



Mid Term Review
PAKISTAN SUSTAINABLE TRANSPORT
PROJECT

Final Report

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Mid Term Review Report

UNDP-GEF Project

Pakistan Sustainable Transport Project (PAKSTRAN)

Project Name	Pakistan Sustainable Transport Project (PAKSTRAN)
GEF Project ID	00072773
UNDP PIMS ID	3953
Award ID	00058561
Funding Source	GEF, UNDP and Government of Pakistan
Country	Pakistan
Region	South Asia
Time frame	June 18, 2011-June 17, 2016
Operational Focal Area	
Strategic Program	
GEF-Agency	UNDP- United Nations Developmental Programme
Implementing Partner	Ministry of Water and Power, Government of Pakistan
Responsible parties	Government of Punjab (P&D Department); Government of Sindh (Transport Department); Ministry of Communications, Government of Pakistan; International Union for Conservation of Nature (IUCN).

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Preface

This Mid Term Review of “Pakistan Sustainable Transport” project sets out findings, and recommendations for UNDP.

The report has been developed in compliance with the Terms of Reference for Mid Term Review. The conclusions and recommendations set out in the report are solely those of the reviewer and are not binding on UNDP.

The author would like to thank all those who assisted in the Mid Term Review of PAKSTRAN Project, particularly the staff of UNDP, Project Management Unit of PAKSTRAN, CIU Sindh, CIU Punjab, Ministry of Water and Power, Pakistan Environmental Protection Agency, Economic Affairs Division, The Urban Unit, National Transport Research Centre, NED University Karachi, UET Lahore, Punjab Transport Department and IUCN.

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Acronyms and Abbreviations

ADB	Asian Development Bank
BRT	Bus Rapid Transit
CIU	Component Implementation Unit
CNG	Compressed Natural Gas
CO₂	Carbon Dioxide
ENERCON	National Energy Conservation Center (under the Ministry of Environment)
FERTS	Fuel Efficiency in the Road Transport Sector (UNDP-GEF Project completed in 2005)
GEF	Global Environment Facility
GHG	Greenhouse Gases
IUCN	International Union for the Conservation of Nature
JICA	Japan International Cooperation Agency
KPK	Khyber Pakhtunkhwa
NTRC	National Transport Research Center (under the MoC)
Pak EPA	Pakistan Environmental Protection Agency
PAKSTRAN	Pakistan Sustainable Transport
ProDoc	UNDP Project Document
R&D	Research and Development
ToE	Tonnes of oil equivalent
ToR	Terms of Reference
UNDP	United Nations Development Programme
UU	Urban Unit (under the Punjab Provincial Government's Planning & Development Department)
WB	World Bank
UET	University of Engineering and Technology

Executive Summary

Project Information Table

Project Title	Pakistan Sustainable Transport Project (PAKSTRAN)		
Project ID	00072773	Financial Update	
PIMS ID	3953	Total Budget of Project (5 years)	\$ 7,800,000
Country	Pakistan	GEF Contribution	\$ 4,800,000
Region	South Asia	UNDP Contribution	\$ 3,000,000
Focal Area		Annual Work Plan Wise Expenditure Detail	Amount (US\$)
Strategic program		Approved Budget for 2015	2,660, 257
Executing Agency	Ministry of Water and Power, Government of Pakistan	Total Expenditure (Jan-10 Dec, 2014)	1,030,899
Management Arrangements	NIM	Total Expenditure 2012-2014	1,501,892 (19%)
		Budget available for 2015 onward	6,298,108
Other Partners Involved	Government of Punjab (P&D Department); Government of Sindh (Transport Department); Ministry of communications; IUCN	Programme period	2013-2017
		Project Timeframe	June 18, 2011 to June 17, 2016

Project Description

Pakistan Sustainable Transport (PAKSTRAN) project is supported & financed by United Nations Developmental Programme (UNDP) along with the Global Environment Facility (GEF).

The proposed project will be implemented for 5 years from 1 October 2010 to 31 December 2015.

The objective of the project is to reduce the growth of the energy consumption and related greenhouse gas emissions from the transport sector in Pakistan, while simultaneously improving urban environmental conditions and improving Pakistan's trade competitiveness by:

- Creating an enabling investment environment for sustainable urban transport;
- Creating an institutional and policy framework that is supportive of urban transit development;
- Improving the fuel efficiency of trucking freight transport; and

- Increasing awareness and capacity in Pakistan on sustainable transport.

The four main components of the project are:

Outcome 1: An operational sustainable urban transport system in Punjab province;
 Outcome 2: An operational sustainable urban transport system in Sindh province;
 Outcome 3: Improved fuel efficiency in truck freight transport; and
 Outcome 4: Increased public awareness and institutional capacity on sustainable transport concepts.

The project is funded by UNDP/GEF with a total budget of US\$ 7.8 million (US\$ 3.0 million from UNDP and US\$ 4.8 million from GEF).

Project Progress Summary

The project progress has been delayed right from the start i.e., procedural delays between the Government of Pakistan and UNDP in signing of the project agreement, problem with Implementing Partner (ENERCON), and disagreement on appointment of National Project Director between UNDP and the project Implementing Partner (IP). Moreover, there have been considerations about enforcement of certain procedures by UNDP like signing of Letters of Agreement amongst the IP and all responsible parties (RPs), delay in approval of work plans and subsequent release of funds to the project PMU/CIUs, etc.

There has been limited progress on the planned activities of Outcome 1: An operational sustainable urban transport system in Punjab province and Outcome 2: An operational sustainable urban transport system in Sindh province.

There has been considerable progress on planned activities of Outcome 4: Increased public awareness and institutional capacity on sustainable transport concepts.

The implementation on activities of Outcome 3: Improved fuel efficiency in truck freight transport activities have just commenced in 2015.

According to the ProDoc, a total expenditure of US \$ 4.978 m (64%) should have been incurred by end of year 3 of the project whereas, the actual total expenditure up to 10 December 2014 is US \$ 1.501 m (19%).

MTR Ratings & Achievement Summary for PAKSTRAN

Measure	MTR Rating	Achievement Description
Project Strategy	N/A	
Progress Towards Results	Overall Objective Achievement Rating: 4 MS	The project is trying to achieve its objective which is only possible if year 3 targets are met by the end of 2015.
	Outcome 1: An operational sustainable urban transport system in Punjab province Achievement Rating: 3 MU	The preparatory work on augmentation of sustainable urban transport feasibility study for BRT is under progress and some of the consultancy studies have been just awarded..

	Outcome 2: An operational sustainable urban transport system in Sindh province Achievement Rating: 3 MU	The main breakthrough is that Sindh Provincial Policy is in finalisation stage. RFPs for a number of consultancy studies have been floated and some of them have been awarded as well.
	Outcome 3: Improved fuel efficiency in truck freight transport Achievement Rating: 4 MS	All preparatory work has been finalized successfully by the project IP/PMU (vacant positions under this Outcome have been advertised; recruitment process is completed; staff is on-board; CIU-Trucking is established at NTRC). The formal activities on this component have also been started in 2015..
	Outcome 4: Increased public awareness and institutional capacity on sustainable transport concepts. Achievement Rating: 4 MS	Most of the planned activities have been conducted and overall performance of this component is satisfactory.
Project Implementation & Adaptive Management	4 MS	Implementation of two out of four project components are presently not leading to efficient and effective project implementation and adaptive management. This is all due to the procedural delays between the Government of Pakistan and UNDP as explained above in the Project Progress Summary. However, the project IP/PMU is working efficiently to improve the pace of project implementation through its all CIUs.
Sustainability	3 ML	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Mid Term Review.

Concise summary of conclusions

The project implementation was severely affected by a number of problems which are typical in Pakistan and now most of them have been resolved.

The project activities practically commenced after July 2014 when funds were released to the project for the implementation of 2014 annual work plan. The project, with efforts from the IP/PMU, has tried to initiate a number of consultancy studies and some of them are in different stages of the procurement process. Indeed, a lot of preparatory works have been carried out by PMU and all four components. **It is anticipated that by end of 2015 all the year 3 targets will be achieved and project will be in a position to achieve its intended outcome.**

The positive aspect of the project is that now there is greater political support for BRTs/Mass Transit System in Pakistan which will considerably assist the project in its implementation.

Recommendation Summary Table

Rec #	Recommendations
	Outcome 1: An operational sustainable urban transport system in Punjab province;
R 1	Reconsider need to conduct PEQS Study for transport sector and involve relevant stakeholders.
R 2	Empower Transport Department, UET Lahore in the management of R&D Unit and ensure its sustainability. Fresh MOU/LoA be signed (along with the revised ToRs of staff) where sustainability issue is incorporated as per the needs/requirements of the project IP/PMU and UNDP. The R&D Unit in Lahore should maintain its interaction and linkage with the approved Centre of Excellence in Environmentally Sustainable Urban Transport (SoE-ESUT) being established by PMU in Islamabad under PAKSTRAN project.
	Outcome 2: An operational sustainable urban transport system in Sindh province
R 3	Establish Centre for Sustainable Transportation Research and Capacity Development (CSTRCD) at NED University, Karachi. Similar to Lahore case, the sustainability issue be addressed properly as per the needs/requirements of the project IP/PMU and UNDP. The CSTRCD in Karachi should also maintain its interaction and linkage with the approved Centre of Excellence in Environmentally Sustainable Urban Transport (SoE-ESUT) being established by PMU in Islamabad under PAKSTRAN project.
	Outcome 3: Improved fuel efficiency in truck freight transport
R 4	Conduct study on assessment of CO2 emissions from truck freight transport in a Business-As-Usual scenario, as well as in a Low-Carbon scenario as per international best practises and involv Pakistan Environmental Protection Agency, EPA Punjab and Sindh Environmental Protection Agency to get maximum benefits.
R 5	Involve Private Progressive trucking companies in pilot project for modernisation and energy efficient trucks.
R 6	Conduct trucking studies which are of interest to more than two provinces
	Outcome 4: Increased public awareness and institutional capacity on sustainable transport concepts
R 7	Conduct awareness programme on technical issues facing urban transport and trucking industry of Pakistan.
R 8	Trainings should be imparted as per their standard protocol and on the approval of the project IP/PMU i.e., availability of training material, field visits, active involvment of trainees in group work, and end of project evaluation. The minmum duration of a training should be one week.
	Project Implementation and adoptive management
R 9	Extend duration of PAKSTRAN Project up to 30th September 2017.
R 10	Revise Project Results Framework as per the needs/requirements of the project IP/PMU and UNDP, and finalize revision.
R 11	Ensure productive use of consultancy studies carried out under PAKSTRAN through the centers being established, including: SoE-ESUT of Islamabad; R&D Unit of Lahore; and CSTRCD of Karachi

R 12	Engage transport, automobile and other experts/staff (such as: at least 2 Technical Experts, 1 Admin and Finance Assistant, and 1 Project Assistant) to assist PMU on consultancy studies being undertaken and to ensure achievement of outcome by PAKSTRAN project.
R 13	Involve relevant stakeholders of ICT, KPK and Baluchistan in PAKSTRAN activities.
R 14	Improve quality and delivery of AWP's by all responsible parties (RPs) and ensure timely flow of funds to the Project

1 Introduction

1.1 Purpose and Objectives of Mid Term Review

The objective of the Mid Term Review is to identify challenges and outline corrective actions to ensure that the project is on track to achieve maximum results by its completion. The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document (ProDoc), and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project's strategy, its risks to sustainability. The TOR for the Mid Term Review of PAKSTRAN has been provided at **Annexure A**.

According to the TOR and "Guidance for Conducting Mid Term Reviews of UNDP-Supported, GEF-Financed Projects" (2014), the review focused on the following categories of project progress:

Project Strategy encompassing the Project design and Result Framework/Log frame.

Progress towards Results: Progress towards outcomes analysis. Additionally to compare and analyze the Baseline with the one completed right before the Mid Term Review; Identify remaining barriers to achieve the project objectives in the remainder of the project and; by review of the aspects of the project that have already been successful, identification of ways in which the project can further expand these benefits.

Project Implementation and Adaptive Management in relation to: a) Management Arrangements; b) Work Planning; c) Finance and co-finance; d) Stakeholder Engagement; e) Reporting and f) Communications.

Sustainability that includes the following aspects: a) Financial risks to sustainability; b) Socio-economic risks to sustainability; c) Institutional Framework and Governance risks to sustainability and, d) Environmental risks to sustainability.

Conclusion and Recommendations evidence-based conclusions in the light of the findings and recommendations for critical intervention that is specific, measurable, achievable and relevant.

1.2 Scope & Methodology

The approach and method adopted for Mid Term Review is based on the criteria of **credibility, reliability and usefulness**. It used the following guidelines:

- Term of Reference for UNDP-GEF Mid Term Review: Pakistan Sustainable Transport Project (PAKSTRAN)
- Guidance for Conducting Mid Term Reviews of UNDP-Supported, GEF-Financed Projects. Final Draft, June 2014.

The Mid Term review was conducted by a single independent reviewer from 25th November to 25th December 2014.

The Mid Term Review of PAKSTRAN has been conducted as per following tools:

- **Documentation reviews:** A review of PAKSTRAN Project Document, Annual Progress Reports, Quarterly Progress Reports and Annual Work Plan for 2015. The list of documents review has been provided in **Annexure B**.
- **Meetings with stakeholder:** The Reviewer met with the key stakeholders of PAKSTRAN comprising of UNDP, Ministry of Water and Power, Project Management Unit of PAKSTRAN, CIU Sindh, CIU Punjab, , Pakistan Environmental Protection Agency, The Urban Unit, National Transport Research Centre, NED University Karachi, UET Lahore, Punjab Transport Department and IUCN. The list of stakeholders met during the Mid Term Review of PAKSTRAN has been provided in **Annexure C**.

All qualitative and quantitative data obtained through desk review and meetings with stakeholders was tabulated for analyses.

The Mid Term Review report has been prepared as per table of contents described in guidance for conducting Mid Term Reviews of UNDP Supported, GEF Financed Projects, 2014.

In addition to a descriptive assessment, the GEF rating system was applied to assess the project credibility, reliability and usefulness, as well as the quality of the Monitoring and Evaluation systems in accordance with the scales provided in the **Table 1.1**.

Table 1.1: GEF Rating System adopted for the Mid Term Review of PAKSTRAN

Ratings for Progress Towards Results	Ratings for Project Implementation & Adaptive Management	Ratings for Sustainability
6. Highly Satisfactory (HS)	6. Highly Satisfactory (HS)	4. Likely (L)
5. Satisfactory (S)	5. Satisfactory (S)	3. Moderately Likely (ML)
4. Moderately Satisfactory (MS)	4. Moderately Satisfactory (MS)	2. Moderately Unlikely (MU)
3. Moderately Unsatisfactory (MU)	3. Moderately Unsatisfactory (MU)	1. Unlikely (U)
2. Unsatisfactory (U)	2. Unsatisfactory (U)	
1. Highly Unsatisfactory (HU)	1. Highly Unsatisfactory (HU)	

1.3 Limitations to the MTR

There were delays in meetings with the stakeholders which were planned to be completed on 11th December 2014 but actually completed on 19th December 2014. Furthermore, the UNDP during middle of the assignment directed the Reviewer to submit the Mid Term Review of PAKSTRAN as per new guidance for conducting Mid Term Reviews of UNDP Supported, GEF Financed Projects, 2014.

1.4 Structure of the MTR report

The Mid Term Review of PAKSTRAN project report presents findings and compiles all information under one document, the document which comprises of;

Chapter 1 provides an introduction of Mid Term Review, **Chapter 2** describes the project description and strategy, **Chapter 3** gives the findings of the Mid Term Review and **Chapter 4** describes the conclusions and recommendation.

2 Project Description and Background Context

2.1 The Project

Pakistan Sustainable Transport (PAKSTRAN) project is an initiative of UNDP-GEF that aims to provide technical assistance to reduce the growth of energy consumption & related greenhouse gas (GHG) emissions from transport sector in Pakistan, while simultaneously improving urban environmental conditions and improving Pakistan's trade competitiveness.

2.2 Development context

In response to urban congestion issues, Pakistan's largest urban centers, notably Karachi, Lahore and Rawalpindi-Islamabad, have been preparing mass transit solutions for a number of years. Karachi has completed several feasibility studies, implementation plans and design drawings for Light Rail Transit (LRT) and Bus Rapid Transit (BRT) systems since 1990 with much of the international technical assistance (namely ADB and JICA) targeted towards the City District Government of Karachi. In April 2009, the ADB deferred negotiations for a US\$450 million TA and loan for BRT in Karachi pending clarity on implementation arrangements. Lahore's transit situation has been studied several times since 1990 with LRT being a preferred mode for study until this year with a new government being formed. The Punjab Provincial Government has stated their intentions to pursue Bus Rapid Transit (BRT) for their mass transit needs.

Rawalpindi-Islamabad recruited an international consulting firm to develop a master transport plan for the cities and include designs for mass and bus rapid transit corridors. **The 8-month study to be started in 2009 will assess current traffic use patterns and identify routes for development of BRT and other traffic management measures.**

With the importance of road freight to Pakistan's overall economy, the GoP declared the trucking sector as a formal industry in January 2008 and adopted a "Trucking Policy" prepared under the auspices of the Ministry of Industry Production and Special Initiatives (now known as MoIP) to improve the performance of the sector. The Policy was the culmination of a number of donor-assisted initiatives to increase the energy efficiency of commercial vehicle fleets including:

- The National Trade Corridor Improvement Program (NTCIP) was adopted by the GOP in 2005 to improve Pakistan's deteriorating trade transport and logistics infrastructure. The WB, ADB and JICA have provided targeted investments into key reforms, infrastructure improvements and operations efficiencies;
- Fuel Efficiency in the Road Transport Sector (FERTS) was executed by ENERCON and implemented and funded through UNDP-GEF between 1996 and 2005. FERTS conducted a number of studies into the improving fuel efficiencies of commercial vehicles including trucks and buses.

The CO₂ emissions in Pakistan from the transport sector were estimated to be **37.1** million tonnes CO₂ in **2008**. By **2020**, GHG emissions from the transport sector could be as high as **66.6 million tons** CO₂ if there are no GHG mitigation interventions in the sector. The baseline analysis indicates that GHG emissions from the transport sector are

already more than 38.6 million tonnes CO₂ in 2009 and are expected to increase by at least 5% every year for the foreseeable future. This translates into a rise in direct carbon emissions from transport alone to 49.3 million tonnes annually by 2014 or earlier depending on the growth rate of transport.

2.3 Problems that the project sought to address

The major problems that the project addresses are:

- Unsustainable urban transport system in Punjab and Sindh Provinces,
- Road congestion in urban areas,
- Increasing Greenhouse Gas Emission,
- Lower fuel efficiency and
- Lower public awareness and institutional capacity on sustainable transport concepts

2.4 Project Description and Strategy

PAKSTRAN project intends to bring about the reduction of GHG emissions from the transport sector by demonstrating Sustainable Urban Transport measures that improve urban mobility and modernize the trucking fleet for fuel efficient cargo transport, and creating a favorable investment climate for replication of these measures. Moreover, the project will guide the development of the demonstrations through:

- Demonstrating international best practices for the holistic planning and implementation of integrated urban transport systems;
- Strengthening the institutional and policy framework for urban transportation development at the provincial government level;
- Demonstrating international best practices for modernizing the trucking fleet through developing fleet strategies in concert with strengthening of regulatory institutions;
- Creating an investment environment with widespread stakeholder acceptance to sustain modernization of trucking fleets;
- Raising public awareness and knowledge of issues in sustainable urban transport and fuel efficient transport.

Strategically, to maximize the probability of PAKSTRAN success, demonstrations for the BRT system and a program to improve fuel efficiency of commercial vehicles will be holistically planned, and integrate international best-practices with ongoing transportation planning, public transport investment programs, and truck fleet modernization initiatives. Specifically, the proposed PAKSTRAN approach will:

- Adopt holistic planning approaches towards a successful “demonstration” BRT system
- Streamline institutions; strengthen strategic plans and the regulatory policy framework at the provincial level
- Utilize holistic approaches to demonstrate implementation of the Trucking Policy
- Raise awareness and knowledge levels

- Be adaptively managed.

2.5 Project Implementation Arrangements

The activities for the implementation start by preparation of BRT for Punjab and Sindh. In parallel, the Trucking Policy is to be implemented along with National Awareness Campaigns. After the preparation of BRT for Punjab and Sindh, an integrated BRT Planning is to be made and implemented on the base of which Provincial Transport policy is to be formulated. The outcome would be an operational sustainable transport system.

For the Trucking policy implementation, a strategy is to be made followed by a pilot to implement the strategy. After identifying and addressing the viability gaps, the second outcome of improved energy efficiency in truck freight transport would be achievable.

National Training Program and Workshops on BRT experience and Truck Policy implementation are to be done for an improved awareness and capacities of sustainable transport concepts.

2.6 Project timing and milestones

The project duration is five years and all the project activities were planned to commence simultaneously.

Planned annual expenditure of the PAKSTRAN

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
GEF	950,000	972,000	1,096,000	1,001,000	781,000	4,800,000
UNDP	470,000	695,000	795,000	560,000	480,000	3,000,000
Total	1,420,000	1,667,000	1,891,000	1,561,000	1,261,000	7,800,000
%	18	21	24	20	16	100

2.7 Main stakeholders

The key stakeholders for the PAKSTRAN project include:

- **The Government of Pakistan: Planning Commission (PC) provides the oversight for Pakistan's public development programme in tandem with the Ministry of Finance (MoF).**
- ENERCON or the National Energy Conservation Center under the administration of Ministry of Environment (MoE) was supposed to collaborate but their involvement was cancelled and Ministry of Water and Power was nominated as implementing partner after a thorough consultative process amongst the project signatories.
- Ministry of Communication, Government of Pakistan and The National Transport Research Center (NTRC) under the administration of the Ministry of Communications (MoC).

- The Provincial Government of Punjab (PjPG), The Urban Unit (UU) under the administration of the Planning and Development Department (PjP&D) of the PjPG, The Lahore Transport Company (LTC).
- The Provincial Government of Sindh (SPG), The Transport Department (STD) and The Karachi Mass Transit Cell (KMTC)
- Academic technical institutions in Pakistan, the most prominent including:
 - National University of Science and Technology (NUST), Islamabad;
 - University of Engineering and Technology (UET), Lahore;
 - National Engineering Directorate (NED), University of Engineering and Technology, Karachi;
 - IUCN Pakistan

3 Findings of Mid Term Review

3.1 Project Start Date and Duration

According to the ProDoc, “the start date of the project is 1st October 2010 and end date is 31st December 2015”.

According to Para 100 of the ProDoc “ A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organisation structure, UNDP country office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders”.

According to the ProDoc, the first activity of the project is holding of “inception workshop” which happened on 4th March 2012. Therefore, 4th March 2012 is the start date of the project and its end date should be 30 September 2017. However, there were the delays after holding of inception workshop are as follows:

- The UNDP committed funds for the project with a start data of 1st October 2010. However, the project agreement was signed on 20th June 2011 and Inception Workshop was held on 4th March 2012.
- The first thing after the project inception meeting was the recruitment of staff for PMU & CIUs but it took extraordinary time in 2012. The PMU successfully organized first Project Board meeting on 4th October 2012, however, AWP could not be approved due to discrepancies related to the financial allocations in ProDoc.
- The 2nd Project Board meeting was held on 1st January 2013 by PMU in which AWP was approved by the PB (Except CIU-IUCN) in this meeting. The Annual Work Plan (AWP) 2013 of IUCN was also approved by the Project Board on 27th February 2013.
- PMU project account was opened on 18 September 2012. However, CIUs accounts took extraordinary delays, which were opened on 18th March 2013. After opening of all CIUs accounts, PMU forwarded advance requests to UNDP on 25th March 2013.
- UNDP forwarded a new format of AWP (as per their CPAP) to PMU; so new version of AWP-2013 was forwarded to UNDP which got approved by the NPD and UNDP on 1st April 2013.
- However, in the meantime Mr. Amjad Nazir (NPD-PAKSTRAN) was transferred on 4th April 2013 and the Government appointed Mr. Arif Alauddin as NPD on 7th May 2013.
- PMU forwarded the case of change of signatory to UNDP for Mr. Arif Alauddin on 30th May 2013; Government then appointed Mr. K. M. Zubair as NPD-PAKSTRAN on 20th June 2013. PMU once again forwarded the case of change of signatory to UNDP for Mr. K. M. Zubair as NPD on 27th June 2013;
- In the meantime, UNDP came up with a new requirement on 4th July 2013 for release of funds i.e. signing of LOAs amongst the IP and all responsible parties.

PMU prepared draft LoAs and shared with UNDP in July 2013; however, the Government again appointed Mr. Arif Alauddin as NPD-PAKSTRAN on 17th July 2013.

- The PMU once again forwarded the case of change of signatory to UNDP for Mr. Arif Alauddin as NPD on 29th July 2013; Change of signatory case for Mr. Arif Alauddin as NPD PAKSTRAN (or otherwise) remained pending with UNDP till 3rd February 2014;
- After a thorough consultative process amongst the Ministry of Water and Power, Ministry of Climate Change, EAD and UNDP, the Ministry of Water and Power took direct ownership of the project by appointing its Additional Secretary as NPD of PAKSTRAN in February 2014 which was endorsed by UNDP on 17th February 2014.
- Project RRF was revised (output-specific 'baseline', 'indicators', 'targets' re-adjusted) in March-April 2014 jointly by PMU and UNDP with support from all CIUs.
- AWP-2014 was signed by UNDP and the project IP on 2nd June 2014. Funds were released to all CIUs by UNDP on 21st July 2014. Thereafter, the implementation of project activities started in full gear after 21st July 2014.

The current allowable duration of UNDP/GEF funded project is seven years. The UNDP committed funds for PAKSTRAN Project with a start date of 1st October 2010. Therefore, keeping in view all above mentioned procedural delays by the Government of Pakistan and UNDP, the project duration should be extended up till the end of seven years period i.e., 30th September 2017.

3.2 Project Strategy

3.2.1 Project Design

Pakistan is facing a rising urbanization, higher incomes and affluence, an increase in the private ownership of motor vehicles, and urban congestion. The consequences of urban transport congestion in Pakistan are having a direct bearing on sustainable development in terms of:

- The livability of urban areas that is deteriorating;
- Economic growth that is constrained by urban transport inefficiencies;
- Foreign exchange reserves that decrease with the increased consumption of imported fuels; and
- Poverty alleviation where lower income households who rely on public transport are disproportionately impacted by increased urban congestion.

Pakistan's population was estimated to be 163.8 million in 2008 with an annual growth rate of 1.87%. The country also has one of the most urbanized populations in Asia with an estimated 53 million urban citizens in 2008 or 35% of its population (up from 31% in 1990).

The largest cities in Pakistan (Karachi (15.1 million), Lahore (8.5 million), Rawalpindi/Islamabad (2.78 million)) have an estimated population of 26.38 million inhabitants and an annual population growth rate of 2.4%.

More than 70% of the national industrial sectors are located in the urban areas. Conversely, the rural and small town proportion of Pakistan's population has decreased from 71% in 1990 to 65% in 2005.

The growth of urban centers and associated issues to improve urban mobility has posed a number of challenges for the GOP. In general, government responses to improve urban traffic flows have been to construct more roads and overpasses to assist private car owners. The network of roads increased from 170,000 km in 1990 to 258,000 km in 2005 to accommodate the increasing numbers of motor vehicles; there is concern, however, within a number of government agencies over the lack of planned interventions to effectively reduce urban commute times as well as improve urban air quality.

While the increased number of roads and overpasses projects has improved traffic flows in several cities, the growth of the number of vehicles in Pakistan has increased traffic volumes to the extent that urban commute times are still increasing. Clearly, the strategy of increasing road capacity is not sustainable.

There is increase in number of motor vehicles in Pakistan from 2.7 million in 1990 to 6.2 million in 2008, an increase of over 100%. Over this same period, private vehicle ownership has increased from 0.7 million to 1.5 million vehicles, an increase of 230%. Recent data on registered motor vehicle ownership in Karachi shows an increase from 1.36 million in 2005 to 1.70 million in 2007, an average of 450 vehicles being added daily to an already congested road system. In Lahore, the increase has been similar with 1.25 million vehicles in 2005 to 1.7 million in 2008, an average of 400 vehicles being added daily to Lahore's road system.

Overall CO₂ emissions in Pakistan are estimated to have risen from 80 million tons in 2003 to 110 million tons in 2008 and are expected to more than double by 2020 to 250 million tons in a business-as-usual scenario, with a 6.3% annual growth rate.

In 2008, the entire transport sector was responsible for 30% of the total energy consumption in Pakistan. As such, it is also a significant contributor to GHG emissions with an estimated 26.7 million tonnes CO₂eq in 2003 and 37.1 million tonnes CO₂eq in 2008. By 2020, GHG emissions from the entire transport sector could be as high as 66.6 million tons CO₂eq if there are no GHG mitigation interventions in the sector and assuming 5% growth in the transport sector.

PAKSTRAN project intends to address the root cause of degrading urban mobility in Pakistan which is due to absence of enabling policies to facilitate sustainable urban transport development and market transformation to energy efficient motor vehicles.

The implementation of PAKSTRAN project was positively impacted by the operation of Lahore Metro Bus Service during February 2013 which resulted in conducting a number of consultancy services as follows:

- Mapping of Land use and infrastructure along the BRT Corridore-1 from Gajjumatta to Shahdara in Lahore;

- Mapping of environmental and socio-economic profile along the BRT Corridore-1 from Gajjumatta to Shahdara in Lahore
- Survey of all public transport services in the city particularly feeder route of the BRT corridor -1 from Gajjumatta to Shahdara in Lahore.
- These studies, when conducted, will inter alia help in the design and operation of BRT Corridors in other cities of Pakistan.

The whole concept of PAKSTRAN was very dynamic and it was requirement of the day. The urbanisation is going very fast in Pakistan and as such the need for BRT is increasing day by day.

PAKSTRAN project addresses the Government of Pakistan priorities to achieve Millennium Development Goals (MDGs) by ensuring environmental sustainability – MDG No. 7 in the transport sector.

The project focus is the implementation of BRT systems in three main cities, Karachi, Lahore and Islamabad/Rawalpindi that will serve as a viable short and medium-term option to improve the efficiency of urban transport mobility.

However, when the BRTS of Lahore become operational during February 2013 and the benefits of mass transit system become evident. Each day 80,000 to 120,000 people use Lahore Metro Bus Service. The overall priorities of the Government of Sindh and KPK quickly shifted toward mass transit systems in Karachi and Peshawar whereas Government of Punjab went ahead with the plans to establish BRTS at Rawalpindi/Islamabad, Multan and Faisalabad.

There is broad consensus amongst Federal and Provincial Governments of Pakistan on modernization of the trucking fleet including strengthening the truck "industry" status; motor vehicle registration system, motor vehicle examination systems; axle load management, driver licensing and training; truck resting areas or "trans-freight stations"; trailer manufacturing and separate trailer registration; national standards and specifications for trucks, trailers and semi-trailers; and industrial estates for truck and bus body makers.

PAKSTRAN project concept is in line with the national sector development priorities and plans which has been developed in collaboration with Government of Pakistan by the United Nations.

An output of Pakistan's 2004-2008 UNDAF is the "One Program" which defines the CP between 2008 and 2010 through the implementation of five Joint Program (JP) Components, one of which is the JP for Environment.

PAKSTRAN will contribute primarily to the outcome and outputs under the Environment JP Component 4 (Sustainable Urbanization) as well as JP Component 1 (Strengthened and Operational Institutional Mechanisms for Integrated Environmental Management).

PAKSTRAN falls under the strategic priorities of the GEF, specifically under Operational Program OP11 "Promoting Environmentally Sustainable Transport" and GEF-4 strategic objectives for OP11 projects of market transformation for sustainable mobility for Pakistan's urban areas.

The global objectives of the project is to facilitate GHG reductions through these market transformation activities. As such, urban mobility will improve through modal transport switches from the private automobile to public transit and commercial transport fuel efficiencies will be improved through efforts to modernize the freight trucking fleet.

The project strategy does provides the most effective route towards expected/intended results which are in line with the overall goal of PAKSTRAN.

Given the history of failed initiatives to develop and implement sustainable transport in Pakistan (Lahore Metro Bus Service which was first proposed during 1991 and was only operational in 2013 which took 20 years to implement).

PAKSTRAN design focuses on demonstrating best practices that are applicable to the Pakistani urban concept and taken into account lessons learned and experiences from previous failed initiatives, in developing and implementing an integrated BRT system and programs to modernize the trucking sector.

The project has been designed in consultation with the inputs provided by the key stakeholders. The outcome and lesson learned of completed, on-going and pipeline projects in transport sector funded by the Government of Pakistan and multilateral donor agencies were considered to ensure achievement of the outcomes.

PAKSTRAN's comprehensive approach integrates environmentally sustainable development, and global and global environmental concerns and commitments in national development planning, with emphasis on poverty reduction and with quality gender analysis.

The only operational BRT is Lahore Metro Bus Service and there is compartment for lady passengers in every bus.

3.2.2 Results Framework/Log Frame

The project success indicators have been provided in the Project Results Framework of PAKSTRAN. These indicators have annual target values, which are monitored during the course of the project implementation.

According to the ProDoc, the project IP/PMU prime responsibility is to ensure that PAKSTRAN produces the results specified in the project document, up to the required quality standard and within the specified constraints of time and cost.

All the Annual Work Plans of PAKSTRAN are approved by the Project Board, which is due to the continuous effort of the PMU. The Annual Work Plan for the PAKSTRAN Project for years 2013, 2014 and 2015 do follow the format of Project Results Framework showing the follows:

Table 3.1: Format of Annual Work Plan of PAKSTRAN

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIME FRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount (US\$)
And baseline, associated indicators and annual targets	List activity results and associated actions								

All the outputs are further sub-divided into sub-outputs with their respective indicators along with the baseline. The planned activity is elaborated by activity result and action to be taken.

The annual work plans of PAKSTRAN are discussed internally within the PMU and all the component implementation units, and finalized.

The annual work plan is submitted to Project Board for approval and decisions are made to achieve the project development results, best value money, fairness, integrity, and transparency.

Although, during the project board meetings an overview of progress report of work carried out during the preceding period is narrated by the National Project Manager (NPM) and Component Directors (CDs). However, there is a need that the progress reports presentations to Project Board (PB) should be moved objectively and it should be clearly mentioned what are the bottle necks which are affecting the project progress and how these should be resolved.

The Project Results Framework of PAKSTRAN's indicators, targets and their means of verification are quite elaborate.

However, based on the fact that the first BRTS in Pakistan i.e., Lahore Metro Bus Service is operational and Rawalpindi/Islamabad BRTS will be operational soon, time is required to design and implement BRTS in Multan/Faisalabad/Karachi. There is a need to revise the outcomes of Component 1 and 2 which can be achieved by the end of the PAKSTRAN Project.

The “Outcome 1 - Operational sustainable urban transport system in Punjab Province” should be revised as “Outcome 1 - Operational sustainable urban transport system in two cities of Punjab Province.”

The “Outcome 2 - Operational sustainable urban transport system in Sindh Province” should be revised as “Outcome 2 -Operational sustainable urban transport system in one city of Sindh Province”

The revision of the above-mentioned outcomes will slightly affect the overall GHG reductions by the end of the project. Furthermore, PAKSTRAN during the course of the project implementation has made revisions in the targets of component 1 and 2 that are highlighted “Red” in the Revised Project Results Framework.

PAKSTRAN project's CO₂ Calculations and Assumptions of Direct Emission Reductions are based on two BRT demonstrations: One each in Punjab and Sindh. The third demonstration is a truck modernization initiative involving a fleet of 50 Bedford trucks.

The Indirect Emission Reductions of PAKSTRAN are based on the lessons learnt from the demonstration of BRT, and the enabling environment that will be created thereafter, it is expected that the design, development and implementation of SUT systems (including BRT systems) in other cities of Pakistan will be facilitated. PAKSTRAN is expected to influence provincial and city authorities to consider and implement SUT systems and measures. In this respect, any CO₂ emission reductions

from these efforts by local authorities in the urban centers of the country in the future can be considered as indirect CO₂ emission reductions.

Therefore, it is anticipated that PAKSTRAN will be able to achieve the targeted total indirect GHG emission reductions from PAKSTRAN add up to 1,714,800 tonnes of CO₂.

Table 3.2 REVISED PROJECT RESULTS FRAMEWORK of PAKSTRAN

Strategy	Indicator	Baseline	Targets	Source of verification	Assumptions
Project Objective Reduction of greenhouse gas (GHG) emissions associated with urban transportation	Cumulative, direct GHG emission reductions in the urban transport sector of three selected cities compared to BAU scenario over a 20-year period, ktonnes Cumulative, direct GHG emission reductions from a pilot scheme to modernize the trucking fleet compared to BAU scenario over a 10-year period, ktonnes	0 ktonnes CO ₂ 0 tonnes CO ₂	608 ktonnes CO ₂ (direct reduction from demonstrations) 5 ktonnes CO ₂ (direct reduction from modernization program)	Reports of BRT demonstrations including surveys of ridership making transport modal switches from car to public transport Reports from pilot truck modernization program on improved fuel efficiency	Monitoring and evaluation activities planned under the project are fully supported and implemented Continued Good support for the modernization of the trucking fleet to reduce air pollution and GHG emissions Reliable data from surveys on modal transport switches and fuel consumption of modern energy efficient trucks Firm commitments from all stakeholders for the implementation of integrated BRT projects including financing of project Firm commitments from all stakeholders to implement a truck modernization program
Outcome-1 Operational sustainable urban transport system in two Cities of Punjab Province	Number of bankable feasibility plans submitted for demonstration BRT project funding by Year 4 ⁴¹ Number of approved integrated BRT implementation plans for a selected city in Punjab Province by Year 3 Number of cities planning to implement BRT systems by Year 3 Number of operational BRT demo systems by Year 5 Percent increase in public transit ridership by Year 5	0	2 Feasibility plans augmented for BRT in Lahore, Rawalpindi/Islamabad. 2 Feasibility studies from output 1.1 being upgraded to holistic BRT implementation plan for the BRT system. No. of capacity development programmes for city government/govt. agencies and local engineering firms in engineering, construction, operations and management of BRT system	Feasibility plans for integrated BRT in the selected Punjabi cities. Plans for implementing an integrated BRT system Infrastructure for a demonstration BRT system Surveys monitoring transport modal switches from private cars to BRT system Reports on government agency involvement from	Provincial government is willing to support BRT development including subsidizing the project Full stakeholder support including existing bus operators Sufficient capital is available for the replenishment of the ECF Willingness of all stakeholders to use ECF as a modality for revolving finance

Strategy	Indicator	Baseline	Targets	Source of verification	Assumptions
	<p>Cumulative energy savings generated by BRT demonstration by end Year 5, toe</p> <p>Cumulative GHG reductions from the BRT demo by end Year 5, tonnes CO2e</p> <p>Number of provincial government agencies involved with planning of SUT projects by Year X</p> <p>Number of strategic plans for holistically planned integrated urban transport by Year X</p>		<p>One operational BRT system with number of institutions having enhanced capacity to operate, maintain, and manage a BRT system</p> <p>8% increase in public transit ridership</p> <p>1,000 toe of energy saved from BRT demonstration</p> <p>20,280 tonnes CO2e reduced by the BRT demonstration</p> <p>New policy framework proposing & stream-lining the reporting lines, responsibilities and accountability for each relevant agencies (Punjab Government, and other institutions).</p> <p>1 strategic plan for holistically planned integrated urban transport</p>	<p>Department of Transport</p> <p>Completed strategic plans for SUT development in 2 cities</p> <p>APRs and PIRs</p>	<p>Availability of land for bus operations (i.e. maintenance and fuelling depots, bus stops and transfer areas)</p>
<p>Outcome-2</p> <p>Operational sustainable urban transport system in one city of Sindh Province</p>	<p>Number of bankable feasibility plans submitted for funding by Year 4⁴⁴</p> <p>Number of approved integrated BRT implementation plans for a selected city in Sindh Province by Year 5</p> <p>Number of financing institutions that commit financing assistance to city buses by Year 3</p> <p>Number of cities planning to implement BRT systems by Year 5</p> <p>Number of provincial government agencies involved with planning of SUT projects by Year 5</p> <p>Percent increase in public transit</p>	0	<p>1 bankable integrated BRT feasibility with implementation plan</p> <p>1 approved Sindh provincial policy on sustainable urban transport with associated implementing rules and regulation (IRRs)</p> <p>2 financial institutions with commitments to finance BRT systems</p> <p>2 cities planning SUT systems</p> <p>5 provincial agencies planning SUT projects</p> <p>4% increase in public transit</p>	<p>Feasibility plans for integrating federal bus purchases with integrated BRT plans for a city in Sindh Province</p> <p>Strengthened institutional framework and strategic plans that enable BRT and SUT development in Sindh Province</p> <p>APRs and PIRs</p> <p>Project surveys monitoring transport modal switches from private cars to BRT system</p> <p>Strategic plan that</p>	<p>Provincial government is willing to support sustainable urban transport development including subsidizing the project</p> <p>Political harmony amongst all stakeholders on SUT development</p> <p>Sufficient capital is available for the replenishment of the ECF</p> <p>Full stakeholder support including existing bus operators</p> <p>Availability of land for bus operations (i.e. maintenance</p>

Strategy	Indicator	Baseline	Targets	Source of verification	Assumptions
	<p>ridership by Year 5</p> <p>Cumulative energy savings generated by BRT pilot by end Year 5, toe</p> <p>Cumulative GHG reductions from the BRT pilot by end Year 5, tonnes CO_{2e}</p> <p>Number of strategic plans for holistically planned integrated urban transport by Year 5</p> <p>Number of provincial policies for developing sustainable urban transport for Sindh Province by Year 5</p>		<p>ridership</p> <p>490 toe of energy saved from BRT demonstration</p> <p>10,140 tonnes CO_{2e} reduced by the BRT demonstration</p> <p>1 strategic plan for holistically planned integrated urban transport</p> <p>New policy framework proposing & stream-lining the reporting lines, responsibilities and accountability for each relevant agencies (Sindh Government, and other institutions)</p>	<p>provides clarity to Sindh Provincial Government on development of SUT</p> <p>Sindh provincial urban transport policy paper</p>	<p>and fuelling depots, bus stops and transfer areas)</p>
Outcome-3 Improved energy efficiency in truck freight transport	<p>Number of background studies completed to support Trucking Policy implementation by Year 3</p> <p>Number of implementing rules and regulations (IRRs) and implementing actions formulated and recommended for approval by Year 3</p> <p>Number of IRRs approved and enforced by Year 3</p> <p>Number of trucks involved with pilots to demonstrate energy efficiency objectives of Policy by Year 4</p> <p>Cumulative energy savings generated from truck modernization pilots by Year 5, toe</p> <p>Cumulative GHG reductions from truck modernization pilots by Year 5, tonnes CO_{2e}</p> <p>Number of public-private partnerships for truck modernization by Year 5</p> <p>Number of trucks planned for</p>	0	<p>10 background studies completed on supporting implementation of Trucking Policy</p> <p>5 implementing rules and regulations</p> <p>5 IRRs approved and enforced</p> <p>50 trucks involved in pilot</p> <p>150 toe of energy saved from truck modernization pilots</p> <p>460 tonnes CO_{2eq}</p> <p>3 public-private partnerships</p> <p>2,000 trucks involved in plans for truck modernization</p>	<p>Documentation of the implementation strategy</p> <p>Documentation of real costs and benefits of truck modernization and government intentions on adopting its recommendations</p> <p>Documentation on plans and implementation of truck modernization pilots</p> <p>Documentation of the management and progress of financing plans for trucking modernization</p> <p>Monitoring reports on implementation of various policy actions</p> <p>APRs and PIRs</p>	<p>Provincial governments are willing to implement trucking policy with the support of the federal government</p> <p>Full stakeholder support including existing truck operators, their associations and truck body assemblers</p> <p>Availability of sufficient funding from various resources</p>

Strategy	Indicator	Baseline	Targets	Source of verification	Assumptions
	involvement in replication of pilots by Year 5				
Outcome 4 Increased public awareness and institutional capacity on sustainable transport concepts	<p>Number of completed awareness raising campaigns programs by Year 5</p> <p>Total number of cities benefiting from awareness raising campaigns by Year 3</p> <p>Number of completed training course on strategic urban land use and sustainable urban transport planning by Year 2</p> <p>Number of city and provincial planners and students trained on LUP and SUTP by Year 5</p> <p>Number of educational institutes where LUP and SUTP courses are offered by Year 5</p> <p>Number of completed workshops on the implementation of the Trucking Policy by Year 5</p> <p>Number of completed workshops on integrated BRT development by Year 5</p>	047	<p>5 awareness raising campaigns</p> <p>3 cities where awareness raising campaigns have been conducted</p> <p>8 training courses of strategic urban land use and sustainable urban transport planning</p> <p>30 city and provincial planners and students trained</p> <p>4 educational institutes where LUP and SUTP courses offered</p> <p>8 workshops on Trucking Policy implementation completed</p> <p>8 workshops on integrated BRT development</p>	<p>Feedback communications from clients of Information Center</p> <p>Documentation of the approved urban transport awareness-raising program, and the program implementation results and evaluation</p> <p>Awareness surveys indicating positive attitudes towards adoption of sustainable urban transport concepts and vehicle energy efficiency issues</p> <p>Minutes of workshops conducted</p>	<p>Relevant stakeholders and target groups are interested in participating and cooperating in the design, development and implementation of program</p>

3.3 Progress towards Results

3.3.1 Progress towards Outcomes Analysis

The review of the log frame indicators against progress made towards the end-of-project targets using the Progress towards Results Matrix has been conducted in accordance with the Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects.

Furthermore, the colour code progress in a “traffic light system” based on the level of progress achieved; assign a rating on progress for each outcome; make recommendations from the areas marked as “Not on target to be achieved” (red).

Green= Achieved	Yellow= On target to be achieved	Red= Not on target to be achieved
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Table 3.3: Table: Progress towards Results Matrix (Achievement of outcomes against End-of-project Targets).

PROJECT GOAL: Reduction in the growth of the energy consumption and related greenhouse gas emissions from the transport sector in Pakistan, while simultaneously improving urban environmental conditions and improving Pakistan's trade competitiveness.									
Project Strategy: Objective: Reduction of greenhouse gas (GHG) emissions associated with urban transportation.									
Indicator ¹	2010 Baseline Level ²	2012 Level in 1 st PIR	2013 Level in 1 st PIR (self-reported) ³	2014 Level in 1 st PIR	2012 Midterm Target ⁴	2015 End-of-project Target	Midterm Level & Assessment	Achievement Rating ⁵	Justification for Rating
Cumulative, direct GHG emission reductions in the urban transport sector compared to BAU scenario over a 20-year period, ktonnes	0 ktonnes CO ₂	0	Interventions regarding achievements of this output are under process and planned.	Project has not calculated or measured the reduction in GHG emissions. Steps are being taken to calculate/measure the GHG emissions by preparing M&E plans under the AWP of PAKSTRAN for 2015.	-	608 ktonnes CO ₂ (direct reduction from BRT demonstrations)		4 MS	It has only been six months since the project has actually started to implement its activities. However the project realizes that it is important to know the overall reduction in GHGs due to the implementation of project activities. Therefore, steps are being taken for calculating/measuring GHGs by preparing M&E plans.
Cumulative, direct GHG emission reductions from a pilot scheme to modernize the trucking fleet compared to BAU scenario over a 10-year period, ktonnes	0 tonnes CO ₂	0	Interventions regarding achievements of this output are under process and planned.	Project has not calculated or measured the reduction in GHG emissions. Steps are being taken to calculate/measure the GHG emissions by preparing M&E plans under the AWP of PAKSTRAN for 2015.	-	5 ktonnes CO ₂ (direct reduction from truck modernization program)		4 MS	It has only been six months since the project has actually started to implement its activities. However the project realizes that it is important to know the overall reduction in GHGs due to the implementation of project activities. Therefore, steps are being taken for calculating/measuring GHGs by preparing M&E plans.

¹ Data from the Log frame and scorecards² Data from the Project Document³ Based on the annual report, "PAKSTRAN- Annual Review Report (January-December 2013)"⁴ Mid Term Targets of the project are taken as year 3⁵ Rating assigned using the 6 point Progress Towards Results Rating Scale: HS, S, MS, MU, U, HU

Project Strategy: Outcome 1: Operational sustainable urban transport system in Punjab Province.									
Indicator ⁶	2010 Baseline Level ⁷	2012 Level in 1 st PIR	2013 Level in 1 st PIR (self-reported) ⁸	2014 Level in 1 st PIR	2012 Midterm Target ⁹	2015 End-of-project Target	Midterm Level & Assessment	Achievement Rating ¹⁰	Justification for Rating
Number of bankable feasibility plans Submitted for demonstration BRT project funding by Year 4.	0	Planned International workshop on SUT (Policy, Planning, Management and BRT), Surveys (Boarding & Alighting, and Traffic Count and Vehicle Occupancy surveys) to optimize the operations of BRT-1	Government of Punjab has laid down one BRT corridor in Lahore from Shahdara to Gajumatta which has enhanced the public transport services in Lahore. Project through its Research Officers hired for R&D Unit providing assistance to the Transport Department, Government of Punjab in collecting field data for assessment of existing corridor and carrying out survey for new	1 international workshop (3 days) conducted for enhancement of these 2 feasibility studies of augmentation as well some studies RfPs have been advertised according to PCOM rules & regulations. No complete feasibility study on BRT is available in Punjab as funds were not released by UNDP to the Component (till 30-6-2014) under the approved AWP-2014 However, CIU-Punjab has organized three sessions on SUT during the 2nd Urban Forum in Karachi in 1st Quarter of 2014.	-	Two feasibility plans augmented for BRT in Lahore and Rawalpindi	Feasibility plans have not been augmented. However, actions have been planned for AWP 2015.	3 MU	The delays in implementation of the plans to carry out the activities to achieve this target are due to the delayed release of funds by UNDP to the component. While steps are being taken to initiate required studies.

⁶ Data from the Log frame and scorecards

⁷ Data from the Project Document

⁸ Based on the annual report, “PAKSTRAN- Annual Review Report (January-December 2013)”

⁹ Mid Term Targets of the project are taken as year 3

¹⁰ Rating assigned using the 6 point Progress Towards Results Rating Scale: HS, S, MS, MU, U, HU

			BRT project in Punjab.						
Number of approved BRT implementation plans for a selected city in Punjab Province by Year 3	0	BRT Feeder routes studies have been planned and Study on integration of land use along the BRT-1 corridor and design of missing components are in the planning process.	3 consultancies to augment BRT corridor in Lahore have been floated but not completed.	TORs and 3 RfPs have been prepared and advertised according to PCOM rules and regulations. Funds were not released by UNDP to the Component (till 30-6-2014) under the approved AWP-2014.	Number of feasibility studies from output 1.1 being upgraded to holistic BRT implementation plan for the BRT system	-	The activities are in the planning phase. The studies required are being identified.	3 MU	The target has not been achieved by the year 3 as prescribed in the indicator.
Number of financing institutions that commit financing assistance to city buses by Year 4	0	0	0	The buses have been already purchased for existing BRT by Govt. of Punjab.	-	2 financial institutions commit to financing agreements for city buses	The buses have been purchased already.	S	The buses have been purchased for BRT at Lahore by Govt. of Punjab.
Number of cities planning to implement BRT systems by Year 3	0	0	0	Planned for next year 2015.	No. of capacity development programmes for city government/ govt. agencies and local engineering firms in engineering, construction, operations and management of BRT system.	-	Planned Studies for the Feasibility for BRT-2 in Faisalabad or Multan.	3 MU	The mentioned activities are planned for 2015 but all actions are delayed. .
Number of operational BRT demo systems by Year 5	0	Planned the Successful deployment and implementation	Government of Punjab has laid down one BRT corridor in Lahore from	One workshop conducted to enhance the capacity for operation, maintenance and management BRT system	-	One operational BRT system with number of institutions having enhanced	Planned the Successful deployment and implementation	2U	One BRT corridor against the end-of-project Target of one operational BRT system has

		of ITS on BRT-1, Workshop to review the design and implementation of BRT, and Third party evaluation of design of BRT system.	Shahdara to Gajjumatta and has installed ITS and TCCC system to facilitate public transport riders in Lahore. Due to delay in release of funds by UNDP to CIU-Punjab no activity could be carried out in 2013.			capacity to operate, maintains, and manages a BRT system.	of ITS on BRT-1, Workshop to review the design and implementation of BRT, and Third party evaluation of design of BRT system.		been achieved. The overall target has not been achieved.
8 Percent increase in public transit ridership by Year 5	0	0	0	After full facilitation through project intervention the target will be examined	-	8% increase in public transit ridership	0		
Cumulative energy savings generated by BRT demonstration by end Year 5	0	No initiatives	No initiatives	Planned for the next year	-	M&E plan (including methodology) development for calculating energy & emission savings	The planning process has not been initiated but expected to be completed by year 5.		
Cumulative GHG reductions from the BRT demo by end Year 5, tonnes CO _{2e}	0	0	0	Planned for the next year	-	M&E plan (including methodology) development for calculating energy & emission savings	The planning process has not been initiated but planned for year 5		
Number of provincial government agencies involved with planning of SUT projects by Year X	0	0	0	Established R &D unit in UET, Lahore	-	New policy framework proposing & stream-lining the reporting lines, responsibilities and accountability for each relevant agencies (Punjab	R&D Unit established but not operational		

						Government, and other institutions)			
Number of strategic plans for holistically planned integrated urban transport by Year X	0	Planned Stakeholder consultations for institutional framework for BRT, Training, capacity development and Establishment of Center of Excellence for BRT at UET Lahore.	R&D Unit Reports have been established and data collected by ROs. Team Leader and ROs have been hired for the R&D unit since it is under refurbishing.	Still in progress and planned for next year 2015.	-	1 strategic plan for holistically planned integrated urban transport.	No strategic plan prepared		
Project Strategy:									
Outcome 2: Operational sustainable urban transport system in Sindh Province.									
Number of bankable feasibility plans submitted for funding by Year 4	0	Existing feasibility study for the selected BRT route reviewed & updated and Project Launched. Workshop held in Karachi	The CIU Sindh has prepared up to six TORs and RFPs. However the consultancy services could not be hired due to non-release of funds by UNDP.	6 studies TORs and RfPs have been prepared in consultation with ADB and 3 are advertised according to PCOM rules and regulations.	-	1 bankable integrated BRT feasibility with implementation plan.	Existing feasibility study for the selected BRT route reviewed & updated and Workshop held in Karachi.	3 MU	Delayed activities are due to non-release of funds by UNDP on time.
Number of approved integrated BRT implementation plans for a selected city in Sindh Province by Year 5	0	0	0	Studies TORs and RfPs have been prepared in consultation with ADB and advertised according to PCOM rules and regulations.	-	1 approved Sindh provincial policy on sustainable urban transport with associated implementing rules and regulation (IRRs)	Policy under final stages of completion	S	Considerable progress has been made to finalize policy on sustainable urban transport.
Number of financing	0	0	0	Govt. of Sindh is already stepping towards and going	2 financial institutions with	-	Government of Sindh intends	2U	Government of Sindh intends to

institutions that commit financing assistance to city buses by Year 3				to finance through PPP mode in yellow line of Karachi BRT system	commitments to finance BRT systems		to finance yellow line		finance yellow line
Number of cities planning to implement BRT systems by Year 5	0	0	0	0	-	2 cities planning SUT systems	No major initiatives taken		The master plan for Karachi Mass Transit has been prepared but work on any BRT not yet commenced. There are number of BRT corridors are in final stage of financial close.
Number of provincial government agencies involved with planning of SUT projects by Year 5	0	0	0	0	-	5 provincial agencies planning SUT projects	No initiatives taken till now.		The master plan for Karachi Mass Transit has been prepared but work on any BRT not yet commenced. There are number of BRT corridors are in final stage of financial close.
Percent increase in public transit ridership by Year 5,	0	0	0	After completion of BRT then it will be monitored	-	4% increase in public transit ridership	The BRT has not been started. Monitoring will be carried out after the completion.		
Cumulative energy savings generated by BRT pilot by end Year 5, toe	0	0	0	In progress and planned	-	M&E plan (including methodology) development for calculating energy & emission savings			
Cumulative GHG reductions from the BRT pilot by end	0	0	0	In progress and planned	-	M&E plan (including methodology)			

Year 5, tonnes CO _{2e}						development for calculating energy & emission savings			
Number of strategic plans for holistically planned integrated urban transport by Year 5	0	Planned the Consultation and drafting of provincial urban transport policy for Sindh.	The principal guidelines with regard to urban transport policy have been prepared and forwarded to committee members through seeking their advice for preparation of TOR.	Studies TORs and RfPs have been prepared in consultation with ADB and advertised according to PCOM rules and regulations	-	1 strategic plan for holistically planned integrated urban transport			
Number of provincial policies for developing sustainable urban transport for Sindh Province by Year 5	0	0	The Transport Department had constituted two committees i.e. I) Legislation Sub-Committee and II) Technical Sub-committee. The committees were formed and initial work for opening of training institutes in transport department and R&D cell in NED University have been completed.	Carrying out a consultative workshop for institutional framework development/refining and re-defining the role of Sindh Transport and Mass Transit Department, transport authorities, traffic engineering KMC etc. (focusing mostly on regulatory aspects). 1 week articulated trainings for each - transport officers, motor vehicle examiners, traffic police personnel, bus drivers and road users.		New policy framework proposing & stream-lining the reporting lines, responsibilities and accountability for each relevant agencies (Sindh Government, and other institutions)	Provincial policy is in finalization stage.	3 MU	Provincial policy is in finalization stage.
Project Strategy: Outcome 3: Improved energy efficiency in truck freight transport.									
Number of background studies	0			UNDP, EAD, Ministry of Water and Power (IP) and	10 background studies	-		4 MS	Component Manager and all

completed to support Trucking Policy implementation by Year 3				PMU set together to finalize the responsible party for the trucking component through PMU analysis of NTRC, Climate change and planning commission. The members decided the Ministry of Communications as responsible party for trucking component. The recruitment process of the required staff has been just completed.	completed on supporting implementation of Trucking Policy				other staff is on-board now due to the efforts of PMU/IP of the project. Lot of initial preparatory work as been carried out. Number of ToRs has been prepared. Some studies have also been awarded/being awarded in 3 rd Quarter 2015.
Number of implementing rules and regulations (IRRs) and implementing actions formulated and recommended for approval by Year 3	0	0	0	0	5 implementing rules and regulations	-			
Number of IRRs approved and enforced by Year 3	0	0	0	0	5 IRRs approved and enforced	-			
Number of trucks involved with pilots to demonstrate energy efficiency objectives of Policy by Year 4				Few energy efficiency related studies are planned like stocktaking of studies already carried out by ENERCON, NTRC and/or other organization.	-	50 trucks involved in pilot			
Cumulative energy savings generated from truck modernization pilots by Year 5, toe	0	0	0	Studies on international best practices/trends in truck freight energy use and its linkage to the context of Pakistan, and environmental impacts of a major freight corridor.	-	150 toe of energy saved from truck modernization pilots			
Cumulative GHG reductions from	0	0	0	Study on assessment of CO ₂ emissions from truck	-	460 tonnes CO ₂	This component of		

truck modernization pilots by Year 5, tonnes CO _{2e}				freight transport in a business-as-usual scenario, as well as in a low-carbon (LC) scenario is planned. Activities not started.			the project is in its initial phase.		
Number of public-private partnerships for truck modernization by Year 5	0	0	0	0	-	3 public-private partnerships	No public-private partnerships		
Number of trucks planned for involvement in replication of pilots by Year 5	0	0	0	Studies for modernization the overall motor vehicle registration and examination system in the context of the road freight sector specific requirements and establishment of 'central data repository'.	0	2,000 trucks involved in plans for truck modernization	This component of the project is in its initial phase but not initiated.		
Project Strategy:									
Outcome 4: Increased public awareness and institutional capacity on sustainable transport concepts									
Number of completed awareness raising campaigns programs by Year 5	0	Planning activities	Developed awareness strategy through a wider consultative process, and designed action plan for Punjab and Sindh; Designed, developed, disseminated	IUCN has partnered with Pakistan Television Corporation (PTV) for preparation the documentary on the theme of Sustainable Urban Transport A media sensitization seminar was organized under PAKSTRAN on; 'Transport Sector and Related Issues: Promoting			The Planned activities were organized as planned. Developed and maintain the project webpage	4 MS	The Planned activities were organized as planned. Developed and maintain the project webpage

			<p>awareness raising material and dynamically maintained a project webpage. Ongoing</p> <p>Implementation of site specific awareness-raising campaign action plan in Punjab and Sindh</p>	<p>Media's Role in Sustainable Urban Transportation in Pakistan'. The PAKSTRAN's website (www.pakstran.pk) has been developed and deployed in cyberspace. A huge quantity of print material for awareness rising has been produced by IUCN.</p>					
<p>Total number of cities benefiting from awareness raising campaigns by Year 3</p>	0	0	0	<p>For public awareness and institutional capacity on sustainable transport concepts' National University of Sciences and Technology (NUST), COMSATS and LUMS were approached and walks were organized. To aware the youth of Pakistan regarding environment and urban transport effect contribution to environment, National University of Computer and Emerging Sciences commonly known as FAST-NU was approached and a debate competition was organized.</p> <p>Islamabad based inter university debate competition was organized along the screening of PAKSTRAN documentary.</p> <p>Closing ceremony of awareness raising campaigns organized by</p>			<p>The Planned activities were organized as planned.</p>	4 MS	<p>The activities were organized as planned.</p>

				IUCN					
Number of completed training course on strategic urban land use and sustainable urban transport planning by Year 2	0	0	0	Developed capacity need assessment and drafted capacity development plan. 2 trainings courses have been conducted for land use and sustainable transport in NED Karachi and SPARCO. One 3 days training on carbon financing has been organized in Karachi in the collaboration with the CDM Cell of Climate Change Division.	3 training courses related to strategic urban land use and sustainable urban transport area.	-	Activities are being carried out	4 MS	Good progress of the activities is observed.
Number of city and provincial planners and students trained on LUP and SUTP by Year 5	0	0	0	Undertaken the training needs assessment of the target groups in Punjab and Sindh. Ongoing Development of a comprehensive capacity development plan for the target groups in Punjab and Sindh; and Implementation of the capacity development plan for the target groups.	-	15 city and provincial planners and students trained	Activities are at the Initial phase of the project		
Number of educational institutes where LUP and SUTP courses are offered by Year 5	0	0	0	0	-	4 educational institutes where LUP and SUTP courses offered	No initiatives have been carried out		
Number of completed workshops on the implementation of the Trucking Policy by Year 5	0	0	Planned activities for	Planning phase	-	8 workshops on Trucking Policy implementation completed	This component is in the Planning phase		

			<p>lessons learned from workshops in Punjab and Sindh to be conducted by all CIUs;</p> <p>Organizing sensitization visits for the relevant planners and officials to cities with good BRT examples.</p>						
Number of completed workshops on integrated BRT development by Year 5	0	<p>Planned Organizing of two workshops on BRT development in Punjab and Sindh;</p> <p>Stock taking of previously studies undertaken for the integrated BRT and build collaborative arrangements;</p> <p>Facilitation in documentation and dissemination of workshop reports and lessons learned from workshops in Punjab and Sindh;</p> <p>Organize sensitization</p>	0	0	-	8 workshops on integrated BRT development	<p>Planned Organizing of two workshops on BRT development in Punjab and Sindh;</p> <p>Stock taking of previously studies undertaken for the integrated BRT and build collaborative arrangements;</p> <p>Facilitation in documentation and dissemination of workshop reports and lessons learned from workshops in Punjab and Sindh;</p> <p>Organize sensitization</p>		

		visits for planners and officials to cities with good BRT examples					visits for planners and officials to cities with good BRT examples		
<p>Overall Performance</p> <p>PAKSTRAN project activities started after July 2014 and most of its problems have seen resolved by the project PMU. The annual work plan for 2015 activities have been approved by Project Board during December 2014. The project staff is motivated and have the capacity to bring the project on track with the achievement of all planned activates of year 3.</p>									

3.4 Remaining barriers to achieving the project objectives

The remaining barriers to achieving the project objective in the remainder of the project as well as measures to further enhance the project benefits are as follows:

3.4.1 Project start date and duration

According to the ProDoc, the start date of the project is 1 October 2010 and end date is 31 December 2015.

According to the ProDoc, the first activity of the project is holding of “inception workshop” which happened on 4th March 2012. Therefore, 4th March 2012 is the start date of the project and its end date should be 30th September 2017. However, there were delays after holding of inception workshop and effectively the project activities started during July 2014 when funds for AWP for 2014 were released.

There is a need that the duration of the project should be resolved keeping in mind the delays that occurred after inception workshop. This will allow the carrying out of all planned activities and achievement of project objective

3.4.2 Nominate alternate National Project Director

There are frequent changes of National Project Director in most of the donor funded projects in Pakistan.

The change of National Project Director affects the decision making process and draws down from the account which adversely affects the performance of the project. Hence, the National Project Manager should act as NPD in the absence of NPD.

3.4.3 Engagement of Technical Staff for the Project

There were considerable delays in PAKSTRAN for engagement of staff for PMU and Component Implementation Units. .

The delays in engagement of staff has considerably affected the performance of the project and there is a need to streamline the process of engagement of staff by all stakeholders especially UNDP and NIMU/EAD.

3.4.4 Revision in Project Results framework

PAKSTRAN project design was prepared during 2008/2009 whereas its activities effectively started during 2014. During 2013, the first BRT became operational in Lahore with strong political support of Government of Punjab. Initially there were a lot of criticism by the political parties on the high cost of BRT of Lahore and on its subsidy. However, now the situation has gradually changed in favor of BRT as its benefits become visible. Now, almost all the political parties in Pakistan particularly in Sindh and KPK have advanced their plans to go ahead with BRTs.

PAKSTRAN outcomes are too broad and seem difficult to be achieved by the end of the project. The ProDoc mentions operational BRT in Punjab and Sindh, operational trucking policy and awareness rising about sustainable transport.

The factual position is that BRT is only operational in Lahore while in Rawalpindi/Islamabad it is in final stages of construction. Whereas in Sindh, the work on mass transit system is yet to commence. Therefore, there is a need that PAKSTRAN Project Results Framework

should be revised as per the needs/requirements by the PMU/IP to reflect the existing situation of BRTs in Pakistan and to address the challenges being faced by sustainable transport.

3.4.5 PEQS Study for Transport Sector

The AWP for 2015 foresees development of Punjab Environmental Quality Standards (PEQS) for Transport Sector. The development of PEQS will set allowable emission standards for the transport sector and facilitate monitoring of quality of vehicles and issue fitness certificates.

There are NEQS for vehicular emission which are applicable throughout the country. The NEQS for vehicular emission are based on quality of fuel available in the country and national ambient air quality standards.

The development of transport specific standards for a particular province may create confusion and could become a hurdle in the enforcement of vehicular emissions as well as in adaptation of European Emission Standards for Exhaust Emissions of New Vehicles sold in EU Member States, in Pakistan for which the Federal Government is putting all of its efforts. There is a need to analyze the justification for conducting PEQS study for transport sector in Punjab.

3.4.6 Sustainability of R&D Unit, Transport Department, UET Lahore

R&D Unit at Transport Department, UET Lahore is being established with all the required facilities which will be ready to start work on research and development in transport sector in Punjab.

The qualified research staff for R&D Unit could not be hired due to lack of interest by potential candidates as they do not see long term benefits. Also, there are concerns on sustainability (and ToRs of staff) of the R&D Unit which must be resolved as per the requirement of the project PMU/IP and UNDP. Hence, a fresh MOU/LoA be signed (along with the revised ToRs of staff) where sustainability issue is incorporated as per the needs/requirements of the project IP/PMU and UNDP. The R&D Unit in Lahore should maintain its interaction and linkage with the approved Centre of Excellence in Environmentally Sustainable Urban Transport (SoE-ESUT) being established by PMU in Islamabad under PAKSTRAN project.

3.4.7 Centre for Sustainable Transportation Research and Capacity Development at NED University

There is a need to enhance the benefits of the PAKSTRAN by establishment of Centre for Sustainable Transportation Research and Capacity Development (CSTRCD) at Department of Urban and Infrastructure Engineering within the NED University of Engineering and Technology, Karachi

3.4.8 The key objective of CSTRCD should be advancing in the core research areas in transportation, and to provide service to a wide variety of local, provincial and federal agencies involved in the transport sector. Similar to Lahore case, the sustainability issue be addressed properly as per the needs/requirements of the project IP/PMU and UNDP. The CSTRCD in Karachi should also maintain its interaction and linkage with the approved Centre of Excellence in Environmentally Sustainable Urban Transport (SoE-ESUT) being established by PMU in Islamabad under PAKSTRAN project. Study on CO₂ emission from truck freight transport

The CIU-Trucking intends to conduct a study on assessment of CO₂ emissions from truck freight transport in a Business-As-Usual scenario, as well as in a Low-Carbon (LC) scenario.

There are concerns that the equipment/facilities required to undertake such a study may not exist in the country. Furthermore, as this will be a very specialized study which will be of interest to other stakeholders too. Therefore, there is a need that relevant stakeholders, including federal and provincial EPAs, should be involved to ensure a useful study.

3.4.9 Involve Progressive trucking fleet Companies for pilot demonstration for energy efficient trucks

There is a need to involve a progressive trucking fleet companies in pilot demonstration for energy efficient trucks. If the owners of these trucking companies do know about economic benefits of energy efficient trucks than they will adopt the required measures quickly like promotion of CNG in Pakistan.

3.4.10 Conduct trucking studies which are of interest to provinces

Trucking is a devolved subject as such there is a need that PAKSTRAN should conduct studies which are interest to many provinces.

3.4.11 Public Awareness and Institutional Capacity Building Programme

There is a need that public awareness and institutional capacity building component of PAKSTRAN should be diversified to cater on more technical issues of sustainable transport.

IUCN should engage technical staff i.e., two Research Officers (similar to other CIUs) for design and delivery of their awareness and institutional capacity building programme. There is a need that capacity building interventions (after approval from the PMU/IP) should be planned for Drivers, Commercial Fleet Operators, Motor Vehicle Examiners, Traffic Police, Road Users Associations and Motor Boat Operators.

There is a need that the challenges faced by the trucking sector should be addressed like overloading, vehicle fitness certification, lack of use of proper equipment for motor fitness checking etc.

Furthermore, quality and delivery of capacity building programme i.e., trainings should be further improved.

3.4.12 Consultancy studies conducted by PAKSTRAN

PAKSTRAN project is conducting a number of studies on different aspects of BRT and there are concerns that some of the studies may not be able to achieve their intended objective.

There is a need that the recommendations of these studies may be converted into actions. Thereafter, these actions may be translated into the end products i.e., legislation, guidelines and strategic plans for future BRTs in Pakistan etc.

3.4.13 Technical staff at the PMU

There is no technical staff i.e., transport, automobile, other experts/staff with the PMU. The whole reliance of technical input is on the consultancy firms which are being engaged by PAKSTRAN for different studies. There is a need that there should be technical staff with the PMU (such as: at least 2 Technical Experts, 1 Admin and Finance Assistant, and 1 Project Assistant) to give their advice on different technical aspects and to handle consultancy studies.

3.4.14 Involvement of stakeholders from KPK/Baluchistan in PAKSTRAN Project activities

Although the project covers whole of Pakistan but its activities are mainly confined to Sindh and Punjab. There is a need that relevant stakeholders from ICT, KPK and Baluchistan should also be involved in PAKSTRAN activities.

3.4.15 Delays in release of funds

3.5 There were considerable delays in the transfer of funds from UNDP to the project. Whereas, the UNDP could only process PMU payment request on the basis of approved AWP. The AWP for 2013 needed a lot of refinement and a total of 38 versions were prepared. There is a need to improve quality and delivery of AWPs by all CIUs and subsequent quick release of funds by the UNDP. Project Implementation and adoptive management

3.5.1 Management Arrangements

The management arrangements and structure of PAKSTRAN are well define and generally effective to implement the project activities. The individual components are implemented in an efficient manner with coordinated work planning, review and reporting through the project IP (PMU/Ministry of Water and Power) as per agreed LoAs.

The Project Management Unit (PMU) has provided effective central coordination in Islamabad through Ministry of Water and Power as outlined in the Project Document. The decision-making arrangement of one of the key activity i.e., Approval of Annual Work Plans were undertaken so far in a timely manner.

The overall quality of execution of project activities by the PMU/Implementing Partner is so far satisfactory and their work done has showed that they can deliver.

The overall quality of support provided by UNDP is good but nevertheless there were delays in the transfer of funds to project against AWP for 2012/2013 which never arrived and 2014 which arrived after 7 months of delay.

3.5.2 Work Planning

Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.

There were considerable delays in start-up and implementation of the project as stated earlier. The causes of the above mentioned delays to the project implementation are as follow:

- Procedural delays between the Government of Pakistan and UNDP about signing of the initial project agreement.
- Problem with Implementing Partner (ENERCON)
- Frequent change of National Project Director
- Delays in release of funds from UNDP

Although the project faced considerable delays but nevertheless the positive approach of PAKSTRAN PMU team and UNDP were eventually able to resolve all the problems faced by the project. Presently, there is no major problem which will hinder its performance.

The work planning processes are results as described earlier. The orientation of work planning is focused towards results right from the first work plan of 2013 which is being followed to date.

The use of the project's results framework/ log frame as a management tool is being used since start of the project.

3.5.3 Finance and Co-financing

The National Project Director of Ministry of Water and Power and National Project Manager of the PMU have setup a separate bank account for the management of funds for the project in a coordinated manner and are responsible for required financial management. UNDP transfer funds to the Project Bank Account (at the IP/PMU level) and then funds are transferred to CIU Punjab, CIU Sindh, CIU Trucking and IUCN at their respective project component accounts.

All the procurement are made as per PCOM regulations. The request for proposals are floated in the national press and if required at UNDP website. The technically and financially most responsive bids are selected on competitive basis.

The funds are strictly allocated as per approved work plan. There was a request from CIU Punjab to fund visit of the PAKSTRAN team/select group to review the performance of Ahmedabad, India BRT which is one of the good examples and is most suitable in the Pakistani context as the behaviour of the passenger and socio-economic and environmental impacts of both the countries are correlated.

There is a need that the PMU/CIU Punjab should have presented a formal revision in the Annual Work Plan which should be duly approved by the Implementing Partner (IP)/PMU and formally submitted to UNDP for approval.

There is a need that the mechanism for revisions of funds should be defined and should be adopted. There is indeed need for budget revisions having appropriateness and relevance of such revisions.

The funds for the project are allocated on the basis of annual work plan and transfer of funds are made on the basis of quarterly request for payment. The next quarter payment is made on the basis of drawdown of funds during the last quarter.

All the procurement of goods and services are being held in accordance with PCOM regulations which are quite elaborate and well define. The awards of contract to successful bidders are made by the PMU and UNDP in accordance with the PCOM.

The project is funded by UNDP and GEF. The Government of Pakistan contribution is in kind.

3.5.4 Project Level Monitoring and Evaluation System

Monitoring and evaluation have been conducted (activity-based monitoring and spot-checks of CIUs by the PMU) in accordance with standard UNDP policies and procedures. The monitoring and evaluation did provide the necessary information on the project's progress specially when annual work plans are conceptualised and approved by the Project Board. The annual and quarterly progress reports do provide sufficient information about progress achieved, problem and their solutions. The existing tools of monitoring and evaluation are sufficient and there is no need for any additional tools.

3.5.5 Stakeholders Engagement

The performance of the PMU/project implementing partner is good.

Moreover, IUCN has in-house capabilities for increasing public awareness and institutional capacity on sustainable transport concepts and so far all the activities were carried out as planned. The description of the activities carried out are available at PAKSTRAN website.

The project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders like Sindh Transport Department; the Urban Unit, Ministry of Water and Power, Ministry of Communication and IUCN. The planned partnership with ENERCON could not materialized as planned rather their involvement became irritant in the implementation of the project and eventually the partnership with them has to be terminated.

The provincial and federal government stakeholders did support the objectives of the project and their commitment towards the project increased manifold when BRT become operational in Lahore.

The need for mass transit in mega cities of Pakistan will strongly push the provincial and federal government stakeholders to continue their active support to the project.

All the project's stakeholders are actively involved in achieving the project objective. Their commitment could not be deterred with the long delays in the project implementation. All the stakeholders patiently looked towards resolution of the problems. The achievement of most of the targets of Annual work plan 2014 is testimony to this. It is acknowledged that release of funds for AWP of 2014 arrived 7 month later.

3.5.6 Reporting

The adaptive management changes have been reported in the quarterly and annual monitoring progress reports. Furthermore, the updated progress of the project is presented by National Project Manager (NPM) and component directors (CDs) in all Project Board Meetings.

The PMU and National Project Manager undertook and fulfilled GEF reporting requirements as well. The quarterly and annual progress reports are clear and concise. The annual and quarterly progress reports mention the planned activity. However, the annual progress reports must clearly distinguish whether the activities were successfully carried out or not.

The lessons derived from adaptive management process have been documented in all the annual progress reports which are shared with all stakeholders.

3.5.7 Communications

The internal project communication between the PMU, CIU Punjab, CIU Sindh, CIU-Trucking and IUCN as well as with key stakeholders is regular and effective and no complain was noted during meetings with the stakeholders. The PMU received regular feedback from the project CIUs and stakeholders as well.

Every stakeholders even multilateral donors like the World Bank are interested in the project outcome and they give valuable suggestions on different aspects of the project particularly on the trucking component.

PAKSTRAN project's component for increased public awareness and institutional capacity in sustainable transport is being implemented by IUCN. The public awareness is being carried out through awareness seminars and workshops, walks, poster competitions amongst students and through PAKSTRAN website. The Project did implemented appropriate outreach and public awareness campaigns for creating awareness about sustainable transport.

Based on the feedback received (and subject to the approval from PMU/IP), now IUCN is planning to provide fact sheets highlighting on issues and needs for sustainable transport in Pakistan and achievements of PAKSTRAN. These fact sheets will be displayed at public awareness sessions as well as on PAKSTRAN website.

Furthermore, IUCN is planning to conduct advocacy with the decision makers on different issues i.e., quality of fuel being produced by the refineries in Pakistan, passage of pending legislations on different aspects of sustainable transport etc. so as to carry forward their awareness raising to the next level.

3.6 Sustainability

The risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are appropriate and up to date.

Although all possible efforts have been made in the PAKSTRAN design to mitigate perceived project risks, there are inevitably some unavoidable residual risks that will have to be carefully monitored and managed to ensure project success.

During the Mid Term Review following additional risks have been identified which should be submitted to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the Project Risks Log.

Financial risks to sustainability:

The ProDoc of PAKSTRAN project has described 2 financial risks which might affect the project sustainability.

There was one financial risk of unfavorable investment climate for BRT and bus purchases. The risk was closely connected with the federal bus purchase program. Prior to the commencement of the project, ENERCON was attempting for several years to facilitate purchases of CNG bus by the private sector.

The project's initial assessment of the investment conditions for the buses was poor with private sector firms assuming large risks including lack of CNG fuelling stations, land for maintenance depots, risk of congested bus routes, vagueness of subsidy support and lack of a hedge against higher fuel costs.

However, during the PAKSTRAN project implementation it was found that the buses for first BRT at Lahore were purchased by the Government of Punjab which will be also the case for BRT Rawalpindi/Islamabad. Now, a trend has been set that the sponsors of BRT will also finance the buses. Therefore, the probability and impact of financial risk has been reduced considerably. +

There was a financial risk of unfavorable investment climate for energy efficient truck purchases at the time of project design. There is little doubt that most commercial truck operators will require financial assistance to modernize their trucks upon successful completion of energy efficient trucks. As part of government's role to assist SMEs to modernize their assets, it will need to create the favorable investment climate by understanding the extent of subsidy support for a truck modernization program. Without this, the unfavorable investment climate will persist. The project will work to estimate the real costs and benefits of a truck modernization program that will enable government to estimate the required subsidy support. In addition, the Project will use its network of donor contacts to solicit support for financing a revolving loan instrument with favorable payback mechanisms to increase the attractiveness of purchasing a fuel efficient truck.

The third risk Unfavorable investment climate for BRT and bus purchases there is little doubt that most commercial truck operators will require financial assistance to modernize their trucks. As part of government's role to assist SMEs to modernize their assets, it will need to create the favorable investment climate by understanding the extent of subsidy support for a truck modernization program. Without this, the unfavorable investment climate will persist.

PAKSTRAN project on its completion will be 1) creating an enabling investment environment for sustainable urban transport; 2) creating an institutional and policy framework that is supportive of urban transit development; and 3) improving the fuel efficiency of trucking freight transport. This will result in opportunities for investors for construction of BRT and main transfer stations on public-private partnerships or by the Federal and Provincial Governments. The Lahore and Rawalpindi/Islamabad BRTS have been funded by the Government of Punjab whereas ADB, The Government of Pakistan as well as Government of Sindh are interested in different routes of Karachi Mass Transit.

The implementation of the Trucking component of PAKSTRAN an outcome of creating demand for energy efficiency of trucks. The positive side of energy efficient trucks will eventually attract them to go for them. The promotion of CNG in Pakistan is an excellent example that the entrepreneur go for economic benefits.

From the above it is concluded that there is likelihood of financial and economic resources will be available for replication of BRTS and energy efficient trucks once the GEF assistance ends.

Socio-economic risks to sustainability:

The ProDoc of PAKSTRAN project has described 4 risks which might affect the project implementation.

The first two risks for component 1 and 2 are the lack of ongoing, long-term provincial government support for integrated BRT in Punjab Province. Both the risks were political having probability factor of 2 and impact factor of 5. The counter measure was the

strengthening urban transport policy, strong institutional agreement with all levels of government and civil society, securing financial commitments for implementing integrated BRT.

Presently, at the time of MTR of PAKSTRAN, this political risk has considerably reduced as the first BRT at Lahore is operational and second BRT at Rawalpindi/Islamabad is at final stages of construction. Although, there were considerable criticism on the Government of Punjab on the high cost of Lahore Metro Bus Service and subsidy given on its operation. However, now the general public of Lahore and rest of Pakistan is seeing benefits of mass transit. This has resulted that now the Government of Sindh is going ahead with the implementation of Karachi Mass Transit. Now, ADB, World Bank, Government of Sindh and Government of Pakistan are in advance stages to go ahead with Karachi Mass Transit. Similarly, the Government of KPK is going ahead with BRT at Peshawar. Therefore, it is concluded that there will be continued keen interest and commitment of provincial governments of Punjab, Sindh and KPK

Private sector involvement in public transport would contribute towards reducing dependence on the public budget and increase financial sustainability of any public transport initiative. The government would maintain investments in infrastructure that will support improved urban mobility such as dedicated bus lanes, synchronized traffic lighting, safe areas for pedestrian and bicycle transport and parking places. The entire objective of conducting a demonstration is to provide useful lessons for replication, recognizing that the initiatives would be replicable as the needs in most cities of similar type are more or less the same. As such, the project will be setup to provide well designed, tightly managed and highly visible demonstrations. These demonstrations seek to build the potential for replication in other cities of Pakistan. A good demonstration will provide important lessons for replicated projects for other Pakistani cities and possibly elsewhere in the developing world.

The overall project risk is moderate. PAKSTRAN has been designed to complement and strengthen ongoing efforts in Pakistan to develop sustainable transport initiatives and to continue to facilitate close coordination and consultation between the relevant stakeholders in each of the proposed activities. Project activities will enhance local technical capacity to implement sustainable transport projects, clarify institutional responsibilities and strategic sustainable transport development; build effective awareness programs and training curriculum targeted to optimize knowledge diffusion on sustainable transport concepts; build the confidence of private investors and financing institutions to reduce risks of loans to finance urban transport projects; and develop policies and regulations to guide the sustainable development of holistically planned urban transport and a modernized trucking fleet. A major assumption for the success of PAKSTRAN is the commitment of all stakeholders involved to work towards the intended outcomes.

4 Conclusions and Recommendations

4.1 Conclusions

The project, initially, faced numerous institutional problems that are typical in Pakistan. Almost half of the anticipated duration of the project was lost in resolving these problems. However, now the project is fully on track with full support and command of the IP/PMU and its all four CIUs.

Although CIU-Punjab initiated a number of consultancy studies under Component 1: An operational sustainable urban transport system in Punjab province. However, these studies too met with problems as there was a huge gap between the budgets foreseen for a study as compared with the bids received. However, this problem was tackled later by re-advertisement of studies by UNDP. Presently none of the study is completed.

The CIU-Sindh also floated RFP for a number of consultancy studies under Component 2: An operational sustainable urban transport system in Sindh province. These studies could not be finalized for variety of reasons, including delays in release of funds. The biggest achievement is that CIU-Sindh has managed to finalize principle policy guidelines for Sindh Urban Transport Policy.

The planned activities of Component 3: Improved fuel efficiency in truck freight transport have just commenced in 2015. All preparatory work on behalf of Component 3 has been finalized successfully by the project IP/PMU (vacant positions under this Outcome have been advertised; recruitment process is completed; staff is on-board; CIU-Trucking is established at NTRC). The formal activities on this component have also been now.

The most of the planned activities of component 4: Increased public awareness and institutional capacity on sustainable transport concepts have been carried out by IUCN.

Financial performance is only 19% against planned 64% of the total committed amount (on the basis of last 3 years). However, after release of funds in July 2014, the project has achieved more than 80% delivery till the end of 2014 which is a great success of the project.

The CIUs/RPs, under the guidance and direction of the IP/PMU, will have to work hard to achieve Year 3 Targets by the end of 2015 to bring the project back on track.

The MTR has identified a number of barriers which are hindering the progress of the project as well as suggested actions to enhance the project benefits which should be adopted.

4.2 Recommendations

The recommendations based on the finding of the Mid Term Review of PAKSTRAN Project are presented as follows:

Table 4.1: Recommendations Table

Rec #	Recommendations	Entity Responsible
	Outcome 1: An operational sustainable urban transport system in Punjab province;	
R 1	Reconsider need to conduct PEQS Study for transport sector and involve relevant stakeholders.	CIU Punjab/Urban Unit and PMU

	<p>The CIU Punjab, under the overall guidance and direction of IP/PMU, should hold consultations with relevant stakeholders i.e., Pakistan Environmental Protection Agency and Environment Protection Department of Government of Punjab before conducting the study. There is a need to investigate whether adaptation of PEQS for transport sector does not conflict with any other party's mandate and how its monitoring and compliance will be ensured.</p>	
R 2	<p>Empower Transport Department, UET Lahore in the management of R&D Unit and ensure its sustainability</p> <p>Fresh MOU/LoA be signed (along with the revised ToRs of staff) where sustainability issue is incorporated as per the needs/requirements of the project IP/PMU and UNDP. The R&D Unit in Lahore should maintain its interaction and linkage with the approved Centre of Excellence in Environmentally Sustainable Urban Transport (SoE-ESUT) being established by PMU in Islamabad under PAKSTRAN project.</p> <p>Transport Department, UET Lahore should prepare an overall work plan for management of R&D Unit's affairs.</p> <p>The work plan should provide details of research to be undertaken, engagement of staff and M.Sc. Research Students, supervision of research by the academia, cost estimates, sustainability and exist strategy.</p> <p>The Urban Unit, Punjab P&D Department and Punjab Transport Department should support R&D Unit, under the overall guidance and direction of the project IP/PMU, in getting research work from public and private sector organizations so as to increase its sustainability.</p>	CIU Punjab/Urban Unit and PMU
Outcome 2: An operational sustainable urban transport system in Sindh province		
R 3	<p>Establish Centre for Sustainable Transportation Research and Capacity Development (CSTRCD) at NED University, Karachi</p> <p>Similar to Lahore case, the sustainability issue be addressed properly as per the needs/requirements of the project IP/PMU and UNDP. The CSTRCD in Karachi should also maintain its interaction and linkage with the approved Centre of Excellence in Environmentally Sustainable Urban Transport (SoE-ESUT) being established by PMU in Islamabad under PAKSTRAN project.</p> <p>The CSTRCD should focus of planning, design and operation of mass transit specially BRT, Transport policy issues, traffic engineering management, road safety, transport standards and use of remote sensing and GIS. The work should be carried out with support of Sindh Transport Department/CIU-Sindh under the overall guidance and direction of the project IP/PMU.</p>	CIU-Sindh/Sindh Transport Dept and PMU
Outcome 3: Improved fuel efficiency in truck freight transport		
R 4	<p>Conduct study on assessment of CO2 emissions from truck freight transport in a Business-As-Usual scenario, as well as in a Low-Carbon scenario as per international best practises and involve Pakistan Environmental Protection Agency, EPA Punjab, and</p>	CIU-Trucking/Ministry of Communications

	Sindh Environmental Protection Agency to get maximum benefits.	nd PMU
R 5	Involve Private Progressive trucking companies in pilot project for modernisation and energy efficient trucks.	CIU- Trucking/Ministry of Communications and PMU
R 6	Conduct trucking studies which are of interest to more than two provinces	CIU- Trucking/Ministry of Communications and PMU
Outcome 4: Increased public awareness and institutional capacity on sustainable transport concepts		
R 7	Conduct awareness programme on technical issues facing urban transport and trucking industry of Pakistan.	CIU-IUCN and PMU
	There is a need that IUCN engages technical staff i.e., two Research Officers (similar to other CIUs) for design and delivery of their awareness and institutional capacity building programme.	
R 8	Trainings should be imparted as per their standard protocol and on the approval of the project IP/PMU i.e., availability of training material, field visits, active involvement of trainees in group work, and end of project evaluation. The minimum duration of training should be one week.	CIU-IUCN and PMU
Project Implementation and adoptive management		
R 9	Extend duration of PAKSTRAN Project up to 30th September 2017.	PMU/IP, UNDP and EAD
	The PMU/MoW&P should put forward a formal request for extension of project duration to UNDP/GEF for onward submission to EAD.	
R 10	Revise Project Results Framework as per the needs/requirements of the project IP/PMU and UNDP, and finalize revision.	CIUs, PMU/IP and UNDP
R 11	Ensure productive use of consultancy studies carried out under PAKSTRAN through the centers being established, including: SoE-ESUT of Islamabad; R&D Unit of Lahore; and CSTRCD of Karachi.	CIUs and PMU
	The recommendations of consultancy studies should be converted into actions which should be translated into their intended outcomes i.e., legislation, guidelines, recommendations for future BRTs in Pakistan etc.	
R 12	Engage transport, automobile and other experts/staff (such as: at least 2 Technical Experts, 1 Admin and Finance Assistant, and 1 Project Assistant) to assist PMU on consultancy studies being undertaken and to ensure achievement of outcome by PAKSTRAN project.	PMU/IP, UNDP and EAD
R 13	Involve relevant stakeholders of ICT, KPK and Baluchistan in PAKSTRAN activities.	CIUs and PMU
R 14	Improve quality and delivery of AWP by all responsible parties (RPs) and ensure timely flow of funds to the Project	CIUs, PMU and UNDP

Annexure-A: Terms of Reference

Mid-term Evaluation of the UNDP/GEF Project
Pakistan Sustainable Transport Project (PAKSTRAN)
(PAKSTRAN - PAK/00072773)

BACKGROUND

1. Country Programme Action Plan

In Country Programme Action Plan (CPAP), UNDP amongst other targets pledges to support the management of the environment and natural resources. UNDP tackles environment at two levels, one at the local level and second to respond to the global environmental challenges. UNDP-Pakistan's environment programme supports upstream policy advice at the federal and provincial levels and also keeping in view the devolved nature of development issues, on-ground activities are carried out through local institutions and communities.

As part of the result oriented monitoring & evaluation activity, UNDP Pakistan is planning to undertake an in-depth mid-term evaluation review of "Pakistan Sustainable Transport Project (PAKSTRAN)" which is under implementation since 2012. The purpose of the review is to provide impartially derived first-hand information on the status of the project and its effectiveness in attaining the project objectives as listed in Project Document. The findings of the review allow for mid-course adjustment and will be useful for understanding the management and technical issues of the project and will specify the need for re-orientation and re-prioritizing of project activities.

To conduct the review process the Mission Members will perform, but not limited to, the activities summarized for individual Members in the following sections.

2. Introduction to Monitoring and Evaluation Policy in UNDP/GEF

The Monitoring and Evaluation (M&E) policy at the project level in UNDP/GEF has four objectives:

- To monitor and evaluate results and impacts;
- To provide a basis for decision making on necessary amendments and improvements;
- To promote accountability for resource use; and
- To document, provide feedback on, and disseminate lessons learned.

A mix of tools is used to ensure effective project M&E. These might be applied continuously throughout the lifetime of the project – e.g. periodic monitoring of indicators - or as specific time-bound exercises such as mid-term evaluations, audit reports and independent evaluations.

Mid-term evaluations are intended to identify potential project design problems, assess progress towards the achievement of objectives, and to make recommendations regarding specific actions that might be taken to improve the project. It is expected to serve as a means of validating or filling the gaps in the initial assessment of relevance, effectiveness and efficiency obtained from monitoring.

3. PAK/00072773 Pakistan Sustainable Transport Project (PAKSTRAN)

Due to increased growth of urban centers the mobility is becoming leading challenge for the Pakistan. The government response to improve urban traffic flows is to construct more roads and overpasses to assist private car owners.

The current road density in Pakistan is 0.32km/km². The network of roads increased from 170,000 km in 1990 to 260,200 km in 2009 to accommodate the increasing numbers of motor vehicles; there is concern, however, within a number of government agencies over the lack of planned interventions to effectively reduce urban commute times as well as improve urban air quality.

While the increased number of roads and overpasses projects has improved traffic flows in several cities, the growth of the number of vehicles in Pakistan has increased traffic volumes to the extent that urban commute times are still increasing. Clearly, the strategy of increasing road capacity is not sustainable as this is creating social and environmental problems, while consuming enormous amount of scarce finances.

Overall CO₂ emissions in Pakistan are estimated to have risen from 80 million metric tons in 2003 to 147.8 million metric tons in 2008 and are expected to more than double by 2020 to 250 million tons in a business-as-usual scenario, with a 6.3% annual growth rate. In 2008, the entire transport sector was responsible for 30% of the total energy consumption in Pakistan. As such, it is also a significant contributor to GHG emissions with an estimated 26.7 million tonnes CO₂eq in 2003 and 37.1 million tonnes CO₂eq in 2008. By 2020, GHG emissions from the entire transport sector could be as high as 66.6 million tons CO₂eq if there are no GHG mitigation interventions in the sector and assuming 5% growth in the transport sector.

Project Objective:

"The objective of the project is to reduce the growth of the energy consumption and related greenhouse gas emissions from the transport sector in Pakistan, while simultaneously improving urban environmental conditions and improving Pakistan's trade competitiveness by 1) creating an enabling investment environment for sustainable urban transport; 2) creating an institutional and policy framework that is supportive of urban transit development; 3) improving the fuel efficiency of trucking freight transport; and 4) increasing awareness and capacity in Pakistan on sustainable transport."

4. PURPOSE OF PROJECT MID-TERM EVALUATION

This Mid-term Evaluation will be coordinated by the UNDP Pakistan Country Office. Mid-term Evaluations (MTEs) are a monitoring tool to assess project status and challenges and to identify corrective actions to ensure that projects are on track to achieve planned outcomes since the start of the project i.e. June 2011. MTEs are required for full-sized UNDP supported projects with GEF financing, and are strongly encouraged for medium-sized projects with GEF financing. MTEs are submitted to the GEF Secretariat.

The purpose of undertaking an in-depth independent review of the Project is to provide all stakeholders with impartially derived first-hand information on the status of the Project and its effectiveness towards achieving the objectives as listed in the Project Document. The findings of the review mission will be useful for understanding the progress achieved to date and the management and technical issues of the Project.

Given the above background, the review mission through consultation with all key stakeholders will undertake the following:

- critically examine the project objectives and arrangements for its implementation;
- assess and report an account of the progress achieved to date towards the production of project outputs, emergent achievements of the project's stated objectives and its contribution toward achieving the corporate objective of UNDP and GEF;
- identify and analyze major technical, management and operational issues and impediments encountered in project implementation, if any;
- assess the monitoring and evaluation system in place;
- formulate a set of specific recommendations for actions necessary to ensure resolution of the issues and impediments identified so that the project has a greater prospect of achieving its objectives (these actions should however remain within the framework of GEF guidelines); and
- Present the recommendations to the Project Steering Committee to be convened as a concluding event for the mission.

The Mid-Term evaluation of PAKSTRAN will determine project progress being made towards the achievement of outcomes and will identify further course of action. Findings of this evaluation will be incorporated as recommendations for enhanced implementation towards the end of the project.

Annexure-B: List of Documents Reviewed

- PAKSTRAN, Annual Progress Report, 2013
- PAKSTRAN, Annual Progress Report, 2012
- PAKSTRAN Consolidated 1st Quarterly Progress Report, 2014
- PAKSTRAN Consolidated 2nd Quarterly Progress Report, 2014
- PAKSTRAN Consolidated 3rd Quarterly Progress Report, 2014
- PAKSTRAN, Annual Work Plan for 2015
- UNDP-GEF Midterm Review Template
- National Transport Policy of Pakistan, Ministry of Communication, 2009
- Guidance for conducting Mid Term Review of UNDP Supported GEF Financed Projects.
- PAKSTRAN ProDoc

Annexure-C: List of Stakeholders Consulted

Dr. Muhammad Saleem Janjua, National Project Manager, PAKSTRAN Project, Islamabad.
Mr. Muhammad Tajwar Khan, Monitoring and Evaluation Officer, PAKSTRAN, Islamabad
Mr. Hazratullah Khan, Administrative and Finance Associate, PAKSTRAN, Islamabad
Mr. Hasan Nasir Jamy, Additional Secretary/ National Project Director PAKSTRAN, Islamabad
Mr. Mahmood Akhtar Cheema, Country Representative IUCN Pakistan/ Component Director, IUCN, Karachi
Ms. Fauzia Bilqis Malik, Programme Coordinator, IUCN, Karachi
Mr. Danish Rashdi, Manager, Education, Communication and Outreach, IUCN, Karachi
Mr. Ahmad Saeed, Component Manager (PAKSTRAN CIU-IUCN), Islamabad
Mr. Zia-ul-Islam, Director (Environment), Pak EPA, Islamabad
Mr. Shahbaz Latif Mirza, Research Officer, National Transport Research Centre, Islamabad
Mr. Qaisar Ishaq, Deputy Secretary, Economic Affairs Division, Government of Pakistan, Islamabad
Mr. Hamid Akhtar, Deputy Secretary, Ministry of Communication, Government of Pakistan, Islamabad
Mr. Khizer Javed, Deputy Director, Ministry of Communication, Government of Pakistan, Islamabad
Mr. Hasan A. Zaidi, Transport Specialist, Transport & ICT, the World Bank, Islamabad
Dr. Nasir Javed, Chief Executive Officer/ Component Director, PAKSTRAN Project, the Urban Unit, Lahore
Mr. Shoaib Khalid, Research Officer, PAKSTRAN, the Urban Unit, Lahore
Dr. Syed Murtaza Asghar Bukhari, Project Director, Transport Planning Unit, Government of Punjab, Lahore

Prof. Dr. Abdul Mr. Fazal Kareem Khatri, Director General, Karachi Mass Transit Cell, Karachi
Mr. Yar Muhammad Khan, Component Manager (PAKSTRAN CIU-Sindh), Karachi Mass Transit Cell, Karachi
Mr. Sattar Shakir, Dean Faculty of Civil Engineering, UET Lahore
Prof. Dr. Mir Shabbar Ali, Chairman, Department of Urban and Infrastructure Engineering, NED UET, Karachi
Prof. Dr. Mushahid Hussain Hashmi, Chairman, Department of Automotive and Marine Engineering, NED UET, Karachi