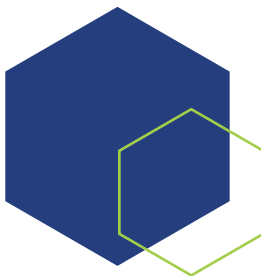




2022 QII  
**ANNUAL REPORT**



QUALITY INFRASTRUCTURE  
 INVESTMENT PARTNERSHIP



## About the QII Partnership

The World Bank Group and the government of Japan established the Quality Infrastructure Investment (QII) Partnership in 2016 to raise awareness and scale up attention to the Quality Infrastructure Investment Principles endorsed by the G20. These include maximizing the positive impact of infrastructure, raising economic efficiency in view of life-cycle cost, integrating environmental and social considerations, building resilience against natural disasters, and strengthening infrastructure governance. The QII Partnership accomplishes this goal by providing grant support to prepare and implement infrastructure projects in developing countries, conduct analyses, and disseminate knowledge about the application of the QII Principles.



2022 QII

# ANNUAL REPORT

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QUALITY INFRASTRUCTURE  
INVESTMENT PARTNERSHIP



# ACRONYMS & ABBREVIATIONS

CCAP	Climate Change Action Plan
DRM	Disaster Risk Management
EAP	East Asia and Pacific
ECA	Europe and Central Asia
FCV	Fragility, Conflict, and Violence
GIF	Global Infrastructure Facility
GRID	Green, Resilient, Inclusive Development
IPG	Infrastructure Finance, PPPs & Guarantees Global Practice
JICA	Japan International Cooperation Agency
LCC	Life-Cycle Costing
MENA	Middle East and North Africa
MOOC	Massive Open Online Course
PGII	Partnership for Global Infrastructure and Investment
PPIAF	Public-Private Infrastructure Advisory Facility
PPP	Public-Private Partnership
QII	Quality Infrastructure Investment
SAR	South Asia Region
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
TDLC	Tokyo Development Learning Center

*All dollar amounts in this report are in U.S. dollars unless otherwise indicated.*



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# FOREWORD FROM THE **GLOBAL DIRECTOR**



*The crises we are facing today are diverse and complex; there is no quick fix to resolve them. Instead, we must develop a coherent, long-term strategy to support our client countries to build a green, resilient, and sustainable future. Sustainable, quality infrastructure development is a key priority for achieving those objectives.*

Let me illustrate. The infrastructure gap is large: 940 million individuals have no electricity, 663 million lack improved sources of drinking water, 2.4 billion lack improved sanitation facilities, 1 billion live more than 2 kilometers from an all-season road, and nearly 3 billion do not have access to the internet.

Infrastructure is critical to achieving the 17 Sustainable Development Goals (SDGs) by 2030. Many involve infrastructure directly, such as providing universal access to clean water, sanitation, or clean and affordable energy. But we also need infrastructure to achieve many of the remaining SDGs.

For example,

- Eliminating hunger requires irrigation and transport infrastructure
- Education requires power, water, and transportation infrastructure
- Sustainable cities require a full range of urban infrastructure

Infrastructure is both vulnerable to and a contributor to climate change. We have a dual challenge—we must find ways to reduce emissions caused by infrastructure, for example, by transitioning from fossil fuels to renewable energy, while also building infrastructure that is resilient to extreme climate events.



As part of the global transition towards a low-carbon, climate-resilient future, we must also ensure that infrastructure investments are based on the Quality Infrastructure Investment (QII) Principles that maximize their economic, social, environmental, and development impact. These Principles have been adopted by both the G7 and G20 and are the foundation for achieving the World Bank Group's green, resilient, and inclusive development ambitions—the GRID approach. This will accelerate climate action while restoring momentum on poverty reduction and shared prosperity.

Infrastructure investment that adheres to QII Principles will deliver value for money, sustainability, resilience, social inclusion, and sound governance. Mainstreaming the QII Principles ensures the delivery of the high-quality and sustainable infrastructure investments envisioned by the G7 and its commitment to the Partnership for Global Infrastructure and Investment. In that context, it is pertinent to discuss the crucial role that partnerships play among multilateral development banks, senior policymakers, and

the private sector in mobilizing the capital required to implement the infrastructure projects upholding the QII Principles.

I am delighted to see our partnership with the government of Japan, through the QII Partnership, growing in recent years to meet the challenges of today's global crises. This partnership is achieving results: Each dollar of QII Partnership funding supports the delivery of \$850 in World Bank investments in sustainable infrastructure.

The World Bank looks forward to continuing its collaboration with Japan to support client countries through the QII Partnership and other programs. I would like to thank Japan for its leadership and driving the concept of quality infrastructure forward as we navigate today's development challenges.

*Imad N. Fakhoury is the Global Director of the World Bank's Infrastructure Finance, PPPs & Guarantees (IPG) Global Practice.*

# PERSPECTIVES FROM **THE MINISTRY OF FINANCE, JAPAN**



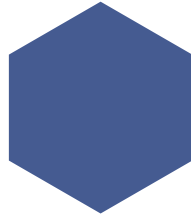
***We reaffirm our support and commitment to the QII Principles as a driver of development. Our partnership with the World Bank has dramatically advanced the QII agenda; the QII Partnership has proved effective in its mission to integrate the QII Principles in World Bank infrastructure projects and disseminate knowledge about QII. There are a few aspects that have become increasingly important.***

First, we would like to stress the renewed importance of QII. Countries are facing multiple overlapping crises—COVID-19, climate change, and energy and food insecurity due to the Russian invasion of Ukraine. Given these multiple crises, one might argue that it is not the time to invest in climate resilience. However, it is important to understand climate change not as a challenge but as an opportunity to achieve sustainable economic growth, which is needed to address other challenges. We appreciate the World Bank

aligning QII with its green, resilient, and inclusive development.

Second, QII is not just about climate but the basis for much broader economic reforms. In this respect, we are pleased to see that many QII Partnership-supported projects are aligned with Japan's broader priority areas, such as cybersecurity, data privacy, and countries affected by fragility, conflict, and violence, as well as resilience. In addition, resilience is not just





about climate resilience but also resilience against other disasters. We appreciate the World Bank collaborating with Japan-funded programs, such as the Tokyo Development Learning Center and the Japan World Bank Program for Mainstreaming Disaster Risk Management.

Third, QII should promote private sector involvement. Tackling multiple challenges require sizable capital that the public sector alone cannot provide. We need to mobilize more private capital. Also, we could benefit from private sector knowledge and technologies. Funds like the Global Infrastructure Facility demonstrate the importance of bringing well-structured, resilient infrastructure projects broadly aligned with the QII Principles to the market and help mobilize private capital at scale. Also, the QII indicators endorsed by G20 can be utilized to make infrastructure projects easier for the private sector to invest in.

There is no doubt that QII will remain a key component of the global development agenda. Under Japan's G7 presidency next year, we would like to place QII as a driver of quality and sustainable development. Our partnership with the World Bank has been critical in moving the QII agenda forward. Japan is willing to contribute by dispatching Japanese technical experts and developing case studies and other knowledge products on QII.

*Kentaro Ogata is the Deputy Vice Minister of Finance for International Affairs at the Ministry of Finance, Japan.*



# EXECUTIVE SUMMARY FROM **THE PROGRAM MANAGER**



***Delivering sustainable, quality infrastructure and essential services is more critical than ever to underpin a green, resilient, inclusive economic recovery. But what do we mean, exactly, when we talk about quality infrastructure? Good design, materials, and construction are critical for any infrastructure project. But the word quality means much more than that.***

It includes designing solutions that meet the needs of all people, including women and members of disadvantaged groups. Or It means building infrastructure that minimizes greenhouse gas emissions and is resilient to the impacts of climate change. It means considering life-cycle costs throughout the asset's life cycle to maximize economic efficiency. And putting robust infrastructure governance in place for greater openness and transparency.

Including these aspects in the definition of quality infrastructure creates the foundation for development up to 2030 and beyond. This is

the mission that drives the Quality Infrastructure Investment Partnership.

Since beginning operations in 2016, the QII Partnership has embedded the Quality Infrastructure Investment Principles into World Bank infrastructure operations in 66 countries across the globe. To date, we provided 178 grants valued at \$52 million. In FY22, we have mainly supported urban infrastructure, transport, and water projects.

This year also saw the emergence of digital development as a QII sector—today, it accounts for 7 percent of our portfolio. We also approved 10



projects through the Analytical Window, resulting in an expanded knowledge base in applying the QII Principles. The first Massive Open Online Course (MOOC) on QII attracted over 8,000 participants.

Interest in QII is strong and growing. Our portfolio in FY22 has seen significant growth—annual approvals have grown to \$25.4 million. The strong demand results from greater recognition of the value that QII grants bring to infrastructure investment. Our grants support over \$22.8 billion in World Bank lending operations, drawing from Japanese and global knowledge. Our work has proven relevant in a world reeling from climate change, the COVID-19 pandemic, and, more recently, a devastating war in Europe that threatens to tip the global economy into recession.

Examples of our work include the following:

- We worked with Yemen to protect its urban areas from the impacts of climate change—namely flooding—through climate assessments for 16 cities drawing from Japanese knowledge and expertise.

- In Mozambique, in partnership with the University of Tokyo, we supported the government in developing digital tools to plan and monitor public transport investments, making urban transport safer and more accessible to women and other vulnerable groups.
- Our analytical work is building the capacity of partner countries and procurement
- Professionals in applying the life-cycle costing approach to infrastructure projects, which improves economic efficiency and strengthens the sustainability of infrastructure assets.

Many more examples are illustrated in this report, along with a summary of our accomplishments from inception through FY22. In the next fiscal year, we will continue to build our portfolio, strengthen the quality of our systems and processes, build community, and continue mainstreaming the QII Principles. We look forward to our continuing work with the government of Japan and our partners.

*Jane Jamieson is the Program Manager of the QII Partnership.*





# OVERVIEW

# The Relevance of Quality Infrastructure Investment

Climate change and the COVID-19 pandemic have strained development efforts in the last few years. Today, new challenges are emerging. The war in Ukraine has led to soaring inflation, acute food and energy shortages, and intensifying supply-chain pressures, all of which complicate the recovery from the COVID-19 pandemic. Since the endorsement of the QII Principles at its Osaka Summit in 2019, the G20 has continued promoting their application. Global leaders see the role of quality infrastructure in ensuring sustainable development and helping to tackle these crises.

## MAINSTREAMING QII FOR GLOBAL INFRASTRUCTURE DEVELOPMENT

The pace of infrastructure investment and development has also been affected, especially in low- and middle-income countries. These challenges will make the attainment of the SDGs—especially climate goals—more difficult. Policymakers across the globe must find sustainable approaches and adopt fiscally and environmentally sustainable solutions.


The G7 is committed to an ambitious agenda to narrow the infrastructure investment gap in developing countries in a way that addresses climate change, drives job creation, supports

an inclusive economic recovery, advances gender equality, and supports recovery from the impacts of the COVID-19 pandemic. Amid rising inflation and debt levels in emerging markets, G7 leaders launched the Partnership for Global Infrastructure and Investment (PGII) in June 2022. It pledged to raise \$600 billion in private and public funds over five years to strengthen global supply chains and invest in sustainable and quality infrastructure projects in developing countries. The Partnership seeks to address many long-term global challenges, including climate change, energy and food security, information technology, health, and gender equity.

At the joint G7 press conference following the summit in June 2022, U.S. President Joseph Biden and Prime Minister Fumio Kishida of Japan underlined the importance of promoting the G20 Principles for Quality Infrastructure Investment:

*"In addition to the challenges such as COVID-19 or climate change, the global economy is currently facing price spikes in energy and food and supply chain disruptions due to the aggression in Ukraine. To deal with these situations, quality infrastructure investment again is indispensable."*

Prime Minister Fumio Kishida



*"...developing countries often lack the essential infrastructure to help navigate global shocks like a pandemic. So they feel the impacts more acutely, and they have a harder time recovering. In our deeply connected world, that's not just a humanitarian concern; it's an economic and a security concern for all of us. That's why one year ago, when this group of leaders met at Cornwall, we made a commitment. The democratic nations of the G7 would step up, step up and provide financing for quality, high-standard, sustainable infrastructure in developing and middle-income countries."*

President Joe Biden

U.S. Secretary of the Treasury Yellen and Japan's Finance Minister Shunichi expressed similar views in a joint statement issued on July 12, 2022:

*"To ensure the quality and value of our investments, we will deliver projects based on the G20 Principles for Quality Infrastructure Investments and encourage the use of QII Principles by our partners. We will continue to work bilaterally, multilaterally with G7 partners under the Partnership for Global Infrastructure and Investment, and with like-minded partners."*

U.S. Secretary of the Treasury Janet Yellen and Japan's Finance Minister Suzuki Shunichi

## QII AS A SOLUTION TO CLOSE THE GLOBAL INFRASTRUCTURE INVESTMENT GAP

Effective approaches to financing quality infrastructure investment and mobilizing private resources for accelerated infrastructure development will be essential in closing the infrastructure gap.

In its report *Lifelines: The Resilient Infrastructure Opportunity*, the World Bank estimates that the total needs for low-carbon and climate-resilient infrastructure in low- and middle-income countries are 4.5 percent of their GDP or an annual investment of \$1.6 trillion between now and 2030. These estimates assume that the proper policies are put in place, so the actual needs will likely be higher.

The QII Principles provide a basis for fiscally and environmentally sustainable infrastructure development and give private investors the confidence to explore investment opportunities. Effective governance standards also contribute to the development of infrastructure.

# The Quality Infrastructure Investment Principles

Infrastructure drives economic prosperity and provides a solid basis for sustainable, balanced, and inclusive growth. It is a core element for achieving the SDGs and the World Bank's GRID approach. Nonetheless, the world still faces a massive gap in financing for investment in sustainable, quality infrastructure.

Addressing this challenge requires a shared strategic direction for quality infrastructure investment. The QII Principles provide a roadmap that addresses the quality dimensions of

infrastructure. These voluntary principles help countries pursue investments that maximize infrastructure's economic, social, environmental, and development impact—the foundation for achieving sustainable, resilient, and inclusive growth.

The QII Principles also contribute to the SDGs. In addition to SDG 9, which calls for resilient infrastructure, many SDGs can only be achieved through sustainable, resilient, and inclusive infrastructure.



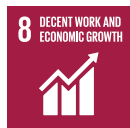
**QII.1 Maximizing the positive impact of infrastructure to achieve sustainable growth and development**



**QII.2 Raising economic efficiency in view of life-cycle costs**



Infrastructure investment, accompanied by job creation and technology transfer, creates a virtuous circle of economic activities through capacity building, improved productivity, and increased private investment.



It also promotes sustainable development and strengthens connectivity and is consistent with national development strategies and relevant international commitments such as the SDGs.



Value for money is a core element of quality infrastructure investment, as reflected in the total cost over the life cycle of infrastructure—including operations and maintenance and construction. Innovative technologies should be leveraged, and the risk of delays and cost overruns should be considered.





## QII.3 ENVIRONMENT

### QII.3 Integrating environmental considerations in infrastructure



Impacts on ecosystems, biodiversity, and climate must be considered when designing infrastructure projects. The use of green financial instruments can be encouraged by disclosing environment-related information.

## QII.4 RESILIENCE

### QII.4 Building resilience against natural disasters and other risks



Managing natural disasters and human-made risks should be factored in when designing infrastructure. Well-designed disaster risk finance and insurance mechanisms help incentivize resilient infrastructure.

## QII.5 SOCIAL

### QII.5 Integrating social considerations in infrastructure investment



The social and economic benefits of infrastructure should reach all people, especially vulnerable and excluded groups. Open access to infrastructure services, safety, and gender considerations should be considered when developing infrastructure.

## QII.6 GOVERNANCE

### QII.6 Strengthening infrastructure governance



Good governance, including openness and transparency in procurement, anti-corruption, and access to relevant information and data, expands the benefits of infrastructure. The sustainability of infrastructure must also be realized at both the national and project levels.

# The QII Partnership

Infrastructure is essential to achieving the World Bank's twin goals—ending extreme poverty and boosting shared prosperity by 2030—and is the foundation for green, resilient, and inclusive development. Many of the 2030 SDGs involve infrastructure directly or indirectly.



Incorporating the QII Principles when designing, implementing, and operating infrastructure assets will strengthen their contribution to economic development, especially in low- and middle-income economies. This shared understanding led the World Bank and the government of Japan to establish the QII Partnership in 2016.



**The Partnership began operations in 2016.** It provides grant funding to support World Bank infrastructure projects through three windows: **Standard grants** enhance QII elements in the project preparation and implementation phases of infrastructure projects. **Just-in-time (JIT) grants** support targeted, short-term interventions that promote the QII Principles. The **Analytical Window** supports standalone research, analysis, and activities that advance global knowledge of the QII Principles.



**The QII Partnership operates as a single-donor trust fund housed within the World Bank's Infrastructure Finance, PPPs & Guarantees Group.** The Ministry of Finance of Japan contributed \$82 million to finance the QII Partnership's activities through FY25. It also provides strategic guidance on the Partnership's activities.



**The QII Partnership Steering Committee is its decision making, oversight, and advisory body.** The committee meets annually to review progress, approve its work plan and operational changes, and agree on the Partnership's strategic direction. Its members include the Global Director for the World Bank's Infrastructure Finance, PPPs & Guarantees Global Practice, the World Bank's Special Representative for Japan, and the Director of the Multilateral Development Banks Division within Japan's Ministry of Finance.

The QII Secretariat manages the process for awarding and supervising grants. It also manages relationships with internal and external stakeholders, including the Japan International Cooperation Agency (JICA), governments, development partners, and other trust funds with Japanese funding. It also manages the process for awarding and supervising grants.

World Bank projects in the digital development, disaster risk management, energy, land and governance, resilience, transport, urban, and water sectors are eligible for QII grants.



## FOCUS AREA

# Promoting the energy transition to net zero

Integrating an increasing amount of variable renewable energy into the current power grid is challenging for grid stability. Renewable energy will need a mix of fast-responding, high-capacity energy storage to help with integration, ramping, and peak demand to deal with voltage variations.

In addition to supporting the integration of renewable energy by smoothing variable production, energy storage can play multiple other valuable roles within the power system. For example, it can optimize supply and demand through baseload and price arbitrage, increase the capacity utilization of transmission and distribution infrastructure, defer investment in peaking generation, replace expensive and polluting diesel power backup, and improve the quality of power supply through ancillary services, including through frequency control and voltage support. Integrating energy storage systems with electric vehicle (EV) charging infrastructure can also help mitigate grid management challenges that come with peaking power from e-mobility, allowing EV batteries to serve as both a source of demand and supply, offering effective power system support.

The QII Partnership is advancing its support to battery energy storage technologies in Asia and

Africa through support to World Bank lending operations. QII provided just-in-time technical support to task teams in Maldives and Burkina Faso in preparing bidding documents for various battery energy storage system projects. The activity supported training to officials from respective governments on the development of guidelines for quality procurement for battery energy storage systems and adopting life-cycle costs in the evaluations. In addition, through a series of virtual consultations with key stakeholders on battery storage, the activity helped build a knowledge base about the technical and environmental requirements for energy storage procurements compliant with best practices for sustainability and safety.

Additionally, the QII Partnership is supporting sustainable energy support programs in the Kyrgyz Republic, Bangladesh, and India. Given the criticality of achieving energy transitions in the FCV context, the QII Partnership is helping Somalia increase access to electricity by developing renewable energy projects, improving the economic efficiency of its electricity sector through more efficient use of public and private resources (while minimizing project implementation delays and cost overruns), and improving institutional governance practices.

# Strategic Priorities for the QII Partnership

The QII Partnership funds activities integrating the QII Principles when preparing and implementing infrastructure projects. It also supports activities involving research and analysis. Through this work, we are expanding the knowledge base of the application of QII Principles while positioning the QII Partnership as a thought leader and funding partner.

## CLIMATE

Infrastructure and the climate have an interdependent relationship—infrastructure is both vulnerable to and a significant contributor to climate change. According to the Climate Change Action Plan 2021–2025, the energy sector accounts for about three-quarters of global greenhouse gas emissions. At the same time, infrastructure assets, particularly in the transport sector, are threatened by rising sea levels, more frequent and severe climate events, and even extreme heat. A recent heat wave in Britain melted roads and caused railway tracks to buckle.

Trillions of dollars must be mobilized from both private and public sources to achieve climate and development objectives by 2030. Governments, private developers, and financiers will need to protect and climate-proof infrastructure investments and find new environmentally friendly investment opportunities—without compromising returns. The World Bank supports innovative solutions to integrate environmental considerations in infrastructure investments. In the infrastructure space, the Principles drive the transition to net zero emissions and the GRID approach, a framework enabling economic and

social transformations that drive sustainable development in low- and middle-income countries.

### Advancing green infrastructure and transition to net zero

The QII Partnership addresses climate and emissions issues through **QII Principle 3: Integrating environmental considerations in infrastructure** in three ways: (a) aligning climate and development by helping countries progress towards low-carbon and climate-resilient development, (b) prioritizing transitions to a low-carbon future, for example, by supporting public and private investment in infrastructure sectors that reduce emissions and limit the impact of climate change, and (c) promoting innovative financial solutions to scale up finance and underpin low-carbon growth to achieve meaningful climate action. For example:

- In **Indonesia**, the QII Partnership is deploying international best practices in accessibility and multi-modal integration and terminal development, minibus fleet modernization, and the fiscal and financial sustainability of transit systems to develop a mass transit project.

- The Partnership supports decarbonization in the East-West railway freight corridor in **Brazil** by conducting studies on mitigation actions of environmental risks along the corridor and the feasibility of low-carbon technologies (alternative fuels).
- We are working with key stakeholders in **India** to build business model options and sustainable markets for battery energy storage systems. This will mobilize private capital and commercial finance to help India achieve a speedy energy transition.

### Climate adaptation and resilience

Quality infrastructure designed to reduce environmental impacts (QII.3) and build resilience (QII.4) can reduce its contribution to climate change while being resilient to climate impacts. Environmental considerations and resilience can be embedded in every phase of the life cycle of infrastructure assets, including design, construction, operations, maintenance, and disposal. This approach yields high economic returns, despite greater upfront financing costs.

Addressing these risks involves more than design and technology. New infrastructure projects should also include comprehensive risk management plans considering likely climate scenarios. Governments and infrastructure project developers will need to rethink their capital strategies to incorporate

sustainability up-front, leverage advanced analytics, and rely more on fiscally and environmentally sustainable ecosystems than individual project models. The World Bank Group works with countries to build resilience and adapt to climate change. For example, it helps strengthen risk information systems to improve decision making and planning and works with communities to implement risk reduction measures. Applying this approach to infrastructure makes it easier and cheaper to reestablish essential services after climate-related damage or disruptions.

A project in war-torn **Yemen** illustrates this approach. War-damaged urban infrastructure, compounded by water shortages and flood damage, left two-thirds of the population without access to safe water and sanitation. A World Bank project is helping restore urban infrastructure services in these cities with support from a QII Partnership grant to conduct climate assessments in selected cities. The activity draws on Japanese knowledge and expertise in disaster risk management, urban resilience, and quality infrastructure design.

Planning around existing ecosystems can also be considered. In **Argentina**, a QII-funded activity supports feasibility studies for reducing drainage and flood risks in Buenos Aires using nature-based solutions, for example, by building reservoirs and retention ponds in city parks. The activity examines how a mix of

green and grey infrastructure can optimize the benefits of urban upgrading, recreation, biodiversity, and reduced heat island effects.

Appropriately designed infrastructure can help communities adapt to the impacts of climate change and increase prosperity. In the **Kyrgyz Republic**, an activity supported by the QII Partnership is helping local governments in public investment planning with community input. Using a participatory approach, municipal leaders are identifying local needs for consideration in green, inclusive, and resilient public investment programs.

Building climate adaptation and resilience into infrastructure projects is urgent, thanks to the growing frequency and severity of climate events. Disruptions to infrastructure caused by natural hazards and poor maintenance cost low- and middle-income countries over \$390 billion annually. Building infrastructure in developing countries that is climate-adapted and resilient can make a huge difference in economic development.

## PROMOTING INCLUSIVE GROWTH TO CREATE JOBS AND TACKLE EXCLUSION AND INEQUALITY

Different groups do not always benefit equally from infrastructure. In many countries, for example, women are typically responsible for collecting water. Infrastructure delivering clean water to homes can therefore spare women from carrying water over long distances. Infrastructure also provides employment opportunities, many of which go to men. Besides women, other groups, including ethnic and religious minorities, could face discrimination

QII.5—integrating social considerations in infrastructure investment—addresses inequality. Quality infrastructure aims to be inclusive and non-discriminatory at all stages of the project life

cycle. Infrastructure should be designed so that all social groups benefit from the opportunities it brings. In addition to infrastructure services, this includes providing access to markets, health, education, and employment.

Getting there involves good communication between communities, stakeholders, and disadvantaged groups from the earliest stages of the infrastructure development process. It also entails providing equal access to employment opportunities, safe working conditions, and other non-discriminatory practices. Inclusive growth is a core element of the World Bank Group's GRID approach.

The QII Partnership supports social inclusion in many World Bank projects. In the **Lao People's Democratic Republic**, for example, an evaluation of the World Bank-supported Road Maintenance Group (RMG) project found that the poorest beneficiaries did not benefit as much as households with above-median income. What could explain these unequal outcomes? A QII Partnership grant financed in-depth interviews with women, their spouses, and village heads from 11 villages to examine the reasons. A key finding was that given the immediate needs for poorest households, they were less able to save and invest—RMG income for was used for immediate consumption needs or to pay off debts. The study offered several recommendations for future public workfare programs.

In **Tajikistan**, female cross-border traders faced more difficulties than male traders because of limited knowledge of business skills, tax and customs regulations, and difficulties accessing financing. A QII Partnership grant helped make the customs service more gender-responsive and provided training to improve knowledge of border procedures and tariffs. The activity helped make Tajik customs offices more responsive to gender issues and stronger as state institutions.

# URBAN ACCESSIBILITY DESIGN GUIDELINE

INCORPORATING UNIVERSAL ACCESSIBILITY INTO INFRASTRUCTURE  
PLANNING AND DESIGN  
NOVEMBER 2020

VIETNAM SUUP Technical Advisory Services on Universally Accessible Infrastructure Design



In **Vietnam**, QII Partnership funding supported universally accessible infrastructure design in roads and bridges in low-income areas in seven cities. It also supported incorporating green infrastructure design within urban planning and development. These activities improved mobility for the disabled and elderly, giving them more access to urban services and employment opportunities. Similar programs are being rolled out in Yemen and Senegal.

## DIGITAL TRANSFORMATION

Digital transformation is underway globally and offers tremendous benefits: at the height of the COVID-19 pandemic it kept businesses, schools, hospitals, and public services running. In developing countries, digital transformation is driving progress across all infrastructure sectors. It offers opportunities for developing countries to "leapfrog" to a more efficient and connected future, as mobile phones have revolutionized connectivity.

Digital transformation and technology are cross-cutting themes that underpin the application of the QII Principles. For example:

- **Technology transfer** helps maximize the positive impact of infrastructure (QII.1) by reducing costs.
- Leveraging **innovative technologies** improves economic efficiency (QII.2).
- Enhanced cybersecurity and data privacy **build resilience** (QII.4).
- Offering digital solutions improves **openness and transparency of procurement** and **anti-corruption**, as well as **access to adequate information and data** (QII.6).

However, with new opportunities come new challenges: digital services can be vulnerable to cyberattacks, poor and disadvantaged groups—especially women and girls—can be further excluded due to lack of access, and the high energy uses associated with data management will have an increasing impact on climate change. So, what can we do to ensure a green, resilient, and inclusive digital transformation?

These issues have made digital transformation—with an emphasis on cybersecurity—a priority for the QII Partnership. In FY22, the Partnership provided over \$1.6 million in grants for digital development. Around 30 percent of the projects and analytical works in other sectors have a digital component, showing the significant contribution of the Partnership to the digitalization of infrastructure.

Examples of QII Partnership support in this area include the following:

- In **Tajikistan** and **Uzbekistan**, the Partnership supports the development of best-practice cybersecurity models to



## CASE STUDY

# Enhancing cyber-security in Mongolia

Mongolia, a nation of about 3 million sandwiched between the Russian Federation and China, is facing severe cybersecurity challenges. The government ranks cybersecurity risks as "very high," an assessment supported by the International Telecommunication Union's 2020 Global Cybersecurity Index, which ranks the country at 120 out of 194 countries.

A QII Partnership grant is helping the Mongolian government adopt the "Zero Trust" security concept, which holds that its organizations should implement a "never trust, always verify" strategy and approach. This entails authenticating every attempt to connect to its systems and services before granting access. The grant provides a strategic roadmap, including technical specifications, to help the government transition to a Zero Trust Infrastructure Architecture (ZTIA). It collaborates with JICA's Mongolia office and Japan's Minister of Internal Affairs and Communications.

The roadmap and foundational knowledge provided by the QII Partnership will inform Mongolia's national cybersecurity strategy. Its recommendations will be implemented by the upcoming Mongolia Smart Government II Project financed by the World Bank. It also includes a learning curriculum and capacity building for governments, the private sector, and academia. This is the first World Bank initiative to help a country transition to ZTIA at the national level. It also helps raise attention and awareness among policymakers of the importance of the QII Principles in cyber infrastructure.



evaluate the climate impact of digital infrastructure expansion and to engage the private sector in rural broadband expansion.

- In **Kosovo**, the Partnership is introducing an e-government platform by conducting a diagnostic of digital workplaces, testing interoperability, and piloting new intranet systems with selected government ministries.
- The deployment of e-procurement in **Pakistan** recommended a government-owned and operated system for cloud implementation to mitigate the risks related to a dependency on the implementation vendor. This highlights the importance of data security in applying digital technology to infrastructure.
- Digital transformation of utilities is an emerging and rapidly changing field. The QII Partnership is working with the World Bank's Energy and Extractives Global Practice on cutting-edge research to improve the quality-of-service delivery and energy utility operations. This analytical work will advance knowledge of the QII Principles through analytical work on improving economic efficiency (QII.2) and infrastructure governance (QII.6) by applying new technologies and digital solutions. Country-specific case studies and global guidance notes are being developed considering international best practices, strategies, architecture design, infrastructure strengthening, and testing that can improve cyber resilience by reducing the vulnerability of electricity companies.

## FRAGILE AND CONFLICT-AFFECTED SITUATIONS

Fragile countries face the most significant risks and have the least ability to respond to climate impacts. This means that investing in sustainable and resilient infrastructure in FCV countries offers significant developmental returns. The QII Partnership is committed to supporting the development of resilient and inclusive infrastructure in FCV countries—between FY17–22, the QII Partnership supported activities in 25 FCV countries (14 percent of the total).

In FCV countries, for example, the QII Partnership is:

- Improving electricity access and the economic efficiency of the power sector in **Somalia** by harnessing available renewable energy resources and building capacity for increased climate resilience and improved infrastructure governance.
- Conducting gap analysis on the existing digital infrastructure and services to develop a subnational GovTech Action Plan in **Armenia**.
- Operationalizing a multi-sectoral approach into decentralized, coordinated decision making to sustainably manage water resources in **Niger**.

## FOCUS AREA

# Strengthening infrastructure governance

Infrastructure projects are extremely costly and have life cycles that can last for decades. The potential for waste, inefficiency, or corruption is high. Openness and transparency throughout the life cycle of infrastructure assets can ensure they are procured transparently and that investments are efficient and offer good value for money. Good infrastructure governance requires transparent, fair, informed, and inclusive decision making at every phase, from bidding to execution.

QII.6—strengthening infrastructure governance—emphasizes all these aspects. It calls for putting well-designed and well-functioning institutions in place to achieve good infrastructure governance. Furthermore, an integral part of good infrastructure governance is realizing sound financial/debt sustainability at both the project- and macro levels. As public and private infrastructure investments will be crucial features of the worldwide COVID-19 and post-pandemic recovery plans, the government will be under significant pressure to accelerate spending. This makes financial/debt sustainability an even more pressing challenge.

The World Bank developed infrastructure governance assessment frameworks to help countries overcome governance bottlenecks in infrastruc-

ture development. This framework, fully aligned with QII.6 and other relevant principles, helps practitioners examine several key dimensions that should be considered in every infrastructure project. These include (a) attention to project life cycles in selecting, designing, procuring, and implementing investment projects that create new infrastructure assets, (b) identification of cross-cutting issues for good infrastructure investment (such as social, environmental, and climate considerations) that should be integrated into every phase of the project's life, and (c) ensuring that relevant regulatory frameworks for sectors (such as power, water, transport) exist, and that service providers have clear roles and responsibilities so that infrastructure services are accessible to citizens.

An analytical work funded by the QII Partnership supported the delivery of pilot infrastructure governance assessments in IDA countries, including Djibouti and Zimbabwe. These helped countries identify constraints to developing, financing, and delivering quality infrastructure investments, focusing on project preparation, procurement, environmental and social considerations, and integrity. It also informed policies and regulations that enhance infrastructure governance and provided actionable recommendations resulting in substantial policy changes.



Another grant supported the development of guidance notes and indicators focusing on integrity, resilience, and decarbonization in the World Bank's InfraGov Assessment Framework, which recommends systematic measures to foster integrity and manage the risk of misconduct along the infrastructure project cycle. Every stage of the project cycle—including planning, procurement, and contract management—is vulnerable to threats such as bribery, collusion, and fraud. The need for integrity and transparency in infrastructure is crucial as spending accelerates as governments implement post-pandemic recovery plans.

Another governance activity supported by the QII Partnership provides solutions and operational guidance to World Bank staff and clients on the modernization of public asset management. This will improve the quality of public infrastructure services and their resilience to climate risks. It provides a framework for aligning public finance choices with public investment and existing infrastructure to bolster infrastructure performance.







**FY17–FY22  
PORTFOLIO**

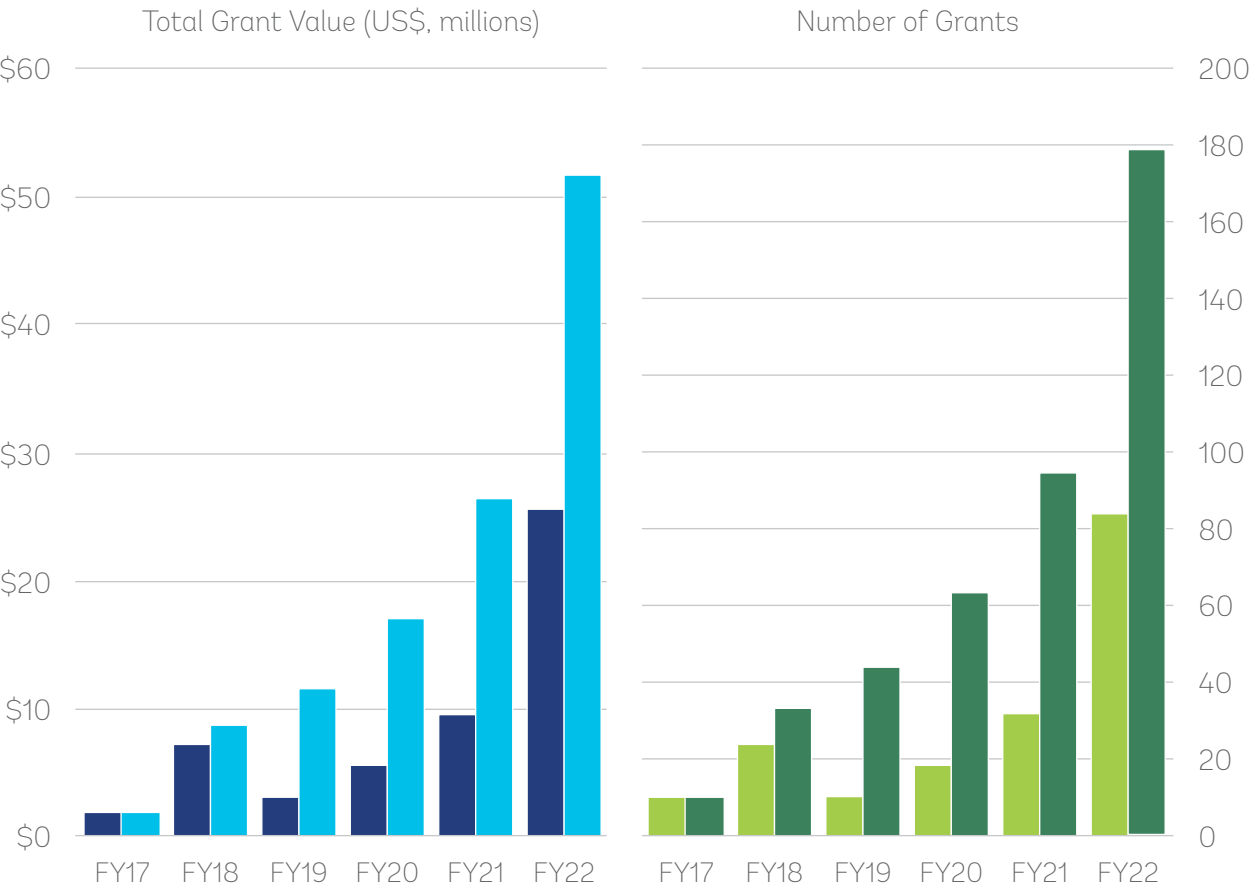
# FY17–FY22

## THE QII PARTNERSHIP PORTFOLIO

The QII Partnership portfolio continues to see rapid growth. The total number of grants awarded grew from 96 to 178 from FY21 to

FY22. In FY22, the value of cumulative grants since inception stood at \$52 million—up from \$26 million in FY21.

### QII GRANT PORTFOLIO VALUE, FY17–FY22



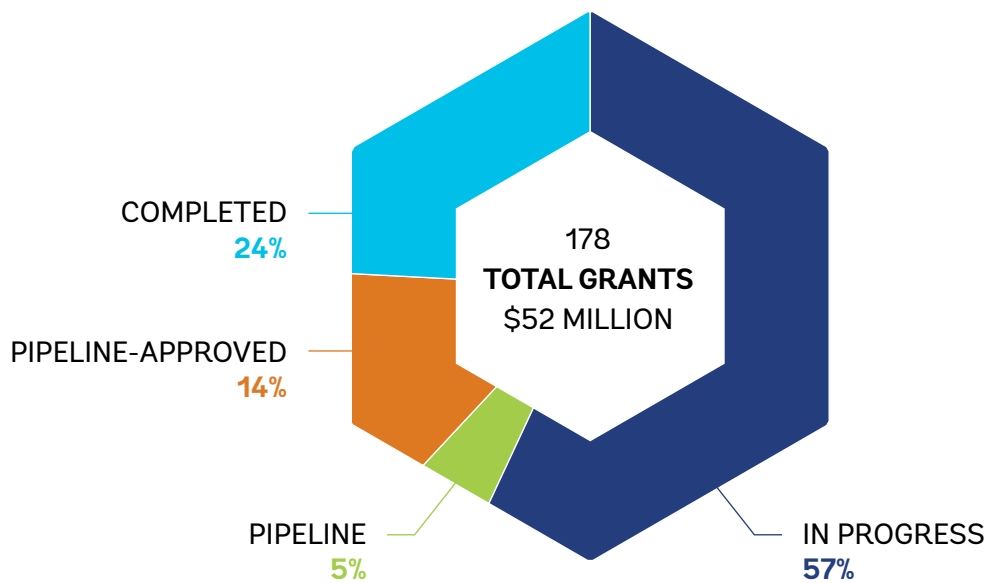
- ◆ Annual Grants Approved (US\$, millions)
- ◆ Cumulative Grants Approved (US\$, millions)

- ◆ Number of Grants
- ◆ Cumulative Number of Grants



More than half—57 percent—of all approved grants since inception are in progress.

### QII GRANT PORTFOLIO BY STATUS



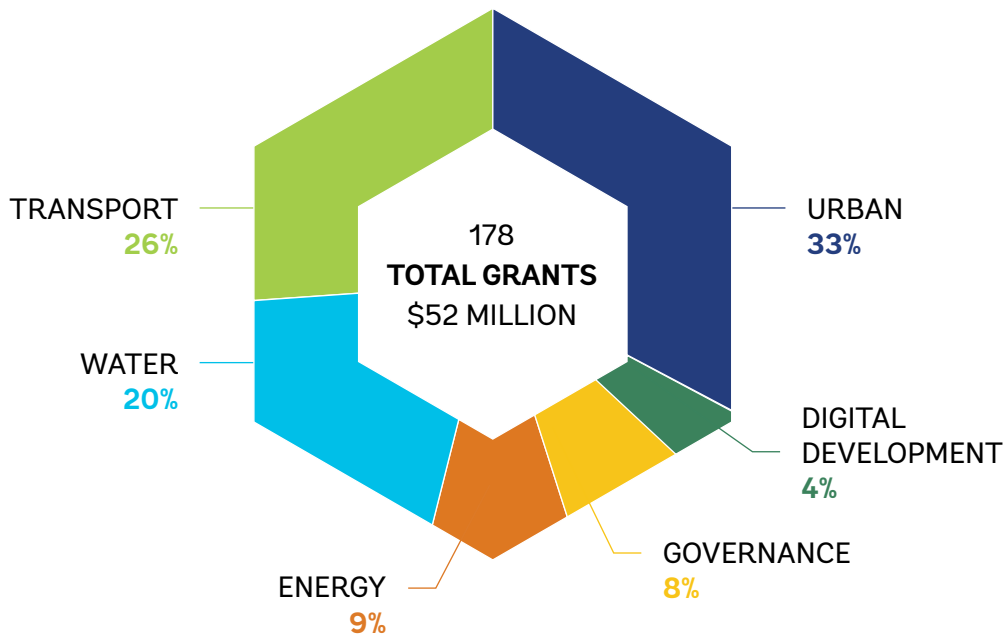


## Sector Impact

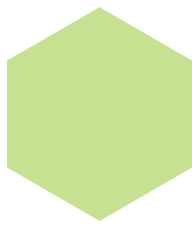
The urban infrastructure and transport sectors continue to account for the largest share of QII Partnership funding, with 33 and 26 percent of funding to date, respectively.

Funding for digital development, a relatively new sector, grew from 0.3 percent in FY21 to 4 percent in FY22 and is expected to grow further.

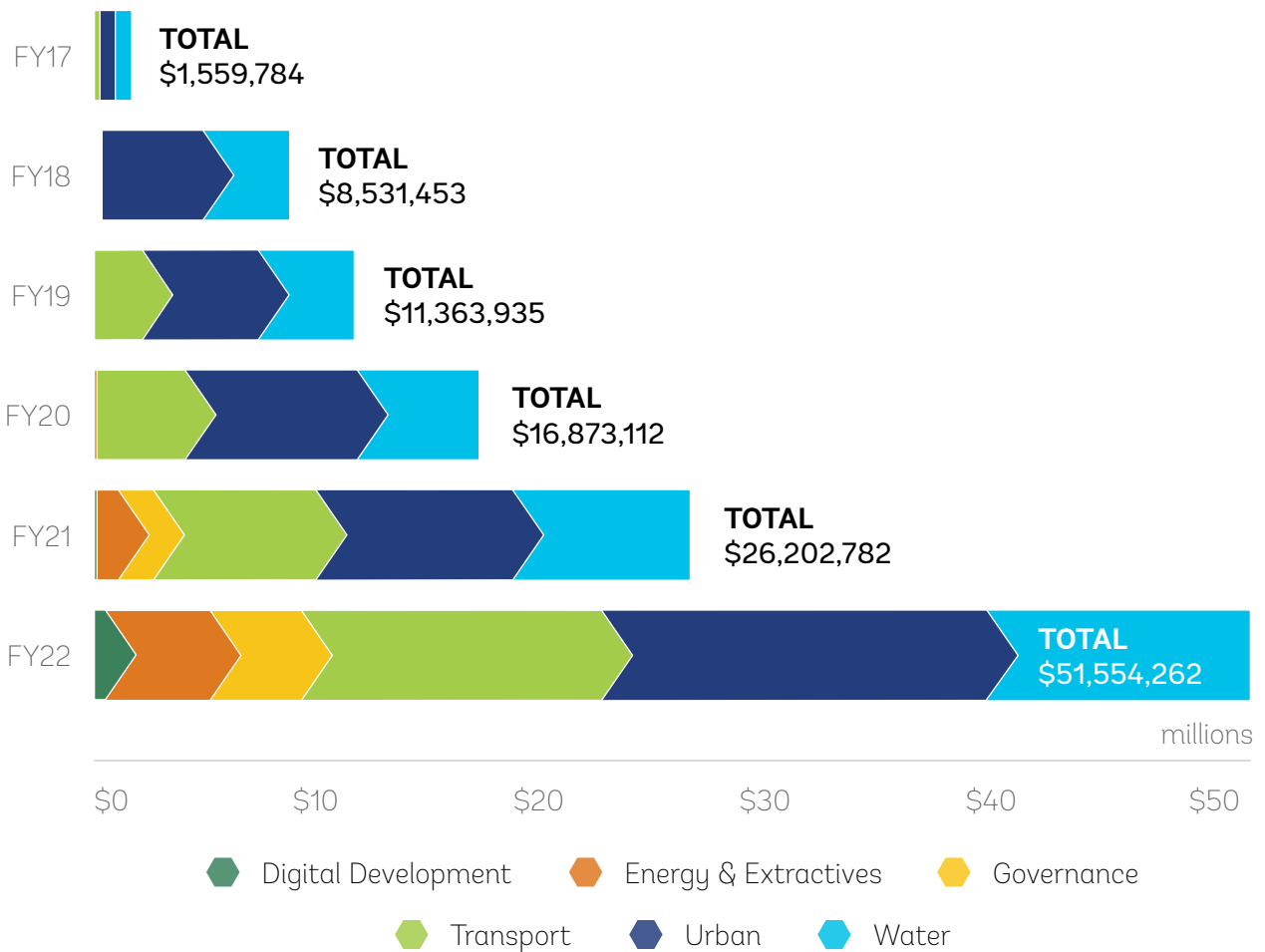
### ALLOCATION OF QII FUNDING BY SECTOR, FY17-22







### GROWTH OF QII GRANT PORTFOLIO BY SECTOR, FY17-22



## FOCUS AREA

# Accelerated and sustainable decarbonization of the transport sector

Decarbonizing the transport sector faces many challenges—transportation produces nearly one-quarter of carbon emissions globally and is the fastest-growing source of fossil fuel consumption. To achieve SDG and net zero targets, governments, the development community, and the private sector will have to take creative approaches to the challenges facing the transport sector today.

QII.3, Integrating Environmental Considerations in Infrastructure Investment, highlights the need to reduce the environmental footprint in all stages of the infrastructure life cycle. This area is a strategic priority for the QII Partnership, which has financed numerous initiatives that chip away at greenhouse gas emissions. These include improving e-mobility, urban mass transit, and regional connectivity while strengthening government capacity to manage transport projects. It also supports financing opportunities and better governance in the sector.

To date, about 40 percent of the QII Partnership's portfolio in the transport sector supports low-carbon approaches or decarbonization. More precisely, the QII Partnership has provided \$6.3 million in funding to support World Bank transport projects valued at \$7.2 billion in five regions across the globe. Sub-sectors include road, national and suburban rail, inland waterways, bus rapid transport (BRT) corridors, and mass transit in cities. The Partnership also funds innovative and cross-cutting research in the transport space, thereby creating valuable knowledge in critical areas such as green transport, development

corridors, regional integration, and urban mobility.

In Indonesia, for example, the QII Partnership is supporting sustainable mass transit infrastructure projects in high-priority transit corridors (Greater Bandung and Medan). The Partnership provided a grant to develop investment plans for integrated terminal development and mini-bus fleet modernization. The activity includes a detailed analysis of the real estate markets, conception designs for terminal areas, recommendations for using PPPs to attract private sector participation, and more. In addition, the QII Partnership is reviewing the fiscal capacity of the relevant provinces and metropolitan areas to address the financing needs of transportation infrastructure. These initiatives complement the support provided by the Global Facility for Disaster Reduction and Recovery (GFDRR) and the Energy Sector Management Assistance Program (ESMAP).

In Brazil, the Partnership is supporting the government in decentralizing the Metrorail networks of six regional capitals. Activities include developing a roadmap and technical options for the initiative, identifying infrastructure elements for Metrorail systems to be integrated with new BRT systems, recommending financing options, addressing legal and regulatory issues, and providing technical advice. These activities will strengthen the capacity of Brazilian institutions to manage urban transport projects. The initiative draws on Japanese experience in land-value capture mechanisms and technical knowledge of Metrorail systems.

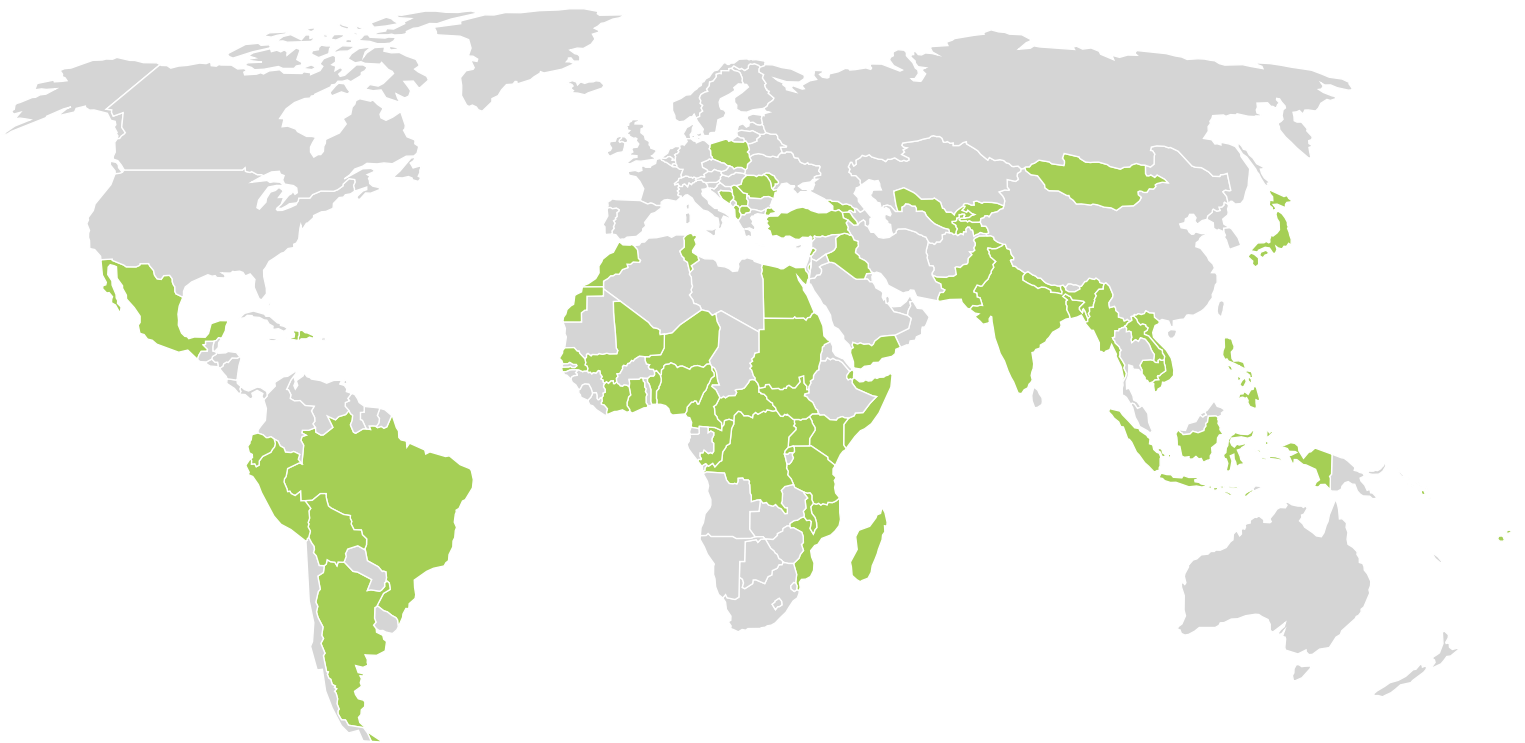




## Geographical Reach

The QII Partnership has supported 66 countries across all regions, up from 47 in FY21. The main recipients of QII Partnership funding are Argentina, Bangladesh, Brazil,

India, Indonesia, Mongolia, Mozambique, Nepal, Peru, Tanzania, and Vietnam, each receiving more than \$1 million in grant funding.

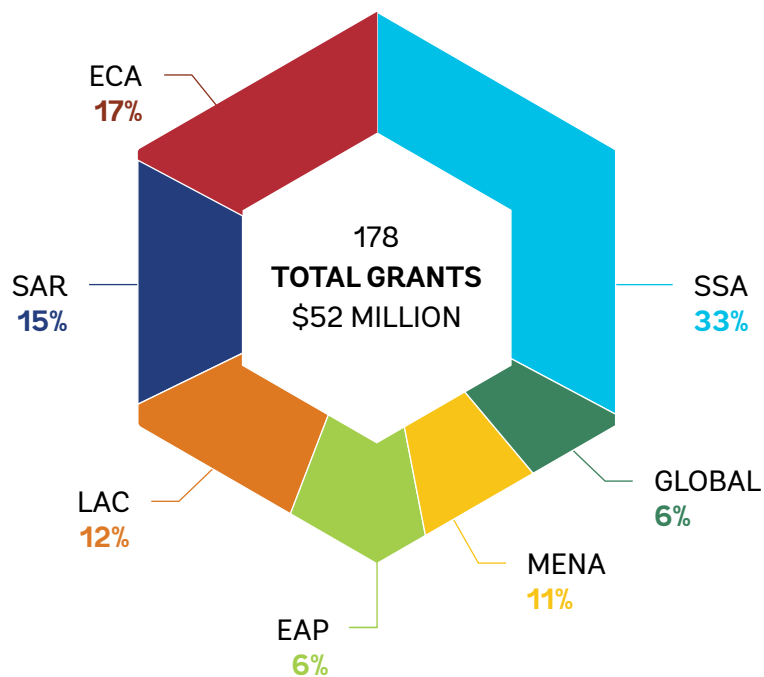




In the last year, Sub-Saharan Africa (SSA) overtook South Asia as the biggest beneficiary region, with 33 percent of total funding. About one-third of newly approved grants were for

projects in SSA. Eastern Europe and Central Asia (ECA) follow at 17 percent, with South Asia (SAR) coming in third at 15 percent.

#### ACTIVITIES IMPLEMENTED, FY17–FY22



# Strengthening the Use of the Analytical Window

The Analytical Window was established to support standalone research, analysis, or activities that advance global knowledge of the QII Principles. It offers an opportunity to increase awareness of the QII Principles beyond projects funded by the Standard Grant window and expands the available evidence base of the successful application of QII Principles across the globe. It also positions the QII Partnership at the forefront of global knowledge and best practice on the QII Principles.

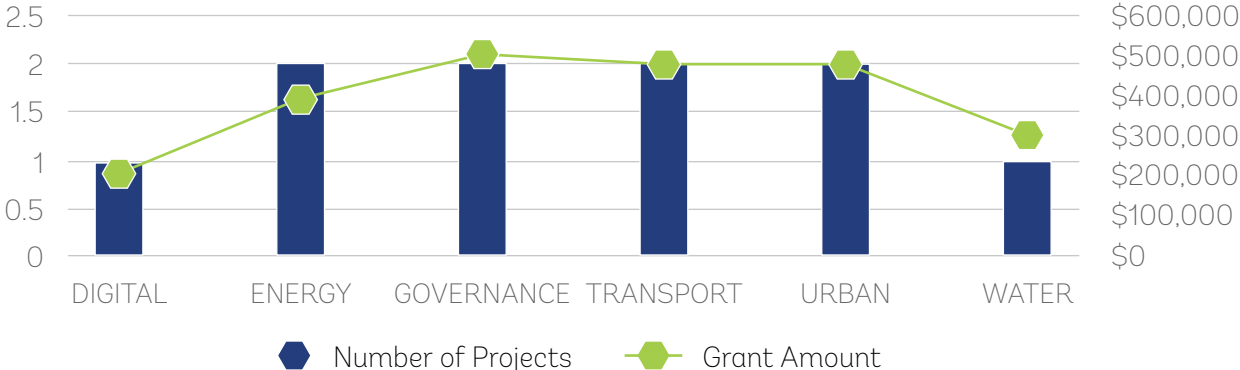
As the QII Partnership matures and the number of funded activities increases, the program is developing a unique body of evidence and knowledge that can be leveraged to support the QII Partnership analytic and knowledge agenda. In addition to the activities funded through the Analytical Window, the QII Secretariat is expanding its outreach and dissemination to promote the QII Principles.

In FY22, 10 projects valued at \$2.4 million were approved under the Analytical Window in the digital, energy, transport, urban, and water sectors.

The analyses explored issues related to many of the Principles, for example:

- Rethinking the role of the suburban railway as an opportunity to **decarbonize transport**, with case studies for three cities in Sub-Saharan Africa (QII.3).
- Implementing global knowledge assessments to promote **effective land administration and quality infrastructure investments**, particularly in the Middle East and North Africa (MENA) region (QII.2).
- Piloting an actionable toolkit for conducting diagnostics and planning of **resilient water supply** infrastructure systems in India and disseminating it among SAR countries and relevant stakeholders (QII.4).
- Developing and piloting an **InfraTech diagnostics tool** to assess the readiness of countries to adopt innovative technologies and provide recommendations for accelerating the adoption of InfraTech (QII.6).

## QII PROJECTS FINANCED THROUGH THE ANALYTICAL WINDOW



## CASE STUDY

# Sharing knowledge of the QII Principles through a MOOC



Infrastructure is essential for economic development and achieving the SDGs. It also plays a vital role in addressing the twin crises that have hampered the world over the last two years—the COVID-19 pandemic and the accelerating impacts of climate change. The economic shocks resulting from measures to contain COVID-19 rely on infrastructure to restore supply chain disruptions, stimulate economic growth, create jobs, and keep communities, governments, and businesses running. Consequently, governments, development institutions, and infrastructure practitioners understand that greater attention must be paid to the quality of infrastructure.

The QII Principles, endorsed in 2019 by the G20, provide a roadmap for ensuring quality in infrastructure. They specifically address challenges facing infrastructure development today by maximizing the positive impact of infrastructure, raising economic efficiency, integrating environmental and social considerations, building resilience against disasters, and strengthening infrastructure governance. The Principles provide a framework that puts these goals within reach.

The Principles, however, are not widely or well understood. Information about QII is limited, and few concrete examples are available that demonstrate how they can be used to promote development. Consequently, there is a dearth of material

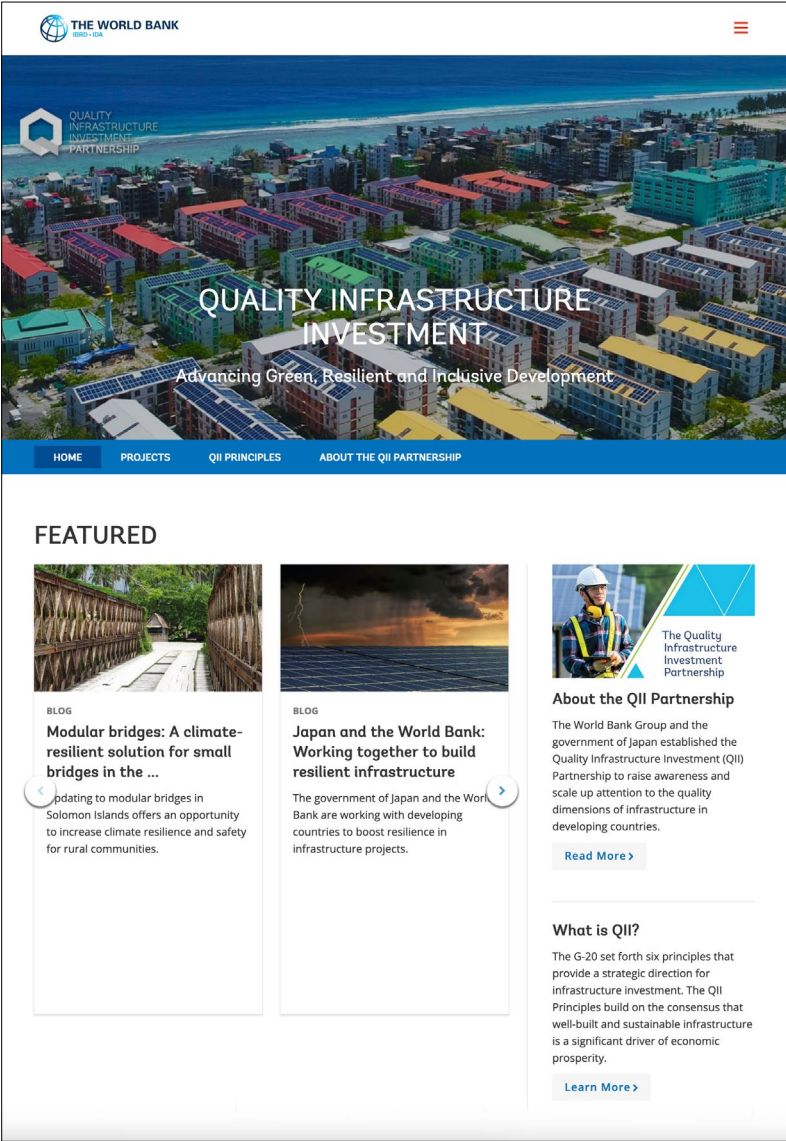
to help policymakers, practitioners, and stakeholders apply the QII Principles to infrastructure development.

To address this knowledge gap, the QII Partnership developed a five-week Massive Open Online Course (MOOC) to help policymakers, practitioners, and stakeholders understand the QII Principles and their role in development. The course emphasized the application of the Principles in green, resilient, and inclusive development. It established the relationship between infrastructure investment, the environment, and climate change, demonstrated the role of resilience and inclusion in the planning and implementation of infrastructure projects, introduced the life-cycle cost approach, and improved understanding of infrastructure governance to build community support and minimize the corrosive impact of corruption.

The course, which ran in early 2022, attracted over 8,000 participants from 193 countries across the globe, led by Nigeria, the United States, and India. Thirty-one percent of the participants were women. Following the course, many participants joined the newly established QII LinkedIn group to continue the learning process and connect to practitioners globally. The knowledge gained will help participants plan for the quality of infrastructure as they develop policies and institutions and seek investments.

# Promoting the QII Principles

An important function of the QII Partnership is disseminating information and knowledge about the value of the QII Principles. In FY22, the Partnership initiated a number of complementary activities to promote the Principles.



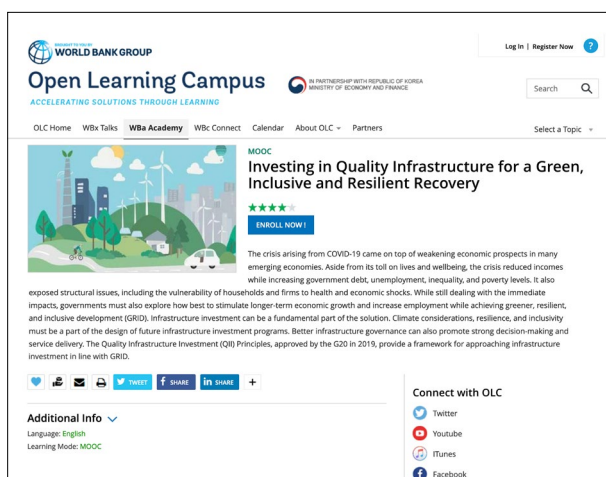
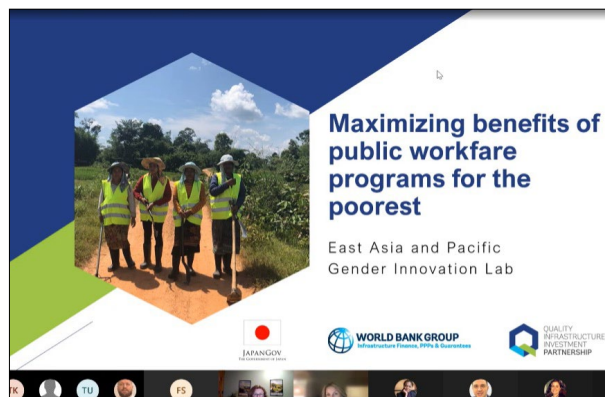
A new website was launched in January 2022 that contains an overview of the QII Principles and the Partnership, as well as case studies, reports, videos, features, blog posts, and other resources that demonstrate the application of the QII Principles in a development context. The website provides greater visibility for both QII as a concept and the Partnership's work.

In March 2022, the Partnership launched a **LinkedIn group focused on QII**. This social media group, the first dedicated to QII, builds a community of professionals interested in deepening their knowledge of QII. It disseminates QII information and materials and fosters discussion with an engaged audience. Membership stood at 580 at the end of FY22 and continues to grow.



The QII Partnership held **four events promoting the QII Principles** in FY22. These were (a) an event with JICA, the Global Infrastructure Facility (GIF), and the Public-Private Infrastructure Advisory Facility (PPIAF) on social inclusion and gender mainstreaming in infrastructure investments, featuring a QII activity in Lao PDR (January 2022), (b) a session with the Tokyo Development Learning Center (TDLC) on resilient infrastructure (February 2022), (c) an event with the World Bank's Governance Global Practice on life-cycle costing and risk sharing in PPP procurement (March 2022), and (d) a learning event on the role of infrastructure in resilient growth with the GIF, TDLC, and the World Bank Tokyo Disaster Risk Management (DRM) Hub (June 2022).

In addition, many QII-funded projects conduct workshops highlighting the role of the QII Principles in their work, such as building climate resilience in Yemen and analyzing workfare programs in Lao PDR's transportation sector. Online or hybrid platforms give these events a global audience.



With funding from the Analytical Window, the QII Partnership developed and launched a five-week **Massive Open Online Course**. This online course focused on the QII Principles as a framework for achieving green, resilient, inclusive development. It attracted over 8,000 participants (31 percent of whom were women) from 193 countries. The MOOC exemplifies the collaboration between QII and JICA, who contributed to the production of the course materials, including an educational video on road asset management.

## CASE STUDY

# Developing sustainable mass transit to reduce urban traffic congestion in Indonesia

Indonesia's cities suffer from chronic traffic congestion that negatively impacts the economy. Serious traffic jams lead to poor air quality, safety and health issues, and economic inefficiency. As almost 60 percent of Indonesia's GDP comes from urban areas, mobility in cities is crucial to ensuring economic competitiveness.

The World Bank's Indonesian Mass Transit Project (MASTRAN), launched in May 2022, is helping the country develop mass transit systems that provide public transportation alternatives to private vehicles, especially two-wheelers. The project will finance (a) the development of a national program of assistance on mass transit for Indonesian cities and (b) BRT systems in the metropolitan areas of Medan, North Sumatra, and Bandung, West Java. The project will help these cities achieve reduced travel times for public transportation users, increased numbers of riders, greater satisfaction regarding safety and security, and a higher percentage of women employed in BRT system operations. It will also help establish institutional structures to manage mass transit at the national and local levels.

A grant from the QII Partnership will ensure that international best practices and knowledge will be integrated into the project. It will finance pilot studies to find fitting solutions for Indonesian cities in the context of the country's transit-oriented development. For example, technical advice will be provided on connecting BRT with other modes combined with mixed-use development

and improved accessibility for integrated terminal development in Medan. Integrated terminal development that allows seamless transfers will improve the performance of the mass transit systems and attract more passengers.

Angkots, a minibus public transport system widely used in Indonesian cities, will also benefit from international experience. Lessons learned from other countries that underwent fleet modernization programs will be applied to the pilots in Indonesia, providing practical options for integrating Angkots with the mass transit systems developed under MASTRAN.

The QII grant also supports assessments of the financial capacity of the selected cities to maintain the project operation. The assessments will help assess fiscal capacity and identify additional sources of revenue to avoid budgetary shortfalls, achieving fiscal sustainability of the mass transit systems.

The activities incorporate two QII Principles into the project. First, they improve the productivity of transport infrastructure (QII.1: Sustainable Growth), and second, they strengthen the financial sustainability of the mass transit systems (QII.2: Economic Efficiency) by considering life-cycle costs in the operational phase. They also tap into good international practice and experience: a Japanese consulting firm with global experience in transit-oriented development is implementing the pilots.

# The QII Partnership's Impact on World Bank Operations

Grant funding from the QII Partnership helps World Bank operational teams incorporate the QII Principles in infrastructure projects. Since its inception, the QII Partnership has approved over \$47 million in standard and JIT grants, nearly double the \$25 million approved at the end of FY21.

These activities supported a total value of \$40.2 billion in World Bank operations. This reflects the value that the QII Principles add to World Bank operations: **every dollar of QII Partnership funding supports approximately \$850 in World Bank investments.**

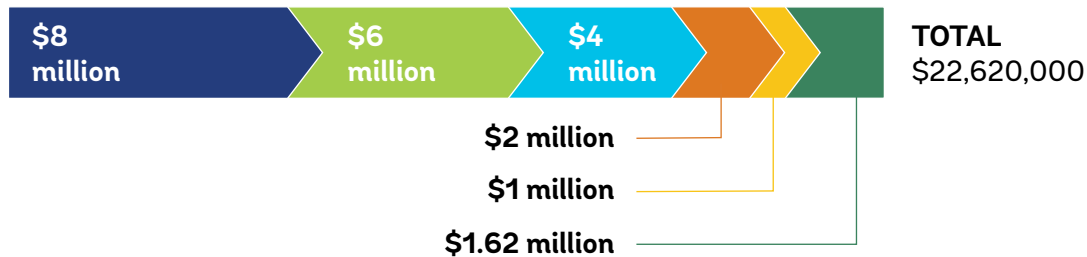
PROJECT STAGE	VALUE OF GRANTS	VALUE OF WORLD BANK INFRASTRUCTURE OPERATIONS
<b>Preparation</b>		
JIT	\$ 0.49 million	\$ 1.3 billion
Standard grant	\$21.7 million	\$ 18.7 billion
<b>Preparation Total</b>	<b>\$22.3 million</b>	<b>\$20.0 billion</b>
<b>Implementation</b>		
JIT	\$ 1.4 million	\$ 5.4 billion
Standard grant	\$23.8 million	\$ 14.8 billion
<b>Implementation Total</b>	<b>\$25.2 million</b>	<b>\$ 20.2 billion</b>
<b>Grand Total</b>	<b>\$47.5 million</b>	<b>\$ 40.2 billion</b>



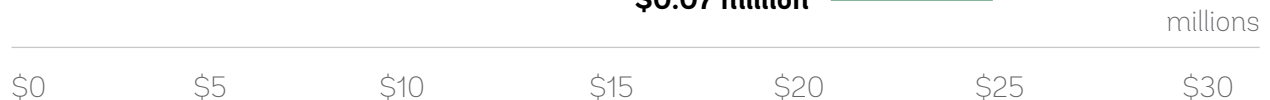
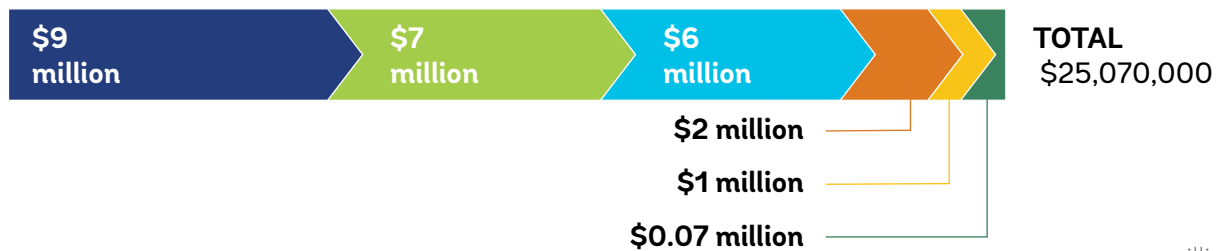
Standard and JIT QII grants support project preparation (47 percent of grant funding for operational work) and implementation (53 percent). The urban infrastructure, transport, and water sectors account for the lion's share of funding (80 percent of preparation and 72 percent of implementation).

### ALLOCATION OF QII FUNDING BY PROJECT STAGE AND SECTOR

#### PREPARATION



#### IMPLEMENTATION & SUPERVISION



- ◆ Urban
- ◆ Transport
- ◆ Water
- ◆ Energy & Extractives
- ◆ Governance
- ◆ Digital Development

## CASE STUDY

# Making Yemeni cities climate resilient

The conflict in Yemen has raged for seven years, triggering a humanitarian crisis fueled by extreme poverty, damaged infrastructure, food and water shortages, and disrupted healthcare services. The country is also vulnerable to climate change. Although most of Yemen has a desert climate, some areas experience flash floods and heavy rainfall.

Yemen's urban areas have been badly impacted. Urban populations are expected to reach 16 million by 2030. War-damaged urban infrastructure, compounded by water shortages and flood damage, has left two-thirds of the population without access to safe water, sanitation, and other essential services. As climate change progresses, rainfall intensity and flooding are expected to increase. A World Bank study estimated that the cost of damage in 16 Yemeni cities is between \$6.8 and \$8.5 billion.

The World Bank's Yemen Integrated Urban Services Emergency Project II (YIUSEP II) is helping the country address emergency needs by restoring urban infrastructure services in 16 selected cities and making them more resilient to climate impacts. Nearly 3 million people stand to benefit.

A QII grant provided the opportunity to understand the vulnerability of urban infrastructure through improved flood and climate assessment and look for innovative approaches to building climate resilience into planned infrastructure investments in Yemen. The QII grant also drew lessons from Japanese knowledge and expertise in disaster risk management, urban resilience,

quality of infrastructure design, and life-cycle costing.

Workshops held in March and May 2022 presented the findings that showed: Yemen's cities face increased incidences of storms, floods, and landslides; infrastructure is inadequate, and flood management is hindered by outdated spatial planning, rapid urbanization, and the spread of informal settlements; and that early warning systems and emergency response planning barely exist, and communities are uninformed and unprepared to face disasters.

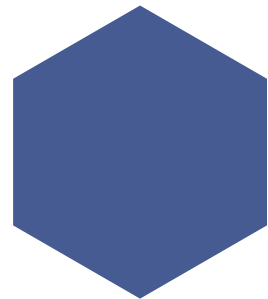
The workshop included training to build the capacity of municipal officers and key line ministries to address these issues through climate-resilient infrastructure design. These include new approaches to integrating public open spaces with stormwater management, urban biodiversity, and social cohesion goals. Japanese experts also shared their experiences in flood risk management and resilience. The workshops provided a foundation to further develop climate risk assessments, identify solutions to address climate risks, and help communities adapt to climate change in Yemen.

The QII grant for this project focused on two QII Principles. Activities improved stakeholders' preparedness for flood risk through climate assessments and workshops (QII.4: Resilience Against Natural Disasters). They also engaged Yemeni women in identifying opportunities and challenges in enhancing urban resilience (QII.5: Social Considerations).





**REVIEW  
OF FY22**





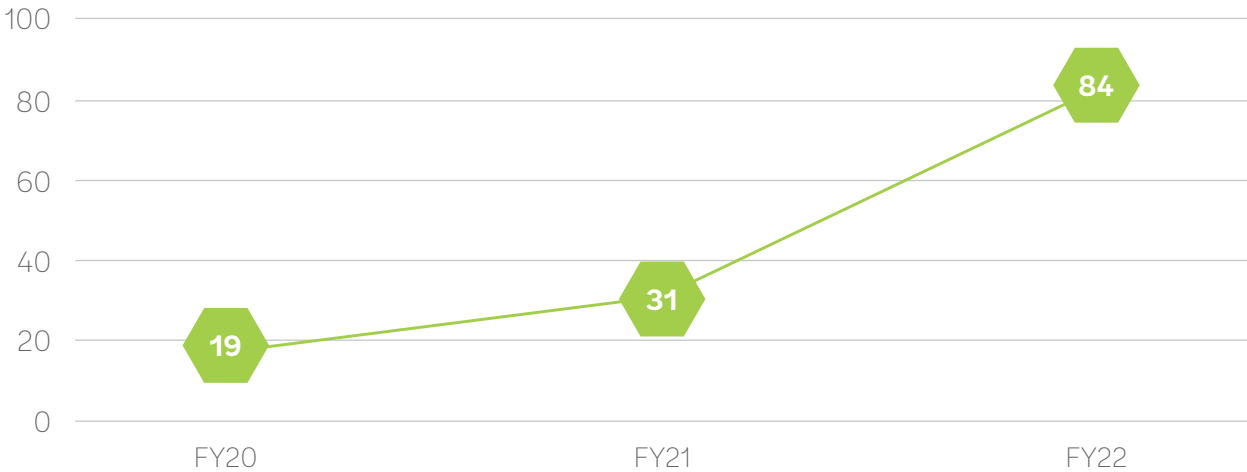
# FY22 IN BRIEF

Although the COVID-19 pandemic continued to rage through FY22, QII activities continued to grow significantly. Eighty-four grants totaling \$25.4 million were approved in FY22, more than double the number approved in the previous fiscal year (31 grants totaling \$9.3 million). Annual approvals grew by 172 percent from \$9.3 million in FY21 to \$25.4 million in FY22, with grants influencing \$22.8 billion in World Bank lending operations.

The increase reflects several trends. First, World Bank teams increasingly recognize the value that

the QII Principles add to infrastructure projects. In particular, global practices in energy and digital—priority sectors—increasingly rely on QII Partnerships advice and funding. Second, it demonstrates that the QII Partnership's expanded outreach and communications efforts are reaching its target audience. Third, World Bank task teams in various infrastructure sectors have more confidence and comfort in approaching the QII Partnership for funding new operations. Finally, it shows that calls for proposals effectively attract interest and stimulate demand for the QII Partnership's services.

**NUMBER OF PROJECTS INITIATED, FY20–FY22**



## Grant Type

The majority of approved projects were standard grants, which accounted for 81 percent of the total by number (68) and 89 percent by grant amount (\$22.6 million).

Ten grants for the Analytical Window accounted for \$2.4 million, representing 11.9 percent by number and 9.4 percent by value. These activi-

ties advance global knowledge and best practice on QII Principles in areas such as public asset management modernization and the energy sector decarbonization program. Six JIT grants accounted for \$420,000 in funding, 7.1 percent by number and 1.6 percent by value. See below for details.

### NUMBER OF GRANTS



### GRANT VALUE



100%

The majority of FY22 grants financed preparation work (63 percent) compared to implementation and supervision (37 percent).

IMPLEMENTATION & SUPERVISION  
37%



## Sector

Urban infrastructure projects received the greatest number of grants (33.5 percent), up from five in FY21. They also received the most funding (27.4 percent). This was followed by transport (21 projects, up from three in FY21) and water (17 projects, up from five in FY21). Notably, the num-

ber of approved digital development projects increased significantly since the last fiscal year, from one to six. Details of projects and their values in each infrastructure sector are summarized below.

### NUMBER OF GRANTS



### GRANT VALUE



100%



# Region

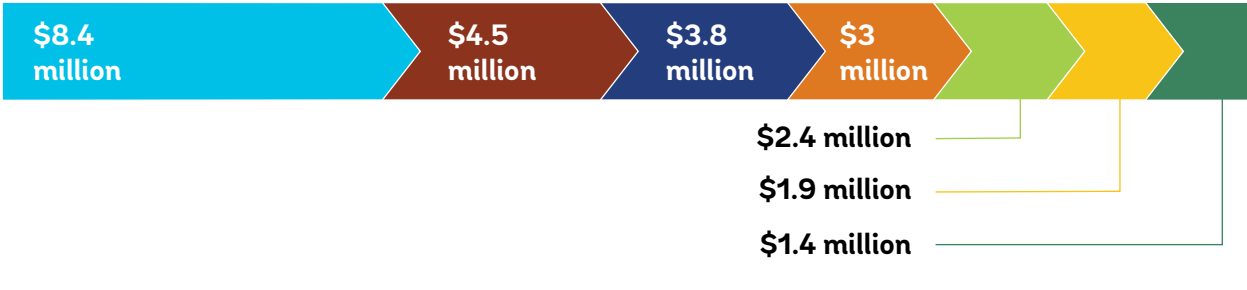
The Sub-Saharan African region accounted for the largest number of projects by number (29.8 percent) and value (33.1 percent), followed by Europe and Central Asia and South Asia.

Notably, the Middle East and North Africa accounted for 7.5 percent of activities by grant value, up from zero in FY21.

NUMBER OF GRANTS



GRANT VALUE



100%

- ◆ SSA
- ◆ ECA
- ◆ SAR
- ◆ LAC
- ◆ EAP
- ◆ MENA
- ◆ GLOBAL



# Support for World Bank Operations

Demand for grants from the QII Partnership more than doubled in the last fiscal year. Annual approvals grew by 172 percent, from \$9.3 million in FY21 to \$25.4 million in FY22. QII grants leveraged nearly \$23 billion in World Bank lending operations. In FY22, each dollar of QII Partnership grants leveraged over \$850 in World Bank infrastructure operations. See Annex 1 for a list of activities initiated in FY22.

## CASE STUDY

# Supporting transit-oriented development in Ecuador



In Quito, the capital city of Ecuador, heavy traffic is one of the most pressing challenges for its more than 2.5 million inhabitants. Quito's unique geography, constrained by mountains and ravines, narrow roads, and a growing population, all contribute to serious congestion that increases commuting time significantly. On average, each city resident wastes over 160 hours a year stuck in traffic.

The Quito Metro Line One Project, launched in 2013, seeks to improve mobility in the city, becoming the backbone of an integrated transport system. The 23-kilometer line will crisscross the city with 15 stations and 18 electric trains with the capacity to transport more than 400,000 people a day. The World Bank's contribution, together with financing from the Inter-American Development Bank (IDB), the European Investment Bank (EIB), and the Development Bank of Latin America (CAF), as well as local and government resources, makes this ambitious project a reality.

A grant from the QII Partnership focused on implementing transit-oriented development (TOD) for the project, aiming to maximize the value for money associated with public transport infrastructure. The project team identified an area with the highest potential for improvement alongside the Metro line and developed a strate-

gy to implement a TOD pilot there. The strategy considered local issues, such as financial needs, political support, and market sounding for private investors.

In parallel with the pilot strategy, the team developed a roadmap for implementing TOD. It included necessary actions from public institutions and recommendations to further improve value and increase accessibility to stations. They included a strategic plan for La Magdalena station and the legal instruments to implement it. Workshops with relevant stakeholders—public authorities, potential investors, and local communities—providing valuable feedback to form the strategy and roadmap through consultations. In addition to the benefits directly associated with the grant, the client incorporated lessons learned from this activity in regulatory reforms down the road.

The activities incorporated three QII Principles into the project. First, they aimed to mobilize private capital to develop the areas around the Metro, hence boosting the project's economic benefits (QII.2: Economic Efficiency). Second and third, a modal shift to improved public transport helps reduce local and global emissions reduction (QII.3: Environmental Considerations), as well as addresses the needs of vulnerable populations, such as women, people with disabilities, and the poor (QII.5: Social Considerations).





# ANNEXES



# ANNEX 1

## ACTIVITIES INITIATED IN FY22

The following is a complete list of the 84 projects approved in FY22 by sector.

DIGITAL DEVELOPMENT	
PROJECT	GRANT TYPE/AMOUNT
<b>Argentina:</b> Strengthening Digital and Data Infrastructure to Close the Digital Gap	Standard: \$300,000
<b>Global:</b> Infratech Country Readiness Diagnostic Tool	Analytical: \$200,000
<b>Mali:</b> Strengthening Cybersecurity Foundations	Standard: \$400,000
<b>Mongolia:</b> Zero Trust Cybersecurity Infrastructure	Standard: \$320,480
<b>Tajikistan:</b> Promotion of Secure, Resilient, and Inclusive Digital Infrastructure	Standard: \$250,000
<b>Uzbekistan:</b> Promoting Green, Resilient, and Inclusive High-Quality Digital Infrastructure	Standard: \$350,000
<b>TOTAL</b>	<b>\$1,820,480</b>



## ENERGY

PROJECT	GRANT TYPE/AMOUNT
<b>ECA Region:</b> Energy Sector Decarbonization Support Program	Analytical: \$150,000
<b>Global:</b> The Utility of the Future	Analytical: \$240,000
<b>India:</b> Building Ecosystems for Battery Storage to Integrate and Move Towards Net Zero	Standard: \$400,000
<b>India:</b> Supporting Sustainable Power Sector Reforms in Himachal Pradesh	Standard: \$400,000
<b>Kyrgyz Republic:</b> Energy Sector Financial Sustainability	Just-in-time: \$70,000
<b>Seychelles:</b> Transition to Renewable Energy	Standard: \$300,000
<b>Somalia:</b> Somali Electricity Infrastructure Investment Support	Standard: \$400,000
<b>Sudan:</b> Supporting Energy-Efficient Lighting and Cooling Infrastructure	Standard: \$350,000
<b>TOTAL</b>	<b>\$2,310,000</b>

## GOVERNANCE

PROJECT	GRANT TYPE/AMOUNT
<b>Albania:</b> GovTech for Service Delivery	Standard: \$320,000
<b>Armenia:</b> Digital Governance Infrastructure	Standard: \$400,000
<b>Cameroon:</b> Strengthening Public Infrastructure Investments	Standard: \$200,000
<b>Ghana:</b> Infrastructure Governance	Standard: \$150,000
<b>Global:</b> Addressing Integrity, Resilience, and the Decarbonization of Infrastructure Using the InfraGov Assessment Framework	Analytical: \$240,000
<b>Global:</b> Strengthening Public Asset Management for Better Infrastructure Services	Analytical: \$265,000
<b>Kosovo:</b> Digital Governance Infrastructure	Standard: \$400,000
<b>Northern Macedonia:</b> Enhanced Infrastructure Governance	Standard: \$350,000
<b>Serbia:</b> Support to the Critical Infrastructure for the Digitalization of Service	Standard: \$238,000
<b>TOTAL</b>	<b>\$2,563,000</b>

## TRANSPORT

PROJECT	GRANT TYPE/AMOUNT
<b>Bangladesh:</b> Sustainable Urban Transport Development in Dhaka	Standard: \$225,000
<b>Brazil:</b> Support for the Preparation of the FICO-FIOL/ East-West Freight Rail Corridor Project	Standard: \$400,000
<b>Brazil:</b> Sustainable Integrated Mobility Project in the Foz do Rio Itajai Region	Standard: \$300,000
<b>Djibouti:</b> Road Corridors Quality Technical Assistance	Standard: \$398,000
<b>Ecuador:</b> Ibarra Transport Infrastructure Improvement Project	Just-in-time: \$70,000
<b>Ecuador:</b> Resilient Urban Regeneration in Quito World Heritage City Center (TOD Phase 2)	Standard: \$400,000
<b>Georgia:</b> Developing Inclusive Infrastructure	Standard: \$190,000
<b>Global:</b> A Framework to Improve Urban Transport Governance Practices	Analytical: \$240,000
<b>Global:</b> Reviving Suburban Rail for Green Development	Analytical: \$240,000
<b>India:</b> Financing and Greening of Inland Vessels	Standard: \$300,000
<b>India:</b> Streamlining Intermodal Station Development	Standard: \$400,000
<b>LAC Region:</b> Public Transport Demand Forecasting Regional Platform for the Post-COVID-19 Era: New Technology for Better Infrastructure Investment Decision Making	Standard: \$350,000
<b>Madagascar:</b> Support for the Transport Connectivity Program	Standard: \$395,000
<b>Mongolia:</b> Infrastructure Governance Diagnostics and Pre-Feasibility of Private Sector Participation in Logistics Infrastructure	Just-in-time: \$70,000
<b>Mongolia:</b> Transport Infrastructure Investment Planning for Ulaanbaatar	Standard: \$390,000
<b>Mozambique:</b> Innovation for Better Infrastructure in the First Mass Transit Project of Maputo	Standard: \$400,000
<b>Serbia:</b> Transport Connectivity Assessment for Serbia	Standard: \$225,000
<b>Support for the Development of a Road Maintenance Policy</b>	Standard: \$150,000
<b>Tajikistan:</b> Enhancing Female Cross-Border Traders' Economic Opportunities	Standard: \$380,000

## TRANSPORT

PROJECT	GRANT TYPE/AMOUNT
<b>Tanzania:</b> Climate Resilient Assessment on Central Rail System	Standard: \$300,000
<b>Uzbekistan:</b> Enhancing Railway Sustainability, Efficiency, and Resilience	Standard: \$350,000
<b>TOTAL</b>	<b>\$6,173,000</b>

## URBAN INFRASTRUCTURE

PROJECT	GRANT TYPE/AMOUNT
<b>Bangladesh:</b> Improving Municipal Infrastructure Delivery	Standard: \$400,000
<b>Brazil:</b> Promoting Green, Resilient, and Inclusive Infrastructure Investments in Central Porto Alegre	Standard: \$350,000
<b>Côte d'Ivoire:</b> Green and Resilient Cities for Northern Côte d'Ivoire	Standard: \$400,000
<b>Djibouti:</b> Towards Efficient, Sustainable, Climate-Smart, and Resilient Infrastructure	Standard: \$400,000
<b>Ghana:</b> Maximizing the Impact and Sustainability of Integrated Flood Risk Management in the Greater Accra Region	Standard: \$400,000
<b>India:</b> Development of Quality Infrastructure Diagnostic & Planning Toolkits for Water Supply Systems	Analytical: 240,000
<b>India:</b> Resilient Urban Infrastructure and Service Delivery in Gujarat	Standard: \$400,000
<b>Indonesia:</b> Mainstreaming Climate Smart Approaches in Indonesian Cities through Quality Design of Infrastructure	Standard: \$400,000
<b>Kyrgyz Republic:</b> Enhancing Resiliency and Energy Efficiency in Public Infrastructure of the Batken Region	Standard: \$350,000
<b>Kyrgyzstan:</b> Enhancing Resilience and School Infrastructure Quality	Standard: \$400,000
<b>Madagascar:</b> Resilient and Inclusive Infrastructure in the South	Standard: \$350,000
<b>MENA Region:</b> Support to Digitalization of Land Administration Systems	Analytical: 240,000
<b>Mongolia:</b> Infrastructure Governance Diagnostics and Pre-Feasibility of Private Sector Participation in Industrial Park Infrastructure	Standard: \$400,000

## URBAN INFRASTRUCTURE

PROJECT	GRANT TYPE/AMOUNT
<b>Mozambique:</b> Strengthening Quality of Infrastructure in Urban Development in the North	Standard: \$400,000
<b>Nigeria:</b> Sustainable Infrastructure Investment for Ibadan	Standard: \$250,000
<b>Senegal:</b> Mainstreaming Universal Accessibility in Urban Operations	Standard: \$400,000
<b>Senegal:</b> Support for Infrastructure Investments of the Senegal Municipal and Agglomerations Support Program	Standard: \$400,000
<b>South Sudan:</b> Enhancing Disaster Resilient and Inclusive Community Infrastructure	Standard: \$400,000
<b>Tanzania:</b> Building resilience in Tanzanian cities	Standard: \$400,000
<b>Tanzania:</b> Optimizing Infrastructure and Services for Informal Traders and Communities to Implement Sustainable Infrastructure and Improve Operations	Standard: \$400,000
<b>Tunisia:</b> Strengthening Urban Infrastructure Resilience	Standard: \$400,000
<b>Vietnam:</b> Resilient Priority Infrastructures in Quang Nam and Quang Ngai Provinces	Standard: \$350,000
<b>Yemen:</b> Enhancing the quality of climate resilient infrastructure design approaches in Yemeni cities	Standard: \$400,000
<b>TOTAL</b>	<b>\$8,530,000</b>

## WATER

PROJECT	GRANT TYPE/AMOUNT
<b>Bangladesh:</b> Infrastructure Governance and Water Security for Greater Chattogram	Standard: \$240,000
<b>Bangladesh:</b> Technical Assistance for Infrastructure Design Improvement and Institutional Capacity Strengthening for the Preparation of the Proposed Chattogram Water Supply Improvement and Sanitation Project II	Just-in-time: \$70,000
<b>Cambodia:</b> Supporting a Long-Term Water Storage Development Program in Cambodia	Standard: \$240,000

## WATER

PROJECT	GRANT TYPE/AMOUNT
<b>Dominican Republic:</b> Water Supply and Wastewater Improvement Project	Standard: \$300,000
<b>India:</b> Life-cycle cost efficiency for Hybrid Annuity PPPs	Standard: \$200,000
<b>Malawi:</b> Canal Automation in the Shire Valley Transformation Program	Standard: \$165,000
<b>Moldova:</b> Technical Assistance Support for the Moldova Water Security and Sanitation Project	Just-in-time: \$70,000
<b>Morocco:</b> Resilient and Sustainable Water in Agriculture in Morocco	Just-in-time: \$70,000
<b>Nepal:</b> Improving Water Sector Governance	Standard: \$240,000
<b>Niger:</b> Integrated Water Security Platform Project	Standard: \$240,000
<b>Niger:</b> Quality Multipurpose Dam and Resettlement—Kandadji Project	Standard: \$400,000
<b>Nigeria:</b> Sustainable Urban and Rural Water Supply, Sanitation and Hygiene Program	Standard: \$400,000
<b>Pakistan:</b> Irrigation Infrastructure Modernization in Pakistan's Sindh Province	Standard: \$240,000
<b>Peru:</b> SEDAPAL—Preparing for the Future	Standard: \$240,000
<b>Peru:</b> Support towards the Digital Transformation and Automation of Water Supply and Sanitation Utilities	Standard: \$300,000
<b>SSA Region:</b> Resilient Urban Water: Developing and Mainstreaming a New Generation of Tools	Analytical: \$300,000
<b>Vietnam:</b> Strengthening Capacity for Effective and Efficient Water Infrastructure Management to Improve Water Security in Phu Quoc	Standard: \$240,000
<b>TOTAL</b>	<b>\$8,530,000</b>



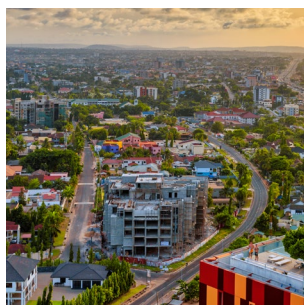
## ANNEX 2

# ACTIVITIES COMPLETED IN FY22 BY SECTOR

Fifteen QII grants valued at \$4.2 million financed projects were completed in FY22 in the energy, transport, urban infrastructure, and water sectors. They also supported governance and knowledge dissemination of the QII Principles. These activities supported World Bank projects totaling \$2.25 billion.

### CROSS-SECTORAL

#### GHANA Infrastructure Governance



Ghana has made significant progress in public financial management, but gaps remain in rolling out effective systems for public investment management (PIM). To address this issue, the World Bank's Economic Management Strengthening Project developed a comprehensive PIM reform strategy and action plan complemented by capacity building. However, these efforts were hampered by a proliferation of different systems, leading to difficulties accessing information. A grant from the QII Partnership conducted a study to diagnose the PIM IT ecosystem in Ghana and present recommendations to realize an integrated and coherent PIM IT ecosystem. The engagement successfully identified the key issues, enhanced the awareness among public institutions, and established a platform for the institutions to integrate the respective IT systems. As a result, public institutions and officials have a roadmap to get more reliable information and data on a real-time basis, allowing Ghana to better plan, procure, implement, and monitor infrastructure projects. *Standard grant: \$150,000.*



## CROSS-SECTORAL

### GLOBAL Massive Open Online Course (MOOC) on Quality Infrastructure Investment



Infrastructure plays a vital role in addressing the twin crises that have hammered the world over the last two years—the COVID-19 pandemic and the impacts of climate change. The QII Principles address infrastructure development challenges. The QII Partnership, with support from Japan, ran a five-week MOOC to help policymakers, practitioners, and stakeholders understand the QII

Principles and their role in development. Over 8,000 participants learned how quality infrastructure could maximize the positive impact of infrastructure, raise economic efficiency, integrate environmental and social considerations, build resilience against disasters, and strengthen infrastructure governance. *Standard grant: \$146,154.*



## ENERGY

### MALDIVES Batter Energy Storage System Procurement Strategies for Quality Infrastructure Investments



Maldives is heavily reliant on diesel and heavy fuel oil for power generation and is working to transition to renewable energy sources. Energy storage is an important part of the solution, as it plays a key role in improving the flexibility of the power system. Accelerating energy storage deployment in the country requires

sound policies for energy storage, power system regulations that adequately remunerate the services that storage assets can provide, and competitive procurement processes for sustainable energy storage solutions. A QII Partnership grant provided recommendations for the effective procurement of battery energy storage systems to scale up variable renewable energy quickly and cost effectively. They also add to the body of knowledge on energy storage solutions in developing countries. *Just-in-time grant: \$68,533.*



**HAITI** Enhancing Rural Roads Investments in Fragile Contexts



Underdeveloped transport infrastructure in Haiti constrains access to economic opportunities and essential services, including health and education, especially in rural areas. The problem is compounded by limited institutional capacity and limited financial resources. QII grant activities supported improvements to the quality of rural road investments, particularly tertiary, low-traffic volume roads, by providing inputs and insights that inform the appropriate design of projects in fragile environments with a focus on rural mobility for women. Activities also supported a diagnostic of the urban transport system in Cap-Haitien using innovative approaches to collect and analyze data, including geospatial analysis, big data, and drones to inform improvement intervention to traffic mobility. *Standard grant: \$546,021.*



**LAO PDR** Maximizing Benefits of Public Workfare Programs for the Poorest



The poorest beneficiaries of the World Bank-supported Lao Poverty Reduction Fund (PRF) did not benefit as much as less-poor beneficiaries, despite the program offering the same work to both groups. PRF aims to reduce poverty in Lao PDR through infrastructure improvements and increased access to services and resources. The finding contradicts the program's aim of helping the poorest households. The QII analytical grant examines (a) the reasons that households in the bottom 50th percentile households received fewer economic benefits from the project and (b) why women's empowerment was weaker in that group. *Analytical grant: \$101,644.*



**MOROCCO** Enhancing the Quality of Road Investments in the North-East of Morocco



The government of Morocco aims to spur economic development and job creation in the northeastern part of the country. This QII grant supported the preparation of the World Bank-funded North East Development Project, which aims to increase economic activity and enhance access to economic opportunities in that part of the country. The grant financed technical assistance, including analyses and training, to improve the quality of project implementation, ensure that geotechnical challenges were considered in the project's technical design, and raise awareness of available quality infrastructure investment solutions to the region's development challenges. *Just-in-time grant: \$57,952.*

**SOLOMON ISLANDS** Implementation of Innovative and Efficient Bridge Technologies



Bridges in Solomon Islands are particularly vulnerable to climate change and natural disasters, threatening communities and economic development. The QII grant funded a study to identify a range of prefabricated modular bridges that could be constructed in Solomon Islands and elsewhere in the Pacific. It also assessed the benefits and limitations of the modular bridges in view of improving climate resilience and economic efficiency. Furthermore, it funded a technical review of modular bridge designs, training to build capacity, a workshop to disseminate the pilot study, and a plan of action supporting the World Bank-funded Solomon Islands Roads and Aviation Project. *Standard grant: \$192,449.*

**WEST BANK AND GAZA Promoting Resilient Municipal Services and Infrastructure in Gaza**



Solid waste management (SWM) in the Gaza Strip faces technical, environmental, social, institutional, and financial challenges due to the volume of waste and the lack of modern waste management systems. Waste management service providers have limited operational and financial capacity. Most residents cannot pay for basic collection and disposal services due to rampant poverty and high unemployment. Border closures, frequent conflicts, and political uncertainty further compound these problems. A QII Partnership grant supported the Gaza Solid Waste Management Project by improving the efficiency, quality, and sustainability of municipal solid waste infrastructure supported under the project. Grant-funded activities led to the establishment of standard operating procedures for improved management of SWM assets, a contingency and resilience plan for improved disaster risk management, and the Waste Information System platform for improved management of the solid waste operation and administrative functions of the municipal service provider. *Standard grant: \$354,634.*



**BANGLADESH Dhaka North Neighborhood Upgrading Project**



The Dhaka North City Corporation (DNCC) sought to improve the quality and sustainability of infrastructure in public spaces. The World Bank's Dhaka North Neighborhood Upgrading Project supported the DNCC in improving its capacity to plan and manage investments in streets, sidewalks, and public spaces. A QII Partnership grant supported the project by developing strategies, analyses, guidelines, and recommendations to the DNCC on managing public infrastructure assets, the development of smart tools, such as smartphone apps, for enhancing citizen engagement, and support for the feasibility assessment and implementation of GREEN6 and resource-efficient features for public spaces. These activities are expected to lead to improved cost efficiency, asset management, and quality of design of public space sub-project investments undertaken by DNCC, better citizen engagement, and more resilient and resource-efficient infrastructure. *Standard grant: \$360,828.*



**BANGLADESH Dhaka Public Space Sustainability**

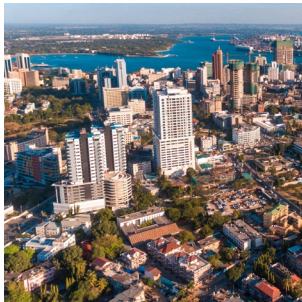


The Dhaka Metropolitan Area is the economic and political center of Bangladesh. It is also one of the world's most densely populated and least livable cities. The QII grant provided technical support and capacity building to the Dhaka South City Corporation to enhance the quality and sustainability of infrastructure and public spaces in four selected neighborhoods under the World Bank's Dhaka City Neighborhood Upgrading

Project. Expected outcomes include infrastructure that is better designed to meet user needs, stronger ownership of the community in the programming and maintenance of neighborhood assets, and more resilient and resource-efficient infrastructure. *Standard grant: \$386,095.*



**TANZANIA Improving Site Safety and Livability in Dar es Salaam**



Dar es Salaam's flooding problems are expected to increase with rapid urbanization and a changing climate. The quality of the green spaces in the city's lagoons and river basins suffers from urban pressure, unplanned building activities, solid waste dumping, toxic industrial effluents, and untreated sewage. This QII grant supported the World Bank's Dar es Salaam Metropolitan Development Project by strengthening construction site safety conditions, supporting the planning, design, and implementation

of open space in selected pilot areas in Dar es Salaam, and conducting a study of current operations and maintenance systems for roads, drainage, and solid waste management. *Standard grant: \$499,400.*



## URBAN INFRASTRUCTURE

### IRAQ Emergency Operation for Development Project



Fierce and protracted fighting in Iraq damaged infrastructure, which impacted commerce, employment, municipal services, and more. The low capacity of local municipalities hampered restoration efforts. In response, the World Bank financed the Iraq Emergency Operation for Development Project (EODP) to support the government in rebuilding damaged infrastructure and restoring public service delivery in four municipalities. A QII grant supported one component of EODP by strengthening the ability of project management teams (PMTs) to identify and prioritize infrastructure intervention, building the capacity of the PMTs, and aiding in the bidding and reconstruction process with an emphasis on sustainability, creating opportunities for small businesses, stimulating local economic recovery, and restoring municipal services. *Standard grant: \$499,969.*



Standard grant: \$499,969.

## WATER

### INDIA Resilient Framework for Groundwater Management

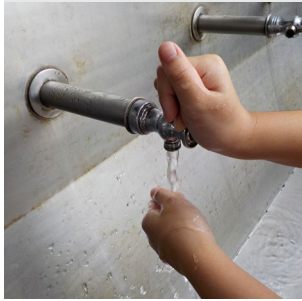


India's groundwater resources are threatened by overexploitation, leading to rapid and widespread groundwater decline. Affected areas include the northern "breadbasket" states, where an estimated 15 percent of the country's food is produced using unsustainable groundwater mining. A QII Partnership grant supported the implementation of the National Groundwater Management Improvement Program. Specifically, it supported the systemization of processes to

develop water security plans, created a framework for assessing the cumulative impact assessment of water security plans, and developed protocols and guidelines to ensure infrastructure investments proposed in the plans are sustainable from a whole catchment perspective. Capacity building and technical guidelines have enabled the government to better manage groundwater resources. *Standard grant: \$249,661.*



**PAKISTAN** Support to the Preparation of the Punjab Rural Sustainable Water and Sanitation Services Project



In Pakistan's Punjab province, public investment in water supply and sanitation has not kept up with the demand for services. Village-level water supply systems suffer from weak operations and maintenance, poor financial sustainability, a lack of water source sustainability planning, and low investment. The government's capacity to address these issues is limited. The QII grant supports the World Bank's Punjab Rural Sustainable Water Supply and Sanitation Project by enabling better monitoring through community-led reporting, identification of cost-effective, innovative engineering design and management options, and baseline water and soil quality data. It also provided household and community survey data to facilitate monitoring and accountability. *Standard grant: \$357,000.*



**SSA** Sahel Irrigation Solutions



Improving agricultural performance in the Sahel is critical to increasing rural incomes, reducing inequalities between rural and urban areas, food security, and consolidating governments' fiscal position. The QII grant supports the World Bank's Regional Sahel Irrigation Initiative Project, which aims to build the Sahel's capacity to develop and manage irrigation and increase irrigated areas through regional solutions. The grant supported irrigation practitioners by providing adapted knowledge and tools to improve the overall implementation and operation of irrigation infrastructure. These included knowledge exchange, introducing tools for streamlining irrigation development processes, and piloting results-driven irrigation planning and development. A toolkit has been made available to practitioners through an online portal of SIIP. *Standard grant: \$203,691.*



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