Infrastructure resilience and building standards in Pacific island countries

Developing a regional approach

Highlights

- **PRIF is supporting a regional diagnostics of constraints in the application of building codes and standards in the Pacific.**
- **A regional and coordinated approach is proposed to raise awareness on the importance of building standards as well as a road map for strengthening capacity of government agencies.**
- **Building standards complement donor support to 'build-back-better' and other initiatives.**

Background on the initiative

Considerable studies were conducted in recent years with the aim of improving the resilience of infrastructure to disasters in the Pacific region which is increasingly prone to extreme weather events.

These studies have targeted post-disaster reconstruction protocols, post-disaster assessment and recovery frameworks, strengthening capacity for recovery planning and monitoring and disaster insurance provision.

Several Pacific island countries (PICs) have received donor assistance in previous years to update building codes and to raise construction standards to withstand more severe natural events.

Building codes provide minimum standards for safety, health and general welfare, including structural integrity, mechanical integrity (for example sanitation, water supply, light and ventilation), means of egress, fire prevention and control and energy conservation.

However, many PICs still have outdated, incomplete or unlegislated building codes, which are complex and expensive to enforce. Further, there remains a strong perception among PIC construction practitioners that both the old codes and the updated codes and standards are not being adequately administered, managed or enforced, leading to poor quality and high rates of deterioration. In addition to the limited availability of funds, challenges range from the high costs of construction materials to the lack of a skilled labour force needed for quality control, compliance and enforcement.

The political basis for the initiative

A regional diagnostics study was initiated by the Pacific Region Infrastructure Facility (PRIF) to examine the status of the national building codes, building construction specifications and standards and their administration, management and compliance across 13 PICs: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, Niue, Palau, Republic of the Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

PRIF members are active partners supporting reconstruction and rehabilitation of public buildings damaged by disasters in the Pacific with the objective to 'build-back-better'. Appropriate building standards are important to ensure the quality and efficiency of materials used in construction and rehabilitation. Most Pacific countries have adopted Australian or New Zealand building standards when necessary and often on an informal basis.

Regional approach

Donors mostly assist countries bilaterally. However, noting the common challenges in PICs and for development partners to respond more effectively, a regional and coordinated approach is proposed to raise awareness on the importance of building standards and to strengthen the capacity of government agencies. This will advance the discussion on the need for legislation on national trade measurement and standards as well as the mechanisms to enforce building product quality compliance. This will also facilitate a harmonised insurance scheme being developed for the Pacific.

Strengthening of Institutions

Better implementation and oversight of building standards will directly benefit various government agencies in all PICs such as Ministries of Trade and Industry, Infrastructure and Development, among others. However, among the 13 PICs, only Fiji has legislation to control building material standards. Fiji, Kiribati, Samoa, Solomon Islands, Tonga and Vanuatu have material testing laboratories but often these are not utilized to test building materials imported, sold and used.

Involvement of private sector and consumer in the initiative

In-country workshops held in Fiji, Vanuatu and Solomon Islands, as well as surveys conducted in other PICs involving representatives from the construction industry, organisations of building professionals, consulting firms, academia and relevant government agencies, revealed the urgency to address multi disciplinary issues on building codes and standards in a coordinated process. Discussions included addressing challenges of accessing Australian or New Zealand standards, which are often referred to in the national building codes, and which can be difficult and costly for members of the building professions.

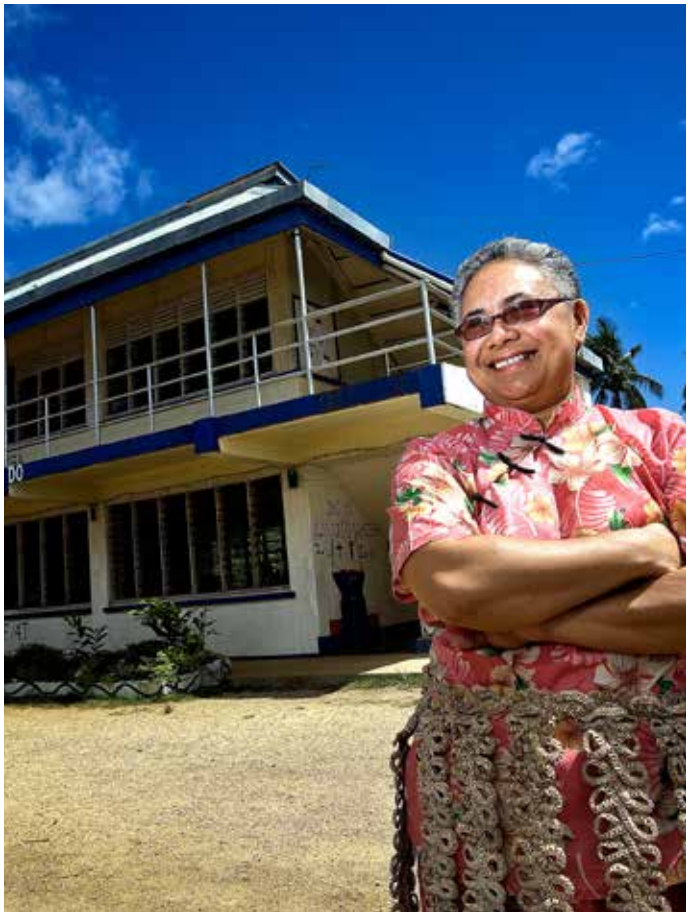
The way ahead

The PRIF regional diagnostics study will lead to the publication of a guidance document (available November 2019) to propose a road map, both at the national and regional levels, that would guide future assistance initiatives related to national building code and standards updates. Recommendations will include suitable administration, management and compliance enforcement that could be provided by PRIF development partners.

Specific recommendations on building standards include: updating the list of acceptable building product standards in the national building code; enabling

copies of relevant building standards to be readily accessible to building professionals; inclusion in the Building Inspectors Duty Statement the monitoring of building products on site, and support for upgrading of equipment where a national materials testing facility exists.

A proposed strategy to improve workmanship standards will involve introducing a system of national certification and accreditation, including bi-annual licensing for all construction personnel (consultants, contractors, project managers and trade persons). The private sector, through the various building professional associations, will be invited to work with relevant government ministries and training institutions to establish appropriate qualification benchmarks and design a regulatory framework in which certification, accreditation and licensing can be administered and compliance monitored.



Photos courtesy of PRIF Members

For further information, please contact:
PRIF Coordination Office, c/- Asian Development Bank, Level 20, 45 Clarence Street, Sydney NSW 2000, Australia
enquiries@theprif.org www.theprif.org

The Pacific Region Infrastructure Facility (PRIF) is a multidevelopment partner coordination, research and technical assistance facility that supports infrastructure development in the Pacific. PRIF members include the Asian Development Bank, Australian Department of Foreign Affairs and Trade, European Investment Bank, European Union, Japan International Cooperation Agency, New Zealand Ministry of Foreign Affairs and Trade, United States Department of State and the World Bank Group.

ADB Australian Aid European Union JICA NEW ZEALAND Aid Programme WORLD BANK GROUP