



STI OPERATIONAL STRATEGY “STIOS 2025”

IsDB Agenda for STI Policy Action

**STI Strategy Division
Science, Technology and Innovation Department**

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Foreword by the President

During the last twelve months, the world has been severely affected by the COVID19 Pandemic - the worst plague faced by humanity in recent decades. The pandemic caused a lockdown for many countries and has taken the souls of over 1.5 million as reported by World Health Organization in early December 2020. This crisis has touched every corner of the globe, but it has also sparked promising innovations. Urgent solutions were being sought worldwide; obviously through Science, Technology and Innovation (STI). This is a challenging period for all; however, it has proved that the President's Five-Year Programme (P5P) has rightly placed STI in the heart of the new business model of the Bank.

I am proud to have established the STI Department which has become an integral part of the DNA of the Islamic Development Bank that constantly looks for better ways of doing business and transforming the economies and societies of our Member Countries. STI Department has contributed to many strands of the Bank's multidisciplinary projects, including in areas such as; digitization, innovation, global value chains (GVCs), health, energy, among others. The Department has also made great progress in promoting and utilizing STI to support our MCs build stronger STI systems that facilitate innovation and support the transfer of technology, through the initiatives program, Transform Fund, Engage Platform, and scholarships Programme that has encouraged education opportunities for our talented students.

With over 400 million people living in absolute poverty in MCs, IsDB's major focus is to devise strategies that foster innovation to reduce unemployment, increase productivity, fight diseases and epidemics, and eliminate illiteracy. The STI Department has taken up this challenge by developing the STI Operational Strategy (STIOS), which translates the STI Policy into actions, and seeks to reinforce the 'Delivery' track of P5P, through the power of STI, for transformation of the IsDB into a dynamic, results-oriented vehicle for development.

I have closely followed the development of the STI Operational Strategy, and I am indeed impressed with the level of effort and forward thinking invested in its realisation. The Strategy will effectively integrate STI into Bank's Operations and empower our staff in all departments within the Bank to contribute to this process. It will also help in the identification of STI priorities and needs of our Member Countries.

I hereby convey my gratitude to Dr Hayat Sindi, the Senior Advisor for STI and Strategy Division Management and Team, for the commitment in the preparation of this important Strategic Document.

Preface



We at STI Department pride ourselves in being transformational and a visionary nucleus in the Bank. Evidently, and being the first MDB to develop STI Policy for Development, I am pleased to launch this STI Operational Strategy “STIOS” which represents our agenda for STI Policy actions. STIOS is also positioning IsDB as a pioneer MDB in mainstreaming STI into its operations. The motto of President’s Programme (P5P) is “IsDB at the frontier of Development” and this initiative is a concrete example of the realization of this goal in STI domain.

In order to realise the objectives of the STI Policy, the STI Department embarked on development of this STI Operational Strategy (STIOS). During its preparation, a thorough organizational analysis was conducted and extensive consultations were held with various Bank Departments, leading to the adoption of a mainstreaming approach that responds to the nature of business model of the Bank, and spans into different implementation levels of the processes, from policies to programme. Furthermore, various operational enablers were developed and adapted in order to make STIOS effective, realistic and achievable.

This could not have been achieved without the support of H.E the President who, despite his busy schedule, generously joined us in each step of this journey. I convey my sincere gratitude to Dr. Bandar Hajjar for the excellent leadership in promoting STI for inclusion on the MCs development agenda to tackle global challenges.

Special appreciation is extended to the STI Strategy Division Management and staff for commitment and contributions towards the preparation of this strategy. All other IsDB staff whose input and active participation, led to improvement of the plan are duly acknowledged.

I am also proud to lead the STI Department and its work towards making our economies and societies stronger and ultimately fostering better policies for better lives.

Hayat Sindi

Senior Advisor to the President
Science, Technology & Innovation

Acronyms and Abbreviations

AAAA	Addis Ababa Action Agenda
ADF	Alternative Development Finance
APIF	Awqaf Properties Investment Fund
BPRD	Budget, Performance and Results Department
CPC	Country Programs Complex
CSC	Country Strategy and Cooperation
CSO	Civil Society Organization
DAC	Development Assistance Committee
DoST	Department of Strategy and Transformation
EBRD	European Bank for Reconstruction and Development
ERS	Economic Research and Statistics
EU	European Union
FAO	Food and Agricultural Organization
FIND	Foundation for New Innovative Diagnostics
GO-SPIN	Global Observatory of Science, Technology and Innovation Policy Instruments
GP	Global Practice
GVC	Global Value Chain
IaDB	Inter-American Development Bank
IBRD	International Bank for Reconstruction and Development
ICD	Islamic Corporation for the Development of the Private Sector
ICT	Information Communication Technology
IFC	International Finance Corporation
IP	Intellectual Property
IPR	Intellectual Property Rights
IsDB	Islamic Development Bank
ISFD	Islamic Solidarity Fund for Development
ITU	International Telecommunication Union
KMIL	Knowledge Management and Institutional Learning
LDMCs	Least Developed Member Countries
LLF	Lives and Livelihood Fund
M&E	Monitoring and Evaluation
MCPS	Member Country Partnership Strategy
MCs	Member Countries
MDB	Multilateral Development Bank

MoU	Memorandum of Understanding
NIS	National Innovation System
OCR	Ordinary Capital Resources
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OMC	Operations Management Committee
OTLs	Operations Team Leaders
P5P	President’s Five-Year Program
PATH	Program for Appropriate Technology in Health
PCR	Project Completion Report
PIASR	Project Implementation Assessment and Support Report
PPR	Project Preparation Report
QRAG	Quality Review and Assurance Group
R&D	Research and Development
RH	Regional Hub
SDGs	Sustainable Development Goals
SMEs	Small and Mid-size Enterprises
SDSN	Sustainable Development Solutions Network
STEM	Science, Technology, Engineering and Mathematics
STI	Science, Technology and Innovation
STIOS	STI Operational Strategy
TVET	Technical, Vocational Education and Training
TWAS	The World Academy of Sciences
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
UNIDO	United Nations Industrial Development Organization
UNSC	United Nations Office for South-South Cooperation
UNTBLC	United Nations Technology Bank for Least Developed Countries
USD	United States Dollars
WFP	World Food Programme
WHO	World Health Organization
WIPO	World Intellectual Property Organization
10YSF	10 Years Strategic Framework

Executive Summary



The STI Operational Strategy (STIOS) translates the STI Policy into strategic and operational actions in line with the 10YSF and P5P for the development of MCs and the achievement of SDGs. This task requires a thorough understanding of the internal business processes of IsDB and identification of required entry points into IsDB operations. It also requires good understanding of the needs and the priorities of the MCs. So, the key steps undertaken to develop STIOS included: (i) Development of a strategic results framework using a Theory of Change that links the STI vision and mission to the desired outcomes (ii) Integration of STI in the Operations process of the IsDB while exploiting synergies within Country Programmes to ensure increased efficiency, effectiveness and impact of IsDB interventions. (iii) Identification of the most pressing needs of MCs to harness the power of STI through in-depth STI system diagnosis of the MCPS, (iv) Leveraging on existing programmes, such as Engage, Transform Fund, Initiatives, and Scholarships to support STI ecosystems in MCs, (v) Mapping of potential STI partners for knowledge sharing and mobilisation of resources, and (vi) Enhancement of the capacity of IsDB Staff to integrate STI in investment projects.

The approach adopted in the preparation of STIOS comprised the following three phases; i) Planning – where a comprehensive ToR for this task was developed leading to the establishment of a taskforce to develop a detailed action plan including timeframe and deliverables; ii) Organisational and Business Model Analysis to identify entry points and proposed changes and iii) Consultations - where in-depth meetings and interviews were conducted with concerned departments in the Bank.

In summary, the objective of STIOS is to ensure that STI is coherently integrated into the member country support framework through i) Mainstreaming STI into the Bank's interventions and programmes to enhance impact, efficiency and sustainability ii) Supporting STI ecosystems in the MCs and (iii) forging proactive partnerships with other MDBs and international funding organizations. Therefore, section 1 of this document provides a brief background including the adopted approach for the development of this Strategy, while section 2 focuses on the mechanisms through which the STI Policy principles are translated into an Operational Strategy. This transition from STI policy to STI Strategy is comprised

of a logical sequence, commencing with: i) The development of a strategic framework, linking the STI policy pillars with established outcomes and outputs; ii) The development of a conceptual framework, which identifies the context within which these outputs and outcomes will be functioning; and iii) Development of a practical operational framework in line with “modus operandi” of IsDB.

Section 3 describes the elements of the (STIOS) and provides a set of interventions and instruments that will be used to mainstream STI into the Bank’s three main operational levels (Policy, MCPS and Project cycle). It also provides the instruments that will be used to support STI ecosystems in MCs. The instruments include inter alia; policy support, innovation grants, business incubation and human capital development. The MC support options will be implemented according to the stage of the development of the National Innovation System of the Member Country as well as its characteristic contextual factors.

The section also provides the enabling factors that are designed to support the implementation of the Strategy. This includes the requisite institutional changes, the proposed financial arrangements and other factors that will create an enabling environment for STI to function within the Bank’s system.

Section 4 describes the roles and responsibilities of various IsDB Departments in the realisation of the objectives of the STIOS. These include, the STI Department, Communication and external relations, DoST, BPRD, and OED, among others. This will help create synergy, ownership, and accountability for the benefit of MCs.

Finally, Section 5 provides the Monitoring and Evaluation Framework to measure progress towards the desired results. The section comprises a Strategic Results Framework that provides key performance indicators for monitoring, reporting and improvement purposes.

The Strategy will cover the period between 2021 to 2025 and will be subject to Mid Term Review after the second year of implementation. A full review will be undertaken at the last year of implementation.



1. Introduction

1.1 Background

Islamic Development Bank Group (IsDBG) has, since inception recognized the crucial role of Science, Technology and Innovation (STI) in tackling the developmental challenges facing its Member Countries (MCs). In this regard, IsDB has been supporting MCs’ scientific and technological capacities through numerous schemes and programmes. With the advent of the IsDB President’s 5-year Program (P5P) and the organisation’s 10-Year Strategic Framework (10YSF), the Bank experienced a transformational shift from a financier to a knowledge-based organisation that partners with MCs to achieve economic growth.

In this context and to harness the power of STI for socio-economic development of the MCs, and to contribute to the attainment of the Sustainable Development Goals (SDGs), IsDB established under its new organizational structure a dedicated Department for STI and has developed the STI policy in 2019. The Policy sets the guiding principles to promote and strengthen Science, Technology and Innovation in the MCs through a wide array of interventions including capacity building, policy development support and adequate policy instruments.

To achieve STI policy objectives, STI will be integrated across IsDB programmes and projects to increase knowledge and innovation density across national and regional activities. In addition, the Bank will put in place the most cost-effective, efficient and sustainable approaches, tools and mechanisms to support the development of STI ecosystems in the MCs.

1.2. Developing STI Operational Strategy (STIOS)

Effective achievement of the objectives of the STI Policy can be materialized through a thorough understanding of the internal business processes of IsDB. It also requires good understanding of the needs and the priorities of the MCs. In this regard, this Operational Strategy (STIOS) provides a structured approach that describes the needed steps to transform STI Policy, principles and concepts into actions, through: (i) Development of a strategic results framework using a Theory of Change that links the IsDB STI vision and mission to desired outcomes, (ii) Integration of STI into the Operations process of IsDB while exploiting synergies to ensure increased impact of IsDB interventions, (iii) Identification of the most pressing needs of MCs to harness the power of STI through in-depth STI system diagnosis of the MCPS, (iv) Leveraging on existing programmes, such as Engage, Transform Fund, Initiatives, and Scholarships to support STI ecosystems in MCs, (v) Mapping of potential STI partners for efficient delivery and mobilisation of resources, and (vi) Enhancement of the capacity of IsDB Staff to engage in the integration of STI in the project cycle.

Therefore, the objective of STIOS is to ensure that STI is coherently integrated into the member country support framework through mainstreaming STI into the Bank’s interventions and programmes. Moreover, STIOS provides support towards strengthening the MCs STI ecosystems in order to increase competitiveness and to achieve the SDGs.

1.3. Adopted Approach

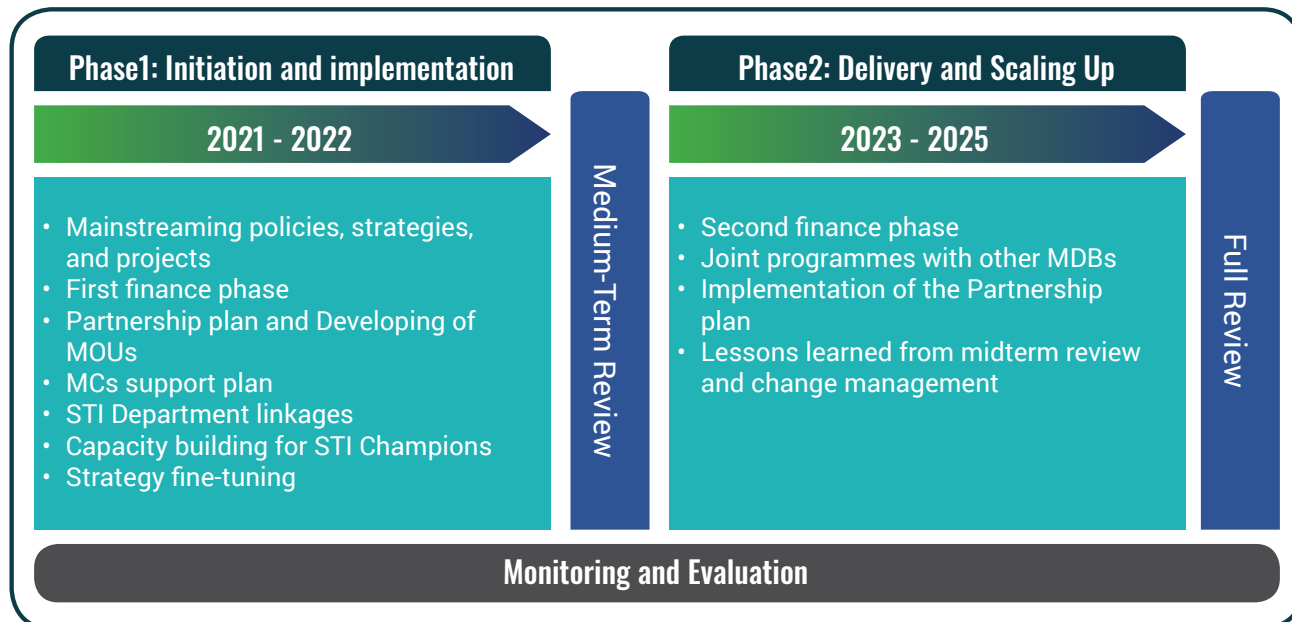
To develop the Operational Strategy (STIOS) the following methodological steps have been adopted:

- **Planning step:** During this introductory step, the comprehensive ToRs were developed based on which a task force was established. Subsequently, a detailed action plan including timeframe, actions and deliverables was developed and submitted to H.E. the President and Senior Management for approval. The action plan was approved (see Annex 1) and represented the road map to develop the STIOS.
- **Organisational analysis:** The organisational analysis was used as an appropriate tool of initiating change and providing information for the development of the Strategy. The key variables analysed were; the mode of operations, business processes and the organizational structure and culture. The objective was to identify entry points and to develop recommended actions for the change. This step included desk reviews of organizational key documents; such as Bank’s manuals and processes, roles of IsDB units, project tools and templates, MCPS guidelines, among others.
- **Consultation:** This was a continuous process that overlapped with all the steps and phases of this task. In-depth meetings and interviews with concerned departments in the Bank were undertaken. See Action Plan (Annex 1). Moreover, regular consultations were held with the Senior STI Advisor to H.E. the President, IsDB. Initial drafts were shared with concerned units in the Bank for revision and consultations. The results of these interactions allowed the identification of optimal ways to integrate STI in all phases of the operational cycle and to come up with a realistic and agreed upon actions

1.4. Time Frame

The Strategy will cover the period between 2021 to 2025 and will be implemented in two phases; phase one will last for two years and will focus on laying the foundations, creating enabling environment i.e. institutional and financing arrangements and testing the proposed interventions and systems. Phase two will be implemented from 2023 to 2025 and will witness a full fledge implementation, delivery and upscaling (see figure1 below).

Figure 1: Milestones and Timeframe



Mid Term Review will be undertaken after the second year of implementation while full review will be undertaken at the last year of implementation.



2. Conceptual Framework

The importance of STI as a key driver for economic transformation and for the development of solutions for societies has been further proven by the COVID19 Pandemic. Moreover, the adoption of the 2030 Agenda for Sustainable Development in 2015 recognized the importance of STI as a critical enabler for sustainable livelihoods and attainment of the 17 goals. In this regard, IsDB seeks to strengthen its role in supporting STI in Member Countries, by aligning MCs support with the AAAA¹ to respond to global challenges.

In this context, STI policy of the Bank has paved the way to strengthen STI systems in MC and has allowed the Bank to move forward to the next level; the development of the Operational Strategy. The transition from STI policy to STI strategies comprised of a two-step approach; first, the development of a conceptual framework, which identifies the Bank’s mission, niche and focus for STI initiatives and interventions. Secondly; the development of a practical operational framework in line with the Banks business model and the conceptual framework. This chapter describes the first step.

Moving from concepts to actions requires a conceptual strategic approach that formalizes the relationship between the vision, mission and outcomes from one side and the role and functions of the Bank from the other side. This section lays the foundation to establish these linkages and describes the overall conceptual framework. STIOS thus, guides this process and provides the overall strategic orientation of STI in the Bank. This includes, inter alia, vision, mission, guiding principles.

The STI vision is “IsDB Member Countries harness the power of STI for inclusive and sustainable development”; and the mission is: “Align IsDB Group actions to strengthen Science, Technology and Innovation systems in Member Countries to achieve Sustainable Development Goals through targeted investments, capacity development and partnerships”.

The following part outlines the elements of the strategic framework; including the strategic objectives, the guiding principles and the strategic pillars (see figure 2).

STI Vision

“IsDB Member Countries harness the power of STI for inclusive and sustainable development”

STI Mission

“Align IsDB Group actions to strengthen STI ecosystems in Member Countries to achieve Sustainable Development Goals through targeted investments, capacity development and partnerships”

¹ Addis Ababa Action Agenda establishes a foundation to support the implementation of the 2030 Agenda for Sustainable Development. It provides a new global framework for financing sustainable development by aligning all financing flows and policies with economic, social and environmental priorities

2.1. Strategic Pillars and Objectives

The strategic pillars and objectives are inspired by the key role of STI as a driver for social and economic development and the P5P Strategic Orientation that requires the Bank to be proactive in presenting development solutions to address challenges faced by MCs. Based on this, STI Strategy plans to achieve its vision through three main strategic objectives:

- Integrating STI into Bank’s Business Model;
- Strengthening STI Ecosystem in IsDB Member Countries;
- Promoting functional Partnerships for STI

2.2. Guiding Principles

Considering the strategic pillars above, a set of guiding principles for the implementation of the STI strategy are summarized below:

- **Relevance and Strategic Alignments:** Each STI Initiative/Programme designed will be subjected to thorough examination to determine its relevance to the country’s development plans and IsDB priorities.
- **Synergy and Complementarity:** STI interventions must be inclusive with a multi-disciplinary approach and complement existing programmes to address complex development challenges. This requires establishing and maintaining a balanced intervention, that harmonizes and integrates IsDB’s direct and indirect STI instruments for greater and sustainable impact.
- **Partnership for Development:** There must be a conscious effort for regional and global cooperation, and partnerships around STI and SDGs. Working in proactive partnership with other MDBs and international funding organizations to support STI in MCs will be important to achieve the strategy targets as well as the SDGs.
- **Inclusive Innovation:** STI will focus on social and inclusive innovation and will promote active participation of women and youth in strategy implementation.
- **Cost-effectiveness:** Each STI Initiative will seek to promote efficiency and effectiveness in the production of the expected outcome.

2.3. Strategic Interventions (SI)

To achieve the strategic objectives, the key interventions and/or priority areas for IsDB investment in collaboration with MCs are outlined below. These will be based on country-specific needs assessment.

SI 1: Mainstreaming STI into IsDB Operations

Integrating STI into development interventions of IsDB MCs initially requires the integration of STI across IsDB sector policies, programmes and projects. The objective is to increase knowledge and innovation density across national and regional activities. To achieve this objective, IsDB will ensure alignment of STI interventions with: i) The IsDB institutional policies and strategies (sector and thematic); ii) The needs and priorities of MCs, through the Member Country Partnership Strategy (MCPS); iii) The investment projects and programmes, and linking STI programmes to Bank operations.

Below is a detailed description of the expected outputs under this strategic intervention

Integration of STI into Institutional Policies and Strategies

IsDB's 'Road Map for Change into a Bank of Development and Developers' indicates the need to be innovative and transformative to ensure sustainable success. This has led to: i) Design of new sector and thematic policies; and ii) Review of the existing ones. A key strategy to deliver on this approach is to mainstream STI as an integral part of the Bank's policies and strategies.

Integration of STI into IsDB Programmes and Projects

This intervention seeks to adapt internal business processes to systematically incorporate STI into the MCPS (with focus on the key five industries of the Bank) and project cycle, to help member countries address priority needs through cost-effective, efficient and sustainable solutions that have significant impact on their development.

Linkage between STI Programmes and Bank Operations

Current STI programmes provide direct support to MCs in the form of grants, knowledge, and expertise. These will aim at targeting specific MC programmes through the project cycle or MCPS process, to build internal cooperation and knowledge exchange mechanisms that harness the results of STI programmes for the benefit of new projects. Programmes such as Transform Fund complemented by Engage platform, will leverage and support innovative technology-based solutions to address the development challenges facing MCs. The Engage Platform will also: i) Support the Bank to function as an STI knowledge broker, facilitating technology transfer, and ii) Link up entrepreneurs with investors and institutional partners. The Scholarships Programme will build a critical mass of researchers and scholars by funding Programmes in cross-cutting areas focused on Sustainability Sciences aiming to create leaders in all sectors of development to usher for technological changes and advancement in Member Countries and Muslim communities in non-member countries. Transformers Roadshow and Multi stakeholder Fora organized in MCs involving national innovation competitions will promote the role of entrepreneurship innovation in accelerating STI-led initiatives in member countries and among Muslim communities in non-Member countries.

Diverse Financial Instruments used for STI

Historically, a significant share of STI direct operations in the IsDB were in the form of technical assistance programmes. The Evaluation Report on IDB's grant-based Science and Technology Programme (2002-2014) concludes that technical assistance, solely, does not create the intended impact and sustainable results.

A combination of financial instruments is, necessary to deliver on STI outcomes, with maximum impact. IsDB will improve access to finance through a combination of financial instruments that include grants, loans and other Islamic finance instruments.

SI 2: Innovation Infrastructure

The development of STI in MCs requires the upgrading of STI infrastructure and the establishment of world class science and innovation systems. This includes research and innovation facilities such as laboratories, incubators, technology parks, innovation hubs, excellence and commercialization centres that support the development of innovation. Existing physical infrastructure and resources can also be leveraged and networked to increase utilization efficiency at national, regional and international levels and reduce maintenance and operating costs through shared services.

Upgrading of STI Infrastructure and facilitating collaboration among education and research institutions in MCs is a key requisite for strengthening the research and innovation Ecosystems to provide the needed support for key actors including entrepreneurs and other innovators for the development of innovation. It will also contribute to building competences in STEM.

Hence, IsDB will support MCs increase the knowledge intensity in industries, improve the linkages with academia by developing mechanisms that balance applied and basic research to enhance the use of knowledge products by industry. Besides, IsDB will support the improvement of STI infrastructure (e.g. machinery upgrading, testing/standards, ICT) to promote STI system linkages, facilitate technology adoption, and support the connection of domestic markets with foreign ones.

Investment in technological infrastructure will further entrepreneurial activity in member countries by providing the requisite tools and opportunities for successful innovation, in addition to acquiring knowledge on the principles of its application². In this regard, IsDB will prioritise support for STI-based start-ups with high growth potential and substantial effects on the Sustainable Development Goals, productivity growth, and employment creation.

SI 3: Enabling Environment

Creating an enabling environment for STI in the Bank and in the MCs is necessary for the development of innovation and improving interaction amongst actors of the STI ecosystem. This enabling environment can be created through an array of activities such as awareness and capacity building, proper financial arrangements, institutional changes, regulatory framework, and Policy Development Support...etc. IsDB will therefore provide support to MCs towards the creation of an enabling environment for STI systems. This will include, Policy support, strengthening STI governance systems in MCs with emphasis on the policymaking processes, strategic alignment, and institutional strengthening, among others

SI 4: Human Capital

The proper functioning of the STI system requires scientific researchers with advanced technical skills, in addition to formal and non-formal STEM education, entrepreneurial talent, well-educated engineers and technicians, and a full matrix of other professionals, such as technology and innovation managers, lawyers with expertise in intellectual property rights, knowledge brokers, and designers, amongst others. Hence, IsDB will leverage its longstanding experience in the development of human capital in MC to promote the development of market-demanded skills to adapt processes, machinery, and products, and to acquire innovation related skills, hence increasing the knowledge and innovation intensity of economic activities.

2 Drucker, P.F., 1985. Entrepreneurial strategies. California Management Review, 27(2).

SI 5: Cooperation and Partnerships

Consistent to the President’s 5 Year Plan to transform IsDB into a network of developers capable of addressing the financing gaps and utilising cutting-edge scientific, technological and innovative products in the interest of Member Countries, global partnership will be established for high impact STI initiatives and programmes. Similarly, IsDB will collaborate with other Multilateral Development Banks and development partners to support STI projects and programmes in MCs. There are numerous opportunities for the international community to improve coordination, coherence and complementarity of development assistance to harness STI for SDGs effectively.

2.4. Crosscutting interventions

The crosscutting interventions will be continuously implemented throughout the phases of the strategy. These are namely: monitoring and evaluation and capacity building, which cut across all the main strategic pillars and interventions.

Monitoring and Evaluation

The Strategy will be regularly monitored and evaluated through annual, mid-term and end-term review processes in order to ensure achievement of the desired results. Moreover, fine-tuning processes including corrective actions will be taken as appropriate and when needed. Under this priority area, technology foresight, data collection and benchmarking of MC performances will also be conducted to generate knowledge that will inform STI policies and programmes.

Capacity Building

Capacity building interventions will be designed and integrated at all relevant levels of the STI Operational Strategy for effective implementation of the STI policy. These interventions extend to both IsDB staff and MCs. In this process, active collaboration will be sought with STI specialised international organisations.



Figure 2: Strategic Framework



3. Operational Framework

In order to achieve the objectives of the STI policy, the STI Operational Strategy aims to embed STI within the operations of the organization, through analysis of the Bank’s business operations and the development of appropriate tools and processes to integrate STI in strategic planning, project design and implementation. These include; i) Review of the tools and processes, ii) Identification of key enablers such as: effective linkages between the STI Department programmes and the rest of the organization; appropriate institutional arrangements that support the implementation of the plan; and the design of financial arrangements well-suited to the particular characteristics of STI interventions to support direct STI interventions in Member Countries.

3.1. Integrating STI into the IsDB Operations Cycle

3.1.1. STI Mainstreaming Levels

This section describes the process and the levels of integrating STI into Bank’s Business model (See Figure 3).

Level 1: Integration of STI into IsDB Policies and Strategies

The Bank’s sector and thematic policies, as well as strategies will be revised to incorporate STI elements for accelerated achievement of the SDGs. The STI team currently participates in the Banks technical committees for development of sector and thematic policies and strategies. This is crucial to ensure harmony and alignment between the Bank’s Policies and Strategies. The STI Department has already started to review sectoral and thematic policies in order to ensure STI mainstreaming within these policies. Generally, most of the policies include STI considerations as a guiding principle for achievement of the policy objectives. Linkages between STI and sectoral and thematic policies will be further enhanced during the implementation of this strategy through a wide array of activities such as organizing joint events to elaborate on areas of integrations, participating in policies update/review, create forum for policy dialogue, and sharing experiences, among others.

Level 2: Country Programming (MCPS)

The primary instrument for Country Programming at IsDB is the Member Country Partnership Strategy (MCPS), 2.0, which entails the identification of member country needs in support of their participation in global value chains, based on their comparative advantage. The integration of STI into the MCPS ensures a holistic view of the needs of MCs through analysis of National STI Systems with linkages to the selected industries to facilitate the identification of projects that act as development levers. STI will be well integrated into MCPS process with focus on the five industries of the Bank; Agribusiness, Textiles, Clothing, Leather and Footwear (TCLF), Petroleum and Chemicals, Construction and Islamic Finance.

The STI Department has already started engaging in this process. In doing so, entry points for STI integration into MCPS process have been identified and accordingly the MCPS templates and documents have been updated. The STI team is a member of the technical committees of MCPS that are currently being developed and will participate at the all stages of the process; diagnosis, analysis, field missions...etc., see Annex 6.3.



Level 3: Project Cycle

The IsDB project cycle involves three stages, namely project preparation and appraisal, project implementation, and project evaluation with the application of standardised templates that are used to effect projects. Similar to the MCPS approach mentioned above, entry points were identified, project templates have been reviewed and updated, so as to integrate STI into each stage of the project cycle. Below is a description of this process that applies to the three main stages of the project cycle.

The preparation and appraisal phase of the project cycle provides an opportunity for STI to be entrenched into the design process for interventions to support MCs. The PPR template (see Annex 6.6) has been revised to incorporate measures to address major STI challenges affecting MCs. The STI staff will engage the regional hubs to design direct STI projects as well as identify opportunities to support MCs through sector projects. The STI champions (nominated by the respective RHs) will act as a link between the STI department, Bank's Operations and the MCs. The STI Champions will additionally support the identification of projects and initiatives for STI investment. Moreover, the STI department is now a member of Quality Review and Assurance Group (QRAG) and Operations Management Committee (OMC) which will further strengthen the inclusion of STI on the MCs investment projects.

Similarly, during project implementation phase, the STI Department will participate in the implementation and supervision missions of projects to ensure that STI components are implemented and progress is realized. The project indicators will be linked to the STI results framework to measure progress made during implementation. The revised Project Implementation



Assessment and Support Report (PIASR) template³ will be used to profile the projects.

At the Project Evaluation stage and in addition to the above, the Project Completion Report has been adjusted to incorporate the following: i) Analysis of the contribution of the project outputs and outcomes to the STI Strategic Result Framework; and ii) Links between the project's M&E framework and the STI Strategic Framework indicators.

Figure 3- Conceptual Steps to mainstream STI in IsDB Operations

Level	Objective	Main Actions	Results
Level 1: IsDB Strategies & Policies	Support the integration of STI into new IsDB Policies and Strategies	Ensure that STI is incorporated into new sector and thematic policies and strategies	STI is integrated into IsDB policies and strategies
Level 2: Country Programming (MCPS)	Link STI to Country Programming and Partnership Strategy	Identify Entry Points Participate in the MCPS technical committees for Programme design, and diagnostic missions	STI is considered in MCPS development, implementation and evaluation
Level 3: Project Preparation and Appraisal	Systematically integrate STI elements across projects preparation process	Support the preparation and appraisal of IsDB Projects	STI is integrated into Bank's investment projects
Project Implementation	Implement and monitor STI activities and ensure continuous strategic alignment	Prepare an STI results framework to guide project design, implementation and regular monitoring of project STI performance	High-impact projects with measurable outcomes
Project Evaluation	Systematically record lessons learnt to improve STI project design	Participate in project evaluation and quality assurance process	Full integration of STI into the Bank's investment projects
Enablers			
Institutional arrangements <ul style="list-style-type: none"> • STI Champions • Capacity Building 		Financing arrangements <ul style="list-style-type: none"> • Sustainable financing • Resource mobilisation • Special grant allocation 	Linking STI Programmes to Operations <ul style="list-style-type: none"> • Scholarships • Engage Platform • Transform Fund • Initiatives

The quality assurance process is an integral function that monitors and coordinates the efficiency of projects executed by the Bank. This process starts from the OTLs, at the RHs, and moves through a coherent quality review mechanism to ensure compliance with the standardized institutional tools, frameworks, and compliance with comments/feedback provided by Peer Reviewers, and concerned Departments through three mechanisms, namely: Peer Reviewing, Quality Review and Assurance Group (QRAG) and Operations Management Committee (OMC).

The identification of STI entry points in the Bank operations, as well as the development of toolkits and updating of templates and guidelines for all stages of the project cycle, provides a good platform to integrate STI into the Quality Assurance Process. These measures will mandate QRAG to assess the extent to which STI is mainstreamed in every project stage and will ensure the quality of the operational efforts undertaken to achieve this objective, as per the updated templates and guidelines. Moreover, the Bank is currently updating the Quality Assurance Process, which provides an opportunity for the STI Department to participate and mainstream STI in the relevant committees.

3.1.2 Enablers and Cross-Cutting Interventions

As described in Figure 3 presented in Section 3.2.1, Conceptual Framework, of this document, the steps to mainstream STI in the internal operative processes have a series of enablers that will influence the success of the strategy and hence the efforts to integrate STI in IsDB operations. The strategy identifies the following enablers as critical success factors:

A. Institutional Arrangements

Special Institutional arrangements are necessary for the effective coordination and involvement of different levels of the organisation in the STI mainstreaming process. In this context, two major strategies will be initially considered; nomination of focal points from RHs as “STI Champions”, and capacity building for IsDB staff. The first set of arrangements correspond to the establishment of the STI Champions, who will lead the promotion of a cultural shift in the organisation to ensure the integration of STI based solutions into IsDB operations as a means for maximising potential development impact. The champions will be trained and their capacities will be further developed to mainstream STI across IsDB Operations, in order to address skills requirements to identify STI-related development opportunities in the MCs, as well as design and implement projects with STI elements integrated effectively.

B. STI Department Linkages

Strengthening the link between the STI department, Global Practices, and Country Services as well as the institutions’ knowledge-sharing capabilities in order to respond to the MC needs will increase efficiency and promote solutions developed by STI Programmes. The STI main Programmes/ Products include, Scholarships, Engage Platform, Transform Fund, and STI Initiatives. The section below provides overview of the proposed linkages between STI Departments Programmes and Bank’s Operations.

Scholarship programmes

The objective of the scholarship program is to promote knowledge-based economies in MCs by supporting the development of technically qualified human resources to support the achievement of national development plans. With more than 14000 scholarship graduates, an Alumni network

is being deployed to facilitate access to a pool of experts educated in the most prestigious higher education institutions in the world and who are motivated to contribute to the goals of the Bank. This pool of expertise is an asset and will be critical in the STI mainstreaming efforts through the following actionable principles:

- Contribution to Country STI Assessment and Global Value Chain Analysis, undertaken during the MCPS process, to include a contextualized vision of the country needs
- Participation in STI Policy Dialogue fora organized by the IsDB to promote closer interaction between science and public policy.
- Participate in Human capital development programmes of the IsDB as mentors, teachers or trainers.
- Prioritization of research grants/scholarship that directly address the identified industries during the GVC analysis for the MCPS process; likewise, the assessments conducted within the MCPS process will identify gaps in Human capacity where the programme can contribute to filling them over time.
- Promoting entrepreneurship and developing research-based solutions. The scholarship programme already has a component on entrepreneurship; nevertheless, this will be enhanced with articulation with Engage Platform and Transform Fund to allow the solutions developed throughout PhD and post-doc programmes to be developed and scaled up using the infrastructure provided by Engage and Transform.

Engage Platform and Transform Fund

The Engage Platform complemented by Transform Fund have the objective of creating a global innovation ecosystem connecting and engaging with key actors of the ecosystem (innovators, investors, academics, start-ups and philanthropists, governments) to address the most pressing development challenges by catalyzing technological innovation as well as solution-driven innovation that can be mainstreamed to boost development impact across key priority sectors. The STI mainstreaming process leverages on the synergies and complementarities of Engage Platform and Transform Fund through the following actionable principles:

- Repository of technology-based development solutions: An open mechanism will be created within Engage Platform to capture the Development Solutions that have been supported by Transform Fund as well as those profiled on Engage Platform. The database of Development Solutions will not only supply the IsDB with solutions to address the needs identified throughout the MCPS process or those requested directly by MCPS. It will also strengthen the supply side of the matchmaking process of Engage where any country in the world can source a solution to its challenges.
- A special call for innovative solutions through Engage platform to respond to emergency needs of MCs through the MCPS. The call will be designed and set up in consultation with country officials and STI team during the next phase of MCPS development.
- Extending the demand-based approach through calls for innovations. Engage through its call for Innovation service and its embedded comprehensive screening process will address the market failures identified in the MCs and leverage innovations and new technologies that have the potential to address key development challenges faced by MCs. Complementarily, Transform Fund provides the financial resources to pilot, scale-up and commercialize those innovations to become development solutions that can be mainstreamed in IsDB sector development interventions and sector operations.



STI Initiatives Programme

The overall objective of this Programme is to help MCs and Muslim Communities in Non-Member Countries respond to their emerging needs by leveraging innovative STI solutions for the achievement of SDGs such as zero hunger; energy; health; agriculture; education; clean water and sanitation; and industry, innovation and infrastructure.

The Initiatives Programme realizes this objective by providing proven development models and solutions that address the needs of the MCs.

Mainstreaming the STI Initiatives programme into IsDB operations provides an avenue for synchronization of efforts with other global practices to meet the needs of MCs effectively. Initiative programme can serve STI mainstreaming through the creation of new lines of business through incubation of innovative initiatives in partnership with the Regional Hubs. Linkages can be harnessed through the identification of mutually beneficial STI projects and jointly financing interventions within the Bank programmes, project cycle and MCPS. The type of interventions that the STI Initiatives programme could be involved in are capacity building, improvement of STI infrastructure (equipment and software), formulation of policies, and acquisition of technology, among others.



C. Financial Arrangements

The availability and alignment of Finance Instruments with STI objectives is a dimension stressed in the STI policy which has profound repercussion on the sustainability and impact of the activities of the IsDB. Resources must be available to implement direct STI projects as well as to integrate STI elements in sectoral projects. This situation calls for innovative financing arrangements and procedures tailored for STI.

This section builds on an in-depth review of financing options currently present globally and in the IsDB and defines the plan to implement a new financial arrangement to strengthen the support of STI in MCs as well as the efforts to mainstream STI in the Banks operations. Table 1 summarises a set of recommendations that will be implemented in two phases; the first phase 2022-2023 as an introductory phase will ringfence 2% of the approved envelope of the operations financing to be utilized for STI Programmes following regular financing system of the Bank (Borrowing modality). Gradual increase of this percentage will depend on a thorough assessment of the results of the first phase. The second phase (from 2024-2025) which will be well informed by the lessons learned from the first phase, will be implemented with a wider scope of financial instruments, (see details below). Regular and Mid-term reviews will determine the actual transition between the two phases of this plan and will provide fine-tuning opportunities.

Operations Financing Allocation (OCR)

The major financial mechanism available to IsDB is Operations Financing, of which the Bank will earmark at least 2% of the overall operations financing in the area of STI to be utilized by RHs as per typical financing procedures of the Bank starting from 2022 and this will increase gradually – subject to evaluation- to reach 10% by 2025. The annual increments will be subject to results from

the Mid Term Review and assessments (at the end of the 2nd year of implementation). Moreover, in some situations, blended financing options that include loans, grants, equity, and partnerships will be explored. IsDB will also continue lobbying with MCs to place STI at the heart of the development agenda and to increase budget allocations to STI.

Grants

IsDB provides grants to MCs through existing STI programmes such as STI Initiatives and Transform fund. The existing STI grants will remain in force with a view of enhancing them during the implementation period. In addition, crowdfunding can help mobilise resources for the implementation of joint investments and attract venture capitalists for new innovations. Crowdfunding options will be considered in phase 2 of project implementation.

Table 1 - Summary of recommendations for STI Financing

Facility	Type of Instrument	Recommendation	Phase
Operational Financing (OCR)	Loan	2% allocation to STI starting from 2022. Expected to increase gradually to 10% by 2025/2026 (subject Mid Term Review)	Phase 1 (2022-2023)
Transform Fund & STI Initiatives	Grants and equity	The existing STI grants will remain in force with a view of enhancing them during the implementation period	
ADF	Loans	To support resource mobilization efforts for implementation of STI interventions in MCPS projects	
ISFD	Loan	Support research and infrastructure development.	Phase 2 (2024-2025)
ICD	Equity, Leasing, and Quasi-equity	Support financing STI infrastructure developments such as incubation centres, Science Parks, Manufacturing Plants, etc	
LLF	Grant and Loan	support STI projects aligned with the three major focus areas of health, agriculture and basic infrastructure	
APIF	Awqaf asset financing	Support profitable STI ventures	
Crowdfunding	Grants	Will be used for fundraising for the implementation of joint investments and attracting venture capitalists for new innovations	

Blended Financing Options

The Lives and Livelihoods Fund (LLF) blends donor grants with ordinary capital resources (OCR) to provide concessional financing for IsDB member countries, targeting health (SDG-3), Agriculture (SDG-2) and basic infrastructure (SDGs 6 and 9). LLF provides opportunities to support STI projects aligned with the three major focus areas. Conversely, Awqaf Properties Investment Fund (APIF) is a waqf fund that supports the establishment of real estate for long term sustainability. Collaborative arrangements will be explored in phase 2 to mobilize resources from LLF and APIF to support STI in MCs.

Other Loan Options

ADF leverages on the strengths of the private sector investors to mobilize resources and create significant synergies for delivery of combined impact. ADF will be considered for mobilization of resources to support STI interventions for MCPS projects beginning with phase 1. ICD and ISFD provide specialized loan options aimed at supporting the private sector. These options will be further explored during phase 2 of implementation to support research and innovation projects as well as STI infrastructure developments such as incubation centres, Science Parks, and Manufacturing Plants, amongst others, under MCPS or project cycle.

3.2. Supporting STI Ecosystems in MCs

In order to contribute to the development of National Innovation Systems in IsDB Member countries a combination of innovation policy instruments and programmes will be implemented. These will vary, as different capabilities are accumulated across actors of the MC systems, and particularly, as firms transition from the technologically marginalized category to dynamic adopters and eventually innovators. This section will facilitate the categorization of MCs STI ecosystem into different levels and consequently will provide a set of instruments that IsDB will leverage upon to support them.

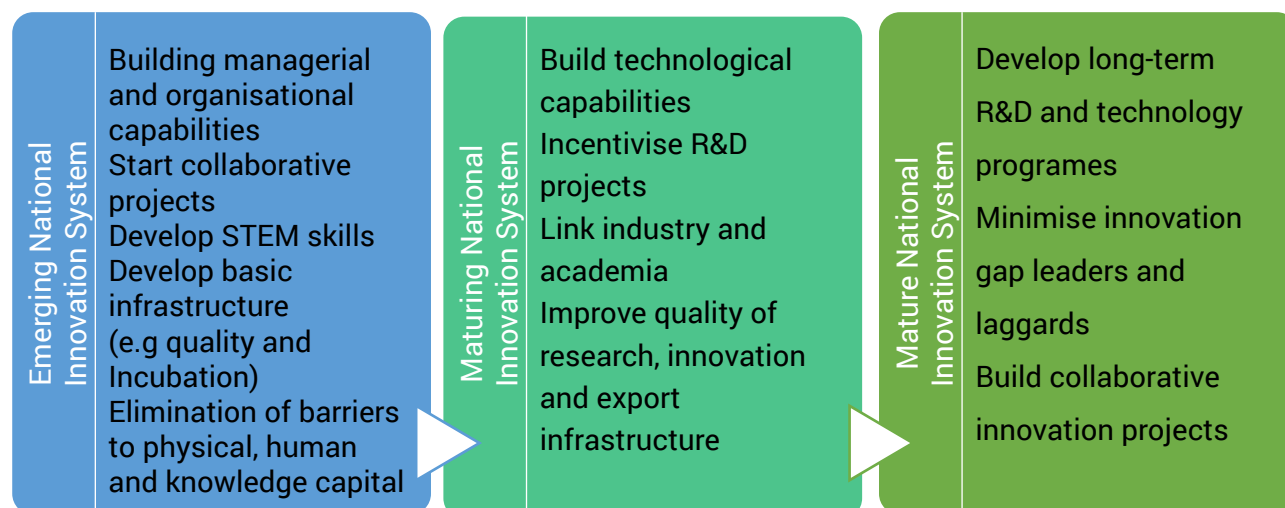
Many developing countries exhaust their governance systems and drain resources, in the process of replicating National Innovation Systems of more advanced countries. This situation can result in misaligned policies in relation to the industry needs and lead to a fragmented and undirected set of instruments. The Islamic Development Bank develops a response package for MC promoting the implementation of policy instruments according to a gradual path of development, expanding the policy mix according to the capabilities of both the private sector and of policymakers and institutions. The role of the IsDB in the response package will be: i) Resource mobilisation through direct investment and partnerships; ii) Technical assistance for project design, implementation and monitoring; iii) Networking with international organisations to provide opportunities for collaboration across MCs to address their challenges of MC; iv) Selection of strategic programmes for direct implementation for the benefit of all MC; and v) Awareness raising on the need for a well-designed set of STI policy instruments as well as for the country ownership.



3.2.1. Levels of Development of National Innovation Systems

Countries at similar stages of development share common challenges related to the nature of innovation activities, implementation capacity, and framework conditions, and these constraints determine the policy mix. However, the combinations of instruments vary over a continuum of capabilities building, Figure presents three key development stages of National Systems of Innovation, as articulated by the World Bank in its publication “The Innovation Paradox”, and the most salient needs shared by countries placed in these levels of development. The following subsections further elaborate on each development level.

Figure 4 - Needs according to the level of development of the National Innovation System



Emerging National Innovation Systems

This type of system is prevalent in low and lower-middle-income countries and is characterised by being distant from the technological frontier. The main symptom of the system is that STI activities are ad-hoc; the system actors conduct little formal R&D and firms present basic managerial and organisational practices which limit innovation practices. In these systems, patenting is almost non-existent, and there is little participation in exports, and when there is, they are primary commodities.

In this perspective, for countries with a less-developed NIS, STI policy would focus primarily on areas such as developing human resources (including fostering managerial and organisational capabilities, as well as STEM skills), improving basic STI infrastructure (e.g. machinery upgrading, testing/standards), and strengthening general framework conditions (ensuring, for example, a sufficient level of competition and IP protection).

Maturing National Innovation Systems

This type of system is prevalent in middle and upper-middle-income countries. The main symptom of the system is that intensity of R&D increased as well as the sophistication of knowledge products; nevertheless, innovation is primarily incremental, and the generation of new technologies and complex innovation projects is incipient. In these systems, firms start participating in the technology sector with an increased presence of manufacturing and services exports and early participation in Global Value Chain. Likewise, there are a few university spin-offs as well as patents.

Policy mix for this group should address: i) Promotion of STI policies that support investments in advanced research and technological capabilities; ii) Strengthening links between actors in the NIS (e.g. industry/academia); iii) Fostering of greater absorptive capacity in firms, and iv) Addressing other systemic barriers to innovation.

Mature National Innovation Systems

This type of system is prevalent in higher-income countries. The main characteristic of this system is that a significant number of firms have reached the technological frontier. With a more mature NIS, innovation policies focus on promoting the generation of new technologies and supporting

increasingly complex innovative projects while continuing to build absorptive capacity in laggard small and medium enterprises (SMEs). In this system, there are a significant number of university spin-offs, large numbers of exporting firms and widespread participation in Global Value Chains.

Policy mix is recommended as follows: i) Innovation policies, focused on promoting the generation of new technologies and supporting increasingly complex innovative projects while continuing to build absorptive capacity in laggard small and medium enterprises (SMEs). ii) Promotion of development of advanced technologies; iii) Fostering collaborative research and innovation across all actors; iv) Promoting an innovation culture throughout the private and public sectors

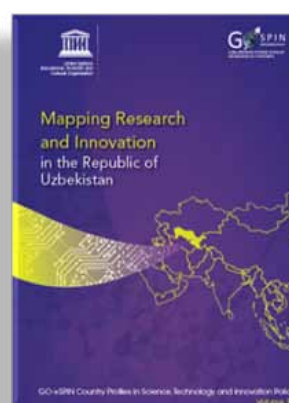
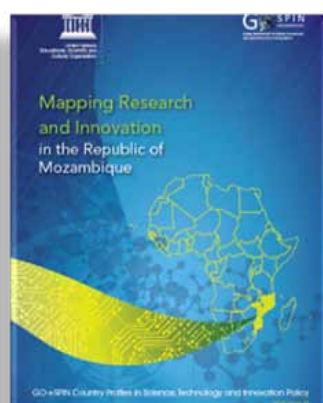
3.2.2. Member Country Support Options

This subsection will elaborate on the main types of STI policy instruments ⁴ that will be used to support Member Countries. These instruments will be implemented according to the stage of development of the National Innovation System of the Member Country as well as its different contextual factors.

A. Policy Support

Policy support will be provided following STI country assessments and categorization of the MCs, through practical support to design, implement and evaluate reforms that enhance the quality of their research and innovation instruments, policies and systems. The support includes the provision of best practices, independent high-level expertise and guidance at the request of Member Countries. This is in line with the Output 2.1 of the STI Results Framework: on Strengthened Governance of STI systems supported in IsDB Member Countries.

An example of the use of this instrument is the current partnership with UNESCO where through the GO-SPIN methodology the National STI Systems of Member Countries is mapped to identify gaps, develop capacities in policymakers and identifies strategic areas of intervention. Likewise, the roadshows undertaken by the IsDB serve the strategic purpose to raise awareness on the need to support STI and increase national STI investments which build the demand for such support.



⁴ Cirera, Xavier, Jaime Frias, Justin Hill, and Yanchao Li. "A Practitioner's Guide to Innovation Policy: Instruments to Build Firm Capabilities and Accelerate Technological Catch-Up in Developing Countries." (2020).

B. Innovation Grants

Grants represent the direct allocation of funding for STI actors to finance, fully or partially, an STI project. Modalities of grants are primarily defined by dimensions such as the selection mechanism, size, duration, eligible activities, payment procedures, and delivery mechanisms. An important grant modality is Collaboration Grants which focus on encouraging firms and organisations to collaborate, instead of supporting individual firms that launch projects on their own. Therefore, it is in line with Outcome 2 of the STI Results Framework: Strengthened STI Systems in IsDB Member Countries and Outcome 3: Functional Partnership for STI Established.

An example of the use of this instrument is the Innovation and STI grants provided by Transform Fund and STI initiatives.

C. Incubators

Business incubation is a process aimed at supporting the development of new and early-stage enterprises. Incubators seek to provide entrepreneurs with an enabling environment at the start-up stage of entrepreneurial activity, to help reduce the cost of launching the enterprise, increase the confidence and capacity of the entrepreneur, and link the entrepreneur to the resources required to start and grow a business. Incubators usually combine physical space with advisory services. The most common goals of incubation programs are enhancing a community's entrepreneurial climate, commercialising new technologies, and creating wealth for local and national economies. Therefore, this instrument is in line with Output 2.3 Strengthened Research, Innovation, and Technological Infrastructural Development for Entrepreneurship Promotion.

D. Business Advisory Services and Technology Extension Services

Business advisory services consist of advice in areas such as financial and accounting services, human resource management, marketing and advertising, pricing strategies, supply chain management, quality management, or legal services. An important type of Advisory services is Technology Extension services. Some of the most common technology extension services include quality management and process efficiency (such as lean manufacturing); management of environmental impacts and energy use; advice on the purchase and installation of new technologies; advice on optimising the use of existing technologies; development of new business models; R&D and commercialisation; accreditation for ISO and technical standards; and more generally digitalisation. Therefore, this instrument is aligned with output 2.2 of the STI strategic framework: Human resource capacity development for the workforce necessary for a functional STI system and Output 2.3 Strengthened Research, Innovation and Technological Infrastructural Development for Entrepreneurship Promotion.

E. Development of Technology Transfer Offices

Technology transfer involves the transfer and diffusion of general-purpose and specific technologies and knowledge to firms. Technology transfer offices help to: identify technologies ready for commercialisation; identify firms that could benefit from a particular technology; provide IPR-related advisory services to researchers and firms; and manage the interaction between firms and knowledge-producing organisations. Therefore, this instrument is aligned with Output 2.3 Strengthened Research, Innovation and Technological Infrastructural Development for Entrepreneurship Promotion.

F. Technology Centres and Centres of Excellence

Technology Centres and Centres of Excellence are public or public-private infrastructure dedicated to providing research, technology extension services and skills training. They tend to be sector-specific and accumulate considerable technical expertise in a sector, often helping to develop new technological solutions or adapting existing market technologies to the needs of the domestic industry. Therefore, this instrument will serve Human Resource Capacity Development for a Functional STI System, and will strengthen Research, Innovation and Technological Infrastructural Development for Entrepreneurship Promotion. An example of the use of this instrument in the IsDB is the current Centre of Excellence in Malaysia focusing on five key areas, namely: Science, Technology and Innovation, Islamic Finance, Technology Transfer, Resource Mobilization and Halal Industry.

G. Innovation Networks

Network support policies are measures aimed at promoting or sustaining the linkage of firms or knowledge producers. The activities are typically centred on a specific technological or problem-oriented topic for the primary purpose of knowledge and information sharing. Networks can focus on different aspects of innovation. Some involve relatively simple forms of innovation: for instance, groups of SMEs that engage in “learning groups” sharing knowledge and experiences and providing mutual encouragement. Other networks are much more focused on frontier technologies, sharing information about technological breakthroughs.

H. Human Capital Development

The main policy issue addressed by this instrument is the need to enhance the human-resource capacity, more specifically, enhancing their national knowledge base in the fields and disciplines seen as most closely connected with economic development; improving interpersonal and international linkages; and addressing social inequities. Therefore, this instrument is aligned with Output 2.2, Human Resource Capacity Development for a Functional STI System .



3.3. Partnerships for Impact

The 2030 Agenda for Sustainable Development acknowledged the importance of Science, Technology and Innovation (STI) for development and established new international cooperation principles and objectives to help strengthen developing countries' STI capacity towards the achievements of the Sustainable Development Goals (SDGs). In line with the P5P, the IsDB will leverage internal and external partnerships to mobilise resources, share knowledge and create synergy for the advancement of STI in member countries. Internally STI Department will work with all units of IsDB Group to build on the comparative advantage of the existing functions and entities to promote STI interventions. Externally, the Department will forge meaningful partnerships with development partners including UN Agencies, MDBs, CSOs and Private Sector to mobilize technical and financial resources for STI.

The section highlights key players supporting developing countries in STI through the analysis of STI related ODA, STI in Philanthropy and STI related UN initiatives. .

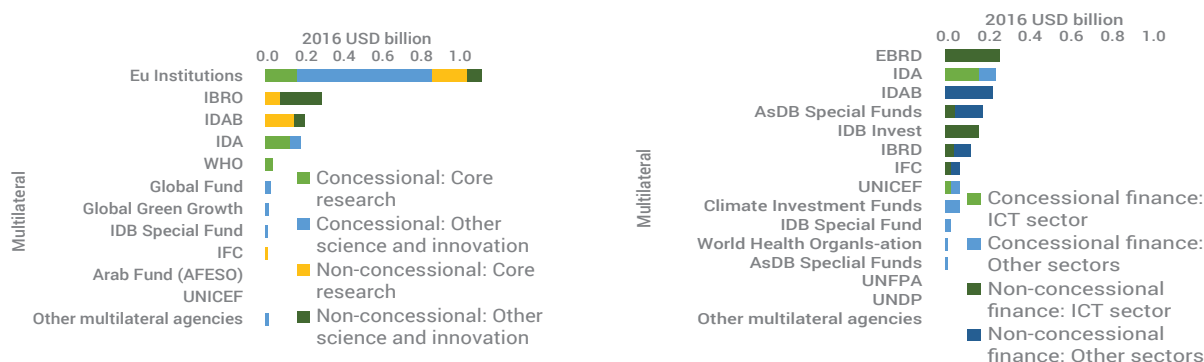
Science, Technology and Innovation in Official Development Assistance

The emphasis of this subsection is ODA for STI from multilateral organisations since they are the most likely partners to contribute with knowledge, expertise and resources to the objective of the IsDB; additionally, these partners are the focus of the STI Policy. According to the 2019 report from the OECD ⁵, the total development finance for STI has been fluctuating between USD 11 and 17 billion in the past years. The fluctuations are due to the volatility of non-concessional finance. Concessional finance to STI amounts to USD 10.5 billion per year, representing 5.9 % of total concessional finance by DAC members, multilateral organisations and other countries. Non-concessional finance represents a minor share of total development finance; however, it still signifies nearly USD 3 billion per year, not counting export credits. Non-concessional finance mainly consists of loans from multilateral development banks towards technology-related infrastructure projects, for example relating to ICTs and renewable energy, and investments in raising countries' technological and innovative capacity.

Figure 5 shows the distribution of disbursements from multilateral organisations to support Science, Technology and Innovation. The largest providers of non-concessional finance to STI are the Asian Development Bank, EU institutions (incl. EBRD), Inter-American Development Bank (IaDB), and the World Bank (IBRD and IFC).

5 Connecting ODA and STI For Inclusive Development: Measurement Challenges From A DAC Perspective (<https://doi.org/10.1787/22220518>)

Figure 5 - Top development providers supporting science and innovation (left) and technology (right), 2016⁵



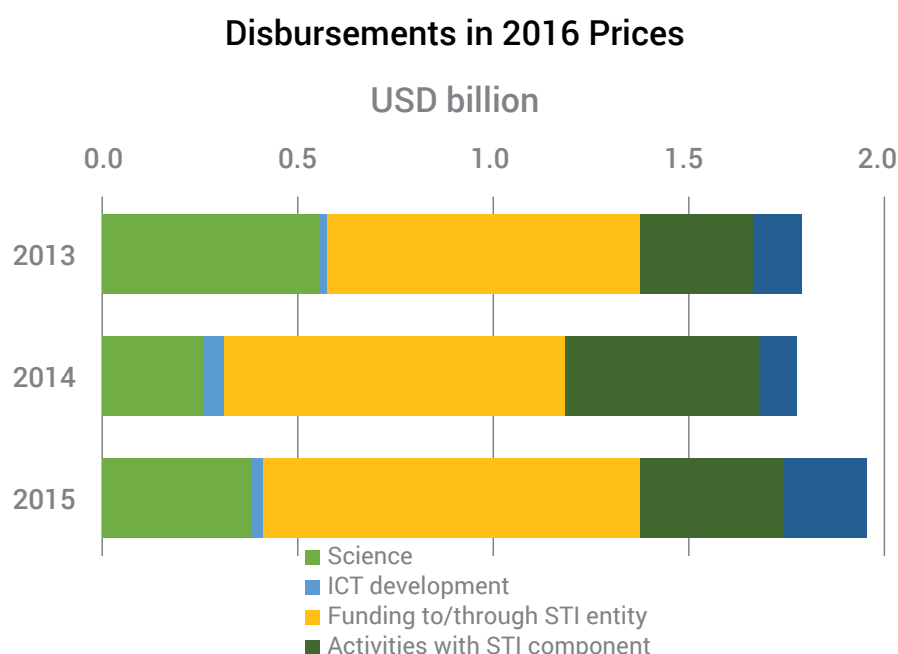
Based on the information above, two of the main potential partners for the IsDB are identified within these set of donors:

- The World Bank is a key player in ODA; moreover, it leads the support in almost all selected STI sectors, especially Communications and Agricultural Research. Besides potential co-financing of projects, the World Bank is a valuable knowledge partner based on their work on promotion of competitiveness, innovation, and entrepreneurship. The World Bank ETIFE (Firms, entrepreneurship and innovation) unit produces specialised analytical studies and best practices reports, ecosystem diagnosis, support policies and institutions, produce impact evaluations and supports the implementation of STI operations in borrowing countries.
- The Inter-American Development Bank (IaDB) is active at strengthening the core of STI systems STI leading financial support in the categories Research/Scientific Institutions and placing second in the Technological research and development category. The countries of Guyana and Suriname are members of the IaDB and the IsDB, providing the opportunity to leverage the IaDB longstanding expertise at shaping the STI systems of countries in Latin America for the benefit of these two countries. Moreover, the IaDB has been running the IaDB Lab for more than 28 years (before 2018 as the Multilateral Investment Fund) where there is great potential for synergies, complementarities and sharing of good practices and lessons learnt since these two funds share the overarching goal of supporting innovative projects and early-stage ventures and promoting innovation and entrepreneurship ecosystems

Science, Technology and Innovation in Philanthropy

- A large share of philanthropy supports STI. The OECD report⁵ estimated that total private philanthropy for development amounted to USD 8 billion per year. While these resources are still modest compared to official development finance, foundations are becoming key partners in specific sectors, particularly the health sector. Based on the resources spent by 143 foundations over the years 2013-2015 (see Figure), foundations' support was the third-largest source of financing in the health and reproductive health sectors. Nearly one-quarter of total support provided by foundations targets STI activities and initiatives.

Figure 6 - Philanthropy funding to STI (2013-2015)



From 2015-2018 the biggest private philanthropy donor in the selected STI sectors is Bill & Melinda Gates Foundation. During this period, the organization donated more than 713 million US dollars. In a very distant second place, the Wellcome Trust donated approximately 52 million US dollars. The third biggest donor is the Michael & Susan Dell Foundation, with 23 million US dollars in the last three years ⁶.

Table 2 below summarises the average yearly support provided by private philanthropy organisations from 2015 to 2018, according to selected STI categories. Based on this information, two main potential partners for the IsDB are identified within these set of donors:

- The leading role of the Bill & Melinda Gates Foundation is clear. The organisation leads funding in the majority of the STI categories assessed and dedicates most of the economic resources to support Agricultural research. Moreover, it is the organisation with the highest allocation of funds through the multilateral system with 1160million USD dollars in 2018, and one that the IsDB have current active links.
- The Wellcome Trust, a UK-based charity, supports research from discovery to impact in biomedical science, population health, medical innovation, humanities and social science, and public engagement, hence its leading position in the category Medical research. The foundation frequently collaborates with the multilateral system. It places fourth according to fund mobilised through the multilateral system with 8.6 million US dollars in 2018.

6 Data collected on 7 September 2020 from https://stats.oecd.org/Index.aspx?DataSetCode=DV_DCD_PPF8

Table 2 Philanthropy Financial flows to support STI fields

Sector	Donor	Financial Flow \$ (average from 2015-2018)
Agricultural research	Bill & Melinda Gates Foundation	121,7266532
	McKnight Foundation	1,771465004
	H&M Foundation	1,181552257
Medical research	Bill & Melinda Gates Foundation	16,21491273
	Wellcome Trust	13,2279631
	William & Flora Hewlett Foundation	0,402406039
Communications, Total	Bill & Melinda Gates Foundation	25,6640925
	BBVA Microfinance Foundation	2,064707
	Ford Foundation	0,685553
Educational research	Michael & Susan Dell Foundation	5,794693355
	William & Flora Hewlett Foundation	3,049383222
	Oak Foundation	2,980635812
Research/scientific institutions	Bill & Melinda Gates Foundation	13,19535669
	Dutch Postcode Lottery	1,758149525
	Conrad N. Hilton Foundation	0,689250817

Science, Technology and Innovation in UN

Based on the analysis of 1,600 activities that relate to science, technology and innovation across 20 UN agencies ⁷, it is estimated that the UN system dedicates around 2,600 full-time staff equivalents, around \$1 billion annual budget and approximately \$120 billion stock of resources for recipients (\$50b grants and trust funds and \$70b loans and credits exclusively from the World Bank). Seven UN agencies host most primary STI initiatives: the World Bank, FAO, ITU, WIPO, UN Environment,

⁷ Conducted in 2017 by the Inter-Agency Task Team for the SDGs (https://sustainabledevelopment.un.org/content/documents/147462017.05.05_IATT-STI-Mapping.pdf)

UNESCO and UNIDO (in descending order of per budget for primary STI initiatives). They represent the major portion of the estimated budget and recipient resources for “primary” STI initiatives. STI initiatives (including “secondary”) in aggregate represent around 15% of staff and budget, and close to 30% of recipient resources at these agencies. Other agencies, such as UNCTAD, UNICEF, WFP, WHO, and UNOSSC, have STI activities with specialized domain focus and of smaller size (partially due to limited data submitted, according to the analysis mentioned above). Based on the analysis of each STI Domain four of the main potential partners for the IsDB are:

- UNESCO is actively supporting countries in the adoption of STI strategies as integral elements of our national sustainable development strategies through policy diagnostics, technical assistance, data compilation and report production and capacity building. Additionally, the UNESCO Institute for Statistics is a key player in aggregating and developing capacities for the collection of national statistics including, Education and R&D. Finally, STEM (Science, Technology, Engineering and Mathematics) Education and TVET (Technical Vocational Education and Training) are largely UNESCO’s capacity building, including with gender focus
- WIPO is the key worldwide actor working on Intellectual property issues. It is an essential partner to building capacity in Member Countries on the use of appropriate investment and intellectual property (IP) frameworks to promote partnerships and the transfer of emerging technologies
- UNCTAD is also active in strengthening National STI Systems providing technical assistance to identify the key strengths and weaknesses of their innovation systems and establish strategic priorities for its development. UNCTAD training activities complement these activities as a means of building capacity in STI policy-making in developing countries.
- The UNTBLDC is a potential partner whose main objective is to facilitate the identification, utilization and access of appropriate technologies by LDCs.

The Sustainable Development Solutions Network and STI

The Sustainable Development Solutions Network (SDSN) mobilizes the world’s academic and research institutes and leverages their strengths to help realize the SDGs and the Paris Agreement. This network is also a potential partner, given their recognition of the positioning and role of universities in the development of new technologies, business models, and governance frameworks as well as their potential to mobilise diverse stakeholders within the ecosystem, including governments, the private sector, civil society, and international organizations. IsDB can leverage on the existence of national, regional and thematic networks to support member countries in the area of research and innovative STI solutions.

4. Roles and Responsibilities for Implementation

STI will play a leading role in the implementation of STIOS in collaboration with Bank's units. This section provides an overview of the roles and responsibilities of key stakeholders and units of the Bank in the implementation of STIOS.

STI Department

The Department will be responsible for the overall implementation, coordination, monitoring and evaluation of the STI Operational strategy. In this regard, the Department will engage in the development of annual execution plans, set targets, and develop annual reports for continuous learning and improvement. The Department will harness strategic partnerships for the benefit of MCs and engage in the development and design of new thematic and sector policies with the purpose of mainstreaming STI.

At the programming level, the department will play an integral role in the preparation of the MCPS, through participation in stocktaking process, consultative meetings, field missions, and elaboration of the STI Country Assessment. The department will also articulate efforts with ERS and DoST to use relevant insights from the STI assessment for informing the Country Diagnosis and all stages of the GVC. The STI Department will provide expertise and oversight regarding the alignment of MCPS project profiles with the STI Strategic Framework.

At the Project level, the STI Department will support the preparation and implementation of investment projects based on established entry points, collaborate with the STI champions at the regional hubs, and act as a focal point for technical clarifications on STI mainstreaming at all levels of project development. The Department will also participate in QRAG and OMC peer review mechanisms to ensure adequate STI screening is undertaken and high-quality standards are followed in the preparation of projects. Moreover, the Department will participate in monitoring and evaluation of projects and review performance in relation to the STI results framework indicators.

Scientific Advisory Board (SAB)

The overall objective of the Scientific Advisory Board is to provide advice on science, technology and innovation (STI) for sustainable development to the President and the executive heads of IsDB organizations. SAB will therefore provide strategic guidance in the implementation of the Operational Strategy and play a key role in, identifying networking opportunities and promoting strategic partnerships for implementation of the strategy and promote cooperation on STI-related issues within IsDB and among member countries and the international scientific community. Additionally, SAB will provide strategic advice on new areas of research where member countries can reap the benefits of cutting-edge science and build the foundation for enterprise and industry growth; entrepreneurs and on the management of Research and Development. SAB will function as standing a high-level technical committee for all STI related aspects.

Country Programs Complex (CPC) - Chief Products and Partnership Officer Directorate (CPO)

CPC/CPO is the focal point for communicating the Bank's operations strategy and activities in local and international fora and for maintaining relationships with Member Countries and other strategic stakeholders. CPC/CPO will ensure their specialists work closely with the STI Department to integrate STI considerations into their respective sector policies and strategies (where applicable), projects

and programs for the benefit of MCs. The products and solutions arising from the Transform Fund will also be aligned with CPC operations. Additionally, the Scholarship and Initiatives Programme will provide support for capacity building to priority STI areas occurring within the GPs projects. Moreover, the CPO will support in overseeing the development of product level partnerships aimed at strengthening the offerings of IsDB STI products to its member countries and co-financiers. It will also help in strengthening the innovation ecosystem already established within the Bank.

Regional Hubs (RHs)

At the Regional Hubs level, the STI Champions will support the STI Department in the STI Assessment. They will provide first-hand knowledge on the framework conditions of the Country, main challenges and opportunities and will facilitate access to qualitative and quantitative information liaising with relevant government authorities. Likewise, regional hubs will facilitate the organisation of all stakeholder consultations undertaken as part of the STI Assessment. Projects teams (led by the STI Champion and the OTL) will ensure that appropriate STI risks and opportunities are identified during the design phase and that corresponding mitigation measures are developed to minimize and monitor their impact to the project. The STI Champion and the OTLs will work closely with the STI Department to identify opportunities and challenges in a particular MC.

Communication & External Relations Department

The Communication and External Relations Department is responsible for all external and internal strategic communications with the aim of enhancing and sustaining the global image, identity, brand and reputation of the Bank. In collaboration with the STI Department, the Communication and External Relations Department will develop communication materials in the first year of implementation of the operational strategy to ensure the right message is delivered to the right audience, raise awareness and appreciation of the planned STI strategic interventions to both internal (Bank staff) and external clients (MCs, partners, and other stakeholders). Moreover, continuous improvements to the communication strategies will be undertaken as and when necessary to suit the changing circumstances.

Department of Strategy and Transformation (DoST)

DoST is primarily responsible for developing IsDB's high-level strategies to maintain and enhance the Bank's contribution and relevance to the developmental needs of its MCs and improve the Bank's profile as a proactive and trusted development partner. DoST will play a central role in strengthening the institutional structures to deliver the aspirations of the STI Policy, supporting STI strategic interventions, alignment of the Key Performance Indicators (KPIs) with the P5P and 10YSF, and integration of STI in the annual work Programme. DoST also leads the GVC analysis and Alternative Development Finance (ADF) Segments. In this regard, the Department will facilitate the resource mobilization efforts of the STI Department from the private sector through ADF to identify and develop alternative financing for STI projects and other interventions in the MCPS. Moreover, the innovative solutions leveraged through Engage and Transform Fund can be capitalized by DoST to contribute to GVC of selected/focused industries of MCs.

Budget, Performance and Results Department (BPRD)

The Budget, Performance and Results Department is responsible for ensuring that project data are input in the system at the appraisal stage and kept up to date on the OMS system as needed, enabling data collection and analysis. In this regard, BPRD will in collaboration with the STI Department

incorporate the STI results framework into the OMS and align them with the institutional KPIs. Financing of STI will be jointly designed and implemented by both STI and BPRD.

Operations Evaluation Department (OED)

The Operations and Evaluation Department independently assesses IsDB high level country/sector, thematic strategies and processes in both Member Countries and operations in Muslim communities in Non-Member Countries. It undertakes thorough reviews and analyses to assess the developmental effectiveness of interventions by the Islamic Development Bank and its alignment to the Bank's strategy. OED will participate in the midterm and final reviews of the STI Operational Strategy, assist to draw lessons and participate in the dissemination of knowledge within IsDB and in the Member Countries to contribute to the improvement of the developmental effectiveness, ensuring that the STI results framework is taken into account in the IsDB's policies, strategies and operations.

Economic Research and Statistics (ERS)

ERS facilitates strengthening of statistical capacities of MCs, especially LDMCs in collaboration with other international agencies and donors; undertakes developmental economic research of key areas of importance for MCs such as government policy stability, equality of income distribution, tariffs and subsidies and availability of key infrastructure and its impact on the overall economic development at country and sector level; provides statistical advisory and analytical services to support operations research activities of IsDB including development and maintenance of statistical databases; and supports country diagnostic studies as well as country development strategies among others. The STI Department will work closely with ERS to align the country macro-economic and diagnostic work with the STI country assessment studies as well as the results framework. ERS will further support the STI Department with data (short-and medium-term macroeconomic monitoring and forecasting of economic performance of the MCs) to help select, categorize and appropriately support MCs with evidence-based interventions.

Knowledge Management and Institutional Learning (KMIL)

STI department will collaborate with this Section of IRTI, in order to fully embed STI knowledge management and learning into the Bank's knowledge management strategy. KMIL will be engaged, to promote learning and sharing on STI across the regional Hubs, in addition to leveraging their role in facilitation and supporting member countries to promote knowledge management platforms and programmes to serve their development needs, which include STI.

5. Monitoring and Evaluation Framework

The STI Monitoring and Evaluation Framework is aimed at supporting improved STI operational performance, strengthen institutional learning, and achieve better results in collaboration with other Bank's Units and the development partners. The framework will therefore enhance institutional learning and accountability for development results of the IsDB's STI programmes.

The STI Department will continuously monitor, learn and adapt based on evidence of what works. Evaluation activities will support such adaptive learning while also fostering accountability for achieving results. Therefore, the objectives of the STI monitoring and evaluation system are to:

1. Foster continuous learning to inform decisions on and improve current and future policies, strategies, programs, operations, activities, and systems;
2. Provide a basis for accountability to shareholders for delivering on its STI development mandate by systematically assessing performance and development results; and
3. Contribute to transparency by systematically assessing the IsDB performance and development effectiveness and by appropriately disseminating the findings.

The STI Strategic Results Framework (see table 3 below) provides the most important sources of indicators for measuring progress on the STI Policy in the IsDB. It lays out indices for internal monitoring of STI-related interventions within the Bank as well as at the Member Country level. As this Results Framework was developed during uncertainty period of COVID19, it will be further elaborated during the first phase of implementation based on the availability of relevant information/indicators. The framework provided below will be thus considered as a guiding tool for early implementation.

The STI Department will regularly produce the STI Performance Report based on the updated Results Framework that will be developed during the first phase of implementation. The report will document the STI results and performance based on expected targets and indicators.



Table 3 : Results Framework (subject to fine-tuning)

Impact: The IsDB Member Countries Harness the Power of STI for Inclusive and Sustainable Development			
Indicator	Baseline	Target (2025)	Means of verification
Human Development Index (MC Median)	0.68	0.72	Annual calculation of IsDB MC Median Score from UNDP Data available online
Multidimensional Poverty Index (MC Median)	0.18	0.16	Annual calculation of IsDB MC Median Score from UNDP Data available online
SDG Index (MC Median)	63	67	Annual calculation of IsDB MC Median Score from Sustainable Development Report available online
Outcome 1 STI is Mainstreamed into IsDB Operations			
Share of funds allocated to STI Direct interventions	0	10%	Annual calculation from internal operational data
Share of funds allocated to STI in sectoral projects with STI mainstreamed	0	10%	BPRD Report - IsDB financial reports
Output 1.1 Integration of STI Elements into IsDB Policies and Strategies			
Number of IsDB sectoral and thematic Policies and Strategies with STI mainstreamed	0	14	IsDB Policies and Strategies Documents
Output 1.2 Integration of STI Elements into IsDB Programmes and Projects			
Number of new projects designed with STI- mainstreamed solutions	0	25	IsDB Project documents
Number of Member Country Partnership Strategies that are STI-aligned	0	15	Member Country Partnership Strategy documents
Output 1.3 Linkage between STI programmes and Bank Operations			
Number of inter-sectoral projects jointly implemented with the STI Department	0	5	STI Department reports
Output 1.4 Diverse financial Instruments used for STI			
Share of OCR allocation to STI	0	10%	BPRD reports and documents
Additional sources of financing mobilized for STI	0	5%	STI reports and Documents
Outcome 2 Strengthened STI Systems in IsDB Member Countries			
Global Innovation Index (MC Median)	24	26	Annual calculation of IsDB MC Median Score from GII data available online

Impact: The IsDB Member Countries Harness the Power of STI for Inclusive and Sustainable Development			
Innovation Capability Index (MC Median)	32	34	Annual calculation of IsDB MC Median Score from World Competitive Index data available online
Output 2.1. Strengthened Governance of STI systems supported in IsDB Member Countries			
Number of Member Countries supported in the development of STI policies and strategies	0	10	MC and IsDB reports
Output 2.2. Human Resource Capacity Development			
Number of Entrepreneurs supported with STI related capacity building programmes	95	265	Annual calculation from internal project data
Output 2.3 Strengthened Research, Innovation and Technological Infrastructure			
Number of STI Infrastructure projects supported, including science parks and technology business incubators, metrology services	0	8	STI reports and Documents
Outcome 3: Functional Partnership Established for STI			
FDI and Technology Transfer (MC Median)	4.13	4.65	Annual calculation of IsDB MC Median Score from World Competitive Index data available online
Business Sophistication Index	24	27	Annual Global Innovation Index Report
Output 3.1. Action Plan for Partnership Developed			
Mapping of development partners to support MC according to development levels and national needs	0	1	availability of action Plan
grouping of MCs completed	0	1	availability of technical reports
Output 3.2. Partnership agreements established to mobilize technical and financial resources for MC			
Number of Partnership agreements developed	0	7	Signed MoUs and Agreements
Output 3.3. Joint Investment Projects developed			
Percentage of co-financed and implemented projects supporting STI (%)	0	30	Annual calculation from internal operational data

Note: The STI Operational Strategy output indicators have been aligned with the P5P and Core Sector Indicators (CSIs) as well as relevant SDG targets. This is aimed at ensuring consistent and harmonized reporting across the Bank’s portfolio, while keeping the Operations Management System (OMS) up to date to track the relevant indicators, see Annex 6.2

6. Annexes

6.1. Action Plan for Mainstreaming STI in IsDB Operations

This action plan represents the road map and steps taken to develop the Operational Strategy, it was approved by senior management and technical expertise of the Bank.

IsDB Strategies and Policies			
Objective	Action	Expected Result	Timeframe
Develop a strategic framework for implementation of the STI Policy	Identify the Vision, Mission and Scope for STI Interventions using a Theory of Change aligned with the P5P, Bank's 10YSF and STI Policy	Vision and Mission for STI in the IsDB developed	3rd week of June 2020
Support the integration of STI into new Policies and Strategies	Participate in the development of new sector and thematic policies and strategies	STI is integrated into IsDB policies and strategies (i.e. water, education)	Continuous process
Country Programming (MCPS)			
Objective	Action	Expected Result	Timeframe
Integrate STI into Country Programming	Undertake desk review of MCPS Process	MCPS process is analysed to include STI elements	Started in Jan 2020
	Organise consultative meetings with MCPS team to integrate STI into MCPS development process.	STI entry points are identified across the MCPS development process	3 rd week of June 2020
	Review and adapt templates to integrate STI in the MCPS process	MCPS related templates are updated (Project Profiles, Results Matrix, etc.)	3 rd week of July 2020
	STI Department participates in the technical review/diagnostic Missions of MCPS	STI team nominated to the Technical Committee of MCPS	3 rd Week of April 2020
		STI team participates in MCPS development process and related missions	Continuous process
	Develop guiding tools for assessment of STI needs of MCs within the MCPS process	Toolkit developed to facilitate diagnosis/assessment of STI ecosystems in the MCs	2 nd week of August 2020

IsDB Strategies and Policies

Project Cycle (Preparation, Implementation and Evaluation)

Objective	Action	Expected Result	Timeframe
Ensure systematic integration of STI into the IsDB project cycle	Hold consultative meetings with CPC (GP, CRS) to integrate STI into project cycle	STI entry points are identified across the Project cycle (project preparation, implementation and completion)	4 th week of June 2020
	Integrate STI elements into the templates and guidelines of project preparation, implementation and evaluation	Project Preparation, Implementation, and Evaluation templates are updated and validated	4 th week of August 2020
	STI Department participates in the design, implementation, and evaluation of Projects and in the Quality Assurance Process	STI is integrated into Bank's investment projects (piloted through COVID19 Program)	2 nd week of Sept 2020

Enablers and Cross-cutting Interventions

A - Institutional arrangements

Objective	Action	Expected Result	Timeframe
Establish needed institutional arrangements to support mainstreaming STI into Bank's operations	Hold a consultative meeting with DoST to establish Institutional support mechanisms	Institutional support mechanisms discussed and agreed upon	4 th week of June 2020
	Establishment an STI mainstreaming unit to facilitate and inject STI solutions within IsDB core projects and programmes	Functions of STI Mainstreaming unit defined Staff roles and responsibilities defined	3 rd week July 2020
	Selection and nomination of STI Champions to support integration of STI into Regional Hub operations	The roles and responsibilities of the STI Champions are defined	4 th week of July 2020
		STI Champions nominated and endorsed	3 rd week of August 2020
	Conduct Capacity Building and orientation sessions for IsDB staff	Orientation sessions on the use of templates and tools across all operations levels are organised	February 2021

IsDB Strategies and Policies			
B - Financial arrangements			
Objective	Action	Expected Result	Timeframe
Scale up financial resources to support mainstreaming STI into the Bank's operations	Hold a consultative meeting with BPRD/ADF on existing and potential financing options for STI mainstreaming	Existing financing arrangements are explored and assessed	3 rd Week of July 2020
	Identify financial Windows/ options to support STI interventions (grants, equity...etc)	Financing options for STI interventions are identified	4 th week of August 2020
	Determine the potential financing schemes for STI interventions including Special OCR allocation	Allocated budget for STI interventions and percentage of OCR are identified	2 nd week of October 2020
C - Linking STI programmes to Bank's Operations			
Objective	Action	Expected Result	Timeframe
Integrate STI programmes into the Bank's Operational Business Model	Hold consultative meetings with GID, Scholarship to explore opportunities for integration between STI Department and CPC	Integration opportunities between STI Department and CPC are identified	May 2020
	Align existing STI programmes with IsDB operations to address MCs challenges and SDGs 1. Utilisation of Transformers and calls for innovation to provide STI solutions to MCs; 2. Leverage Roadshows in MCs to promote STI 3. Use TWAS for capacity building, networking, and knowledge sharing in STI to MCs 4. Utilisation of UNESCO/ Go-SPIN assessment to support MCs STI ecosystem and to determine capacity building interventions	STI programmes/ Interventions integrated into the Bank operational programming for MCs	Continuous process
	Develop proposal to mobilize/leverage existing STI programmes (Transform, Scholarship, Engage, Initiatives) to support Bank's investment Projects and interventions	Proposal for Inter-Departmental support to STI mainstreaming in Country Programs Complex is developed	2 nd week of September 2020

IsDB Strategies and Policies

D - Partnerships

Objective	Action	Expected Result	Timeframe
Leverage internal and external Partnerships for STI to mobilize resources, share knowledge and create synergy with Development Partners	Mapping of potential and relevant STI partners	Potential external and internal partners are identified and grouped according to their roles	1st week of September 2020
	Hold consultative meetings with internal (ICD, ITFC, ICIEC...etc) and external (OECD, UNESCO, UN Technology Bank, WHO, etc) partners to identify potential areas of collaboration	Areas of collaboration with internal and external partners are identified and agreed upon	4 th week of Jan 2021
	Determine common areas of collaborations between STI and Development Partners	MoUs developed with relevant development partners to support STI ecosystem in the MCs	4 th week of Feb 2021

E – Member Country Support

Objective	Action	Expected Result	Timeframe
Strengthen STI ecosystems in MCs and build a culture of entrepreneurship and innovation	Assessment of MC STI needs (Grouping / Clustering of MCs according to level of STI development)	Toolkit developed to facilitate diagnosis/assessment of STI ecosystems in the MCs	2 nd week of August
	Develop GO-SPIN for pilot member countries to assess STI ecosystem and to determine investment priorities	2 GO-SPIN are developed in collaboration with UNESCO for Uzbekistan and Mozambique	Started in 2019
	Leverage STI solutions to support MCs	STI Solutions are made available for MCs COVID19 Response Programme	Continuous Process
	Develop a Comprehensive Support Plan for STI ecosystems in MCs.	STI-ecosystem Support Plan is developed for MCs.	3 rd week of October

6.2. STI Results Framework Alignment with CSI and SDGs

Impact: The IsDB Member Countries Harness the Power of STI for Inclusive and Sustainable Development						
Indicator	Base-line	Target (2025)	Sources of verification	Alignment with the SDG targets Sectors	Alignment with Core Sector Indicators (CSI)	
					Code	Indicators
Human Development Index (MC Median)	0.68	0.72	UNDP Human Development Index (HDI) Reports			
Multidimensional Poverty Index (MC Median)	0.18	0.16	UNDP Human Development Index (HDI) Reports	NA	NA	NA
SDG Index (MC Median)	63	67	Sustainable Development Solutions Network (SDSN) SDG Index Score Reports			
Outcome 1 STI is Mainstreamed into IsDB Operations						
Share of funds allocated to STI Direct interventions	0	10%	Annual calculation from internal operational data (IsDB)			
Share of funds allocated to STI in sectoral projects with STI mainstreamed	0	10%	BPRD Report - IsDB financial reports	17.7	NA	NA
Output 1.1 Integration of STI Elements into IsDB Policies and Strategies						
Number of IsDB sectoral and thematic Policies and Strategies with STI mainstreamed	0	14	IsDB Policies and Strategies Documents	17.7	NA	NA
Output 1.2 Integration of STI Elements into IsDB Programmes and Projects						
Number of new projects designed with STI- mainstreamed solutions	0	25	IsDB Project documents	9.b	Agriculture	Crop yield increased (tons/hectare)
Number of Member Country Partnership Strategies that are STI-aligned	0	15	Member Country Partnership Strategy documents		Education	Students benefitted (number)

STI OPERATIONAL STRATEGY “STIOS 2025”

Impact: The ISDB Member Countries Harness the Power of STI for Inclusive and Sustainable Development							
Number of new projects designed with STI- mainstreamed solutions	0	25	ISDB Project documents	9.b	Health	4100	Health facilities constructed or upgraded or equipped (number)
					Health	4200	Health personnel trained (number)
					Energy	5200	Installed energy generation capacity using renewable sources (MW equivalent)
					Transport	6600	Annual capacity increased at other transport or logistics gateways and hubs (intermodal platforms, logistics parks, etc.) (TEU, tons, m3, vehicles or passengers)
Number of Member Country Partnership Strategies that are STI-aligned	0	15	Member Country Partnership Strategy documents	9.b	Capacity development	9100	People trained (number) [Male/Female]
					Employment	100100	People employed (number) [Male/Female]
Output 1.3 Linkage between STI programmes and Bank Operations							
Number of inter-sectoral projects jointly implemented with the STI Department	0	5	STI Department reports	9.b	Agriculture	1300	Crop yield increased (tons/hectare)
					Education	3200	Students benefited (number)
					Health	4100	Health facilities constructed or upgraded or equipped (number)
					Health	4200	Health personnel trained (number)
					Energy	5200	Installed energy generation capacity using renewable sources
					Transport	6600	(MW equivalent)

Impact: The IsDB Member Countries Harness the Power of STI for Inclusive and Sustainable Development							
Output 1.3 Linkage between STI programmes and Bank Operations							
Share of OCR allocation to STI	0	10%	BPRD reports and documents	17.7	Education	3200	Students benefitted (number)
Additional sources of financing mobilized for STI	0	5%	STI reports and Documents	17.7	Education	3200	Students benefitted (number)
Outcome 2 Strengthened STI Systems in IsDB Member Countries							
Global Innovation Index (MC Median)	24	26	Annual calculation of IsDB MC Median Score from GII data available online	NA	NA	NA	NA
Innovation Capability Index (MC Median)	32	34	World Competitive Index data available online				
Output 2.1. Strengthened Governance of STI systems supported in IsDB Member Countries							
Number of Member Countries supported in the development of STI policies and strategies	0	10	MC and IsDB reports	9.b	Agriculture	1300	Crop yield increased (tons/hectare)
					Employment	10100	People employed (number) [Male/Female]
Output 2.2. Human Resource Capacity Development							
Number of Entrepreneurs supported with STI related capacity building programmes	95	265	IsDB internal project data	8.3	Rural Development	2100	Rural (farm, non-farm or cottage industry) enterprises established or promoted (number)
					Employment	10100	People employed (number) [Male/Female]
Outcome 3: Functional Partnership Established for STI							
FDI and Technology Transfer (MC Median)	4.13	4.65	World Competitive Index data available online	NA	NA	NA	NA
Business Sophistication Index	24	27	Annual Global Innovation Index Report	NA	NA	NA	NA

Impact: The IsDB Member Countries Harness the Power of STI for Inclusive and Sustainable Development

Output 3.1. Action Plan for Partnership Developed						
Mapping of development partners to support MC according to development levels and national needs	0	1	Available of action Plans	NA	NA	NA
Grouping of MCs completed	0	1	Available of IsDB technical reports			
Output 3.2. Partnership agreements established to mobilize technical and financial resources for MC						
Number of Partnership agreements developed	0	7	Signed MoUs and Agreements)	17.7	Education 3200	Students benefitted (number)
					Employment 10100	People employed (number) [Male/Female]
Output 3.3. Joint Investment Projects developed						
Percentage of co-financed and implemented projects supporting STI (%)	0	30	IsDB operational Reports	17.7	Education 3200	Students benefitted (number)
					Health 4100	Health facilities constructed or upgraded or equipped (number)
					Health 4200	Health personnel trained (number)
					Employment 10100	People employed (number) [Male/Female]

6.3 Summary of MCPS Entry points for STI Integration

MCPS Stage	MCPS Phase	STI Entry Point	STI Entry Point Description	Guiding Tools and Templates
Pre-MCPS Preparation	MCPS Country Selection	Integrate STI considerations	The Country prioritisation process shall incorporate STI considerations.	STI Considerations on qualitative and quantitative metrics used in country selection. See section 3.1.1.2
MCPS Preparation	Country STI Assessment	STI Analysis	Desktop Research on the National STI System.	- Indicative list of STI indicators - Indicative Outline of Country STI Assessment
MCPS Preparation	Country Diagnosis	STI Department participation in Missions; Contributions from STI Analysis	- Joint missions to fill information gaps of the STI Analysis - Contributions from STI Analysis	- MCPS Mission schedule - Indicative Outline of Country STI Assessment
MCPS Preparation	Country Portfolio Performance Review Report	Integrate STI considerations	Disaggregated projects by STI.	
MCPS Preparation	Investor Intelligence Report	Integrate STI considerations	Disaggregated donor projects by STI.	
Formulation of MCPS Concept Note	MCPS Reconnaissance Mission	STI Department participation in Missions	Validation of findings from STI Analysis	- MCPS Mission schedule
Formulation of MCPS Concept Note	MCPS Concept Note	Contributions from STI Analysis	STI Analysis contributes insights about the National STI System	- STI Analytical Dimensions and guiding questions
Formulation of MCPS Concept Note	Country STI Assessment	STI Needs Assessment	Field research to identify opportunities for STI as an agent of change to improve the productivity of Global Value Chains and the effectiveness of actions towards the SDGs	- STI Analytical Dimensions and guiding questions
Finalization of MCPS Strategy	Field GVC Analysis	STI Department participation in Missions	Joint missions to fill information gaps of the STI Analysis	- MCPS Mission schedule - Indicative list of Interviews
Finalization of MCPS Strategy	Project Profiles and Results Matrices	Integrate STI elements in Projects	STI Needs Assessment informs the design of projects	- Project Design Tool - Project Profile Template

6.4. Country STI Assessment Report

Introduction to the STI Country Assessment Toolkit

The objective of this toolkit is to assess the situation of the STI Ecosystems of IsDB member Countries, and in doing so, determine the gaps that require intervention. This assessment is geared towards the general STI system as well focus areas or sectors identified from the Global Value Chain preliminary analysis, for investment.

The significance of the STI country assessment is that it guides the inputs of the Science Technology and Innovation Department, as well as other IsDB Departments and entities as well as member countries and partners in the development of programmes that address these gaps, as an integral part of IsDB interventions in these countries.

Details of the Toolkit

The basic parts of this toolkit are: i) STI analytical dimensions with guiding questions; ii) Table of SDG-based STI sectoral indicators, based on the analytical dimensions ; iii) Recommended list of institutions to be met during the assessment, to collect the necessary information; iv) Final Report template.

B.1 STI Analytical Dimensions

These are divided into the following categories: STI framework conditions, knowledge development, science and technology activities, knowledge exchange and transfer, infrastructure for STI and finally, STI-based innovation and entrepreneurship.

B. 1.1 STI Framework conditions

The systems approach to STI emphasizes the essential value of the interactions between the various actors and levels of the STI systems, not only the sole presence of the system's building blocks. In this sense, the systemic perspective recognizes that responsibilities are often distributed across various stakeholders, highlighting the importance of the framework conditions of a country and the coordination not only between government agencies but also with other actors such as firms, higher education institutions, civil society. Therefore, it is highly relevant to understand the STI governance and accountability mechanisms including agenda setting, prioritization, budget allocation and incentive schemes, as well as mechanisms for system learning (measurement and evaluation; foresight). This category also includes metrics related to the public acceptance and support for S&T and the recognition of S&T as a key driver for addressing broader socio-economic development challenges.

Guiding Questions

Does the overall development policy framework or plan recognise STI as a relevant policy field for inclusive and sustainable economic growth?

Does civil society recognise STI as a relevant field to solve society's most pressing needs for sustainable economic growth?

Does the country have a National STI policy? If not, why not?

What are the key objectives and targets of STI policy? What was the process of selecting these? To what extent do they consider sustainability challenges and SDGs, and how do they include multiple stakeholders?

What are the policy instruments, including regulatory measures, to support STI directly?

What are the policy instruments, including regulatory measures to support STI as a cross-sectional theme, influencing sectoral activities and fostering sustainable development?

To what extent is the STI policy mix internally (within direct STI measures) and externally (across other sectoral activities related to STI) consistent and coherent? What are the processes and organisational arrangements to ensure this consistency and coherence?

Who are the main implementation bodies for main STI policy instruments? What are the implementation mechanisms? What are the competences and responsibilities of these implementation bodies?

How would you rate the capacities ⁸ of government to design policy instruments, policy instrument portfolios and to implement these?

How is the STI policy monitoring and evaluation system organised in the Country?

What are the key characteristics of evaluation culture and policy learning in STI policy?

To what extent is the monitoring and evaluation system tailored to informing the design and implementation of STI policy for sustainable development and the SDGs?

What is the contribution of public policy in creating an environment for impact of STI as an enabler/ catalyst, notably in areas relevant for sustainable development ⁹?

B.1.2 Knowledge Development and Science and Technology Activities

The most fundamental resource in the modern economy is knowledge. In the context of STI systems, the knowledge development process is closely associated with R&D activities. Hence, measuring R&D allows understanding how much effort, how much resources, have been put into an explicit activity to create new knowledge and develop new products and processes. This understanding is useful for a nation to understand the performance of the system as well as to design programs to target directly R&D or sectoral initiatives that aim at building on the knowledge stock available or at enhancing it.

For the case of developing countries, it is important to highlight that R&D activities are typically not widespread; therefore it is important to extend the analysis to other types of Science and Technology activities that support the adoption and diffusion of knowledge (e.g. imitation or adaptation of mature foreign technologies) as well as connection with external links of the Global Value Chain through metrology, standardization and quality control services.

⁸ Including understanding of the functioning of national STI systems: governance framework, formulation, monitoring and review of STI policies and action plans,

⁹ Focus on key sectors implicated in the national development plan and relevant sectoral policies and the GVCs

Guiding Questions

What are the main areas of knowledge production?

What is the balance in the knowledge-producing community between basic research and applied research?

To what extent does knowledge production match the demand of other industry, society or other sectors?

Who are the main actors producing knowledge (public organisations, international NGOs, universities, etc.) in the Country?

What is the type of finance available from the following and other sources: Public? Private seed capital? Venture capital? Private equity? Public R&D?

Is a demand for Science and Technology services e.g. scientific data collection, testing, standardisation, metrology and quality control? If yes, to what extent is this demand? Are existing organisations capable of meeting this demand?

B.1.3 Knowledge Exchange and Transfer

Assessing the Knowledge flow in the STI system is essential to facilitate knowledge circulation and sharing, including networks, partnerships, and collaboration activities. This also includes open science which encompasses open access to research results as well as increased collaboration between researchers and scientists through non-proprietary networks and platforms. It also includes more traditional measures of international flows such as trade and transfers of technology or technical knowledge.

Guiding Questions

Is all knowledge produced/generated within the Country disseminated?

If yes, what is the scope of this dissemination?

What are the drivers and barriers of knowledge flows, learning, innovation and collaborations?

What are the key connections and collaboration dynamics in the knowledge dissemination system?

Do these system dynamics foster/lead to learning among actors?

What are the networking capabilities?

Who are the most active members in the innovation networks?

What are the key needs and gaps in terms of Networking (inclusion)? Learning? Enabling transformation? and Addressing SDGs?

How to ensure learning and knowledge flows, including technology, between local and foreign actors, North-South and South-South collaboration?

What are the most important scientific fields in which the Country is engaging in international cooperation and with what institutions?

What are the main sources of technology acquisition from abroad?

B.1.4 Infrastructure for STI

It has long been recognized that growth in productivity and incomes, and improvements in health and education outcomes require investment in infrastructure. With over half the world population now living in cities, mass transport and renewable energy are becoming ever more important, as is the growth of new industries and information and communication technologies. From the perspective of STI Systems, it is clear that prevailing infrastructure strongly affect the speed and direction of innovation within an STI System. Therefore, it is important to assess and upgrade infrastructure that supports knowledge creation, technology development, and economic value. As STI infrastructure no longer is just about bricks and mortar or equipment, it is relevant to new types of infrastructure such as business support, prototyping and scaling, metrology and quality control, amongst others.

Guiding Questions

What is the state of R&D and innovation infrastructure, and what are the main institutions that have them?

What are the main sources of financing for the development of R&D and innovation infrastructure?

To what extent the available R&D and innovation infrastructure is available to and utilised by various actors of the STI system and aligned with the needs of the STI system.

To what extent are investments and infrastructures tailored to support key specialisation areas for sustainable development?

B.1.5 STI based Innovation and Entrepreneurship

Innovation is the sought-after output of an STI System, hence shedding light on its productivity and effectiveness. Nevertheless, it is also understood as the process of translating new and/or existing knowledge into marketable solutions, shedding light on the interconnectedness and supportive environment. This theme acknowledges this dual nature of innovation as well as the role of the entrepreneur as the essential actor to introduce innovations. Information related to this theme is highly relevant to serve as incentives for industry to engage in value-added activities new to their market while empowering the population to improve their livelihoods through innovative entrepreneurship that solves their most direct societal needs.

Guiding Questions

What is the share of firms involved in innovation activities?

What are the types of activities?

What is the nature and level of involvement of other innovation actors in innovation activities?

What are the impacts of innovation on different social groups (e.g. by gender, age, educational level) and different geographic areas of the Country, including peripheral regions?

What are the key systemic drivers and barriers of innovation, notably with respect to innovation fostering sustainable development and the SDGs?

What is the position of the Country in global value chains relevant to the key specialisation areas?

What are existing and emerging innovation areas that have the high potential to address the development problems by sector?

B.2 Indicative List of STI Quantitative Indicators (Including SDG targets)

The indicators below are an indicative list of quantitative indicators with its corresponding links to MCPS stages as well as with the SDGs

Theme	Indicator		Stage of MCPS Process		Link to the SDGs targets
	Example	Potential Source	Synergy with Country Diagnosis	Synergy with Global Value Chain Analysis	
STI Framework conditions 1	Existence and engagement of all relevant policy actors involved in policy design and implementation Existence of Strategic documents for STI Incorporation of STI in sectoral and SDGs strategies Inclusion of non-governmental stakeholders in policy design Public perception and understating of STI Existence of mechanisms to ensure coordination of STI across policies Existence of STI policy implementation mechanisms Evidence of the use of monitoring and evaluation studies in policy design	Country-specific	Implications of governance in macro-economic performance	IsDB GVC Qualitative Framework (Natural Potential)	4.3 ¹¹ 8.2 ¹² 8.3 ¹³ 9.5 ¹⁴ 9.b ¹⁵ 17.6 ¹⁶

- 11 by 2030 ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university;
- 12 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value added and labour-intensive sectors;
- 13 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services;
- 14 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
- 15 Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
- 16 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism

Theme	Indicator		Stage of MCPS Process		Link to the SDGs targets
	Example	Potential Source	Synergy with Country Diagnosis	Synergy with Global Value Chain Analysis	
Knowledge development and other S&T activities	Gross Expenditure on R&D (GERD) and Business Expenditure on R&D (BERD) (preferably by sector) Seed, venture capital, equity investments (preferably by sector)	World Bank, UNESCO, ASTI from CGIAR Country specific	Macro-economic Industry structure	Macro-level value chain assessment (R&D chain) IsDB GVC Qualitative Framework (Dynamic Potential, Surplus and Spill over Potential)	2.3 ¹⁷ 2.a ¹⁸ 3.b ¹⁹ 8.3 9.5 9.b 14.a ²⁰
Human Capital for STI	Tertiary graduates in STEM-related fields of education R&D personnel (preferably by type) Researchers by sector	UNESCO Country-specific, ASTI from CGIAR (Agriculture), UNESCO Global Ocean Science Report (Oceans), Engineering (UNESCO Engineering Report – Upcoming)	Macro-economic structure of labour force	IsDB GVC Qualitative Framework (Natural Potential, Surplus and Spill over Potential)	2.3 2.a 4.3 4.4 ²¹ 5.5 ²² 9.5 9.b 14.2 ²³ 14.a 15.5 ²⁴

- 17 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 18 2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- 19 Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
- 20 Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries
- 21 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 22 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life
- 23 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
- 24 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

Theme	Indicator		Stage of MCPS Process		Link to the SDGs targets
	Example	Potential Source	Synergy with Country Diagnosis	Synergy with Global Value Chain Analysis	
Knowledge Exchange and Transfer	Scientific Publications Co-authorship of scientific publications Patent co-invention International science and technology cooperation Medium-high and high technology exports Technological Balance of Payments (TBP) FDI in STI sectors	Bibliometric Indexes (e.g. Scopus, Lens. org) National or international patent database (e.g. PATSTAT/ OECD RegPat) World Bank Country-specific	Macro-economic structure of labour force Macro-economic Industry structure	Identifying and measuring the highest potential value chain Macro-level value chain assessment (Distribution and Sales) IsDB GVC Qualitative Framework	9.b 17.6 17.11 ²⁵
Innovation and Entrepreneurship	Innovative Firms Level of various forms of innovation including social innovation, frugal innovation and grassroots innovation Patenting Entrepreneurship Share of companies with process standards implemented (ISO)	Country specific National or international patent database (e.g. PATSTAT/ OECD Global Entrepreneurship Monitor International Standards Organization (ISO)	Macro-economic Industry structure and productivity	Macro-level value chain assessment IsDB GVC Qualitative Framework (Dynamic Potential, Surplus and Spill over Potential)	4.4 8.2 8.3 9.2 9.5 17.6
Infrastructure for STI	Higher Education Institutes Public research organizations Statistic Institutes National Quality institutions	Country specific, World Higher Education Database, SESRIC Country specific	Macro-economic Industry structure	IsDB GVC Qualitative Framework (Natural Potential, Dynamic Potential)	9.5 ²⁶ 9.b 17.6

25 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020

26 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

B.3 Country STI Assessment Report Template

The report template is used to prepare the STI report which highlights the gaps in the STI Ecosystem as well as at the level of the selected GVCs, for consideration and incorporation into the MCPS Concept Note and Strategy. It is divided into the following key sections: i) Executive Summary; ii) An introduction section; iii) A general overview of STI in the Member Country, which addresses STI in the national development and SDG agenda, the STI system and policy framework, Analysis of Strengths, Weaknesses, Opportunities and Threats; iv) Implications for the selected Global Value Chains for the Member Country Partnership Strategy; v) Conclusion and recommendations.

Executive Summary

Presents a synthesis of the findings of the STI Country Assessment

Introduction

The introduction gives an overview of the internal (Organizational) and External (MC) context and main objectives of the Country STI Assessment. It describes the methodology used in the assessment

Suggested length: 1-2 pages

General Overview of STI in the Member Country

This section describes the general composition and performance of the STI system of the MC, including the STI Policy Framework, Legal and Institutional aspects.

(The development of this section will commence with desktop research to collect readily available information and will be complemented with field missions according to the Country STI Assessment and MCPS processes.)

STI in National Development

This section will develop the case for supporting STI in the country by describing its current and potential role as explicitly mentioned in the National Development Agenda, including SDG roadmaps and plans (This may be reflected in one or multiple documents like the vision, development plan, SDG reports and others). Note: If there is no explicit mention of STI, the analysis should highlight and explain how STI can practically support the goals explicitly mentioned in the document, to help the country achieve the SDGs. This section will inform the development of the Section IV (STI Policy Instruments), the Development Context of the MCPS Concept Note and Technical Note.

Since the description of the National Development Agenda is already present in the Economic Profile for the MCPS, emphasis should be laid on STI dimensions.

STI System and Policy Framework

STI Policy

Analysis of the STI Policy currently in place as well as the sectoral policies related to the selected GVCs. Particular emphasis should be laid on the explicit goals and targets of the national STI policy as well mechanisms defined to achieve them. The role of STI in the sectoral policy related to the selected GVCs should be analysed in line with the explicit reference in the policy. If STI is not explicitly mentioned, this should be highlighted and the analysis should further explained how STI can support the goals that are explicitly mentioned in the sectoral policy (ies)

This section will inform the development of the section IV. Development Context of the MCPS Concept Note and Technical Note.

STI system Institutions/Stakeholders

This section should describe all the stakeholders in the STI systems, their role in the system and the interlinkages. Focus should be laid on organizations that i) plan and design policies; ii) coordinate activities within the STI system; iii) Fund STI programmes; iv) execute STI activities (e.g beneficiaries of government STI programmes); v) provide STI support services (e.g. metronomy, standardization, IP services, business development services, etc); and vi) monitoring and evaluation of the STI Policy and STI System

STI Policy Instruments

This section should describe and analyze all implementation mechanisms of the STI Policy, such as legal framework, R&D or Innovation funds, programmes to attract FDI, Programmes for technological modernization, promotion of STEM education, promotion of technological services, amongst many others.

This section will help identify the gaps in the implementation mechanisms described in the STI Policy and hence inform the design of MCPS interventions

STI Inputs

Analysis of national inputs to the STI System. This section shall be supported by analysis of statistical data such as R&D Expenditure, STI-related Investments in Human Resources, infrastructure, Higher Education, etc.

STI Outputs

This is an analysis of national outputs of the STI System.

This section shall be supported by statistical data on the various categories of outputs such as Scholarly Works Outputs, Patent outputs, Innovation surveys.

Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of the STI System

Using the information collected from sections a) and b), this section will analyse the general Strengths, Weaknesses, Opportunities and Threats of the STI System. The discussion shall focus on the following dimensions i) STI Framework conditions, ii) Knowledge development and Science and Technology Activities, iii) Human Capital for STI, iv) Knowledge exchange and transfer, v) Infrastructure for STI, vi) STI based Innovation and Entrepreneurship.

(This section needs to be developed in direct consultation with National Stakeholders, preferably developed during an MCPS Field Mission. This section will inform the development of the Section III. Country Diagnosis of the MCPS Concept Note and Technical Note)

Implications for Selected GVCs

This section will build on the information presented in the SWOT Analysis of the STI System as well as on the stocktaking mission, undertaken at the Identification of STI Needs stage of the Country STI Assessment , to identify the main implications of the STI Policy context and performance with respect to the selected GVC,.

This section will inform the development of the section III. Country Diagnosis, in particular the subsection “Cross cutting interventions along the GVC” of the MCPS Concept Note and Technical Note

Conclusions and Recommendations

Conclusions of the Country STI Assessment and recommendations.

This section shall provide independent conclusions informed by evidence collected in this study as well as through consultations with Member Countries.

6.5. Revised MCPS templates

Annex 6.5.1. Guidance Notes on MCPS (Concept Note and Strategy Final Document)

Recommended changes in red box and/or red text

This section presents the description and contents of each section of the MCPS Concept Note and MCPS Strategy Document.

The introduction gives an overview of the main objectives of undertaking the MCPS given the overall view of the country context, IsDB’s potential engagement in the partnership, the timing and brief information on the last MCPS.

I. Introduction

- In this section, the timing of the MCPS will be indicated, and the duration of the Government’s National Development Strategy/Program.

This section sets the stage of the partnership with the country diagnostic study, identifying recent economic, socio-economic trends and the structural challenges to development the MC is facing. The diagnostic will also identify the binding constraints to development. And within the context of the new MCPS, this section will also contain the potential trade opportunities. All these points will be summarized from the Country Diagnostic Report (including a Global Value Chain Study) undertaken by ERS.

Suggested length: 4-7 pages

II. Country Context

i. Country Diagnostic

- **Recent economic trends:** Presents a clear overview of the Country’s macroeconomic direction, and key structural challenges in terms of debt sustainability, price shocks of main commodities and products.
- **Economic growth, poverty reduction, and improvement in human development:** Assesses long-term economic growth and the resulting poverty and human development indicators, highlighting relevant trends.
- **Recent social and political developments:** depict current social and political events and their potential impact the population, especially the most vulnerable segment.
- **Economic outlook:** present a forecast of the economic situation of the Country highlighting potential opportunities and risks as well
- **Development challenges and binding constraints:** Overview of the Country’s main development challenges including the Country’s competitiveness and sector binding constraints
- **Islamic Finance:** Present the Islamic Finance industry profile of the Country. The profile includes the main challenges and opportunities of the Islamic Finance sector. Establish baseline data on

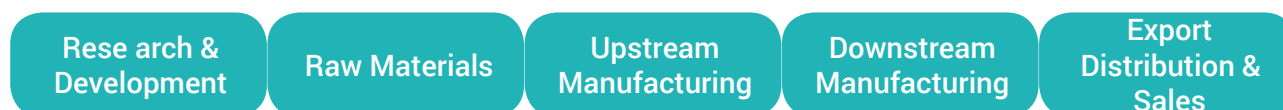
Islamic Finance (including both demand and supply) so that policies to enhance the sector can be properly undertaken.

- **Youth and Gender:** Analyse the welfare of the youth and women in the Country, showing comparative trends of key welfare statistics (relative to rest of population).
- **Climate Change:** Present the impact of climate change on the current and future state of the Country's economy. Assess the Country's climate resilience gaps. The Diagnostics will also integrate the Country's climate-related goals and commitments through its Nationally Determined Contribution (NDC).

- **Science Technology and Innovation (STI):** Present the impact of STI on the current and future state of the Country's economy as a whole. The synthesis will be obtained from the Country STI assessment in particular from section “General Overview of STI in MC” and in particular the section “SWOT Analysis of the STI System”.

- **Regional cooperation and integration:** Include this section if regional cooperation and integration (RCI) are to play a major role in the Country's development. Describe how RCI initiatives may reinforce national economic growth and poverty reduction efforts.
- **Member country's SDG profile:** The MCPS can set tentative SDGs targets to align IsDB support with it. Of interest are three particular SDGs (i.e., Goal 8,9, and 17) as core challenges for IsDB to focus on. In addition, the new MCPS approach should also identify the Country's most critical unmet SDGs. These SDGs can be either determined by the unmet gap between the indicator and the target relative to the 2030 goal and/or by the unmet gap between the indicator and the target relative to peer countries (countries with similar income, structure, or geopolitical background). As such, review the MC's Voluntary National Reviews (VNRs) ²⁷, which are part of the follow-up and review of the 2030 Agenda for Sustainable Development.
- **Global Value Chain Field Analysis:** Conduct Global Value Field Chain analysis in the MC-validated areas of interventions to identify capacity gaps and bottlenecks to determine potential interventions that address them.

GVC process from A to Z- Illustration: Tropical fruits industry/products



Research & Development (R&D)

a) Definition: R&D Comprises of a spectrum of activities such as basic research, process/product improvement research aimed at the development of new products or processes that enable innovation and improve productivity and value addition.

b) Illustration: At the R&D stage activities can spur innovation that either improves the productivity of fruit production or transforms fruits into higher value derivative products. The main gaps here may be: low farm productivity due to low technology adoption or low financing and low skilled labor due to lack of training. The potential, required interventions: Microfinance interventions can increase investments by farmers and boost production. Interventions improving the usage of higher quality seeds, fertilizers, and machines can increase technology adoption and hence raise productivity. Skill upgrading interventions can also improve productivity.

Raw Materials Acquisition

a) Definition: Refers to the acquisitions of key basic, unprocessed inputs used at the primary stage of production.

b) Illustration: At this stage, it is important to have the capability to secure the right raw materials (fruits), which is essential for the production of the higher value derivative (canned juice). The main bottleneck here may be rain volatility due to climate volatility. The problem adversely affects production and disrupts supply. The potential, required interventions: Interventions such as adequate irrigation or climate insurance might optimize fruit production. Climate resilience interventions can mitigate the production risks.

Upstream Manufacturing

a) Definition: Refers to the production stage where raw materials are processed into intermediary products.

b) Illustration: At this stage, the bottlenecks may be energy shortage and lack of infrastructure facilities for stocking fruits after production. The potential, required interventions: Interventions to build agricultural storage facilities and power plants has the potential to improve, substantially, the whole value chain.

Downstream Manufacturing

a) Definition: Refers to the production stage where intermediate inputs are transformed into final output.

b) Illustration: At this stage capacity gaps exist in fruits transformation, which results in low value addition in the final fruit product (fruit syrup) from raw fruits. The potential, required interventions:

interventions that create or improve processing plants and packaging plants can considerably boost the value-add. Specialized training can also play a key part in this regard.

Export Distribution & Sales

- a) Definition:** Refers to the final stage in value chain where the final input is sold and exported.
- b) Illustration:** The main bottleneck here may be lack of export financing due to weak financial markets in the MC. The potential, required interventions: interventions in trade financing, export credit, or investment insurance are likely to be effective.

Cross cutting interventions along the GVC

Capacity gaps and bottleneck: there is likely to exist along the GVC weak transportation networks and poor access to both local and international markets. Critical social needs might arise in the GVC, locally: lack of technical education of farmers, or poor health status of the farmers; such problems might also prevail geographically along the path of the GVC. **During the identification of capacity gaps and bottleneck special consideration shall be given to the insights provided by the Country STI Assessment, and in particular the section “Implications for Selected GVCs”. The implications will be based on the dimensions: STI Framework conditions, Knowledge development and Science and Technology Activities, Human Capital for STI, Knowledge exchange and transfer, Infrastructure for STI, and STI based Innovation and Entrepreneurship.**

III. Development Context

This section identifies how the Government is responding to the development challenges it is facing. It articulates the national development strategy along with analysis of the financing gap and for closing the gaps.

Suggested length: 4-5 pages

A. National Development Strategy

i. Overview of the strategy

- This section is the determination of big priorities -or the common priorities, which form the basis of defining the critical areas of intervention to cover.
- **Highlight the priority sectors and sector-binding constraints as defined by the government.**
 - **Highlight the role of STI in the country development agenda and other strategic documents. This portion is informed by the subsection “STI in the National Development Agenda” of the Country STI Assessment.**
 - **Discuss the main sector policies the government is planning to undertake.**
 - **Discuss the STI Policy and the role of STI in other sector policies. This portion is informed by the subsection “STI Policy” of the Country STI Assessment.**
- Outline policy interventions the government is planning to implement in the near and medium-term.

- Current country engagement to determine the country orientation for official development assistance: some countries have pre-identified sectors for intervention for IsDB.
- Show the above orientation in relation to IsDB strategic priorities defined in IsDB corporate strategic priorities; which are anchored by IsDB sector priorities and policies.

ii. The role of resource mobilisation in development financing

- Estimate the Country's development financing gap. Assess the Country's capacity to mobilise resources for its development from different sources: FDI, ODA, etc. Review the composition of the financial assistance envelop from significant development partners.

iii. Macroeconomic Risk, Public Financial Management and Procurement System

- Macroeconomic risk assessment includes reports produced by rating agencies and IMF reports as well as the sustainability of exchange rate, balance of payments and debt servicing capabilities of the Country.
- Public financial management tasks include assessing (1) the capacity and weaknesses of the project implementing entities such as executing agencies, and (2) analysing government budget utilisation and consumption.
- Also Assess Procurement Systems of the Country, highlighting recent changes (positive or negative) in performance of the country systems, and their impact of project implementation. What is the mechanism followed by the Country, by IsDB in the past, and by other multilateral organisations? What are the status and financial strength of the executing agencies in the Country?

B. Development Partners' Matrix

- This section discusses the main aspects of country partnership strategies of major development partners.
- The overall section identifies potential, common goals, interventions, and projects to establish alignment, and overall coordination mechanism.
- A table of Development Partners' Matrix, which describes the current and planned interventions of the development partners, can be ideal for this section where such an engagement exists.

The section articulates the IsDB Group's partnership strategy with the member country. The final output in this section is a generated list of agreed upon, validated interventions

Suggested length: 8-10 pages.

IV. IsDB Group Strategy

A. Objective

B. Pillars of the MCPS

- The universe of interventions: broken down in 2-4 pillars/Value Chains maximum
- Justifications of the selection of the Pillars/Value Chains and interventions contained therein

C. Financing the MCPS

- **Resource Mobilisation for the MCPS:** Discuss how resources will be mobilised to finance MCPS interventions. The discussion takes into account the MC's OCR and the Donor Density Report
- **Parallel Financing and Program Coordination with other Development Partners:** Discuss the role of development partners in different sectors; past partnerships with IsDB, and potential partnership opportunities. Emphasis should be placed on alignment and synergy of development programs.
- **Indicative Financial Envelop:** Describes the expected size and composition of the financial envelope. This will distinguish between the resources that IsDB can bring to the task from its own resources and how much it will mobilise from private capital. Determine indicative amount based on IsDB OCR along with an estimation of resource mobilisation for the MCPS, and proposals from parallel financing and program coordination with other development partners. Determining the Financial Envelop require strong coordination and input from the DG-CRS, GPRM, RMD, FPPA, OQR and senior management of the IsDB group entities.

D. Implementing the MCPS

- **Conclusions and Lessons Learnt from Past MCPS:** Present key conclusions, lessons, and recommendation of evaluations/review reports of IsDB past MCPS/programs
- **Assessment of Development Impact of Past IsDB interventions:** Discuss the development impact of past interventions. Assess suggestive evidence of how IsDB past interventions improved development outputs/outcomes.
- **Portfolio Performance:** Include a statistical analysis of both the trend and composition of the different components of the Country's active portfolio. Outline the main factors affecting the large CUC and Pre-CUC in the Country. Identify issues of quality at entry, project design, and executing agency weak capacities. The section should conclude with a clear picture, description, and timeline of how the new decentralisation of IsDB operations addresses the main issues in the active portfolio.

Additional Services: This section of the MCPS outlines areas in which the member country can benefit from IsDB additional services. It highlights advisory services the IsDB can provide to address implementation issues. It also provides information on how IsDB provide several strategic grant-based interventions and advisory services such as Islamic Finance Services (IRTI), STI

initiatives (e.g. Transform Fund, STI Policy Capacity building, etc.), ICIEC interventions, Sector Advisory Services (from Global Practices), Thematic Advisory Services (from Resilience and Social Development Department), Reverse Linkages opportunities and Market Integration promotion activities, and Advisory Services from Entities.

- **Project Financial Management and Procurement:** This section provides an overview of the Project Financial Management system to follow for the interventions in the MCPS. It also gives an overview of the procurement system and modality to follow in general for all projects under the MCPS.
- **Monitoring and Evaluation Systems:** This section establishes a clear result framework with interlinkage between Expected project results with overall country results. The goal is to link contribution of IsDB in Selected Country's National Development Goals; (2) Establish data sources for monitoring and evaluations; (3) determine access to these statistical databases; (4) identify relevant weaknesses of the national statistical office and propose a solution that can help address them; (5) Obtain development indicators, core sector indicators, project-level outcome-output indicators; and (6) Relevant OTLs can systematically collect a considerable part of the data during project cycle process: PIASR, PCR, etc.

This section assesses the risks of the MCPS implementation. It provides suggestions for risks mitigation measures. It should take into account keys issues such as debt sustainability, public financial management, and procurement systems. Sectoral issues should also be dealt with.

Suggested length: 2-4 pages.

V. Risk management

- Present a framework for the potential risks and their mitigating measures that could be encountered during the implementation of the MCPS.
- The section must also address potential shortcomings on the revenue mobilisation side.

VI. Results Matrix

This section presents the results framework of the MCPS. What are the expected achievement of the MCPS objectives? What are the relevant output/outcomes given the professed goals/objectives, and how do we expect to measure the relevant indicators?

Suggested length: 1-2 pages.

Annex 6.5.2. Member Country Partnership Strategy Concept Note/Final doc Template

Recommended changes in red box and/or red text

Acknowledgements

Acronyms and Abbreviations

Acknowledgements

Executive Summary

Acronyms and Abbreviations

I. Introduction

II. Country Context

Country Diagnostic

i. Recent Economic Trends

ii. Economic Growth, Poverty Reduction and Improvement in Human Development

iii. Recent Social and Political Developments

iv. Economic Outlook

v. Development Challenges and Binding Constraints

vi. Thematic Issues

1. Islamic Finance

2. Youth and Gender

3. Climate Change

4. Science, Technology and Innovation

a. STI Framework conditions

b. Knowledge development and Science and Technology Activities

c. Human Capital for STI

d. Knowledge exchange and transfer

e. Infrastructure for STI

f. STI based Innovation and Entrepreneurship

5. Regional Cooperation and Integration

vii. Member Country SDG Profile and Analysis

viii. Global Value Chain Analysis

III. Development Context

a. National Development Strategy

i. Overview of the Strategy

1. The role of STI in the Country Strategy and Policy framework

ii. The Role of Resource Mobilization in Development Financing

iii. Public Financial Management and Procurement Systems Analysis

b. Development Partners’ Matrix

i. Partners working on STI

IV. IsDB Group Strategy

a. Objective

b. Proposed Pillars and Intervention Areas of the IsDB

c. Implementing the MCPS

i. Conclusions and Lessons Learnt from Past MCPS

ii. Assessment of Development Impact of Past IsDB Interventions

iii. IsDB Portfolio Performance (Update)

iv. Additional Services Offered by IsDB

Boxes

Figures

Annexes

Annex 1 IsDB Portfolio

Annex 2 ITFC Portfolio

Annex 3 ICD Portfolio

Annex 4 ICIEC Portfolio

Annex 5.....

6.6 Revised Project Cycle Templates

Annex 6.6.1. Project Preparation Template

Recommended changes in red box and/or red text

A. Strategic Context and Rationale

This section will include a narrative in the following sub-sections that will describe the context and rationale for IsDB to provide its financing to the Beneficiary Country for the proposed project:

1. Brief historical development of the project:

Provide information relevant to the origins of the project, including the following:

- Timeline towards development and preparation of the project
 - Participatory approach used in preparing the project (consultations/ interactions with stakeholders and its outcomes)
- Include explicit mention to the field missions and consultations with STI actors as part of the Country STI Assessment to identify areas of intervention
- Documents on the basis of which the PPR/PAD is prepared, such as the date of receipt of official request from the beneficiary country, inclusion of project in work program, feasibility study, field mission(s) etc.

2. IsDB Operations in the Country:

Provide a brief description of IsDB country and sector portfolios analysis and performance in the country with specific reference to pre-effective and post-effective portfolio, disbursements and CUC.

Provide additional information in Annex 4.

3. Project Context:

Country Context:

Provide a brief description of the country's context (limited to last five years), including the following:

- Country Economic Situation and Recent Economic Performance: include information related to GNP/GDP, growth rate trends, drivers of growth or deceleration, highlights of fiscal and monetary policy
- Poverty Profile of the Country: include information about poverty rate and changes over time reflected by indicators such as Human Development Index etc.
- Country Development Strategy and Challenges: include relevant information on the development plan adopted by government, pillars, objectives, and commitment towards achieving SDG targets

- Include role of STI in the National Development plan, in particular in the context of this project
- Other major Development Partners in the country: include the donor density information in the sector of focus, including their portfolio size and performance.
- Include disaggregation by STI Projects.

Provide additional information in Annex 5.

Thematic Context:

Provide a brief description of the thematic context, including the following thematic Considerations: include relevant information on the focus of women and youth empowerment strategies in the country in general and the sector in specific.

Provide additional information in Annex 5.

Sector Context:

Provide a brief description of sector context relevant to the project, including the following:

- Description of the salient features of the sector in the country, and its potential
- Key sector issues/challenges/major constraints hindering the growth of the sector in the country
- Possible solutions for addressing these constraints
- Interventions by other Development Partners helping to improve this sector in the country / address sector challenges.
- Based on the Country STI Assessment summarise the Strengths, Weaknesses, Threats and Opportunities of the STI systems and its implications for project's sector.

4. Rationale for IsDB involvement:

State the rationale for proposed IsDB financing, including the following:

- Rationale for Country and Sector Support: Key development country / sector issues addressed by the project
- Alignment with country's development strategy / priorities and sector-specific strategy and the basis for the project being a high priority for the country,
- Alignment of IsDB involvement with policies/activities of the government and other Development Partners (DPs)
- Alignment with IsDB Strategy: State the project linkages with IsDB's strategic priorities, IsDB's sector / thematic policy/ strategy, country's MCPS and the SDGs.
- Alignment with the STI Strategic Results Framework.

B. Project Development Objective

This section states the development objectives of the proposed project, including the key project results indicators and information related to target beneficiaries.

1. Project Objectives:

Include the project development objective (PDO) directly relevant to the issues being identified. While defining the PDO, the following are considered:

- Problem Statement: “What is the problem(s) the project is going to address?”
- Linkage of Project Development Objective to Problem Statement and Country's Development Goals / MCPS
- Link the STI related objectives of the project to the STI goals established by the country's National Development Plan.

NOTE: Project Development Objective is a clear, succinct and measurable objective statement

2. Project Location:

State the location of the project site (s), region/ provinces, highlighting the access to the project site, the overall commination mechanisms, i.e., access to road, rail, etc. and distances from the main cities/ airports.

Provide additional information in Annex 2.

3. Project Beneficiaries and Stakeholder Consultations:

State the target beneficiaries (age and gender disaggregated), direct and indirect, of the project. Moreover, provide information about ownership by national stakeholders and beneficiary groups evidenced through consultations with key project stakeholders and participatory processes that were held during design and preparation stage of the project. The consultation modalities should be briefly outlined for the various types of stakeholders involved. Key findings of the consultations, and concerns raised by beneficiary groups, especially women, youth and vulnerable groups of the population, should be presented.

Ensure the inclusion of the results of the Country STI Assessment field missions and consultations.

C. Project Description

This section includes a description of core of the project, including the project's scope, components, financing plan and the reflection of past lessons learnt within project design.

1. Project Design and Scope/Components:

Provide a brief description of what the project entails, including the proposed project design, different project components covering all category of expenditures, i.e., Works, Goods and Services.

Ensure explicit mention of the STI elements included in the project and how these are connected to the STI Strategic Framework.

Provide additional information in Annex 7.

2. Alternatives Considered and Reasons for Rejection:

Provide a summary of the alternative technical design options considered and the basis of appropriateness of proposed design for achieving the development.

Provide additional information in Annex 6.

3. Past Lessons Learned and Reflected in Project Design:

Provide a brief description of how the project design reflect on the lessons learned from on-going/ completed projects, country analytical work and known best practices, including the following.

D. Project Thematic Orientation

This section will include a discussion of the project’s orientation towards the Bank’s thematic areas

1. Climate Change:

Provide a brief on the results from application of the Climate Risk Screening tool on the project and integration of climate considerations in the project.

Provide additional information in Annex 13.

2. Women and Youth Empowerment:

Provide a brief on the analysis on women and youth empowerment, fragility and employment generation (where applicable) and how that is integrated in the project design. Demonstrate as how concerns raised by beneficiary groups, especially women, youth of the population are reflected in the design of the proposed project.

3. Science Technology and Innovation

Provide a brief analysis on the state of the STI System building on the Country STI Assessment undertaken as part of the MCPs process. Demonstrate how the STI elements of this project answer to the gaps identified in this assessment (Provide narrative on how STI is mainstreamed).

E. Project Cost and Financing Plan

This section includes the project cost and financing plan information.

1. Tentative Project Costs:

Provide an item-wise project cost estimate in the table in local and foreign currency (US\$ equivalent).

Provide additional information in Annex 8.

2. Proposed Financing Plan:

- Provide the project financing plan which shows the suitable mode of financing and the various sources of funds for each project component in project currency

Provide additional information in Annex 8.

F. Implementation Arrangements

This section includes a description of the project's implementation arrangements.

1. Executing Agency / Agencies (EAs):

Provide a brief description of the suitability of the Executing Agency / Agencies, including the following:

- Identification of the suitable EA and IA
- Listing the main Responsibilities / Functions of EA and IA, including the effect of other institutions on these roles
- Project implementation capacity of EAs: Staffing of EA, prior experience of EA(s) of working on similar projects, same location/area, IsDB in particular and other MDBs and DFIs in general, and the brief on the status of those projects / programs;

Assessment of agencies capacity, experience and skills to manage project Provide additional information in Annex 9.

2. Institutional Arrangements:

Provide a brief on the institutional arrangements for project implementation and the required reporting structure, including the following:

- Overall governance and project management structure / organizational chart for Project Implementation with all relevant stakeholders / institutions clearly identified
- Project Management Unit (PMU): Mention where the PMU is housed, including its main responsibilities, experience, reasons for selecting particular type of PMU structure, financing of PMU and Budget / capacity building needs of the PMU
- Structure of PMU: Staff composition of PMU and their roles, reporting structure, and coordination requirements
- Project Implementation Unit (if required): Mention location (s), staffing budget, and the TOR, etc.
- Project Implementation Consultant(s): provide the reasons and corresponding ToR
- Ensure there is expertise available to implement and manage the project STI element and aware of the systemic nature of STI

Provide additional information in Annex 9.

3. Implementation Plan and Readiness of Projects:

Provide a brief on status of project readiness, including the following....

Provide additional information in Annex 9.

4. IsDB Project Monitoring and Implementation Support Plan:

Provide a brief overview of the mechanisms for project’s progress reporting, including the following:

- Overall purpose of IsDB’s project monitoring activities and implementation support plan
- Arrangements for coordination and exchange of information amongst the key stakeholders (government, IsDB and the co-financiers, if any), with responsibilities clearly assigned

Provide additional information in Annex 9.

G. Fiduciary Due Diligence

This section will include a brief on the project’s fiduciary requirements.

1. Procurement Arrangements:

This provides a brief on the project’s procurement arrangements, including the following:

- Procurement Strategy: Highlight the overall procurement strategy to implement the project while taking into consideration that assessment of Procurement Capacity of Country and Executing Agency, IsDB’s previous experience on similar projects with the country and EA
- If relevant for the STI project, integrate special considerations for the procurement of innovative solutions where it is impractical for the provider to prepare complete technical specifications given the rapid pace of technological change or provide detailed commercial documentation given the novelty of the solution.
- Procurement Plan: Show the contracts required to be procured to implement the Project as a list of Indicative Procurement Packages for all IsDB financed items. This will also provide information about the procurement method, timelines, type (s) of contract(s) to be used, how vendors will be managed, and who will be involved at each stage of the process,
- Detailed justification for choice of Mode of Procurement & Method of Selection for all IsDB financed items
- Procurement status of the project including need for advance procurement (where applicable)
- Identification of Procurement Risks and the Mitigation measures, Responsibility, Timeframe

Provide additional information in Annex 12.

2. Project Financial Management and Audit Arrangements:

3. Project Disbursement Arrangements:

- This provides a brief regarding the project’s disbursement arrangements, including the following:
 - Assessment of EAs capacity to manage funds flow and disbursements....
- Provide additional information in Annex 11.

H. Project Results and Monitoring

This section includes a description of the project results and monitoring and evaluation (M&E) framework.

Ensure that a STI project or a project with STI related elements include indicators linked to the STI Strategic Framework.

1. Key Development Results Indicators:

2. Monitoring and Evaluation of Outcomes/Results

I. Project Risks and Sustainability

This section includes description of the project risks and project sustainability.

1. Project Risks:

Provide a brief description of the potential risks associated with the project, the impact of the risk proportional to its severity, likelihood of the identified potential risks, and the proposed / existing mitigation measures.

2. Project Sustainability:

Taking into account the various risks and mitigation measures identified in the Project Risk Matrix, provide a general summary of the effectiveness of the measures by the stakeholders to ensure sustainability of the proposed intervention....

J. Project Justification

This section justifies the need for IsDB to finance the project, supported by detailed annexes.

1. Technical Feasibility:

2. Economic and Financial Analysis:

3. Financial Analysis & Economic Analysis:

K. Issues for the Consideration for the Management

Annex 6.6.2 Project Implementation Assessment and Support Report Template

Recommended changes in red box and/or red text

Executive Summary

(Maximum Length - 2 pages)

1. Project Data and Information
2. Project Implementation Arrangements
3. Project Procurement
4. Delivery of Goods, Works and Services
5. Disbursements (of IDB Financing)
6. Development Results

Describe the likelihood of achieving the overall development objective(s) of the project. Describe the intermediate outcomes of the project achieved so far. Describe the interim contributions to the STI Strategic Results Framework						
Outputs	Indicators (CSIs, STI Strategic RF and others)	Base line	Targets	Achievements to-date (%)	Score (1 – 4)	Remarks
Output 1						
Output 2						
Average Score						

7. Potential Risks and Mitigation Measures

Sr. No.	Potential Risks	Suggested Mitigation Measures

8. Follow-up Action Plan

Sr. No.	Issues	Follow-up Actions	Responsibility	Timeframe
1.				
2.				

9. Overall Score

Sr. No.	Criteria	Score
1	Project Implementation Arrangements	
2	Project Procurement: Status of the Contract Award	
3	Delivery of Goods, works and services	
4	Disbursement	
5	Development Results	
Overall Score		
Overall Rating		

10. Review and Comments

Staff Responsible	Name and Signature	Date	Comments
Project Team Leader			
Sector Division Manager			
OPS Department			
Sector Department Director			
STI Department			

Annex 6.6.3 Project Completion Report Template

Recommended changes in red box and/or red text

Executive Summary

(Maximum length - 3 pages)

Project Completion Report

A. Project Information

1. PIASR Record

Any Previous PIASRs with Date and Ratings PIASR 1	Inset the Number of PIASR, year, date, and rating
--	---

3. Quality Assurance Considerations

2. Project Financing (Total Cost)

Project by Component (Cost breakdown) (insert project currency million).

Component	At Appraisal	At Completion	Disbursed Amount	Project Savings or Over-Runs
Insert Project Components	Insert amount	Insert Amount	Insert Amount	Insert Amount
Base Cost				
Contingency				
Total				

Project Disbursement by Mode of Financing (insert project currency million)

Item	Mode-1	Mode-2	Mode-3	Total
Total Approved Amount				
Additional Financing (if any)				
Total Cancelled Amount				
Total Disbursed Amount				
Total Unutilized Amount				
Yearly Disbursements				
Year 1				
Year 2				

B. Project Performance Assessment

1. Relevance

Criteria	Assessment	Score (0-1)
Relevance of Project Development Objective(s)		
Coherence between Results Chain		
Relevance of Project Objectives and Design		
Average Score		

2. Effectiveness

Criteria	Assessment	Score (0-1)
Progress Towards Output(s)		
Output-1		
Output-2		
Progress Towards Outcome(s)		
Outcome-1		
Outcome-2		
Net Effect of the Project		
Average Score		

3. Efficiency

Timeliness			
Planned Project Duration (Years as per the RRP/PAD) – (Years)	Actual Implementation Time (Years)	Difference (Months)	Score (0-1)
Insert reasons for deviation in implementation time			
Resource Use Efficiency			
Planned cost as per the RRP/PAD– (years)	Actual cost (Insert Currency million)	Difference (Insert Currency million)	Score (0-1)
Insert reasons for deviation in cost			
Compliance with Conditions of Financing			
Conditions/ Covenants	Compliance	Score (0-1)	
Cost Benefit Analysis (if applicable)			
Financial and Economic Internal Rate of Return (At Appraisal)	Financial and Economic Internal Rate of Return (At Completion)	Score (0-1)	
FIRR			
EIRR			
Average Score			

4. Sustainability

Criteria	Assessment	Score (0-1)
Technical and Financial, soundness of the project results (including O&M facilitation, availability of O& M funding, spare parts, workshop facilities etc.)		
Beneficiary commitment, including supportive legal/regulatory framework and socio-political/stakeholder support		
Institutional Sustainability (organizational and management effectiveness)		
Resilience of the project results to exogenous factor		
Climate Change		
Social aspects of the project (integration of women and youth)		
Average Score		

C. Project Stakeholders Performance

1. Bank's Performance

Criteria	Assessment	Score (0-1)
Quality of Bank's input during the preparation	Assess the quality and adequacy of inputs provided by the Bank at project preparation and design to ensure readiness for implementation. Assess the extent of use of past lessons while designing the project.	
Quality of supervision	Assess the skills-mix and frequency of supervision missions, problem solving, responsiveness to changing conditions, adequacy of follow-up of recommendations and decisions made during supervisions and in PIASRs.	
Use and quality of RBLF and compliance to operations policies	Assess the quality of the RBLF, use of the relevant CSIs, baseline and targets, compliance to operations policies and procedures.	
Adequacy of the Results-based M&E design	Adequacy of the Results-based M&E design, use of monitoring plan, use of baseline data, quarterly progress reports, quality of follow-up system of the Bank, etc.	
Link with the STI Strategic Results Framework	How the project contributes to the outcomes and outputs of the STI Strategic Result Framework and how the project's M&E framework feed the Strategic Framework indicators.	
Average Score		

2. Beneficiary's Performance

Criteria	Assessment	Score (0-1)
Quality of Preparation		
Quality of Implementation Arrangements		
Compliance with Project Safeguards		
Responsiveness to Bank supervision findings and recommendations		
Effectiveness of measures taken to ensure satisfactory operations at completion and sustainability		
Average Score		

3. Performance of Other Stakeholders

Criteria	Assessment	Score (0-1)
Performance of Consultants		
Performance of Contractors/Suppliers		
Performance of Other Co-financiers (if applicable)		
Average Score		

D. Key Findings

E. Lessons Learnt

This is free text and describe all the major lessons learnt. Support the identified lessons learnt using the results of the project/program and provide the basis for drawing such lessons. (Lesson learnt should be developed based on the most important findings affecting performance of the projects -both positive or negative– including identification and management of project risks at the procurement, financial management, and technical dimensions. However, the lesson learned should explore the core causes behind the identified issue.).

Include narrative with respect to the STI element of the project, as well as the operational and administrative dimension of mainstreaming STI elements in the project cycle. These lessons learnt shall be elaborated to inform the improvement of the business processes required to mainstream STI in the project cycle.

F. Risks to Development Outcome(s)

G. Overall Score and Rating

Sl. No.	Indicators/Criteria	Score
1	Relevance (Average score in percentage)	
2	Effectiveness (Average score in percentage)	
3	Efficiency (Average score in percentage)	
4	Sustainability (Average score in percentage)	
Overall Score in Percentage		
Overall Rating		

