



Technical Assistance Report

Project Number: 54089-001
Transaction Technical Assistance Facility (F-TRTA)
May 2020

Islamic Republic of Pakistan: Preparing Transport Projects

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 10 April 2020)

Currency unit	–	Pakistan rupee/s (PRe/PRs)
PRe1.00	=	\$0.00597
\$1.00	=	PRs167.5000

ABBREVIATIONS

ADB	–	Asian Development Bank
CPEC	–	China–Pakistan Economic Corridor
km	–	kilometer
TA	–	technical assistance

NOTES

- (i) In this report, “\$” refers to United States dollars.

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TRANSACTION TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 54089-001	
Project Name	Preparing Transport Projects	Department/Division	CWRD/CWTC
Nature of Activity Modality	Project Preparation Facility	Executing Agency	Government of Khyber Pakhtunkhwa (KP), Government of Punjab, Planning & Development Department, Sindh
Country	Pakistan		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✓ Transport	Road transport (non-urban)		1.50
		Total	1.50
3. Operational Priorities		Climate Change Information	
✓ Addressing remaining poverty and reducing inequalities		Climate Change impact on the Project	Low
✓ Accelerating progress in gender equality			
✓ Promoting rural development and food security			
✓ Strengthening governance and institutional capacity			
Sustainable Development Goals		Gender Equity and Mainstreaming	
SDG 9.1		Some gender elements (SGE)	✓
		Poverty Targeting	
		Geographic Targeting	✓
4. Risk Categorization	Complex		
5. Safeguard Categorization	Safeguard Policy Statement does not apply		
6. Financing			
Modality and Sources		Amount (\$ million)	
ADB		1.50	
Transaction technical assistance: Technical Assistance Special Fund		1.50	
Cofinancing		0.00	
None		0.00	
Counterpart		0.00	
None		0.00	
Total		1.50	
Currency of ADB Financing: US Dollar			

I. THE TECHNICAL ASSISTANCE FACILITY

A. Justification

1. The transaction TA facility will provide project preparation support to a series of ensuing projects, comprising (i) Punjab Provincial Highway Project; (ii) Khyber Pakhtunkhwa (KP) Rural Road Development Project; and (iii) Sindh Provincial Road Improvement Project (Phase II). All ensuing projects aim to rehabilitate or upgrade existing provincial roads or rural roads while improving regional connectivity with neighboring provinces. Project identification and preliminary technical reviews are being carried out with either ongoing loan proceeds or the provincial government's own resources. The government has cleared the concept papers for these ensuing projects in the fourth quarter of 2019. The TA facility is required to conduct the relevant due diligence, improve project readiness, provide implementation support during the initial stage, and provide capacity building activities for the concerned executing and implementing agencies. The TA facility is listed in the 2019 pipeline in the approved Country Operations Business Plan (2019–2021)¹ for Pakistan. The ensuing projects are included in the Country Operations Business Plan (2020–2022) for Pakistan.²

2. **Road network in the country.** Transport is a key driver of socioeconomic development. Transport allows people to access jobs, markets, social interaction, education, and other services, enabling people to rise out of poverty and overcome social exclusion. Transport adds value to goods brought to markets, and links rural areas to cities and global supply chains, thereby driving economic development.³ Road transport dominates Pakistan's transport system, accounting for almost 98% of freight traffic in ton-kilometers and 94% of passenger traffic in passenger-kilometers. Pakistan's road network of 263,000 kilometers (km) consists of 12,500 km of national highways and 93,000 km of provincial highways, with the remainder classified as either district, rural roads, or urban roads. The national highway network, which is less than 5% of the total road network, caters to 80% of inter-urban traffic. The National Highway Authority (NHA) is responsible for national highways, while the provincial governments are responsible for provincial highways, and district roads. Other rural roads come under the jurisdiction of local government bodies as well as other government agencies (such as provincial irrigation departments). Urban roads and streets are the responsibility of municipalities, cantonment boards, metropolitan/city development authorities and housing development agencies.

3. **Needs for improved connectivity.** Despite the high reliance on road transport, the quality and capacity of the road infrastructure severely constrains free and safe traffic flow. While the quality of the national highways has improved considerably from continuous capital spending such as China–Pakistan Economic Corridor (CPEC) Program and better road asset management, the overall condition remains below the target to eliminate those roads with condition of poor and very poor—only 11% of national highways are assessed to be in *good* and 67% in *fair* condition.⁴ This is partly due to aging road and bridge infrastructure. The condition of the provincial highways is worse, especially in the remote parts of the country. They have poor serviceability (narrow, rough and unsafe) and many are either perennially impassable due to flooding/landslides, or subject to closure due to extreme weather events. The district and rural access roads, which connect farmers to market, likewise have poor serviceability and receive even less attention (mostly emergency repairs) due to lacking ownership and inadequate funding.

¹ ADB. 2018. [Pakistan. Country Operations Business Plan \(2019–2021\)](#). Manila.

² ADB. 2019. [Pakistan. Country Operations Business Plan \(2020–2022\)](#). Manila.

³ Government of Pakistan, Ministry of Planning, Development and Reforms. 2018. [National Transport Policy of Pakistan](#). Islamabad.

⁴ National Highway Authority's annual maintenance plan for 2019–2020.

4. **Government's strategic objectives and approach.** The government's vision for 2025⁵ includes transport and connectivity as one of the seven priorities to achieve high, sustained, and inclusive growth. The previous government's plan for the transport sector envisaged rehabilitation and upgrading of the existing network, selective investment in new highways to facilitate regional trade, enhanced private sector participation, and control of overloading. Following completion of several mega road projects under CPEC, the government has shifted its focus to improvement of regional connectivity, especially linkages to remote and/or underdeveloped areas, reforming the railway network, and improving transport logistics, particularly removal of bottlenecks to international (cross-border) trade, domestic commerce, and tourism (footnote 3).

5. **ADB's involvement in the transport sector.** ADB has been a leading development partner in Pakistan's transport sector. Since 2010, ADB has focused on the upgrading of existing national highway network as well as construction of new motorways totaling 480 kms, including investing in improving border crossing under the Central Asian Regional Economic Cooperation (CAREC) Program. Before 2009, ADB's assistance included interventions in each province, covering improvements on national and provincial highways, as well as rural roads in one umbrella project. However, each project involved more than one executing agency which resulted in difficulties in implementation. Some projects faced difficulties during implementation due to start-up delays in projects in Sindh and KP provinces. Some lessons will be further addressed in the proposed TA facility and ensuing projects.

6. **Road development in Punjab.** The province of Punjab is situated at the crossroads of national and international growth corridors with the potential to connect with regional economies. The area mostly consists of an alluvial plain that has served as the region's food basket for centuries. It is also Pakistan's most industrialized province, and accounts for almost 40% of large-scale manufacturing and 70% of small-scale manufacturing, mostly located in north-eastern Punjab. The classified road network of 86,098 km in Punjab includes 3,276 km of national highways and 1,422 km of motorways managed by the NHA, 10,415 km of provincial highways, and 70,985 km of district roads managed by the Punjab Communication and Works Department (C&WD).

7. There is a significant geographical disparity in the development of Punjab's economy, with the southern and western districts of the province (more rural, agricultural) lagging substantially behind the relatively more prosperous northern and eastern districts (more urban, industrial). The inadequacy of east-west road connectivity becomes most apparent in southern Punjab given the north-south orientation of the three high-capacity national road transport corridors (M4, M3 and N5) while there are no direct east-west corridors linking the market towns of southern Punjab (e.g. between Layyah and Okara; Rajanpur and Bahawalnagar; and other areas).

8. The Punjab government is developing a provincial spatial strategy that has identified key east-west routes to provide strong potential for economic growth with forward linkages to various development initiatives under CAREC and CPEC programs. The key provincial road transport corridors that the government plans to develop by 2023 are included in Punjab Growth Strategy 2023, which was launched in May 2019. These corridors include about 244 roads (classified as arterials) with an aggregate length of more than 11,000 km. The traffic volume exceeds 8,000 vehicles per day on about 60 out of 244 roads, but only 45 roads have been dualized. Increasing traffic growth (at a rate of 6–8% per annum) combined with a traffic mix of motorcycles, rickshaws, tractors, and heavy-laden trucks, buses, and cars causes acute traffic congestion and significant

⁵ Government of Pakistan, Ministry of Planning, Development and Reforms. 2014. [Pakistan 2025: One Nation, One Vision](#). Islamabad.

road safety hazards to road users. Many fatal and serious injury traffic accidents have been reported as a result of head on collisions.

9. **Road development in Khyber Pakhtunkhwa.** Road transport is the mainstay of transport activity in KP. In addition, KP provides the main transit corridor to Afghanistan across the Khyber Pass. The province has a classified paved road network of 15,102 km, of which 1,878 km are national highways managed by NHA, 2,204 km are provincial highways⁶ managed by the Pakhtunkhwa Highways Authority (PKHA), and 11,400 km are district roads managed by the KP C&WD. Provincial highways, with an average daily traffic ranging from 3000-8000 vehicles, connect district centers with the national highway network, and play a vital role in economic development of the province. District roads and rural access roads which directly connect farmers to market and other social service providers, have been neglected for quite a long time, due to lack of financial resources, the very large rehabilitation needs (maintenance backlog), relatively low traffic volumes, the rugged mountainous terrain, and until recently, conflict and insecurity affecting large parts of KP.

10. As in Punjab, there is also a significant disparity in road connectivity in rural areas of KP with southern and western KP having significantly lower road density (especially all-weather, paved roads) as compared to central and eastern KP. The newly merged tribal districts (formerly Federally Administered Tribal Areas) are the least endowed with roads. A key development priority of the KP government is to rectify the disparity in road connectivity across the province with greater attention to the southern and western districts. Other road sector priorities include upgrading of the provincial road network (managed by PKHA), improved and reliable access to tourism centers, and rehabilitation and upgrading of rural roads to improve access to markets and social services.

11. **Road development in Sindh.** More than 60% of Sindh's population live in rural areas, where agriculture is the main source of livelihood. Sindh's economic development is also unbalanced geographically. Karachi, the provincial capital and Pakistan's largest city, accounts for about 20% of the country's gross domestic product, 75% of national trade, and more than 30% of value added in large-scale manufacturing. Rural Sindh, especially the poorly connected southeast and north parts of the province, lags in both economic and social development with a poverty headcount double that of urban areas. The lack of reliable, all-weather roads has significantly contributed to economic and social deprivation in rural areas.

12. Transport activity in Sindh largely relies on road transport. The classified paved road network of 25,737 km in Sindh includes 1,365 km of national highways, 2,830 km of provincial highways, 11,630 km of secondary roads, and 9,912 km of access roads. Much of the road network is spread densely along the banks of the Indus River and its major irrigation and drainage canals. Rural road connectivity is poor in the southeastern and north districts of the province and along the coast. Sindh's provincial highways, which handle traffic with a range of 3,000–8,000 vehicles daily, connect provincial administrative and commercial centers with district headquarters and market towns. They are vital in facilitating intra-provincial trade and commerce; providing access to health, education, and other public services; and reducing poverty by creating jobs and business opportunities. The condition of the provincial highway system is, however, below national standard, and the pavement surface condition and riding quality are deteriorating. Many of these roads have been upgraded to rural roads or tracks with low bearing capacity to sustain heavier traffic loads and resist damage from storm surges and flooding. Most provincial highways have substandard geometric standards. The pavement condition of more than half of the road

⁶ Including 380 km of provincial highways located in federally administered tribal areas.

network is rated *poor* or *bad*. Inadequate expenditure on road maintenance and an inability to properly prioritize expenditures have accelerated road deterioration, resulting in an increase in traffic accidents, vehicle operating costs, and travel times. Key road development objectives include upgrading all provincial highways to proper design standards with a focus on safety and climate resilience, adding critical missing road links to the network in the under-served parts of the province, and sustainable preservation and maintenance of the secondary and rural access roads.

B. Outputs and Activities

13. **Output 1: Transport sector project feasibility study and preparation supported.** The TA facility will provide technical expertise to prioritize, plan, and prepare road investment projects under the proposed (i) Punjab Provincial Highway Project; (ii) KP Rural Road Development Project; and (iii) Sindh Provincial Road Improvement Project (Phase II). This will include all requisite due diligence; assessment of technical suitability; and the economic, financial, and social viability of the proposed projects. The TA facility will also address capacity and institutional constraints, environmental and social safeguards, and gender concerns, and identify measures to strengthen project implementation and policy related issues.

14. **Output 2: Project management capacity of the executing agencies improved.** The TA facility will strengthen the capacity of the executing agencies in project management through improved project readiness, procurement and contract management. The TA facility will also aim to (i) improve road safety and road maintenance sustainability, including gender mainstreaming for design and implementation; (ii) promote climate risk adaptation and mitigation measures; (iii) explore the private sector's participation in road investment; and (iv) introduce a new technology in the transport sector in the provinces.

15. The TA facility is considered *complex*, because the loan amount for an ensuing project may exceed \$200 million. ADB has experience with each of the executing agencies, and safeguards classifications for the ensuing projects would likely be *B*.

C. Cost and Financing

16. The TA facility is estimated to cost \$1,600,000.00, of which \$1,500,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF 6). The key expenditure items are listed in Appendix 1.

17. The government will provide counterpart support in the form of counterpart staff, office accommodation, office supplies, and other in-kind contributions. The government was informed that approval of the TA does not commit ADB to finance any ensuing projects.

D. Implementation Arrangements

18. The TA activities for ensuing projects will start only after ADB approves the project concept paper for each of the ensuing projects.

19. ADB will administer the TA facility and be responsible for TA implementation oversight, accountability for the outputs, and communication with the consultants and stakeholders. The governments of Punjab, KP, and Sindh will be the executing agencies for each ensuing project, respectively. A steering committee, to be chaired by the Additional Chief Secretary, will be

established for each province to oversee and monitor project preparatory activities under the TA facility.

20. The implementation arrangements are summarized in Table 1.

Table 1: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	June 2020–December 2023		
Oversight body	Steering committee chaired by the Additional Chief Secretary will be established for each province to oversee and monitor project preparatory activities under the TA facility		
Executing agencies	Government of Punjab for Punjab Provincial Highway Project Government of KP for KP Rural Road Development Project Planning & Development Department, Sindh for Sindh Provincial Road Improvement Project (Phase II)		
Implementing agency	(i) C&WD, Punjab for Punjab Provincial Highway Project (ii) C&WD, KP for KP Rural Road Development Project (iii) WSD, Sindh for Sindh Provincial Road Improvement Project (Phase II) Project		
Consultants	To be selected and engaged by ADB		
	Individual: individual selection (international)	International expertise (27 person-months)	\$688,500
	Individual: individual selection (national)	National expertise (56 person-months)	\$392,000
Procurement	Not required due to the preparatory nature of projects		
Advance contracting	Advance actions in recruitment of consultants		
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		
Asset turnover or disposal arrangement upon TA completion	Hand-over to the government.		

ADB = Asian Development Bank, C&WD = Communication and Works Department, KP = Khyber Pakhtunkhwa, WSD = Works & Service Department, TA = technical assistance.
Source: Asian Development Bank.

21. **Consulting services.** ADB will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.⁷ The TA facility will require consultancy services of international and national individual consultants (estimated 83 person-months, comprising 27 person-months of international key experts and 56 person-months of national key experts) for undertaking surveys and preparatory works for the ensuing projects.

II. THE PRESIDENT'S DECISION

22. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$1,500,000 on a grant basis to the Government of Islamic Republic of Pakistan for Preparing Transport Projects, and hereby reports this action to the Board.

⁷ Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 3).

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	688.5
ii. National consultants	392.0
b. Out-of-pocket expenditures	
i. International and local travel	216.0
ii. Goods (rental and/or purchase) ^b	10.0
iii. Surveys	15.0
iv. Training, seminars, and conferences	53.5
v. Reports and communications	10.0
vi. Office support ^c	15.0
2. Contingencies	100.0
Total	1,500.0

Note: The TA is estimated to cost \$1,600,000, of which contributions from the ADB are presented in the table. The government will provide counterpart support in the form of counterpart staff, office accommodation, office supplies, and other in-kind contributions. The value of the government contribution is estimated to account for \$100,000 or 6.2% of the total TA cost.

^a Financed by ADB's Technical Assistance Special Fund (TASF-6).

^b The assets purchased under the TA facility would be handed over to the government upon completion of the TA.

^c Provision for consultants' local office operations (e.g., support staff).

Source: Asian Development Bank estimates.

PROJECTS UNDER TECHNICAL ASSISTANCE FACILITY

Table A2.1: Indicative Consultants' Input Allocation
(person-month)

Item	Total	Punjab Provincial Highway Project complex	Khyber Pakhtunkhwa Rural Road Development Project low risk	Sindh Provincial Road Improvement Project (Phase II) low risk
A. International Consultant				
Technical advisor	2.0	1.0	0.5	0.5
Transport economist	3.0	1.0	1.0	1.0
Highway engineer	3.0	1.0	1.0	1.0
Highway maintenance engineer	3.0	1.0	1.0	1.0
Financial management specialist	3.0	1.0	1.0	1.0
Transport institutional specialist	3.0	1.0	1.0	1.0
Environment specialist	2.0	1.0	0.5	0.5
Climate change specialist	2.0	1.0	0.5	0.5
Road asset management specialist	3.0	1.0	1.0	1.0
Road safety specialist	3.0	1.0	1.0	1.0
Subtotal (A)	27.0	10.0	8.5	8.5
B. National Consultant				
Transport economist	2.0	1.0	0.5	0.5
Highway design engineer	7.0	3.0	2.0	2.0
Structure engineer	3.0	1.0	1.0	1.0
Highway maintenance engineer	9.0	3.0	3.0	3.0
Procurement specialist	12.0	4.0	4.0	4.0
Financial specialist	3.0	1.0	1.0	1.0
Environment specialist	9.0	3.0	3.0	3.0
Resettlement specialist	8.0	3.0	3.0	2.0
Social development specialist (gender)	3.0	1.0	1.0	1.0
Subtotal (B)	56.0	20.0	18.5	17.5
Total (A+B)	83.0	30.0	27.0	26.0

Source: Asian Development Bank estimates.

Table A2.2: Basic Ensuing Project Information

Item	Punjab Provincial Highway Project	Khyber Pakhtunkhwa Rural Road Development Project	Sindh Provincial Road Improvement Project (Phase II)
ADB financing	\$418 million	\$150 million	\$200 million
Lending modality	Project loan	Project loan	Project loan
Approval plan	Q1 2021	Q3 2021	Q1 2022
Executing agency	Government of Punjab	Government of KP	Government of Sindh
Output	(i) dualize 485 km provincial highways (ii) strengthen capacity of C&WD of Punjab	(i) rehabilitate 700 km roads and 50 bridges (ii) strengthen C&WD's capacity and develop a road sector strategy	(i) reconstruct 847 km provincial highway (ii) strengthen capacity of WSD of Sindh
Implementing agency	C&WD, Punjab	C&WD, KP	WSD, Sindh
Potential environment and social categorization	ENV=B IR=B IP=C	ENV=B IR=B IP=C	ENV=B IR=B IP=C
Risk categorization	Complex	Low risk	Low risk

ADB = Asian Development Bank, C&WD = Communication and Works Department, ENV = environment, IP = indigenous people, IR = involuntary resettlement, km = kilometer, KP = Khyber Pakhtunkhwa, Q = quarter, WSD = Works & Service Department.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=54089-001-TARreport>

1. Terms of Reference for Consultants