Pakistan: North-West Frontier Province Barani Area Development Project (Phase 2)
ABBREVIATIONS

ADB – Asian Development Bank  
BME – benefit monitoring and evaluation  
DIU – district implementation unit  
EIRR – economic internal rate of return  
IFAD – International Fund for Agricultural Development  
NGO – nongovernment organization  
NWFP – North-West Frontier Province  
PCR – project completion report  
PFI – participating financial institution  
RRP – report and recommendation of the President

NOTE

In this report, “$” refers to US dollars.

Key Words

adb, asian development bank, barani area development, independent evaluation department, lessons, north west frontier province, nwfp, pakistan, pcr, project completion report validation, poverty reduction, rural development

The guidelines formally adopted by the Independent Evaluation Department (IED) on avoiding conflict of interest in its independent evaluations were observed in the preparation of this report. To the knowledge of IED management, there were no conflicts of interest of the persons preparing, reviewing, or approving this report.

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I. PROJECT DESCRIPTION

A. Rationale

1. According to the report and recommendation of the President (RRP)\(^1\) of the Asian Development Bank (ADB), the North-West Frontier Province (NWFP)\(^2\) had a population of $17.5 million, of which more than 80% lived in rural areas. Poverty in NWFP was characterized by more than 80% of households having consumption levels below the NWFP minimum monthly per capita poverty level of $15, 70% were illiterate (88% for women), 62% lacked access to safe drinking water, and 50% had no access to sanitation. Social development of barani (rainfed) areas was lower than the overall average for the province. Household incomes were constrained by low productivity of rainfed agriculture and livestock, and lack of off-farm

\(^1\) ADB. 2000. Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Islamic Republic of Pakistan for the North-West Frontier Province Barani Area Development Project, Phase II. Manila.

\(^2\) The North-West Frontier Province is now known as Khyber Pakhtunkhwa.
employment opportunities. Indebtedness was a feature of 77% of the households, accumulated for consumption and basic needs.

2. The government’s framework for developing these rural areas focused on the following: (i) strengthening agriculture, infrastructure, and the social sectors, and included reform of agricultural policy; (ii) improving efficiency of land and water resource management; (iii) upgrading roads serving rural areas and improving maintenance; and (iv) participatory-based water supply and sanitation schemes. ADB’s country operational framework for 1999–2000 highlighted the promotion of sustained human and social development, and in 1999, ADB adopted poverty reduction as the overarching goal to be incorporated in the new country operational strategy.

B. Expected Impact

3. The RRP cited the following project impacts: (i) poverty reduction in remote areas of the NWFP, particularly among the agriculturists who owned small farming lands and the landless; and (ii) improvement of the status of women in traditionally conservative areas where access to opportunities are limited. Poverty was expected to decline from 80% to 50% in 15 years and household incomes from diversified sources were to increase by 50% in real terms also in 15 years.

C. Objectives or Expected Outcomes

4. The project objectives were to (i) sustain and improve agricultural practices through better natural resources management, (ii) enhance community infrastructure, (iii) improve rural livelihood opportunities and alternatives, including specific measures to increase women’s access to social and economic resources. Targets at project completion were the following: (i) increased production yields in the green sector by up to 20%; (ii) increased income generating activities per village by up to 100%; and (iii) reduced transport and utility costs to bring down by 30% the cost of a bag of fertilizer delivered, and time spent fetching water down by 50%. The number of women active in organizations was to increase to 50 per village and the number of women-run enterprises was to increase by up to 100% per village. Employment activities were to increase to 1,000 days per village, and household income was to increase by up to 30%. Access to rural finance was to be improved with 30% of village households taking formal loans. Access to services was to be quicker by reducing travel time to the nearest center by 20%.

D. Components and Outputs

5. The project completion report (PCR)\(^3\) reported that the project output achievements (PCR Appendix 1) were assessed against performance targets as presented in the project framework in the report PPR for the project. Except for the rural financial services component, all outputs and targets as designed were relevant and mostly accomplished or surpassed. Further, a technical audit of 58 infrastructure schemes confirmed that their overall development and implementation were largely in line with the overall project framework, envisaged design principles, and technical specifications (PCR Appendix 2).

(i) Village-Level Development. Nongovernment organizations (NGOs) were to be contracted to provide community mobilization services, training, rural finance outreach,

and rural health and education support. Women’s and village organizations were to be established, with three to four women’s and men’s community organizations per village. Activists and community organization office bearers were to be trained in leadership and organizational skills. The component also provided for the following women-specific interventions: (i) village-based girls education, (ii) training of village female teachers, (iii) health awareness and family planning, (iv) women health practitioners, (v) training of traditional birth attendants, (vi) gender awareness programming, (vii) skills and enterprise training, and (viii) networking among women’s organizations.

(ii) **Strengthening of Agriculture Livelihood.** Under the field crops subcomponent, the project was to (i) increase the supply of improved seed for main crops, (ii) reduce storage losses, and (iii) train extension workers. Under the horticulture subcomponent, high-value vegetables were to be introduced to improve nutrition and income. Fruit plant nurseries were to be developed by demonstration and training. To promote soil and water conservation, the project was to construct soil erosion controls and provide training in soil and water management. Under the livestock subcomponent, activities included breed improvement, animal health and vaccination, feed enhancement, poultry enterprise management, and training. The community forestry subcomponent was to (i) improve the use of forest and range areas and provide fuelwood; and (ii) conduct training in participatory forestry methods, land use planning, community nursery, afforestation, and income-generating activities.

(iii) **Rural Financial Services.** Short-term loans were to be provided for seasonal crop and livestock production needs, trading activities, microenterprises, and income-generating activities with an emphasis on rural women and the landless for farm and off-farm activities. Medium-term credit was to be provided for a range of asset investments including farm machinery, tree crops, and establishment of nurseries and microenterprises. Inventory finance and operating capital were to be provided for businesses in the project communities. For Kohistan and Orakzai, community savings and credit organizations were to be established.

(iv) **Participatory Small-Scale Infrastructure.** The project was to support community infrastructure needs including micro-irrigation, drinking water supply, village roads, micro-hydroelectric schemes, and demonstration latrines. Larger schemes were also supported through pooling of resources.

- **Micro-irrigation.** Of 570 irrigation schemes, 516 (91% of the appraisal target) were completed, including tube wells, diversion and surface irrigation schemes, and inlets and outlets. Of these, 90 were delivered through WCOs. According to the technical audit, these interventions were generally successful in achieving their primary goals. The changes in cropping patterns from staple wheat and maize to high-value vegetable cash crops resulted in increased farm incomes. These interventions will also lead to major reductions in rain scarcity impacts. The design and implementation of these schemes was successful, and they are generally well operated and maintained by village organizations. The project made special efforts to resolve the issue of ensuring access of water by other community members. About 80% of the schemes are likely to continue operation, provide increased crop yields and income, and be sustainable.

- **Drinking water supply and sanitation.** These schemes were in high demand and reported to be accessible to all. A total of 2,535 drinking water supply schemes were completed against a planned target of 765 (331% of the target). The completed
schemes included 107 gravity schemes, 2,273 hand pumps, and 155 tube wells. Of these, 150 were delivered through WCOs. Further, 226 school demonstration latrines (110%) were completed against a planned target of 205, and 18% were constructed in girls’ schools. The joint ADB–IFAD midterm review mission and the technical audit both rated these schemes highly successful; the quality of civil works were excellent, the large schemes are of international standards, and the water quality is safe for human consumption.

- **Feeder roads.** The appraisal targets were relevant, but the technical specification and classification as small-scale infrastructure was not relevant. Minor changes were made, and an additional category of low-specification blacktop roads (BTRs) was added to the scope. At completion, feeder roads exceeded the targets. A total of 651 km of village feeder roads were completed against planned targets of 600 km (108%) including 420.29 km jeepable tracks and 231.00 km of low-specification BTRs. Of these, 237.15 km of feeder roads were constructed by the Works and Services Department, and 413.38 km were constructed by village organizations. The technical audit confirmed that these roads successfully achieved their core objectives.

(v) **Institutional Support.** This component included (i) project management; (ii) sector technical support and consulting services; (iii) benefit monitoring and evaluation (BME); and (iv) capacity building and training for NGOs, staff, and local government. Sector support included coordinators for gender and training, agriculture and natural resource management, and rural infrastructure development.

E. **Provision of Inputs**

6. The project was estimated to cost $99.0 million equivalent, of which $19.0 million (19%) was foreign exchange cost and $80.0 million equivalent (81%) was local currency cost. The cost estimates included physical and price contingencies, taxes, duties, and recovery of the non-grant portion of the project preparatory technical assistance. ADB was to provide a loan of $52.0 million from its special funds resources to finance 53% of the total project cost. The loan was to have a repayment period of 32 years including an 8-year grace period, and carry an interest charge of 1.0% per annum during the grace period and 1.5% thereafter. The International Fund for Agricultural Development (IFAD) provided cofinancing of $14.8 million (15% of total project cost), with a term of 40 years and a grace period of 10 years, and an annual service charge of 0.75%. The remaining local currency cost was to be met by the government (20%), beneficiaries (11%, mostly through in-kind contributions), and participating financial institutions (PFIs) (1%).

F. **Implementation Arrangements**

7. The executing agency was to be the NWFP’s Planning, Environment, and Development Department. Management functions were to be decentralized with a project liaison unit in Peshawar whose detailed responsibilities were discussed in the RRP. The unit was to be staffed by a project director, a monitoring economist, a gender and human resource development officer, infrastructure and agriculture–natural resource management coordinators, an accountant, and other administrative support staff. District implementation units (DIUs) were to be established in each of the 10 project districts, and headed by a district project coordinator, and staffed by coordinators on community infrastructure, gender, and agriculture and natural resources management. DIUs were to be responsible for (i) planning and implementing work plans; (ii) coordinating village activities and input of NGOs, PFIs, and line agencies; and (iii) approving subprojects. The project was to be implemented over 7 years, starting in
July 2001. This validation notes that the project had been implemented under unusually harsh conditions such as severe security threats, earthquake, and floods.\(^4\)

8. Procurement and consultant recruitment were to conform to ADB guidelines.\(^5\) Although local NGOs were to be engaged, not all NGOs were expected to have adequate experience. To address this, NGO capacity building was to be supplied by an experienced NGO or institute to ensure common approaches and competence are built in community mobilization, management systems, and capacity in rural microfinance. Newly decentralized government agencies needed capacity building, which was expected to take time. ADB and IFAD arranged with the NWFP government that project management work with local governments to expose them to participatory approaches and methodologies. Political steering of project activities was also a risk to the project, but was mitigated with the participation of NGOs, project management, and village organizations.

9. Associated with the loan for the project were 38 loan covenants, which are given in the Appendix 7 of the PCR. Most of the covenants were related to project implementation, counterpart financing, and reporting requirements. Three covenants were not complied with because the rural financial services component was not implemented. The covenant requiring insurance of project facilities was also not complied with.

II. EVALUATION OF PERFORMANCE AND RATINGS

A. Relevance of Design and Formulation

10. The PCR rated the project relevant. The objective of poverty reduction was consistent with ADB's overarching strategic objective and the needs of the target group, ADB's country strategy and program, and the government's strategy for rural development and the agriculture sector. The objective of gender and development was also consistent with ADB's thematic objectives, ADB's country strategy and program, and the government's commitments to gender equality. However, the rural financial services component, which accounted for about 10% of the project cost, was not implemented because PFI s lacked financial and outreach capabilities and factors such as low population density, high dependence on agriculture, fewer economic opportunities, and low households savings, which led to high delivery cost. This was a major design change. Other important design changes approved during project implementation included the following: (i) decreasing beneficiary funding requirements, (ii) waiver of beneficiary funding in the four earthquake-affected project districts, (iii) upgrading of feeder tracks from a single category of gravel roads to two subcategories—gravel roads and low specification blacktop roads, and (iv) addition of civil engineers to DIUs. Notwithstanding the changes made to the project design, this validation concurs with the PCR rating of relevant.

B. Effectiveness in Achieving Project Outcomes

11. The PCR stated that the project was effective in achieving outcomes. It stated that “outputs contributed to the outcome of improved, sustainable use of natural resources through better management practices and enhanced community infrastructure to increase the value of and/or reduce the costs of village activities.” It did not provide quantified results for the outcome

\(^4\) The Central and West Asia Department (CWRD) informed that during the project implementation, eight male project staff were kidnapped (along with 5 vehicles), two female staff were shot dead, one male staff member was stabbed, and many staff received life threats from Taliban. In addition, two project offices were bombed. These conditions were also documented in PCR (para 14).

indicators due to the difficult security conditions to collect those outcome data at the time of the project completion, but did provide various relevant data to justify the effective rating. Against this background, this validation reviewed the PCR’s discussion of outputs and impact and other results to determine if these have contributed to achieving overall project outcomes. The achievement of outputs has been good in providing participatory small-scale community infrastructure needs including micro-irrigation, drinking water supply, village roads, and micro-hydroelectric schemes (para. 5). However, there was no quantitative measure of yield improvements except on the section on impact.

12. Appendix 2 of the PCR provided technical evaluation of civil works that used 64% of the ADB loan amount conducted by an independent audit group and found the infrastructures satisfactory. However, there is no clear indication that it has contributed to a reduction in fertilizer prices. The PCR stated that a poverty and socioeconomic assessment was not conducted due to security concerns and the PCR had to rely on impact assessment studies conducted by BME consultants, hired by the executing agency.6 Understanding the unusually severe conditions in Pakistan to implement the project and collect the monitoring and evaluation data, this validation tried to judge the effectiveness using the available data and information and rates the project effective.

C. Efficiency of Resource Use in Achieving Outcomes and Outputs

13. The PCR stated that the project was efficient and based its assessment on the fact that “it was completed at 80% of the estimated cost and was generally able to surpass appraised targets for all components except the rural financial services component and the roads subcomponent, which was partly implemented.” The overall project economic internal rate of return (EIRR) was estimated at 14.37%, compared to 18.80% at appraisal.

14. The PCR also stated that EIRR for micro-irrigation was not calculated because of a negative cash flow and that financial evaluation was not conducted because this was only applicable to the rural financial services component that was not implemented. This validation clarifies that an EIRR is not based on cash flow but on net economic benefits. An infrastructure project may not charge for usage (e.g., a bridge) and there may or may not be a negative cash flow, but there is an economic benefit that can be measured in terms of consumer surplus or willingness to pay. The statement indicates a misunderstanding of the EIRR concept. Additionally, financial evaluation does not measure efficiency, but rather is an indicator of sustainability and should not be discussed in this section.

15. Appendix 9 of the PCR provided few details on EIRR. The text provided the assumptions and the resulting EIRR figure only. Therefore, it is not possible to assess the validity of EIRRs to substantiate the claimed efficient rating. In the cases of roads and water supply, it was stated that time savings were valued in terms of wages. Given the extent of unemployment and under-employment in the region, time savings are likely overvalued and the associated EIRR as well. Since the project’s objective was to reduce poverty and improve the status of women, mainly through employment and income-generating activities, the EIRR calculation should have been based on incremental income as a result of the project (the benefit) and the project investment and associated recurrent costs (the cost). The BME system should have been designed to collect this data.

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6 CWRD informed that the government not only completed most of the activities but also conducted periodic project benefit monitoring surveys in continued war conditions, followed by earthquake in 2005 and followed by unprecedented floods in 2010.
16. The PCR did not rate process efficiency in its discussions under the efficiency criterion. However, in the PCR discussion of relevance, the PCR mentioned that the delayed release of funds and problems confronting the cofinancing arrangement led to slow delivery of outputs. In para. 9, the PCR identified prerequisites that contributed to implementation delays, which include the high funding requirement for PFIs and the high costs of beneficiary funding, community organizing, and NGO and consultant recruitment. Security conditions and the 2005 earthquake and the 2010 flood also affected the project. Given the lack of strong basis and evidence for the EIRR figures, coupled with the elimination of some important project components in EIRR estimation, including the delays and issues confronting process efficiency, this validation downgrades the efficiency rating to less than efficient.

D. Preliminary Assessment of Sustainability

17. The PCR rated project sustainability as likely. The PCR’s justification was because all schemes constructed under the project were handed over to relevant line agencies, district governments, and village organizations. The PCR added that the government maintained all completed public sector infrastructure schemes and village organizations maintained all community infrastructure schemes. Of the 39 female technical staff members recruited under the project, 33 positions were regularized; and of the 110 informal positions, 65% were regularized. NGOs recruited under the project have permanent presence in the project area; and are expected to further strengthen the capacity of village organizations. A private fund is supporting these NGOs. Most village organizations were registered as Citizen Community Boards, which qualify for district government assistance. NGOs trained 14,850 community leaders (36% women) to run these village organizations. However, the PCR is not clear how infrastructure is being maintained or how maintenance is funded by the government or village organizations. Appendix 2 of the PCR, which focused on civil works, mentioned that infrastructure maintenance requires government support. A summary of the audit group evaluation revealed that operations and maintenance of 83% of the infrastructure (48 of 58) was either highly satisfactory or satisfactory. On balance, this validation rates sustainability as likely sustainable.

E. Impact

18. The PCR stated that an impact assessment could not be conducted because of the security situation in the project area, but studies carried out by BME consultants hired by the executing agency rated overall impact as high. The PCR added that these studies reported a 51% increase in overall cropping intensity; drinking water supply to project households increased by 42%; and household satisfaction with water supply quality was 40.5% in comparison to 2.3% in 2006. Coverage of pour-flush latrines for human waste disposal reached 28% of project households in comparison to 0.3% in 2006. Male employment opportunities increased by 3 labor-days in the project area and wages increased for men and women. Travel by earthen roads fell by 18% and travel by metaled roads increased by 11%. The overall literacy rates on the sample households increased by 50%, 25% more from the pre-project situation. The PCR also cited greater involvement of women in communities and the government. While admitting that clearly impact data were not attainable at the time of the project completion, this validation rates the overall impact as significant.
III. OTHER PERFORMANCE ASSESSMENTS

A. Performance of the Borrower and Executing Agency

19. The PCR rated performance of the executing agency highly satisfactory and the implementing agency satisfactory. The PCR argued that the executing agency had an adequate mandate, management capacity, and commitment to implement the project, and supervised the project efficiently. The Project Review Board and other committees made policy decisions, compliance reviews, and approvals efficiently. The executing agency’s project management unit fulfilled management and coordination targets, including procurement and management of contracts, implementation, and monitoring and evaluation of the project’s institutional support component. Counterpart financing was highly satisfactory and the executing agency submitted most audit reports on time. Performance of the implementing agencies was also satisfactory. The departments of agriculture and livestock adequately provided essential technical and management support to complete project activities and introduced new initiatives. The performance of the Works and Services Department was partly satisfactory. The performance of the Public Health and Engineering Department, Forest Department, and four local NGOs was satisfactory.

20. Considering that performance of the different implementing agencies has been mixed, this validation rates overall borrower and executing agency performance as satisfactory.

B. Performance of the Asian Development Bank

21. The PCR rated ADB performance satisfactory and this validation concurs with the rating. The PCR reported that ADB expedited implementation, ensured compliance with loan conditions and covenants, trained EA staff in disbursement and procurement guidelines, resolved the high beneficiary share, revised the civil works design standards, and strengthened the project offices. Eight review missions were carried out, with the last in June 2008 to finalize the project and loan closing schedule and modalities. Of these, two review missions were jointly carried out with IFAD. Detailed assessment studies were conducted for the midterm review mission by three consultants. Of these, two consultants were financed by IFAD. Revisions in design formulated by the midterm review mission included (i) field-level assessment of ongoing activities; (ii) analysis of the design as appraised; and (iii) proposed revision in scope, specification of civil works, implementation arrangements, mode of procurement, and project costs. However, these changes were not approved by ADB due to a linked request for project extension. The EA expressed displeasure over delays in disbursements due to systemic problems faced by cofinanced projects, as well as ADB’s no extension policy and lack of commitment to stand-alone community development projects.

C. Others

22. The PCR provided no assessment of environmental impact and other safeguards, gender, governance, and anticorruption or fiduciary aspects.

IV. OVERALL ASSESSMENT, LESSONS, AND RECOMMENDATIONS

A. Overall Assessment and Ratings

23. The PCR rated the project successful and assed the project relevant, effective, efficient, and likely sustainable. This validation supports the overall successful rating, but downgrades
the efficiency rating to less than efficient (see table). The PCR provided insufficient information on the EIRR calculation and some major components were not included in the calculation.

Overall Ratings

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<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>Relevant</td>
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<tr>
<td>Effectiveness in achieving outcomes</td>
<td>Effective</td>
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<tr>
<td>Efficiency in achieving outcomes and outputs</td>
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<td>Less than</td>
<td>Unable to verify EIRR calculation assumptions and methodology. As per PCR, the negative benefit flows</td>
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<td>efficient</td>
<td>of some components were not included in the calculations. In addition, there were delays and process-</td>
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<td>related inefficiencies (para. 16).</td>
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<tr>
<td>Preliminary assessment of sustainability</td>
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<td>Likely</td>
<td>sustainable</td>
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<tr>
<td>Overall assessment</td>
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<td>Successful</td>
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<tr>
<td>Borrower and executing agency</td>
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<td>Satisfactory</td>
<td>The performance of the implementing agency under the executing agency has been mixed (para. 20).</td>
</tr>
<tr>
<td>Performance of ADB</td>
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<td>Satisfactory</td>
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<tr>
<td>Impact</td>
<td>High</td>
<td>Significant</td>
<td>Refer to para. 18.</td>
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<tr>
<td>Quality of PCR</td>
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<td>Refer to para. 27.</td>
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ADB = Asian Development Bank, EIRR = economic internal rate of return, IED = Independent Evaluation Department, PCR = project completion report.

Note: From May 2012, IED views the PCR's rating terminology of "partly" or "less" as equivalent to "less than" and uses this terminology for its own rating categories to improve clarity.

Source: ADB Independent Evaluation Department.

B. Lessons

24. The PCR identified several lessons regarding the following: (i) design requirements for a successful rural development project; (ii) method of selecting NGOs; (iii) the need for technical expertise for road, water supply, and diversion schemes; and (iv) avoidance of financing subprojects by each financier. This validation concurs with these lessons.

C. Recommendations for Follow-Up

25. The PCR made only one recommendation regarding monitoring of project components related to women. The PCR did not provide a clear connection of this recommendation in its text.

V. OTHER CONSIDERATIONS AND FOLLOW-UP

A. Monitoring and Evaluation Design, Implementation, and Utilization

26. The project provided for BME, however, the design of the BME system, its implementation, and its results were not discussed in the PCR. The appendix on loan covenants in the PCR indicated that BME was not established in the first year of the project as required; it was established in the third year. However, the government PCR (page 22) indicated that the consultants failed to deliver a BME system. Moreover, the consultants did not make annual visits to the project area as required. This is at odds with the PCR, which states that BME
consultant performance was satisfactory and most deliverables were achieved. The PCR stated that some studies were prepared from the BME data, but the PCR made no assessment.

B. Comments on Project Completion Report Quality

27. This validation recognizes that a project completion review mission could not be fielded due to the armed conflict in the region, and unavailability of line agency staff because of their involvement in flooding relief activities. This validation also recognizes that the PCR is based on a desk study of the executing agency’s PCR, BME study, independent technical audit of civil works, and records of ADB and the executing agency. Therefore, the PCR has clear a limitation in collecting own evaluation data and making objective judgment. Nonetheless, understanding the severe security situations and that the PCR made some good efforts in making use of the available data in the completion review, this validation rates the PCR satisfactory.

C. Data Sources for Validation

28. The sources of data for this validation consist of (i) the project’s RRP, (ii) project review reports and aide memoires of ADB missions and related correspondence, (iii) ADB PCR, and (iv) government PCR.

D. Recommendation for Independent Evaluation Department Follow-Up

29. The PCR recommends that a project performance evaluation report be prepared. This validation concurs if the security situation permits.