Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 27-Apr-2022 | Report No: PIDA33319

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Pakistan	P177069	Khyber Pakhtunkhwa Rural Accessibility Project (KPRAP)	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
SOUTH ASIA	25-Apr-2022	09-Jun-2022	Transport
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	The Islamic Republic of Pakistan	Communication and Works Department, Government of Khyber Pakhtunkhwa	

Proposed Development Objective(s)

The Project Development Objective is to improve safe and climate-resilient rural accessibility to schools, health facilities and markets in selected districts of Khyber Pakhtunkhwa.

Components

Component 1. Safe and climate resilient access
Component 2. Safe and affordable school journeys for girls
Component 3. Project management and institutional strengthening
Component 4. Contingent Emergency Response

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	310.00
Total Financing	310.00
of which IBRD/IDA	300.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	300.00
IDA Credit	300.00
Non-World Bank Group Financing	
Counterpart Funding	10.00
Borrower/Recipient	10.00

Environmental and Social Risk Classification

Substantial

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

1. **Pakistan has made significant progress over the last two decades towards reducing poverty.** The expansion of off-farm economic opportunities, and the increase in migration and associated remittances allowed over 47 million Pakistanis to escape poverty between 2001 and 2018. Nonetheless, challenges for inclusive growth remain, and are systematically related to spatial disparities and deficits in human capital endowment, as well as access to services and opportunities. Human capital outcomes are poor and stagnant, with high levels of stunting at 38 percent and learning poverty at 75 percent. Growth of per capita GDP has also been low, averaging only around 1.8 percent annually. Economic growth in Pakistan has historically been fueled by private and government consumption, with productivity-enhancing investment and exports contributing relatively little. Furthermore, consumption-led growth has been associated with frequent macroeconomic imbalances. Achieving sustained higher economic growth is important for Pakistan to reduce inequality and increase shared prosperity.

2. **After rebounding in FY21, growth is expected to moderate in FY22-23.** Due to low-base effects and recovering domestic demand, real gross domestic product (GDP) growth at 2015-16 factor prices rebounded to 5.6 percent in FY21 from a contraction of 1.0 percent in FY20. However, with emerging external imbalances and higher domestic inflation, monetary tightening has resumed in FY22. Output growth is therefore projected to moderate to 4.3 percent in FY22 and to 4.0 percent in FY23. Economic growth is thereafter projected to recover to 4.2 percent in FY24. This recovery is predicated on continued macroeconomic stability and a narrowing of the fiscal and external deficits in the medium-term. Inflation is estimated to rise to an average of 10.7 percent in FY22 but is then expected to decrease over the forecast horizon as world commodity prices ease. Following from the faster import than export growth in first half of FY22, the current account deficit (CAD) is expected to widen to 4.4 percent of GDP in FY22. Moderating demand pressures due to monetary tightening, lower commodity prices and the weaker currency are expected to dampen imports in FY23. With the implementation

of reforms to reduce import tariffs on relevant intermediates for the export sector and increased allocations for export refinance schemes, the CAD is expected to narrow to 3.0 percent of GDP in FY24. The fiscal deficit (excluding grants) is projected to widen slightly to 6.3 percent of GDP in FY22, and gradually narrow over the medium term as revenue mobilization measures, particularly General Sales Tax (GST) harmonization and Personal Income Tax reform take hold. Public debt will remain elevated in the medium term, as will Pakistan's exposure to debt-related shocks. This outlook assumes that the International Monetary Fund Extended Fund Facility program will remain on track. Nonetheless, setbacks in GDP due to the pandemic have had an impact on poverty and are expected to reverse the sustained reduction observed over the past 20 years. The pandemic has also increased the number of out-of-school children (OOSC). An estimated 930,000 additional children are expected to drop out from both primary and secondary education.

3. **Globally, Pakistan ranks fifth among countries most affected by extreme weather events between 1998 and 2018.**[1] The Government of Pakistan (GoP) has reported some progress recently,[2] but adequate measures need to be financed and implemented to meet the targets and the National Adaptation Plan. Extreme weather events are expected to grow in severity, with high human and economic costs. Around 75 percent of losses are attributable to floods. Rural populations have been disproportionately impacted by climate shocks. Adaptation measures are critical to mitigate flooding risks and hazardous impacts.[3]

4. **Khyber Pakhtunkhwa (KP) Province is of strategic and economic importance.** KP is the northwest frontier of Pakistan, bordering Afghanistan. The province comprises 35 districts and is home to 37 million people, 80 percent of whom reside in rural areas. It contributes 20 percent to the national GDP, with forestry and agriculture being major sources of economic activities (20 percent of the provincial GDP) and employment creation (40 percent) in rural areas. The geographic location of the province offers tremendous potential for regional connectivity and trade with Central Asian countries, leading to Europe. In this context, the Government of Khyber Pakhtunkhwa's (GoKP) sustainable plan for 2019–23 includes policies to support national and regional connectivity and integration.

5. **Compared to other provinces, KP is especially vulnerable to climate change due to its terrain and topography.** Between 1970 and 2020, 20 extreme weather events including floods, landslides, and avalanches have impacted KP,[4] with climate change being a direct cause. A significant increase in trends (1960–2020) of annual rainfall and temperature patterns has been observed in some parts of

[1] Global Climate Risk Index 2020. Germanwatch. December 20, 2021. https://www.germanwatch.org/sites/default/files/20-2-01e%20Global%20Climate%20Risk%20Index%202020_14.pdf.
[2] The Global Climate Risk Index 2021 shows that Pakistan has moved from the fifth position to eighth position in the long-term climate risk index. https://germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202021_1.pdf.
[3] World Bank Group and Asian Development Bank. 2021. *Climate Risk Country Profile: Pakistan*. https://climateknowledgeportal.worldbank.org/sites/default/files/2021-05/15078-WB_Pakistan%20Country%20Profile-WEB.pdf.
[4] Pakistan Meteorological Department. n.d. Extreme Disaster Events in Khyber Pakhtunkhwa, Pakistan Since 1970, Regional Meteorological Center Peshawar. https://www.pmd.gov.pk/rmc/rmcpesh/htmlpages/KP-disasterevents.html.

KP,[5] which has impacted agricultural production and access to basic services in the Northern (12 districts), Southern (2 districts), and Newly Merged Districts (NMDs)[6] of KP. Due to a lack of resilient infrastructure, these natural calamities have also impacted lives and livelihoods and disrupted access and connectivity between districts and rural communities. For instance, heavy flooding in 2010 severely damaged the road network, resulting in loss of connectivity, an increase in transport costs and unemployment, negatively impacting farmers' income. The GoKP has committed to reforms and financing to address climate risks.[7]

6. **KP has the second highest instance of poverty in Pakistan and has major gaps in human capital development.**[8] KP (including the NMDs) is the second poorest region in the country. Poverty is concentrated in the northern districts (Upper Dir, Kohistan, Shangla, and Buner) and southern districts (Tank and Dera Ismail Khan), as well as in the NMDs, which also have a high presence of Afghan refugees. KP is also the least urbanized province in Pakistan,[9] with large urban–rural disparities: the 2014/15 Multidimensional Poverty Index is 0.042 and 0.295 for urban and rural areas, respectively.[10] Education and health indices for KP and the NMDs are also among the lowest in the country, and below the national mean; only Balochistan ranks lower. Furthermore, there are significant gender disparities in human development indices in KP (particularly NMDs), with a Sub-national Gender Development Index score of 0.67 (0.51 for NMDs, the lowest in the country).[11] Likewise, the female labor force participation rate in KP is much lower compared to that of men. Women are also disadvantaged in the off-farm sector, particularly the labor-intensive construction sector, where they occupy less than one percent of jobs.[12] They also earn, on average, 20 percent less than men working in the construction sector. In rural areas, this wage gap is around 10 percent higher.[13] Almost 30 percent of females aged five and above in KP have never attended school, compared to 16.7 percent of males.[14]

[5] Alam, Fakhri, Muhammad Salam, Nasir Ahmad Khalil, Wais Khan, and Masaud Khan. 2021. "Rainfall Trend Analysis and Weather Forecast Accuracy in Selected Parts of Khyber Pakhtunkhwa, Pakistan." *SN Applied Sciences* 3 (575): https://link.springer.com/article/10.1007/s42452-021-04457-z.

[6] NMDs refer to seven districts and six frontier regions incorporated into the KP province in 2018. Prior to the merger, these districts were autonomously governed and used to be called the Federally Administered Tribal Areas.

[7] This includes setting up a Climate Change Cell and adopting a provincial level climate change policy and action plan. In 2018, KP became the first subnational government in the world to adopt a Climate Change Financing Framework, which guides public financial and economic management.

[8] Global Data Lab, Human Development Indices (database). https://globaldatalab.org/shdi/2019/human-development/PAK/?levels=1%2B4&interpolation=1&extrapolation=0&nearest_real=0.

[9] Ministry of Finance. 2018. *Pakistan Economic Survey 2017–18: Population, Labour Force & Employment*. https://www.finance.gov.pk/survey/chapters_18/12-Population.pdf

[10] Multidimensional Poverty in Pakistan. 2016. Government of Pakistan, United Nations Development Programme (UNDP) and Oxford Poverty and Human Development Initiative (OPHI).

[11] Global Data Lab, Human Development Indices (database). https://globaldatalab.org/shdi/2019/human-development/PAK/?levels=1%2B4&interpolation=1&extrapolation=0&nearest_real=0. The Sub-national Gender Development Index value indicates the level of gender parity across the three Human Development Index dimensions of education, health, and standard of living. A value below 1 indicates gender inequality to the disadvantage of females, while values greater than 1 indicate gender inequality to the disadvantage of males. A value equal to 1 indicates gender parity.

[12] Development Statistics of Khyber Pakhtunkhwa 2021. KP Planning and Development Department, 2021a.

[13] Development Statistics of Khyber Pakhtunkhwa 2021. KP Planning and Development Department, 2021b.

[14] Pakistan Bureau of Statistics. Population Census 2017.

Sectoral and Institutional Context

7. **Rural roads in KP play a key role in connecting districts to provincial centers, but a large proportion of the network is in poor condition.** The province has a rural road network of 21,679 km, which is under the responsibility of the Communication and Works Department (CWD). About 72 percent of this network is spread over 22 districts, serving 30 million inhabitants, while 28 percent is in the 13 NMDs serving five million inhabitants. Almost 41 percent of the total network is in poor condition. An additional 30 percent of the network is expected to change from fair to poor condition unless it receives timely maintenance.[15]

8. **Lack of climate resilience has further exacerbated the road conditions in the province.** Extreme weather events have caused road damage and transport disruptions due to embankment failures, flooding of carriageways, slope failures, and landslides. Such events disrupt all-weather access to basic services and result in high recurrent costs in terms of loss of precious lives, livelihoods, and infrastructure sustainability.

9. **Climate resilience of road infrastructure remains a significant challenge for KP.** Almost 20 percent of the entire network is still unpaved, particularly in the NMDs, which increases the risk of damage due to extreme weather events and drives up maintenance and reconstruction requirements. With an anticipated rise in the frequency and intensity of future climate-induced natural disasters, the resilience of KP's road system could worsen if mitigation and adaptation measures are not implemented soon.

10. **Underinvestment in maintenance compounds the issue.** The GoKP has only allocated limited resources in meeting its road maintenance needs. Between 2014 and 2017, only an average of 2–2.5 percent of KP's annual road subsector budget was allocated to maintenance (considerably below the standard of five percent for earth surfaces), while most of it was used to instead construct or upgrade new roads and bridges. This is insufficient for routine and periodic maintenance. As a result, the maintenance backlog is increasing, leading to deteriorating road conditions.[16] In addition, there is no proper inventory of rural roads, and neither a systematic prioritization framework (Road Assets Management System, RAMS), nor road network analyses for strategic road works planning and maintenance. Poor network conditions also pose traffic-related hazards for commuters.

11. **Geospatial analysis shows big access gaps, which limit human capital development in KP.** Geospatial analysis[17] conducted by the World Bank (WB) showed that almost 40 percent of the rural population

[15] As per the Road Network Evaluation Tools (RONET) assessment conducted by the Bank team in February 2021 for the GoKP.
[16] Asian Development Bank. 2018. "Proposed Loan for Additional Financing Islamic Republic of Pakistan: Khyber Pakhtunkhwa Provincial Roads Improvement Project." Report and Recommendation of the President to the Board of Directors, Asian Development Bank.

[17] Using global friction maps to calculate travel time to access public facilities. The detailed methodology has been documented in this publication: Banick, Robert Steven; Basnet, Manish; Bosch, Lander Sonia M; Meyer, Moritz.

Paving the Way to Equal Access: Geospatial Analytics Can Address Geographic Disparities in Service Accessibility in Pakistan (English). Poverty & Equity Notes; no. 45 Washington, D.C. : World Bank Group.

http://documents.worldbank.org/curated/en/099829404222230199/IDU0400f3646006090417f09a900dfcc60038d2f

in KP must travel more than one hour to access a health facility (second highest in the country),[18] while 44 percent of the rural population requires more than 30 minutes of driving to get to primary schools, and 10 percent live more than two hours driving distance from an urban center.[19] The accessibility gaps are more pronounced in the northern and southern KP districts . For instance, Kohistan (in the north) ranks the lowest in terms of accessibility, while Lower Dir ranks the highest. This forms the basis for the selection of these districts (priority districts) under the project.

Education Access

12. **KP has a large gender disparity in terms of access to education.** In the NMDs, more than 70 percent of girls are out of school (OOS) (from primary level to high school), compared to 30 percent of boys.[20] KP has lower rates of OOSC (34 percent overall), but gender disparities are large (49 percent of girls are OOS, compared to 21 percent of boys). The low enrollment is compounded by high dropout rates, with NMDs once again performing the worst and the rest of KP having the widest gender gaps. OOS rates generally increase with age,[21] with sharp dropout rates at key transition levels: at the end of primary school (grade 5), the end of middle school (grade 8), and secondary school (grade 10). There are also strong gender disparities. Dropout rates for girls in KP are particularly significant at the end of grades 5 and 10.

13. **Long home-to-school distances and difficult commuting conditions disproportionately affect girls' participation in education.** In a 2021 phone survey,[22] among children that have never enrolled in school, 27 percent did not do so due to accessibility reasons: (i) "commute to school is difficult"; and (ii) "no school in village". Accessibility issues were second only to affordability (32 percent cited "school is too expensive"). Among those that cited "commute to school is difficult" the top three reasons cited were: (i) distance to school; (ii) cost of transportation; and (iii) transport safety. These points were corroborated by focus group discussions (FGDs) involving rural stakeholders in Peshawar and Swat.[23] Large distances have been shown to significantly impact enrollment and regular

[18] World Bank preliminary geospatial analysis conducted in February 2021 for the GoKP.
[19] Sustainable Development Strategy. A Medium-Term Development Framework for Khyber Pakhtunkhwa for 2019–23. Planning and Development Department, GoKP.
[20] Pakistan Bureau of Statistics. Pakistan Social and Living Standards Measurement (PSLM), 2019–20.

[21] The gross enrolment rate (GER) at the primary level for girls is 70 percent while for boys it's 94 percent. GER at the middle school level for girls is low at 49 percent and 82 percent for boys. For high schools, GER is 35 percent for girls and 68 percent for boys. Pakistan Bureau of Statistics. PSLM, 2019–20.

[22] A phone survey was undertaken by Gallup, on behalf of the World Bank Education and Transport Global Practices in November 2021. The survey targeted 5,201 families with school-going children across Pakistan, 3,551 of which were in KP. Of these families, 38 percent o were those with female children; 4,782 families (around 92 percent) had children that were currently attending school, and 419 (around 8 percent) had children that were out of school. Families were asked detailed questions on reasons behind participation and regular attendance, or lack thereof, in schools, with a particular focus on transport and accessibility issues.
[23] Two FGDs were conducted by the Transport and Education GPs in Peshawar and Swat in November 2021. Participants of FGDs included: parents, parent teacher committee members, Benazir Income Support Program beneficiaries, teachers, education officials, and non-governmental organization (NGO) representatives. The Peshawar FGD had 37 participants (20 female), and the Swat FGD had 41 participants (26 female). The objectives were to understand and map stakeholders' perceptions and experiences on the barriers to girls' participation in education, and understand education accessibility gaps for girls, particularly from a transport angle.

attendance, particularly of girls, who are more likely than boys to drop out of school due to safety, distance, and transport-related factors, especially in rural areas.[24]

14. **While there are motorized transport alternatives in rural areas, however parents are largely unable to afford them.** Transport costs, in addition to school fees, were key cost drivers that made education unaffordable for families. During the FGDs, parents from rural districts in KP said local buses, vans, rickshaws, and coasters were common modes for children to travel between home and school. However, they regularly cited high transportation costs as a barrier to education access.

15. **Safety on the route to school is a key concern for parents.** Safety was the third most important reason why phone survey participants cited the commute to school as being difficult. FGD participants generally preferred schools to be located within their villages and had safety concerns with children attending schools outside their villages. Parents generally did not prefer their girls to walk to school unaccompanied, but they did not always have the time to accompany their children, posing issues for regular attendance and even impacting enrollment.

16. **Poor network conditions, including road safety, and a lack of all-weather access to roads heighten risk perceptions and disrupt regular attendance of children in schools.** FGD findings show that road access in vulnerable KP districts is blocked during the winter (due to snow and landslides) and monsoon season (floods, landslides), causing parents to choose not to send their children to school. Rural areas in the province are often unpaved or have run-down roads, which, coupled with the lack of road and traffic safety, present serious challenges to commuters. For instance, lack of adequate pavements and crossover points increase the likelihood of vehicular–pedestrian accidents.[25]

17. **Poor school accessibility is also partly due to construction decisions that were not based on technical considerations.** The KP Department of Education is divided into Elementary and Secondary Education (E&SED) and Higher Education. Both departments prepare a list of schools and colleges to be constructed, which are reflected in the Provincial Annual Development Program and approved by the Provincial Assembly as part of the annual budget. Once the projects are approved, the Department of Education seeks the services of the CWD for their design, costing, tendering, and construction. When construction is complete, the facilities are handed over to the Department of Education for operation. There is currently no data-driven process that optimizes site selection, based on accessibility to population centers. In the absence of such processes, prioritization of facilities to be constructed and site selection is often based on subjective considerations, which may not lead to optimal outcomes.

[24] Mughal, Abdul Waheed. 2018. "Investigating the Issue of Out of School Children in Rural Pakistan: Implications for Policymakers." PhD Thesis, Loughborough University.

[25] In the rural circles of Peshawar, for instance, between 2003 to 2012 there were around 40 fatal and 75 non-fatal road crashes each year. On average, 26 pedestrian deaths occurred each year in the rural northern and southern parts of the city, while 52 pedestrians were injured annually. Shah, Syed Akhtar, Numan Ahmad, and Ahn Byung Ha. 2018. "Pedestrians' Exposure to Road Traffic Crashes in Urban Environment: A Case Study of Peshawar, Pakistan." *Journal of the Pakistan Medical Association* 68 (4).

Health Access

18. **Accessibility and affordability of health services is a major issue, especially in the northern and southern districts of KP.** A lot of time is spent waiting for transportation and travelling to health facilities. Inability to travel to healthcare facilities has been associated with higher mortality and morbidity from conditions and diseases that are otherwise treatable.[26] Analyses of existing and new household data suggest that lack of transport availability and large travelling distances rank among the main constraints for people, specifically women of child-bearing age.[27] Poor rural road conditions also lead to increased vulnerability in the face of public health emergencies (such as the COVID-19 pandemic), hindering access to essential medical services and preventive measures, such as vaccines.

Access to Markets

19. **Poor market integration can hurt smallholder farmers.** The agriculture sector provides livelihoods to 85 percent of the KP population, accounts for 20 percent of the provincial GDP, and employs 40 percent of the labor force. Geospatial analyses show big gaps in access to markets, particularly in the northern and southern districts of the province. This, coupled with inadequate storage facilities, leads to significant post-harvest losses and an overall grim outlook for the province's agricultural output, less than 10 percent of the total production of fruits and vegetables is processed in KP.[28] Factors such as poor road conditions, great distances from farms to major urban centers and markets, as well as high transportation costs for southern districts can also be attributed to these losses. Sustainable and all-weather roads can aid in linking farmers to markets and buyers. As a result, strengthening rural road infrastructure can raise agricultural productivity and output, reduce losses, increase income, boost the economic activities and livelihoods of farming communities, and alleviate rural poverty.[29]

20. **The low climate resilience of rural roads has impacted economic activity.** Extreme climate causes road damage and transport disruptions due to snow, embankment failures, flooding of carriageways, slope failures, and landslides. Such events are more intense in some areas and disrupt accessibility to basic services, as well as generate recurrent costs for lives, livelihoods, and the sustainability of infrastructure. In 2011, the GoKP found one-third of KP to be vulnerable to floods. In 2015, floods and landslides in the district of Chitral (North KP) caused damage worth approximately PKR 4,289.26 million (US$42 million) to roads and bridges.[30] In addition, transport was disrupted, affecting the

[26] Weiss, D.J., Nelson, A., Vargas-Ruiz, C.A. et al. 2020. "Global Maps of Travel Time to Healthcare Facilities." *Nature Medicine* 26: 1835–8. https://doi.org/10.1038/s41591-020-1059-1

[27] Iftikhar ul Husnain, M., Rashid, M. & Shakoor, U. Decision-making for birth location among women in Pakistan: evidence from national survey. *BMC Pregnancy Childbirth* **18,** 226 (2018). https://doi.org/10.1186/s12884-018-1844-8

[28] Based on data from Planning Commission and the World Bank's estimates.

[29] In Punjab, for instance, the construction of approximately 8,104 km of rural roads in several districts, carried out under a rural road development program, is estimated to have generated PKR 5,559 million in annual monetary benefits for wheat farmers in those districts. See: Chaudhry, Ahmen, Umair Mazher, Mannan Hassan Khan, and Muhammad Avais Tahir. 2020. "How Rural Roads Affect the Farmers? An Empirical Analysis of Farm- Gate Prices in Punjab, Pakistan." Publication No. 447, Punjab Economic Research Institute, Lahore.

[30] Chitral Floods 2015: Recovery Needs Assessment and Action Framework Provincial Disaster Management Authority Khyber Pakhtunkhwa, December 8, 2021. https://www.pdma.gov.pk/sub/uploads/Chitral%20Floods%20-%20Recovery%20Needs%20Assessment.pdf

poorest rural villages. The Provincial Disaster Management Authority has recorded 20 flood and landslide events in the last 50 years

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

21. The Project Development Objective (PDO) is to improve safe and climate-resilient rural accessibility to schools, health facilities and markets in selected districts of Khyber Pakhtunkhwa.

Key Results

22. The proposed PDO indicators are:
    (a) Access to schools: Travel time savings for rural population to access nearest school in selected districts.
    (b) Access to health services: Travel time savings for rural population to access nearest health facility in selected districts.
    (c) Access to markets: Travel time savings for rural population to access nearest market in selected districts.
    (d) User satisfaction with rural road transport, disaggregated by gender.

D. Project Description

23. **The project aims to improve all weather access to schools, healthcare facilities and markets in priority districts.** The total cost of the project is US$310 million, out of which US$300 million will be financed by IDA and US$10 million by the GoKP as counterpart financing. The project is comprised in 4 components:

24. **Component 1: Safe and climate resilient access (IDA: US$274 million; GoKP: US$10 million).**
    (a) **Road upgrading and rehabilitation in select districts, including design, rehabilitation, maintenance, and supervision of works.** This sub-component will finance designs, rehabilitations, maintenance, and supervision of works for rural roads in selected districts. Starting with a long list of roads shared by the GoKP (based on the accessibility analysis),[31] roads and districts were prioritized for upgrading and rehabilitation based on the criteria that improving these identified roads would maximize access gains to schools, markets, and healthcare facilities.[32] Almost all the roads proposed by GoKP are present in areas vulnerable to snowfall and floods. 30 percent of the roads proposed under this component are unpaved and will need to be paved and/or upgraded to higher levels i.e., surface treated, asphaltic pavement.
    (b) **Improvement of climate resilience of infrastructure, including the raising of embankments, provision of side drains, improvement of culverts, ditches, vegetation, bridges, enhanced slope protection, adoption of design standards for pavements, and climate investments to mitigate effects of rainfall and high temperatures.** This sub-component will also finance climate investments (design, works, and maintenance) for rural roads to ensure all-weather accessibility to basic services. This includes but is not limited to raising embankments, providing side drains, improvement of culverts, ditches, vegetation, bridges, enhanced slope protection, adopting design standards for pavements that reflects a higher level of climate resilience, a decision to seal previously gravel roads, and geometric improvement of roads to enhance road safety. Drainage design will also reduce the effects of more frequent and increased precipitation. In addition, the component will include green techniques, including use of vegetation, geo-mesh, gabions, pavement seals, etc., to mitigate effects of rainfall and high temperatures. Adaptation measures through resilience planning at the network level will ensure continuous access to schools, health facilities and markets.
    (c) **Improvement of road safety infrastructure and equipment in the vicinity of schools, health facilities and marketplaces, including the provision of sidewalks, bike lanes, road markings, signage, and traffic calming measures.** This sub-component will improve road safety infrastructure and equipment in the vicinity of schools, health facilities, and marketplaces to ensure the safety of children, pedestrians, and cyclists. Infrastructural improvement in these areas will improve the safety of commuters and support climate adaptation and mitigation measures. These improvements will include the provision of sidewalks, bike lanes (if necessary), road markings, signage, traffic calming measures, i.e., rumble strips, marking of reduced speed zones, delineators, traffic lights, guard rails, etc. Specifically in the vicinity of schools, ramps to facilitate the movement of differently abled children will also be considered where appropriate. Additionally, crowd-sourcing platforms such as the Safe2School app can be utilized in enhancing the safety of school-going children and in reducing preventable traffic-related casualties and injuries using real-time data collected from app users on their daily commute.[33]
    (d) **Inclusion of gender approach and universal access features and measures in the design, construction/rehabilitation, and maintenance of rural roads.** This component will include gender considerations during the implementation of the project. Various options for direct and indirect employment will be explored in the design, rehabilitation, and maintenance of rural roads, keeping in view the social norms of the province, e.g., ensuring inclusion of women in the labor force for road rehabilitation (bidding documents will include provision to employ a minimum of 5 percent of women), in order to increase female labor force participation. Also, a pilot for routine maintenance using microenterprises will be implemented, aimed at

boosting female labor participation rate in the sector by predominating employing women to undertake road maintenance tasks.[34] Similarly, designs and works in the vicinity of schools and facilities will include universal access features and measures.

(e) **Provision of fiberoptic infrastructure to facilitate the expansion of internet connectivity in the future.** This component will consider the provision of basic fiberoptic infrastructure, i.e., ducts and manholes alongside selected roads to facilitate the expansion of internet connectivity in the future. This component will be implemented as per the telecom and digital plan of the GoKP.

25. **World Bank support under this component will cover COVID-19 health protocols, gender-based violence (GBV) action plans, emergency and contingency plans to address natural disasters, and auditing.** The GoKP will be responsible for utility relocation, stakeholder compensation, and other social costs.

26. **Component 2: Safe and affordable school journeys for girls (IDA: US$14 million)**. This will support the provision of subsidized school transport for girls from marginalized communities. Improving transport to and from school has been shown to improve school participation and regular attendance.[35]

27. The key features of the intervention are as follows:

(a) **Target population.** This component will focus initially on middle school-age girls where home-to-school distances are much larger than for primary schools. Once the intervention is more mature, it may be extended to upper primary school, where OOS rates are still significant (albeit lower than in middle schools). The intervention will target both OOS girls (to bring them into the fold) and girls who are currently enrolled in school but are facing difficulties with daily commutes (to facilitate regular attendance). For this project, OOS girls are defined as those that have not attended school for at least six months prior to receiving subsidized transport. The project aims to support the enrollment of over 8,000 such OOS girls cumulatively over its course.[36] The bulk of beneficiaries (around 95,000) are expected to be girls that are already enrolled in school, in which case the project will support their regular attendance and reduce attrition. Such girls will be supported by the project cumulatively over five years. While the intervention will focus primarily on female students, but a small number of female teachers may also be supported to enhance safety perceptions among parents.

[31] A list of 76 roads with a total length of approximately 1,200 km was shared by the GoKP.

[32] Health care incorporates primary/secondary/tertiary facilities. “Markets” refers to all markets; however, access to central markets and the provincial capital, Peshawar, are also available separately.

[33] The Safe2School application has been developed and funded by the Global Road Safety Facility. It uses real-time crowd-sourced data to assess the road safety of users such as schoolchildren, by flagging safety issues and dangerous locations on school routes, allowing parents and local authorities to shape interventions accordingly.

[34] The pilot sustainable microenterprises for routine maintenance will initially be implemented at a small-scale, involving only 1 or 2 districts. The aim of the pilot is to collect lessons learned, which can be applied to the implementation of future programs.

[35] The KP Sustainable Transition and Retention in Delivering Education (STRIDE) undertaken by the KP E&SED and the Institute of Social and Policy Studies (I-SAPS), Islamabad, around 2018 in two KP districts showed improved attendance and retention rates. Note that the KP STRIDE project provided transport for children to and from afternoon schools that offered second chances for children that had dropped out of the school system. The program has since been adopted by the GoKP in a few districts. The government, particularly the E&SED, is therefore familiar with the model and will be engaged during project implementation for advice and support. Several programs in Zambia, Brazil, and India have shown the provision of transport boosts punctuality and reduces absenteeism, among other positive educational outcomes.

[36] Note that this may not be 8,000 unique individuals, as some girls that are supported to re-enroll may remain enrolled for several years thereafter and will continue to receive the subsidized transport provided, they meet the attendance bar.

(b) **Districts.** This component will be implemented in the Torghar, Hangu, Dera Ismail Khan, and Lakki Marwat (these have been chosen provisionally) as they have among the highest rates of OOS girls.[37][38] District choices will be refined based on detailed surveys of vulnerable populations and local availability of transportation for the intervention.

(c) **Selection of schools and beneficiaries.** Specific schools and beneficiaries will be selected by the GoKP Department of Education within the first year of the project being declared effective, based on a detailed survey of OOSC populations in the chosen districts, and available school choices. Schools will be selected based on the following criteria: (i) public schools as well as low fee private or community schools, as these may be more practical choices in certain communities; and (ii) schools with functioning parent teacher council (PTC) or equivalent administrative body to coordinate the intervention.[39] Beneficiaries will be selected based on the following criteria: (i) a home-to-school threshold of 1.5 km,[40] which may be adjusted based on the detailed survey; (ii) needs, defined based on qualification for other cash transfer programs (such as the Benazir Income Support Program, BISP), while ensuring that children are not already receiving other subsidies for transportation; and (iii) lack of access to other private means of transport. Children will be required to maintain an attendance of at least 80 percent[41] (which will be monitored on a semi-annual basis) to remain eligible for the subsidy. Smaller scale pilots may be considered in parallel with the detailed study, subject to data availability and readiness of the PIU.

(d) **Level of subsidy.** The project will subsidize up to 70 percent of transport costs (a survey of transport costs undertaken by I-SAPS in rural KP found them to be typically in the range of PKR 1,000 to PKR 2,500 per month), with parents being expected to cover the remainder. Based on this level of subsidy and the budget, over 100,000 children[42] may be supported during the five years of the intervention.

(e) **Modality.** PTCs will be strengthened to sign and manage contracts with appropriately experienced and qualified local private transport providers. The project will fund the development of contracts that will include key performance indicators (KPIs), safety, and service standards. Local private transport providers will be selected following a community-driven development method, as per the World Bank's Procurement Regulations. If necessary, transport providers will be trained on safety, security, and gender considerations. As community schools and low-fee private schools generally do not have formally appointed PTCs, equivalent structures led by head teachers will be leveraged or new structures involving parents will be created, where necessary. To reduce the risk of mismanagement, payments to service providers will be made directly by the Project

[37] NMDs have been avoided for this intervention to avoid any overlap with the KP Rural Investment and Institutional Support Project, which will develop local service delivery models leveraging village councils and may include accessibility related interventions.

[38] OOS rates for rural girls in the 5 districts are: 90 percent (Kohistan), 84 percent (Torgarh), 62 percent (Hangu), 62 percent (Dera Ismail Khan) and 58 percent (Lakki Marwat)

[39] The District Performance Scorecard introduced by the GoKP Department of Education tracks whether public schools have functioning PTCs. PTCs in public schools are led by school headteachers who are appointed civil servants. PTCs have been called upon to implement and monitor projects at the school level (e.g., construction or rehabilitation) and are therefore not foreign to the concept of having to manage school level interventions.

[40] Distances longer than 1.5 km have been shown to affect schooling outcomes in other contexts. See, for instance: Bosch Lander S.M., Jonathan C.K. Wells, Sooky Lum, and Alice M. Reid. 2020. "Associations of the Objective Built Environment Along the Route to School with Children's Modes of Commuting: A Multilevel Modelling Analysis (the SLIC Study)." *PLoS ONE* 15 (4): e0231478. https://doi.org/10.1371/journal.pone.0231478

[41] Conditional cash transfer programs in Pakistan and elsewhere regularly set attendance criteria for continued support. For instance, the Waseela-e-Taleem cash transfer scheme piloted in 2012 across Pakistan used 70 percent as the minimum attendance bar. The 80 percent threshold has been chosen in consultation with the GoKP.

[42] Note that 100,000 is the cumulative figure across five years of the intervention and may not represent unique beneficiaries. Children supported in the first year of the intervention may continue to receive support in subsequent years so long as they remain enrolled and attend school regularly.

Implementation Unit (PIU)-CWD through its Designated Account (DA) using e-wallets, upon verification of adherence to contract terms by the PTCs (overseen by the Department of Education). Parents will not receive any money directly.

(f) **Communication.** The KP Free Compulsory Primary and Secondary Education Act 2017[43] allows for the formation of community-led School Attendance Authorities (SAAs) for each school, to ensure that children under its jurisdiction attend school. SAAs have the power to direct parents to send their children to school and can pursue legal action if parents fail to comply The GoKP will notify these authorities in the selected districts to inform communities of provision. The project will finance part of the materials to support SAAs in their enforcement and supervision work.

(g) The budget allocated for this component includes a buffer in case the cost of transport services increases with time (beyond the assumed figure of PKR 2,500 per month), or if families are unable to pay 30% of the transport costs, as envisaged, and other unforeseen cost escalations.

28. **Sustainability of the intervention is key.** The GoKP has agreed to continue the subsidized transport provision beyond the project lifespan, contingent on its success. A covenant to this effect has been included in the project financing agreement. The project will fund a rigorous impact evaluation (mid-term and end line) under Sub-component 3.2 to assess the impact of the intervention on enrollment and attendance. Appropriate comparators will be identified, such as schools from the same or neighboring districts not chosen for the intervention. Data collection at the school and local authority levels will be strengthened where necessary.

29. **Component 3: Project management and institutional strengthening (IDA: US$12 million).** This component covers two sub-components summarized below:

30. *Sub-component 3.1: Project Management (IDA US$5 million).* This includes provision of support for Project management, implementation, and monitoring, technical assistance and capacity building for the staff of the PIU, education department, Project audit, and implementation and monitoring of the environmental and social safeguards standards. The project resources will finance, inter alia, the administrative and operational costs related to implementation and monitoring of Component 1 and 2, technical assistance (TA), the core staff of the PIU, auditing costs, capacity building for the PIU staff, Department of Education, and implementation and monitoring of the environmental and social (E&S) safeguards standards.

31. *Sub-component 3.2: Institutional Strengthening Program (IDA US$7 million):* Carrying out of a series of institutional strengthening programs, including improvement of policies for road sustainability, road funding, financing, resource allocation, procurement and management of road works contracts, development of a GIS based road access management system, implementation of pilot sustainable microenterprises for routine maintenance with gender considerations, introduction of modern and climate resilient design and construction practices, tooling policy, road maintenance policy, e-tolling, performance-based contracts, public-private participation in roads, the use of geo-enabling initiative for monitoring and supervision, development of tools and capacity strengthening of E&SED and CWD to leverage geo-spatial analyses, and carrying out of impact evaluation of activities under Part 2 of the Project. The sub-component will:

[43] Section 5 of the Khyber Pakhtunkhwa Act No. XII of 2017. http://kpcode.kp.gov.pk/uploads/2017_12_THE_KHYBER_PAKHTUNKHWA_FREE_COMPULSORY_PRIMARY_AND_SECONDARY_EDUCATION_ACT_2017.pdf

(a) Finance comprehensive road sector reforms to improve policies for road sustainability, road funding, financing, and the capacity of the CWD to select, prepare, and allocate efficient resources, and procure and manage road works contracts, including emergency works in the event of floods, landslides, earthquakes, and other natural disasters, etc. It will finance the provision of hardware, software, and training for the development and operationalization of a geographic information system (GIS) based RAMS[44] with a capability to plan and maintain the network based on actual requirements, accessibility, and the risk of climate vulnerability. It will also support the introduction of modern and climate resilient designs and construction practices, paving decision-making tools (e.g., SPADE-PLUS), preparation of tolling policy, road maintenance policy, support to scale up performance-based contracts through coordination with ADB on existing financed projects,[45] and public–private participation in roads (project preparation and contract management).
(b) Use the WB developed Geo-enabling Initiative for Monitoring and Supervision (GEMS) for remote monitoring of road upgrading and infrastructure works funded by the project.
(c) Develop tools and boost the capacity of the E&SED and CWD to leverage geospatial analyses to select sites for the construction of schools. With such tools and accompanying changes to decision-making processes, the GoKP will be able to optimize infrastructure investments to boost access to schools. It will build on efforts to strengthen data on schools (including private schools) funded under the KP HCI project.[46] The approach can also be extended to other social amenities such as healthcare facilities and markets, subject to the availability of data and with support from concerned departments.
(d) Fund the impact evaluation of interventions in Component 2.

32. **Component 4. Contingent Emergency Response.** Provision of immediate response to an Eligible Crisis or Emergency, as needed. This is a zero-dollar component that can be triggered in future crises, considering the vulnerability to floods and landslides in KP.

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Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

[44] Through collaboration with the Asian Development Bank.
[45] Through collaboration with the Asian Development Bank.
[46] See for instance, the work done by Geo-referenced Infrastructure and Demographic Data for Development in Sierra Leone: GRID3. 2021. "Sierra Leone Government uses GRID3 Insights for New School Infrastructure and Catchment Area Planning Policy." https://grid3.org/news/report-provides-insight-for-improving-access-to-education-in-sierra-leone; and in Nigeria: GRID3. 2020. "How Geospatial Data Can Help Solve Nigeria's Educational Challenges." https://grid3.org/news/how-geospatial-data-can-help-solve-nigerias-educational-challenges.

Summary of Assessment of Environmental and Social Risks and Impacts

The Environment risk is rated Substantial, which is mostly due to civil works during project implementation, and Borrower?s exposure to ESF implementation which was limited but has improved during another Bank?s financed project. To mitigate this risk, the PIU will hire a supervisory firm with robust experience on environmental standards and the PIU team will hire a senior environmental specialist financed by the project. Standalone procurement risks are substantial given recent experience with C&W.

The Social Risk Rating is substantial and mostly related to potential land use, acquisition and any resettlement related to civil works. There are also risks related to labor influx, the prevailing security situation in the region, and community health and safety. There are moderate SEA/SH related risks, and gender considerations will be further assessed during project preparation. Detailed management plans will be prepared prior to any civil works to manage the E&S risks according to mitigation hierarchy.

E. Implementation

Institutional and Implementation Arrangements

33. **The CWD of the GoKP will implement the project through a dedicated Project Implementation Unit (PIU).** The PIU has been created and is headed by a Project Director (PD) who is a senior CWD staff**.** The PD is assisted by a team comprising a procurement specialist, an infrastructure engineer, environmental and social safeguards specialists, a financial specialist, and two education specialists. The PIU will be supported by a Design and Supervision Consulting firm. Upon completion, the rehabilitated roads will be handed back to the CWD for its maintenance (see details of the organization and the roles of PIU in Annex 1).

34. **A cross-sectoral implementation committee (IC) will be created for the proposed project.** The GoKP Planning and Development Department, with the assistance of the CWD, will set up an IC to organize and coordinate project activities from construction to operation. The IC will be led by the CWD and will comprise the Departments of Education, Health, and Agriculture. The Project Operations Manual (POM) will describe the roles and responsibilities of the IC. The POM will be completed and approved by the WB prior to Board approval.

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