

Proximity analysis and Perceptions Paradigm of Extension Field Staff Regarding Urban-Based Public Transport in Quetta, Pakistan

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Abstract

Present study was sought to check the variances imperceptions paradigm between and among groups of respondents who measured the significance of forty one (41) survey items as variables regarding the barriers of urban-based public transportation system. Empirical study was conducted in the Quetta city; capital of Balochistan province, Pakistan in order to addresses the obligations and violations regarding urban-based transport system with particular focus on Extension Field Staff disquiet. Quetta district was purposively taken for the study. Nonparametric statistics were used to analyze the responses of the respondents. Kruskal-Wallis Test and discrepancies among groups was used. Mann-Whitney U Test was also used to make the pair-wise comparisons between groups. The results depicted that statistically variances of the opinions among the groups ($p < .005$) for 14 out of 15 survey items was observed regarding urban-based public transportation system. Similar, significant differences were observed 3 out of 9 survey items about deferment services of public transportation. It was therefore suggested that the sophisticated technical measures about urban-based transport system should be taken at all level. Local buses routes should be re-considered keeping in view the public convenience. Further, effective Traffic Engineering Cell appliance should be recognized in order to overcome the traffic mobbed problems at city level. Quetta Development Authority (QDA) should provide the permanent bus stand (Adda) so that to facilitate the passengers through an efficient transport system. Segregate buses services should be provided the extension field staff so as to lane the extension activities at accurate genre. Long and short term planning's should be promotes with the context of vigorous urban-based transport system and inter-city linked routes established.

Keywords: Balochistan, Extension field staff, Quetta, Urban-based transportation.

Overview

Efficient urban transportations system plays an influential part in the socio-economic development of Pakistan economy. A well-organized transport structure with modern groundwork is considered economic variables of production (GoP, 2013). In the context of Pakistan, the transport system generally consists and spreads of roads, railways, air transport/ ports, shipping services and the like. Due to the present need and importance the Pakistani government had given high priorities to Transport and Logistic (T&L) sector system. The transport and logistics sector is prerequisite to be enhanced by modernizing through an incessant process of reforms. An allocation of funds about 23 percent of the total public sector development program in the tears of 2012-13 has been provided to the public transport and logistics sector in Pakistan (GoP, 2013). Nevertheless, extra investment is required to improve this sector not only for the higher expansion but also for improvement of regional connectivity and prosperity with the neighboring countries. Competitiveness, efficiency, innovation and entrepreneurship enhance the productivity of the country with the term of economic growth, social improvement, poverty reduction and infrastructure development. Similar, government of Pakistan made efforts to provide safe, reliable, effective, affordable and accessible fully integrated transport system in order to fulfill the present needs of the masses (GOP, 2012-13).

Globally, Bus Rapid Transit (BRT) structures as an effective substitute and alternate of rail systems in several metropolises of developed countries such as Australia, Canada, France, South Korea and so forth. Bus Rapid Transit system grasps the conveniences mode and much more capable, overfilled and more viable characteristics (Hensher, 2007; UNEP, 2009).

Pecuniary growth considered as imperative ingredients obligatory for the well-being and prosperity not only for the region but also important for the denizen. On the other hands, physical infrastructures play a prime for the economy development and welfare of the masses (GoB, 2011). Quetta District is one of the furthestmost advanced district of Balochistan provinces because of possesses a central strategic position. Area-wise district Quetta ranked as 4th and has a covered area of 2,653 Kms. Naturally, Quetta District is hilly; the mountain ranges

are fairly unvarying in their feature which containing of long central ridges from which frequent spurs descend. These spurs are intersected by myriad gorges and torrent beds with varied ground in elevation of 1,254-3,500 meters. The Mashlakh, Chiltan, Murdar and Zarghoon are the important mountain ranges in the Quetta district (GoB, 2011).

The aggregate geographical area of the district is 2,653 square kilometer according to the Census 1998 with total 2 Tehsils and 67 Union Councils (administrative units). Total district population in 759,941 among them 412,064 males and 347,877 females. The household size was 8.5 and housing units was 87091 respectively (Census 1998; GoB, 2011). Currently, 34 buses form Brewery road, 34 buses from Pashtoonabad routes and nearly eighty four (84) large buses and mini buses of Sariab route, (civil hospital to Hazarganji wholesale market) were run in less effective mechanism. Astonishingly, facts that there were no any single traffic lights were functioning at Quetta city level except for Quetta Cantonment Board area. Around there was policy (there has never been any consistency or continuum) for transport industries imposed, but transporters regretted to adopt the instructions and orders due to the privilege and monopoly rendered by the provincial transport authority towards the transporters. The provincial transport authority has become extortion to the powerful transport mafia this trend may generate a chaotic condition and has led to corruption of provincial transport authority. Provincial transportation authority working pattern in one-way-continuum as a result lack of coordination, consequently effect the mechanism and delineation of responsibility and power.

THE PROBLEM AND ITS SETTING:

Rural villages epitomize the sole of Pakistan, more than 70% of the rural population living in the rural areas agricultural regard as the key occupation of the rural masses and create the livelihood options for the inhabitants of the rural masses in considerable extent. Similar, agriculture sector is the main component of the Baluchistan economy contributes 52% of Gross Domestic Product of the economy. An agriculture extension service was effective tool and key player with the term of either broadcasting of information or creates awareness among the masses about the latest agriculture technologies and recommended practices. On the other hands, Agriculture Research Institute was innovative tool for generating the inventions technologies and transfers those technologies toward the Agricultural Extension Wing but unfortunately the fruits of those efforts have not been harvested as yet with par of the other Departments of the province, as results socio-economical condition of the intended beneficiaries not yet improved. Obviously, the scenario point-out that there was gap amongst the communication, knowledge and skills. Quetta city is directly well linked by road, rail, and air with other provinces of the Pakistan and other countries. Urban-based bus service in district Quetta is typically linked with all the central towns and villages. Other modes of local transport such as rickshaws, Suzuki services, taxis, pickups and mini Mazda's were also frequently used for public transportations. Every day hundreds of thousands of passengers are traveling in the local buses. Access to public transport is a thrilling major concern which have plagued the city ever since. In spite of Quetta premises, its transportation connected difficulties have enlarged considerably. In addition, because of the transportation problems the respondents stroked expressively imbalanced. Slow bus services adversely affect the work function of extension field staff, offices; white-collar workers, school teachers; students, professionals and other corporate sector entities because they spent more time in lopsided travelling. Quetta urban-based transportation had miserable condition either in the shape of quality or hasty services. An important issue was high cost of health problems and accidents with the term of mortality were created. Detrimental impact on bus transport was stuck in traffic severely and affecting the entire traffic system (GoB, 2011). To address the deteriorated condition of urban-based transport, traffic congestion, environmental pollution, there should be concrete and consolidate plan to provide the desirable buss services which fulfill the present day requirements. Insufficient urban-based transportations and inadequate social infrastructure are particular major impediments to the development of agriculture sector. Keeping in view the prompt development of agriculture sector present research was designed to identifying the barriers faced by extension field staff due to the urban-based transportation and assessment the obligations and violations about urban-based transport system.

OBJECTIVES

Present research was to proximity analysis and perceptions paradigm of extension field staff regarding urban-based public transport in Quetta, Pakistan: Overtly the study sought to following specific objectives. 1) To find out the demographic profile of the respondents
.2) To examine the barriers and factors affecting the agricultural extension activities due to the slow urban-based transportation in the study areas
.3) To study the obligations and violations regarding urban-based transport system.4) to developed the recommendations regarding the operative and maintenance system in Quetta city urban-based transportation system for policy makers and stakeholders.

MATERIALS AND METHODS

This empirical study was conducted in the Quetta city; capital of Balochistan province of Pakistan in order to address the obstacles rendered by the urban-based transport system with particular focus on extension field staff perceptions. This district was purposively taken for the study because of 4 foremost motives, 1) barriers regarding urban-based transport apprehension of extension field staff, 2) dawdling and long hour's services for wider range, 3) discomfort at travelling and, 4) causing environmental/ noise pollution. Quetta city is one of the heavily populous parts in the province whereby the agricultural extension service improbable expected to bring about change and enhance in farm output in the term of sequential crop productivity. For present research study is comprised over sixty (60) extension field staff from Agriculture and Cooperatives Department, Government of Balochistan (Agriculture Extension Wing (AEW)+20, Agriculture Training Institute (ATI)+20, Balochistan Agriculture College (BAC)+20=60) as target population through the stratified sampling techniques aim to divide the population on certain specific representative and subgroup or stratum from given population (Creswell, 2012). Whereas forty 40 respondents (Nearside+20, Teamster+20=40) was also selected by using convenience sampling. The sample for this study comprised of 100 respondents calculated by using "Table for determining Sample Size from a given Population" as used and developed by Fitzgibbon and Morris (1987); Krejcie & Morgan (1970) at the 0.05 percent conceivable error rate. Survey items of the respondents were the variables of the study. Comprehensive questionnaire were used as a tool for data collected. Further, 41 closed-form survey items were identified as dimensions of performance for the respondents. Those survey items were measured on the 5-point Likert type of scaling (level of satisfaction for nearside and teamster) to measure the survey items or constructs (1 = not at all satisfied, 2 = slightly satisfied, 3 = moderately satisfied, 4 = very satisfied, 5 = extremely satisfied). Whereas (level of effected for AEW, ATI, BAC extension field staff respectively) to measure the survey items or constructs (1 = not at all effected, 2 = slightly effected, 3 = moderately effected, 4 = very effected, 5 = extremely effected). While level of agreement were also used as scale whereas 1 stand for strongly disagree, 2 stand for somewhat disagree, 3 stand for neither agree nor disagree, 4 stand for somewhat agree and 5 stand for strongly agree. During the data collection process the pressure horn and noise of the traffic makes it difficult to comprehend the respondent's perceptions. Due to the nethermost literacy rates, survey items in the questionnaire for the nearside and teamster respondents the 5-point Likert-scaling prudently were clarified in order to ensure and understood the purpose of the present research study and jot down the respondents perceptions based on the responses received by the respondents. Respondents level of agreement and satisfaction was operationalized as on summated rating scale developed and suggested by Likert, 1932; Edwards, 1969; Devellis, 1991; and Spector, 1992). Background and dependent survey items were collected from the closed-ended form questions and quires. Owing to the time buffering most interviews were consisted roughly 7 to 10 minutes. For face validity of the questionnaire, the researchers have made all the essential provisions, structure and length of the questions. For content validity a panel of two experts from University of Balochistan (UOB) Quetta and one from Balochistan Agriculture College assessed the questionnaire. Cronbach's alpha coefficients were also calculated. All the values for raw data sets were .91. According to George and Mallery (2003) and Nunnally (1967), a Cronbach's alpha ≥ 0.7 is suitable to conduct a study (Henneman, 2006; Reynaldo & Santos, 1999). The collected data were analyzed by using SPSS version 22 statistical package. Nonparametric Statistics i.e. Mann and Whitney's U Test (1947) between dual groups and Kruskal Wallace's (1952) Test among more than two groups were calculated so as to find out the relationships between and among survey items and variables that have significance differences (Conover, 1980; Gay 1980; Lehmann, 1975; Pallant, 2007; Vaus, 2002).

RESULTS AND DISCUSSIONS:

Socio-economic profile of the respondents:

The demographic information of the respondents plays an imperative role and may accelerate the rate of adoption regarding technology transfer process. The socio-economic profile of the respondent's was educational level, age and background contour. Education was regarded as bring about the desirable changes and modifications in human attitudinal direction as well as known to be a weapon of changes. Educational dimension was not only straightly connected to the scale of information and adoption but also transfer the latest application and procedure of agricultural innovations (Aphunu and Atoma, 2010; Achem & Akangbe, 2011).

Table-1: Descriptive statistics of the respondents (n=100)

Respondents	Educational level						Total
	Illiterate	Matriculation	Inter	Diploma in Agric	B.Sc. Agric	M. Sc. Agric.	
AEW (EFS)	0	3	2	2	11	2	20
ATI (EFS)	0	0	0	12	8	0	20
BAC(EFS)	0	4	3	4	6	3	20
Nearside	12	8	0	0	0	0	20
Teamster	13	4	3	0	0	0	20
Total	25	19	8	18	25	5	100

Demographic	Categories	Percent %
Age of respondents	18 to 25	29
	>26 to 35	25
	>36 to 45	28
	>45 to 50	14
	51 and above	4

Demographic	Categories	Percent%
Background	Rural	24
	Urban	76

Most (11%) of the extension field staff from Agricultural Extension Wing have holding B.Sc. (Hon) in agriculture discipline as shown in table-1. Most (12%) of the extension field staff belonged from the Agriculture Training Institute have holding Diploma in Agriculture. Most (12-13%) of the Nearside and Teamster were illiterate. The results of age composition depicted that majority of the respondents were fallen in to the 18 to 25 years of age categories (29%), followed by (28%) of the respondents between the 36 to 45 year age categories. While (4%) of the respondent were 51 and above year of age category. This implies that the respondents who were youngsters having more concerning about the urban-based transportation system. The data pertaining to the background information were showed that vast majority (76%) of the respondents belonged from urban background. Whereas (24%) of the respondents had belonged from the rural background.

Table-2: Mann-Whitney U test regarding survey items loadings for attitudinal aspects of public transportation as perceived by respondents (n=100).

Survey items	Nearside		Teamster		Mann-Whitney U test	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
	Mean Rank	Sum of Rank	Mean Rank	Sum of Rank				
<i>Public transport services are capable to:</i>								
Faster geographical mobility	29.35	587.00	11.65	587.00	23.000	233.000	-5.062	.000**
Frequent services	30.40	608.00	10.60	212.00	2.000	212.000	-5.657	.000**
Swift routes coverage	30.10	602.00	10.90	218.00	8.000	218.000	-5.326	.000**
Socially aesthetic	25.08	501.50	15.93	318.50	108.500	318.500	-2.748	.006*
Un-crowded	20.40	408.00	20.60	412.00	198.000	408.000	-.058	.953
Dynamic mode	25.88	517.50	15.13	302.50	92.500	302.500	-3.199	.001**
Environmental protected	28.40	568.00	12.60	252.00	42.000	252.000	-4.550	.000**
Time reliability	28.48	569.50	12.53	250.50	40.500	250.500	-4.465	.000**
Calm in atmosphere	27.38	547.50	13.63	272.50	62.500	272.500	-3.810	.000**
Comfortable in condition	27.50	550.00	13.50	270.00	60.000	270.000	-4.132	.000**
Convenient in nature	27.03	540.50	13.98	279.50	69.500	279.500	-3.641	.000**
Appropriate for services	30.13	602.50	10.88	217.50	7.500	217.500	-5.346	.000**
Reliable in situation	30.20	604.00	10.80	216.00	6.000	216.000	-5.419	.000**
Provide the safe and sound services	29.48	589.50	11.53	230.50	20.500	230.500	-5.006	.000**
Travel time reliability	30.10	602.00	10.90	218.00	8.000	218.000	-5.416	.000**

Scale = 1 = not at all satisfied, 2 = slightly satisfied, 3 = moderately satisfied, 4 = very satisfied, 5 = extremely satisfied:

*Significant at the 0.05 level (2 tailed).

The important aspect of the present research was to determine the respondents perceptions based on 5

point Likert-scaling whereas one stand for not at all effected, two stand for slightly effected, three stand for moderately effected, four stand for very effected and five stand for extremely effected. Wilcoxon–Mann–Whitney Test was conducted at 0.05 alpha level, which indicating that when $p \leq 0.05$, there was at least 95% confidence that differences between perceptions of the two groups was statistically different. Table-2 reveals the snapshot of the results about perceptions of the respondents in order to observe the significant differences in various survey items. The comparison of the diverse categories with the Mann-Whitney U Test reveals that the highly significant differences found on the thirteen (13) survey items were: faster geographical mobility (Mann-Whitney $U=23.000$, $p<.005$); frequent services (Mann-Whitney $U=2.000$, $p<.005$); swift routes coverage (Mann-Whitney $U=8.000$, $p<.005$); dynamic mode (Mann-Whitney $U=92.500$, $p<.005$); environmental protected (Mann-Whitney $U=42.000$, $p<.005$); time reliable (Mann-Whitney $U=40.500$, $p<.005$); calm in atmosphere (Mann-Whitney $U=62.500$, $p<.005$); comfortable in condition (Mann-Whitney $U=60.000$, $p<.005$); (Mann-Whitney $U=60.000$, $p<.005$); convenient in nature (Mann-Whitney $U=69.000$, $p<.005$); appropriate for services (Mann-Whitney $U=7.500$, $p<.005$); reliable in situation (Mann-Whitney $U=6.000$, $p<.005$); provide the safe and sound services (Mann-Whitney $U=20.500$, $p<.005$) and travel time reliable (Mann-Whitney $U=-8.000$, $p<.005$). One survey items was found statistical significant was: socially aesthetic (Mann-Whitney $U=-108.500$, $p<.005$) similar one survey items not found significant was: un-crowded (Mann-Whitney $U=-198.000$, $p<.005$). The Wilcoxon–Mann–Whitney Test at 5% significance level shows that there were (14) survey items as variables was highly significant between the beliefs of both respondents i.e. Near side and teamster regarding urban-based transportation system. However, discrepancies were generally attributed by the differences among the dimensions of perceptions. Significant differences were observed 14 out of 15 categories as survey items.

Table-3: Kruskal-Wallis Test regarding variable loadings for attitudinal aspects of public transportation as perceived by respondents (n=100).

Survey items	Mean score			Kruskal Wallis	Sig**
	AEW	ATI	BAC		
<i>Due to deferment services of public transportation:</i>					
Suffering extension activities	38.13	30.38	23.00	12.236	.002**
Effect the research innovative activities	39.70	27.38	24.43	12.019	.002**
Inconsistency interval in office time	31.40	24.00	36.10	5.864	.053
Effect the routine operation of extension	35.88	18.38	37.25	17.006	.000**
Effect the working pattern of the deptt:	34.35	31.75	25.40	3.148	.207
Effect the EFS job responsibility	34.70	24.90	31.90	3.910	.142
Influence the regularity of EFS	33.40	21.75	36.35	9.703	.008
Effect the mobility of EFS	36.40	27.80	27.30	3.876	.144
Active geographical mobility	27.75	33.85	29.90	1.392	.499

Scale = 1 = not at all effected, 2 = slightly effected, 3 = moderately effected, 4 = very effected, 5 = extremely effected:

*Significant at the 0.05 level (2 tailed).

The central feature of the current study was to check the respondent’s attitudinal aspect sand current perceptions. The results of the Kruskal-Wallis Test utilized so as to observed the association among three groups perception sand insights grounded to measure on 5point Likert scaling (1 = not at all effected, 2 = slightly effected, 3 = moderately effected, 4 = very effected, 5 = extremely effected) as shown in table-3. The comparison of the various groups of the survey items with the Kruskal Wallis Test exposes that the highly significant differences were found on the three (3) groups were: suffering extension activities (Kruskal Wallis =12.236, $p<.005$); effect the research innovative activities (Kruskal Wallis =12.019, $p<.005$) and effect the routine operation of extension (Kruskal Wallis =17.006, $p<.005$). While there non-significant differences found in survey items were: inconsistency interval in office time (Kruskal Wallis =5.864, $p<.005$); effect the working pattern of the department (Kruskal Wallis =3.148, $p<.005$); effect the EFS job responsibility (Kruskal Wallis =3.910, $p<.005$); influence the regularity of EFS (Kruskal Wallis =9.703, $p<.005$); effect the mobility of EFS (Kruskal Wallis =3.876, $p<.005$) and active geographical mobility (Kruskal Wallis =1.392, $p<.005$). Significant differences at $p<.005$ was observed three (3) out of nine (9) categories as survey items.

Table-4: Relative ranking regarding rotated factors (n=100).

Rotated factors	Ranked Order	Mean	SD
No arrangement for safety barriers in the buses	1 st	2.00	1.271
No regular stop and no shade for sitting arrangement	2 nd	1.98	1.155
Drivers stop the bus wherever they feel like	3 rd	1.96	1.072
Drivers pick the passengers in every place but given priorities to drop the passengers their on wish	4 th	1.91	1.232
Created noise pollution and environmental pollution	5 th	1.88	1.066
Conductors adopted a highly irresponsible attitude	6 th	1.88	1.085
Drivers play vulgar songs at a high volume	7 th	1.87	1.178
Passengers is usually hanging on the doors	8 th	1.87	1.107
Speed is vicissitude and unsafe	9 th	1.86	1.198
Women find it difficult to climb on the buses	10 th	1.83	1.074
No proper arrangement for the women and the elders	11 th	1.82	.999
Floor and footboards are usually broken	12 th	1.81	1.089
Conductors push more people inside	13 th	1.79	1.258
Buses are very crowded	14 th	1.76	1.046
Sharp nails and metal protruding causes injury	15 th	1.73	1.153
Buses have broken windows glasses	16 th	1.72	1.173
Due to great rush to put one foot on the floor	17 th	1.71	.902

Scale = 1= strongly disagree, 2=somewhat disagree, 3=neither agree nor disagree, 4= somewhat agree, 5=strongly agree

The rank order was calculated based on mean scores in order to find out the relative ranking of each category. These aspect of data are presented in table-4, which show that no arrangement for safety barriers in the buses (mean=2.00; SD=1.271), no regular stop and no shade for sitting arrangement (mean=1.98; SD=1.155), drivers stop the bus wherever they feel like (mean=1.96; SD=1.072) and drivers pick the passengers in every place but given priorities to drop the passengers their on wish (mean=1.91; SD=1.232) fell in between medium category towards high category were ranked 1st, 2nd, 3rd and 4th respectively. While on the other hands, sharp nails and metal protruding causes injury (mean=1.73; SD=1.153), buses have broken windows glasses (mean=1.72; SD=1.173) and due to great rush to put one foot on the floor (mean=1.71; SD=.902) fell in between low to medium category were ranked 15th, 16th and 17th respectively.

Table-5: Comparison between attitudinal scaling of respondents regarding urban-based transportation

Comparison of route services	Inter-city bus-route services of Quetta city
Much better	- Samungaliroute services - Balali route services
Somewhat better	- Western By Pass route services
About the same	- Kirani, route services
Somewhat worse	- Pushtoonabad route services - Sirki route services
Much worse	- Sariab route services - Eastern by pass route services

Respondents were also asked to provide their perceptions about the better urban-based transportation as shown in table-5. The respondents express their view that Samungali and Balali route bus services were relatively much better as compared to other routes bus services. However, Western by Pass and Kirani urban-based bus services were considered as somewhat better bus services. While Pushtoonabad and Sirki bus route services were observed as somewhat worse transportations services. Comparatively, Sariab road and Eastern by pass eventually much worse urban-based bus services.

Table-6: obligations and violations of urban-based Quetta transportation.

<i>Obligations</i>	<i>Violations</i>
District Regional Transport Authorities is responsible for traffic control and traffic checking (within the area of its jurisdiction). Motor Vehicle Ordinance, 1965.	Astonishingly, facts that there is no any single traffic lights functioning at Quetta city. There is lack of check and balance mechanism between provincial transport authority and traffic police.
Regulating bus stands is establishing. Motor Vehicle Ordinance, 1965.	Monopoly factors and transport mafias influencing on the government decision.
Establishing the signaling systems, signs on roads, street markings, parking places, transport stations, stops, stands and terminals Balochistan Environmental Protection Bill 2012.	Lack of regular bus stand at city level, temporary bus stand is operationalizing as less effective mechanism which not only causes the problems for air contamination but also main cause of traffic blocking.
Alteration, expansion, repairs, of existing buildings or other works, roads or other transport systems. Balochistan Environmental Protection Bill 2012.	Miserable and dejected ailment of the physical infrastructure and groundwork.
Launch systems for monitoring, measurement, Investigation and inspection to prevent and the control pollution. Balochistan Environmental Protection Bill 2012.	Absence of monitoring, measurement and inspection system was prevailed at province level either in the shape of coordination among system actors or effective mechanism about better urban-based transportation.
Reducing and preventing of pollution. Balochistan Environmental Protection Bill 2012.	Currently worse and inferior types of air pollution in Quetta city inhabitants were faced due to the heavy transportation.
No person shall operate a motor vehicle from which air pollutants or noises are being emitted in an amount. Balochistan Environmental Protection Bill 2012.	Indiscrimination utilization and myriad numbers of the vehicles on the roads produced the serious threat not only for environment but also considered as the main sources of air or noises pollutions.
Running on the road as per the environment quality standard. Balochistan Environmental Protection Bill 2012.	Ordinary quantity of the urban-based buses services and mini buses was hoary and out of molded.
Emission of any effluent, waste, air pollutant or noise, or the handling of hazardous substances, or any other act or omission is likely to occur, in violation of the provisions of act, rules or regulations. Balochistan Environmental Protection Bill 2012.	Considered amount of the buses is old in condition and emission myriad numbers of the hazardous and other perviousg as in the atmosphere.

CONCLUSION AND RECOMMENDATION:

Proficient urban-based transportations system plays an important role in the socio-economic development of Pakistan economy. A well-organized transport structure with modern groundwork is considered economic variables of production. Unfortunately, public transport industry in Quetta city often regarded as ill-equipped to deal with the absolute mechanism to adopt advances in technology. The results reveal that the most of the extension field staff belonged from Agriculture Training Institute holding have Diploma in Agriculture i.e. (12%). Most (12-13%) of the nearside and teamster were illiterate. Majority of the respondents were fallen in to 18 to 25 years of age categories (29%). Vast majority (76%) of the respondents belonged from urban background. The Wilcoxon–Mann–Whitney test at 5% significance level shows that there was (14) survey items was highly significant between the beliefs of both the nearside and teamster respondents regarding barriers of urban-based transportation system. Significant differences were observed 14 out of 15 survey items. No arrangement for safety barriers in the buses (mean=2.00; SD=1.271), no regular stop and no shade for sitting arrangement (mean=1.98; SD=1.155) and drivers stop the bus wherever they feel like (mean=1.96; SD=1.072) fell in between medium category towards high category were ranked 1st, 2nd and 3rd respectively. Most of the respondents were of the view that the Samungali and Balali route bus services were relatively much better as compared to other routes bus services. Keeping this in view following recommendation was suggested. Urban-based (Local buses) routed should be re-organized and re-considered keeping in view the public convenience. Effective traffic engineering cell mechanism should be established in order to overcome the traffic problems at the city level. Quetta Development Authority (QDA) should provide the permanent bus stand so that to provide the facilities to the passengers through an efficient transport system at city level. Segregate buses services should be provided the extension field staff so as to lane the extension activities at accurate genre. Long and short term planning’s should be promoted with the context of

vigorous urban-based transport system and inter-city linked routes should be established in dynamic mode. Well-established urban-based transportation system should be imposed with the term of healthier execute, enact, check and balance system.

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