Validation Report
June 2021

People’s Republic of China: Shanxi Small Cities and Towns Development Demonstration Sector Project
NOTE

In this report, "$" refers to United States dollars.

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<th>Director General</th>
<th>Marvin Taylor-Dormond, Independent Evaluation Department (IED)</th>
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<td>Director</td>
<td>Nathan Subramaniam, Sector and Project Division (IESP)</td>
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<tr>
<td>Team Leader</td>
<td>Garrett Kilroy, Senior Evaluation Specialist, IESP</td>
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## PROJECT BASIC DATA

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<td>Project Officers</td>
<td>J. Masic, W. Lan</td>
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<td>IED review Director</td>
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*Team members: S. Shin (Quality reviewer), F. De Guzman (Senior Evaluation Officer), and J. Eerikainen and R. Collier (Consultants).
I. PROJECT DESCRIPTION

A. Rationale

1. Urbanization was a key part of the People’s Republic of China’s (PRC) socioeconomic development objectives under the 11th Five-Year Program (2006–2010). It comprised developing coordinated large, medium, and small-sized cities and towns; and strengthening physical and economic links among urban settlements around metropolitan areas.¹ This strategy of developing larger urban agglomerations was congruent with Asian Development Bank’s (ADB) strategic priorities in the PRC and ADB’s Town-Based Urbanization Strategy Study. The government sought to increase economic productivity and narrow the urban–rural income gap by focusing on towns with high potential for employment generation and economic growth. Cities are the PRC’s main engines of economic growth, and in support of industrial production and administrative activities, their service sector has expanded substantially to create large numbers of jobs. Investing in public goods such as urban infrastructure projects were expected to generate positive economic externalities. However, local governments often lack financial and institutional capacity to prepare and implement large projects.

2. Shanxi Small Cities and Towns Development Demonstration Sector Project (the project) was one of three ADB-financed provincial sector projects; the other two were for Hebei and Liaoning provinces.² These projects aimed to (i) promote balanced and environmentally sustainable urbanization; (ii) narrow the urban–rural gap; and (iii) improve production, employment, and living conditions in the three provinces’ small cities and towns. The projects were to demonstrate effect for other small cities and towns. A sector loan modality was followed as the subprojects varied in their degree of preparedness. It allowed flexibility in selecting subsequent subprojects during implementation to meet the changing demands of small cities and towns.

3. At appraisal, a $100 million ordinary capital resources loan was to support each of the three provincial projects and a $0.25 million grant from the Multi-Donor Trust Fund (MDTF) under the Water Financing Partnership Facility (WFPF). The original project preparation technical assistance and the grant focused on water supply, wastewater, and water resources. However, provincial projects expanded, adding other sectors: (i) Hebei—energy sector; (ii) Liaoning—agriculture, natural resources, rural development, and transport sectors; and (iii) Shanxi—agriculture, education, energy, natural resources, rural development, and transport sectors. This expansion provided greater technical diversity in its implementation and management capacity.

B. Expected Impacts, Outcomes, and Outputs

4. The project’s intended impact was improved environmental quality and increased employment generation in Shanxi province’s small cities and towns. Its envisaged outcome was improved urban infrastructure and municipal services in about seven small cities and towns. Related to the project output, the sector project included three core subprojects approved in

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project processing and five subsequent subprojects processed during the project implementation. Each subproject had one or more components.

5. Outputs expected from the three core subprojects were as follows. Pingyao county subproject 1 rehabilitated Huiji River with water reservoirs built and steel dams installed. Wutong town subproject 2 had five components: (i) completed Caoxi road and associated municipal services; (ii) constructed heat exchange stations and distribution network; (iii) completed and operational gas supply storage and distribution system; (iv) constructed wastewater treatment facilities and collection network; and (v) built education services facilities such as a vocational training center and a junior high and two nursery schools. Youyu county subproject 3 also covered five components: (i) operationalized heat supply system with new heat stations, heat exchange stations, and distribution network; (ii) constructed drinking water production and distribution works; (iii) built drainage and wastewater collection system; (iv) constructed wastewater treatment facilities and collection network; and (v) constructed flood control channel.

6. Expected outputs of five noncore subsequent subprojects were added: (i) improved and landscaped Mian River of Niangziguan town, and constructed dams; (ii) improved roads and associated services in Xinghuacun town; (iii) rehabilitated Baishi River and landscaped northern East lake in Qingxu County; (iv) upgraded nursery schools, constructed a training center, and conducted trainings for teachers and childcare workers in Lingshi county; and (v) constructed new water resources wells with water transmission pipelines and expanded water supply plant and water distribution pipelines in Yichen county.

7. The project provided institutional capacity strengthening initiatives to a range of stakeholders, including the executing agency and implementing agencies. It also supported corporate governance and financial management of water entities through grant assistance, policy work on town development, and capacity building for teachers and nursery workers.

C. Provision of Inputs

8. The ADB Board of Directors approved the loan in December 2009, and it became effective, as well as the WFPF grant, in July 2010. The project completion date was extended by 30 months from December 2015 to June 2018. The back-to-office-report (BTOR) of the midterm review (MTR) explained that the delay was mainly due to (i) change of candidate noncore subprojects to comply with ADB safeguards requirements; and (ii) delay in recruiting the consulting firm needed to help implementing agencies in appraising subsequent noncore subprojects. The BTOR noted that approval of the Lingshi and Yicheng subprojects was within the project’s intended final year. Loan closing date was also delayed by 24 months from June 2016 to June 2018 to accommodate the delayed completion of the subprojects.

9. The project cost estimate at appraisal was $224.7 million to be financed by ADB’s $100.0 million loan from its ordinary capital resources (45% of total financing), WFPF’s $0.3 million grant (0.1%), and domestic counterpart’s $124.5 million (55%). At project completion, the total project cost was $169.7 million, 75.5% of the appraisal estimate. ADB financed $93.6 million (55% of total project cost and 94% of ADB’s loan), WFPF financed $0.2 million (0.1%) with a cost saving of $55,467, and government financed $75.9 million (45% of the total). Only about 61% of estimated counterpart funds were utilized due to minimum use of the budgeted $40.3 million contingency. The lower than estimated project costs were due to (i) minimum use of the $40.4

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million contingencies, (ii) $9.3 million reduction in Youyu subproject due to part of components were financed outside the project, and (iii) $8.7 million savings in financing charges during implementation.4

10. The WFPF grant aimed to strengthen financial management and corporate governance in water and wastewater agencies and companies in participating small cities and towns under the project. The WFPF grant was closed in May 2014.

11. The project was classified category A for environment as it complied with ADB’s set standards at approval and with host country laws and regulations. It was also classified category A for involuntary resettlement with five subprojects requiring land acquisition and resettlement. The compensation framework and compensations implemented met ADB’s requirements. It was category C for indigenous peoples as there was no record of important archaeological or cultural heritage sites or of land and resources used for indigenous peoples’ traditional purposes at any of the project sites in the three core subproject towns.

D. Implementation Arrangements

12. The institutional arrangements followed those outlined at appraisal. Shanxi Provincial Government (SPG) was the executing agency and a project-leading group provided guidance and support. A provincial project management office (PMO) in the Shanxi Housing and Urban–Rural Development Department managed project activities. A PMO was set up in each subproject city, county, and town, to liaise with the provincial PMO and manage implementing agencies’ work. The provincial PMO managed subprojects effectively, worked closely with consultants, coordinated with key government agencies, reported to ADB, guided local implementing agencies and PMOs, and organized capacity building activities.

13. The project completion report (PCR) considered that 133 of the 135 covenants were complied with, except for 2 covenants that were considered “being complied with”. However, at the time of evaluation, these two important covenants had not been complied with. Both covenants pertained to setting cost recovery tariffs for water supply, wastewater, heat supply, and gas supply, which would be critical in ensuring sustainability.

14. The project engaged a joint venture of international and national consulting firms using quality- and cost-based selection, in accordance with ADB Guidelines before employing a loan implementation consultant (LIC). The consulting service contract was signed in September 2014 and the consultants were mobilized in October 2014, 50 months after loan effectiveness. As loan closing was extended to June 2018, the contract was extended and completed in June 2018. The total actual person months of consulting services were 97.3 person-months, including 14 person-months of international and 83.3 person-months of national consultants. Before the consulting firm was recruited, the provincial PMO engaged individual consultants using domestic counterpart funds to provide timely assistance to implementing agencies. External monitoring agencies were engaged to monitor the project’s land acquisition and resettlement, environmental protection, and social impacts.

15. Despite the late start for the LIC, the SPG reported the consultants were effective and efficient in assisting the PMOs and implementing agencies in bidding documents,

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management, disbursement, preparing reports for ADB, site inspection, training organization, PCR preparation, and annual audits. The SPG’s PCR indicated that the PMO’s support was timely, satisfactory, and appreciated.5

II. EVALUATION OF PERFORMANCE AND RATINGS

A. Relevance of Design and Formulation

16. The PCR rated the project highly relevant as the project’s intended outcome—improved urban infrastructure and municipal services—was fully aligned with national and provincial strategic development priorities and ADB strategies at appraisal and completion. The project was also aligned with ADB’s Strategy 2020 for the urban sector in the PRC and ADB’s Water Operational Plan.6 The project continues to be relevant, particularly concerning ADB’s Livable Cities Operational Priority Area of Strategy 2030.7 At completion, the project remained consistent with the PRC’s National New-Type Urbanization Plan, 2014–2020, and Shanxi’s Thirteenth Five-Year Plan 2016–2020, which promoted economically, socially, and sustainable urbanization, and also prioritized integrated rural and urban development to achieve “people-oriented urbanization.”8

17. The design and monitoring framework’s (DMF) outcome and output indicators were generally sound. However, baselines were mostly not provided, and this posed a challenge in assessing the project’s contribution to the sector and level of ambition. The DMF was revised in a scope change in 2015 to accommodate the noncore subsequent subprojects. The wastewater outcome indicator was problematic as neither the original nor the revised DMF did not indicate the towns or counties covered.

18. The choice of a sector modality also posed challenges for implementation. At project concept stage,9 it was noted that the National Development and Reform Commission must process subproject feasibility reports, as with a conventional project modality. The differences between ADB’s choice of a sector modality and the necessary national project processes questioned the appropriateness of the choice of sector modality, thus increasing the burden on implementation capacity. Assurance was repeatedly given prior to approval concerning the substantial experience of the executing agency and implementing agency. However, the first Loan Review Mission in December 2010 concluded that the PMO was relatively inexperienced.10 The SPG’s PCR listed the project’s “special challenges,” indicating that “some counties/towns had very weak capacity in project management and had no experience of ADB projects ever.”

19. The scale of core project investments was reduced for Youyu county, as the government financed investments outside the project. The scale of subsequent subprojects using the project

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funds was less than expected, with counterpart funds being 46% less than appraisal estimates. However, most of these can be accounted for by the savings in contingency and financing charges.

20. The midterm review (MTR) in October 2014 resulted in a change in scope in April 2015 and the DMF was updated to reflect the changes. This did not include any change in the impact and outcome statements, but it reduced planned outputs for Youyu county. It is therefore likely, that outcome achievements were slightly less than envisaged at appraisal, given the resources deployed.

21. This validation recognizes that the project was well aligned with ADB and government strategies but notes some shortcomings in the DMF design concerning baselines that do not accurately assess the contribution to the sector or the project’s level of ambition. This validation assesses the project relevant.

B. Effectiveness in Achieving Project Outcomes and Outputs

22. The PCR rated the project effective as the outcomes and outputs of core and subsequent subprojects as stated in the revised DMF at midterm were substantially achieved. The DMF indicated that about seven small cities and towns would be supported, but the project supported eight counties or towns at completion. The DMF included one outcome indicator for all components, one outcome indicator for revenue-generating components for water, wastewater, and heating, as well as six component specific outcome indicators. A public opinion survey indicated that 80% of surveyed people were satisfied with environmental conditions against a target of 75% satisfaction. The outcome of full cost recovery for all revenue-generating components was only partially achieved. However, it was reported that full cost recovery had gradually been achieved in the heating components in Wutong town and Youyu county. Only water supply in Yicheng county showed some future promise of cost recovery, with an approved increase in tariff in 2019. Of the six component specific outcomes, those for heating and education were fully achieved. The river improvement outcome was partially achieved as achievements of two relevant counties were above the target while one town’s improvement of river courses was below the target. Road outcomes were largely achieved in two towns and one county, although the project’s contribution to Youyu county was minimal. Wastewater outcomes were difficult to evaluate as the indicator did not state to which counties or towns they were applied. If these would only apply to the counties or towns that had this intervention, they could be deemed achieved. Out of the total eight outcome indicators, six achieved their targets and two were partially achieved.

23. Outputs expected from the three core subprojects were as follows. Subproject 1 included dredging, embankments, and three dams on 7.2 kilometers (km) of Huiji River. Subproject 2 also included (i) road widened and improved; (ii) 66 megawatts (MW) heat exchange stations and distribution network; (iii) 5.9 million cubic meter (m³) per year gas supply storage and distribution system; (iv) wastewater treatment facilities of 4,000 m³/day and planned 35 km collection network; and (v) a vocational training center, a junior high school, and two nursery schools. Subproject 3 included (i) a 116 MW boiler station (revised to 58 MW at MTR), district heating substations, and distribution network; (ii) 10.1 km of roads (revised to 2.05 km at MTR; (iii) two new wells and a water distribution network (removed from scope at MTR); (iv) a stormwater drainage and sewerage network (removed from scope at MTR); and (v) 4.85 km of river course rehabilitated (removed from scope at MTR). Expected outputs of five subsequent subprojects were as follows. Subsequent subproject 1 included improvement works and two dams on 2.4 km of the Mian River.
Subsequent subproject 2 covered construction of three roads and associated municipal services in Xinghuacun town. Subsequent subproject 3 included (i) Baishi River rehabilitation with dredging, two barrages, river embankment, and landscaping; and (ii) Donghu Lake landscaping and construction of a public square, roads, and pathways. Subsequent subproject 4 had (i) two nursery schools constructed or upgraded, (ii) a training center constructed and equipped as a training base; and (iii) a training program for nursery schoolteachers and childcare workers. Subsequent subproject 5 included (i) four water intake wells, water transmission pipelines, water supply plant, and water purification facilities; and (ii) water distribution pipelines.

24. Three core subprojects were prepared during project preparation and included 11 components, of which 1 component had two subcomponents, while 10 components had an associated subcomponent. Both Wutong town and Youyu county had subprojects consisting of five components, while Pingyao county—and all the subsequent subprojects—had only one component. Pingyao’s single component subproject for river improvement (embankments and dams) was fully implemented as planned with delay. Wutong county’s components for roads, heat supply, gas supply, and education facilities were substantially completed with some design changes, but for its wastewater component the DMF noted that out of 57.87 km wastewater collection network completed and put into use in 2014, local government financed 45 km. Of the five components for Youyu county, the heat supply was implemented with capacity of 58 MW achieved (half of the appraisal capacity) and Hengjiu street new road with 2.05 km length was constructed. Youyu county’s remaining components for water supply, drainage and wastewater, and flood control were each removed from the project and financed by local government as part of the MTR change in scope. Of the core subprojects’ 11 components, 3 in Youyu county and 1 in Wutong town were not project implemented.

25. The five subsequent noncore subprojects designed during implementation had one component each, but with multiple indicators under each component. Three subsequent noncore subprojects at Niangziguan Town (subsequent subproject 1), Qingxu county (subsequent subproject 3), and Yicheng county (subsequent subproject 5) subdivided component into multiple subcomponents. Niangziguan town (subsequent subproject 1), Xinghuacun town (subsequent subproject 2), and Lingshi county (subsequent subproject 4) all achieved the planned outputs of the component subprojects and the associated indicators but with delays for the subproject components in Niangziguan town and Lingshi county. In Qingxu county (subsequent subproject 3), the East Lake subcomponent was partially achieved with balancing changes in areas of landscaping and public square. For the Baishi river rehabilitation, the target for barrages was met, but those for embankments and landscaping fell short by 30% and 18% respectively. In Yicheng county’s water supply improvement subproject (subsequent subproject 5), the subcomponents for water intake wells and water supply plant achieved their targets, but with delay for the water supply plant. The water pipelines subcomponents developed the target distribution pipelines, but the transmission pipelines fell 65% short of the target that encountered delay. With some shortfalls as noted in Qingxu and Yicheng counties, the five noncore subproject components substantially achieved their target outputs, but with delays. Of the 30 total output indicators for core and noncore components, 3 were removed by the minor change in project scope under the Youyu county subproject. Of the remaining 27 output indicators, 23 were achieved and 4 were partially achieved.

11 Gas supply changed from coal gas to natural gas.
12 The reduction in heat boiler capacity is due to detailed design that resulted in further optimization with the heating source changed to the purchased heating from a nearby heat and power cogeneration plant.
26. The project was categorized as A for environment and involuntary resettlement, and C for indigenous peoples. Safeguard performance was assessed satisfactory for environment, as the project complied with ADB set standards at approval and with host country laws and regulations. The project provided major benefits in improved ambient and household air quality, effluent treatment, and reduced air and carbon dioxide emissions. There were deficiencies in reporting on occupational health and safety and in the management at Qingxu county. The monitoring results of biochemical oxygen demand in 5 days and ammonia nitrogen did not yet conform to the surface water standards, but improvement was expected. The performance in meeting requirements under ADB’s Policy on Involuntary Resettlement and Project Agreement (2010) was satisfactory. The project comprised three core subprojects and five noncore subprojects, where five required land acquisition and resettlement and were completed by September 2016. The compensation framework and implemented compensations met ADB’s requirements. The safeguard for indigenous peoples was not triggered as the environmental impact assessment (2008) concluded that there was no record of archaeological or cultural heritage sites or land and resources used for traditional purposes by indigenous peoples at any of the project sites in the three core subproject towns.

27. This validation assesses the project effective since eight instead of seven subprojects were supported, most outputs and at least 80% of outcome targets were achieved, and performance on safeguards was satisfactory.

C. Efficiency of Resource Use

28. The PCR rated the project efficient in terms of economic internal rates of return (EIRRs) of subprojects and claimed process efficiency due to savings, compared to the original estimates of project costs. This validation notes that the assumptions presented in the PCR were unclear.

29. The PCR calculated subproject base case EIRRs for all components, except the Wutong town education component. EIRRs estimated at appraisal exceeded the 12% rate applied in the report and recommendation of the President (RRP). The PCR used the methodology at appraisal (i.e., converting financial values in economic terms using appropriate shadow prices). The sensitivity analysis undertaken determined that the project as a whole remains economically viable under the various scenarios. The sensitivity analysis flagged some viability concerns with the two core subprojects and five of noncore subprojects.

30. The PCR suggested that planned outputs were achieved at lower costs. County and town financing for core subprojects at appraisal was estimated at $55.9 million, but it was actually $38.7 million since contingencies were unspent. Youyu county also underspent by financing most of its five components outside the project. The county advised the ADB inception mission team in March 2010 that it was required to reallocate loan funds as the heating component, due to be ADB-financed, had been shouldered by the county. The reallocation was made 3 years later in July 2013 after Youyu removed most of its subprojects to be financed outside the project.

31. The project suffered from a number of delays, some due to process inefficiencies and some due to unforeseen events. The consulting service contract was only signed in September 2014, 4 years and 9 months after approval. While the reason for the delay was unforeseen, the overall delay of over 4 years was unreasonable. There were also delays due to unforeseen events concerning Youyu county’s resettlement issues and due to flood events in 2016 and 2017.

Yicheng county and Lingshi county subprojects entailed lengthy domestic approval procedures for identifying the project scope and approving the feasibility study. It should be noted that the project administration manual (PAM) was not published until December 2011, 2 years after board approval.

32. There are some economic viability concerns for several subprojects under the more sensitive scenarios. In addition, there were some process inefficiencies including the consultant’s late recruitment that contributed to the project’s 2-year extension of its closing date from June 2016 to June 2018. However, as the EIRRs were above the 12% threshold and delays were already accounted for, this validation assesses the project efficient.

D. Preliminary Assessment of Sustainability

33. The PCR rated the project likely sustainable, based on its sound technical designs and sufficient quality to sustain benefits. The project was also supported by training and transfer of assets to agencies or companies which would provide operations and maintenance (O&M) costs. Base case financial internal rate of return (FIRR) was calculated in the PCR and used to support sustainability.

34. For the seven nonrevenue-generating subprojects, the PCR considered these to be technically sound and owned by agencies with adequate fiscal budget to ensure provision for annual O&M costs. For the five revenue-generating subprojects, the PCR calculated the FIRR and weighted average cost of capital (WACC) of each subproject, with each FIRR higher than the WACC. All five cases were considered sensitive to adverse variances in revenues. It was noted that at completion, covenants 79 and 80 relating to full cost recovery tariff levels were sufficient to cover O&M costs. However, depreciation and debt service had not been fully complied with at the time of the PCR, but with some positive signals for Yicheng water supply including improved financial viability due to the new water tariff.

35. The delayed compliance with cost recovery tariffs and the sensitivity to adverse revenue variances of the revenue-generating subprojects are a concern going forward. However, based on the positive FIRRs, and the statement that adequate fiscal budget is in place to ensure O&M for those subprojects that do not generate revenue, this validation assesses the project likely sustainable.

III. OTHER PERFORMANCE ASSESSMENTS

A. Preliminary Assessment of Development Impact

36. The PCR rated development impact satisfactory based on outcomes and outputs of individual subprojects, rather than the sector project-level impacts. The RRP’s DMF impact statement was “improved environmental quality and increased employment generation in small cities and towns in Shanxi province.” Two pairs of impact indicators were identified. For environmental impact, indicators were “average days of air quality above grade II in county level cities increased to 240 per year14” and “surface water quality in the middle and lower reaches of the Fen River increased from class V to class IV” by 2021. The PCR’s DMF reported the actual achievement of 207 days in 11 “important” cities in 2018 for the first impact indicator and that surface water quality in the “middle and lower reaches of the Fen River is still worse than Class

14 2007 is given as the baseline year but no baseline figure is given for this indicator.
V.“ This indicated partial success for the first indicator and failure for the second indicator. For employment impact, the DMF target was to reduce the unemployment rate below 4.5% and to increase per capita annual disposable incomes of urban households by 6%. The PCR indicated that 3,410 jobs were created during construction and operation, while the RRP estimated 41,800 jobs in construction and 31,000 in operation of core subprojects alone. Also, the PCR’s DMF indicated that the unemployment rate was 3.3% in 2018 and maintained at no more than 4.5%, but the attribution of the project to improvements in provincial-level employment were unclear. This validation assesses the project’s impact to be less than satisfactory due to below-target achievements on environmental objectives and unclear attribution to employment and income gains.

B. Performance of the Borrower and Executing Agency

37. The PCR rated the performance of the borrower, executing agency, and implementing agencies satisfactory. This validation notes the challenges which the inexperienced PMOs faced as described in SPG’s PCR and acknowledges the lack of capacity at the outset. Implementing activities, complying with loan covenants and safeguard requirements, and adequacy and timeliness of local counterpart funding were satisfactory compared to the standards expected at the design and initial implementation stages. This validation assesses the borrower and the executing agency’s performance satisfactory.

C. Performance of the Asian Development Bank and Cofinanciers

38. The PCR rated ADB’s performance satisfactory. A sector project modality was used despite the PRC having limited capacity for domestic project processing. During preparation, it was mistakenly stated that the prospective provincial and county or township executing agency and implementing agencies were experienced in preparing and implementing such projects, but the first loan review mission noted the PMO’s inexperience. ADB adopted a modality unfamiliar to the PRC and overstated capacity to accommodate the sector modality.

39. As the executing agency and implementing agencies were inexperienced, they required clear and timely support. However, the PAM was published in December 2011, 2 years after board approval. LIC could have supported implementation but the initial selection in December 2012, 3 years after approval, had to be restarted and LIC support was only engaged in September 2014, 4 years and 9 months after approval and 1 year 3 months before scheduled completion. The reason for restarting the recruitment was unforeseen, but a delay of over 4 years was unreasonable.

40. ADB’s safeguard work quality at approval was satisfactory. In compliance with ADB’s Environment Policy (2003) at appraisal, the project was correctly classified as category A for environment and involuntary resettlement, and category C for indigenous people. Translation of environment and social requirements to loan and project agreements in 2010 was adequate. ADB’s safeguard work quality at supervision was up to the requirements of this multicomponent project and was rated satisfactory.

41. The shortfall in project outcomes and outputs, compared with those expected at appraisal, was the non-implementation of four of the five components of Youyu county’s core subproject due to changes in local financing before loan effectiveness. The Youyu county implementing agency sought to reallocate resources during the inception mission in March 2010, but it did not occur until July 2013 after non-ADB funds were used to finance the components.
42. Considering PAM’s delayed publication 2 years after loan approval and timeliness of support during implementation, including delayed LIC support and delayed loan funds reallocation, this validation assesses ADB’s performance less than satisfactory.

IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

A. Overall Assessment and Ratings

43. The PCR rated the project successful as it was considered highly relevant, effective, efficient, and likely sustainable. Overall, this validation assesses the project successful. The relevance rating was downgraded from highly relevant to relevant due to some shortcomings in the DMF design concerning baselines and the choice of modality. The project was less than efficient due to process inefficiencies and economic viability concerns for several subprojects under the more sensitive scenarios. Based on these four core criteria, this validation assesses the project successful. This validation notes that the preliminary assessment of impacts is less than satisfactory due to the non-achievement of environmental impact targets and the unclear attribution to province-wide employment impact targets. The borrower and executing agency performance was satisfactory, but ADB performance was assessed less than satisfactory due to the executing agency’s and implementing agency’s overstated capacity during preparation and lack of timely support during implementation.

Overall Ratings

<table>
<thead>
<tr>
<th>Validation Criteria</th>
<th>PCR</th>
<th>IED Review</th>
<th>Reason for Disagreement and/or Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>Highly relevant</td>
<td>Relevant</td>
<td>DMF baselines mostly were not provided.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Effective</td>
<td>Effective</td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>Efficient</td>
<td>Efficient</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td>Likely sustainable</td>
<td>Likely sustainable</td>
<td></td>
</tr>
<tr>
<td>Overall Assessment</td>
<td>Successful</td>
<td>Successful</td>
<td></td>
</tr>
<tr>
<td>Preliminary Assessment of Impact</td>
<td>Satisfactory</td>
<td>Less than satisfactory</td>
<td>DMF indicators for environmental impacts were not achieved and claimed employment impact was less than expected and difficult to attribute to the project.</td>
</tr>
<tr>
<td>Borrower and executing agency</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td></td>
</tr>
<tr>
<td>Performance of ADB</td>
<td>Satisfactory</td>
<td>Less than satisfactory</td>
<td>Shortcomings during preparation and the quality and timeliness of support during implementation, including delayed LIC support.</td>
</tr>
<tr>
<td>Quality of PCR</td>
<td>Less than satisfactory</td>
<td>Para. 49.</td>
<td></td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, DMF = design and monitoring framework, IED = Independent Evaluation Department, PCR = project completion report.

Source: ADB (IED).
B. Lessons

44. The PCR indicated two lessons. The flexibility of sector project design requires that (i) the executing and implementing agencies to have relatively strong capacity in assessing subsequent subprojects; and (ii) project consulting team to be mobilized immediately after loan approval to provide assistance to the executing and implementing agencies. The PCR also noted that institutional capacity development was critical to ensure project sustainability and such development was needed in addition to capacity building activities to support project implementation and project asset O&M.

45. This validation notes that the PCR lessons are appropriate and identifies two additional project level lessons. First, a project’s MTR provides an opportunity to reassess and modify a project’s DMF, in terms of realistic performance targets, configuration of components and/or outputs, subprojects’ selection, and timeframe of implementation. Project team could strive to review all project’s aspects during an MTR in addition to focusing on project administration and changes in scope. These efforts could help in responding timely to changing project situations—for example, reduction in scope and design—and could help minimize delays in the project’s implementation schedule, along with keeping the subprojects on track. Second, the government’s commitment and ownership strengthen the project’s credibility. Providing timely response and adequate support from start-up to completion are critical in overcoming the implementation difficulties in various occasions. For instance, the PMO’s leadership could have helped ensure that assistance was provided on time to implementing agencies. This, in turn, would help in easing delays in the procurement activities and implementation of subprojects.

C. Recommendations for Follow-Up

46. Out of 135 covenants, 133 were complied, but two were considered “being complied with.” Both covenants (79 and 80) were related to setting cost recovering tariffs for revenue-generating subprojects that were critical in ensuring sustainability. The PCR proposed follow-up action so that the relevant implementing agencies can closely monitor cost recovery and take action as needed to achieve full cost recovery. This validation supports this proposal.

V. OTHER CONSIDERATIONS AND FOLLOW-UP

A. Monitoring and Reporting

47. The PCR noted (i) general compliance with loan and grant covenants; (ii) timely submission of environmental, resettlement, and social monitoring reports; (iii) appropriate maintenance of financial records and submission of annual audited accounts; (iv) regular updating of monitoring records on the DMF to reflect actual progress; (v) borrower’s submission of their draft PCR; and (vi) updating of all target information at completion, including the impact indicators for 2019–2021. The PCR did not indicate any deficiencies in monitoring and reporting activities.

48. This validation generally agrees with the PCR but notes two issues in the DMF that limit its usefulness. First, the DMF addressed the approved subproject’s outputs and outcomes rather than the total investment’s overall sectoral outcomes, thus performance measurement was for the individual subprojects rather than the whole sector project. Second, the DMF focused on air and water quality related to the urban infrastructure services and set impact targets related to them. Environmental targets for air and water quality were not achieved despite the satisfactory outcome claimed based on a public survey. Two impact targets for unemployment and per capita incomes
were achieved, but the logic attributing a contribution to the outcomes and outputs was not established. As the subprojects diversified, they became less relevant to the targeted DMF impacts and the RRP’s DMF should have been updated to reflect the changing scope.

B. Comments on Project Completion Report Quality

49. The PCR did not provide sufficient evidence to justify a highly relevant rating, without references to innovative features, significant demonstration value for other projects, or transformative effects. Greater consideration of the shortcomings in DMF design was also warranted. The PCR stated that most indicators were specific, measurable, realistic, and time-bound, which was incorrect, as baselines were mostly not provided. Similarly, the efficiency assessment was silent on process efficiency, without reference to the delay in fielding the LIC. In view of these points of insufficient supporting evidence and lack of candor concerning the DMF and process efficiency, this validation assesses the PCR quality less than satisfactory.

C. Data Sources for Validation

50. Data sources for this validation include (i) RRP and appendixes; (ii) ADB’s and SPG’s PCRs and their appendixes, including financial and economic analysis spreadsheets; (iii) BTORs and attachments from preparation and review missions; and (iv) technical assistance completion report for Shanxi Small Cities and Towns Development Demonstration Sector Project.

D. Recommendation for Independent Evaluation Department Follow-Up

51. The PCR suggested a project performance evaluation report in 2022 when the last completed revenue-generating subproject has been operational for 3 years. Given that the Shanxi project is one of three provincial sector project demonstrations that ADB prepared with varying levels of diversity, this validation suggests a study of the performance of the three provincial sector projects to help demonstrate lessons which could be learnt and applied.