Validation Report

Reference Number: PVR-457
Project Number: 38160-032
Grant Number: 0108
October 2016

Tonga: Integrated Urban Development Sector Project

Independent Evaluation Department
Asian Development Bank
ABBREVIATIONS

ADB – Asian Development Bank
ADF – Asian Development Fund
CBD – central business district
DMF – design and monitoring framework
EIRR – economic internal rate of return
HDI – human development index
km – kilometer
MOI – Ministry of Infrastructure
MOT – Ministry of Transport
MOW – Ministry of Works
M&E – monitoring and evaluation
O&M – operation and maintenance
PCR – project completion report
PIA – project implementation assistance
PMU – project management unit
PSC – project steering committee
RRP – report and recommendation of the President
TA – technical assistance

NOTE

In this report, "$" refers to US dollars.

Key Words

adb, asian development bank, groundwater quality monitoring, operation and maintenance, tonga, trunk drainage, urban development, validation

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I. PROJECT DESCRIPTION

A. Rationale

1. At the time of project formulation, the development expansion in Tonga’s capital, Nuku’alofa, had been driven by ad hoc projects. The lack of sector-wide planning resulted in the development of residential areas on unsuitable lands at Nuku’alofa’s periphery and public infrastructure with limited capacity for future urban growth. A sector approach was confirmed as appropriate as this would facilitate a coordinated sector-wide urban planning and has the flexibility to meet changing investment priorities and to coordinate with the government’s urban infrastructure investment priorities. The approach would also reduce the government’s transaction costs in preparing urban sector projects. The grant-funded project was approved with seven core subprojects already developed and candidate subprojects to be selected after
approval. An associated technical assistance (TA) was approved to help establish an urban planning and management system.

2. The 2006 Strategic Development Plan Eight sets out the government’s development aims and program. Strategy 20 of this plan aimed to develop an urban planning and management strategy for Tonga and to formulate an investment project that will develop urban areas. The Asian Development Bank (ADB) supported the implementation of Strategic Development Plan Eight by focusing on (i) better governance, (ii) macroeconomic stability, and (iii) private sector-led urban economic growth. This contributed to ADB’s overarching goal of poverty reduction. It was also fully consistent with the ADB Pacific Strategy, 2005–2009 and supported Tonga’s continued economic and social development and achievement of the Millennium Development Goals.

B. Expected Impacts, Outcomes, and Outputs

3. The project was designed to provide (i) an efficient and well-maintained primary urban road network, (ii) all-weather roads for low-income and low-lying residential areas, (iii) well-maintained and functional drainage systems, (iv) effective trunk drainage systems, and (v) quality groundwater monitoring wells to assess the impacts of septic tanks on Nuku’alofa’s aquifers. The project was to facilitate the setting up of improved urban planning and management capacity, and infrastructure maintenance programs.

4. The expected impact of the project was to improve living standards. The associated performance indicators and targets were to (i) maintain the National Human Development Index or increase it from 0.815 during 2008–2012 (baseline year: 2006); (ii) reduce average vehicle journey time for a 7-kilometer (km) trip through Nuku’alofa during peak hours—from 28 minutes to 18 minutes or less—by 2012 (baseline year: 2006); and (iii) reduce the number of reported cases of waterborne diseases as indicated by reports on (a) diarrhea cases that are less than 1,500 by 2012 (baseline: 2,320 in 2003), (b) dengue fever cases that are less than 100 by 2012 (baseline: 194 in 2003), (c) typhoid fever incidence that is less than 15 by 2012 (baseline: 23 in 2003), and (iv) groundwater that remains safe for drinking and reticulated water quality continues to meet the World Health Organization’s Guidelines for Drinking Water Quality (1997). This validation notes that it would be difficult to isolate the impact of this specific project from any of the selected indicators identified above.

5. The project’s expected outcome was improved urban infrastructure. The associated performance indicators and targets were (i) vehicle operating costs are reduced by 5% by 2011, (ii) traffic accidents on primary roads are reduced by 10% by 2012, and (iii) the duration of severe flooding in Sopu are reduced from several months to less than 1 day per year by 2012.

6. The project comprised three main outputs in the following core areas: (i) Roads—efficient and well-maintained primary road network, (ii) Drainage—well-maintained and functional drainage systems, and (iii) Sanitation—monitored groundwater quality and assessed

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2 ADB. 2008b. Technical Assistance to Tonga for Urban Planning and Management System. Manila (TA7082-TON, approved in 27 May for $700,000).
4 These are the government’s goals for urban planning and infrastructure development as expressed in Strategy 20 of the Strategic Development Plan Eight for Tonga.
impacts of septic tanks on aquifers underlying Nuku’alofa. In the report and recommendation of the President’s (RRP) design and monitoring framework (DMF), the output statements for each sector included references to maintenance but this validation notes that the maintenance indicator and target for the roads sector\(^6\) were deleted in the DMF of the project completion report (PCR). There was no explanation for this and there is no reference to the preventive maintenance program in the PCR, despite the acknowledgment that the sustainability of project benefits requires continued commitment from the government to operate and maintain the project assets in the context of Nuku’alofa’s urban development (PCR, para. 62). The RRP included a fourth output on institutional strengthening and capacity building, which was the output of the associated TA.

7. Although the project was approved in 2008 and the Nuku’alofa Central Business District (CBD) Project financed by the People’s Republic of China was approved in 2009, the DMF was not revised in 2009 to accommodate the cancellation of the Sopu drainage channel and its replacement with candidate subprojects.\(^7\) If this was done, the evaluation of the substituted subprojects in the economic analysis conducted for the PCR would have been consistent with the DMF.

C. Provision of Inputs

8. The project’s investment cost was estimated at $14.2 million equivalent, including taxes and duties of $1.8 million equivalent. The total project cost was lower than planned at appraisal, with total expenditure at $13.4 million. Expenditure on civil works and equipment had a significantly higher proportion of project expenditure (62%) than had been planned at appraisal (49%). The financing plan outcome also showed some variation. At completion, the borrower financed 16% of the implementation cost against the appraisal estimate of 21%.

9. The most significant difference in cost is in the Sopu drainage channel. This subproject was cancelled when the initial design work revealed that the scope of works would have to be expanded significantly and would incur additional land acquisition and resettlement. The $1.9 million budget for this subproject was reallocated to other candidate subprojects. Works under the drainage rehabilitation subproject were reduced because these overlapped with the CBD reconstruction project (footnote 7). Increased cost of primary road upgrades resulted from a change in scope to accommodate additional drainage work that was reallocated from the cancelled Sopu drainage channel. The budget for candidate subprojects was increased from $1.2 million to $4.1 million. This was made possible by reallocating the savings from the Sopu drainage subproject and the unallocated category.

10. TA funds associated with the grant were also provided (footnote 2). The amount of $700,000 equivalent was funded from the Japan Special Fund and implemented the urban planning and management system that had been formulated under project preparatory TA (footnote 2).

11. The project was classified as environmental Category B. It required the preparation of an environmental assessment review framework that guided the implementation of subsequent

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\(^6\) The roads maintenance performance target and indicator in the RRP was “Preventative maintenance program and management system for urban roads established and staff trained by mid-2009.”

\(^7\) This is on the rehabilitation of storm water drainage systems in Nuku’alofa’s CBD (subproject D1). The scope of the subproject was narrowed down to the rehabilitation of drainage along Vuna Road and the Queen Salote Wharf, and along Vaha‘akolo Road from Vilai Barracks to the Royal Palace, as original plans overlapped with the Nuku’alofa CBD Rebuilding Project.
subprojects. Resettlement was not required under any of the subprojects but land acquisition was needed for one subproject.

D. Implementation Arrangements

12. The Project Steering Committee (PSC) was established as planned and provided overall policy guidance and direction for the project. The Ministry of Works (MOW) was the executing agency and responsible for the overall implementation of the project. MOW established a project management unit (PMU) for day-to-day management and implementation of the project. The project implementation assistance (PIA) consultants assisted the PMU in project planning, design, monitoring, and reporting. During the implementation period, MOW also went through a reform process and merged with the Ministry of Transport (MOT) to form a single ministry—the Ministry of Infrastructure (MOI). This involved the movement of some key MOW personnel, some of whom had been working with the project. It set back the capacity-building objective of the project and reduced the size of the operational unit.

13. The PCR reported that all grant covenants, including the requirements for project implementation arrangements, the submission of audited financial statements, and reporting on safeguards were all complied with. Appendix 6 of the PCR, however, reported partial compliance of Schedule 4, para. 16—on gender and employment (PCR, Appendix 6, p. 26). The project was assessed as environmental Category B (para. 11) and Schedule 4, para. 15 of the loan covenants required the recipient to establish, within 3 months of effectivity, an environment and social unit within MOW responsible for environmental and/or social compliance requirements and monitoring (PCR, Appendix 6, p. 25). Compliance was done by recruiting an environmental specialist based within the PMU, who monitored the implementation of environmental mitigation measures and contributed to reporting through the quarterly reports. The specialist also ensured that all environmental requirements were followed.

II. EVALUATION OF PERFORMANCE AND RATINGS

A. Relevance of Design and Formulation

14. The PCR rated the project highly relevant largely based on the sector approach used in the design of the project. The project outcome was entirely consistent with the government’s development goals and strategies, as discussed earlier (para. 2)

15. The lack of sector-wide planning had earlier resulted in the development of residential areas on unsuitable land in Nuku’alofa’s periphery and public infrastructure with limited capacity for future urban growth. The sector approach that was adopted was appropriate, especially as it readily enabled the project to meet the changing investment priorities, and to coordinate and be aligned with the government’s urban infrastructure investment priorities. The TA project associated with the grant helped to establish an urban planning and management system, which was also entirely consistent with government and ADB strategies.

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8 The PCR reported that the feasibility studies prepared for the subprojects included an initial environmental examination and an environmental management plan.

9 The widening of the roundabout at the intersection of Taufa’ahau and ‘Alaivahamama’o roads required the acquisition of 86.99 square meters (m²), which was acquired from four plots, leaving all plots with still more than the minimum 759 m² required under Tongan law.

10 The PSC was chaired by the Minister of Finance and composed of representatives from the MOW: Ministry of Lands, Survey and Natural Resources; Solicitor General’s office; Ministry of Education; Ministry of Health; and district officers of Kolomotu’a and Kolofo’ou.
16. The project’s inputs were adequate to achieve the planned outputs and outcome. However, the DMF was not revised following the cancellation of the Sopu drainage channel and the reallocation of funds from high-priority core projects to non-core subprojects. Performance targets were not specified in detail and lacked baseline data.

17. Further stakeholder coordination during project design may have been able to prevent the overlap between the drainage rehabilitation and maintenance component of the grant and the Nuku’alofa CBD Reconstruction Project.\textsuperscript{11} The overlap led to the cancellation of a significant part of the drainage rehabilitation subproject. This could have been foreseen at the appraisal stage of the ADB-funded project in 2007—which is considered a weakness in design and in the capacity of the executing and implementing agencies.\textsuperscript{12} The overlap could have been foreseen also by the designers of the project funded by the People’s Republic of China.

18. The risk of delay resulting from difficult land acquisition was also not fully anticipated or mitigated and this hindered implementation—thus, the Sopu drainage channel was eventually cancelled. Although the project was highly relevant to the government and ADB, and the sector approach was suitable in meeting the rapidly changing investment priorities of the sector, the logical framework was not modified following major changes in core subprojects. The project design assumed that at the outcome and output levels, land acquisition would proceed without delays. This validation assesses the project relevant.

B. Effectiveness in Achieving Project Outcomes and Outputs

19. The PCR rated the project effective. Against the output performance indicators and targets, the project achieved the following under item (i) Roads—primary road works were completed in 2013, a total of 23.2 km of primary and secondary roads were rehabilitated, and 6.5 km of all-weather access roads constructed in Popua and Sopu. As noted earlier, the RRP indicator on preventive maintenance does not appear in the DMF of the PCR. The following were achieved under item (ii) Drainage—(a) flood incidence was reduced by the expansion of the drainage network, although it was not indicated if the roads to low-income and low-lying residential areas in Nuku’alofa were passable and there is no reference to the performance target achievement associated with the target baseline; (b) drain-maintenance equipment was delivered in November 2009 and urban drain cleaning started with training provided by the supplier, and a maintenance program was established; and (c) all existing drains in the CBD area were rehabilitated and completed in September 2010. However, 2.1 km of trunk drainage in Sopu was dropped after the detailed feasibility study,\textsuperscript{13} and replaced with drainage work in

\textsuperscript{11} The RRP noted that “the Project will complement the proposed CBA [referred to in PCR as CBD] reconstruction project to be funded by the People’s Republic of China. Although the Integrated Urban Development Sector Project does not have common components with the proposed CBA reconstruction project, it will provide for rehabilitating drainage systems and upgrading roads within the CBA that are essential to support the investments funded by the People’s Republic of China.”

\textsuperscript{12} The Nuku’alofa CBD Reconstruction Project was undertaken by the government through a loan from the People’s Republic of China in 2009 to assist the government and businesses in the reconstruction of infrastructure in the Nuku’alofa CBD, which was destroyed by the riots of November 2006.

\textsuperscript{13} Subproject D2. This involved the construction of a 2.1 km gabion-lined drainage channel through the low-lying area of Sopu connecting the largest, isolated, and open-water areas with the watershed outlet. Design work for this subproject began in 2008, but detailed investigation showed that significantly larger works than initially anticipated were necessary. The additional works also required significant additional land acquisition and resettlement. While the community generally supported the subproject and the additional land acquisition, the owner of the largest affected area, the ‘Atenis Institute, opposed the proposed resettlement plan. This led to a reconsideration and eventual cancellation of the subproject. Funds were to be reallocated to high-priority core and non-core subprojects related to urban development in Nuku’alofa.
non-core subprojects. Also, the overlap with the Nuku'alofa CBD Rebuilding Reconstruction Project led to the cancellation of a significant part of the drainage rehabilitation subproject. The following were achieved under item (iii) Sanitation—nine groundwater monitoring wells were completed by December 2009, and water testing took place from January 2010 to September 2013.

20. The intended outcome targets were achieved as follows: (i) the average journey time for a 7 km vehicle trip through Nuku'alofa during peak hours was reduced from 28 minutes in 2006 to an average of 11 minutes in 2013, which translates into an average speed of 38 km per hour while vehicle operating costs would have fallen accordingly; and (ii) traffic accidents declined from 378 in 2007 to 183 in 2013, which is a reduction by 51%. The third outcome indicator and target specified that the duration of severe flooding in Sopu would be reduced from several months to less than 1 day per year by 2012. As earlier noted, the Sopu drainage channel was dropped and replaced with drainage work in another four villages. The PCR noted that flooding during heavy rains in these villages has declined.

21. The project objective in the RRP was to raise the living standards in Nuku'alofa, including those for low-income residential areas by improving urban infrastructure such as roads, drainage, and sanitation. The project will also assist in the implementation of planning and urban management legislation, and building capacity for urban planning and management to boost sustainability of urban development. The RRP did not specify beneficiary numbers but described the general benefits of the proposed road improvements and drainage and flood relief components.

22. The benefits of the project are likely to have been understated considering various benefits that were not quantified such as (i) travel time savings; (ii) greater safety for road users, including pedestrians, vehicle drivers, and passengers; and (iii) enhanced accessibility to all-weather road links between homes and markets, places of employment, and education and health facilities. Information on the number of beneficiaries, the socioeconomic characteristics of the beneficiaries particularly the targeted low-income groups, and how the benefits are distributed (impact on poverty reduction, for example) is lacking.

23. The project has improved sanitation, reduced road congestion, raised road safety for vehicles and pedestrians, and reduced health hazards through improved groundwater monitoring. In addition, the accompanying TA project successfully prepared the National Spatial Planning and Management Bill, which was enacted in 2012. Although detailed information on the beneficiaries is not available, the project has benefited low-income residential areas in various ways, such as (i) improved drainage system that reduced exposure to contaminated water and to waterborne and mosquito-transmitted diseases, (ii) implicit savings from cleaning up unsanitary floodwater, and (iii) savings from less traffic disruption and congestion and less damage to property and resources. The implementation of the core projects and selected non-core projects was not highly effective due to the deletion of a core subproject and parts of a core subproject. Based on the discussion above, this validation assesses the project effective.

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14 Non-core subprojects with related drainage works included the 2.4 km of drainage in Malolelei, Hepisipa, Piula, Lomipeau, FWC Tofoa, Fielakepa, Hifoata, Fatafehi, Railway, Niuvakai, and Navy roads (non-core P1); the 1.9 km drainage along Vaha'akolo, Niumeitolu, Vuna, and Queen Salote roads (non-core P2); and the 0.9 km of drainage along Faifekau, Olavah, Royco 2, Tauatofa, R1 Taufa'ahau, and Fanga roads (non-core P3).

15 This was cited as an impact performance measure, but applicable at outcome level.

C. Efficiency of Resource Use in Achieving Outcomes and Outputs

24. The PCR rated the project *efficient*. Project implementation was physically completed on 31 December 2013, 6 months behind schedule.\(^\text{17}\) The project’s planned implementation period was 5 years and project approval was delayed by 9 months at the government’s request to enable access to the Asian Development Fund (ADF) grant allocation under the revised framework for ADF grants.\(^\text{18}\) To allow for a full implementation period, ADB subsequently granted an extension of 6 months—from 30 June to 31 December 2013. The PIA consultants were recruited immediately after grant effectiveness and this was particularly important in view of the limited capacity of MOW. The potential risks from a delay in selecting and mobilizing the consultants were minimized and, thus, enabled the timely start of implementation activities.

25. During the implementation period, MOW also went through a reform process and merged with MOT to form a single ministry—MOI. This involved the movement of some key MOW personnel, some of whom had been working with the project. This move set back the capacity-building objective of the project and reduced the size of the operational unit. Nevertheless, the PSC, PMU, and PIA consultants remained focused on the project objectives, and the project was completed on time.

26. The Taufa’ahau Road upgrade was completed as planned and below budget at a final cost of capital works of $1.0 million, 18% less than the original allocation. As the project was completed as planned, the estimated benefit streams from the original economic analysis were assumed to continue to be applicable. The cost savings are estimated to have increased the subproject’s economic internal rate of return (EIRR) to 21.3%, from an appraisal estimate of 18.2%. In contrast, although the Alaivahamama’o Road upgrade was also completed as planned, it incurred a cost overrun in its final amount of $406,030 from the original allocation of $343,052. The higher actual costs reduced the subproject’s EIRR to 10.9%, from an appraisal EIRR of 14.1%. It is noted in the reevaluation that EIRRs for road upgrade subprojects are likely to be underestimated if benefits that cannot be quantified are considered.

27. Even assuming that only a third of households in the four main beneficiary areas would be at risk of flooding without the drainage improvements, the substantial savings from routine repairs after flood damage, and the avoided housing damage from severe storms have resulted in an EIRR of 14.5%. If included, the benefits that could not be quantified would increase this return—in the form of avoided repair costs for damage to buildings, reduced mosquito-breeding and disease-bearing stagnant water, and the general upgrade of land in the area, leading to potential increases in settlement and commercial development in the long term—all given as examples in the PCR (PCR, Appendix 8). Based on the generally satisfactory process and economic efficiencies, this validation assesses the project *efficient*.

D. Preliminary Assessment of Sustainability

28. The project was considered *likely sustainable* in the PCR. It has been noted that the output level performance indicator and target for the road sector—“preventative maintenance program and management system for urban roads established and staff trained by mid-2009”—which appeared in the DMF of the RRP, was deleted in the DMF of the PCR without explanation. The PCR noted the addition of a preventive road maintenance program and a storm water drainage maintenance program. However, no details were provided nor was there

\(^{17}\) A full review of the imprest account was carried out by the Controller’s Department of ADB after the physical completion of the grant although this caused a delay of 10 months in the financial closing of the grant.

any reference to the relevant section of the RRP’s Section VI, Assurances and Conditions on physical component maintenance policy. For the drainage sector, the drain-maintenance equipment was delivered in late 2009, urban drain cleaning also started, a training provided by the supplier was undertaken, and a maintenance program was established. The rehabilitation of all existing drains in the CBD area was completed in September 2010.

29. The PCR noted that all outputs were designed to specifications and standards that can be maintained with the materials and methods available in Tonga, but to sustain the project benefits, it requires the continued commitment of the government to operate and maintain the project assets in the context of Nuku'alofa’s urban development. There is no evidence, however, of the government’s commitment to meet the annual maintenance costs for the upgraded roads and drainage systems. The costs were initially estimated at around 1% of capital costs but are projected to escalate to 8% of capital costs per annum. The PCR indicated that adequate funding for the operation and maintenance (O&M) would help preserve the quality of the upgraded infrastructure and, thus, avoid larger future expenditures on repairs and rehabilitation. There was no evidence presented that this level of funding is being planned for.

30. The impact of the training conducted by the project was also constrained by heavy staff turnover and the PCR indicated that securing the necessary financial and human resource support may prove challenging in the context of a small island country such as Tonga. This validation assesses the project less than likely sustainable.

E. Impact

31. The PCR did not provide a rating for the project’s impact. The intended impact was simply described as “improved living standards.” Based on the 2014 United Nations Development Programme’s HDI Report, the HDI for Tonga was 0.695 in 2005 (0.693 in the 2015 HDI report), and showed an increasing trend from 0.696 in 2008 to 0.705 in 2013 (0.713 in 2010 to 0.717 in 2014 in the 2015 HDI Report).\(^{19}\) Even with the improved performance recorded by the 2015 HDI report—indicating an upward trajectory—the DMF target of achieving an HDI of 0.815 has not yet been achieved. Other impact-level performance targets were achieved, and these are (i) reduced average journey time for a 7 km vehicle trip through Nuku'alofa during peak hours, from 28 minutes in 2006 to an average 11 minutes in 2013, which translates into an average speed of 38 km per hour; (ii) reduced cases of diarrhea (from 612 cases recorded in 2013), zero cases of dengue fever in 2013, and two incidences of typhoid reported in 2013; and (c) positive analysis of data from groundwater monitoring showing that groundwater in Nuku’alofa remains safe for drinking and meets the World Health Organization guidelines. It is not clear how far the project has contributed to these achievements and there is no evidence of an attempt to assess this.

32. It is likely that the economy of Nuku’alofa and the wider surrounding region directly and indirectly benefited from the project. Although the project was not classified as a poverty intervention, the project addressed poverty reduction by targeting residents in the low-income areas. Core subprojects were developed based on a detailed poverty analysis conducted through various participatory approaches during the project preparatory stage but there is no evidence that this was complemented by beneficiary analysis at project completion. As envisaged at appraisal, the project did not have any adverse environmental impact. The feasibility studies prepared for the subprojects included an initial environmental examination and

an environmental management plan. No resettlement was required under any of the subprojects. One of several justifications for the project at design stage was that it was considered that the ADF grant of $11.3 million would ease the macroeconomic impact of the large financing requirements for urban infrastructure development that was considered essential for economic growth and social development. There was no assessment of this kind of impact.

33. The impact-level monitoring and evaluation (M&E) was weak and relied on general measures. The project has probably achieved more than can be attributed to it given the limited evidence provided. On this basis, this validation assesses the project impact satisfactory.20

III. OTHER PERFORMANCE ASSESSMENTS

A. Performance of the Borrower and Executing Agency

34. The PCR rated the performance of the borrower and MOW highly satisfactory because the project implementation was completed on time and within allocated budgets. The PCR indicated that although the number of MOW staff able to fully commit to project implementation was limited, the PIA team worked closely with the personnel provided by MOW and implemented the project successfully on time and within budget. MOW provided sufficient office space for the consulting team in its office building, facilitating access to and communication between the consultants and MOW. The government was also able to identify additional non-core subprojects, screen them, and approved by the PSC efficiently.

35. However, there is a lack of evidence that government has recognized the importance of maintenance of the improved assets as indicated in the sustainability section of this validation. This validation also notes that the objective to strengthen the capacity of MOW was affected by the government’s reform process, which merged MOW and MOT to form MOI. In the process, some MOW staff were moved and part of the capacity-building efforts already made was lost. Given these points, borrower and executing agency performance is assessed satisfactory.

B. Performance of the Asian Development Bank

36. The PCR rated the performance of ADB satisfactory. ADB fielded supervision missions as planned and was responsive to the needs of the government. Reallocation of grant proceeds were agreed once a major subproject had proved technically unfeasible and when overlaps with another project was identified—although ADB should have picked up these potential problems at project design stage. The DMF was not revised following the significant changes to the core projects. These issues aside, the project was completed within the initial time frame and nearly 100% of the proceeds of the grant were utilized. Overall, the performance of ADB is rated satisfactory.

IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

A. Overall Assessment and Ratings

37. The PCR rated the project successful. The project was highly relevant to government and ADB policies and strategies but weaknesses in project design and mitigation strategies for known risks limited the project’s relevance and its effectiveness in achieving project objectives. The

20 Beginning May 2016, the Independent Evaluation Department adopts the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations on development impacts. In this terminology, a satisfactory rating coincides with the significant rating that was used before the April 2016 guideline.
sector lending modality was appropriate for this project because it allowed for implementing flexibility and core subprojects identified during project preparation ensured a quick start-up of the project. The early mobilization of PIA consultants and TA consultants was helpful and, overall, the project was completed within budget. The generally satisfactory process and economic efficiencies led to an efficient rating. Due to the lack of evidence that the government commits to meet the annual O&M costs for the upgraded roads and drainage systems, this validation rates the project less than likely sustainable. Impact-level M&E is weak and relies mainly on general measures, but the project probably achieved more than can be attributed to it given the limited evidence provided. Overall, the project is rated successful based the ratings for the project’s relevance, effectiveness, efficiency, and sustainability.

### Overall Ratings

<table>
<thead>
<tr>
<th>Criteria</th>
<th>PCR</th>
<th>IED Review</th>
<th>Reason for Disagreement and/or Comments</th>
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<tbody>
<tr>
<td>Relevance</td>
<td>Highly relevant</td>
<td>Relevant</td>
<td>The project design had weaknesses that limited the project’s relevance. The logical framework was not modified following major changes in core subprojects. The project design could have better anticipated land acquisition issues for the Sopu drainage channel and the overlaps with the Nuku’alofa CBD Reconstruction Project (paras. 14–18).</td>
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<tr>
<td>Effectiveness in achieving outcome</td>
<td>Effective</td>
<td>Effective</td>
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<tr>
<td>Efficiency in achieving outcome and outputs</td>
<td>Efficient</td>
<td>Efficient</td>
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<tr>
<td>Preliminary assessment of sustainability</td>
<td>Likely sustainable</td>
<td>Less than likely sustainable</td>
<td>No evidence is presented on the government’s commitment to provide for annual operation and maintenance costs for the upgraded roads and drainage systems. The impact of training was constrained by heavy staff turnover. The PCR indicated that securing the necessary financial and human resource support may prove challenging (paras. 28–30).</td>
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<tr>
<td>Overall assessment</td>
<td>Successful</td>
<td>Successful</td>
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<tr>
<td>Impact</td>
<td>Not rated</td>
<td>Satisfactory</td>
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<tr>
<td>Borrower and executing agency</td>
<td>Highly satisfactory</td>
<td>Satisfactory</td>
<td>There is a lack of evidence that the government has recognized the importance of maintenance of the improved assets (paras. 34–35).</td>
</tr>
<tr>
<td>Performance of ADB</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td></td>
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<tr>
<td>Quality of PCR</td>
<td>Satisfactory</td>
<td>Less than satisfactory</td>
<td>Please refer to para. 43.</td>
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ADB = Asian Development Bank, CBD = central business district, IED = Independent Evaluation Department, PCR = project completion report.

Note: This report uses the ratings terminology of the April 2016 Guidelines for the Evaluation of Public Sector Operations.

Source: ADB Independent Evaluation Department.
B. Lessons

38. This validation agrees that (i) one of the significant lessons from the project is the positive impact of early fielding of PIA consultants; (ii) under a sector modality, core subprojects should only be included at project appraisal if detailed feasibility studies have shown them to be implementable; and (iii) for projects where machinery and equipment are to be purchased from project funding, it should be ascertained during project design that the executing agency is making sufficient allocations to the operational budget in the year targeted for the procurement of the equipment, and the years to follow.

39. This validation also adds the following lessons: (i) data requirements to provide evidence of achievement of performance targets need more attention and lack of M&E data has characterized this PCR, and (ii) adequate stakeholder coordination during project design could have prevented an overlap between the drainage rehabilitation and maintenance component of the grant and the Nuku'alofa CBD Reconstruction Project.

C. Recommendations for Follow-Up

40. This validation agrees with the PCR that (i) maintenance of project roads and drains is necessary to ensure long-term sustainability, that the focus on adequate and timely maintenance should be emphasized, and effective use of project-financed equipment should be made at all times; and (ii) it is emphasized that the Ministry of Infrastructure (MOI) should ensure that regular maintenance work is carried out to safeguard long-term sustainability of the infrastructure, and that adequate budgets are allocated at all times for regular O&M of the road- and drain-cleaning equipment provided under the project.

41. In addition, this validation suggests that the establishment of project performance M&E systems or other related data collection and monitoring systems needs more emphasis. In the case of PCRs, an appendix that details the data used and data management system in general would ensure enhanced attention to this aspect of project implementation and as an aid to project evaluation.

V. OTHER CONSIDERATIONS AND FOLLOW-UP

A. Monitoring and Evaluation Design, Implementation, and Utilization

42. The project was reported to be compliant with the covenant that it should provide a Project Performance Management System. However, it is clear from the PCR that insufficient data was available to fully assess the project’s performance. The relevant recommendation is presented in para. 41.

B. Comments on Project Completion Report Quality

43. The PCR is less than satisfactory. The PCR is generally consistent with the PCR Guidelines and to the Independent Evaluation Department’s Project Performance Evaluation Report Guidelines. It is internally consistent, with appendixes mostly supporting the discussion in the main text. However, the evidence to support ratings assessments is often inadequate and the lack of data is not pointed out or not questioned. Although the PCR draws out appropriate key lessons, it does not point out the fact that not enough information is available to assess the depth of weakness (in sustainability, for example). The PCR also contains minor inaccuracies (i.e., the cost of consulting services).
C. Data Sources for Validation

44. This validation has benefited from the PCR, RRP, TA Completion Report, 13 loan review mission reports, and the minutes of the staff review committee and management review meetings.

D. Recommendation for Independent Evaluation Department Follow-Up

45. It is recommended that follow-up activities should focus on sustainability.