How quality infrastructure drives development in fragile countries







Fragility, conflict, and violence pose significant barriers to economic development and poverty reduction in many countries. The Quality Infrastructure Investment Principles offer a strategic framework to guide infrastructure development. This framework, endorsed by the G20, emphasizes sustainable growth, economic efficiency, environmental and social considerations, building resilience, and strengthening governance. Adhering to these principles ensures that every dollar spent in fragile contexts contributes to sustainable, resilient, and inclusive services for some of the world's most vulnerable people.

BACKGROUND

Fragility, conflict, and violence (FCV) pose significant development challenges that jeopardize efforts to eradicate extreme poverty in low- and middle-income countries. The number of people living in extreme poverty in FCV-affected areas could surpass those in non-FCV settings as early as 2024. Furthermore, the World Bank estimates that nearly 59 percent of the global extreme poor will reside in FCV countries by 2030.

Fragile countries need stability, access to education, healthcare, jobs, and strategic investments in key sectors to get back on their feet. Quality infrastructure lies at the core of addressing these needs. Without it, countries cannot adequately meet the development challenges in FCV areas, which include extreme poverty, climate change impacts, and disrupted livelihoods.

The Quality Infrastructure Investment (QII) Principles—endorsed by the G20—provide a strategic approach and a roadmap to address key challenges in infrastructure. By applying these principles, infrastructure can significantly contribute to the World Bank's vision and mission of creating a world free of poverty and ensuring that our planet remains livable. The QII Principles guide countries in developing infrastructure that maximizes the use of scarce resources, incorporates environmental and social considerations, boosts resilience, and improves governance. Although voluntary and non-binding, the six QII Principles provide essential insights for effectively managing infrastructure investment projects.

The QII Principles

- Maximizing the positive impact of infrastructure to achieve sustainable growth and development
- Raising economic efficiency in view of life-cycle cost
- Integrating environmental considerations into infrastructure
- Building resilience against natural disasters
- · Integrating social considerations in infrastructure investment
- Strengthening infrastructure governance



APPLYING THE QII PRINCIPLES IN FCV COUNTRIES

The QII Partnership between the World Bank and Japan was established in 2016 to integrate the QII Principles into Bank-supported infrastructure projects. To date, it has provided \$11.2 million in grant funding—17 percent of its total portfolio—for initiatives in 21 FCV countries, ranging from the fragile atoll nation of Tuvalu to the conflict-torn Democratic Republic of Congo to the West Bank and Gaza. Sub-Saharan Africa (SSA) receives the largest share of QII Partnership support at 64 percent, followed by the Middle East and North Africa (MENA) at 17 percent and Europe and Central Asia (ECA) at 11 percent.

How does this work? Let's take a closer look at how the six QII Principles are being applied in practice in FCV countries.

QII Principle 1: Maximizing the positive impact of infrastructure

This principle highlights the role of quality infrastructure in promoting sustainable growth by creating a "virtuous circle" of economic activity. Specifically, it focuses on job creation and technology transfer, creating a ripple effect of positive impacts that benefit communities and drive long-term development. In doing so, quality infrastructure supports national development strategies and helps countries achieve their global commitments.





Technical assistance funded by the QII Partnership contributed to <u>resilient urban</u> <u>development in the Democratic Republic of Congo</u>. This activity included promoting job opportunities for local people and building their capacity and skills, thereby contributing to productivity improvements and long-term economic growth in line with QII.1. For example, local engineers and planners were engaged in flood risk mapping, the main component of the project. Local university students were trained to conduct data collection and analysis, which provided them with exposure to the real-life application of their new knowledge and skills. Their work led to a database on flood risk mapping, which is currently used to provide urban planners in Kinshasa with critical information on drainage, solid waste, and vegetation.

QII Principle 2: Raising economic efficiency in view of life-cycle cost

QII Principle 2 emphasizes the importance of raising economic efficiency in view of life-cycle costs (LCC) in infrastructure projects. This principle advocates for achieving value for money by considering total costs over the life cycle of the infrastructure—including operations and maintenance costs. It encourages the use of innovative technologies and effective risk management to minimize delays and cost overruns, thereby optimizing economic efficiency.



The QII Partnership has actively promoted the integration of LCC in infrastructure design as a priority. One example in an FCV setting is a training program conducted in Cameroon. Historically, Cameroon's public investment programs were hindered by inefficiencies, such as delays and cost overruns. In response, the QII Partnership task team trained 40 government officials in applying LCC in the design and management of infrastructure investments.

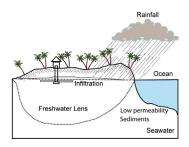
Recognizing the participants' strong sense of ownership, a more advanced training series was developed, focusing specifically on the application of LCC in the roads sector. The additional training was highly successful, with participants contributing relevant data from various phases of the life cycle of road projects in the country. Participants collaborated on a case study illustrating the application of LCC.

QII Principle 3: Integrating environmental considerations in infrastructure investments

QII Principle 3 emphasizes the critical need to integrate environmental considerations into infrastructure investments. It promotes the alignment of infrastructure projects with goals for low-carbon and climate-resilient development. By prioritizing transitions to a low-carbon future and supporting innovative financial solutions, this principle drives sustainable development and advances meaningful climate action.

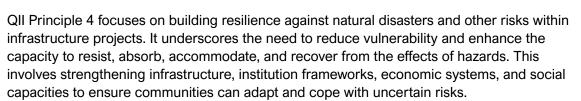


In this area, the QII Partnership is making significant contributions in Katembe, a suburb of Maputo, Mozambique. Katembe is positioned for substantial urban growth, but it is particularly susceptible to climate impacts such as coastal erosion, rising tides, and flooding. Recognizing these vulnerabilities, the QII Partnership provides critical technical inputs for protecting ecological areas and flood plains. It also supports establishing zoning regulations to advance nature-based solutions and safeguard ecological areas and flood plains. These measures will minimize the impact of climate change.

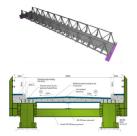


Furthermore, the QII Partnership funded a pivotal study by the University of Auckland on pavement failure on the runway of the Funafuti International Airport of Tuvalu. The study revealed that a combination of high tides and heavy rainfall—key indicators of climate change—exerted excessive pressure underneath the runway, leading to its failure. These findings provided the basis for securing additional financing to address these issues using innovative and resilient construction methods.

QII Principle 4: Building resilience against natural disasters and other risks







An example of building resilience to natural disasters is the QII Partnership-supported assessment of prefabricated modular bridges in the Solomon Islands. This initiative analyzed 19 prefabricated modular bridges and assessed their benefits and limitations in improving climate resilience and economic efficiency. It also included an assessment of the suitability of modular bridges at project sites in Malaita Province. Characterized by reduced design and construction time, these innovative modular bridges offer many advantages compared to conventional ones. The success of this project demonstrates the high potential for replication in other Pacific countries facing similar challenges.

QII Principle 5: Integrating social considerations in infrastructure investment



QII Principle 5 emphasizes the importance of integrating social considerations into infrastructure. It states that the social and economic benefits of infrastructure projects should reach all people, particularly vulnerable and excluded groups. This principle champions inclusivity and equitable development throughout the planning and implementation phases of these projects.

In Haiti, the <u>QII Partnership funded a study that examined the socioeconomic impact of improved road connections on women in rural communities in Haiti, comparing these outcomes with those experienced by men. The study shed light on the relationship between access to rural roads and improvements in household welfare and the well-being of women. It called for project designs that prioritize gender equality and ensure equal access to newly developed infrastructure. Furthermore, it emphasizes the importance of addressing "invisible infrastructure"—the social norms and behavioral influences that play a role in narrowing the gender gap in infrastructure usage.</u>

QII Principle 6: Strengthening infrastructure governance



QII Principle 6 focuses on enhancing infrastructure governance. It emphasizes the need for robust governance structures and processes to ensure transparency, accountability, and effectiveness in infrastructure projects. This principle aims to minimize inefficiencies, reduce corruption risks, and promote good governance practices for sustainable development.

In Kosovo, the QII Partnership is supporting good infrastructure governance by promoting the digitalization of government services. Specifically, the project is assisting in developing the country's digital transformation strategy, integrating digital platforms across government organizations to enhance interoperability and assessing the data management framework for cloud storage solutions. These activities are expected to contribute to an improved governance structure, enabling the government to provide public services with improved efficiency and transparency.

In Nigeria, an initiative supported by the QII Partnership is promoting good governance by building the government's implementation capacity as part of the World Bank's \$700 million Sustainable Urban and Rural Water Supply, Sanitation, and Hygiene (SURWASH) Program. The Partnership's support includes developing a detailed guidance note for state governments and implementing agencies, outlining action plans and disbursement-linked results tailored to the local context. In addition, the program operations manual was updated, leading to better institutional arrangements and reporting structures between federal and state governments. The successful completion of these measures is critical for the timely effectiveness of the SURWASH Program, showcasing the importance of infrastructure governance in achieving project goals.

GOING FORWARD

The FCV context presents a pressing challenge that demands our immediate attention. Fragility, conflict, and violence jeopardize efforts to eradicate extreme poverty. The numbers are alarming, but amidst these challenges, there is hope. Infrastructure development, particularly quality infrastructure, can serve as a powerful catalyst for positive change and sustainable development in FCV countries. The QII Principles provide a roadmap for successful infrastructure investment projects, ensuring they optimize resources, consider environmental and social factors, enhance resilience, and strengthen governance. The success stories of the QII Partnership in supporting FCV countries are inspiring. By prioritizing sustainable growth, raising economic efficiency, integrating environmental and social considerations, building resilience, and strengthening governance, we can create a future where infrastructure becomes a force for progress, even in the most challenging contexts.



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