Regional Disparity and Quality of life in Pakistan: A Taxanomic Distance Analysis

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CERTIFICATE

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List of Abbreviations

UNDP	United Nations Development Program
WFS	Weighted Factor Score
PCA	Principal Component Analysis
LGA	Local Government Area
PFC	Provincial Finance Commission
ADP	Annual Development Plan
GDP	Gross Domestic Product

Definitions

Distance Values: Standardized Distance Values show the difference between two districts within a province for each indicator of quality of life separately. It gives us the micro level estimates of regional disparity in quality of life between districts.

Composite Development Distance: Composite development distance is the sum of difference of all standardized values for all the 15 indicators of quality of life between districts within each province.

Ideal District: Ideal district is an assumed or simulated district which shows the highest standardized values for each of the 15 indicators of quality of life. Ideal district is used in identification of best district and is designated as "0" in this study. The objective of determining the ideal district is that no single district within data shows the highest standardized values for all the fifteen indicators of quality of life.

Best District: A district, within province, which is closer to the ideal district in terms of standardized distance values is the best district. Best district is also the number one ranked district in the province.

Backward/Least Developed Districts: Backward/Least Developed district are lower ranked districts based on the composite indices of quality of life.

Model District: Model district is a reference point for the backward district to aim for higher quality of life. It is determined using the following two conditions:

- It stands be ranked higher than the backward district.
- Composite Development Distance between model and backward district must always be lower than the Critical Minimum Distance.

Potential Targets: Average standardized values of model districts are the potential targets for backward districts. Values of all the indicators of the model districts may not be higher than the corresponding values of backward districts. Values of only such indicators would serve as potential targets which are higher than the corresponding values of backward districts.

Abstract

This study assesses the prevailing disparities in quality of life at intra-provincial level in Pakistan using the Wroclow Taxanomic Distance method. Scandinavian approach of quality of life is used in this study with optimal combination of fifteen objective indicators of education, health and living conditions. For ranking of districts composite indices of quality of life are constructed. Districts are categorized according to their level of development i.e., 'high level developed', 'high-middle level developed', 'low-middle level developed' and 'low developed/backward districts' on the basis of constructed composite indices of quality of life. For bringing out uniform development, model districts are identified for backward districts and potential targets are estimated for those indicators which are significantly lagging behind. At intra-provincial level, Punjab is the most developed followed by Sindh, KPK and Balochistan. Intra-provincial disparities in quality of life are estimated for four provinces. In Punjab, Central and northern Punjab such as Lahore, Islamabad, Rawalpindi, Jehlum and Sialkot are developed as compared to Southern Punjab Muzaffargarh, Vehari and Rajanpur. Karachi, Hyderabad, Peshawar, Abbotabad and Quetta are developed districts in Sindh, KPK and Blaochistan. Musa Khel, DeraBugti, TharParkar, Thatta, DI Khan, Tank and Kohistan are backward districts in these three provinces. The findings show that huge disparities in the quality of life are present among different districts between and within different regions of Pakistan. Urbanization, industrialization, presence of cantonments, colonial history, inflow of remittances and unequal land distribution are major factors in variation of quality of life in Pakistan. This study utilizes Wroclow Taxanomic distance method which helps in setting targets to be achieved by backward districts. This study argues that resource distribution mechanisms such as Provincial Finance Commissions should focus on location specific micro planning in order to include peripheries in development process. This study shows that how each district stands in relation to other districts in domain of quality of life and how lagging indicators of health, education and living conditions can be improved. Regional disparities often create political and ethnic strife amongst provinces and this looming fear makes micro planning an imperative to avoid social and ethnic unrest.

Key words: Quality of life, Wroclow Taxanomic Distance, Scandinavian approach, micro planning

Chapter 1

Introduction

Multi-dimensional process of development in the social and economic aspects of human life improves the level of quality of life. It needs the satisfaction of cultural, economic, social, political rights, equitable division of gains and opportunities of development, gender equality, dignified living and empowerment of all marginalized sections and communities of the society (Myrdal, 1972). This process can be summarized as the upward movement of the whole social system. Development can also be considered as the attainment of certain ideas such as socio-economic equalization, rise in productivity, improved institutions and attitudes, modern knowledge and a rationally and logically harmonized system of policy measures which can eliminate the various undesirable conditions in the fabric of social system that continuously perpetuate the recurrent state of underdevelopment (Black, 1966).

Development generally means the overall progress and it represents betterment in all elements of human life. This concept can be put in simple words that development is extensive achievements and improvements by the introduction of new functions or carrying out old functions in a more efficient way. Generally it is believed that economic growth is associated with development because it brings functional and structural changes in individuals and society. It is true that development and economic growth are interlinked ideas but there is fundamental difference between these terms. It is possible that economy enjoys higher growth rates but still suffers from low levels of development in society. Growth can be regarded as necessary condition for development as growth just takes into account gross domestic product whereas development is a multi-dimensional concept as it deals with the notions of improvements, innovations, progress in a society. Development is positively associated with the computation and redistribution of economic growth for well-being, quality of life, human welfare and standard of living. The main goal of development is to build an enabling environment for people to stay healthy, live long and spend creative lives. There is an urgent need in shifting the center of attention of development economics from national income to people centered policies (Haq, 1995). The important point is that impact of economic growth is dependent on the question that how fruits of economic growth would be used and redistributed amongst various sections of society.

During the 1960s and 1970s many western countries started questioning the economic growth as a mean to bring social change. The social costs of unequal material economic growth such as public poverty and pockets of individual poverty have been emphasizing over the period (Mishan, 1967). There were significant changes in the view of social development because of diminishing marginal utility in material

wealth and post-materialism in post-industrial societies (Inglehart, 1977). The idea of quality of life was conceived as a better alternative as compared to material prosperity. Quality of life became one of the developmental goals of post industrial and affluent societies which were concerned with ecological basis and human well being. The concept of quality of life is multi-dimensional and more intricate goal of social development. Quality of life is primarily concerned with measuring and monitoring of wellbeing or welfare. This concept is used to refer to individual welfare or wellbeing which has its own philosophical roots [(Chamberlain, 1985); (Diener, 1994)]. There have been various efforts to operationalize the concept of welfare in general and quality of life in particular. There are two main approaches which represent the extreme views on a wider continuum of concept related to quality of life: the American Quality of Life Approach (Campbell, Phil, & Willard, 1976) and the Scandinavian level of living Approach (Erikson, 1989). The measurement and monitoring of wellbeing or welfare has been the focus of researches on the quality of life. Objective and subjective indicators have been used to evaluate human well being and quality of life. Different scholars have incorporated different indicators in the quality of life such as education, better political processes and institutions, medical services and social welfare.

On the other hand regional disparity or imbalanced development in quality of life has been an important issue in both developed and developing economies but this phenomenon is more prominent in developing countries due to extreme differences in level of development and incomes. Government assumes a greater role in eliminating these disparities between different regions. In Pakistan different development plans have formulated national growth and development strategies with the aim to achieve balance regional development. One of multiple aims of National Economic Council is to ensure the regional equity and balanced development. It is interesting to note that even after all these development plan and national strategies; there are wider levels of development disparities in different regions and districts of Pakistan. Such disparities can be gauged if a cursory look is given to indicators like unemployment rates, infant mortality rates, and net enrollment rates at primary, secondary and tertiary levels, incidence of poverty and concentration of manufacturing units.

Historically, uneven regional socio-economic development has been an important political issue in Pakistan. Economic disparities created rifts between West and East Pakistan and fuelled the separatist movement for the cause of provincial autonomy in Eastern wing of Pakistan. Later on this movement transformed into nationalist movement and was able to create Bangladesh out of Pakistan. During the periods of 1970 and 1980, regional disparity amongst different provinces of Pakistan turned into a more

glaring phenomenon. The repercussions and consequences of these disparities can go beyond the realm of economic issues because such unbalanced growth can also create and exacerbate ethnic and political issues in Pakistan. Siddiqui (2008) opines that national and provincial statistics do not reveal the development gaps at inter and intra-district level. Provision of basic social services by government affects the human capibilities to a considerable extent. The issues of wellbeing and quality of life of people have been neglected by all governments in Pakistan. Pakistan has enjoyed periods of economic growth but this growth could not be translated into social development (Zaidi, 1999). Regional disparities in objective indicators of quality of life such as high maternal and infant mortality rates, higher population growth, low literacy rate, high incidence of poverty, low life expectancy have been observed between different districts.

Different studies have been conducted to analyze the rankings of districts in socio-economic development [for example see (Jamal & Malik, 1988);(Khan & Iqbal, 1982)]. Most of the studies concluded that majority of the districts of Punjab perform well in socio-economic development and quality of life as compared to other provinces [(Haq & Zia, 2008) (Khan & Iqbal, 1982) (Pasha & Ahmed, 1999)(Cheema, Khalid, & Patnam, 2008)(Haq & Zia, 2013)]. Such variations in the level of quality of life in districts of Pakistan demands micro planning. Therefore it is important to undertake such studies which inform the micro planning through quantification of levels of development in areas of quality of life and living standards. This study aims to estimate the regional disparity in quality of life at inter-provincial and intra-provincial level. This study would also identify the model districts for the backward districts and identify potential targets for objective indicators for these backward districts.

1.1 Objectives of the Study:

The objectives of the study are:

- To compute the extent of the inter-provincial and intra-provincial regional disparities in quality of life.
- To rank the provinces and districts within four provinces according to their levels of development in quality of life in areas such as Education, Health and living conditions.
- To classify districts within four provinces according to multiple stages of development such as 'high developed', 'high middle level developed', 'low middle level developed' and 'low developed'.
- To identify model districts for the low developed districts within each province and set targets for the backward districts in terms of indictaors of quality of life.

1.2 Significance and Contribution of the Current Study:

Micro Planning requires such studies which can inform about the development status of any given area in relation to other areas. Such approach towards planning will make the process of development more inclusive and grass-root. Pakistan has devolved several functions such as education and health to provinces after the eighteenth amendment. Provinces have emerged as major actors in this development process after the devolution as nearly sixty percent Public Sector Development Program (PSDP) being carried out by them. Provinces are supposed to distribute resources through the Provincial Finance Commission amongst different districts and such studies will help in equitable distribution of resources to those districts which are lagging behind in socio-economic development. Similarly Distict Finance Commission can distribute resources to backwards areas of a disrict and can eliminate intra-district disparities.

This study aims to identify inter-provincial and intra-provincial disparities in the quality of life. This study would provide policy makers at provincial level an important input in decision making of allocation of scarce resources. This study also address the question of which priorities should be set in the Provincial Finance Commission for the equitable distribution of basic services amongst different districts of provinces and in the provincial development allocations. This study will provide the profile of backwardeness of different districts within four provinces and it will help provincial governments in setting priorities for the Annual Development Plans and Provincial Finance Commission.

Most of the studies have used Principal Component Analysis to rank provinces and districts according their status of development in quality of life. On the same line most of the studies have analyzed inter-district disparities along with intra-provincial disparities in Punjab. This study will form clusters of districts according to their levels of development using the taxanomic distance technique. This study will use data of Pakistan Social and Living Standards Measurement for the year 2012-2013. This study will employ objective social indicators of Education, Health and living conditions. Major contribution of this study will be to rank districts of Balochistan, Sindh, KPK and Punjab according to their levels of development in areas of basic services which improve quality of life.

1.3 Organization of the Study:

This study is organized as follows:

First chapter gives brief introduction, significane, contribution and objectives of the study. Second chapter is related to literature review. Third chapter includes theoretical framwork of this study. Fourth chapter includes discussion about choice of methodology and specification of data. Fifth chapter is

related to estimation, results and analysis. Policy implications and conclusion born out by this study are delineated in sixth chapter.

Chapter 2

Literature Review

To provide this study with a proper context and perspective it is important to review the related literature. Most of the studies which have been conducted view regional disparities in various domains such as poverty, rural-urban divide, quality of life and socio-economic development. Following studies have quantified disparities at inter-state, inter-district and intra-district level. This study would rank the provinces and districts within each province according to their levels of development in the domain of objective quality of life. This chapter would review the related literature to strengthen its argument.

Literature on quality of life is diverse regarding to measurement and operationalization of this concept. But literature agrees with this fact that Gross Domestic Product (GDP) is not an ideal indicator for measuring the multidimensional processes of development. Development includes socio-economic aspects, improved quality of life and higher levels of standards of living. There are two main approaches which have been used by different studies to measure quality of life i.e., Scandinavian quality of life and American quality of life. Studies which have used Scandinavian quality of life approach, they use objective indicators of standards of living such as access to resources. Studies which measure quality of life using American quality of life, they use subjective indicators such as happiness and satisfaction with prevailing conditions. Different research studies have used various techniques to measure quality of life among them Principal Component Analysis, wroclow taxanomic distance method, Z-Sum score and Linear scaling is popular. Wroclow Taxonomic distance method has been widely used in micro planning research studies though this method has not been employed in research studies in the context of Pakistan. Most of the literature suggests that regional disparities exist in quality of life in developed and developing countries. Urbanized, industrialized and capital cities are more developed as compared to far flung areas. Contextualizing Pakistan, literature suggests that Punjab has been the most developed province of Pakistan as compared to Sindh, KPK and Baluchistan [(Haq & Zia, 2013); (Cheema, Khalid & Patnam, 2008)]. Balochistan manifest the most deplorable socio-economic conditions and most of the population is deprived of basic necessities. Literature on intra-provincial disparity shows that provincial and federal capitals perform better as compared to peripheries in each province [(Haq & Zia, 2008); (Pasha & Ahmad, 1999)]. Factors such as industrial base, urbanization, presence of cantonments and higher inflow of remittances seem to be major causes of regional disparity in Pakistan. Now we review the different studies of regional disparity and quality of life.

Ewusi (1976) argues that gross domestic product is not an ideal measure for development and it is important to develop multiple derrivatives for development. Author selects socio-economic indicators for the nine regions of Ghana and evaluates the relative development of these regions using taxanomic distance analysis. He further argues that government should provide assistance to lagging regions to avoid growing development-divide between backward and developd regions.

Similarly, Arief (1982) analyzed the measure of development and pattern of development for eleven states of Malaysia. The Author visualizes the level of living as satisfaction of multiple needs of population which are fulfilled by the continuous flow of good and service at one point in time. Sixteen indicators of health, housing, economic conditions and education are used for ranking the states of Malaysia according to their levelsof living. This study has utilized the wroclaw taxanomic method for ranking and classifed these states highly and low developed states. Two states ranked as highly developed whereas four states classified as low developed. These different patterns of development provides a basis for the allocation of scarce available resources to different states and endorses balanced regional development.

Ohlan (2013) assesses the pattern of regional disparities in quality of life and socio-economic development at the level of districct using the wroclow taxanomic distance method based upon the best possible combination of indicators of socio-economic development and quality of life. Separate indices such as agricultural, infrastructural, industrial were constructed and districts were classified according to their stages of development such as developed, middle develped and backward. Composite Index of socio-economic development was high in the Southern regions of India but terribly low for the Central and Northern regions of India. This study identified the model districts and potential targets for the backward districts to improve the quality of life. This study suggests that there is significant disparities between regions and within regions and identification of lagging indicators of quality of life is important for an equitable development.

Similarly, Mohanty (2009) quantifies the quality of life in different neighborhoods of Peel using the mapping technique and taxanomic distance method. This study ranks the neighborhood of Peel on the basis of socio-economic and health indicators. The study concludes that allocation of scarce resources would be efficient if policy makers can identify the spatial imbalances in socio-economic indicators and can set potential targets for backward areas. Adedayo (1998) has discussed the patterns and reasons of inequality amongst different districts of Ogun State, Nigeria. Districts which perform better as compared to other Local Government Areas (LGAs), they have higher urbanization rates, coastal areas and much

developed physical infrastructure. LGAs which have more banks, roads and developed market connections, they all perform better in educational and health indicators as compared to other districts. Authors conclude stating the fact that physical infrastructure, urbanization etc. are important determinants of development of backward areas. The authors argue that planned government investments in different areas play a significant role in development disparities across region. Spellerberg, Huschka, & Habich (2007) investigates the regional disparity within Germany and between Germany and Europe over the period from 1978 to 2001 with the help of subjective and objective indicators of quality of life for individual. This study has adopted the euromodule to examine the trends of regional disparity between Germany and other european states. The study identifies the priviliged and underpriviliged areas in the context of well-being and levels of living. The main finding of this study is that the Western Germany is much developed as compared to Eastern Germany and economic disparity is increasing. On the other hand if Germany is compared with other european states then regional disparity in terms of objective and subjective quality of life is slight. Social inequality and deprivation can have political consequences for any state.

Narain, Rai, & Bhatia (1999) analyzed the regional disparity in development of southern region of India such as Kerala, Karnatka, Tamil Anadu and Andhra Pradesh using the district as unit of analysis for 1991-92. The authors utilizes wroclow Taxanomic Distance method for their analysis. They selected 30 socio-economic indicators and constructed the composite indices of development in agricultural, infrasturtual and socio-economic fields. The pattern of development was so skewed that seven most developed districts belonged to Kerala only whereas other states had larger share of underdeveloped districts.

Narain et al (2000, 2002, 2005) carried out the same intra-state anaylsis for the Tamil Nadu, Madhya Pradesh and Jammu Kashimr and treated district as unit of analyis. They selcted optimal combination of indcators and used wroclow taxanomic distance method for the construction of development indices such as infrastructural index, agricultural index and socio-economic development index. They observed development disparities among districs of these states. They concluded that the role of microplanning is very important for bringing out a uniform development within these states.

Bhatia & Rai (2004) evaluated the Intra-Provincial and Intra-district regional disparity in levels of development in infrastructral, agricultral facilities and complete socio-economic field through constructing the overall composite index of development for the state of Uttar Pradesh. Their unit of analysis was community block and they selected 23 socio-economic variables and 380 community

blocks under 30 districts for the year 2001. They used wroclaw taxanomic distance method for ranking of these community blocks according to their level of development and set potential targets for the backward blocks. This study stressed the need of micro planning in the state of Uttar Pradesh where few districts are much developed in comparison to most of other districts in the same province. They conclude that location specific planning is crucial for India to mitigate the severe impact of spatial imbalanced development.

Narain, Bhatia, & Rai (2012) constructed a composite indictor consisting of best possible comination of forty five development indictors for the eighteen districts of West Bengal for 2001-02. Districts were ranked on the basis of infratrcutrual facilities, agricultural and socio-economic sectors using the wroclow taxanomic distance method. This study has identified wider disparities between districts but most of the population is living in relatively high developed area but underdevelopment of other areas. This study confirms positive correlation between infrastructral facilities such as health and education and agricultural sector with overall composite index.

Narain, Rai, Sarup, & Bhatia (2003) investigated the intra district disparity through using the taluka as a unit of analysis for the state of Karnatka in 1994-95. Thirty two indicators have been selected for the construction of industrial, agricultural, infrastructural and socio-economic fields. Banglore is ranked as highly developed district where as Shimoga district is the least developed district in overall socio-economic field. This study suggests that intra-district disparity has been on the rise as many talukas of same district are highly and less developed. The study conclude that government sould adopt active measures to reduce intra-district disparity in levels of development.

Narain, Sharma, Rai, & Bhatia (2007) estimated the levels of development for 27 states of India in 2001-02 and selected wroclow taxanomic distance method for the construction of composite index of of socio-economic development. Thirty three indicators have been selected for the construction of industrial, agricultural, infrastructural and socio-economic indices. Wider development disparities were found as Punjab ranked the most developed whereas other states lagged behind. Literacy rate and infrastructural facilities are the significant factors which determines the socio-eonomic development.

Rai, Sarup, Bhatia, & Narain (2009) have measured the level of development of all districts of Andhra Pradesh and constructed a composite index consisting of best possible combination of fifty socio-economic indictors for the 22 districts of Andhra Pradesh in 2001-02. They estimated the level of development in infrastructural facilities, agricultural sector and socio-economic sector. 42 percent population of these districts are middle developed in socio-economic sector whereas more than 20

percent poplation is living in backward areas. Regional disparities are more severe in this state as compared to the state of west Bengal.

Sharma, Rai, Bhatia, & Narain (2005) has measured the level of development of districts of Kerala and constructed a composite index consisting of best possible combination of 39 socio-economic indictors of 14 districts of Andhra Kerala in 2001-02. They estimated the level of development in infrastructural facilities, agricultural, industrial and socio-economic sectors.Thrissur district is ranked first where as district of Wayanad is ranked as least developed in socio-economic sector. This study aruges that the infrastructural facilities such as educaion and health are very important for improving the level of development. It also highlights intra-district disparities where low developed district is not entirely backward but some areas within one district is middle level or highly developed as compared to other parts of the same district.

Different studies on inter-provincial, intra-provincial and tehsil level disparities in socio-economic conditions and quality of life have been conducted in Pakistan. Contexualizing intra-provincial disparity, Jamal & Malik (1988) analyses the changing patterns of regional development in Sindh. The authors argue that government took initiatives in 1970s for the balanced regional development but no fruitful results were obtained. This paper uses thirty one indicators of wealth and income, modernization in agriculture, housing, education, communication and health conditions. The paper has utilized techniques like Z-Sum Score and Taxonomic Distance. The authors used 1971-72 and 1980-81for tracing the changes in development ranking of districts over period of ten years. They show that regional disparities have been increasing despite various policy initiatives taken by the government. Results also show that some developed districts have been performing poor relative to their prior performance. The study shows that income and wealth are not strongly correlated with the overall status of development. Other factors like education, housing, infrastructure are also very important for the level of development. The study concludes that different policies aimed at to reducing regional imbalances failed.

Pakistan has more rural population as compared to urban population. Rural population is living relatively in more abject poverty as compared to urban areas. It is very important to recognize differences in development levels at village and then tehsil level. There are vast differences in public services and provision of inputs in these areas.

Khan & Iqbal (1982) quantify the inter-provincial and inter-district level of development amongst villages. The authors quantified the different developmental disparities in terms of access to services, quality of life and living. Districts are clustered in terms of primary (most developed), secondary

(middle level developed) and tertiary groups (low developed). According to the rankings Punjab ranks first followed by Sindh, NWFP and Baluchistan. Villages of Punjab perform better in most indicators as compared to villages other provinces. Districts from Punjab are amongst the first top twenty districts. Baluchistan has wider share in bottom twenty districts. The authors conclude that it is very important to identify development disparities amongst villages at provincial and district level.

Pasha, Malik, & Jamal (1990) discuss the changing patterns of development levels in all districts of Pakistan. They use weighted factor score (WFS) and Z-sum score is also used to check the robustness of results obtained by WFS. Thirty one indicators of income and wealth, modernization of agriculture, housing conditions, health, education, transportation and communication, Labour force and gender equality are used in this study. Then a composite indicator of development is derived through generating weighted factor scores. As per study, Punjab is the most developed province of Pakistan because majority of its districts are included in top quartile of national population. Baluchistan is the least developed province of Pakistan because of its higher share in lower quartile of national population. This paper concludes that those districts which have dynamic base and small scale manufacturing industries have performed better as compared districts which lack these characteristics. Educational, Health and infrastructure play an important role in the development of different areas.

Haq (2009) has explored the objective versus subjective indicators for the wellbeing in all districts of Pakistan. She has used objective indicators which include education, health, economic status and living conditions. Different subjective indicators are also employed to check the perceptions of households about their education, health and economic status. This paper has used the Pakistan Social and Living Standards Measurement Survey for the year of 2006-2007.

Author has employed principal component analysis to rank different districts in terms of their objective as well as subjective wellbeing. There are widespread differences in social wellbeing of different districts. There are also pronounced differences in the subjective wellbeing of households. According to objective indicators, districts of Punjab are rated as good as compared to other provinces. First quartile of population includes all provincial and federal capitals of Pakistan. Baluchistan has wider share of its population under the category of poor wellbeing. These rankings show that Punjab has many pockets of under developed areas. But at the same time underdeveloped provinces like Baluchistan and NWFP have pockets of developed areas as well. Ranking of districts with respect to subjective indicators entails different results. There are many districts in the satisfied category which are not doing good in terms of objective indicators. Author estimated the human wellbeing through combining the objective and

subjective indicators. All the provincial and federal capital comes under the category where human wellbeing is good. The study concludes that subjective wellbeing and social indicators are complementary. Policy makers should give attention to those areas where subjective perceptions are low because in real world subjective perceptions are formed by objective realities as well.

Pasha, Pasha, & Ghuas (1996) quantify the level of social development in districts of Pakistan. Authors have used variables like education, health and water supply to quantify disparities in social development of these regions. Authors have used principal component analysis in this paper to rank districts. This paper has highlighted the importance of female education and enrolment levels for the development. This paper has also shown the close linkages and correlation between economic and social development spatially within Pakistan. In all these rankings Punjab performs relatively much better as compared to other provinces. Punjab has greater share of population in top and medium quartiles as compared to its share in national population. Baluchistan performs much poor as compared to all other provinces and hence it resides in the bottom quartile of national population. Social development is affected with the greater urbanization and economic development. Capital cities also have positive impact on social development. Punjab is much advanced in terms of social development as compared to other provinces. The authors conclude that social development is influenced by educational variables.

Haq, Ahmed & Shafique (2010) discuss the quality of life and wellbeing at districts and tehsils level of Punjab. In this analysis principal component analysis is employed to evaluate tehsils as well as districts level disparities in quality of life. This study has used the MICS data for the 2007-08 period. Different variables like health, education, child protection, environment and socio economic development are used to quantify quality of life. Punjab is divided into central, southern, western and northern areas. District of Lahore is ranked as the top district of Punjab in terms of quality of life. Seven out of ten tehsils of Lahore are also ranked at top positions. Similarly Rawalpindi is ranked at second position but one of its tehsil is ranked at the bottom. So it is very much evident that some districts which are very developed have some tehsils which are backward. Central Punjab is the top region of Punjab which has the high quality of Life. Western Punjab has a zero share in good quality of life. It is also discussed in this paper that how urbanization and poverty can live side by side. Southern Punjab has mostly share in medium level of quality of life. It is very much evident from the result that sometimes a developed district has many under developed tehsils.

Haq & Zia (2008) discuss and quantify the subjective and objective wellbeing indicators. The authors have used the data of Pakistan Social and Living Measurements (PSLM) for the year of 2006-07. This

study has ranked hundred districts of Pakistan according to the three categories of wellbeing. Authors have used the same methodology for construction of composite index as was used by United Nations Development Program for Human Development Index. Indicators of education, health and living conditions are selected for the construction of objective wellbeing index. Indicators are used for the construction of wellbeing Index. Similarly indicators of education, health and security conditions are used for the construction of subjective wellbeing index. Linear scaling technique is used to standardize all variables. Z-sum score technique is used to check the robustness of results. It is interesting to note that Punjab has a predominant share in the highest ranking of wellbeing. Punjab has also greater share in the category of high level of wellbeing.

Districts of Sindh and NWFP dominates category of the Medium level of wellbeing. Districts of Baluchistan dominate the category of lower level of wellbeing. Punjab has a larger share of its districts in the developed regions. Similar rankings have been conducted for subjective level of wellbeing. It is very interesting to note that all developed districts are ranked in second category of level of subjective wellbeing i.e., medium. Districts of Baluchistan rank lower in subjective level of wellbeing. So here is a discrepancy in subjective and objective indicators of wellbeing. Authors concluded that subjective indicators should be used for better insights in policy making. .

In another paper Haq & Zia (2013) constructed the index of quality of life combining the objective and subjective indicators of human wellbeing such as living conditions, education, health and satisfaction with economic conditions for the year 2006-07.Authors have used the Principal Component Analysis and again confirmed their prior finding that there are substantial differences in human wellbeing in the district of pakistan.

Haq & Ali (2014) discuss in this paper the sprawling development disparities in different regions of Punjab. In this paper authors have tried to assert that those areas which are poverty stricken (lagging), they score lower in social and human development rankings. Authors have chosen variables like health, knowledge, environment and socio-economic development. In this paper Principal Component analysis has been used to rank districts according to their social and human development indicators. Development disparities get intense as one person travels from northern areas of Punjab to southern and western areas of this province. There is a strong correlation between human and social development and incidence of poverty. A wealth quintile index is also constructed which shows that mostly more than 44 percent population of Layyah, Rajanpur reside in this quintile. This index shows the pattern of development disparities across all the districts. Human capital is dismally low in lagging districts as

compared to those districts which are Barani areas. This paper also suggests that there is negative correlation between level of urbanism and poverty.

Ali (2011) has analysed the spatially pattern of poverty in Punjab at district and tehsil level. Author has used the HIES an MICS data for the year 2007-08. Author has suggested that those areas where poverty incidence is higher, they also have lower quality of living. Factors like landlessness, cantonment areas, better integration in national and international market and urbanization play a larger role in the development of these areas. It is concluded that patterns of poverty must be checked in order to have better public policy and resource allocation option. According to Cheema, Khalid, & Patnam (2008), those districts which have lower development rankings; they have also higher poverty rates.

Jamal, Khan, Toor, & Amir (2003) have analysed the pattern of spatial deprivation in Pakistan. Authors have used variables like education, housing conditions, employment status and residential facilities. Authors have used factor analysis to construct four indices after generating weights. Authors have used the same methodology which was used by UNDP for human poverty index. As per study, population of Punjab has more shares in low medium and low level of deprivation rates in both rural and urban areas. 42% population of Sindh resides in low level of deprived areas. All deprived areas in Punjab generally belong to Southern and western belt. This is concluded that it is important to transfer funds to those areas like rural areas of Baluchistan and Sindh which are most deprived of basic public goods.

Pasha & Hassan (1982) have ranked districts of four provinces on the basis of development rankings. Authors have chosen z-sum score and weighted factor score techniques to quantify the current development levels in different districts. Authors have selected twenty seven indicators of wealth and income, agriculture, transportation and communication, education, industry, housing and sexual equality. It is interesting to note that top quartile of population is residing in capitals of all provinces. Baluchistan has the largest share in the most under developed districts. It is very important to mention that provinces which are highly developed, they have many areas which are least developed. Similarly provinces like Baluchistan and NWFP have many areas which are relatively developed. The authors have developed this fact that human capital is strongly correlated to composite development indicator as compared to wealth and income.

Midhet (2003) has quantified the development ranking of rural districts of Pakistan. Author has shown the relation between development rankings, Child-Women Ratio (CWR) and Mother Mortality rate (MMR). MMR is significantly lower in those areas where accessibility of health services is relatively easy. Adult literacy rate, percent of households with children who are immunized are major factors

which influence CWR. Extent of urbanization and proximity to health facilities are major determinants which reduce MMR. The author has stressed this fact that development ranking is very important to identify those areas which are lagging behind.

Wasti & Siddiqui (2008) have quantified different levels of development in districts of Pakistan using thirty three indicators of income and wealth, education, Health, agriculture, transport and communication, housing and gender equality. As per study, Punjab is the most developed area of Pakistan because majority of most developed districts of Pakistan are in Punjab. Four capitals of all provinces and Sialkot, Gujranwala, Gujarat and Rawalpindi are the most developed districts of Pakistan. Punjab is more developed in agriculture, housing, education, transport and communication sectors. This paper looks at those sectors which perform poorly in different provinces. Sindh is mostly backward because it performs poorly in social and economic infrastructure provision. Baluchistan and NWFP represent the same deprivation picture. Sindh has the highest number of population which is residing in the backward areas. More than 29% population of Khyber Pakhtunkhawa is residing in the most backward areas of the nation. Baluchistan has eight per cent population who is living in lower quartile of national population.

Most of the studies in the context of Pakistan have used principal component analysis to analyze the regional disparity in socio-economic conditions and quality of life. Only few studies have talked about intra-provincial disparity in all the provinces within one time. Our study is focused on the identification of intra-provincial disparity in all provinces using taxanomic distance analysis to fill this gap in literature.

Chapter 3

Theoretical Framework

Measurement of quality of life requires a theory which explains the notion of "good life" (Cobb, 2000). Concept of quality of life is primarily related with measurement and monitoring of welfare. There are different approaches and concepts regarding the operationalization and measurement of the welfare and quality of life. Every approach and concept deals with different aspects and dimensions of quality of life (Noll, 2002). Two approaches towards measurement of quality of life will be discussed in detail in this chapter. First approach is Scandinavian levels of living approach (Erikson, 1989) and second approach is American quality of life Approach (Campbell, Phil, & Willard, 1976).

3.1 Different Approaches of Quality of Life:

3.1.1 Scandinavian Level of Living Approach:

The Scandinavian level of living approach emphasizes on the objective conditions of the human being. This concept defines the quality of life in terms of the objective conditions and command over resources (Uusitalo, 1994). Welfare can be defined as command over resources and an individual can consciously or unconsciously control his living circumstances or conditions using these resources (Erikson, 1993). Examples of these resources can be health conditions, knowledge and education, income, networks and social relations. This approach stresses this observation that external conditions- the arenas- are important which decide the utilization of given resources and an individual's capacity of action. This is very much evident by this approach that the concept of quality of life and welfare is operationalized by using the indicators of objective living conditions. It should not be concluded here that this concept does not value subjective wellbeing of people. The key point of Scandinavian approach is that subjective wellbeing is also dependent on the aspirations of people and this is the reason that such subjective indicators cannot inform public policy in the measurement of quality of life. Individual's preferences and opinions should be a part of democratic political processes being active citizens and must go into the opinion polls. This approach resembles with the concept of capabilities developed by Sen (Stewart, 1996).

3.1.2 Capabilities Approach:

Capabilities approach and Scandinavian resources approach have many common aspects. Capabilities are mirrored by specific term of functioning which an individual can achieve. In the life of an individual these are 'doings' and 'beings' such as being in good health, going to movies, reading books and being socially integrated. Quality of life is measured through these capabilities and this is the reason that focus of public policy should be on the improvement of these capabilities (Sen, 1993). It is stressed here that the main point in measurement of a person's quality of life is not equal to the functionings which are actually achieved. This approach recognizes this fact that individuals have different preferences and values and it is quite possible that individuals give different weights to various functionings. The most important point is that whether an individual has all required capabilities to achieve all such functionings and the kind of life he aspires. The common point of both these approaches is that individuals consciously and actively control their lives according to their desired preferences. This logic makes it evident that capabilities and resources are viewed as crucial means to achieve ends. Human Development Approach which is another welfare concept also puts great emphasize on the choices of people.

3.1.3 American Quality of Life Approach:

On the contrary side, American approach focuses on the satisfaction of different needs and it can be best assessed by the individuals. This approach is of the view that the final goal of societal development is not the objective improvement in living conditions but it is the subjective well being of the people in terms of happiness and satisfaction (Diener & Suh, 1997) (Campbell, Phil, & Willard, 1976). Happiness and satisfaction are two distinguished components of subjective wellbeing. Satisfaction with life represents cognitive judgment and it affects the emotions and moods whereas happiness explains affective side of subjective wellbeing. Another conception makes positive effect, satisfaction and absence of distress important components of subjective wellbeing (Argyle, 1996). In the literature of American quality of life, subjective quality of life includes the positive, negative, cognitive and affective aspects. Hence this approach is operationalized through using the subjective social indicators.

3.1.4 Basic Needs Approach:

This approach categorizes three basic needs of human which are 'having', 'loving' and 'being'. Each category considers both objective and subjective dimensions of human wellbeing. Impersonal and material needs are denoted as 'having' where as 'loving' is termed as a need for social interaction and relations. Feelings of happiness are taken as subjective measures for the satisfaction of needs in case of

'loving'. 'Being' is related to needs of the harmonious relationship with nature and integration into society. This aspect is measured through using objective indicators such as political participation into political processes, enjoyment because of nature and meaningful work opportunities for individuals. Personal growth and feelings of alienation are subjective dimensions of this category (Allardt, 1993). Many writers have blamed the resource approach as too restrictive and this Basic Needs Concept was developed in response to it.

3.1.5 German Quality of Life:

German quality of life is another approach which combines objective and subjective conditions of human life. This concept is focused on the constellation of subjective wellbeing and objective living conditions across several life domains (Zapf, 1984). Working conditions, material aspects, social relation and state of health are treated as objective living conditions. Subjective wellbeing includes the individual's own assessment about his living conditions and this depends on affective and cognitive processes. The combination of good subjective wellbeing and bad objective living conditions is termed as adaptation. The constellation of good subjective wellbeing and good objective living conditions is called as wellbeing. These combinations are shown in the given table

Constellation of welfare positions:

Objective Wellbeing	Subjective Wellbeing	
	Good	Bad
Good	Wellbeing	Dissonance
Bad	Adaptation	Deprivation

Source:(Zapf, 1984)

3.2 Objective and Subjective Indicators:

Objective Indicators are used with the assumption that objective living conditions can be termed as unfavorable or favorable by comparing the real conditions with set goals, values and objectives. There must be a consensus in society about three things such as the dimensions that are important for welfare, the good and bad conditions and in which direction society should move. Whereas Subjective indicators are generally related to the perception of individuals related to their circumstances. However it is maintained in Scandinavian welfare approach that objective indicators are most suitable for planning purposes whereas others have advocated the use of subjective indicators for a better and more inclusive planning (Veenhoven, 2000). According to another approach both objective and subjective indicators must be used in order to evaluate the quality of conditions and quality of persons (Lane, 1996). Quality

of person depends on the personal growth, learning and a sense of wellbeing. Quality of conditions is depicted by objective circumstances opportunities which a person can exploit and achieve his desired goals.

3.3 Regional Disparities and Theoretical Notions:

Policy makers have meticulously tried to tackle the challenge of equitable economic growth so that people of different regions can have equal access to opportunities and this struggle can also lead towards human development and better quality of life. There are two approaches which are used to handle this challenge. These approaches include the liberal and interventionist schools of thought (Haq & Ali, 2014). Liberal school of thought opines that there is a significant trade-off between efficiency and equality. According to this line of reasoning inequalities will stay in any system so this element must be treated as norm rather than an exception. The main focus of any government policy or decision must make sure that everyone has an equal access to opportunities to contribute to socio-economic development and to take advantage from it. If government takes such decisions only then society can experience more equitable distribution of assets, income, good health, knowledge, recognition and respect but even then it is difficult to say that inequality can be eliminated completely.

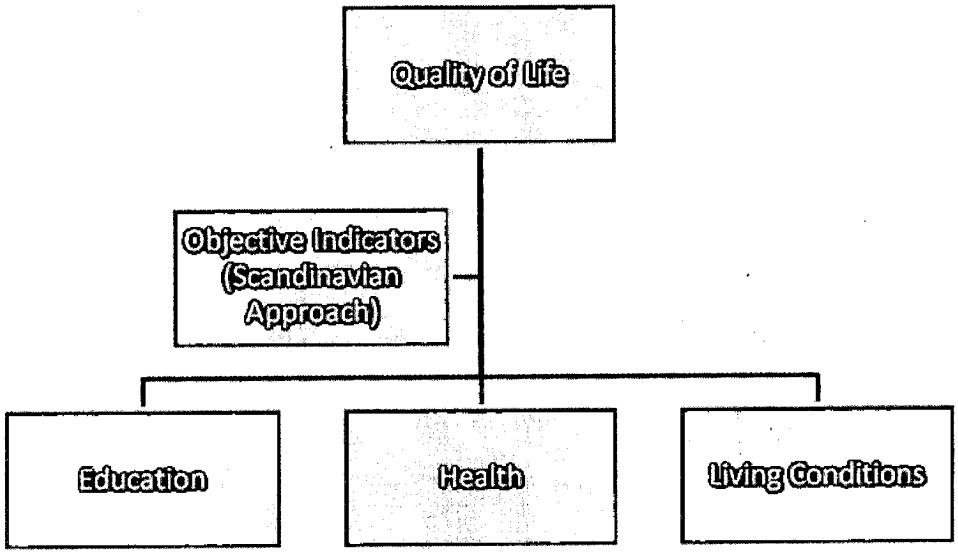
On the other side, interventionist school of thought opines that government should play an active role in reducing the glaring inequalities prevailing in any society at any time (Friedmann, 1973) (Myrdal, 1957). This school of thought believes that inequalities will grow with the economic growth. Interventionists opine that if market forces are left on their own then allocation of resources can be efficient but not equitable. In such system strongest and wealthiest people are more likely to capture the major chunk of resources and as a result, wealthy people will become more rich and powerful whereas poor will be more marginalized. This is the reason that interventionists support direct and effective government policies which can buttress the more equitable and unbiased distribution of the gains of economic growth. The important theory of spatial polarization and concept of growth poles basically conveys the idea that working of free capitalistic markets would accentuate the development inequalities between different regions (Perroux, 1955). This pattern would entail economic inequalities which in turn stimulate social inequalities and all these negative tendencies would lead towards social tensions, conflicts and political instability. Regional imbalances in development would get more intense in absence of state intervention and contract with politically indispensable intervention. It is interesting to note that regional disparities can also lead towards horizontal inequalities in any country. Horizontal inequalities generally mean the inequalities in social, economic and cultural statuses and between

several culturally defined groups (Stewart, 2008). Inequality in basic social sector services can lead towards severe conflict and in some cases violence in different regions of any country with severe repercussions.

3.4 Theoretical Framework for the Current Study:

There are various concepts of quality of life with a broader distinction of objective conditions and subjective wellbeing but all these approaches are concerned with the wellbeing or welfare of individuals. Quality of life consists of various factors such as economic, health, social and environmental conditions which determine the social and human development. QLI can also be utilized to monitor and comment on multiple issues faced by individuals and communities and it can be used to improve the quality of life of communities.

This study uses the Scandinavian level of life approach for investigating the regional disparity in quality of life. A flow chart has been given below to describe the concept and indicators used in this study.



Source: Author's Contribution

We have chosen this approach because in developing world improved objective conditions are not accessible to wider section of society where as subjective opinions can be contested on many grounds. The main purpose of this study is to contribute to the process of micro planning through estimating the regional disparity at inter and intra-provincial level and fifteen objective indicators such as education, health and living conditions have been used here. The major reason for not choosing the American quality of life approach is that subjective satisfaction depends on people's level of aspirations. The question of how much people are satisfied with conditions also entails another meaning that how well

they have adapted to present circumstances. It is possible that people who are living in worse conditions tend to be more contented and satisfied as compared to people who are enjoying higher levels of living. It is argued here that the quality of life depends on the command over resources and such resources can be utilized for multiple ends which a person desires. Similarly this study uses the theoretical notion of state intervention to improve quality of life in all core and periphery areas of Pakistan. Provincial Finance Commissions and Annual Development Plans must incorporate analysis of regional disparities in allocation of scarce resources.

Chapter 4

Research Methodology and Data

Quality of life cannot be analyzed using any single indicator. Similarly when indicators are analyzed separately then they cannot give any integrated and comprehensive picture of level of development. Therefore, this limitation makes it necessary to construct the composite index of quality of life based on optimal number of development indicators. Different methods are available to aggregate different variables. These include Principal Component Analysis, aggregation method, Multi-Factor Analysis, ratio index, monetary index. Most of these methods suffer from limitations such as the selection of indicators and their weight age in the aggregate index. A concise review of some of the most popular approaches of analysis of quality of life is discussed below.

4.1 Different Methods for Measurement of Quality of Life

4.1.1 Principal Component Analysis:

A survey of literature based on the quality of life and socio-economic development shows that most of the studies have used Principal Component Analysis as mode of analysis. Major limitation of this method is that it makes restrictive assumptions about the indicators which are being used for analysis. Such assumption supposes that indicators are linearly related to each other and hence rule out any non-linear relationship between them. So PCA is not an ideal method when non linearity is present. Principal Component Analysis measures variances and it is established by the scaling of variables, so this methodology is suitable only when variables are on comparable scales. Similarly any special meaning cannot be assigned to the transformed variables in relation to level of development. This mode of analysis produces artificial orthogonal variables which cannot be directly identified with any specific economic situation.

4.1.2 Multiple Factor Analysis:

This mode of analysis handles the data set in which a group of individuals is explained by numerous set of variables. The major advantage of this method is that factor loadings can be utilized as weights to combine the effects of different indicators. However to some extent this technique tries to avoid the arbitrariness in selecting weights. The major limitation of this method is that if variables are presented in dissimilar scales of measurement then a comparable and meaningful composite index for level of quality of life or socio-economic development cannot be achieved.

4.1.3 Monetary Index:

In this method development indicators are generally converted into monetary values and then total of all such values is regarded as the composite index of development. It is important to note that monetary values of these development indicators get changed from time to time and from place to place and this thing badly affects the composite index. Another major issue is that there are different aspects in development and quality of life which cannot be converted into monetary values like birth rate, urbanization, education, population density and gender ratio etc.

4.1.4 Aggregation Index:

This is a method which adds all values of indicators related to different facets of development in order to construct a composite index of socio-economic development. The major issue with this technique is that composite index is sensitive to units in which data is recorded.

4.1.5 Ratio Index:

Development indicators in the domain of rural quality of life can be transformed using the formula given below:

$$Yi = \frac{X(max) - Xi}{X(max) - X(min)}$$

The summation of total values of Y_i is considered as a composite index. The issue with this formula is that it does not utilize any other information except the range values given in the denominator.

4.2 Mode of Analysis for the Current Study:

4.2.1 Wroclow Taxanomic Method:

Economists, planners and policy makers always want to make comparison of their countries and regions with other countries in different geographical areas or at equal/different level of growth and development. Such comparisons are preliminary step in establishing targets or goals for the desired growth and development. It is interesting to note that intra-country comparisons among areas, states, or regions are more constructive for policy making or public policy initiatives within a country.

Taxanomic method is used to determine the level and pattern of objective quality of life in districts of Pakistan. Taxanomic method is the most potent tool when a large number of indicators are used to make comparison at intra-country, intra-provincial or even intra-district level. Such comparisons can be made to analyze the different aspects of development and modernization in a given country. The main limitation emerges when several assumptions are made about indicators of development and their weights in the aggregate index. Wroclow Taxanomic Method was developed to construct a composite

index of development which tackled these issues. Taxanomic method was constructed by a faction of Polish mathematicians in early 1950(Florek, Łukaszewicz, Perkal, Steinhaus, & Zubrzycki, 1952) in order to construct a statistical technique of determining the homogenous units or type of things in an n-dimensional vectorial space without using the traditional tools of analysis such as regressions, correlations and variance. This methodology is also called as a clustering technique which is based on distance. It divides the data set into homogeneous subsets. It was recommended to United Nations Education, Scientific and Cultural Organization (UNESCO) by Professor Zygmunt Hellwing, who belonged to Wroclaw School of Economics (Hellwing, 1967). Taxanomic method is used for comparing, classifying and ranking countries by their levels of development (Harbinson, Manubrick, & Resnick, 1970). It provides a sophisticated tool for extrapolation and interpolation of the concerned statistical data set. It creates a measure of economic and social maturity and introduces a formal concept of the pattern of economic and social development which proves to be very insightful for policy making and planning. In contemporary research this method is being employed for making comparisons between developed and developing countries. It is also argued that Wroclow Taxanomic Analysis is a sensitive and more valid technique for the measurement of development levels because it does take into account of dispersion among different component indicators such as structural resemblance among districts [(Harbinson, Manubrick, & Resnick, 1970); (Gostowski, 1970)]. This method is utilized as a similarity measure which can be very helpful in establishing model districts, provinces and countries. This method has been employed by several other studies such as [(Harbison, Maruhnic, & Rerwick, 1968); (Ewusi, 1976); (Arief, 1982); (Land, 1975); (Narain, Bhatia, & Rai, 2012); (Narain, Rai, Sarup, & Bhatia, 2003); (Narain, Rai, Sarup, & Bhatia, 2009); (Narain, Sharma, Rai, & Bhatia, 2005); (Bhatia & Rai, 2004); (Khan & Iqbal, 1982)]

This study chooses this methodology because it is highly suitable for comparing, ranking and classifying provinces and districts of any country by their level of modernization, standards of living and quality of life. This method captures the several facets of multidimensional development. This technique has its own pros and cons such as It is much simple but lengthy in its process. It consists of several steps which are discussed below.

4.2.2 Procedure of Standardization:

The raw data which is being used in this study are objective indicators of quality of life. These indicators are measured in different units so they have been transformed in uniform unit for any meaningful analysis (Harbison, Maruhnic, & Rerwick, 1968). For example doctors per population and mortality rate

are measured in different units but after standardization their units will be same. These standardized values are analyzed for the classification, ranking and clustering of Provinces and districts. The taxonomic units are provinces and districts.

Here a set Z consists of N points and these N points are a group of provinces or districts 1,2,3,….,N for a group of objective indicators of quality of life such as 1,2,……,m

$P_1(x_1, x_2, x_3, x_3, \ldots, x_m)$, $P_2(x_1, x_2, x_3, \ldots, x_m)$,….. $P_N(x_1, x_2, x_3, \ldots, x_m)$

This set of points can be represented in matrix shape which is given below

$$\begin{matrix} X11 & X12 & \ldots & X1m \\ X21 & X22 & \ldots & X2m \\ . & . & \ldots & . \\ . & . & \ldots & . \\ . & . & \ldots & . \\ XN1 & XN2 & \ldots & XNm \end{matrix}$$

i= 1,2,3,…….n for province or a district

j= 1,2,3,……,m for objective indicator of quality of life

Here Xnm is a particular value of an indicator for a province or a district. Here every province or district is represented by a single point in an m-dimensional space. A standardization procedure is necessary to remove the influence of units of measurement and it is given below:

$$[Zij] = \frac{Xij - \overline{Xj}}{Sj} \ldots\ldots\ldots\ldots (4.1)$$

Where $\overline{Xj}$ = Mean of the Jth indicator

$$\overline{Xj} = \frac{1}{N\sum_{i=1}^{N} Xij}$$

Sj= Standard deviation of the jth indicator

$$Sj = \frac{\left[\left(\frac{1}{N}\right)\sum_{i=1}^{N}(Xij - \overline{Xj})\,2\right]1}{2}.$$

The process of standardization produces another new matrix which is denoted as Zij. In this matrix every province or district is represented by a standardized point or vector in an m-dimensional space.

[Zij]= matrix of the standardized values of all indicators

$$Zij = \begin{bmatrix} D11 & D12 & \ldots & D1m \\ D21 & D22 & \ldots & D2m \\ . & . & \ldots & . \\ . & . & \ldots & . \\ . & . & \ldots & . \\ DN1 & DN2 & \ldots & Dnm \end{bmatrix}$$

Where

$$D11 = \frac{X11 - \overline{X1}}{S1}, D12 = \frac{X12 - \overline{X2}}{S2} \ldots\ldots\ldots D1m = \frac{X1m - \overline{Xm}}{Sm}$$

All these points such as D11, D12, D13,……,Dnm are standardized points in an m-dimensional space. Now this standardized matrix is used to generate another matrix which is called as difference, or distance matrix. This matrix shows the distance of each point to every other point for each of the m variables. Here values higher values show the larger distance and value closer to zero shows the less distance between any two districts (take the absolute value of distance). This process produces interim matrix which is given below:

$$\begin{bmatrix} D11 - D21 & D12 - D22 & \ldots & D1m - D2m \\ D11 - D33 & D12 - D32 & \ldots & D1m - D3m \\ . & . & \ldots & . \\ . & . & \ldots & . \\ . & . & \ldots & . \\ D(N-1) - DN1 & D(N-1)2 - DN2 & \ldots & D(N-1)m - DNm \end{bmatrix}$$

Difference between any two districts as D_a and D_b for any subset or set of m variables is calculated or derived by using the following formula

$$Cab = \left[\sum_{k=1}^{m} \frac{[(Dak - Dbk)2]1}{2}\right] \ldots\ldots\ldots\ldots (4.2)$$

From the above formula, following relationships are inevitable

$$Caa = 0; Cab = Cba;\ Cab \leq Cak + Ckb$$

Equation (4.2) produces a symmetric matrix also called as development distance matrix which is given below

$$C = \begin{bmatrix} 0 & C12 & \ldots & C1N \\ C21 & 0 & \ldots & C2N \\ . & . & \ldots & . \\ . & . & \ldots & . \\ . & . & \ldots & . \\ CN1 & CN2 & \ldots & 0 \end{bmatrix}$$

Within a given set of provinces or districts, this distance of each province or district to every other province or district respectively is a composite or synthetic distance. Composite Distance is a pure mathematical expression of numerous distances on each of several. After computing the distance matrix we choose the minimum value in each row and donate it as c_a. Number c_a shows the minimum distance between one district and every other district in a particular row. Sometimes another difficult situation can occur when there will be more than one equal distance corresponding to one particular district. It is

important to note that such situation is extremely rare, so it is assumed that there is only one closest closest district. This closest district can serve as a model for the other district.

After the derivation of distance matrix, now critical minimum distance value would be calculated. Critical minimum distance helps in identifying model districts for backward districts.

4.2.3 Critical Minimum/Model Distance:

$$C(+) = \bar{C} + 2Sc \ldots\ldots\ldots (4.3)$$

Where

$$\bar{c} = \left(\frac{1}{N}\right)\sum_{j=1}^{N} cj$$

Is the arithmetic mean of all the minimum distances in all rows of the distance matrix.

And where

$$sc = \left(\frac{1}{N}\right)\sum_{j=1}^{N} (cj - \bar{c})$$

Is the standard deviation of all the minimum distances in every row

It goes without saying that choice of goals is a prime factor for planning. Taxanomic method fulfills this purpose through calculating the measures of development. Here it is important to assume that what kind of change in a given variable is positive or negative for the quality of life. Assumptions ought to be made that whether a particular indictor is a "retardant" or "stimulant" for the quality of life. For each variable in each set of N provinces or districts, there is a single ideal value which is the best value held within the group, by a given province or district. It is possible that one province or one district holds all the best values which are included in the index but this is extremely rare situation. Best value of each indicator of quality of life is used to simulate the ideal province or district. Ideal province or district has all the best values of variables of quality of life in the standardized matrix. Here the equation (4.4) is the distance of each province or district in the matrix to the ideal province or district which is denoted by 0.

$$ci0 = \frac{\left[\sum_{k=1}^{m}(Dik - D0k)2\right]1}{2} \quad (4.4)$$

Here i=1, 2, 3,....,N and 0 is the maximum standardized value as given in the standardized matrix. The larger is the number of c_{i0} then greater is the distance from this particular province or district to its high point within the set or subset of variables. In this way a ranked relationship is established by determining difference between the ideal district and other districts standardized values for different variables.

Equation 4.4 is used in computation of measure of development (Composite index of quality of life). The ideal province or district is denoted as 0 and then a simulated percentage distribution from the ideal province or district is calculated by the equation 4.5 which is measure of development. It is a function of equation 4.4 and the critical distance from the ideal province or district.

4.2.4 Measure of Development (Composite Index of QOL):

$$di = \frac{cio}{c0} \quad (4.5)$$

And here

$$c0 = \overline{cio} + 2sio$$

And

$$\overline{cio} = \left(\frac{1}{N}\right)\sum_{i=1}^{N} cio \ (themeanofthepatternofdevelopment)$$

And

$$sio = \left[\left(\frac{1}{N}\right)\sum_{i=1}^{N} \frac{[(cio - \overline{cio})2]1}{\square}\right]$$

d_i, in the above equation, is called as Composite Index of Quality of Life. The more close d is to 0 the more developed is the province or district and the closer the d is to 1, the less developed the province or district. The construction of this measure is such that it is always non-negative. It is extremely rare that value of d exceeds 1 and this is the reason this following inequality holds:

$$0 < d < 1$$

4.2. 5 Model Districts of Quality of Life:

Taxanomic technique does not only rank the specific regions with respect to their levels of development but measure of development (composite index of quality of life) also helps to identify the model neighborhoods for the backward districts and also fix potential targets for any given province or district. In order to determine the model districts for the district B in the arena of quality of life two conditions must be fulfilled which are given below.

$$cba < c(+)and$$

$$da < db \ ...(4.6)$$

Here first condition specifies that composite distance of model district must be less than the critical minimum distance. Similarly model districts for district B must have a higher measure of development

(composite index of quality of life). When set of districts, say Z*, fulfill these two conditions then these districts are model of development for the district B.

4.2.6 Different Stages of Development:

For the classificatory purposes, Taxanomic method for the ranking of districts or provinces is a very potent technique. It classifies districts and provinces according to different stages of development. These fractile groups are used to classify the districts. For comparing the different provinces and districts according to their quality of life, those districts which are having composite indices of quality of life less than or equal to (Mean-SD), they are classified as highly developed and they come under the stage-IV of the development. Similarly those provinces or districts which are having composite indices greater than or equal to (Mean+SD), they are classified as low developed/backward and they come under the Stage-I. Those provinces or districts which have composite indices between the Mean-SD and Mean, they are classified as "high middle level developed" under the stage-III. Provinces and districts which have composite indices between Mean and Mean+SD, they are classified as "low middle level developed" under the stage-II of development.

Provinces/Districts	**Range of Composite Indices**	**Stages of Development**	
Province or District	C.I<=(Mean-SD)	Highly Developed	IV
Province or District	C.I>=(Mean+SD)	Least Developed	I
Province or District	(Mean-SD)<C.I<Mean	High Middle Level Developed	II
Province or District	Mean<C.I<(Mean+SD)	Low Middle Level	III

4.2.7 Issues of Weighting the Variables:

The major weakness of taxanomic method used in this study is that it gives equal weight to all variables of quality of life. Wroclaw taxanomic method gives equal weight to all variables unlike other methods of Euclidean distances such as I-distance or Generalized Distance of Mahalanobis. It is important to mention here that there are no standard methods which can be used for giving weights to different indicators in calculating the development distances. There is no set pattern of development and this is the reason that different indicators will become important when there are different stages of development faced by particular regions. This study utilizes the Wroclaw taxanomic method, so equal weights will be given to all aspects of the quality of life. Standardization of all variables plays another important role. Standardization will entail an implicit weighting in favor of all those variables which

have lower standard deviation. Those indicators or variables which have higher standard deviation, less weight will be given to those indicators. The main argument is here that when the procedure of standardization is followed then some inherent weighting system is present.

4.2.8 Goals of Quality of Life Indicators and Potential Targets:

This study identifies model districts for the least developed districts in terms of quality of life and set potential targets for these least developed districts using the taxanomic method. Model districts should fulfill two conditions which are given below:

$$cba < c(+) and$$

$$da < db$$

First condition stipulates that model district should have a higher quality of life index as compared to shadow or least developed district. The second condition makes it necessary that development distance of model districts should not exceed the critical minimum distance. Now the potential targets are the arithmetic means of the values of specific indicators of model districts. It is not important that the arithmetic means of particular indicators of model districts would always be greater than the values of the backward district. It is also possible that value of any indicator of low developed district is equal or greater than the arithmetic means of the value of indicators of the model district. It is important to bear in mind that this not a disadvantage of taxanomic method but rather it is a strong point. It shows that specific indicator is relatively well developed and there is no need to pay immediate attention to this area of quality of life. This is an excellent point and this knowledge can be employed by policy makers to allocate scarce resources to those areas which need immediate attention.

4.3 Data:

The Pakistan Social and Living Standards Measurement survey is a complex and large household survey which contains information on different topics. This survey is very helpful in monitoring the social indicators and their improvement over the year. It is conducted by PBS (Pakistan Bureau of Statistics) and report of PSLM survey is prepared after deleting missing values, outliers, and non-responses and is extremely helpful for the researcher and policy makers. Social indicators cover a variety of output measures such as immunization rate and indicators of this survey help in measuring the welfare and quality of life in Pakistan. Objective indicators of the PSLM include education, health, household assets and amenities (living conditions) whereas subjective indicators are related to satisfaction with service delivery at national, provincial and district level. The PSLM covers all four provinces, further divides regions into rural and urban areas and sub-divides findings on the basis of gender. This survey uses two-

stage stratified sample design for the latest report of 2012-13. This two stage stratified sample design contains selection of Primary Sampling Units and then Selection of Secondary Sampling Unit. This study has used the PSLM survey for the year 2012-2013. Sample size of the PSLM is set at 5438 sample villages/enumeration block which consists of 77, 764 households and this sample size produces best reliabale results at the level of district (Pakistan, 2014). It covers all the four provinces such as Balochistan (29 districts), KPK (25 districts), Punjab[1] (37 districts) and Sindh (23 districts). The PSLM is an ideal data set for this study because it covers trends of important social indicators in all four provinces within one year unlike any other source such as MICS and hence this data set makes intra-provincial comparison easy for any one year or over the period.

1 Pakistan Social and Living Standards Measurement survey 2012-2013 inludes Isalamabad in Punjab as a district . Therefore, we have included Islamabad as a district in Punjab in this study.

4.4 Description of Indictors:

It is normally believed that indicators of quality of life should be measured with the help of large number of attributes which must be feasible and relevant [(Slottje, 1991); (Maasoumi, 1986)]. Therefore this study uses fifteen objective indicators for the measurement of quality of life in Pakistan. These indicators have also been used by Haq & Zia (2013). A brief description of these indicators is given below in the table:

Table 4.1: Social Indicators

Objective Indicators of Quality of Life
Education
1. Women in completed primary or higher level education
2. Men in completed primary or higher level education
3. Literacy rate age 15 or 15 plus: Ability to read newspaper or write a letter
4. NER (Net Enrollment Rate) at primary level: children age 5-9 years old attending primary level
Health
1. Location of Delivery (LoD): Children birth at private and government hospitals
2. Safe Delivery (SD): Person who assisted in delivery i.e., doctor and/or nurse
3. Child Health: Indicator based on record and recall of full immunization course
4. Prenatal consultation: Tetanus Toxiod Injection received by pregnant women
Living Conditions
1. Source of safe drinking water; Tap water
2. Quality of roof i.e., Solid Roof
3. Number of houses which have more than one room
4. Source of Lighting: Households which have electricity connections
5. Source of fuel: Households which use kerosene oil or gas for cooking purposes
6. Sanitation Facility: access to better sanitation in terms of flush which is connected to septic tank/public sewerage
7. Quality of wall material: cemented blocks or burnt bricks

Source: Pakistan Social and Living Standards Measurement Survey 2012-2013

4.4.1 Indicators of Better Education:

Wellbeing and quality of life can be ensured through better provision of educational facilities. Four indicators have been used in this study such as literacy rate, net enrollment rate at primary level, percentage of women population who has completed primary or higher level education and percentage of men population who has completed primary or higher level education. Literacy is taken as ability to write a simple letter and read a newspaper. Population which is fifteen years and literate is expressed as percentage of population aged fifteen years or older. Net Enrollment rate is calculated as number of children aged 5-9 years and attending primary level classes 1-5 divided by the number of children aged 5-9 years and enrollment in katchi class is excluded.

4.4.2 Indicators of Quality Health Conditions:

Quality of life cannot be improved without the improvement of health conditions. This study has chosen four health indicators such as Location of delivery which is private/government hospital, Safe delivery which is measured as doctor and/or nurse have assisted in delivery, fully immunization course and prenatal consultation. Health child is measured through the indicator based on record and recall that children aged 12-23 months have received DPT1, 2, 3, BCG, Polio 1, 2, 3 and measles. Improved maternal health has been an important issue in Pakistan and 1 out of 89 women in Pakistan would die of maternal complications during life time period taken as the lifetime risk (NIPS, 2008). This aspect of maternal health is measured through variable that whether women have received Tetanus Toxoid injection at least for once. Another two aspects are also covered such as location of delivery and type of assistance received during the delivery.

4.4.3 Quality of Living Conditions:

Households' access to different civic amenities is not only determined by its particular location but also by the economic conditions. This study has chosen seven indicators for the measurement of living conditions such as percentage of household having safe drinking water, toilet facilities, number of rooms, material used for walls, solid roofs, sources of fuel for cooking such as gas connections and electricity connections.

4.5 Description of Statistics for Four Provinces:

Balochistan:

Statistics of quality of life indicators for Balochistan is given below in the table 4.2.

Table 4.2: statistics of Balochistan

Balochistan	Minimum%	Maximum%	Mean%	Coefficient of Variation
Female Primary+ Education	0.00	44.00	14.14	0.75
Male Primary+ Education	16.00	72.00	45.17	0.30
Literacy Rate 15+	8.00	66.00	35.31	0.36
Net Enrollment Rate (Primary)	9.00	73.00	43.41	0.32
Fully Immunized	6.00	91.00	54.72	0.42
Prenatal Consultation	4.00	77.00	32.45	0.59
Location of Delivery	4.00	65.00	29.00	0.67
Safe Delivery	2.00	53.00	21.00	0.71
Sanitation	1.00	82.00	24.86	0.73
Electricity Connections	28.08	99.80	75.84	0.27
Source of Fuel	0.00	95.20	17.50	1.42
Solid Roof	0.00	34.30	3.29	2.24
Quality of wall material	3.80	76.89	22.79	0.69
Rooms Above 1	61.02	98.40	85.07	0.12
Safe drinking Water (Tap water)	0.00	83.00	27.41	0.83

Computations are based on the "Pakistan Social and Living Standards Measurement" 2012-2013

Table shows that variation in different indicators such as access to safe drinking water, percentage of female population who has completed primary and higher education, Net enrollment rate, location of delivery, safe delivery and sanitation is quite high. These values make it confirmed that wider disparity

is present in quality of life indicators in Balochistan. Minimum value of households with safe drinking water facility is 0.00% whereas maximum value is 83.00% and this finding suggests that some regions do not have access to basic public services. Indicators like households with sources of fuel (gas connections) and solid roof have maximum values of 34.30% and 95.20% and minimum values of 0% for both indicators respectively. On average, households with gas connections (source of fuel) are 17.50% whereas its maximum and minimum values are 95.20% and 0% respectively. Similarly on average only 3.29% households have solid roofs. On average, 14.14% female population has completed primary and higher level education. These statistics provide an initial guess that there is a greater disparity in indicators of quality of life in Balochistan.

Sindh:

Statistics of quality of life indicators for Sindh is given below in the table 4.3.

Table 4.3: Statistics of Sindh

Sindh	Minimum%	Maximum%	Mean%	Coefficient of Variation
Female Primary+ Education	14.00	71.00	26.22	0.49
Male Primary+ Education	38.00	79.00	53.48	0.17
Literacy Rate 15+	35.00	81.00	47.22	0.24
Net Enrollment Rate (Primary)	32.00	66.00	49.04	0.17
Fully Immunized	44.00	89.00	71.30	0.19
Prenatal Consultation	32.00	91.00	56.52	0.26
Location of Delivery	15.00	88.00	43.39	0.41
Safe Delivery	16.00	82.00	41.78	0.41
Sanitation	8.00	97.00	44.52	0.47
Electricity Connections	48.17	99.38	87.97	0.16
Source of Fuel	0.48	97.89	29.76	0.75
Solid Roof	0.18	79.45	11.15	1.80
Quality of wall material	23.26	98.75	53.92	0.31
Rooms Above 1	45.42	85.83	61.11	0.16
Safe drinking Water (Tap water)	1.00	86.00	19.48	1.11

Computations are based on the "Pakistan Social and Living Standards Measurement" 2012-2013

Statistics for Sindh show high variation in indicators such as safe drinking water, solid roof, sources of fuel and female in primary or higher level completed education and sanitation etc. Only 19.48 percent households, on average have safe drinking water facility-tap water and its maximum and minimum values are 86% and 1% respectively. Coefficient of variation of households having solid roof and

percentage of households with access to tap water is 1.80 and 1.11 respectively which confirms higher variation in these indicators relative to their average values. These statistics of Sindh show that access to basic services is not equal in Sindh.

KPK:

Statistics of quality of life indicators for Sindh is given below in the table 4.4.

Table 4.4: Statistics of KPK

KPK	Minimum%	Maximum%	Mean%	Coefficient of Variation
Female Primary+ Education	2.00	56.00	26.00	0.53
Male Primary+ Education	28.00	77.00	57.48	0.20
Literacy Rate 15+	15.00	69.00	45.04	0.27
Net Enrollment Rate (Primary)	34.00	74.00	52.96	0.21
Fully Immunized	3.00	96.00	71.52	0.32
Prenatal Consultation	15.00	86.00	62.52	0.29
Location of Delivery	9.00	67.00	42.52	0.39
Safe Delivery	8.00	59.00	36.36	0.37
Sanitation	14.00	88.00	66.16	0.28
Electricity Connections	41.83	100.00	92.14	0.15
Source of Fuel	0.00	78.37	19.82	1.12
Solid Roof	0.91	62.79	29.21	0.76
Quality of wall material	0.44	83.90	49.97	0.50
Rooms Above 1	75.39	91.05	82.68	0.05
Safe drinking Water (Tap water)	6.00	83.00	45.08	0.50

Computations are based on the "Pakistan Social and Living Standards Measurement" 2012-2013

In Khyber Pukhtunkhawa, households having access to tap water, households with solid roof, sources of fuel for cooking (Gas Connections), Fully immunized children, safe delivery and percentage of female who have completed primary and higher education show high variations relative to average. Minimum value of fully immunized children is 3% whereas maximum value is 96% within Khyber Pukhtunkhawa. Dispersion of values around mean show the dispersion in quality of life conditions in Khyber Pukhtunkhawa.

Punjab:

Statistics of quality of life indicators for Sindh is given below in the table 4.5.

Table 4.5: Statistics of Punjab

Punjab	Minimum%	Maximum%	Mean%	Coefficient of Variation
Female Primary+ Education	18	74	44.05	0.33
Male Primary+ Education	37	87	60.16	0.18
Literacy Rate 15+	32	84	57.03	0.21
Net Enrollment Rate (Primary)	41	83	64.05	0.16
Fully Immunized	77	99	89.70	0.06
Prenatal Consultation	60	99	82.22	0.13
Location of Delivery	16	87	49.86	0.33
Safe Delivery	14	84	46.86	0.37
Sanitation	43	99	74.51	0.20
Electricity Connections	73.27	99.92	94.54	0.06
Source of Fuel	1.04	89.61	29.74	0.77
Solid Roof	1.13	91.77	20.64	1.16
Quality of wall material	41.37	99.92	84.78	0.17
Rooms Above 1	55.9	93.16	74.96	0.13
Safe drinking Water (Tap water)	2	74	19.59	0.83

Computations are based on the "Pakistan Social and Living Standards Measurement" 2012-2013

In Punjab, households having access to tap water, households with solid roof, safe delivery and percentage of female who have completed primary or higher education show high variations relative to average. Maximum value of percentage of female who have completed primary or higher education is 74% whereas minimum value is 18% in Punjab. These measures explain crudely that some districts have better quality of life conditions as compared to other districts in Punjab.

In this chapter we have reviewed different methods for ranking of districts on the basis of composite index of quality of life. Taxanomic Distance is relatively better method for ranking of different districts and then clustering similar districts in different development stages. This method also identifies model districts and potential targets for the backward districts. Fifteen indicators of objective quality of life are chosen from the PSLM data and these fifteen indicators form the optimum combination for evaluation of quality of life in four provinces.

Chapter 5

Results and Discussion

This chapter presents the provincial and district level rankings of the composite indices of quality of life. We have ranked districts using the composite index of quality of life. Districts are classified according to their levels of development based on quality of life index. Model districts and potential targets for certain level of quality of life have been identified for the backward districts. This chapter analyzes intra-provincial disparity in quality of life using the following steps:

1. Identification of Best District
2. Ranking of districts according to Composite index of quality of life
3. Classification of districts and identification of model districts
4. Identification of Potential Targets

Equation 4.4 is used for the identification of best district. Equation 4.5 has been used to compute the composite index of quality of life. The values of these indices for districts have been used to rank districts. Composite indices and equation (4.3) have been used to classifiy districts according to levels of development and for identification of model districts. Potential targets for each of 15 indicators of quality of life for backward districts are identified using Equation (4.6).

5.1 Inter-Provincial Ranking:

Inter-provincial disparity is quantified and provinces are ranked on the basis of composite indices of quality of life. Here "0" is designated as the ideal province or simulated province which has the highest standardized values for all the fifteen indicators of quality of life. Equation 4.4 computes distance of each province from the ideal province for each indicator and higher distance value shows the greater distance from the ideal province. Distance values range from 0-2 in the table 5.1 and it is evident that Punjab has the least distance from the ideal province securing the value of 0 in most of the indicators whereas Balochistan has the highest values for all the indicators except Rooms above 1 and hence conditions of quality of life are worse. Backward areas in terms of quality of life can easily be identified and scarce resources should be allocated to those areas which need immediate attention such as child health (immunization of children) in Balochistan, percentage of households having 'Rooms above 1' in Sindh and households which use gas connections for cooking in KPK and Punjab.

Table 5.1: Distance from each province to the "Ideal" Province:

Provinces	Female-Education[2]	Male-Education[3]	Literacy Rate[4]	Net Enrollment Rate[5]	Fully Immunized[6]	Pregnant Women[7]	Total LOD[8]	Total SD[9]	Sanitation[10]	Electricity conn[11]	Gas[12]	Solid Roof[13]	Burnt Bricks[14]	Rooms above 1[15]	Safe Water[16]
Balochistan-0	-2.25	-2.18	-2.07	-2.43	-2.79	-2.76	-2.17	-2.15	-2.24	-2.19	-2.23	-2.15	-2.38	0	-0.98
KPK-0	-1.4	-0.5	-1.14	-1.14	-1.01	-0.88	-0.65	-0.95	-0.29	-0.16	-1.98	0	-1.19	-0.3	0
Punjab-0	0	-0.17	0	0	0	0	-0.11	-0.09	0	0	-1.25	-0.78	0	-1.49	-2.15
Sindh-0	-0.47	0	0	-1.43	-1.16	-0.99	0	0	-0.67	-0.58	0	-0.06	-0.7	-2.13	-0.1

On the basis of measure of development ordinal ranks are given to provinces and here Punjab ranks first whereas Balochistan ranks last.

Table 5.2: Ranking of Provinces:

Province	Measure (di)	Ranking
Punajb	0.31	1
Sindh	0.33	2
KPK	0.38	3
Balochistan	0.87	4

This finding has been supported by the literature [(Wasti & Siddiqui, 2008); (Khan & Iqbal, 1982); (Pasha & Hassan, 1982); (Pasha, Malik & Jamal, 1990); (Pasha, Pasha & Ghaus, 1996); (Haq & Zia, 2008); (Haq, 2009); (Haq & Zia, 2013)]. The value of composite indices varies from 0.31 to 0.87 which shows a huge development disparity within provinces. It is interesting to point out that Punjab is the

2Women in completed primary or higher level education
3Men in completed primary or higher level education
4Literacy rate age 15 or 15 plus: Ability to read newspaper or write a letter
5NER (Net Enrollment Rate) at primary level: children age 5-9 years old attending primary level
6Child Health: Indicator based on record and recall of full immunization course
7Prenatal consultation: Tetanus Toxiod Injection received by pregnant women
8Children birth at private and government hospitals
9Person who assisted in delivery i.e., doctor and/or nurse
10access to better sanitation in terms of flush which is connected to septic tank/public sewerage
11Households which have electricity connections
12Households which use kerosene oil or gas for cooking purposes
13Solid Roof
14cemented blocks or burnt bricks
15Number of houses which have more than one room
16Tap water

most developed district in terms of quality of life but there is a substanial variation in the quality of life within Punjab (Haq, Ahmed &Shafique, 2010) and spatially imbalanced development has also been observed in other provinces. This provincial level development disparity should be looked into and this study explores the intra-provincial disparity in the next section.

5.2 Intra-Provincial Disparity in Quality of Life in Balochistan:

5.2.1 Identification of Best District:

We have formulated an ideal district using the highest standardized values of the fifteen indicators of quality of life. This ideal district is an imaginary district used to serve as an ideal for comparison i.e. where does a district stands in relation to the ideal quality of life. Next we have computed the distance of each district from the ideal district. The closer a district is to the ideal district the more developed it is while farther a district is from the ideal district the less developed it is.

Among the 28 districts of Balochistan, Quetta is nearest to ideal district (simulated district) and Kohlu is farthest from the ideal district which implies that in Baluchistan Quetta is the best district and Kohlu is the worst districts in terms of quality of life. This is based on computation of Equation (4.4) and results are shown in table 5.3.

Table 5.3: Distance from each district to the ideal district

Districts	Female-Education	Male-Education	Literacy Rate	Net Enrollment Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Awaran-0	-2.56	-2.41	-1.99	-2.18	0.00	-1.05	-1.26	-0.81	-4.20	-3.40	-3.84	-4.65	-2.76	-2.13	-3.22
Kalat-0	-2.37	-1.32	-1.91	-1.53	-0.44	0.00	-0.21	-0.61	-3.98	-0.59	-3.25	-4.59	-3.34	-2.27	-2.03
Kharan-0	-2.94	-1.17	-1.91	-1.75	-0.18	-3.40	-2.20	-2.49	-3.65	-1.43	-3.06	-4.62	-4.32	-0.94	-2.25
Khuzdar-0	-2.56	-1.98	-2.15	-1.38	-1.53	-1.62	-1.52	-1.88	-3.43	-1.71	-3.60	-4.37	-4.20	-1.66	-2.16
Lasbilla-0	-2.46	-2.34	-2.39	-2.84	-1.62	-1.52	-0.94	-1.41	-2.99	-1.88	-3.19	-1.45	-1.98	-2.02	-2.42
Mastung-0	-1.99	-1.24	-1.99	0.00	-0.70	-0.89	-0.31	0.00	-2.77	0.00	-2.80	-4.15	-3.27	-1.46	-2.07
Washuk-0	-3.69	-3.00	-3.11	-2.04	-2.45	-1.10	-1.31	-2.89	-4.48	-3.21	-3.84	-4.65	-3.21	-1.50	-3.66
Gwadar-0	-1.80	-0.37	-1.27	-0.44	-1.58	-1.26	-0.37	-1.61	-2.88	-0.81	-3.12	-4.00	-2.30	-1.64	-1.63
Ketch-0	-2.27	-1.10	-2.07	-1.31	-1.62	-2.62	-1.73	-2.36	-3.65	-1.39	-3.66	-4.56	-3.15	-1.81	-2.29
Jafarabad-0	-3.50	-2.49	-3.19	-2.76	-2.45	-2.41	-2.93	-2.89	-2.77	-0.10	-2.91	-4.61	-2.87	-3.62	-2.91
Jhal Magsi-0	-2.94	-1.83	-2.55	-2.04	-0.92	-3.40	-0.52	-1.55	-3.98	-0.73	-3.83	-4.54	-3.52	-2.01	-2.95
Bolan-0	-3.31	-2.20	-2.87	-2.69	-0.88	-3.24	-2.62	-3.03	-3.71	-0.34	-2.87	-4.37	-4.26	-0.79	-2.60
Nasirabad-0	-3.69	-3.44	-3.82	-3.13	-2.54	-3.09	-2.67	-2.69	-3.15	-0.84	-3.39	-4.54	-3.43	-3.71	-3.04
Chaghi-0	-3.41	-2.34	-2.95	-2.84	-2.89	-3.14	-2.72	-2.96	-3.76	-2.53	-3.71	-4.45	-2.64	-1.73	-3.26
Qilla Abdullah-0	-3.41	-1.98	-2.39	-3.42	-3.11	-2.83	-1.52	-0.74	-3.98	-0.22	-3.69	-4.46	-4.15	0.00	-2.64
Nushki-0	-1.70	-1.24	-1.51	-2.55	-0.83	-2.83	-2.98	-3.23	-2.32	-0.45	-3.41	-4.40	-2.55	-0.60	-0.84
Pashin-0	-1.89	-0.95	-1.27	-2.11	-1.71	-2.98	-1.78	-1.14	-2.32	-0.32	-2.19	-4.42	-4.33	-0.20	0.00
Quetta-0	0.00	0.00	0.00	-0.73	-0.79	-2.30	-0.58	-0.54	0.00	0.00	0.00	0.00	0.00	-0.12	0.00
Dera Bugti-0	-4.17	-4.10	-3.90	-4.65	-3.72	-2.15	-3.14	-2.62	-3.60	-3.44	-2.94	-4.59	-4.25	-0.94	-2.86
Hernai-0	-3.03	-2.05	-2.55	-3.13	-2.36	-1.41	-2.30	-2.15	-3.60	-1.14	-3.56	-4.37	-4.51	-0.72	-2.60
Kohlu-0	-4.07	-4.02	-4.62	-2.62	-2.63	-3.82	-3.19	-3.43	-4.37	-2.18	-3.83	-4.61	-4.65	-0.79	-3.53
Sibbi-0	-0.66	-0.80	-0.96	-1.67	-0.92	-1.41	0.00	-1.14	-1.22	-0.52	-1.18	-4.05	-2.28	-0.86	-0.66
Ziarat-0	-2.08	-0.66	-1.11	-2.04	-1.97	-2.83	-1.68	-1.88	-3.87	-0.02	-0.43	-4.58	-3.88	-0.01	-2.20
Barkhan-0	-3.41	-2.12	-3.19	-1.60	0.00	-2.67	-2.09	-3.36	-2.93	-0.69	-3.71	-4.63	-3.54	-0.89	-3.17
Qilla Saifullah-0	-3.41	-2.49	-3.50	-0.44	-0.74	-3.19	-2.46	-3.03	-4.20	-1.03	-3.66	-4.63	-4.36	-0.17	-2.73
Loralai-0	-3.31	-1.90	-2.47	-2.40	-1.75	-2.62	-2.83	-2.89	-2.54	-0.55	-3.78	-4.22	-4.27	-2.35	-3.04
Musa Khel-0	-3.88	-3.15	-3.34	-3.05	-3.15	-3.66	-2.98	-2.96	-2.43	-1.17	-3.83	-4.60	-3.75	-2.58	-3.66
Sherani-0	-3.98	-2.27	-3.11	-2.33	-1.09	-0.94	-2.72	-2.83	-3.10	-1.38	-3.84	-4.61	-4.04	-0.42	-3.61
Zhob-0	-3.50	-1.98	-2.79	-2.76	-1.49	-3.24	-3.09	-3.30	-1.77	-1.30	-3.78	-4.30	-3.93	-0.45	-3.00

The results show that distance values with reference to the ideal district (henceforth "distance values") of the districts for each indictor of quality of life range from 0-4 in table 5.3 and as value diverges more from 0 (ideal value) then the quality of life for district begins to worsen. Distance Values for the 15

indicators of quality of life for kohlu range between 3-4 and she performs poorly in areas of education such as percentage of women/men who have completed primary or higher education, health conditions such as safe delivery and location of delivery and in household amenities such as solid roof of houses and availability of gas connections. Quetta has distance values equal to or close to 0 against all indicators except immunized pregnant women where distance value is 2.No other district has a dominant share in best values which are zero or close to zero for quality of life indicators. It implies that Quetta is the best district in Balochistan. This trend confirms presence of severe regional disparity in Balochistan where some districts have small distances such as Quetta, Gawadar and Sibi whereas Dera Bugti, Kohlu and Musa Khel have higher distance values. The finding regarding disparity and ranking also draws support from literature where Provincial Capital Quetta performs much better as compared to other districts which are far flung [(Haq, 2009); (Pasha & Hassan,1982); (Khan & Iqbal, 1982)]. It is interesting to note that when Balochistan ranks 4th (least developed) within provinces having the value of 0.87 of composite index of quality of life. However, there appears to be pockets of developed districts such as Quetta and underdeveloped districts like Kohlu in Balochistan.

5.2.2 Ranking of districts according to Composite index of quality of life:

We have ranked districts according to composite index of quality of life. In Balochistan composite indices vary from 0.17 to 0.94 as is given in table 5.4. Lower the values of quality of life index reflect better state of the quality of life indicators and therefore greater development.

Quetta ranks first with the value of 0.17 whereas Kohlu ranks 28th with the value of 0.94. This shows huge disparity between the best and the worst districts within Balochistan. Sibi, Gawadar, Mustang and Lasbilla rank 2nd, 3rd, 4th and 5th respectively; Composite indices of quality of life vary between 0.39 to 0.56 within these relatively better ranked districts.

Table 5.4: Ranking of Districts within Balochistan

Districts	Composite Index of QOL	Ranking
Quetta	0.18	1
Sibbi	0.39	2
Gwadar	0.50	3
Mastung	0.52	4
Lasbilla	0.56	5
Pashin	0.58	6
Kalat	0.60	7
Ziarat	0.61	8
Nushki	0.62	9
Ketch	0.66	10
Khuzdar	0.67	11
Kharan	0.70	12
Awaran	0.71	13
JhalMagsi	0.71	14
Barkhan	0.73	15
Hernai	0.73	16
Loralai	0.74	17
Bolan	0.75	18
Zhob	0.75	19
Qilla Abdullah	0.75	20
Sherani	0.76	21
Jafarabad	0.77	22
QillaSaifullah	0.78	23
Washuk	0.81	24
Chaghi	0.80	24
Nasirabad	0.84	25
Musa Khel	0.85	26
DeraBugti	0.91	27
Kohlu	0.94	28

Equation (4.2) computes composite distance matrix for all the districts and then choosing the least distance value within each row Critical Minimum Distance is calculated using equation (4.3). Critical Minimum Distance is used in identification of model districts and finally in potential targets to be achieved by the backward districts. Composite Development Distance is an aggregate distance between two districts which shows the level of disparity between them in quality of life. Table 5.5 is a composite distance matrix which gives a synthetic single distance value from one district to the other district for all the 15 of indicators of the quality of life. Higher development distance shows greater disparity between districts. The table 5.5 shows that Development distance values range from 0 to 13.14. Development distance between Kohlu and Quetta is 13.14 which shows the backward status of Kohlu in relation to Quetta. Development distance between Kohlu and Musa Khel is of 3.46 and it shows that Musa Khel and Kohlu are somewhat similar quality of life conditions as compared to those districts which show greater development distance values.

5.5: Composite Distance Matrix for Balochistan:

Awaran	Kalat	Kharan	Khuzdar	Lasbilla	Mastung	Washuk	Gwadar	Ketch	Jafarabad	JhalMagsi	Bolan	Nasirabad	Chaghi	Qilla Abdullah	Nushki	Pashin	Quetta	DeraBugti	Hernai	Kohlu	Sibbi	Ziarat	Barkhan	QillaSaifullah	Loralai	Musa Khel	Sherani	Zhob	CMD
0.00	3.77	4.56	3.44	4.43	5.05	3.76	4.97	3.97	5.82	4.02	5.39	5.80	4.77	5.70	5.98	6.52	10.43	6.48	4.61	6.65	6.58	6.51	4.86	5.46	5.19	6.23	4.56	5.78	3.44
3.77	0.00	4.81	3.25	4.74	2.57	5.36	3.17	3.87	5.74	3.92	5.48	6.38	6.25	5.36	5.66	5.26	9.22	8.03	4.60	8.01	4.89	5.41	5.14	5.81	5.23	7.07	5.13	6.45	2.57
4.56	4.81	0.00	2.80	5.36	4.98	4.99	4.59	2.47	4.89	2.94	2.33	5.20	4.24	4.41	3.51	3.94	9.65	6.48	3.55	5.39	5.89	3.99	2.66	2.93	3.22	5.05	3.80	3.33	2.33
3.44	3.25	2.80	0.00	4.11	3.74	3.55	3.42	1.86	4.29	2.82	3.44	4.57	3.85	3.96	4.16	4.15	9.52	5.80	2.52	5.42	5.35	4.59	3.36	3.56	2.99	4.70	3.30	3.94	1.86
4.43	4.74	5.36	4.11	0.00	5.14	4.93	4.51	4.33	5.13	4.51	5.30	5.37	4.75	5.28	5.34	5.86	7.88	6.47	4.60	6.93	5.55	6.10	5.31	6.17	4.87	5.76	5.26	5.42	4.11
5.05	2.57	4.98	3.74	5.14	0.00	6.40	2.64	4.12	6.26	4.34	5.79	7.02	6.84	5.62	5.63	4.65	7.86	8.85	5.33	8.44	4.02	5.05	5.30	5.70	5.57	7.40	5.74	6.47	2.57
3.76	5.36	4.99	3.55	4.93	6.40	0.00	5.83	4.08	4.88	4.43	4.76	4.55	3.02	5.00	6.33	7.09	11.69	4.33	3.62	4.33	7.85	6.58	4.46	4.52	4.50	4.56	3.42	4.87	3.02
4.97	3.17	4.59	3.42	4.51	2.64	5.83	0.00	3.02	5.80	4.25	5.60	6.75	5.89	5.61	4.50	4.33	7.27	8.48	5.05	8.26	3.48	4.67	5.14	5.74	5.15	6.96	5.69	5.94	2.64
3.97	3.87	2.47	1.86	4.33	4.12	4.08	3.02	0.00	4.01	2.48	3.34	4.57	3.42	4.17	3.44	4.17	9.16	6.39	3.26	5.63	5.28	4.26	3.20	3.59	2.96	4.61	3.93	3.83	1.86
5.82	5.74	4.89	4.29	5.13	6.26	4.88	5.80	4.01	0.00	4.29	3.82	1.82	3.49	5.05	4.97	6.11	10.63	5.47	4.04	5.15	7.14	5.93	4.19	5.19	2.52	2.70	4.39	4.09	1.82
4.02	3.92	2.94	2.82	4.51	4.34	4.43	4.25	2.48	4.29	0.00	3.28	4.29	4.04	3.71	4.78	4.93	9.94	6.54	3.74	5.46	6.03	4.88	3.24	3.80	3.41	4.57	4.32	4.33	2.48
5.39	5.48	2.33	3.44	5.30	5.79	4.76	5.60	3.34	3.82	3.28	0.00	3.99	3.68	3.72	3.74	4.58	10.28	5.36	2.83	4.09	6.66	4.24	2.27	2.73	2.53	3.86	3.11	2.58	2.27
5.80	6.38	5.20	4.57	5.37	7.02	4.55	6.75	4.57	1.82	4.29	3.99	0.00	3.21	5.05	5.83	6.75	11.63	4.59	4.23	4.06	8.09	6.74	4.49	5.14	3.01	1.96	4.62	4.27	1.82
4.77	6.25	4.24	3.85	4.75	6.84	3.02	5.89	3.42	3.49	4.04	3.68	3.21	0.00	4.28	4.94	6.19	10.96	3.83	3.39	3.55	7.59	5.87	4.05	4.35	3.28	2.69	3.78	3.36	2.69
5.70	5.36	4.41	3.96	5.28	5.62	5.00	5.61	4.17	5.05	3.71	3.72	5.05	4.28	0.00	5.25	4.54	10.43	5.29	2.67	5.21	6.76	4.54	4.86	4.80	4.15	4.65	4.34	4.34	2.67
5.98	5.66	3.51	4.16	5.34	5.63	6.33	4.50	3.44	4.97	4.78	3.74	5.83	4.94	5.25	0.00	3.53	8.21	7.18	4.34	6.81	4.91	4.60	4.00	4.93	4.01	5.67	4.93	3.72	3.44
6.52	5.26	3.94	4.15	5.86	4.65	7.09	4.33	4.17	6.11	4.93	4.58	6.75	6.19	4.54	3.53	0.00	7.72	7.61	4.54	7.59	3.95	3.39	5.44	5.58	5.02	6.64	5.95	5.08	3.39
10.43	9.22	9.65	9.52	7.88	7.86	11.69	7.27	9.16	10.63	9.94	10.28	11.63	10.96	10.43	8.21	7.72	0.00	12.87	10.39	13.14	5.48	8.28	10.27	10.99	10.31	11.71	11.04	10.27	5.48
6.48	8.03	6.48	5.80	6.47	8.85	4.33	8.48	6.39	5.47	6.54	5.36	4.59	3.83	5.29	7.18	7.61	12.87	0.00	4.34	3.60	9.35	7.52	6.27	6.25	5.41	4.18	4.92	5.05	3.60
4.61	4.60	3.55	2.52	4.60	5.33	3.62	5.05	3.26	4.04	3.74	2.83	4.23	3.39	2.67	4.34	4.54	10.39	4.34	0.00	4.53	6.39	4.57	3.69	3.98	2.77	4.00	2.48	3.23	2.48
6.65	8.01	5.39	5.42	6.93	8.44	4.33	8.26	5.63	5.15	5.46	4.09	4.06	3.55	5.21	6.81	7.59	13.14	3.60	4.53	0.00	9.71	7.31	4.72	3.99	4.62	3.46	4.41	4.25	3.46
6.58	4.89	5.89	5.35	5.55	4.02	7.85	3.48	5.28	7.14	6.03	6.66	8.09	7.59	6.76	4.91	3.95	5.48	9.35	6.39	9.71	0.00	4.74	6.60	7.48	6.68	8.31	7.24	6.93	3.48
6.51	5.41	3.99	4.59	6.10	5.05	6.58	4.67	4.26	5.93	4.88	4.24	6.74	5.87	4.54	4.60	3.39	8.28	7.52	4.57	7.31	4.74	0.00	5.34	5.39	5.21	6.64	5.72	5.45	3.39
4.86	5.14	2.66	3.36	5.31	5.30	4.46	5.14	3.20	4.19	3.24	2.27	4.49	4.05	4.86	4.00	5.44	10.27	6.27	3.69	4.72	6.60	5.34	0.00	2.40	2.84	4.35	2.63	2.70	2.27
5.46	5.81	2.93	3.56	6.17	5.70	4.52	5.74	3.59	5.19	3.80	2.73	5.14	4.35	4.80	4.93	5.58	10.99	6.25	3.98	3.99	7.48	5.39	2.40	0.00	3.84	4.90	3.42	3.70	2.40
5.19	5.23	3.22	2.99	4.87	5.57	4.50	5.15	2.96	2.52	3.41	2.53	3.01	3.28	4.15	4.01	5.02	10.31	5.41	2.77	4.62	6.68	5.21	2.84	3.84	0.00	2.72	3.08	2.42	2.42
6.23	7.07	5.05	4.70	5.76	7.40	4.56	6.96	4.61	2.70	4.57	3.86	1.96	2.69	4.65	5.67	6.64	11.71	4.18	4.00	3.46	8.31	6.64	4.35	4.90	2.72	0.00	4.28	3.24	1.96
4.56	5.13	3.80	3.30	5.26	5.74	3.42	5.69	3.93	4.39	4.32	3.11	4.62	3.78	4.34	4.93	5.95	11.04	4.92	2.48	4.41	7.24	5.72	2.63	3.42	3.08	4.28	0.00	2.94	2.48
5.78	6.45	3.33	3.94	5.42	6.47	4.87	5.94	3.83	4.09	4.33	2.58	4.27	3.36	4.34	3.72	5.08	10.27	5.05	3.23	4.25	6.93	5.45	2.70	3.70	2.42	3.24	2.94	0.00	2.42

If we just compare Quetta (best district) with other districts to point out the disparity between Quetta and all other districts then development distance values range from 5.48 to 13.14 in the table 5.6. Sibbi is the closet district to Quetta whereas Kolhu is farthest from Quetta in terms of quality of life. When Quetta is compared with other districts then as you move away from Quetta there is higher development distance.

Table 5.6: Development Distance from Quetta

Districts	Development Distance
	Quetta (1st Ranked District)
Sibbi	5.48
Gwadar	7.27
Pashin	7.72
Mastung	7.86
Lasbilla	7.88
Nushki	8.21
Ziarat	8.28
Ketch	9.16
Kalat	9.22
Khuzdar	9.52
Kharan	9.65
JhalMagsi	9.94
Barkhan	10.27
Zhob	10.27
Bolan	10.28
Loralai	10.31
Hernai	10.39
Awaran	10.43
Qilla Abdullah	10.43
Jafarabad	10.63
Chaghi	10.96
QillaSaifullah	10.99
Sherani	11.04
Nasirabad	11.63
Washuk	11.69
Musa Khel	11.71
DeraBugti	12.87
Kohlu	13.14

Composite development distance value shown in table 5.4 reflects the aggregate distance between two districts in quality of life based on fifteen indicators. To focus on a specific quality of life indicator that needs more attention, it is important to look at each of the indicators of poorly ranked districts. An examination of these individual indicators has policy value for microplanning. Distance values against each indicator for all districts of Balochistan are shown in appendix 1.

5.2.3 Classification of Districts according to level of Development:

Given the state of development of each district, we have classified the 28 districts of Balochistan, in one of the following four categories of the level of development.

- Highly Developed
- High-Middle Level Developed
- Low-Middle Level Developed
- Least- Developed/Backward

Districts are classified according to four categories of development in quality of life and results are given in the table 5.7. Here four districts of Balochsitan; Sibbi, Quetta, Gawadar and Mastung belong to the category of highly developed distaricts. Seven districts come under high middle level developed whereas fifteen districts are in low developed category. The classification shows the imbalances in well-being within Balochistan. Musa Khel, Dera Bugti and Kohlu are the most backward districts of Balochistan. More than half of the districts in Balochistan belong to the low middle level developed category and this finding explains the dismal conditions of human well-being in largest port of the province.

Table 5.7: Classification of Districts according to Levels of Development

Stages of Development		Range of Indices	Districts
Highly Developed	IV	C.I<=(Mean-SD=0.53)	**Sibbi, Quetta, Gwadar, Mastung**
High Middle Level Developed	III	0.53<CI<0.69	**Kalat, Khuzdar, Lasbilla, Ketch, Nushki, Pashin, Ziarat**
Low Middle Level	II	0.6871913<CI<0.84	**Zhob, Shirani, Loralai, QillaSaifullah, Barkhan, Hernai, Qilla Abdullah, Chaghi, Nasirabad, Bolan, JhalMagsi, Jaffarbad, Washuk, Kheran, Awaran**
Least Developed	I	CI>=0.84	**Musa Khel, DeraBugti, Kohlu**

Spatial mapping[17] of districts according to their stages of development is also given for a better visual understanding of regional disparity within Balochistan.

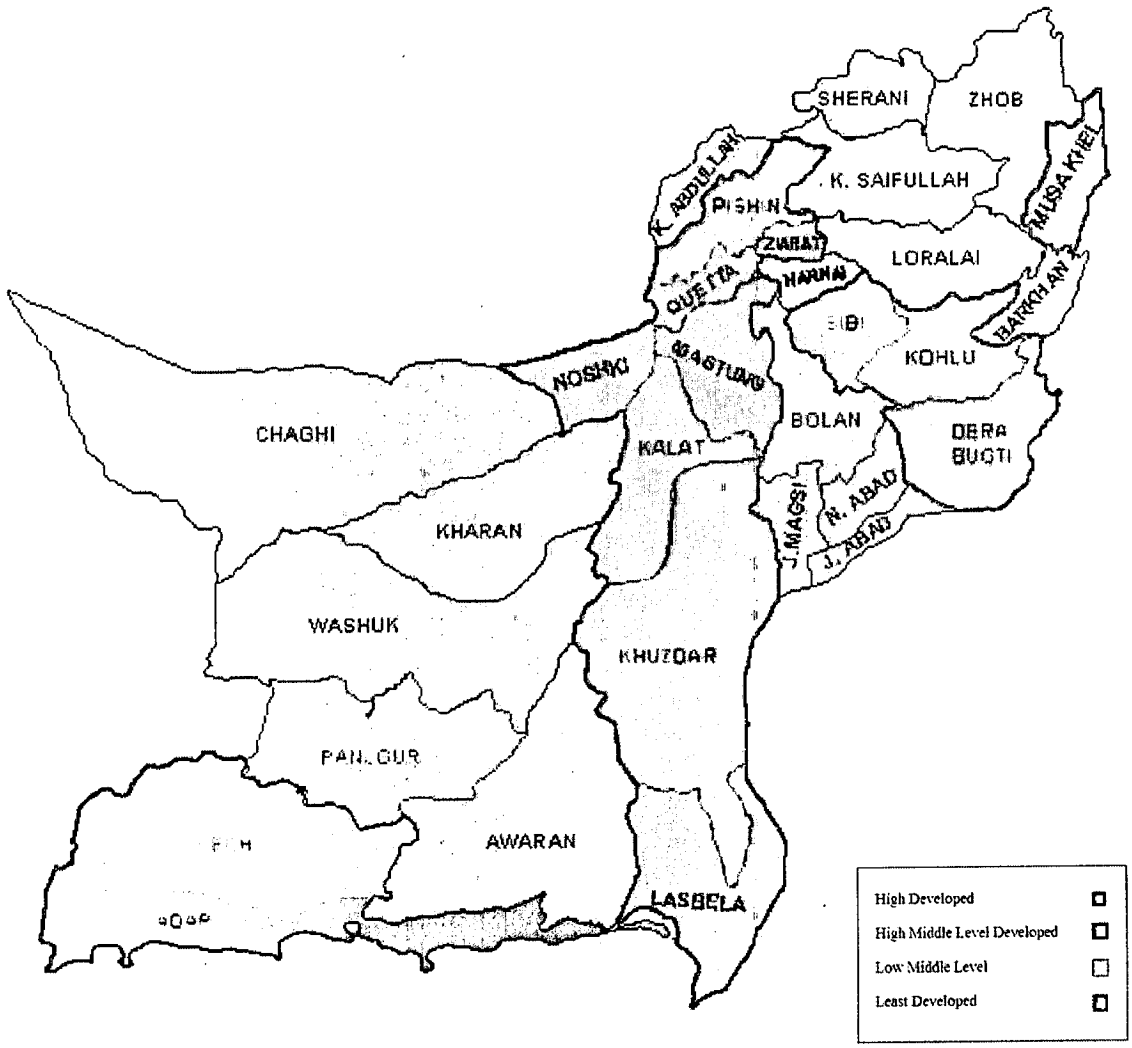


Figure 1: Spatial map of Balochistan according to level of development

5.2.4 Model Districts for the backward districts:

Model districts serve as the role models for the backward districts to achieve higher levels of quality of life. Model districts are ranked better as compared to backward districts and show development distance lower than critical minimum distance criterion.

17 Map of Balochistan has been accessed from http://www.pakimag.com/politics/local-govt-elections-in-balochistan.html/attachment/balochistan-map-district-wise

Equation (4.6) sets the criteria for those districts which can be a model for backward districts and using this equation we have identified model districts for Musa Khel, Dera Bughti and Kohlu in the table 5.8. Seven model districts for Musa Khel rank higher on the basis of composite indices of quality of life. Development distance of model districts is less than critical minimum distance given in the table 5.5. Similarly four and five model districts are also identified for the Dera Bughti and Kohlu respectively.

Table 5.8: Model Districts for the backward districts

Backward Districts	Model Districts for the Backward Districts
Musa Khel	**Jaffarabad, Chaghi, Bolan, Nasirabad, Hernai, Barkhan, Loralai, Sherani, Zhob**
DeraBugti	**Washuk, Chaghi, Shirani, Hernai**
Kohlu	**Washuk, Bolan, Nasirabad, Qilla Saifullah, Zhob**

In short run, Musa Khel, Dera Bugti and Kohlu should strive to achieve quality of life indicators that characterize their model districts. Policy effect at micro level should be directed to achieve this end.

5.2.5 Identification of Potential Targets:

Potential targets are arithmetic means of standardized values of all indicators of model districts. These model districts set potential targets for the backward districts and specify realistic targets which can be achieved gradually. Table 5.9 contains the potential targets within parenthesis for the districts of Kohlu, Dera Bughti and Musa Khel. Dera Bughti has dismal values of indicators of education, health and living conditions. Percentage of women who have completed primary or higher level education is 0% and Potential target is 6.7% which should be achieved by the District of Dera Bugti. Children who have received full immunization is only 6% whereas potential target is 40.75%.

Table 5.9: Potential Targets for the Backward Districts (%)

Districts	Female-Education	Male-Education	Literacy Rate	Net Enrollment Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
DeraBugti	0 (6.75)	16 (39)	17 (29.25)	9 (37.5)	6 (40.75)	36 (45.5)	5 (21.75)	10 (12.75)	17 (14.5)	28.08 (56.8025)	22.39 (2.5575)	0.48 (0.99)	10.07 (20.22)	88.91 (87.37)	18 (8.5)
Kohlu	1 (6.8)	17 (36.2)	8 (25.6)	37 (42.6)	31 (54)	4 (24)	4 (18.6)	2 (8.6)	3 (19.4)	54.33 (71.822)	0.26 (8.23)	0.36 (1.146)	3.8 (16.492)	90.49 (85.036)	3 (14.8)
Musa Khel	3 (7.4444)	29 (40.444)	24 (28.444)	31 (36.889)	19 (51.778)	7 (28.667)	8 (14.111)	9 (9.8889)	38 (27.111)	75.46 (79.30556)	0.18 (8.328889)	0.42 (1.468889)	17.92 (18.334)	72.44 (81.96)	0 (14.333)

Some Indicators of quality of life in Dera Bugti such as more than one room, percentage of households with access to tap water and Gas connections are better as compared to the potential target. It is not a flaw of this technique but it specifies that this indicator of quality of life needs no immediate attention and scarce resources can be diverted to those areas which lag significantly behind the potential targets. Lagging indicators which show significant lower values as compared to potential targets for the backward districts are given below in the

Table 5. 10: Lagging indicators of backward districts

Districts	Lagging Areas
Dera Bughti	Female Education, Male Education, Net Enrollment Rate, Safe delivery, Safe drinking Water, Electricity Connections
Kohlu	Female Education, Male Education, Literacy Rate, immunization of pregnant women, Safe Delivery, Sanitation, Gas connections, solid roof of houses, Safe drining Water
Musa Khel	Female Education, Fully immuznied Children, Safe Delivery, gas connections, safe Drinking Water, Solid roof

Scarce resources can be diverted towards those indicators which require attention such as safe drinking water facilities, increased percentage of women in primary or higher education, safe delivery and fully

immunized children. Kohlu performs poorly in all the indicators except Net enrollment rate, Percentage of household having Electricity Connections and more than one room.

Each district has its own specific areas in need of urgent intervention by the government and this study focuses on the identification of such areas in backward districts.This analysis reveals that in Pakistan there is not only same pattern of inter-provincial disparity over the years but intra-provincial disparity exists side by side. Balochistan is already tackling the issues of ethnic unrest and separatist nationalism. These challenges can partially be tackled through an active and serious role of government in eliminating these regional disparities.

5.3 Intra-Provincial Disparity in quality of life in Sindh:

5.3.1 Identification of Best District:

Among the 23 districts of Sindh, Karachi is nearest to ideal district and Tharparkar is farthest from the ideal district which implies that in Sindh Karachi is the best district and Tharparkar is the worst district in terms of quality of life. This is based on computation of equation (4.4) and results are shown in table 5.12. The results show that distance values of the districts for each indicator of quality of life range from 0-4 in the table 5.12 and as value diverges more from 0 (ideal value) then the quality of life for district begins to worsen. Distance Values for the fourteen indicators of quality of life for Tharparkar range between 3-4 and distance value of only one indicator, households having more than one room, is 0.3. Karachi has distance values equal to or close to 0 against all indicators except households having Gas connections where standardized distance value is 2. No other district has a dominant share in best values which are zero or close to zero for quality of life indicators. This implies that Karachi is the best district in Sindh. Karachi and Hyderabad have very low distance values whereas Tharaparkar, Jaccoabad and Thatta show very high distance values from the ideal district. According to Jamal & Malik (1988) such regional disparities in Sindh have been increasing despite various policy initiatives taken by the government.

5.11: Distance from each district to the "Ideal" district

Districts	Female-Education	Male-Education	Literacy Rate	Net Enrollment Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Badin-0	-4.21	-4.01	-4.11	-2.93	-1.96	-2.41	-1.80	-1.70	-3.94	-2.18	-3.33	-3.75	-3.76	-3.74	-3.32
Dadu-0	-3.04	-1.84	-2.14	-0.85	0.00	-1.94	-3.43	-3.22	-2.90	-0.20	-0.85	-3.91	-2.64	-3.14	-3.59
Hyderabad-0	-1.56	-1.41	-1.07	0.00	-0.22	-0.47	-0.28	0.00	-0.52	-0.03	-3.22	-0.69	-0.34	-2.09	-0.60
Jamshoro-0	-3.43	-2.82	-3.40	-2.56	-0.36	-2.34	-2.30	-2.05	-2.85	-0.61	-2.96	-3.66	-2.32	-2.88	-2.21
Matiari-0	-3.19	-2.71	-2.95	-2.32	-0.58	-0.60	-1.57	-1.23	-2.85	-0.29	-2.90	-3.62	-2.19	-2.93	-3.64
Tando Allah Yar-0	-3.50	-3.57	-3.13	-3.05	-0.87	-2.67	-1.85	-1.58	-2.80	-0.32	-3.18	-3.48	-2.41	-3.92	-3.55
TandoMuhd Khan-0	-3.89	-4.01	-3.22	-3.91	-2.18	-2.14	-1.74	-1.70	-3.28	-1.54	-3.78	-3.52	-3.36	-3.23	-3.59
Thatta-0	-4.21	-4.44	-4.02	-4.15	-2.10	-3.01	-2.64	-2.98	-3.85	-3.02	0.00	-3.07	-3.93	-4.14	-3.23
Karachi-0	0.00	0.00	0.00	-0.49	0.00	0.00	0.00	0.00	0.00	-0.11	-2.96	0.00	0.00	0.00	0.00
Jaccobabad-0	-4.21	-3.25	-4.02	-2.56	-3.05	-2.88	-3.93	-3.74	-2.04	-0.37	-3.68	-3.95	-2.78	-3.15	-3.59
Kashmore-0	-4.44	-3.14	-4.02	-3.05	-2.10	-3.14	-4.10	-3.86	-2.80	-0.63	-2.42	-3.86	-2.91	-2.51	-3.87
Larkana-0	-3.19	-1.84	-2.77	-0.98	-0.36	-1.67	-2.75	-2.57	-1.43	-0.11	-3.16	-3.81	-2.72	-1.93	-3.92
Shahdadkot-0	-4.13	-3.25	-3.93	-2.08	-0.51	-2.21	-3.20	-2.98	-2.57	0.00	-3.11	-3.91	-2.93	-2.34	-3.23
Shikarpur-0	-3.74	-2.38	-3.22	-1.83	-0.51	-1.87	-2.58	-2.52	-2.42	-0.13	-3.61	-3.92	-3.13	-2.73	-3.92
Mir Pur Khas-0	-3.66	-3.57	-3.22	-2.44	-2.39	-3.68	-2.70	-2.69	-2.42	-1.39	-2.94	-3.16	-3.38	-1.78	-2.35
Sanghar-0	-3.43	-2.38	-2.68	-1.71	-2.47	-3.21	-2.70	-2.46	-2.14	-0.65	-4.36	-3.49	-2.74	-2.64	-3.32
Tharparkar-0	-4.21	-3.25	-3.93	-2.08	-3.26	-2.41	-3.31	-3.22	-4.23	-3.71	-4.37	-3.86	-4.49	-0.31	-3.64
Umer Kot-0	-4.36	-3.79	-3.84	-2.32	-0.36	-3.95	-3.43	-3.22	-3.23	-1.80	-3.48	-3.74	-3.61	-1.62	-2.58
Ghotki-0	-4.21	-2.27	-3.48	-1.95	-1.89	-3.28	-2.92	-2.57	-1.81	-0.39	-3.44	-3.90	-2.19	-3.01	-3.41
Khairpur-0	-3.66	-2.60	-2.77	-1.71	-0.94	-2.41	-3.03	-2.75	-2.76	-0.51	-3.61	-3.93	-2.63	-2.36	-3.50
Nowshero Feroze-0	-3.19	-2.49	-2.14	-1.34	-0.65	-3.28	-2.87	-2.57	-2.57	-0.71	-2.92	-3.89	-2.34	-3.16	-3.32
Nawabshah-0	-3.97	-2.82	-2.86	-1.95	-1.45	-1.60	-2.42	-2.69	-2.52	-0.13	-2.03	-3.69	-2.37	-2.71	-3.64
Sukkur-0	-2.80	-1.73	-2.50	-1.34	-1.31	-1.87	-2.08	-1.81	-1.43	-0.19	-3.06	-3.42	-2.13	-1.87	-2.49

5.3.2 Ranking of Districts According to Composite Index of Quality of Life:

We have ranked districts according to composite index of quality of life. In Sindh composite indices vary from 0.19 to 0.87 as is given in table 5.12. Lower values of quality of life index reflect better state of the quality of life indicators and therefore greater development. Karachi (which is also the provincial capital) ranks first with the value of 0.19 whereas Tharparkar ranks 23rd with the value of 0.87. This shows huge disparity between the best and the worst districts within Sindh. Hyderabad, Sukkur, Larkana and Matiari rank 2nd, 3rd, 4th and 5th respectively; Composite indices of quality of life vary between 0.30

to 0.62 within these relatively better ranked districts. Thatta and Tharparkar rank 22nd and 23rd having composite indice of 0.85 and 0.87 respectively. These are the most backward districts of Sindh. According to the UNDP Human Development report (2003) Karachi and Hyderabad, in Sindh Province, have found a place in top thirty districts of Pakistan. Badin is the major oil-producing district but its composite index is 0.81 and is ranked as 19th out of 23 districts of Sindh. This reflects that the benefits of natural resources extracted from a specific district do not influence the quality of life in the district.

Table 5.12: Ranking of Districts

Districts	Composite Index of QOL	Ranking
Karachi	0.19	1
Hyderabad	0.30	2
Sukkur	0.54	3
Larkana	0.62	4
Matiari	0.62	5
Dadu	0.64	6
Jamshoro	0.65	7
Nawabshah	0.66	8
NowsheroFeroze	0.66	9
Khairpur	0.69	10
Shikarpur	0.70	11
Sanghar	0.70	12
Tando Allah Yar	0.71	13
Mir PurKhas	0.71	14
Ghotki	0.72	15
Shahdadkot	0.73	16
TandoMuhd Khan	0.78	17
UmerKot	0.80	18
Badin	0.81	19
Kashmore	0.82	20
Jaccobabad	0.82	21
Thatta	0.86	22
Tharparkar	0.88	23

Composite Development Distance is an aggregate distance between two districts which shows the level of disparity between them in quality of life. Table 5.13 is a composite distance matrix which gives a synthetic distance value for a set of indicators and here Critical Minimum Distance is calculated using the equation (4.3). Composite development distance values range from 0.00 to 13.65 in the table 5.13. Tharparkar has the maximum composite distance from Karachi and its value is 13. Composite development distance between Tharparkar and Mir Pur Khas is 4.34 which is smaller and hence Mir Pur Khas can be a potential Model district for Tharparkar. This table shows that Karachi and Hyderabad have high composite development distances from the less developed districts which shows that development in quality of life is highly skewed. Last row is Critical Minimum Distance which is the minimum distance within each row. CMD will be used for identification of potential model districts.

5. 13: Composite Distance Matrix for Sindh

	Badin	Dadu	Hyderabad	Jamshoro	Matiari	Tando Allah Yar	TandoMuhd Khan	Thatta	Karachi	Jaccobabad	Kashmore	Larkana	Shahdadkot	Shikarpur	Mir PurKhas	Sanghar	Tharparkar	UmerKot	Ghotki	Khairpur	NowsheroFeroze	Nawabshah	Sukkur	CMD
Badin	0.00	5.52	10.05	3.73	4.36	3.30	2.01	2.42	12.70	4.50	4.21	5.82	4.14	4.20	3.67	4.26	4.75	4.03	4.27	4.12	4.54	4.10	5.84	2.01
Dadu	5.52	0.00	8.02	3.29	3.68	4.07	5.34	6.43	10.38	4.63	4.43	2.47	3.05	2.27	4.78	3.42	6.74	4.77	3.47	2.08	2.06	2.77	3.63	2.06
Hyderabad	10.05	8.02	0.00	7.52	6.96	8.12	9.30	11.17	3.53	10.02	10.52	7.12	8.75	8.11	8.91	7.94	11.61	10.29	8.54	8.20	7.95	7.77	5.63	3.53
Jamshoro	3.73	3.29	7.52	0.00	2.61	2.19	3.38	4.82	10.06	4.15	3.93	3.43	2.26	2.34	3.27	3.00	6.19	3.68	2.81	2.18	2.52	2.37	3.14	2.18
Matiari	4.36	3.68	6.96	2.61	0.00	2.66	3.63	5.91	9.53	5.18	5.19	3.28	3.44	2.52	4.86	3.86	6.90	5.59	3.95	3.07	3.64	2.37	3.23	2.37
Tando Allah Yar	3.30	4.07	8.12	2.19	2.66	0.00	3.02	4.61	10.10	3.24	3.21	2.66	1.99	1.69	2.50	1.70	5.32	3.56	2.02	1.26	2.02	1.40	2.64	1.26
TandoMuhd Khan	2.01	5.34	9.30	3.38	3.63	3.02	0.00	2.93	11.76	4.11	3.99	5.25	3.90	3.81	3.38	3.70	5.25	4.48	3.96	3.78	4.33	3.40	5.06	2.01
Thatta	2.42	6.43	11.17	4.82	5.91	4.61	2.93	0.00	13.65	4.60	4.17	6.92	5.03	5.40	4.07	5.11	4.96	4.23	5.13	5.13	5.45	5.22	7.00	2.42
Karachi	12.70	10.38	3.53	10.06	9.53	10.10	11.76	13.65	0.00	12.45	12.83	9.35	11.23	10.59	11.17	10.34	13.50	12.57	11.08	10.61	10.45	10.32	7.92	3.53
Jaccobabad	4.50	4.63	10.02	4.15	5.18	3.24	4.11	4.60	12.45	0.00	1.72	4.57	3.08	3.68	3.28	2.85	5.48	4.34	2.50	3.30	4.01	3.20	4.91	1.72
Kashmore	4.21	4.43	10.52	3.93	5.19	3.21	3.99	4.17	12.83	1.72	0.00	4.68	2.69	3.51	3.13	3.28	4.83	3.24	2.74	2.97	3.85	3.35	5.33	1.72
Larkana	5.82	2.47	7.12	3.43	3.28	2.66	5.25	6.92	9.35	4.57	4.68	0.00	2.94	1.98	4.59	3.12	6.75	5.17	3.26	2.38	2.95	2.47	2.24	2.24
Shahdadkot	4.14	3.05	8.75	2.26	3.44	1.99	3.90	5.03	11.23	3.08	2.69	2.94	0.00	1.70	3.32	3.05	5.69	3.18	2.51	1.72	2.89	2.02	3.78	1.70
Shikarpur	4.20	2.27	8.11	2.34	2.52	1.69	3.81	5.40	10.59	3.68	3.51	1.98	1.70	0.00	3.80	2.67	5.99	4.10	2.47	1.39	2.36	1.47	3.11	1.39
Mir PurKhas	3.67	4.78	8.91	3.27	4.86	2.50	3.38	4.07	11.17	3.28	3.13	4.59	3.32	3.80	0.00	2.42	4.34	2.80	2.96	3.04	3.45	3.50	4.24	2.42
Sanghar	4.26	3.42	7.94	3.00	3.86	1.70	3.70	5.11	10.34	2.85	3.28	3.12	3.05	2.67	2.42	0.00	5.46	4.20	1.68	2.06	2.25	2.24	2.85	1.68
Tharparkar	4.75	6.74	11.61	6.19	6.90	5.32	5.25	4.96	13.50	5.48	4.83	6.75	5.69	5.99	4.34	5.46	0.00	4.41	5.89	5.37	6.22	5.88	7.04	4.34
UmerKot	4.03	4.77	10.29	3.68	5.59	3.56	4.48	4.23	12.57	4.34	3.24	5.17	3.18	4.10	2.80	4.20	4.41	0.00	3.94	3.41	3.86	4.41	5.66	2.80
Ghotki	4.27	3.47	8.54	2.81	3.95	2.02	3.96	5.13	11.08	2.50	2.74	3.26	2.51	2.47	2.96	1.68	5.89	3.94	0.00	2.05	2.35	2.26	3.45	1.68
Khairpur	4.12	2.08	8.20	2.18	3.07	1.26	3.78	5.13	10.61	3.30	2.97	2.38	1.72	1.39	3.04	2.06	5.37	3.41	2.05	0.00	1.59	1.50	3.09	1.26
NowsheroFeroze	4.54	2.06	7.95	2.52	3.64	2.02	4.33	5.45	10.45	4.01	3.85	2.95	2.89	2.36	3.45	2.25	6.22	3.86	2.35	1.59	0.00	2.53	3.34	1.59
Nawabshah	4.10	2.77	7.77	2.37	2.37	1.40	3.40	5.22	10.32	3.20	3.35	2.47	2.02	1.47	3.50	2.24	5.88	4.41	2.26	1.50	2.53	0.00	2.86	1.40
Sukkur	5.84	3.63	5.63	3.14	3.23	2.64	5.06	7.00	7.92	4.91	5.33	2.24	3.78	3.11	4.24	2.85	7.04	5.66	3.45	3.09	3.34	2.86	0.00	2.24

If we compare Karachi (the best district) with other districts to point out the disparity then development distance values range from 3.53 to 13.65 in the table 5.14. Hyderabad has the minimum development distance value of 3.53 from Karachi but as we move away from the Provincial Capital development distance value increases reflecting the worsening quality of life.

Table 5.14: Development Distance from Karachi

Districts	Development Distance
	Karachi
Hyderabad	3.53
Sukkur	7.92
Larkana	9.35
Matiari	9.53
Jamshoro	10.06
Tando Allah Yar	10.1
Nawabshah	10.32
Sanghar	10.34
Dadu	10.38
NowsheroFeroze	10.45
Shikarpur	10.59
Khairpur	10.61
Ghotki	11.08
Mir PurKhas	11.17
Shahdadkot	11.23
TandoMuhd Khan	11.76
Jaccobabad	12.45
UmerKot	12.57
Badin	12.7
Kashmore	12.83
Tharparkar	13.5
Thatta	13.65

Composite development distance value shown in table 5.13 reflects the aggregate distance between two districts in quality of life based on fifteen indicators. To focus on a specific quality of life indicator that needs more attention, it is important to look at each of the indicators of poorly ranked districts. An examination of these individual indicators has policy value for micro planning. Distance values against each indicator are shown in appendix 1.

5.3.3 Classification of Districts according to level of development:

Districts are classified according to four categories of development in quality of life and results are shown in the table 5.15. Here two districts of Sindh; Hyderabad and Karachi fall in the category of highly developed districts. Seven districts come under high-middle level developed whereas twelve districts are in low developed category. Tharparkar and Thatta are the most backward districts of Sindh.

Balochistan and Sindh have more than 50% districts under the low-middle developed category. This finding tells that the disparity in quality of life among the districts of the two provinces is rather high.

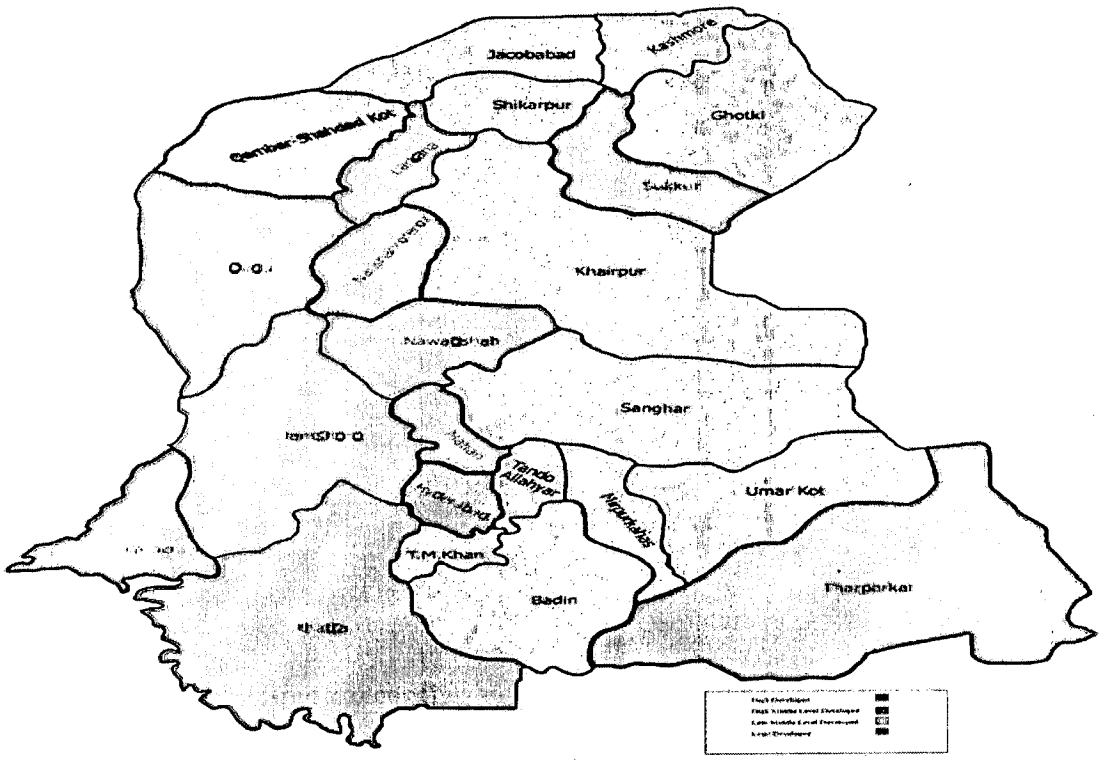
5.15: Classification of Districts according to level of Development

Stages of Development		Range of Indices	Districts
Highly Developed	IV	C.I<=(Mean-SD=0.517811)	**Hyderabad, Karachi**
High-Middle Level Developed	III	0.517811<CI<0.678541	**Sukkur, Nawabshah, NowsheroFeroze, Larkana, Matiari, Jamshoro, Dadu**
Low-Middle Level	II	0.678541<CI<0.83927	**Badin, Tando Allah Yar, Tando Muhammad Khan, Jaccobabad, Kashmore, Shadadkot, Shikarpur, Mir PurKhas, Sanghar, UmerKot, Ghotki, Khairpur**
Least Developed/Backward	I	CI>=0.83927	**Thatta, Tharparkar**

A spatial mapping[18] of this regional disparity according to levels of development is shown in map 2.

18 Map of Sindh has been accessed from http://sindhforests.gov.pk/forest-and-deh-maps

Figure 2: Spatial map of Sindh according to level of development



5.3.4 Identification of Model Districts:

Equation (4.6) sets the criteria for those districts which can be a model for backward districts and using this equation we have identified model districts for Thatta and Tharparkar in the table 5.16. Three model districts for Thatta rank higher on the basis of composite indices of quality of life. Development distance of model disticts is less than critical minimum distance given in the table 5.16. Similarly two model districts are also identified for Tharparkar.

5.16: Model Districts for the backward districts:

Backward Districts	Model Districts for the Backward Districts
Thatta	**Badin, Tando Muhammad Khan**
Tharparkar	**Badin, Mir PurKhas**

5.3.5 Identification of Potential Targets:

These model districts set potential targets for the backward districts of Thatta and tharparkar and specify realistic targets which can be achieved gradually. Table 5.17 contains the potential targets within paranthesis.

Thatta needs to achieve potential targets in all indicators except number of households having solid roofs. Tharparkar has been a backward area for long and even in 2012-13 it has low values of quality of life indicators. Tharparkar has received attention of media recently because of high infant mortality and table 5.17 given below shows clearly that it needs some serious policy reconsiderations in health and living conditions to improve quality of life indicators.

5.17: Potential Targets for the Backward Districts

Districts	Education Female-	Male-	Literacy	Net	Fully Immunize Women	Pregnant	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Bricks Burnt	Rooms above 1	Safe Water
Thatta	17 (19)	38 (42)	36 (40)	32 (38)	60 (60.5)	46 (57)	41 (56.5)	31 (53)	16 (21)	57.72 (73.69)	13.63 (17.99)	17.7 (6.45)	32.69 (38.89)	45.42 (51.76)	11 (16)
Tharparkar	17 (20.5)	49 (44)	37 (40)	49 (44)	44 (59)	35 (45.5)	29 (48)	27 (44.5)	8 (30)	48.17 (74.70)	0.7 (13.20)	1.96 (10.02)	23.26 (38.70)	82.78 (58.85)	7 (24.5)

Government need to pay serious attention to the issues of safe delivery, location of delivery, sanitation, safe drinking water and women education. Scarce resources should be allocated to those domains of quality of life which are lagging as given in the table 5.18 for the two backward districts in Sindh:

Table 5.18: Lagging indicators of backward districts

Backward Districts	Lagging Areas
Thatta	**Female Education, Fully Immunized Pregnant women, Safe Delivery, Gas Connections, Safe Drinking Water**
Tharparkar	**Female Education, Safe delivery, Fully Immunized Pregnant Women and Children, Sanitation, Gas Connections, Safe Drinking Water**

5.4 Inter-Provincial Disparity in quality of life in KPK:

5.4.1 Identification of Best Districts:

Among the 25 districts of KPK, Abbotabad is nearest to ideal district (simulated district) and Tor Garh is farthest from the ideal district which implies that in KPK Abbotabad is the best district and Tor Garh is the worst districts in terms of quality of life. This is based on computation of Equation (4.4) and results are shown in table 5.19. The results show that distance values of the districts for each indictor of quality of life range from 0-4 in table 5.19 and as the value diverges more from 0 (ideal value) then the quality of life for district begins to worsen .Distance Values for the 14 indicators of quality of life for Tor Garh range between 3-4 except the distance value of access to tap water which is close to 0 (ideal value).

Abbotabad has distance values equal to or close to 0 against all indicators except availability of Gas Connections and Households having more than one room where distance value is 1.No other district has a dominant share in best values which are zero or close to zero for quality of life indicators. This implies that Abbotabad is the best district in KPK. This trend confirms presence of severe regional disparity in KPK where some districts like Abbotabad, Haripur and Peshawar (also the provincial capital) are close to ideal district in the province whereas DI Khan, Kohistan and Tor Garh are farthest from the ideal district.

Table 5.19: Distance from each district to the "Ideal" District"

Districts	Female-Education	Male-Education	Literacy Rate	Net Enrollment Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bannu-0	-2.82	-1.11	-2.06	-1.60	-1.55	-0.71	-1.03	-1.03	-1.56	0.00	-3.25	-2.63	-0.57	-2.75	-0.62
Lakki Marwat-0	-2.30	-0.86	-1.73	-2.04	-2.12	-1.75	-1.64	-1.84	-2.09	-0.05	-3.26	-2.71	-1.36	-1.95	-1.83
D.I.Khan-0	-2.37	-2.31	-2.72	-3.11	-1.10	-2.14	-2.91	-2.80	-2.15	-0.59	-3.28	-2.78	-2.22	-1.98	-2.10
Tank-0	-3.19	-2.48	-3.05	-3.11	-1.24	-2.79	-3.39	-3.39	-2.63	-0.04	-3.34	-2.79	-2.37	-2.19	-1.16
Abbottabad-0	0.00	0.00	0.00	-0.62	-0.22	-0.44	-0.30	-0.22	-0.27	-0.05	-1.76	-0.40	-0.51	-1.51	-0.13
Batagram-0	-3.04	-1.97	-2.47	-1.60	-1.99	-1.26	-1.15	-1.18	-0.81	-0.18	-3.49	-1.25	-0.97	-0.98	-0.27
Haripur-0	-0.07	-0.43	-0.16	0.00	-0.66	-0.22	-0.61	-0.30	-0.05	-0.17	-1.44	0.00	-0.51	-2.19	-0.89
Kohistan-0	-3.93	-3.68	-3.63	-3.47	-3.36	-3.89	-3.51	-3.76	-3.97	-3.28	-3.52	-2.51	-3.13	-1.02	-3.44
Mansehra-0	-1.04	-1.11	-1.07	-0.98	-1.19	-2.08	-1.45	-1.25	-0.75	-1.44	-2.82	-1.35	-1.22	-2.41	-1.07
Tor Garh-0	-4.01	-4.19	-4.45	-3.55	-4.11	-2.68	-3.33	-3.47	-2.74	-4.11	-3.53	-2.80	-3.36	-3.91	-0.67
Hangu-0	-3.04	-1.54	-2.56	-2.22	-1.15	-0.82	-1.58	-1.48	-0.70	-0.10	-2.77	-1.25	-0.63	-0.13	-2.19
Karak-0	-1.71	-0.34	-1.32	-0.89	-1.06	-2.52	0.00	-1.55	-1.67	-0.59	-0.95	-2.75	-1.23	-1.48	-2.90
Kohat-0	-1.93	-1.03	-1.48	-1.78	-0.84	-0.60	-1.21	-1.03	-0.97	-0.49	-2.33	-1.12	-0.94	-1.82	-1.61
Bonair-0	-2.89	-2.31	-2.72	-1.60	-1.15	-1.59	-1.33	-1.62	-1.77	-0.64	-3.45	-0.73	-1.17	-2.36	-1.65
Chitral-0	-1.41	-1.20	-1.32	-1.60	-0.35	-0.11	-0.61	-0.96	-0.16	-0.28	-3.53	-2.67	-3.08	0.00	0.00
Lower Dir-0	-2.37	-1.97	-2.06	-2.58	-0.09	-1.75	-1.27	-1.84	-0.59	-0.20	-3.34	-1.41	-1.77	-1.62	-2.05
Malakand-0	-1.26	-1.03	-1.15	-1.42	0.00	0.00	-1.15	-1.40	-1.34	-0.05	-1.94	-0.79	-1.49	-1.08	-2.01
Shangla-0	-3.27	-2.74	-2.88	-3.47	-1.72	-1.37	-2.48	-3.02	-1.40	-0.49	-3.53	-2.00	-2.27	-3.63	-1.16
Swat-0	-2.30	-1.54	-1.65	-2.40	-0.57	-0.93	-0.79	-1.40	-0.05	-0.09	-3.04	-0.39	-0.89	-3.44	-1.29
Upper Dir-0	-3.04	-2.91	-2.23	-3.11	-1.02	-1.64	-2.36	-2.66	-1.72	-0.30	-3.45	-2.37	-2.83	-1.97	-3.21
Mardan-0	-2.15	-1.71	-1.98	-1.42	-0.13	-0.38	-1.39	-1.48	-0.54	-0.12	-2.03	-0.87	-0.47	-2.98	-2.81
Swabi-0	-2.00	-1.62	-2.14	-0.62	-0.57	-1.26	-1.64	-1.55	-0.43	-0.16	-2.92	0.00	0.00	-2.84	-3.03
Charsada-0	-2.45	-1.62	-2.23	-1.33	-0.09	-0.11	-0.85	-0.96	-0.70	-0.11	-2.10	-1.57	-0.71	-2.47	-3.08
Nowshera-0	-1.56	-1.03	-1.24	-1.07	-0.53	-0.82	-1.09	-1.55	-0.27	-0.23	-0.88	-0.75	-0.41	-3.70	-1.92
Peshawar-0	-1.48	-1.03	-1.07	-1.16	-0.22	-0.27	0.00	0.00	0.00	-0.12	0.00	-0.07	-0.03	-1.77	-1.20

5.4.2 Ranking of districts according to Composite index of quality of life:

In KPK the value of composite indices vary from 0.20 to 0.99 as is given in table 5.20. Abbotabad ranks first with the value of 0.20 whereas Tor Garh ranks 25th with the value of 0.99. The disparity within the districts of the province is evident from the dispersion of values of the composite indices for the best and worst districts. Abbotabad, Haripur and Peshawar rank 1st, 2nd and 3rd respectively; within these better ranked districts values of composite indices of quality of life vary between 0.20 to 0.25. Tank, Kohistan, Tor Garh rank 23rd, 24th and 25th respectively. Within the lower ranked districts, the value of composite indices vary between 081 to 0.99.

Table 5.20: Ranking of Districts

Districts	Composite Index of QOL	Ranking
Abbottabad	0.21	1
Haripur	0.24	2
Peshawar	0.26	3
Malakand	0.38	4
Kohat	0.42	5
Nowshera	0.44	6
Mansehra	0.47	7
Chitral	0.49	8
Karak	0.50	9
Mardan	0.50	10
Charsada	0.51	11
Swat	0.53	12
Swabi	0.53	13
Hangu	0.53	14
Batagram	0.54	15
Bannu	0.56	16
Lower Dir	0.58	17
Bonair	0.61	18
LakkiMarwat	0.61	19
D.I.Khan	0.74	20
Upper Dir	0.76	21
Shangla	0.79	22
Tank	0.82	23
Kohistan	0.99	24
Tor Garh	1.00	25

Composite distance matrix in table 5.21 shows the composite development distance of each district from every other district. Development Distance values range from 0 to 12.14 in the table 5.21. Abottabad has the highest development distance from Tor Garh which is 12.14 and it has the least development distance from Haripur which is 1.52 reflecting that the two share similar kind of level of quality of life. Tor Garh is the most backward district and it has the least development distance value in relation to Kohistan which is 4.63 reflecting that both of them more or less same in terms of backwardness.

Table 5. 21: Composite Distance Matrix of KPK

	Bannu	LakkiMarwat	D.I.Khan	Tank	Abbottabad	Batagram	Haripur	Kohistan	Mansehra	Tor Garh	Hangu	Karak	Kohat	Bonair	Chitral	Lower Dir	Malakand	Shangla	Swat	Upper Dir	Mardan	Swabi	Charsada	Nowshera	Peshawar	CMD
Bannu	0.00	2.47	4.41	5.09	5.29	2.73	5.36	8.65	3.47	8.34	3.70	4.54	2.72	2.98	4.57	3.61	4.13	4.27	3.29	4.88	3.70	4.27	3.51	4.16	5.31	2.47
LakkiMarwat	2.47	0.00	3.01	3.93	5.96	3.30	6.02	7.08	3.34	7.76	3.46	3.72	3.04	3.07	4.78	3.19	4.08	3.95	4.11	3.60	4.17	4.46	4.06	4.73	6.16	2.47
D.I.Khan	4.41	3.01	0.00	11.56	8.65	7.33	5.25	6.88	11.78	9.43	12.52	15.39	7.26	18.44	11.53	8.85	8.51	8.15	12.22	6.95	9.35	6.68	9.30	7.44	8.38	3.01
Tank	5.09	3.93	11.56	0.00	8.76	5.07	8.82	5.27	5.75	5.89	5.25	6.45	5.69	4.29	6.68	4.36	6.40	2.81	5.92	3.07	6.09	6.39	6.27	6.92	8.62	2.81
Abbottabad	5.29	5.96	8.65	8.76	0.00	5.49	1.52	12.02	4.00	12.14	5.74	5.32	3.76	6.02	4.91	5.64	3.60	8.13	4.74	8.07	4.96	5.25	5.13	4.09	3.10	1.52
Batagram	2.73	3.30	7.33	5.07	5.49	0.00	5.60	8.09	3.65	8.13	2.61	5.20	2.98	2.55	4.10	3.20	4.20	4.48	3.60	4.82	4.30	4.32	4.23	5.01	5.38	2.55
Haripur	5.36	6.02	5.25	8.82	1.52	5.60	0.00	11.87	3.87	11.92	5.77	5.27	3.69	5.81	5.52	5.71	3.57	7.99	4.53	7.93	4.39	4.56	4.71	3.36	2.78	1.52
Kohistan	8.65	7.08	6.88	5.27	12.02	8.09	11.87	0.00	8.54	4.63	7.93	8.71	8.79	7.11	9.87	7.67	9.46	6.32	9.36	5.62	9.18	9.14	9.20	10.11	11.56	4.63
Mansehra	3.47	3.34	11.78	5.75	4.00	3.65	3.87	8.54	0.00	8.62	4.27	3.84	2.45	3.34	4.51	3.39	3.50	5.19	3.29	5.21	3.64	3.57	3.99	3.38	4.68	2.45
Tor Garh	8.34	7.76	9.43	5.89	12.14	8.13	11.92	4.63	8.62	0.00	8.93	9.83	9.13	7.37	10.04	8.35	10.21	5.52	9.03	6.80	9.46	9.63	9.63	10.01	11.70	4.63
Hangu	3.70	3.46	12.52	5.25	5.74	2.61	5.77	7.93	4.27	8.93	0.00	4.62	2.65	3.07	4.55	2.67	3.35	4.98	3.93	4.19	3.51	3.80	3.25	4.80	5.05	2.61
Karak	4.54	3.72	15.39	6.45	5.32	5.20	5.27	8.71	3.84	9.83	4.62	0.00	3.71	4.81	5.60	4.43	4.01	6.59	5.19	5.58	4.38	4.85	4.03	4.19	4.93	3.71
Kohat	2.72	3.04	7.26	5.69	3.76	2.98	3.69	8.79	2.45	9.13	2.65	3.71	0.00	2.83	4.03	2.62	1.87	4.91	2.47	4.67	2.27	3.00	2.33	2.80	3.52	1.87
Bonair	2.98	3.07	18.44	4.29	6.02	2.55	5.81	7.11	3.34	7.37	3.07	4.81	2.83	0.00	5.25	2.47	3.92	3.51	2.96	3.63	3.17	3.07	3.34	4.29	5.58	2.47
Chitral	4.57	4.78	11.53	6.68	4.91	4.10	5.52	9.87	4.51	10.04	4.55	5.60	4.03	5.25	0.00	4.17	4.00	6.34	5.14	5.85	5.61	6.26	5.20	6.05	5.90	4.00
Lower Dir	3.61	3.19	8.85	4.36	5.64	3.20	5.71	7.67	3.39	8.35	2.67	4.43	2.62	2.47	4.17	0.00	3.30	3.84	2.80	3.03	3.10	3.54	3.14	4.30	5.39	2.47
Malakand	4.13	4.08	8.51	6.40	3.60	4.20	3.57	9.46	3.50	10.21	3.35	4.01	1.87	3.92	4.00	3.30	0.00	5.95	3.65	5.15	2.85	3.67	2.82	3.40	3.59	1.87
Shangla	4.27	3.95	8.15	2.81	8.13	4.48	7.99	6.32	5.19	5.52	4.98	6.59	4.91	3.51	6.34	3.84	5.95	0.00	4.34	2.99	5.02	5.51	5.33	5.84	7.76	2.81
Swat	3.29	4.11	12.22	5.92	4.74	3.60	4.53	9.36	3.29	9.03	3.93	5.19	2.47	2.96	5.14	2.80	3.65	4.34	0.00	4.95	2.48	2.97	3.08	2.90	4.34	2.47
Upper Dir	4.88	3.60	6.95	3.07	8.07	4.82	7.93	5.62	5.21	6.80	4.19	5.58	4.67	3.63	5.85	3.03	5.15	2.99	4.95	0.00	4.72	5.23	4.67	6.04	7.64	2.99
Mardan	3.70	4.17	9.35	6.09	4.96	4.30	4.39	9.18	3.64	9.46	3.51	4.38	2.27	3.17	5.61	3.10	2.85	5.02	2.48	4.72	0.00	1.89	1.31	2.17	3.90	1.31
Swabi	4.27	4.46	6.68	6.39	5.25	4.32	4.56	9.14	3.57	9.63	3.80	4.85	3.00	3.07	6.26	3.54	3.67	5.51	2.97	5.23	1.89	0.00	2.66	3.00	4.63	1.89
Charsada	3.51	4.06	9.30	6.27	5.13	4.23	4.71	9.20	3.99	9.63	3.25	4.03	2.33	3.34	5.20	3.14	2.82	5.33	3.08	4.67	1.31	2.66	0.00	2.93	4.00	1.31
Nowshera	4.16	4.73	7.44	6.92	4.09	5.01	3.36	10.11	3.38	10.01	4.80	4.19	2.80	4.29	6.05	4.30	3.40	5.84	2.90	6.04	2.17	3.00	2.93	0.00	3.12	2.17
Peshawar	5.31	6.16	8.38	8.62	3.10	5.38	2.78	11.56	4.68	11.70	5.05	4.93	3.52	5.58	5.90	5.39	3.59	7.76	4.34	7.64	3.90	4.63	4.00	3.12	0.00	2.78

Comparing all the districts of the province with reference to the best district in the province i.e., Abbotabad (best district) yields distance values ranging from with 1.52 to 12.14 in the table 15.22. Haripur has the minimum development distance value 1.52 from Abbottabad but as you move away from this cantonment dominated area then development distance value gets higher.

Table 5.22: Development Distance from Abbottabad

Districts	Development Disparity
	Abbottabad
Haripur	1.52
Peshawar	3.1
Malakand	3.6
Kohat	3.76
Mansehra	4
Nowshera	4.09
Swat	4.74
Chitral	4.91
Mardan	4.96
Charsada	5.13
Swabi	5.25
Bannu	5.29
Karak	5.32
Batagram	5.49
Lower Dir	5.64
Hangu	5.74
LakkiMarwat	5.96
Bonair	6.02
Upper Dir	8.07
Shangla	8.13
D.I.Khan	8.65
Tank	8.76
Kohistan	12.02
Tor Garh	12.14

5.4.3 Classification of Districts according to level of development:

Districts have been classified according to four categories of development in quality of life and results are shown in the table 5.23. Here three districts of KPK; Abbotabad, Haripur and Peshawar belong to the category of highly developed districts and Stage-IV. Thirteen districts come under high-middle level developed whereas five districts are in low-middle level developed category. Shangla,Tor Garh,

Kohistan and Tank are the most backward districts of Khyber Pukhtunkhawa. It is really interesting to note that more than half of the districts of KPK belong to the high developed and high middle level developed whereas half of the districts in Sindh and Balochistan belong to the low middle level developed categories but KPK has more backward districts. This finding suggests that each province has its own specific human well being conditions and micro planning in terms of devolved responsibilities and functions should be considered for a more balanced and equitable development within provinces.

Table 5.23: Classification of Districts according to level of Development

Stages of Development		Range of Indices	Districts
Highly Developed	IV	C.I<=(Mean-SD=0.34997)	**Peshawar, Haripur, Abbottabad**
High Middle Level Developed	III	0.34997<CI<0.5665	**Nowshera, Charsada, Swabi, Mardan, Swat, Malakand, Chitral, Kohat, Karak, Hagu, Mansehra, Batagram, Bannu**
Low Middle Level	II	0.5665<CI<0.7833	**Upper Dir, Lower Dir,Bonair, DI Khan, LakkiMarwat**
Least Developed/Backward	I	CI>=0.7833	**Shangla, Tor Gorh, Kohistan, Tank**

Spatial mapping[19] of districts according to their levels of development is given in map 3.

Figure 3: Spatial map of KPK according to level of development

5.4.4 Identification of Model Districts and Potential Targets:

Model districts are identified in the table 5.24 given below. There are six model districts for the district of Shangla and four model districts for the Tank. Tor Garh and Kohistan have one model district each.

Table 5.24: Model Districts for the backward districts

Backward Districts	Model Districts for the Backward Districts
Shangla	**Bannu, LakkiMarwat, Bonair, Lower Dir, Upper Dir, Swat**
Tor Garh	**Bonair**
Kohistan	**Upper Dir**
Tank	**Lakki Marwat, Lower Dir, Upper Dir, Bonair**

19 Map of KPK has been accessed from http://www.nrdf.org.pk/maps/132-map-of-kpk

5.4.5 Identification of Potential Targets:

Tor Garh is the most backward district of KPK as mentioned earlier and potential targets for the backward district against all indicators of quality of life are higher except number of households having access to safe drinking water. Only the 2% women have completed primary or higher education and only 3% children are fully immunized. Districts of Shangla, Tank and Kohistan also show low values for percentage of women with primary or higher levels of education. Each district has its own specific lagging areas of quality of life.

Table 5.25: Potential Targets for the Backward Districts

Districts	Education Female-	Education Male-	Rate Literacy	Enrollmen Net	Immunize Fully	Women Pregnant	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Bricks Burnt	above 1 Rooms	Safe Water
Shangla	12 (20.67)	45 (56.17)	34 (43.83)	35 (49)	57 (71.5)	61 (60.5)	26 (43.83)	18 (35.5)	62 (63.83)	93.09 (97.00)	0 (5.185)	18.65 (25.06)	27.4 (48.26)	76.51 (81.63)	57 (43.17)
Tor Garh	2 (17)	28 (50)	15 (36)	34 (56)	3 (70)	37 (57)	12 (45)	12 (37)	37 (55)	41.83 (60.96)	0 (1.86)	0.91 (46.67)	0.44 (54.72)	75.39 (81.58)	68 (46)
Kohistan	3 (15)	34 (43)	25 (42)	35 (39)	20 (73)	15 (56)	9 (28)	8 (23)	14 (56)	53.53 (95.76)	0.28 (1.83)	7.25 (10.44)	6.26 (13.54)	83.14 (86.96)	6 (11)
Tank	13 (20.25)	48 (53.5)	32 (42.5)	39 (47.75)	68 (71.25)	35 (55.25)	11 (39.75)	13 (32)	39 (59.25)	99.41 (95.81)	4.16 (8.48)	1.11 (22.87)	25.04 (39.53)	82.26 (83.13)	57 (34)

Lagging indicators of quality of life for the four most backward districts are shown below in the table 5.26. To improve the quality of life the lagging indicators demand immediate attention from the government.

Table 5.26: Lagging indicators of backward districts

Backward Districts	Lagging Indicators
Shangla	**Female Education, Literacy Rate, Fully Immunized Children, Safe Delivery, Gas Connections, material of walls (burnt bricks)**
Tor Garh	**Female Education, Literacy Rate, Fully Immunized Children, Safe Deivery, Gas and Electricity Connections, households with solid roofs, material of walls (burnt bricks)**
Kohistan	**Female Education, Male Education, Literacy Rate, Net Enrollment Rate, Fully Immunized Children and women, Safe Delivery, Sanitation, Gas and Electricity Connections, households with solid roofs, material of walls (burnt bricks), Access to Tap Water**
Tank	**Female Education, Literacy Rate, Fully Immunized Women, Location of delivery and safe delivery, Sanitation, Gas Connections, Solid roof of houses**

5. 5 Intra-Province Disparity in quality of life in Punjab:

5.5.1 Identification of Best Districts:

Punjab is the most developed province of Pakistan; it has sustained its first position among the four provinces over the period and it has been supported by the literature (Khan & Iqbal, 1982) (Wasti & Siddiqui, 2008) (Haq,2009). Intra-provincial disparity in quality of life within Punjab is severe at district and even at Tehsil and Taluka levels (Haq, Ahmed & Shafique, 2010).

Among the 37 districts of Punjab, Islamabad is nearest to ideal district (simulated district) and Rajanpur is farthest from the ideal district which implies that in Punjab Islamabad (federal capital) is the best district and Rajanpur is the worst districts in terms of quality of life. This is based on computation of Equation (4.4) and results are shown in table 5.27. The results show that distance values with reference to the ideal district (henceforth "distance values") of the districts for each indictor of quality of life range from 0-4 in table 5.27 and as value diverges more from 0 (ideal value) then the quality of life for district begins to worsen . Distance Values for the 13 indicators of quality of life for Rajanpur range between 3-4 except the percentage of fully immunized children and Pregnant women with distance value of 1. Islamabad has distance values equal to or close to 0 against all indicators except immunized children and access to tap water where distance value is 1.No other district has a dominant share in best values which are zero or close to zero for quality of life indicators. This implies that Islamabad is the best district in Punjab. Rawalpindi, Jehlum (Northern Punjab) and Lahore, Sialkot (Central Punjab) coming next in order show small distance values from the ideal district as compared to districts of Vehari, Rahim Yar Khan and Rajanpur (all in Southern Punjab) show high distance value in all indicators of quality of life. This reflects the disparity in quality of life between regions of Southern, Northern and Central Punjab. Northern and Central Punjab show better quality of life conditions and this finding draws some support from literature (Haq & Zia, 2013).

Table 5.27: distance from each district to the Ideal district:

Districts	Female-Education	Male-Education	Literacy Rate	Net Enrollment Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Islamabad-0	0.00	0.00	0.00	-0.10	-1.61	0.00	0.00	0.00	0.00	-0.27	-0.40	0.00	-0.08	0.00	-1.23
Bahawalnager-0	-2.63	-3.39	-2.91	-3.28	-1.61	-3.79	-2.74	-2.76	-2.13	-1.30	-3.69	-3.40	-1.56	-2.49	-1.97
Bahawalpur-0	-2.91	-3.76	-3.33	-4.18	-3.76	-2.82	-3.11	-2.76	-2.20	-2.09	-3.08	-3.60	-1.78	-3.05	-3.56
Rahim Yar Khan-0	-3.18	-3.85	-3.59	-3.98	-3.94	-3.40	-3.47	-3.17	-2.40	-1.99	-3.09	-3.76	-1.87	-3.36	-3.75
D. G. Khan-0	-3.74	-3.58	-3.93	-2.09	-3.76	-3.21	-4.20	-4.03	-3.73	-2.76	-3.48	-3.75	-3.72	-1.04	-2.95
Layyah-0	-2.63	-2.48	-2.65	-0.70	-0.72	-0.78	-3.53	-3.51	-1.73	-2.88	-3.75	-3.77	-1.81	-1.75	-4.11
Muzaffar Garh-0	-3.18	-3.58	-3.42	-3.09	-2.33	-2.14	-3.41	-3.28	-2.66	-2.07	-3.33	-3.72	-2.92	-3.79	-4.36
Rajanpur-0	-3.88	-4.58	-4.45	-3.38	-1.25	-1.56	-4.32	-3.92	-3.06	-4.68	-3.86	-3.80	-4.12	-2.85	-3.87
Chiniot-0	-2.77	-2.93	-3.33	-2.69	-1.61	-2.04	-2.07	-1.67	-2.66	-0.73	-2.75	-3.57	-0.89	-1.95	-4.24
Faisalabad-0	-1.11	-1.74	-1.45	-1.79	-3.05	-1.95	-1.64	-1.38	-0.47	-0.22	-1.63	-3.01	-0.10	-1.59	-3.38
Jhang-0	-2.98	-2.93	-3.08	-2.79	-2.15	-3.40	-2.68	-2.76	-3.00	-1.91	-3.30	-3.71	-1.56	-1.83	-4.30
T. T. Singh-0	-1.45	-2.02	-1.62	-1.39	-1.61	-1.65	-2.01	-1.61	-1.67	-0.12	-2.72	-3.61	-0.43	-1.43	-2.58
Gujranwala-0	-0.83	-2.02	-1.28	-1.99	-1.79	-0.78	-1.40	-1.27	-0.20	-0.14	-1.10	-1.49	-0.05	-1.29	-4.24
Gujrat-0	-0.97	-1.65	-1.54	-1.19	-0.54	-0.29	-1.04	-0.81	-0.67	-0.23	-1.27	-1.99	-0.08	-0.94	-2.95
Hafizabad-0	-1.94	-2.66	-2.31	-1.89	-1.08	-0.88	-2.01	-1.79	-1.33	-0.37	-1.65	-3.08	-0.38	-1.36	-4.42
Mandi Bahuddin-0	-1.38	-1.83	-1.71	-1.29	-1.08	-0.39	-2.80	-2.42	-1.13	0.00	-2.99	-2.87	0.00	-1.46	-4.11
Narowal-0	-1.52	-2.20	-2.14	-0.70	-1.25	-0.88	-2.80	-2.25	-1.27	-0.05	-3.69	-3.11	-0.36	-1.60	-3.99
Sialkot-0	-0.83	-2.02	-1.37	-1.00	-0.90	-0.29	-1.52	-2.07	-0.33	-0.31	-1.99	-1.62	-0.03	-0.97	-3.13
Kasur-0	-2.56	-3.30	-2.99	-2.19	-2.69	-1.75	-1.77	-1.56	-0.80	-0.32	-3.12	-3.22	-0.24	-3.44	-3.56
Lahore-0	-0.42	-1.19	-0.60	-1.49	-1.79	-0.78	-0.49	-0.29	-0.07	-0.33	0.00	-0.51	-0.01	-2.24	0.00
Nankana Sahib-0	-1.80	-2.38	-2.22	-1.99	0.00	-1.65	-2.25	-1.96	-0.87	-0.47	-2.52	-3.19	-0.67	-2.10	-3.99
Sheikhupura-0	-1.38	-2.48	-1.97	-2.19	-2.69	-1.26	-1.34	-1.09	-0.33	-0.17	-1.51	-2.09	-0.34	-1.90	-3.19
Khanewal-0	-2.56	-2.66	-2.56	-1.99	-2.15	-1.85	-2.98	-2.82	-2.60	-0.94	-2.74	-3.57	-1.48	-2.11	-4.36
Lodhran-0	-2.98	-3.12	-3.16	-2.99	-1.25	-2.24	-3.29	-3.34	-2.53	-1.61	-3.56	-3.69	-1.83	-2.48	-3.56
Multan-0	-2.21	-2.84	-2.31	-2.19	-0.72	-2.24	-2.31	-2.36	-1.53	-0.88	-1.90	-3.21	-1.48	-3.23	-3.75
Vehari-0	-2.77	-3.48	-2.91	-2.69	-0.72	-1.36	-2.07	-2.02	-2.60	-1.04	-3.48	-3.68	-1.18	-2.45	-3.87
Attock-0	-1.59	-1.47	-1.54	-1.09	-0.36	-0.49	-1.58	-1.32	-1.47	-0.24	-1.75	-1.98	-0.60	-0.53	-2.39
Chakwal-0	-0.90	-0.83	-0.94	0.00	-1.43	-2.63	-1.28	-1.04	-0.87	-0.28	-2.45	-2.99	-0.40	-0.03	-2.52
Jehlum-0	-0.62	-0.83	-1.28	-0.30	-0.72	-0.97	-0.91	-1.04	-0.87	-0.09	-2.39	-2.34	-0.92	-0.32	-2.15
Rawalpindi-0	-0.48	-0.55	-0.34	-1.00	-1.08	-0.78	-0.67	-0.46	-0.80	-0.39	-1.06	-0.82	-0.43	-0.05	-1.66
Okara-0	-2.70	-3.03	-2.91	-0.80	-1.25	-2.24	-2.98	-2.99	-1.53	-0.55	-2.72	-3.49	-0.86	-2.81	-3.87
Pakpatten-0	-2.84	-3.30	-2.99	-1.79	-3.05	-2.53	-3.11	-3.11	-2.80	-0.64	-3.57	-3.63	-1.87	-3.24	-3.81
Sahiwal-0	-2.35	-2.84	-2.56	-1.79	-0.54	-2.82	-2.68	-2.59	-1.86	-0.99	-2.87	-3.56	-0.67	-2.23	-3.81
Bhakar-0	-3.18	-3.03	-2.82	-2.39	-0.54	-2.04	-2.31	-2.30	-3.53	-1.16	-3.80	-3.76	-2.02	-1.98	-4.24
Khushab-0	-2.63	-2.20	-2.48	-1.69	-2.15	-1.26	-2.80	-2.71	-1.67	-1.07	-3.25	-3.62	-0.82	-0.85	-2.64
Mianwali-0	-2.56	-2.29	-2.48	-1.89	-2.15	-0.39	-2.01	-2.76	-1.80	-1.42	-3.46	-3.62	-1.14	-2.24	-2.95
Sargodha-0	-2.21	-2.02	-2.14	-1.79	-2.33	-0.88	-2.07	-1.90	-1.20	-0.29	-2.72	-3.51	-0.70	-1.55	-4.18

5. 5.2 Ranking of districts according to Composite index of quality of life:

We have ranked districts according to composite index of quality of life. In Punjab composite indices vary from 0.14 to 0.98 as is given in table 5.28. Lower values of quality of life index reflect better state of the quality of life indicators and therefore greater development.

Islamabad ranks first with the value of 0.14 whereas Rajanapur ranks 37th with the value of 0.98. This shows huge disparity between the best and the worst districts within Punjab. Islamabad, Rawalpindi, Lahore and Jehlum rank 1st, 2nd 3rd and 4th having composite indices of quality of life from 0.14 to 0.33. Three of these districts belong to the northern part of Punjab whereas Lahore is in Central Punjab. Islamabad[20] and Lahore are Federal and Provincial Capitals Whereas Rawalpindi and Jehlum have developed cantonment areas. Muzaffar Garh, RahimYar khan, DG khan, and Rajanpur rank 34th, 35th, 36th and 37th and their composite indice of quality of life range from 0.85 to 0.98. All of the low ranked districts are in southern Punjab whereas most of the highly ranked districts are in northern and central parts of Punjab. This points towards the spatial development imbalances in Punjab.

20 PSLM include Islamabad, the federal capital, in Punjab

Table 5.28: Ranking of Districts

Districts	Composite Index of Quality of Life	Ranking
Islamabad	0.14	1
Rawalpindi	0.21	2
Lahore	0.25	3
Jehlum	0.34	4
Gujrat	0.35	5
Attock	0.37	6
Sialkot	0.39	7
Chakwal	0.42	8
Gujranwala	0.44	9
Sheikhupura	0.48	10
Faisalabad	0.50	11
T. T. Singh	0.51	12
M. Bahuddin	0.54	13
Hafizabad	0.55	14
Nankana Sahib	0.57	15
Narowal	0.58	16
Sargodha	0.59	17
Khushab	0.61	18
Multan	0.63	19
Mianwali	0.63	20
Sahiwal	0.66	21
Kasur	0.66	22
Okara	0.67	23
Chiniot	0.69	24
Vehari	0.70	25
Khanewal	0.70	26
Layyah	0.72	27
Bahawalnager	0.73	28
Bhakar	0.74	29
Lodhran	0.77	30
Jhang	0.78	31
Pakpatten	0.78	32
Bahawalpur	0.84	33
MuzaffarGarh	0.86	34
Rahim Yar Khan	0.89	35
D. G. Khan	0.91	36
Rajanpur	0.99	37

Composite development distance between two districts shows the level of disparity between them in quality of life. Higher development distance shows greater disparity between districts. The composite development distance for each district with reference to other districts in the province are shown in table 5.29. The table shows that development distance values range from 0 to 13.78. RajanPur has the highest development distance of 13.78 from Islamabad. Development distance between Rajanpur and Jhang is smallest (3.89). Thus Jhang can be a model district for the backward district of Rajanpur.

Table 5.29: Composite Distance Matrix

Islamabad	Bahwalnagar	Bahawalpur	Rahim Yar Khan	D. G. Khan	Layyah	MuzaffarGarh	Rajanpur	Chiniot	Faisalabad	Jhang	T. T. Singh	Gujranwala	Gujrat	Hafizabad	MandiBahuddin	Narowal	Sialkot	Kasur	Lahore	Nankana Sahib	Sheikhupura	Khanewal	Lodhran	Multan	Vehari	Attock	Chakwal	Jehlum	Rawalpindi	Okara	Pakpattan	Sahiwal	Bhakar	Khushab	Mianwali	Sargodha	CMD
0.0	10.17	11.23	11.96	12.49	9.81	11.66	13.78	9.19	6.13	10.47	6.71	5.26	4.38	7.26	7.11	7.63	4.95	8.73	3.43	7.71	5.94	9.27	10.51	8.57	9.52	4.89	5.26	4.27	2.25	9.16	10.49	8.99	10.20	8.09	8.33	7.50	2.25
10.17	0.00	3.30	3.58	5.00	5.17	3.87	6.09	3.59	5.59	2.88	4.51	6.85	6.99	5.30	5.74	5.25	6.61	4.16	8.49	4.55	5.57	3.69	2.55	3.62	3.50	6.30	6.54	6.95	8.18	3.88	3.35	3.16	3.69	3.88	4.14	4.95	2.55
11.23	3.30	0.00	1.04	4.43	5.64	2.64	5.28	3.88	5.98	2.94	5.84	7.23	8.04	5.76	6.51	6.19	7.63	4.21	9.57	5.77	5.89	3.68	3.13	4.51	4.22	7.66	8.10	8.46	9.43	4.78	3.09	4.63	4.56	4.75	4.49	5.15	1.04
11.96	3.58	1.04	0.00	4.17	5.97	2.63	5.25	4.39	6.60	3.12	6.43	7.93	8.76	6.37	7.07	6.68	8.31	4.74	10.28	6.31	6.60	4.03	3.40	4.94	4.77	8.33	8.63	9.12	10.16	4.98	3.09	4.95	4.89	5.29	5.13	5.76	1.04
12.49	5.00	4.43	4.17	0.00	5.62	4.22	4.54	5.87	8.18	4.14	7.36	9.40	9.71	7.61	8.04	7.44	9.18	7.14	11.47	7.68	8.34	4.99	4.42	6.61	6.10	8.77	8.97	9.44	10.69	6.03	4.40	6.15	5.33	5.59	5.98	6.98	4.14
9.81	5.17	5.64	5.97	5.62	0.00	4.42	5.45	4.48	6.13	4.24	4.87	6.56	6.42	4.59	4.31	3.85	5.71	5.35	9.30	4.21	6.26	3.40	3.42	4.22	3.86	5.70	6.44	6.40	8.07	3.47	4.40	3.64	3.79	3.48	3.29	4.31	3.29
11.66	3.87	2.64	2.63	4.22	4.42	0.00	3.89	3.92	6.78	2.99	6.10	7.63	8.18	5.72	6.30	5.85	7.72	4.72	10.22	5.43	6.63	3.20	2.31	4.00	3.65	7.65	8.41	8.52	9.83	4.12	2.59	4.27	3.53	4.96	4.30	5.27	2.31
13.78	6.09	5.28	5.25	4.54	5.45	3.89	0.00	6.67	9.71	5.45	8.75	10.25	10.45	8.25	8.82	8.38	9.98	7.85	12.51	7.93	9.44	6.17	4.68	6.86	6.06	9.73	10.76	10.70	11.95	6.88	5.95	6.81	5.64	7.10	6.66	8.10	3.89
9.19	3.59	3.88	4.39	5.87	4.48	3.92	6.67	0.00	4.36	2.48	3.46	5.11	5.35	2.85	4.04	3.72	5.32	2.98	8.13	3.08	4.21	2.03	2.78	2.71	1.73	4.94	5.75	5.91	7.25	2.95	3.16	2.36	2.34	3.15	3.10	2.80	1.73
6.13	5.59	5.98	6.60	8.18	6.13	6.78	9.71	4.36	0.00	5.48	2.55	2.59	3.46	3.10	3.47	3.72	3.34	3.63	5.29	3.69	1.69	4.32	5.81	4.08	5.13	3.82	3.43	3.92	4.63	4.47	5.39	4.35	5.99	3.83	4.17	2.62	1.69
10.47	2.88	2.94	3.12	4.14	4.24	2.99	5.45	2.48	5.48	0.00	4.70	6.59	7.04	4.63	5.36	4.89	6.69	4.30	9.41	4.48	5.70	2.28	2.09	3.60	3.03	6.41	6.58	7.17	8.48	3.52	2.66	2.86	2.53	3.68	3.89	4.23	2.09
6.71	4.51	5.84	6.43	7.36	4.87	6.10	8.75	3.46	2.55	4.70	0.00	3.78	3.36	2.70	2.58	2.44	3.23	3.57	5.90	2.69	3.02	3.45	4.61	3.36	3.72	2.86	3.01	3.20	4.82	3.44	4.58	3.08	4.43	2.48	3.01	2.26	2.44
5.26	6.85	7.23	7.93	9.40	6.56	7.63	10.25	5.11	2.59	6.59	3.78	0.00	2.30	2.86	3.37	4.10	2.21	4.70	4.94	3.70	2.05	5.23	6.64	4.58	5.60	3.23	4.28	3.83	3.88	5.30	6.67	5.11	6.56	4.97	5.04	3.47	2.05
4.38	6.99	8.04	8.76	9.71	6.42	8.18	10.45	5.35	3.46	7.04	3.36	2.30	0.00	3.13	3.45	4.04	1.73	5.27	4.29	3.63	3.00	5.69	6.87	4.83	5.56	1.64	3.52	2.32	2.78	5.47	7.17	5.18	6.47	4.84	4.96	3.90	1.64
7.26	5.30	5.76	6.37	7.61	4.59	5.72	8.25	2.85	3.10	4.63	2.70	2.86	3.13	0.00	2.29	2.69	3.04	3.52	6.63	1.94	2.84	3.12	4.50	2.85	3.27	3.15	4.52	4.30	5.47	3.25	4.86	3.01	4.22	3.26	3.36	1.91	1.91
7.11	5.74	6.51	7.07	8.04	4.31	6.30	8.82	4.04	3.47	5.36	2.58	3.37	3.45	2.29	0.00	1.31	2.62	4.11	6.81	2.45	3.63	3.61	4.89	3.79	4.05	3.18	4.25	3.93	5.42	3.49	5.11	3.51	4.82	3.11	3.31	2.20	1.31
7.63	5.25	6.19	6.68	7.44	3.85	5.85	8.38	3.72	3.72	4.89	2.44	4.10	4.04	2.69	1.31	0.00	3.26	3.72	7.28	2.54	3.93	3.25	4.48	3.67	3.66	3.63	4.18	4.09	5.94	2.87	4.43	3.09	4.32	2.78	3.03	2.20	1.31
4.95	6.61	7.63	8.31	9.18	5.71	7.72	9.98	5.32	3.34	6.69	3.23	2.21	1.73	3.04	2.62	3.26	0.00	4.97	4.86	3.39	2.98	5.23	6.37	4.61	5.37	2.08	3.64	2.66	3.44	4.89	6.62	4.79	6.28	4.28	4.45	3.55	1.73
8.73	4.16	4.21	4.74	7.14	5.35	4.72	7.85	2.98	3.63	4.30	3.57	4.70	5.27	3.52	4.11	3.72	4.97	0.00	7.21	3.50	3.22	3.44	4.15	3.13	3.28	5.34	5.83	5.95	7.17	3.10	3.52	3.43	4.56	3.75	3.19	2.89	2.89
3.43	8.49	9.57	10.28	11.47	9.30	10.22	12.51	8.13	5.29	9.41	5.90	4.94	4.29	6.63	6.81	7.28	4.86	7.21	0.00	6.83	4.76	8.34	9.23	7.13	8.36	4.80	5.62	4.78	3.28	8.05	9.19	7.90	9.33	7.34	7.35	6.91	3.28
7.71	4.55	5.77	6.31	7.68	4.21	5.43	7.93	3.08	3.69	4.48	2.69	3.70	3.63	1.94	2.45	2.54	3.39	3.50	6.83	0.00	3.55	3.30	3.97	2.10	2.94	3.46	4.50	4.33	5.81	2.79	4.74	2.12	3.85	3.41	3.43	2.66	1.94
5.94	5.57	5.89	6.60	8.34	6.26	6.63	9.44	4.21	1.69	5.70	3.02	2.05	3.00	2.84	3.63	3.93	2.98	3.22	4.76	3.55	0.00	4.50	5.76	3.88	4.81	3.54	4.26	4.07	4.49	4.55	5.50	4.50	5.92	4.09	4.09	2.83	1.69
9.27	3.69	3.68	4.03	4.99	3.40	3.20	6.17	2.03	4.32	2.28	3.45	5.23	5.69	3.12	3.61	3.25	5.23	3.44	8.34	3.30	4.50	0.00	2.25	2.59	2.47	5.09	5.72	5.98	7.38	2.25	2.15	2.31	2.55	2.61	2.60	2.60	2.03
10.51	2.55	3.13	3.40	4.42	3.42	2.31	4.68	2.78	5.81	2.09	4.61	6.64	6.87	4.50	4.89	4.48	6.37	4.15	9.23	3.97	5.76	2.25	0.00	1.61	1.57	2.26	2.39	2.44	2.72	1.50	1.47	1.52	1.60	1.62	1.61	1.61	1.47
8.57	3.62	4.51	4.94	6.61	4.22	4.00	6.86	2.71	4.08	3.60	3.36	4.58	4.83	2.85	3.79	3.67	4.61	3.13	7.13	2.10	3.88	2.59	3.07	0.00	2.62	4.55	5.48	5.47	6.70	2.27	3.56	1.91	3.37	3.68	3.31	3.23	1.91
9.52	3.50	4.22	4.77	6.10	3.86	3.65	6.06	1.73	5.13	3.03	3.72	5.60	5.56	3.27	4.05	3.66	5.37	3.28	8.36	2.94	4.81	2.47	2.34	2.62	0.00	5.05	6.23	6.08	7.55	2.98	3.35	2.37	1.78	3.33	2.74	3.31	1.73
4.89	6.30	7.66	8.33	8.77	5.70	7.65	9.73	4.94	3.82	6.41	2.86	3.23	1.64	3.15	3.18	3.63	2.08	5.34	4.80	3.46	3.54	5.09	6.13	4.55	5.05	0.00	3.25	2.02	2.96	5.00	6.58	4.65	5.68	3.99	4.39	3.70	1.64
5.26	6.54	8.10	8.63	8.97	6.44	8.41	10.76	5.75	3.43	6.58	3.01	4.28	3.52	4.52	4.25	4.18	3.64	5.83	5.62	4.50	4.26	5.72	6.95	5.48	6.23	3.25	0.00	2.15	3.64	5.49	6.87	5.08	6.54	4.55	5.39	4.32	2.15
4.27	6.95	8.46	9.12	9.44	6.40	8.52	10.70	5.91	3.92	7.17	3.20	3.83	2.32	4.30	3.93	4.09	2.66	5.95	4.78	4.33	4.07	5.98	7.08	5.47	6.08	2.02	2.15	0.00	2.60	5.77	7.24	5.47	6.59	4.72	5.12	4.35	2.02
2.25	8.18	9.43	10.16	10.69	8.07	9.83	11.95	7.25	4.63	8.48	4.82	3.88	2.78	5.47	5.42	5.94	3.44	7.17	3.28	5.81	4.49	7.38	8.51	6.70	7.55	2.96	3.64	2.60	0.00	7.40	8.71	7.01	8.16	6.24	6.61	5.78	2.25
9.16	3.88	4.78	4.98	6.03	3.47	4.12	6.88	2.95	4.47	3.52	3.44	5.30	5.47	3.25	3.49	2.87	4.89	3.10	8.05	2.79	4.55	2.25	3.03	2.27	2.98	5.00	5.49	5.77	7.40	0.00	2.82	1.75	3.46	3.08	3.13	3.12	1.75
10.49	3.35	3.09	3.09	4.40	4.40	2.59	5.95	3.16	5.39	2.66	4.58	6.67	7.17	4.86	5.11	4.43	6.62	3.52	9.19	4.74	5.50	2.15	2.56	3.56	3.35	6.58	6.87	7.24	8.71	2.82	0.00	3.38	3.33	3.73	3.46	4.04	2.15
8.99	3.16	4.63	4.95	6.15	3.64	4.27	6.81	2.36	4.35	2.86	3.08	5.11	5.18	3.01	3.51	3.09	4.79	3.43	7.90	2.12	4.50	2.31	2.62	1.91	2.37	4.65	5.08	5.47	7.01	1.75	3.38	0.00	2.78	3.01	3.30	3.21	1.75
10.20	3.69	4.56	4.89	5.33	3.79	3.53	5.64	2.34	5.99	2.53	4.43	6.56	6.47	4.22	4.82	4.32	6.28	4.56	9.33	3.85	5.92	2.55	2.26	3.37	1.78	5.68	6.54	6.59	8.16	3.46	3.33	2.78	0.00	3.78	3.55	4.11	1.78
8.09	3.88	4.75	5.29	5.59	3.48	4.96	7.10	3.15	3.83	3.68	2.48	4.97	4.84	3.26	3.11	2.78	4.28	3.75	7.34	3.41	4.09	2.61	3.34	3.68	3.33	3.99	4.55	4.72	6.24	3.08	3.73	3.01	3.78	0.00	1.94	2.38	1.94
8.33	4.14	4.49	5.13	5.98	3.29	4.30	6.66	3.10	4.17	3.89	3.01	5.04	4.96	3.36	3.31	3.03	4.45	3.19	7.35	3.43	4.09	2.60	3.19	3.31	2.74	4.39	5.39	5.12	6.61	3.13	3.46	3.30	3.55	1.94	0.00	2.39	1.94
7.50	4.95	5.15	5.76	6.98	4.31	5.27	8.10	2.80	2.62	4.23	2.26	3.47	3.90	1.91	2.20	2.20	3.55	2.89	6.91	2.66	2.83	2.60	4.20	3.23	3.31	3.70	4.32	4.35	5.78	3.12	4.04	3.21	4.11	2.38	2.39	0.00	1.91

To assess the level of disparity we have compared districts of Punjab with its number one ranked district i.e., Islamabad. Table 5.30 gives us the development distance of Islamabad from every other district within Punjab. Development Distance values range from 2.25 to 13.78. Development distance between Islamabad and Rawalpindi is 2.25 whereas development distance gets higher as you move to Southern Punjab which gives a clue about development imbalances between regions within Punjab.

Table 30: Development Distance from Islamabad

Districts	Development Disparity
	Islamabad
Rawalpindi	2.25
Lahore	3.43
Jehlum	4.27
Gujrat	4.38
Attock	4.89
Sialkot	4.95
Gujranwala	5.26
Chakwal	5.26
Sheikhupura	5.94
Faisalabad	6.13
T. T. Singh	6.71
M. Bahuddin	7.11
Hafizabad	7.26
Sargodha	7.5
Narowal	7.63
Nankana Sahib	7.71
Khushab	8.09
Mianwali	8.33
Multan	8.57
Kasur	8.73
Sahiwal	8.99
Okara	9.16
Chiniot	9.19
Khanewal	9.27
Vehari	9.52
Layyah	9.81
Bahawalnager	10.17
Bhakar	10.2
Jhang	10.47
Pakpatten	10.49
Lodhran	10.51
Bahawalpur	11.23
MuzaffarGarh	11.66
Rahim Yar Khan	11.96
D. G. Khan	12.49
Rajanpur	13.78

To focus on a specific quality of life indicator that needs more attention, it is important to look at each of the indicators of poorly ranked districts in Punjab. An examination of these individual indicators has policy value for micro planning. Distance values against each indicator are shown in appendix 1.

5. 5.3 Classification of Districts according to level of development:

Districts are classified according to four categories of development in quality of life and results are given in the table 5.31. Here seven districts of Punjab; Rawalpindi, Jehlum, Attock, Islamabad, Lahore, Sialkot and Gujrat belong to the category of highly developed districts. Punjab is the only province whose seven districts fall in the advanced stages of development and these districts are situated in northern and central parts of Punjab. Ten districts come under high-middle level developed whereas fifteen districts are in low-middle level developed category. Most of the districts which are low middle level developed are in Western and Southern Punjab. Rajanpur, Muzaffargarh, DG Khan, Rahim Yar Khan and Bahawalpur are backward districts.

Table 5.31: Classification of Districts according to level of Development

Stages of Development		Range of Indices	Districts
Highly Developed	IV	C.I<=(Mean-SD=0.399116)	**Rawalpindi, Jehlum, Attock, Islamabad, Lahore, Sialkot, Gujrat**
High Middle Level Developed	III	0.399116<CI<0.599411	**Faisalbad, Nankana Sahib, Sargodha,Chakwal, Sheikhupura, Narowal, MandiBahaudin, Hafizabad, T.T Singh, Gujranwala**
Low Middle Level	II	0.599411<CI<0.799705	**Mianwali, Khushab, Bhakkar, Sahiwal, Pakpattan, Okara, Vehari, Multan, Lodhran, Khanewal, Kasur, Jhang, Chiniot, Layyah, Bahawalnagar**
Least Developed	I	CI>=0.799705	**RajanPur, Muzzafargarh, D. G Khan, Rahim Yar Khan, Bahawalpur**

It is interesting to point out that more than half of the districts of Punjab belong to the lower developed or backward categories even when significant numbers of districts are developed in Punjab. This gives us the idea that development is skewed in the province of Punjab where northern and central Punjab are quite developed whereas southern and western Punjab have lower levels of quality of life and higher

levels of poverty. There is no significant industrialization in these areas and only few numbers of universities are located in these hilly and sandy parts of Southern Punjab.

Spatial mapping[21] of this disparity is given below in map 4.

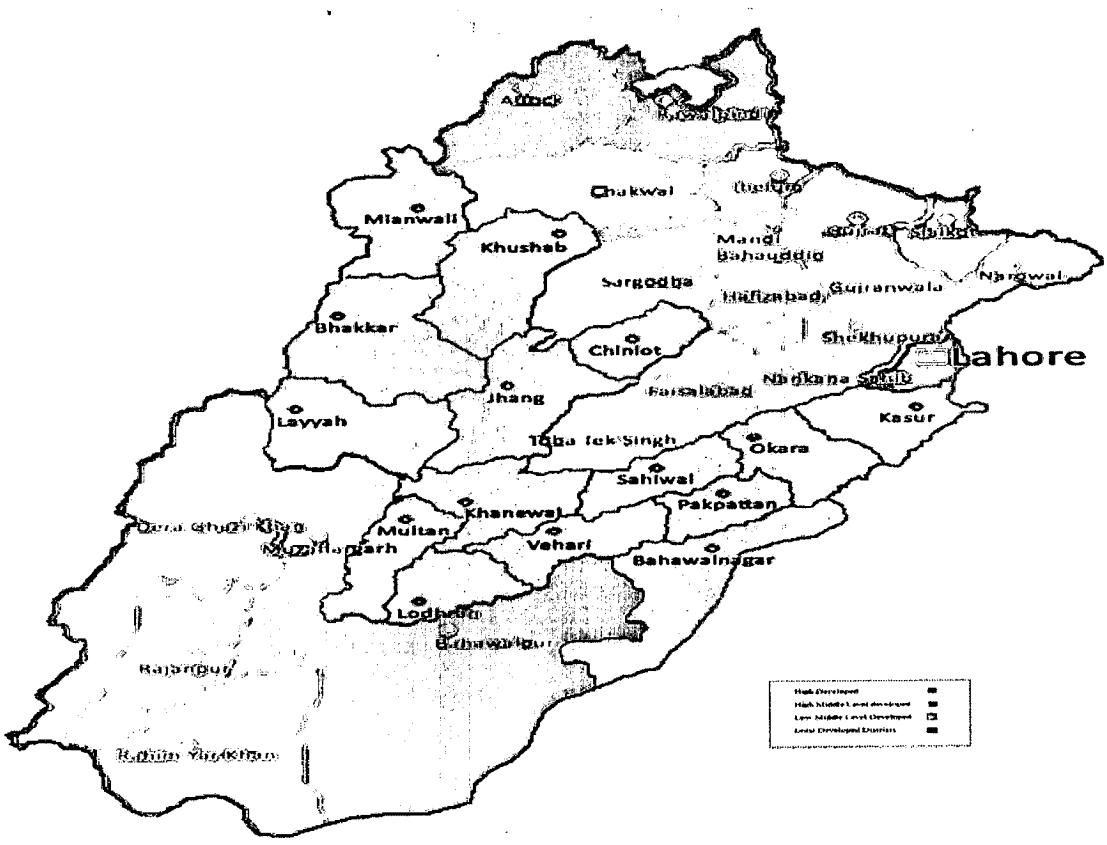


Figure 4: Spatial map of Punjab according to level of development

5.5.4 Identification of Model Districts:

Model districts for the backward districts have been identified and given in the table 5.32. Jhang is the model district for all the backward districts. There are one, three, and four model districts for Rajanpur, D. G Khan, Muzaffargarh, and Bahawalpur respectively.

21 Map of Punjab has been accessed from http://www.findpk.com/yp/html/punjab_.html

Table 5. 32: Model Districts for the backward districts

Backward Districts	Model Districts for the Backward Districts
Rajanpur	**Jhang**
Muzzafargarh	**Jhang, Khanewal, Lodhran, Pakpattan**
D. G Khan	**Jhang, Lodhran, Pakpattan**
Rahim Yar Khan	**Jhang**
Bahawalpur	**Bahawalnagar, Jhang, Lodhran, Pakpattan**

5.5.5 Identification of Potential Targets:

Average standardized values of these model districts are potential targets for 15 indicators to be achieved by the least developed districts and are given in table 5.33.

Table 5.33: Potential Targets for the Backward Districts

Districts	Education	Female-Education	Male-Literacy	Net Enrollment	Fully Immunized	Pregnant Woman	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bahawalpur	32 (32.75)	46 (52.25)	45 (48.5)	41 (55.75)	78 (87.75)	70 (68.25)	36 (38.5)	36 (39)	66 (59.75)	88 (92.15)	19.08 (8.7)	6 (8.79)	74.62 (75.65)	63.14 (68.49)	16 (18.5)
Rahim Yar Khan	28 (31.67)	45 (53)	42 (48)	43 (57.67)	77 (87)	64 (71)	30 (37.33)	29 (30.67)	63 (57.33)	88.58 (92.03)	18.73 (9.91)	2.07 (4.16)	73.26 (74.95)	60.16 (68.41)	13 (16.67)
Muzzafargarh	28 (33)	48 (54.25)	44 (49.5)	52 (59)	86 (87)	77 (73.25)	31 (37.5)	27 (31.75)	59 (58)	88.1 (92.67)	13.21 (14.12)	3.3 (4.76)	58.36 (75.94)	55.9 (69.40)	3 (8.75)
RajanPur	18 (31)	37 (55)	32 (48)	49 (55)	92 (87)	83 (64)	16 (43)	16 (36)	53 (54)	73.27 (89.05)	1.04 (13.86)	1.13 (3.39)	41.37 (77.66)	65.15 (75.2)	11 (14)
DG khan	20 (31)	48 (55)	38 (48)	62 (55)	78 (87)	76 (64)	18 (43)	14 (36)	43 (54)	84.21 (89.05)	9.88 (13.86)	2.42 (3.39)	46.97 (77.66)	82.98 (75.2)	26 (14)

Each backward district has their lagging areas where government must intervene to check the deplorable human conditions in these districts. Rajanpur has lower values for the education indicators but it performs relatively better in child and women health. It also shows dismal standardized values for safe delivery and living conditions. Lagging indicators of quality of life in these backward areas are given below in table 5.34.

Table 5.34: Lagging indicators of backward districts

Backward Districts	Lagging Indicators
Rajanpur	**Female Education, Male Education, Literacy Rate, Net Enrollment Rate, Safe Delivery, Gas Connections, Safe Drinking Water**
Muzzafargarh	**Female Education, Safe Delivery, Safe Drinking Water, households having solid roof**
D. G Khan	**Female Education, Literacy Rate, Safe Delivery, Gas Connections**
Rahim Yar Khan	**Net Enrollment Rate, Safe Drinking Water, Safe Delivery**
Bahawalpur	**Net Enrollment Rate, Safe Delivery, Gas Connection, Safe Drinking Water**

Government needs to utilize its scarce resources in those areas of backward districts which need immediate attention and it demand specified micro planning which has been absent in the centralized planning structure of Pakistan.

5.6 Analysis of Results:

Our results show that Punjab is the most developed province in terms of quality of life whereas Balochistan is the most backward province in Pakistan. In Balochistan, Quetta, Mstung, Sibbi and Gawadar are "highly developed districts whereas Musa Khel, Dera Bughti and Kohlu are the most backward districts. Percentage of women who have completed primary or higher level education is below 3% in these three backward districts which is far low as compared to national figure of 42%. At provincial level, only 18% women have completed primary or higher level of education. According to Alif Ailaan report (2015) of district ranking in education, from Balochistan, Quetta is the only district in the top 50 districts of Pakistan. Kohlu is the 138th district out of 142 districts in education ranking of districts. In Kohlu adult literacy is 8% whereas adult literacy in Pakistan is 57%. Pregnant women who have received tetanus injections are less than 7% for Kohlu and Musa Khel as compared to provincial (Balochistan) and national figures of 31% and 72% respectively. Kohlu performs equally poor in indicators of safe delivery, access to safe drinking water, gas connections and household amenities. Musa Khel and Dera Bugti share similar conditions except the fact that households in Dera Bugti have a better access to Gas connection which is 22% but still this figure lags if we compare it with national level access to gas connections which is 38%. Dera Bugti comes at 141 out of 142 districts in the gender

parity index in education (Alif Ailaan, 2015). According to the Human development report of (UNDP, 2003) Dera Bugti was the last district in Pakistan on the Human Development Index.

In Sindh, Karachi and Hyderabad are highly developed districts whereas Thatta and Tharparkar are ranked as least developed (most backward districts). Tharparkar is at the bottom in ranking of districts in Sindh. 17% women have completed primary or higher level of education in Tharparkar and Thatta but this figure is much lower as compared to national figure of 41% in Sindh or 42% in Pakistan. Sindh has 59% literacy rate which is above the national figure of 57% but districts of Tharparkar and Thatta are well below the provincial and national figures (37 and 36%) which explain the disparity within Sindh. Thatta and Tharparkar show dismal values for percentage of households with safe drinking water, toilet facilities, material used for walls, solid roofs, and gas connections. Less than 1 percent household have access to gas connections in Tharparkar. Only 35% pregnant women are immunized and 44% children are fully immunized in Tharparkar. Indicators of safe delivery, location of delivery and type of assistance during delivery, also show lower values in Tharparkar and Thatta.

Districts of Abboatabad, Haripur and Peshawar are highly developed whereas Shangla, Kohistan, Tank and Tor garh are the most backward areas in KPK. Tor Garh is at the bottom (25^{th}) in ranking of districts. Tor Garh and Kohistan have less than only 4% women who have completed their primary or higher level education as compared to provincial figure of 29%. It is disappointing to see that even provincial figure for the percentage of women who have completed primary or higher level education is less than national figure of 42%. There are strong cultural traditions in these areas where women education is not encouraged. Literacy rate in Tor Garh is 15% which is lowest in the province of KPK. Only 3% children are fully immunized in Tor Garh and figures for safe delivery are equally low in districts of Tor Garh, Kohistan and Tank. No households have gas connections, solid roofs and walls in Tor Garh whereas less than 6% households in Kohistan have access to safe drinking water.

Islamabad, Lahore, Sialkot, Rawalpindi, Jehlum are highly developed districts of Punjab. Punjab has the highest number of backward districts among all provinces i.e., Rajanpur, Muzaffargarh, DG Khan, Rahim Yar Khan and Bahawalpur and all these districts are situated in Southern Punjab. Each district has its own lagging indicators in quality of life. Rajanpur comes at the last number in the ranking of districts. In Rajanpur only 18% women have completed primary or higher level education as compared to provincial figure of 47%. It can be pointed out that Rajanpur is still performing better in this indicator as compared to districts like Tor Garh, Dera Bughti and Thar Parkar but it is important to bear in mind that our study is focused on intra-provincial disparity. Regional inequality in Punjab is equally

pronounced in access to improved water supply and sanitation and health facilities. Only 16% deliveries take place in hospitals with the help of a doctor or nurse and 1% households have gas connections and solid roof in Rajanpur. Figures for gas connections, solid roofs and safe drinking water are dismally low for all the four districts. There have been visible North-South divide in the province of Punjab where districts situated in North and Central Punjab is much developed as compared to districts in South Punjab. In the Backward districts of Rahim Yar Khan, Muzaffargarh and Rajanpur, one degree college meets the needs of 118–427 (thousand) people as compared to developed districts of Lahore, Rawalpindi and Sialkot where 71–148 (thousand) people have a college. The proportion of the adult population who has 10 or more years of education is 19 % in the central Punjab and only 9 % in the southern Punjab (Amjad, G, & Mustafa, 2008). Backward and low developed districts have less access to the facility of district hospital as compared to overall access in the Punjab (Haq & Ali, 2014).Bahawalpur was a rich state after the partition but over the decades it has been the most backward district and there have been various voices in the political institutions where proposal of making Southern Punjab another province has been extended. Demands for making Seraiki belt another province has been made by these areas because of the development bias towards Lahore and Islamabad.

Developed districts in Balochistan, Sindh, KPK and Punjab perform better in most areas of quality of life. More than 50% women have completed primary or higher level education in districts of Karachi, Abbotabad, Islamabad, Lahore whereas 44% women in Quetta have primary or above level of education. All these districts have higher values of this indicator as compared to national figure which is 42%. Developed districts perform better in all indicators of education, health and household amenities.

The scope of this study is restricted to finding out the level of backwardness or well-being of the districts and the ranking of districts in terms of quality of life. Determining the causes of backwardness is beyond the scope of this study. However, we have made an attempt to relate the level of backwardness with the reasons laid down in relevant literature. These reasons broadly include the factors of colonial history, urbanization, industrialization, level of poverty, dependence on agriculture and social practices. Presence of Cantonments can be associated with better quality of life. Developed districts such as Quetta, Sialkot, Lahore, Abbotabad, Peshawar, Rawalpindi, Jehlum and Karachi have developed cantonment areas. According to Khawaja (2012), colonial policies such as presence of cantonment areas in north and central Punjab played an important role in the development divide between northern, central and southern, western Punjab. According to report of institute of public policy (2012) , the roots of regional inequality in Punjab from the days of the British Raj lie in distance from the GT-road, extent of

urbanization, coverage of the canal irrigation network and distance respectively from the federal capital and provincial capital. Quetta was developed as cantonment in 1876 as a result of strategic British colonial policies. Thus, the colonial decision of developing Quetta for strategic reason had far reaching effects on its urbanized development. Today Quetta has advanced urban assets such as several pharmaceutical industrial establishments, horticulture processing, manufacturing industries as well as mining. The backward and low developed districts in Balochistan suffer from lack of planning, poor services and shortages of housing as confirmed by the issues of air pollution, sanitation, overcrowding, lack of access to safe drinking water and socio -economic problems.

Abbotabad was the summer capital of KPK in British period and areas adjacent to this city such as Haripur developed as by product. Peshawar is provincial capital and has many industrial units, hospitals and educational facilities. Karachi was once the federal capital of Pakistan and it is a major commercial port city. Sindh is suffering from the development divide between Karachi and rest of the Sindh (which is mostly rural) for decades.

Levels of urbanization, industrialization are advanced in developed areas such as Peshawar, Lahore, Karachi, Quetta, Rawalpindi and Sialkot whereas low developed districts such as RajanPur, DG Khan, Dera Bugti, Tharparkar, Tank and Kohistan are not urbanized and have rural labor force which are highly dependent on agriculture sector. Districts like Sialkot, Gujranwala, Faisalabad, Karachi, Peshawar and Quetta have industrial zones as compared to backward districts of Tharparkar, Rajanpur, Tank and Dera Bugti. Agglomeration of industries in districts Quetta, Abbotabad, Karachi, Hyderabad, Islamabad and Lahore can be associated with lower incidence of poverty in these leading regions (Haq & Ali, 2014). Similarly Per Capita expenditure is quite low in backward districts as compared to those districts which are ranked best/developed in quality of life (Cheema et al, 2008). Ownership of land is extremely unequal in Pakistan where only 2.5% of all households have ownership of more than 40% land and half of the rural households do not have any ownership of land. Backward and lower middle level developed districts (Rajanpur, DI Khan, Muzaffargarh, Layyah, Thatta, Badin, Sanghar, Ghotki, Kohlu and Dera Bughti) show higher values of Gini Coefficient for land distribution in Pakistan (Amjad et al, 2008). High dependency ratio and large family sizes are observed in backward districts of Rajanpur, Vehari, DeraBughti, Tor Garh, Kohistan, Thatta and Tharparkar (GOP,1998) . Remittances is another important factor in improving quality of life in Pakistan. Sixty percent population migrated to Middle East from only 20 districts which are developed such as Lahore, Swat, Karachi, Gujranwala, Rawalpindi Lahore and Faisalabad (Haq, 2008).

Each province has its own particular disparity patterns. Areas of particular interventions and targets to be achieved within each province vary. Most of the backward districts are less industrialized, less urbanized, presence of higher levels of poverty and lower levels of population density make them more vulnerable to structural regional inequality in Pakistan. Most of the backward districts show dismal values of female education, child and maternal health, safe delivery and sanitation. Pakistan needs to have a coherent micro planning to identify immediate areas of attention in order to achieve important development goals.

Chapter 6

Conclusion and Policy Recommendations

Definition and Measurement of quality of life has been an important concern for economists after the criticism of Gross Domestic Product as an indicator of well-being. It has been seen in the contemporary history that countries like China and Germany have many underdeveloped areas but their growth rates have been steady. Inadequate access to important services which improve quality of life such as health, education and living conditions leaves fewer options for the poor to break out of the vicious circle of poverty. These socio-economic deprivations make people and regions more vulnerable to exogenous shocks. This thing has triggered the thinking of people to look at the quality of life as another important indicator of development process. There have been disagreements over the definition and measurement of what makes a good quality of life. Scandinavian School of thought takes objective indicators such as access to resources to quantify the quality of life whereas American school of thought considers subjective well-being is another important indicator for the well-being.

Developed and developing world have realized that GDP is not an ideal indicator for inclusive development. Planning Commission of Pakistan has formulated Vision 2025 for the speedy development.

However it is disappointing to observe that Pakistan has not been able to achieve millennium development goals where number of out of school children is 25 million. There are areas like Dera Bugti, Tharparkar, Thatta, Kohistan and Rajanpur where indicators of quality of life are below national average numbers. Development in Pakistan has been quite skewed where Punjab is the most developed province and it has sustained it position for the most part of history of Pakistan. But apart from this inter-provincial structural inequality, there are different areas within Provinces which are not on the same development path but some districts have higher levels of living as compared to backward districts.

Pakistan has a quite centralized structure in terms of planning where federal government overtakes the role of provincial and most of the resources have been under the federation. There has been no decentralization of resources and authority in Pakistan until the passage of the eighteenth amendment where Provincial governments have been made responsible for important areas such as education, health and living conditions. Micro-planning is needed at the provincial and district levels where different areas within each province and even within districts differ in the levels of quality of life. This micro-panning needs careful identification of districts which are backward and then potential targets should be set to

achieve. Provincial Finance Commission should be constituted with quality of life as a criterion to distribute resources between districts. Such mechanisms of resource distribution will challenge the prevailing regional development disparity in Pakistan.

This study is focused on the ranking of provinces and districts according to their levels of objective quality of life using fifteen indicators of education, health and living conditions for the year 2012-13. The study explores the intra-provincial disparity in quality of life for four provinces and spatial mapping of this disparity is also undertaken. Wroclow Taxanomic distance is used to construct composite indices of quality of life for each district. Under the methodology development distances are also computed between districts within each province. Based on Composite Indices of quality of life districts are categorized under four stages of development i.e., highly developed, high-middle level developed, low-middle level developed and least developed (backward). To achieve more or less similar level of quality of life, Models districts for the backward districts are worked out. Potential targets against each of the fifteen indicators of quality of life are set for the lagging districts within each province. There have been interesting findings:

- Punjab has the highest levels of quality of life whereas Sindh, KPK and Baluchistan rank on 2nd, 3rd and fourth respectively. Relevant literature that measures quality of life using different methodologies suggest that Punjab has sustained its position in good quality of life and human development conditions over the sustained period.
- Within Balochistan, Quetta has the highest composite index of quality of life and it is also a provincial Capital whereas more than half of the districts in Balochistan fall in the low middle level developed category. Dera Bugti, Musa Khel and Kohlu are the most backward districts. Model districts for the above referred three backward districts have been identified and potential targets have been set. In Dera Bugti, not a single woman has completed primary or higher level of education. We have set a target of 6% for completed primary and higher level of education of women in Dera Bugti. This is based on our methodology discussed in chapter 4.Net enrollment rate and adult literacy rates are also low in these areas which define the long term prospects of these districts. Given poor prospects, it is obvious that these are the areas that need to be addressed to improve quality of life.
- In Sindh, Karachi and Hyderabad are the developed areas where Karachi is also a provincial Capital. Thatta and Tharparkar show the lowest standards of quality of life and more than 50% districts belong to the low medium level developed category. Badin, Mir PurKhas, Tando

Muhammad Khan have been identified as model districts for the lagging areas and potential targets have been set. Tharparkar shows dismal values for the health conditions such as only 27% deliveries are done by doctors/nurses, only 29% deliveries take place at hospitals. Tharparkar has seen rising infant mortality in the recent past. It is important to understand that poor health is one of the important factors which pushes people below poverty line and makes them more marginalized. Wroclow Taxanomic technique specifies areas such as health or education where the resources should be utilized within one district.

- In KPK, Abbotabad,Haripur and Peshawar are the most developed districts. Abbotabad, Haripur and Peshawar are ranked1st, 2nd and 3rd. It is interesting to note that in other provinces, highly developed and 1st ranked district is also provincial capital but in case of KPK Peshawar is ranked 3rd.Abbotabad is first ranked district possibly because of the heavy presence of military establishments (cantonments) and also strong presence of good education and health facilities. Abbotabad used to be the summer capital in the colonial period (Khawaja, 2012) and hence visibly developed as compared to other areas in KPK. More than half of the districts in KPK belong to the developed or high level developed areas but it has more backward districts as compared to the Sindh and Balochsitan. Shangla, Tor Gorh, Kohistan, Tank are the least developed areas and after identifying model districts, potential targets are set according to the pressing areas of attention.
- Most developed districts of Punjab are Federal and Provincial Capital, Islamabad and Lahore respectively along with Rawalpindi, Jhelum, Attock, Sialkot and Gujrat. Most of 'low middle level developed' districts are in Western and Southern Punjab. Rajanpur, Muzaffargarh, DG Khan, Rahim Yar Khan and Bahawalpur are backward districts and are situated in southern Punjab. These districts have hilly, sandy, dry landscapes and some fertile planes for the cultivation of cotton. Southern Punjab is the most poor division within Punjab and quality of life is worse in these areas where poverty levels are high (Ali, 2011).Central and Northern Punjab have highest levels of quality of life as compared to southern and western Punjab.Southern Punjab has dismal adult literacy rate and net enrollment rates. Sikandar and Shah (2010) has constructed composite index of inequality in public service delivery. They state that as the distance from Lahore increases, value of composite indices also increases. Our study also shows that development distance increases as you move away from federal capital. This shows that

basic services which make quality of life better are not available in the peripheries of Punjab which implies that development is biased towards core areas.

- Factors like greater level of urbanization, higher incidence of poverty, greater levels of population densities, presence of industrial zones and inflow of remittances could be observed in the 'developed districts' of all provinces whereas backward districts lag significantly behind on these counts (Haq, 2008).

Inequality in education, health and living conditions make quality of life differ and this phenomenon triggers the conflict between different ethnicities, social, economic and political classes. Pakistan has already suffered a great loss of Bangladesh and today same conditions are found in Balochistan which has the most dismal conditions of quality of life. It is important to recognize this basic fact and some of the important policy implications are:

- Provincial Finance Commission should be an institutional mechanism of resource distribution between districts of each province.
- Allocation of resources under PFC must be backed by sound research and development needs of each district instead of allocating budget on ad hoc basis. Quality of life must be included as an important criterion for allocation of funds to those areas which are lagging behind.
- Special attention should be given to backward areas which are lagging behind the model districts.
- Backward districts poorly perform on some indicators while in some other domain they perform better. Government not only needs to know which district is backward but also the indicator and public services which are sub-optimally provided.
- Process of equitable development would be ignited if dimension specific policy frameworks are designed and implemented. It will only be possible if micro-planning is taken as a serious option. This option requires the serious commitment of central, provincial and local governments in Pakistan.
- Educational budgets need to be increased for the backward areas. Better facilities such as enrollment of all school going children into schools, better qualified teachers, free provision of books and awareness related to importance of education are necessary steps which should be taken by provincial governments as it is a provincial subject.
- Living and health conditions need to be improved through establishing more hospitals and other health related facilities and should make access to health care more affordable. Awareness

related to environment, health and sanitation issues should be given to targeted areas. These measures can help in bringing basic services to peripheries.

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Appendix 1

Interim Distance between Districts for Balochistan

Table: Distance from Awaran to other Districts

	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Awaran-Kalat	-0.19	-1.10	-0.08	-0.65	0.44	-1.05	-1.05	-0.20	-0.22	-2.82	-0.59	-0.06	0.59	0.15	-1.19
Awaran-Kharan	0.38	-1.24	-0.08	-0.44	0.18	2.35	0.94	1.68	-0.55	-1.97	-0.78	-0.04	1.56	-1.19	-0.97
Awaran-Khuzdar	0.00	-0.44	0.16	-0.80	1.53	0.58	0.26	1.08	-0.77	-1.70	-0.24	-0.29	1.45	-0.47	-1.06
Awaran-Lasbilla	-0.09	-0.07	0.40	0.65	1.62	0.47	-0.31	0.61	-1.22	-1.52	-0.65	-3.20	-0.77	-0.11	-0.79
Awaran-Mastung	-0.57	-1.17	0.00	-2.18	0.70	-0.16	-0.94	-0.81	-1.44	-3.40	-1.04	-0.50	0.51	-0.66	-1.15
Awaran-Washuk	1.14	0.59	1.11	-0.15	2.45	0.05	0.05	2.09	0.28	-0.20	0.00	0.00	0.46	-0.62	0.44
Awaran-Gwadar	-0.76	-2.05	-0.72	-1.75	1.58	0.21	-0.89	0.81	-1.33	-2.59	-0.72	-0.66	-0.46	-0.49	-1.59
Awaran-Ketch	-0.28	-1.32	0.08	-0.87	1.62	1.57	0.47	1.55	-0.55	-2.01	-0.18	-0.09	0.40	-0.32	-0.93
Awaran-Jafarabad	0.95	0.07	1.19	0.58	2.45	1.36	1.68	2.09	-1.44	-3.31	-0.94	-0.04	0.12	1.50	-0.31
Awaran-JhalMagsi	0.38	-0.59	0.56	-0.15	0.92	2.35	-0.73	0.74	-0.22	-2.68	-0.01	-0.11	0.76	-0.12	-0.26
Awaran-Bolan	0.76	-0.22	0.88	0.51	0.88	2.20	1.36	2.22	-0.50	-3.06	-0.97	-0.29	1.50	-1.33	-0.62
Awaran-Nasirabad	1.14	1.02	1.83	0.95	2.54	2.04	1.41	1.88	-1.05	-2.57	-0.46	-0.11	0.67	1.59	-0.18
Awaran-Chaghi	0.85	-0.07	0.96	0.65	2.89	2.09	1.47	2.15	-0.44	-0.87	-0.13	-0.20	-0.12	-0.39	0.04
Awaran-Qilla Abdullah	0.85	-0.44	0.40	1.24	3.11	1.78	0.26	-0.07	-0.22	-3.18	-0.15	-0.19	1.39	-2.13	-0.57
Awaran-Nushki	-0.85	-1.17	-0.48	0.36	0.83	1.78	1.73	2.42	-1.88	-2.96	-0.43	-0.25	-0.20	-1.52	-2.38
Awaran-Pashin	-0.66	-1.46	-0.72	-0.07	1.71	1.94	0.52	0.34	-1.88	-3.09	-1.65	-0.24	1.57	-1.93	-3.22
Awaran-Quetta	-2.56	-2.41	-1.99	-1.45	0.79	1.26	-0.68	-0.27	-4.20	-3.40	-3.84	-4.65	-2.76	-2.00	-3.22
Awaran-DeraBugti	1.61	1.68	1.91	2.47	3.72	1.10	1.88	1.82	-0.61	0.04	-0.90	-0.07	1.49	-1.18	-0.35
Awaran-Hernai	0.47	-0.37	0.56	0.95	2.36	0.37	1.05	1.35	-0.61	-2.26	-0.28	-0.29	1.76	-1.40	-0.62
Awaran-Kohlu	1.51	1.61	2.63	0.44	2.63	2.77	1.94	2.62	0.17	-1.22	-0.01	-0.05	1.89	-1.34	0.31
Awaran-Sibbi	-1.89	-1.61	-1.04	-0.51	0.92	0.37	-1.26	0.34	-2.99	-2.88	-2.66	-0.61	-0.48	-1.27	-2.56
Awaran-Ziarat	-0.47	-1.76	-0.88	-0.15	1.97	1.78	0.42	1.08	-0.33	-3.38	-3.41	-0.07	1.12	-2.12	-1.01
Awaran-Barkhan	0.85	-0.29	1.19	-0.58	0.00	1.62	0.84	2.56	-1.27	-2.72	-0.13	-0.03	0.78	-1.24	-0.04
Awaran-QillaSaifullah	0.85	0.07	1.51	-1.75	0.74	2.15	1.20	2.22	0.00	-2.37	-0.18	-0.03	1.60	-1.95	-0.48
Awaran-Loralai	0.76	-0.51	0.48	0.22	1.75	1.57	1.57	2.09	-1.66	-2.86	-0.06	-0.44	1.52	0.22	-0.18
Awaran-Musa Khel	1.33	0.73	1.35	0.87	3.15	2.62	1.73	2.15	-1.77	-2.23	-0.01	-0.06	0.99	0.45	0.44
Awaran-Sherani	1.42	-0.15	1.11	0.15	1.09	-0.10	1.47	2.02	-1.11	-2.03	0.00	-0.05	1.29	-1.70	0.40
Awaran-Zhob	0.95	-0.44	0.80	0.58	1.49	2.20	1.83	2.49	-2.43	-2.11	-0.06	-0.35	1.18	-1.67	-0.22

Table: Distance from Kalat to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Kalat-Kharan	0.57	-0.15	0.00	0.22	-0.26	3.40	1.99	1.88	-0.33	0.84	-0.19	0.03	0.97	-1.34	0.22
Kalat-Khuzdar	0.19	0.66	0.24	-0.15	1.09	1.62	1.31	1.28	-0.55	1.12	0.35	-0.23	0.86	-0.62	0.13
Kalat-Lasbilla	0.09	1.02	0.48	1.31	1.18	1.52	0.73	0.81	-1.00	1.29	-0.06	-3.14	-1.36	-0.25	0.40
Kalat-Mastung	-0.38	-0.07	0.08	-1.53	0.26	0.89	0.10	-0.61	-1.22	-0.59	-0.45	-0.44	-0.08	-0.81	0.04
Kalat-Washuk	1.33	1.68	1.19	0.51	2.01	1.10	1.10	2.29	0.50	2.62	0.59	0.06	-0.13	-0.77	1.63
Kalat-Gwadar	-0.57	-0.95	-0.64	-1.09	1.14	1.26	0.16	1.01	-1.11	0.23	-0.13	-0.59	-1.04	-0.63	-0.40
Kalat-Ketch	-0.09	-0.22	0.16	-0.22	1.18	2.62	1.52	1.75	-0.33	0.81	0.41	-0.03	-0.19	-0.46	0.26
Kalat-Jafarabad	1.14	1.17	1.27	1.24	2.01	2.41	2.72	2.29	-1.22	-0.49	-0.34	0.02	-0.47	1.35	0.88
Kalat-JhalMagsi	0.57	0.51	0.64	0.51	0.48	3.40	0.31	0.94	0.00	0.14	0.58	-0.05	0.17	-0.27	0.93
Kalat-Bolan	0.95	0.88	0.96	1.16	0.44	3.24	2.41	2.42	-0.28	-0.24	-0.38	-0.23	0.91	-1.48	0.57
Kalat-Nasirabad	1.33	2.12	1.91	1.60	2.10	3.09	2.46	2.09	-0.83	0.25	0.14	-0.05	0.08	1.44	1.01
Kalat-Chaghi	1.04	1.02	1.04	1.31	2.45	3.14	2.51	2.36	-0.22	1.94	0.46	-0.14	-0.71	-0.54	1.23
Kalat-Qilla Abdullah	1.04	0.66	0.48	1.89	2.67	2.83	1.31	0.13	0.00	-0.36	0.44	-0.13	0.80	-2.27	0.62
Kalat-Nushki	-0.66	-0.07	-0.40	1.02	0.39	2.83	2.77	2.62	-1.66	-0.14	0.16	-0.19	-0.79	-1.67	-1.19
Kalat-Pashin	-0.47	-0.37	-0.64	0.58	1.27	2.98	1.57	0.54	-1.66	-0.27	-1.06	-0.18	0.98	-2.07	-2.03
Kalat-Quetta	-2.37	-1.32	-1.91	-0.80	0.35	2.30	0.37	-0.07	-3.98	-0.58	-3.25	-4.59	-3.34	-2.15	-2.03
Kalat-DeraBugti	1.80	2.78	1.99	3.13	3.28	2.15	2.93	2.02	-0.39	2.86	-0.31	0.00	0.90	-1.33	0.84
Kalat-Hernai	0.66	0.73	0.64	1.60	1.93	1.41	2.09	1.55	-0.39	0.56	0.31	-0.22	1.17	-1.55	0.57
Kalat-Kohlu	1.70	2.71	2.71	1.09	2.19	3.82	2.98	2.83	0.39	1.60	0.58	0.01	1.30	-1.49	1.50
Kalat-Sibbi	-1.70	-0.51	-0.96	0.15	0.48	1.41	-0.21	0.54	-2.77	-0.07	-2.07	-0.55	-1.07	-1.41	-1.37
Kalat-Ziarat	-0.28	-0.66	-0.80	0.51	1.53	2.83	1.47	1.28	-0.11	-0.56	-2.82	-0.01	0.53	-2.26	0.18
Kalat-Barkhan	1.04	0.80	1.27	0.07	-0.44	2.67	1.88	2.76	-1.05	0.10	0.46	0.04	0.19	-1.39	1.15
Kalat-QillaSaifullah	1.04	1.17	1.59	-1.09	0.31	3.19	2.25	2.42	0.22	0.45	0.41	0.04	1.01	-2.10	0.71
Kalat-Loralai	0.95	0.59	0.56	0.87	1.31	2.62	2.62	2.29	-1.44	-0.04	0.53	-0.37	0.93	0.07	1.01
Kalat-Musa Khel	1.51	1.83	1.43	1.53	2.71	3.66	2.77	2.36	-1.55	0.58	0.58	0.01	0.40	0.31	1.63
Kalat-Sherani	1.61	0.95	1.19	0.80	0.66	0.94	2.51	2.22	-0.89	0.79	0.59	0.01	0.70	-1.85	1.59
Kalat-Zhob	1.14	0.66	0.88	1.24	1.05	3.24	2.88	2.69	-2.21	0.71	0.53	-0.29	0.59	-1.82	0.97

Table: Distance from Kharan to other Districts

Districts	Female-Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Kharan-Khuzdar	-0.38	0.80	0.24	-0.36	1.36	-1.78	-0.68	-0.61	-0.22	0.28	0.54	-0.25	-0.11	0.72	-0.09
Kharan-Lasbilla	-0.47	1.17	0.48	1.09	1.44	-1.88	-1.26	-1.08	-0.66	0.45	0.14	-3.17	-2.33	1.08	0.18
Kharan-Mastung	-0.95	0.07	0.08	-1.75	0.53	-2.51	-1.88	-2.49	-0.89	-1.43	-0.26	-0.46	-1.05	0.53	-0.18
Kharan-Washuk	0.76	1.83	1.19	0.29	2.28	-2.30	-0.89	0.40	0.83	1.78	0.78	0.04	-1.10	0.57	1.41
Kharan-Gwadar	-1.14	-0.80	-0.64	-1.31	1.40	-2.15	-1.83	-0.87	-0.77	-0.62	0.06	-0.62	-2.02	0.70	-0.62
Kharan-Ketch	-0.66	-0.07	0.16	-0.44	1.44	-0.78	-0.47	-0.13	0.00	-0.03	0.60	-0.06	-1.16	0.87	0.04
Kharan-Jafarabad	0.57	1.32	1.27	1.02	2.28	-0.99	0.73	0.40	-0.89	-1.33	-0.15	0.00	-1.44	2.69	0.66
Kharan-JhalMagsi	0.00	0.66	0.64	0.29	0.74	0.00	-1.68	-0.94	0.33	-0.70	0.77	-0.07	-0.80	1.07	0.71
Kharan-Bolan	0.38	1.02	0.96	0.95	0.70	-0.16	0.42	0.54	0.06	-1.08	-0.19	-0.25	-0.06	-0.14	0.35
Kharan-Nasirabad	0.76	2.27	1.91	1.38	2.36	-0.31	0.47	0.20	-0.50	-0.59	0.33	-0.07	-0.89	2.78	0.79
Kharan-Chaghi	0.47	1.17	1.04	1.09	2.71	-0.26	0.52	0.47	0.11	1.10	0.65	-0.16	-1.68	0.80	1.01
Kharan-Qilla Abdullah	0.47	0.80	0.48	1.67	2.93	-0.58	-0.68	-1.75	0.33	-1.20	0.63	-0.16	-0.17	-0.94	0.40
Kharan-Nushki	-1.23	0.07	-0.40	0.80	0.66	-0.58	0.79	0.74	-1.33	-0.98	0.35	-0.22	-1.76	-0.33	-1.41
Kharan-Pashin	-1.04	-0.22	-0.64	0.36	1.53	-0.42	-0.42	-1.35	-1.33	-1.11	-0.86	-0.20	0.01	-0.74	-2.25
Kharan-Quetta	-2.94	-1.17	-1.91	-1.02	0.61	-1.10	-1.62	-1.95	-3.65	-1.42	-3.06	-4.62	-4.32	-0.81	-2.25
Kharan-DeraBugti	1.23	2.93	1.99	2.91	3.55	-1.26	0.94	0.13	-0.06	2.01	-0.12	-0.03	-0.07	0.01	0.62
Kharan-Hernai	0.09	0.88	0.64	1.38	2.19	-1.99	0.10	-0.34	-0.06	-0.29	0.50	-0.25	0.20	-0.21	0.35
Kharan-Kohlu	1.14	2.85	2.71	0.87	2.45	0.42	0.99	0.94	0.72	0.75	0.77	-0.01	0.33	-0.15	1.28
Kharan-Sibbi	-2.27	-0.37	-0.96	-0.07	0.74	-1.99	-2.20	-1.35	-2.43	-0.91	-1.88	-0.57	-2.04	-0.08	-1.59
Kharan-Ziarat	-0.85	-0.51	-0.80	0.29	1.79	-0.58	-0.52	-0.61	0.22	-1.41	-2.63	-0.04	-0.44	-0.93	-0.04
Kharan-Barkhan	0.47	0.95	1.27	-0.15	-0.18	-0.73	-0.10	0.87	-0.72	-0.74	0.65	0.01	-0.78	-0.05	0.93
Kharan-QillaSaifullah	0.47	1.32	1.59	-1.31	0.57	-0.21	0.26	0.54	0.55	-0.40	0.60	0.01	0.04	-0.76	0.48
Kharan-Loralai	0.38	0.73	0.56	0.65	1.58	-0.78	0.63	0.40	-1.11	-0.88	0.72	-0.40	-0.05	1.41	0.79
Kharan-Musa Khel	0.95	1.98	1.43	1.31	2.98	0.26	0.79	0.47	-1.22	-0.26	0.77	-0.02	-0.57	1.64	1.41
Kharan-Sherani	1.04	1.10	1.19	0.58	0.92	-2.46	0.52	0.34	-0.55	-0.05	0.78	-0.01	-0.27	-0.51	1.37
Kharan-Zhob	0.57	0.80	0.88	1.02	1.31	-0.16	0.89	0.81	-1.88	-0.13	0.72	-0.32	-0.38	-0.48	0.75

Table:Distance from Khuzdar to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Khuzdar-Lasbilla	-0.09	0.37	0.24	1.45	0.09	-0.10	-0.58	-0.47	-0.44	0.17	-0.41	-2.91	-2.22	0.36	0.26
Khuzdar-Mastung	-0.57	-0.73	-0.16	-1.38	-0.83	-0.73	-1.20	-1.88	-0.66	-1.71	-0.80	-0.21	-0.94	-0.19	-0.09
Khuzdar-Washuk	1.14	1.02	0.96	0.65	0.92	-0.52	-0.21	1.01	1.05	1.50	0.24	0.29	-0.99	-0.15	1.50
Khuzdar-Gwadar	-0.76	-1.61	-0.88	-0.95	0.04	-0.37	-1.15	-0.27	-0.55	-0.89	-0.48	-0.37	-1.90	-0.02	-0.53
Khuzdar-Ketch	-0.28	-0.88	-0.08	-0.07	0.09	0.99	0.21	0.47	0.22	-0.31	0.06	0.20	-1.05	0.15	0.13
Khuzdar-Jafarabad	0.95	0.51	1.04	1.38	0.92	0.78	1.41	1.01	-0.66	-1.61	-0.69	0.25	-1.33	1.97	0.75
Khuzdar-JhalMagsi	0.38	-0.15	0.40	0.65	-0.61	1.78	-0.99	-0.34	0.55	-0.98	0.23	0.18	-0.68	0.35	0.79
Khuzdar-Bolan	0.76	0.22	0.72	1.31	-0.66	1.62	1.10	1.14	0.28	-1.36	-0.73	0.00	0.05	-0.86	0.44
Khuzdar-Nasirabad	1.14	1.46	1.67	1.75	1.01	1.46	1.15	0.81	-0.28	-0.87	-0.21	0.18	-0.77	2.06	0.88
Khuzdar-Chaghi	0.85	0.37	0.80	1.45	1.36	1.52	1.20	1.08	0.33	0.82	0.11	0.09	-1.56	0.08	1.10
Khuzdar-Qilla Abdullah	0.85	0.00	0.24	2.04	1.58	1.20	0.00	-1.14	0.55	-1.48	0.09	0.10	-0.06	-1.66	0.48
Khuzdar-Nushki	-0.85	-0.73	-0.64	1.16	-0.70	1.20	1.47	1.35	-1.11	-1.26	-0.19	0.04	-1.65	-1.05	-1.32
Khuzdar-Pashin	-0.66	-1.02	-0.88	0.73	0.18	1.36	0.26	-0.74	-1.11	-1.39	-1.40	0.05	0.12	-1.46	-2.16
Khuzdar-Quetta	-2.56	-1.98	-2.15	-0.65	-0.74	0.68	-0.94	-1.35	-3.43	-1.70	-3.60	-4.37	-4.20	-1.53	-2.16
Khuzdar-DeraBugti	1.61	2.12	1.75	3.27	2.19	0.52	1.62	0.74	0.17	1.74	-0.66	0.22	0.04	-0.71	0.71
Khuzdar-Hernai	0.47	0.07	0.40	1.75	0.83	-0.21	0.79	0.27	0.17	-0.56	-0.04	0.00	0.31	-0.93	0.44
Khuzdar-Kohlu	1.51	2.05	2.47	1.24	1.09	2.20	1.68	1.55	0.94	0.48	0.23	0.24	0.44	-0.87	1.37
Khuzdar-Sibbi	-1.89	-1.17	-1.19	0.29	-0.61	-0.21	-1.52	-0.74	-2.21	-1.19	-2.42	-0.32	-1.93	-0.80	-1.50
Khuzdar-Ziarat	-0.47	-1.32	-1.04	0.65	0.44	1.20	0.16	0.00	0.44	-1.68	-3.17	0.22	-0.32	-1.65	0.04
Khuzdar-Barkhan	0.85	0.15	1.04	0.22	-1.53	1.05	0.58	1.48	-0.50	-1.02	0.11	0.26	-0.67	-0.77	1.01
Khuzdar-QillaSaifullah	0.85	0.51	1.35	-0.95	-0.79	1.57	0.94	1.14	0.77	-0.67	0.06	0.26	0.16	-1.48	0.57
Khuzdar-Loralai	0.76	-0.07	0.32	1.02	0.22	0.99	1.31	1.01	-0.89	-1.16	0.18	-0.15	0.07	0.69	0.88
Khuzdar-Musa Khel	1.33	1.17	1.19	1.67	1.62	2.04	1.47	1.08	-1.00	-0.54	0.23	0.23	-0.45	0.92	1.50
Khuzdar-Sherani	1.42	0.29	0.96	0.95	-0.44	-0.68	1.20	0.94	-0.33	-0.33	0.24	0.24	-0.16	-1.23	1.45
Khuzdar-Zhob	0.95	0.00	0.64	1.38	-0.04	1.62	1.57	1.41	-1.66	-0.41	0.18	-0.06	-0.27	-1.20	0.84

Table:Distance from Lasbila to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Lasbilla-Mastung	-0.47	-1.10	-0.40	-2.84	-0.92	-0.63	-0.63	-1.41	-0.22	-1.88	-0.40	2.70	1.28	-0.56	-0.35
Lasbilla-Washuk	1.23	0.66	0.72	-0.80	0.83	-0.42	0.37	1.48	1.49	1.33	0.65	3.20	1.23	-0.52	1.23
Lasbilla-Gwadar	-0.66	-1.98	-1.11	-2.40	-0.04	-0.26	-0.58	0.20	-0.11	-1.07	-0.07	2.55	0.32	-0.38	-0.79
Lasbilla-Ketch	-0.19	-1.24	-0.32	-1.53	0.00	1.10	0.79	0.94	0.66	-0.48	0.47	3.11	1.17	-0.21	-0.13
Lasbilla-Jafarabad	1.04	0.15	0.80	-0.07	0.83	0.89	1.99	1.48	-0.22	-1.78	-0.29	3.16	0.89	1.60	0.48
Lasbilla-JhalMagsi	0.47	-0.51	0.16	-0.80	-0.70	1.88	-0.42	0.13	1.00	-1.15	0.64	3.09	1.54	-0.01	0.53
Lasbilla-Bolan	0.85	-0.15	0.48	-0.15	-0.74	1.73	1.68	1.61	0.72	-1.54	-0.32	2.91	2.27	-1.23	0.18
Lasbilla-Nasirabad	1.23	1.10	1.43	0.29	0.92	1.57	1.73	1.28	0.17	-1.04	0.19	3.09	1.45	1.69	0.62
Lasbilla-Chaghi	0.95	0.00	0.56	0.00	1.27	1.62	1.78	1.55	0.77	0.65	0.51	3.00	0.66	-0.29	0.84
Lasbilla-Qilla Abdullah	0.95	-0.37	0.00	0.58	1.49	1.31	0.58	-0.67	1.00	-1.66	0.50	3.01	2.16	-2.02	0.22
Lasbilla-Nushki	-0.76	-1.10	-0.88	-0.29	-0.79	1.31	2.04	1.82	-0.66	-1.43	0.22	2.95	0.57	-1.42	-1.59
Lasbilla-Pashin	-0.57	-1.39	-1.11	-0.73	0.09	1.46	0.84	-0.27	-0.66	-1.56	-1.00	2.96	2.34	-1.82	-2.42
Lasbilla-Quetta	-2.46	-2.34	-2.39	-2.11	-0.83	0.78	-0.37	-0.87	-2.99	-1.87	-3.19	-1.45	-1.98	-1.90	-2.42
Lasbilla-DeraBugti	1.70	1.76	1.51	1.82	2.10	0.63	2.20	1.21	0.61	1.56	-0.26	3.14	2.26	-1.08	0.44
Lasbilla-Hernai	0.57	-0.29	0.16	0.29	0.74	-0.10	1.36	0.74	0.61	-0.74	0.37	2.91	2.53	-1.30	0.18
Lasbilla-Kohlu	1.61	1.68	2.23	-0.22	1.01	2.30	2.25	2.02	1.38	0.30	0.64	3.15	2.66	-1.23	1.10
Lasbilla-Sibbi	-1.80	-1.54	-1.43	-1.16	-0.70	-0.10	-0.94	-0.27	-1.77	-1.36	-2.02	2.59	0.29	-1.16	-1.76
Lasbilla-Ziarat	-0.38	-1.68	-1.27	-0.80	0.35	1.31	0.73	0.47	0.89	-1.86	-2.76	3.13	1.90	-2.01	-0.22
Lasbilla-Barkhan	0.95	-0.22	0.80	-1.24	-1.62	1.15	1.15	1.95	-0.06	-1.19	0.52	3.18	1.55	-1.13	0.75
Lasbilla-QillaSaifullah	0.95	0.15	1.11	-2.40	-0.88	1.67	1.52	1.61	1.22	-0.85	0.47	3.18	2.38	-1.84	0.31
Lasbilla-Loralai	0.85	-0.44	0.08	-0.44	0.13	1.10	1.88	1.48	-0.44	-1.33	0.58	2.76	2.29	0.33	0.62
Lasbilla-Musa Khel	1.42	0.80	0.96	0.22	1.53	2.15	2.04	1.55	-0.55	-0.71	0.64	3.15	1.77	0.56	1.23
Lasbilla-Sherani	1.51	-0.07	0.72	-0.51	-0.53	-0.58	1.78	1.41	0.11	-0.50	0.65	3.15	2.06	-1.60	1.19
Lasbilla-Zhob	1.04	-0.37	0.40	-0.07	-0.13	1.73	2.15	1.88	-1.22	-0.58	0.59	2.85	1.95	-1.57	0.57

Table:Distance from Mastung to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Mastung-Washuk	1.70	1.76	1.11	2.04	1.75	0.21	0.99	2.89	1.71	3.21	1.04	0.50	-0.05	0.04	1.59
Mastung-Gwadar	-0.19	-0.88	-0.72	0.44	0.88	0.37	0.05	1.61	0.11	0.81	0.32	-0.16	-0.97	0.17	-0.44
Mastung-Ketch	0.28	-0.15	0.08	1.31	0.92	1.73	1.41	2.36	0.89	1.39	0.86	0.41	-0.11	0.34	0.22
Mastung-Jafarabad	1.51	1.24	1.19	2.76	1.75	1.52	2.62	2.89	0.00	0.10	0.11	0.46	-0.39	2.16	0.84
Mastung-JhalMagsi	0.95	0.59	0.56	2.04	0.22	2.51	0.21	1.55	1.22	0.73	1.03	0.39	0.25	0.54	0.88
Mastung-Bolan	1.33	0.95	0.88	2.69	0.18	2.35	2.30	3.03	0.94	0.34	0.07	0.21	0.99	-0.67	0.53
Mastung-Nasirabad	1.70	2.20	1.83	3.13	1.84	2.20	2.36	2.69	0.39	0.84	0.59	0.39	0.16	2.25	0.97
Mastung-Chaghi	1.42	1.10	0.96	2.84	2.19	2.25	2.41	2.96	1.00	2.53	0.91	0.30	-0.63	0.27	1.19
Mastung-Qilla Abdullah	1.42	0.73	0.40	3.42	2.41	1.94	1.20	0.74	1.22	0.22	0.89	0.31	0.88	-1.46	0.57
Mastung-Nushki	-0.28	0.00	-0.48	2.55	0.13	1.94	2.67	3.23	-0.44	0.45	0.61	0.25	-0.71	-0.86	-1.23
Mastung-Pashin	-0.09	-0.29	-0.72	2.11	1.01	2.09	1.47	1.14	-0.44	0.32	-0.60	0.26	1.06	-1.27	-2.07
Mastung-Quetta	-1.99	-1.24	-1.99	0.73	0.09	1.41	0.26	0.54	-2.77	0.00	-2.80	-4.15	-3.27	-1.34	-2.07
Mastung-DeraBugti	2.18	2.85	1.91	4.65	3.02	1.26	2.83	2.62	0.83	3.44	0.14	0.43	0.98	-0.52	0.79
Mastung-Hernai	1.04	0.80	0.56	3.13	1.66	0.52	1.99	2.15	0.83	1.14	0.76	0.21	1.25	-0.74	0.53
Mastung-Kohlu	2.08	2.78	2.63	2.62	1.93	2.93	2.88	3.43	1.60	2.18	1.03	0.45	1.38	-0.68	1.45
Mastung-Sibbi	-1.33	-0.44	-1.04	1.67	0.22	0.52	-0.31	1.14	-1.55	0.52	-1.62	-0.11	-0.99	-0.61	-1.41
Mastung-Ziarat	0.09	-0.59	-0.88	2.04	1.27	1.94	1.36	1.88	1.11	0.02	-2.37	0.43	0.61	-1.46	0.13
Mastung-Barkhan	1.42	0.88	1.19	1.60	-0.70	1.78	1.78	3.36	0.17	0.69	0.91	0.47	0.27	-0.58	1.10
Mastung-QillaSaifullah	1.42	1.24	1.51	0.44	0.04	2.30	2.15	3.03	1.44	1.03	0.87	0.47	1.09	-1.29	0.66
Mastung-Loralai	1.33	0.66	0.48	2.40	1.05	1.73	2.51	2.89	-0.22	0.55	0.98	0.06	1.01	0.88	0.97
Mastung-Musa Khel	1.89	1.90	1.35	3.05	2.45	2.77	2.67	2.96	-0.33	1.17	1.04	0.44	0.48	1.11	1.59
Mastung-Sherani	1.99	1.02	1.11	2.33	0.39	0.05	2.41	2.83	0.33	1.38	1.04	0.45	0.78	-1.04	1.54
Mastung-Zhob	1.51	0.73	0.80	2.76	0.79	2.35	2.77	3.30	-1.00	1.30	0.98	0.15	0.67	-1.01	0.93

Table:Distance from Washuk to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
washuk-Gwadar	-1.89	-2.63	-1.83	-1.60	-0.88	0.16	-0.94	-1.28	-1.60	-2.39	-0.72	-0.66	-0.91	0.14	-2.03
washuk-Ketch	-1.42	-1.90	-1.04	-0.73	-0.83	1.52	0.42	-0.54	-0.83	-1.81	-0.18	-0.09	-0.06	0.30	-1.37
washuk-Jafarabad	-0.19	-0.51	0.08	0.73	0.00	1.31	1.62	0.00	-1.71	-3.11	-0.94	-0.04	-0.34	2.12	-0.75
washuk-JhalMagsi	-0.76	-1.17	-0.56	0.00	-1.53	2.30	-0.79	-1.35	-0.50	-2.48	-0.01	-0.11	0.30	0.50	-0.71
washuk-Bolan	-0.38	-0.80	-0.24	0.65	-1.58	2.15	1.31	0.13	-0.77	-2.86	-0.97	-0.29	1.04	-0.71	-1.06
washuk-Nasirabad	0.00	0.44	0.72	1.09	0.09	1.99	1.36	-0.20	-1.33	-2.37	-0.46	-0.11	0.21	2.21	-0.62
washuk-Chaghi	-0.28	-0.66	-0.16	0.80	0.44	2.04	1.41	0.07	-0.72	-0.68	-0.13	-0.20	-0.58	0.23	-0.40
washuk-Qilla Abdullah	-0.28	-1.02	-0.72	1.38	0.66	1.73	0.21	-2.15	-0.50	-2.98	-0.15	-0.19	0.93	-1.50	-1.01
washuk-Nushki	-1.99	-1.76	-1.59	0.51	-1.62	1.73	1.68	0.34	-2.16	-2.76	-0.43	-0.25	-0.66	-0.90	-2.82
washuk-Pashin	-1.80	-2.05	-1.83	0.07	-0.74	1.88	0.47	-1.75	-2.16	-2.89	-1.65	-0.24	1.11	-1.30	-3.66
washuk-Quetta	-3.69	-3.00	-3.11	-1.31	-1.66	1.20	-0.73	-2.36	-4.48	-3.20	-3.84	-4.65	-3.21	-1.38	-3.66
washuk-DeraBugti	0.47	1.10	0.80	2.62	1.27	1.05	1.83	-0.27	-0.89	0.24	-0.90	-0.07	1.03	-0.56	-0.79
washuk-Hernai	-0.66	-0.95	-0.56	1.09	-0.09	0.31	0.99	-0.74	-0.89	-2.06	-0.28	-0.29	1.30	-0.78	-1.06
washuk-Kohlu	0.38	1.02	1.51	0.58	0.18	2.72	1.88	0.54	-0.11	-1.02	-0.01	-0.05	1.43	-0.72	-0.13
washuk-Sibbi	-3.03	-2.20	-2.15	-0.36	-1.53	0.31	-1.31	-1.75	-3.26	-2.69	-2.66	-0.61	-0.94	-0.64	-3.00
washuk-Ziarat	-1.61	-2.34	-1.99	0.00	-0.48	1.73	0.37	-1.01	-0.61	-3.18	-3.41	-0.07	0.66	-1.49	-1.45
washuk-Barkhan	-0.28	-0.88	0.08	-0.44	-2.45	1.57	0.79	0.47	-1.55	-2.52	-0.13	-0.03	0.32	-0.62	-0.48
washuk-QillaSaifullah	-0.28	-0.51	0.40	-1.60	-1.71	2.09	1.15	0.13	-0.28	-2.17	-0.18	-0.03	1.14	-1.33	-0.93
washuk-Loralai	-0.38	-1.10	-0.64	0.36	-0.70	1.52	1.52	0.00	-1.94	-2.66	-0.06	-0.44	1.06	0.84	-0.62
washuk-Musa Khel	0.19	0.15	0.24	1.02	0.70	2.56	1.68	0.07	-2.05	-2.04	-0.01	-0.06	0.53	1.08	0.00
washuk-Sherani	0.28	-0.73	0.00	0.29	-1.36	-0.16	1.41	-0.07	-1.38	-1.83	0.00	-0.05	0.83	-1.08	-0.04
washuk-Zhob	-0.19	-1.02	-0.32	0.73	-0.96	2.15	1.78	0.40	-2.71	-1.91	-0.06	-0.35	0.72	-1.05	-0.66

Table:Distance from Gawadar to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Gwadar-Ketch	0.47	0.73	0.80	0.87	0.04	1.36	1.36	0.74	0.77	0.58	0.54	0.56	0.85	0.17	0.66
Gwadar-Jafarabad	1.70	2.12	1.91	2.33	0.88	1.15	2.56	1.28	-0.11	-0.72	-0.22	0.62	0.57	1.99	1.28
Gwadar-JhalMagsi	1.14	1.46	1.27	1.60	-0.66	2.15	0.16	-0.07	1.11	-0.09	0.71	0.55	1.22	0.37	1.32
Gwadar-Bolan	1.51	1.83	1.59	2.25	-0.70	1.99	2.25	1.41	0.83	-0.47	-0.25	0.37	1.96	-0.84	0.97
Gwadar-Nasirabad	1.89	3.07	2.55	2.69	0.96	1.83	2.30	1.08	0.28	0.02	0.27	0.55	1.13	2.07	1.41
Gwadar-Chaghi	1.61	1.98	1.67	2.40	1.31	1.88	2.36	1.35	0.89	1.72	0.59	0.46	0.34	0.10	1.63
Gwadar-Qilla Abdullah	1.61	1.61	1.11	2.98	1.53	1.57	1.15	-0.87	1.11	-0.59	0.57	0.46	1.85	-1.64	1.01
Gwadar-Nushki	-0.09	0.88	0.24	2.11	-0.74	1.57	2.62	1.61	-0.55	-0.37	0.29	0.40	0.25	-1.04	-0.79
Gwadar-Pashin	0.09	0.59	0.00	1.67	0.13	1.73	1.41	-0.47	-0.55	-0.50	-0.93	0.42	2.02	-1.44	-1.63
Gwadar-Quetta	-1.80	-0.37	-1.27	0.29	-0.79	1.05	0.21	-1.08	-2.88	-0.81	-3.12	-4.00	-2.30	-1.52	-1.63
Gwadar-DeraBugti	2.37	3.73	2.63	4.22	2.15	0.89	2.77	1.01	0.72	2.63	-0.18	0.59	1.95	-0.70	1.23
Gwadar-Hernai	1.23	1.68	1.27	2.69	0.79	0.16	1.94	0.54	0.72	0.33	0.44	0.37	2.21	-0.91	0.97
Gwadar-Kohlu	2.27	3.66	3.34	2.18	1.05	2.56	2.83	1.82	1.49	1.37	0.71	0.61	2.35	-0.85	1.89
Gwadar-Sibbi	-1.14	0.44	-0.32	1.24	-0.66	0.16	-0.37	-0.47	-1.66	-0.30	-1.94	0.05	-0.02	-0.78	-0.97
Gwadar-Ziarat	0.28	0.29	-0.16	1.60	0.39	1.57	1.31	0.27	1.00	-0.79	-2.69	0.58	1.58	-1.63	0.57
Gwadar-Barkhan	1.61	1.76	1.91	1.16	-1.58	1.41	1.73	1.75	0.06	-0.13	0.59	0.63	1.24	-0.75	1.54
Gwadar-QillaSaifullah	1.61	2.12	2.23	0.00	-0.83	1.94	2.09	1.41	1.33	0.22	0.54	0.63	2.06	-1.46	1.10
Gwadar-Loralai	1.51	1.54	1.19	1.96	0.18	1.36	2.46	1.28	-0.33	-0.27	0.66	0.22	1.97	0.71	1.41
Gwadar-Musa Khel	2.08	2.78	2.07	2.62	1.58	2.41	2.62	1.35	-0.44	0.35	0.71	0.60	1.45	0.94	2.03
Gwadar-Sherani	2.18	1.90	1.83	1.89	-0.48	-0.31	2.36	1.21	0.22	0.56	0.72	0.61	1.74	-1.22	1.98
Gwadar-Zhob	1.70	1.61	1.51	2.33	-0.09	1.99	2.72	1.68	-1.11	0.48	0.66	0.30	1.63	-1.18	1.37

Table:Distance from Awaran to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Ketch-Jafarabad	1.23	1.39	1.11	1.45	0.83	-0.21	1.20	0.54	-0.89	-1.30	-0.75	0.05	-0.28	1.82	0.62
Ketch-JhalMagsi	0.66	0.73	0.48	0.73	-0.70	0.78	-1.20	-0.81	0.33	-0.67	0.17	-0.02	0.37	0.20	0.66
Ketch-Bolan	1.04	1.10	0.80	1.38	-0.74	0.63	0.89	0.67	0.06	-1.05	-0.79	-0.20	1.11	-1.01	0.31
Ketch-Nasirabad	1.42	2.34	1.75	1.82	0.92	0.47	0.94	0.34	-0.50	-0.56	-0.27	-0.02	0.28	1.90	0.75
Ketch-Chaghi	1.14	1.24	0.88	1.53	1.27	0.52	0.99	0.61	0.11	1.14	0.05	-0.11	-0.51	-0.07	0.97
Ketch-Qilla Abdullah	1.14	0.88	0.32	2.11	1.49	0.21	-0.21	-1.61	0.33	-1.17	0.03	-0.10	0.99	-1.81	0.35
Ketch-Nushki	-0.57	0.15	-0.56	1.24	-0.79	0.21	1.26	0.87	-1.33	-0.95	-0.25	-0.16	-0.60	-1.21	-1.45
Ketch-Pashin	-0.38	-0.15	-0.80	0.80	0.09	0.37	0.05	-1.21	-1.33	-1.08	-1.47	-0.15	1.17	-1.61	-2.29
Ketch-Quetta	-2.27	-1.10	-2.07	-0.58	-0.83	-0.31	-1.15	-1.82	-3.65	-1.39	-3.66	-4.56	-3.15	-1.69	-2.29
Ketch-DeraBugti	1.89	3.00	1.83	3.35	2.10	-0.47	1.41	0.27	-0.06	2.05	-0.72	0.03	1.10	-0.86	0.57
Ketch-Hernai	0.76	0.95	0.48	1.82	0.74	-1.20	0.58	-0.20	-0.06	-0.25	-0.10	-0.20	1.36	-1.08	0.31
Ketch-Kohlu	1.80	2.93	2.55	1.31	1.01	1.20	1.47	1.08	0.72	0.79	0.17	0.04	1.49	-1.02	1.23
Ketch-Sibbi	-1.61	-0.29	-1.11	0.36	-0.70	-1.20	-1.73	-1.21	-2.43	-0.88	-2.48	-0.52	-0.88	-0.95	-1.63
Ketch-Ziarat	-0.19	-0.44	-0.96	0.73	0.35	0.21	-0.05	-0.47	0.22	-1.37	-3.23	0.02	0.73	-1.80	-0.09
Ketch-Barkhan	1.14	1.02	1.11	0.29	-1.62	0.05	0.37	1.01	-0.72	-0.71	0.05	0.07	0.39	-0.92	0.88
Ketch-QillaSaifullah	1.14	1.39	1.43	-0.87	-0.88	0.58	0.73	0.67	0.55	-0.36	0.00	0.07	1.21	-1.63	0.44
Ketch-Loralai	1.04	0.80	0.40	1.09	0.13	0.00	1.10	0.54	-1.11	-0.85	0.12	-0.35	1.12	0.54	0.75
Ketch-Musa Khel	1.61	2.05	1.27	1.75	1.53	1.05	1.26	0.61	-1.22	-0.23	0.17	0.04	0.60	0.77	1.37
Ketch-Sherani	1.70	1.17	1.04	1.02	-0.53	-1.67	0.99	0.47	-0.55	-0.02	0.18	0.04	0.89	-1.39	1.32
Ketch-Zhob	1.23	0.88	0.72	1.45	-0.13	0.63	1.36	0.94	-1.88	-0.10	0.12	-0.26	0.78	-1.35	0.71

Table:Distance from Jaffarabad to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Jaffarabad-JhalMagsi	-0.57	-0.66	-0.64	-0.73	-1.53	0.99	-2.41	-1.35	1.22	0.63	0.93	-0.07	0.64	-1.62	0.04
Jaffarabad-Bolan	-0.19	-0.29	-0.32	-0.07	-1.58	0.84	-0.31	0.13	0.94	0.25	-0.03	-0.25	1.38	-2.83	-0.31
Jaffarabad-Nasirabad	0.19	0.95	0.64	0.36	0.09	0.68	-0.26	-0.20	0.39	0.74	0.48	-0.07	0.55	0.09	0.13
Jaffarabad-Chaghi	-0.09	-0.15	-0.24	0.07	0.44	0.73	-0.21	0.07	1.00	2.43	0.80	-0.16	-0.24	-1.89	0.35
Jaffarabad-Qilla Abdullah	-0.09	-0.51	-0.80	0.65	0.66	0.42	-1.41	-2.15	1.22	0.13	0.79	-0.15	1.27	-3.62	-0.26
Jaffarabad-Nushki	-1.80	-1.24	-1.67	-0.22	-1.62	0.42	0.05	0.34	-0.44	0.35	0.50	-0.21	-0.32	-3.02	-2.07
Jaffarabad-Pashin	-1.61	-1.54	-1.91	-0.65	-0.74	0.58	-1.15	-1.75	-0.44	0.22	-0.71	-0.20	1.45	-3.42	-2.91
Jaffarabad-Quetta	-3.50	-2.49	-3.19	-2.04	-1.66	-0.10	-2.36	-2.36	-2.77	-0.09	-2.91	-4.61	-2.87	-3.50	-2.91
Jaffarabad-DeraBugti	0.66	1.61	0.72	1.89	1.27	-0.26	0.21	-0.27	0.83	3.35	0.03	-0.02	1.37	-2.68	-0.04
Jaffarabad-Hernai	-0.47	-0.44	-0.64	0.36	-0.09	-0.99	-0.63	-0.74	0.83	1.05	0.65	-0.25	1.64	-2.90	-0.31
Jaffarabad-Kohlu	0.57	1.54	1.43	-0.15	0.18	1.41	0.26	0.54	1.60	2.09	0.92	-0.01	1.77	-2.84	0.62
Jaffarabad-Sibbi	-2.84	-1.68	-2.23	-1.09	-1.53	-0.99	-2.93	-1.75	-1.55	0.42	-1.73	-0.57	-0.60	-2.76	-2.25
Jaffarabad-Ziarat	-1.42	-1.83	-2.07	-0.73	-0.48	0.42	-1.26	-1.01	1.11	-0.07	-2.47	-0.03	1.00	-3.62	-0.71
Jaffarabad-Barkhan	-0.09	-0.37	0.00	-1.16	-2.45	0.26	-0.84	0.47	0.17	0.59	0.81	0.01	0.66	-2.74	0.26
Jaffarabad-QillaSaifullah	-0.09	0.00	0.32	-2.33	-1.71	0.78	-0.47	0.13	1.44	0.94	0.76	0.01	1.48	-3.45	-0.18
Jaffarabad-Loralai	-0.19	-0.59	-0.72	-0.36	-0.70	0.21	-0.10	0.00	-0.22	0.45	0.87	-0.40	1.40	-1.28	0.13
Jaffarabad-Musa Khel	0.38	0.66	0.16	0.29	0.70	1.26	0.05	0.07	-0.33	1.07	0.93	-0.02	0.87	-1.05	0.75
Jaffarabad-Sherani	0.47	-0.22	-0.08	-0.44	-1.36	-1.46	-0.21	-0.07	0.33	1.28	0.94	-0.01	1.17	-3.20	0.71
Jaffarabad-Zhob	0.00	-0.51	-0.40	0.00	-0.96	0.84	0.16	0.40	-1.00	1.20	0.88	-0.31	1.06	-3.17	0.09

Table: Distance from Jhalmagsi to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Jhalmagsi-Bolan	0.38	0.37	0.32	0.65	-0.04	-0.16	2.09	1.48	-0.28	-0.38	-0.96	-0.18	0.74	-1.21	-0.35
Jhalmagsi-Nasirabad	0.76	1.61	1.27	1.09	1.62	-0.31	2.15	1.14	-0.83	0.11	-0.45	0.00	-0.09	1.70	0.09
Jhalmagsi-Chaghi	0.47	0.51	0.40	0.80	1.97	-0.26	2.20	1.41	-0.22	1.80	-0.12	-0.09	-0.88	-0.27	0.31
Jhalmagsi-Qilla Abdullah	0.47	0.15	-0.16	1.38	2.19	-0.58	0.99	-0.81	0.00	-0.50	-0.14	-0.08	0.63	-2.01	-0.31
Jhalmagsi-Nushki	-1.23	-0.59	-1.04	0.51	-0.09	-0.58	2.46	1.68	-1.66	-0.28	-0.42	-0.14	-0.96	-1.41	-2.12
Jhalmagsi-Pashin	-1.04	-0.88	-1.27	0.07	0.79	-0.42	1.26	-0.40	-1.66	-0.41	-1.64	-0.13	0.81	-1.81	-2.95
Jhalmagsi-Quetta	-2.94	-1.83	-2.55	-1.31	-0.13	-1.10	0.05	-1.01	-3.98	-0.72	-3.83	-4.54	-3.52	-1.88	-2.95
Jhalmagsi-DeraBugti	1.23	2.27	1.35	2.62	2.80	-1.26	2.62	1.08	-0.39	2.72	-0.89	0.05	0.73	-1.06	-0.09
Jhalmagsi-Hernai	0.09	0.22	0.00	1.09	1.44	-1.99	1.78	0.61	-0.39	0.42	-0.27	-0.18	1.00	-1.28	-0.35
Jhalmagsi-Kohlu	1.14	2.20	2.07	0.58	1.71	0.42	2.67	1.88	0.39	1.46	0.00	0.06	1.13	-1.22	0.57
Jhalmagsi-Sibbi	-2.27	-1.02	-1.59	-0.36	0.00	-1.99	-0.52	-0.40	-2.77	-0.21	-2.66	-0.50	-1.24	-1.15	-2.29
Jhalmagsi-Ziarat	-0.85	-1.17	-1.43	0.00	1.05	-0.58	1.15	0.34	-0.11	-0.70	-3.40	0.04	0.36	-2.00	-0.75
Jhalmagsi-Barkhan	0.47	0.29	0.64	-0.44	-0.92	-0.73	1.57	1.82	-1.05	-0.04	-0.12	0.09	0.02	-1.12	0.22
Jhalmagsi-QillaSaifullah	0.47	0.66	0.96	-1.60	-0.18	-0.21	1.94	1.48	0.22	0.31	-0.17	0.09	0.84	-1.83	-0.22
Jhalmagsi-Loralai	0.38	0.07	-0.08	0.36	0.83	-0.78	2.30	1.35	-1.44	-0.18	-0.06	-0.33	0.75	0.34	0.09
Jhalmagsi-Musa Khel	0.95	1.32	0.80	1.02	2.23	0.26	2.46	1.41	-1.55	0.44	0.00	0.05	0.23	0.57	0.71
Jhalmagsi-Sherani	1.04	0.44	0.56	0.29	0.18	-2.46	2.20	1.28	-0.89	0.65	0.01	0.06	0.52	-1.58	0.66
Jhalmagsi-Zhob	0.57	0.15	0.24	0.73	0.57	-0.16	2.56	1.75	-2.21	0.57	-0.05	-0.24	0.42	-1.55	0.04

Table: Distance from Bolan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bolan-Nasirabad	0.38	1.24	0.96	0.44	1.66	-0.16	0.05	-0.34	-0.55	0.49	0.51	0.18	-0.83	2.92	0.44
Bolan-Chaghi	0.09	0.15	0.08	0.15	2.01	-0.10	0.10	-0.07	0.06	2.19	0.84	0.09	-1.62	0.94	0.66
Bolan-Qilla Abdullah	0.09	-0.22	-0.48	0.73	2.23	-0.42	-1.10	-2.29	0.28	-0.12	0.82	0.10	-0.11	-0.79	0.04
Bolan-Nushki	-1.61	-0.95	-1.35	-0.15	-0.04	-0.42	0.37	0.20	-1.38	0.10	0.54	0.04	-1.70	-0.19	-1.76
Bolan-Pashin	-1.42	-1.24	-1.59	-0.58	0.83	-0.26	-0.84	-1.88	-1.38	-0.03	-0.68	0.05	0.07	-0.59	-2.60
Bolan-Quetta	-3.31	-2.20	-2.87	-1.96	-0.09	-0.94	-2.04	-2.49	-3.71	-0.34	-2.87	-4.37	-4.26	-0.67	-2.60
Bolan-DeraBugti	0.85	1.90	1.04	1.96	2.85	-1.10	0.52	-0.40	-0.11	3.10	0.07	0.22	-0.01	0.15	0.26
Bolan-Hernai	-0.28	-0.15	-0.32	0.44	1.49	-1.83	-0.31	-0.87	-0.11	0.80	0.69	0.00	0.26	-0.07	0.00
Bolan-Kohlu	0.76	1.83	1.75	-0.07	1.75	0.58	0.58	0.40	0.66	1.84	0.96	0.24	0.39	-0.01	0.93
Bolan-Sibbi	-2.65	-1.39	-1.91	-1.02	0.04	-1.83	-2.62	-1.88	-2.49	0.17	-1.70	-0.32	-1.98	0.07	-1.94
Bolan-Ziarat	-1.23	-1.54	-1.75	-0.65	1.09	-0.42	-0.94	-1.14	0.17	-0.32	-2.44	0.22	-0.38	-0.79	-0.40
Bolan-Barkhan	0.09	-0.07	0.32	-1.09	-0.88	-0.58	-0.52	0.34	-0.77	0.34	0.84	0.26	-0.72	0.09	0.57
Bolan-QillaSaifullah	0.09	0.29	0.64	-2.25	-0.13	-0.05	-0.16	0.00	0.50	0.69	0.79	0.26	0.10	-0.62	0.13
Bolan-Loralai	0.00	-0.29	-0.40	-0.29	0.88	-0.63	0.21	-0.13	-1.16	0.20	0.90	-0.15	0.01	1.55	0.44
Bolan-Musa Khel	0.57	0.95	0.48	0.36	2.28	0.42	0.37	-0.07	-1.27	0.82	0.96	0.23	-0.51	1.78	1.06
Bolan-Sherani	0.66	0.07	0.24	-0.36	0.22	-2.30	0.10	-0.20	-0.61	1.03	0.97	0.24	-0.22	-0.37	1.01
Bolan-Zhob	0.19	-0.22	-0.08	0.07	0.61	0.00	0.47	0.27	-1.94	0.95	0.91	-0.06	-0.32	-0.34	0.40

Table: Distance from Nasirabad to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Nasirabad-Chaghi	-0.28	-1.10	-0.88	-0.29	0.35	0.05	0.05	0.27	0.61	1.69	0.32	-0.09	-0.79	-1.98	0.22
Nasirabad-Qilla Abdullah	-0.28	-1.46	-1.43	0.29	0.57	-0.26	-1.15	-1.95	0.83	-0.61	0.31	-0.08	0.72	-3.71	-0.40
Nasirabad-Nushki	-1.99	-2.20	-2.31	-0.58	-1.71	-0.26	0.31	0.54	-0.83	-0.39	0.02	-0.14	-0.87	-3.11	-2.20
Nasirabad-Pashin	-1.80	-2.49	-2.55	-1.02	-0.83	-0.10	-0.89	-1.55	-0.83	-0.52	-1.19	-0.13	0.90	-3.51	-3.04
Nasirabad-Quetta	-3.69	-3.44	-3.82	-2.40	-1.75	-0.78	-2.09	-2.15	-3.15	-0.83	-3.39	-4.54	-3.43	-3.59	-3.04
Nasirabad-DeraBugti	0.47	0.66	0.08	1.53	1.18	-0.94	0.47	-0.07	0.44	2.61	-0.45	0.04	0.82	-2.77	-0.18
Nasirabad-Hernai	-0.66	-1.39	-1.27	0.00	-0.18	-1.67	-0.37	-0.54	0.44	0.31	0.17	-0.18	1.08	-2.99	-0.44
Nasirabad-Kohlu	0.38	0.59	0.80	-0.51	0.09	0.73	0.52	0.74	1.22	1.35	0.44	0.06	1.22	-2.93	0.48
Nasirabad-Sibbi	-3.03	-2.63	-2.87	-1.45	-1.62	-1.67	-2.67	-1.55	-1.94	-0.32	-2.21	-0.50	-1.15	-2.85	-2.38
Nasirabad-Ziarat	-1.61	-2.78	-2.71	-1.09	-0.57	-0.26	-0.99	-0.81	0.72	-0.81	-2.95	0.04	0.45	-3.70	-0.84
Nasirabad-Barkhan	-0.28	-1.32	-0.64	-1.53	-2.54	-0.42	-0.58	0.67	-0.22	-0.15	0.33	0.08	0.11	-2.83	0.13
Nasirabad-QillaSaifullah	-0.28	-0.95	-0.32	-2.69	-1.79	0.10	-0.21	0.34	1.05	0.20	0.28	0.08	0.93	-3.54	-0.31
Nasirabad-Loralai	-0.38	-1.54	-1.35	-0.73	-0.79	-0.47	0.16	0.20	-0.61	-0.29	0.39	-0.33	0.84	-1.37	0.00
Nasirabad-Musa Khel	0.19	-0.29	-0.48	-0.07	0.61	0.58	0.31	0.27	-0.72	0.33	0.45	0.05	0.32	-1.13	0.62
Nasirabad-Sherani	0.28	-1.17	-0.72	-0.80	-1.44	-2.15	0.05	0.13	-0.06	0.54	0.46	0.06	0.61	-3.29	0.57
Nasirabad-Zhob	-0.19	-1.46	-1.04	-0.36	-1.05	0.16	0.42	0.61	-1.38	0.46	0.40	-0.24	0.51	-3.26	-0.04

Table: Distance from Chaghi to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Chaghi-Qilla Abdullah	0.00	-0.37	-0.56	0.58	0.22	-0.31	-1.20	-2.22	0.22	-2.31	-0.02	0.01	1.51	-1.73	-0.62
Chaghi-Nushki	-1.70	-1.10	-1.43	-0.29	-2.06	-0.31	0.26	0.27	-1.44	-2.08	-0.30	-0.05	-0.08	-1.13	-2.42
Chaghi-Pashin	-1.51	-1.39	-1.67	-0.73	-1.18	-0.16	-0.94	-1.82	-1.44	-2.21	-1.51	-0.04	1.69	-1.53	-3.26
Chaghi-Quetta	-3.41	-2.34	-2.95	-2.11	-2.10	-0.84	-2.15	-2.42	-3.76	-2.53	-3.71	-4.45	-2.64	-1.61	-3.26
Chaghi-DeraBugti	0.76	1.76	0.96	1.82	0.83	-0.99	0.42	-0.34	-0.17	0.91	-0.77	0.14	1.61	-0.79	-0.40
Chaghi-Hernai	-0.38	-0.29	-0.40	0.29	-0.53	-1.73	-0.42	-0.81	-0.17	-1.39	-0.15	-0.09	1.88	-1.01	-0.66
Chaghi-Kohlu	0.66	1.68	1.67	-0.22	-0.26	0.68	0.47	0.47	0.61	-0.35	0.12	0.15	2.01	-0.95	0.26
Chaghi-Sibbi	-2.75	-1.54	-1.99	-1.16	-1.97	-1.73	-2.72	-1.82	-2.54	-2.01	-2.53	-0.41	-0.36	-0.87	-2.60
Chaghi-Ziarat	-1.33	-1.68	-1.83	-0.80	-0.92	-0.31	-1.05	-1.08	0.11	-2.51	-3.28	0.13	1.24	-1.72	-1.06
Chaghi-Barkhan	0.00	-0.22	0.24	-1.24	-2.89	-0.47	-0.63	0.40	-0.83	-1.85	0.00	0.18	0.90	-0.85	-0.09
Chaghi-QillaSaifullah	0.00	0.15	0.56	-2.40	-2.15	0.05	-0.26	0.07	0.44	-1.50	-0.05	0.18	1.72	-1.56	-0.53
Chaghi-Loralai	-0.09	-0.44	-0.48	-0.44	-1.14	-0.52	0.10	-0.07	-1.22	-1.98	0.07	-0.24	1.63	0.61	-0.22
Chaghi-Musa Khel	0.47	0.80	0.40	0.22	0.26	0.52	0.26	0.00	-1.33	-1.36	0.12	0.14	1.11	0.85	0.40
Chaghi-Sherani	0.57	-0.07	0.16	-0.51	-1.79	-2.20	0.00	-0.13	-0.66	-1.15	0.13	0.15	1.40	-1.31	0.35
Chaghi-Zhob	0.09	-0.37	-0.16	-0.07	-1.40	0.10	0.37	0.34	-1.99	-1.23	0.07	-0.15	1.30	-1.28	-0.26

Table: Distance from Qilla Abdullah to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Qilla Abdullah-Nushki	-1.70	-0.73	-0.88	-0.87	-2.28	0.00	1.47	2.49	-1.66	0.22	-0.28	-0.06	-1.59	0.60	-1.81
Qilla Abdullah-Pashin	-1.51	-1.02	-1.11	-1.31	-1.40	0.16	0.26	0.40	-1.66	0.09	-1.50	-0.05	0.18	0.20	-2.64
Qilla Abdullah-Quetta	-3.41	-1.98	-2.39	-2.69	-2.32	-0.52	-0.94	-0.20	-3.98	-0.22	-3.69	-4.46	-4.15	0.12	-2.64
Qilla Abdullah-DeraBugti	0.76	2.12	1.51	1.24	0.61	-0.68	1.62	1.88	-0.39	3.22	-0.75	0.13	0.10	0.94	0.22
Qilla Abdullah-Hernai	-0.38	0.07	0.16	-0.29	-0.74	-1.41	0.79	1.41	-0.39	0.92	-0.13	-0.09	0.37	0.72	-0.04
Qilla Abdullah-Kohlu	0.66	2.05	2.23	-0.80	-0.48	0.99	1.68	2.69	0.39	1.96	0.14	0.14	0.50	0.79	0.88
Qilla Abdullah-Sibbi	-2.75	-1.17	-1.43	-1.75	-2.19	-1.41	-1.52	0.40	-2.77	0.29	-2.52	-0.42	-1.87	0.86	-1.98
Qilla Abdullah-Ziarat	-1.33	-1.32	-1.27	-1.38	-1.14	0.00	0.16	1.14	-0.11	-0.20	-3.26	0.12	-0.27	0.01	-0.44
Qilla Abdullah-Barkhan	0.00	0.15	0.80	-1.82	-3.11	-0.16	0.58	2.62	-1.05	0.46	0.02	0.17	-0.61	0.89	0.53
Qilla Abdullah-QillaSaifullah	0.00	0.51	1.11	-2.98	-2.36	0.37	0.94	2.29	0.22	0.81	-0.03	0.17	0.21	0.17	0.09
Qilla Abdullah-Loralai	-0.09	-0.07	0.08	-1.02	-1.36	-0.21	1.31	2.15	-1.44	0.32	0.08	-0.25	0.13	2.35	0.40
Qilla Abdullah-Musa Khel	0.47	1.17	0.96	-0.36	0.04	0.84	1.47	2.22	-1.55	0.94	0.14	0.14	-0.40	2.58	1.01
Qilla Abdullah-Sherani	0.57	0.29	0.72	-1.09	-2.01	-1.88	1.20	2.09	-0.89	1.15	0.15	0.14	-0.10	0.42	0.97
Qilla Abdullah-Zhob	0.09	0.00	0.40	-0.65	-1.62	0.42	1.57	2.56	-2.21	1.07	0.09	-0.16	-0.21	0.45	0.35

Table: Distance from Naushki to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Nushki-Pashin	0.19	-0.29	-0.24	-0.44	0.88	0.16	-1.20	-2.09	0.00	-0.13	-1.22	0.01	1.77	-0.40	-0.84
Nushki-Quetta	-1.70	-1.24	-1.51	-1.82	-0.04	-0.52	-2.41	-2.69	-2.32	-0.44	-3.41	-4.40	-2.55	-0.48	-0.84
Nushki-DeraBugti	2.46	2.85	2.39	2.11	2.89	-0.68	0.16	-0.61	1.27	3.00	-0.47	0.19	1.69	0.34	2.03
Nushki-Hernai	1.33	0.80	1.04	0.58	1.53	-1.41	-0.68	-1.08	1.27	0.70	0.15	-0.03	1.96	0.12	1.76
Nushki-Kohlu	2.37	2.78	3.11	0.07	1.79	0.99	0.21	0.20	2.05	1.74	0.42	0.20	2.09	0.18	2.69
Nushki-Sibbi	-1.04	-0.44	-0.56	-0.87	0.09	-1.41	-2.98	-2.09	-1.11	0.07	-2.23	-0.36	-0.28	0.26	-0.18
Nushki-Ziarat	0.38	-0.59	-0.40	-0.51	1.14	0.00	-1.31	-1.35	1.55	-0.42	-2.98	0.18	1.33	-0.59	1.37
Nushki-Barkhan	1.70	0.88	1.67	-0.95	-0.83	-0.16	-0.89	0.13	0.61	0.24	0.30	0.23	0.98	0.28	2.34
Nushki-QillaSaifullah	1.70	1.24	1.99	-2.11	-0.09	0.37	-0.52	-0.20	1.88	0.59	0.25	0.23	1.81	-0.43	1.89
Nushki-Loralai	1.61	0.66	0.96	-0.15	0.92	-0.21	-0.16	-0.34	0.22	0.10	0.37	-0.18	1.72	1.74	2.20
Nushki-Musa Khel	2.18	1.90	1.83	0.51	2.32	0.84	0.00	-0.27	0.11	0.72	0.42	0.20	1.19	1.98	2.82
Nushki-Sherani	2.27	1.02	1.59	-0.22	0.26	-1.88	-0.26	-0.40	0.77	0.93	0.43	0.20	1.49	-0.18	2.78
Nushki-Zhob	1.80	0.73	1.27	0.22	0.66	0.42	0.10	0.07	-0.55	0.85	0.37	-0.10	1.38	-0.15	2.16

Table: Distance from Pashin to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Pashin-Quetta	-1.89	-0.95	-1.27	-1.38	-0.92	-0.68	-1.20	-0.61	-2.32	-0.31	-2.19	-4.42	-4.33	-0.08	0.00
Pashin-DeraBugti	2.27	3.15	2.63	2.55	2.01	-0.84	1.36	1.48	1.27	3.13	0.74	0.17	-0.08	0.74	2.86
Pashin-Hernai	1.14	1.10	1.27	1.02	0.66	-1.57	0.52	1.01	1.27	0.83	1.37	-0.05	0.19	0.52	2.60
Pashin-Kohlu	2.18	3.07	3.34	0.51	0.92	0.84	1.41	2.29	2.05	1.87	1.64	0.19	0.32	0.59	3.53
Pashin-Sibbi	-1.23	-0.15	-0.32	-0.44	-0.79	-1.57	-1.78	0.00	-1.11	0.20	-1.02	-0.37	-2.05	0.66	0.66
Pashin-Ziarat	0.19	-0.29	-0.16	-0.07	0.26	-0.16	-0.10	0.74	1.55	-0.29	-1.76	0.17	-0.45	-0.19	2.20
Pashin-Barkhan	1.51	1.17	1.91	-0.51	-1.71	-0.31	0.31	2.22	0.61	0.37	1.52	0.21	-0.79	0.69	3.17
Pashin-QillaSaifullah	1.51	1.54	2.23	-1.67	-0.96	0.21	0.68	1.88	1.88	0.71	1.47	0.21	0.03	-0.02	2.73
Pashin-Loralai	1.42	0.95	1.19	0.29	0.04	-0.37	1.05	1.75	0.22	0.23	1.58	-0.20	-0.05	2.15	3.04
Pashin-Musa Khel	1.99	2.20	2.07	0.95	1.44	0.68	1.20	1.82	0.11	0.85	1.64	0.18	-0.58	2.38	3.66
Pashin-Sherani	2.08	1.32	1.83	0.22	-0.61	-2.04	0.94	1.68	0.77	1.06	1.65	0.19	-0.28	0.22	3.61
Pashin-Zhob	1.61	1.02	1.51	0.65	-0.22	0.26	1.31	2.15	-0.55	0.98	1.59	-0.11	-0.39	0.25	3.00

Table: Distance from Quetta to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Quetta-DeraBugti	4.17	4.10	3.90	3.93	2.93	-0.16	2.56	2.09	3.60	3.44	2.94	4.59	4.25	0.82	2.86
Quetta-Hernai	3.03	2.05	2.55	2.40	1.58	-0.89	1.73	1.61	3.60	1.14	3.56	4.37	4.51	0.60	2.60
Quetta-Kohlu	4.07	4.02	4.62	1.89	1.84	1.52	2.62	2.89	4.37	2.18	3.83	4.61	4.65	0.66	3.53
Quetta-Sibbi	0.66	0.80	0.96	0.95	0.13	-0.89	-0.58	0.61	1.22	0.51	1.18	4.05	2.28	0.74	0.66
Quetta-Ziarat	2.08	0.66	1.11	1.31	1.18	0.52	1.10	1.35	3.87	0.02	0.43	4.58	3.88	-0.11	2.20
Quetta-Barkhan	3.41	2.12	3.19	0.87	-0.79	0.37	1.52	2.83	2.93	0.68	3.71	4.63	3.54	0.76	3.17
Quetta-QillaSaifullah	3.41	2.49	3.50	-0.29	-0.04	0.89	1.88	2.49	4.20	1.03	3.66	4.63	4.36	0.05	2.73
Quetta-Loralai	3.31	1.90	2.47	1.67	0.96	0.31	2.25	2.36	2.54	0.54	3.78	4.22	4.27	2.22	3.04
Quetta-Musa Khel	3.88	3.15	3.34	2.33	2.36	1.36	2.41	2.42	2.43	1.16	3.83	4.60	3.75	2.46	3.66
Quetta-Sherani	3.98	2.27	3.11	1.60	0.31	-1.36	2.15	2.29	3.10	1.37	3.84	4.61	4.04	0.30	3.61
Quetta-Zhob	3.50	1.98	2.79	2.04	0.70	0.94	2.51	2.76	1.77	1.29	3.78	4.30	3.93	0.33	3.00

Table: Distance from Dera Bughti to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
DeraBugti-Hernai	-1.14	-2.05	-1.35	-1.53	-1.36	-0.73	-0.84	-0.47	0.00	-2.30	0.62	-0.22	0.27	-0.22	-0.26
DeraBugti-Kohlu	-0.09	-0.07	0.72	-2.04	-1.09	1.67	0.05	0.81	0.77	-1.26	0.89	0.02	0.40	-0.16	0.66
DeraBugti-Sibbi	-3.50	-3.29	-2.95	-2.98	-2.80	-0.73	-3.14	-1.48	-2.38	-2.93	-1.76	-0.54	-1.97	-0.08	-2.20
DeraBugti-Ziarat	-2.08	-3.44	-2.79	-2.62	-1.75	0.68	-1.47	-0.74	0.28	-3.42	-2.51	-0.01	-0.37	-0.93	-0.66
DeraBugti-Barkhan	-0.76	-1.98	-0.72	-3.05	-3.72	0.52	-1.05	0.74	-0.66	-2.76	0.77	0.04	-0.71	-0.06	0.31
DeraBugti-QillaSaifullah	-0.76	-1.61	-0.40	-4.22	-2.98	1.05	-0.68	0.40	0.61	-2.41	0.73	0.04	0.11	-0.77	-0.13
DeraBugti-Loralai	-0.85	-2.20	-1.43	-2.25	-1.97	0.47	-0.31	0.27	-1.05	-2.90	0.84	-0.37	0.02	1.40	0.18
DeraBugti-Musa Khel	-0.28	-0.95	-0.56	-1.60	-0.57	1.52	-0.16	0.34	-1.16	-2.28	0.90	0.01	-0.50	1.64	0.79
DeraBugti-Sherani	-0.19	-1.83	-0.80	-2.33	-2.63	-1.20	-0.42	0.20	-0.50	-2.07	0.90	0.02	-0.21	-0.52	0.75
DeraBugti-Zhob	-0.66	-2.12	-1.11	-1.89	-2.23	1.10	-0.05	0.67	-1.83	-2.15	0.84	-0.29	-0.31	-0.49	0.13

Table: Distance from Dera Hernai to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Hernai-Kohlu	1.04	1.98	2.07	-0.51	0.26	2.41	0.89	1.28	0.77	1.04	0.27	0.24	0.13	0.06	0.93
Hernai-Sibbi	-2.37	-1.24	-1.59	-1.45	-1.44	0.00	-2.30	-1.01	-2.38	-0.62	-2.38	-0.32	-2.24	0.14	-1.94
Hernai-Ziarat	-0.95	-1.39	-1.43	-1.09	-0.39	1.41	-0.63	-0.27	0.28	-1.12	-3.13	0.22	-0.63	-0.72	-0.40
Hernai-Barkhan	0.38	0.07	0.64	-1.53	-2.36	1.26	-0.21	1.21	-0.66	-0.46	0.15	0.26	-0.98	0.16	0.57
Hernai-QillaSaifullah	0.38	0.44	0.96	-2.69	-1.62	1.78	0.16	0.87	0.61	-0.11	0.10	0.26	-0.15	-0.55	0.13
Hernai-Loralai	0.28	-0.15	-0.08	-0.73	-0.61	1.20	0.52	0.74	-1.05	-0.60	0.22	-0.15	-0.24	1.62	0.44
Hernai-Musa Khel	0.85	1.10	0.80	-0.07	0.79	2.25	0.68	0.81	-1.16	0.03	0.27	0.23	-0.77	1.85	1.06
Hernai-Sherani	0.95	0.22	0.56	-0.80	-1.27	-0.47	0.42	0.67	-0.50	0.23	0.28	0.24	-0.47	-0.30	1.01
Hernai-Zhob	0.47	-0.07	0.24	-0.36	-0.88	1.83	0.79	1.14	-1.83	0.15	0.22	-0.07	-0.58	-0.27	0.40

Table: Distance from Kohlu to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Kohlu-Sibbi	-3.41	-3.22	-3.66	-0.95	-1.71	-2.41	-3.19	-2.29	-3.15	-1.66	-2.65	-0.56	-2.37	0.07	-2.86
Kohlu-Ziarat	-1.99	-3.37	-3.50	-0.58	-0.66	-0.99	-1.52	-1.55	-0.50	-2.16	-3.40	-0.02	-0.77	-0.78	-1.32
Kohlu-Barkhan	-0.66	-1.90	-1.43	-1.02	-2.63	-1.15	-1.10	-0.07	-1.44	-1.50	-0.12	0.02	-1.11	0.10	-0.35
Kohlu-QillaSaifullah	-0.66	-1.54	-1.11	-2.18	-1.88	-0.63	-0.73	-0.40	-0.17	-1.15	-0.17	0.02	-0.29	-0.61	-0.79
Kohlu-Loralai	-0.76	-2.12	-2.15	-0.22	-0.88	-1.20	-0.37	-0.54	-1.83	-1.64	-0.05	-0.39	-0.37	1.56	-0.48
Kohlu-Musa Khel	-0.19	-0.88	-1.27	0.44	0.53	-0.16	-0.21	-0.47	-1.94	-1.01	0.00	-0.01	-0.90	1.79	0.13
Kohlu-Sherani	-0.09	-1.76	-1.51	-0.29	-1.53	-2.88	-0.47	-0.61	-1.27	-0.81	0.01	0.00	-0.60	-0.36	0.09
Kohlu-Zhob	-0.57	-2.05	-1.83	0.15	-1.14	-0.58	-0.10	-0.13	-2.60	-0.89	-0.05	-0.30	-0.71	-0.33	-0.53

Table: Distance from Sibbi to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Sibbi-Ziarat	1.42	-0.15	0.16	0.36	1.05	1.41	1.68	0.74	2.66	-0.50	-0.74	0.54	1.60	-0.85	1.54
Sibbi-Barkhan	2.75	1.32	2.23	-0.07	-0.92	1.26	2.09	2.22	1.71	0.17	2.54	0.58	1.26	0.03	2.51
Sibbi-QillaSaifullah	2.75	1.68	2.55	-1.24	-0.18	1.78	2.46	1.88	2.99	0.51	2.49	0.58	2.08	-0.68	2.07
Sibbi-Loralai	2.65	1.10	1.51	0.73	0.83	1.20	2.83	1.75	1.33	0.03	2.60	0.17	1.99	1.49	2.38
Sibbi-Musa Khel	3.22	2.34	2.39	1.38	2.23	2.25	2.98	1.82	1.22	0.65	2.66	0.55	1.47	1.72	3.00
Sibbi-Sherani	3.31	1.46	2.15	0.65	0.18	-0.47	2.72	1.68	1.88	0.86	2.66	0.56	1.76	-0.44	2.95
Sibbi-Zhob	2.84	1.17	1.83	1.09	0.57	1.83	3.09	2.15	0.55	0.78	2.61	0.26	1.66	-0.41	2.34

Table: Distance from Ziarat to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Ziarat-Barkhan	1.33	1.46	2.07	-0.44	-1.97	-0.16	0.42	1.48	-0.94	0.66	3.28	0.05	-0.34	0.88	0.97
Ziarat-QillaSaifullah	1.33	1.83	2.39	-1.60	-1.23	0.37	0.79	1.14	0.33	1.01	3.23	0.05	0.48	0.17	0.53
Ziarat-Loralai	1.23	1.24	1.35	0.36	-0.22	-0.21	1.15	1.01	-1.33	0.52	3.34	-0.37	0.39	2.34	0.84
Ziarat-Musa Khel	1.80	2.49	2.23	1.02	1.18	0.84	1.31	1.08	-1.44	1.15	3.40	0.01	-0.13	2.57	1.45
Ziarat-Sherani	1.89	1.61	1.99	0.29	-0.88	-1.88	1.05	0.94	-0.77	1.35	3.41	0.02	0.16	0.41	1.41
Ziarat-Zhob	1.42	1.32	1.67	0.73	-0.48	0.42	1.41	1.41	-2.10	1.27	3.35	-0.28	0.06	0.44	0.79

Table: Distance from Barkhan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Barkhan-QillaSaifullah	0.00	0.37	0.32	-1.16	0.74	0.52	0.37	-0.34	1.27	0.35	-0.05	0.00	0.82	-0.71	-0.44
Barkhan-Loralai	-0.09	-0.22	-0.72	0.80	1.75	-0.05	0.73	-0.47	-0.39	-0.14	0.06	-0.41	0.73	1.46	-0.13
Barkhan-Musa Khel	0.47	1.02	0.16	1.45	3.15	0.99	0.89	-0.40	-0.50	0.48	0.12	-0.03	0.21	1.69	0.48
Barkhan-Sherani	0.57	0.15	-0.08	0.73	1.09	-1.73	0.63	-0.54	0.17	0.69	0.13	-0.02	0.50	-0.46	0.44
Barkhan-Zhob	0.09	-0.15	-0.40	1.16	1.49	0.58	0.99	-0.07	-1.16	0.61	0.07	-0.33	0.40	-0.43	-0.18

Table: Distance from Qilla Saifullah to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
QillaSaifullah-Loralai	-0.09	-0.59	-1.04	1.96	1.01	-0.58	0.37	-0.13	-1.66	-0.49	0.11	-0.41	-0.09	2.17	0.31
QillaSaifullah-Musa Khel	0.47	0.66	-0.16	2.62	2.41	0.47	0.52	-0.07	-1.77	0.14	0.17	-0.03	-0.61	2.40	0.93
QillaSaifullah-Sherani	0.57	-0.22	-0.40	1.89	0.35	-2.25	0.26	-0.20	-1.11	0.34	0.18	-0.02	-0.32	0.25	0.88
QillaSaifullah-Zhob	0.09	-0.51	-0.72	2.33	0.74	0.05	0.63	0.27	-2.43	0.26	0.12	-0.33	-0.42	0.28	0.26

Table: Distance from Loralai to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Loralai-Musa Khel	0.57	1.24	0.88	0.65	1.40	1.05	0.16	0.07	-0.11	0.62	0.06	0.38	-0.52	0.23	0.62
Loralai-Sherani	0.66	0.37	0.64	-0.07	-0.66	-1.67	-0.10	-0.07	0.55	0.83	0.06	0.39	-0.23	-1.92	0.57
Loralai-Zhob	0.19	0.07	0.32	0.36	-0.26	0.63	0.26	0.40	-0.77	0.75	0.01	0.09	-0.34	-1.89	-0.04

Table: Distance from Musa Khel to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Musa Khel-Sherani	0.09	-0.88	-0.24	-0.73	-2.06	-2.72	-0.26	-0.13	0.66	0.21	0.01	0.01	0.29	-2.16	-0.04
Musa Khel-Zhob	-0.38	-1.17	-0.56	-0.29	-1.66	-0.42	0.10	0.34	-0.66	0.13	-0.05	-0.30	0.19	-2.12	-0.66

Table: Distance from Sherani to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Sherani-Zhob	-0.47	-0.29	-0.32	0.44	0.39	2.30	0.37	0.47	-1.33	-0.08	-0.06	-0.30	-0.11	0.03	-0.62

Interim Distance between Districts Tables of KPK

Table:Distance from Bannu to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bannu-LakkiMarwat	-0.52	-0.26	-0.33	0.44	0.57	1.04	0.61	0.81	0.54	0.05	0.01	0.08	0.79	-0.80	1.20
Bannu-D.I.Khan	-0.45	1.20	0.66	1.51	-0.44	1.42	1.88	1.77	0.59	0.59	0.04	0.16	1.65	-0.77	1.47
Bannu-Tank	0.37	1.37	0.99	1.51	-0.31	2.08	2.36	2.36	1.07	0.04	0.10	0.16	1.80	-0.56	0.54
Bannu-Abbottabad	-2.82	-1.11	-2.06	-0.98	-1.32	-0.27	-0.73	-0.81	-1.29	0.05	-1.49	-2.23	-0.07	-1.24	-0.49
Bannu-Batagram	0.22	0.86	0.41	0.00	0.44	0.55	0.12	0.15	-0.75	0.18	0.24	-1.38	0.40	-1.77	-0.36
Bannu-Haripur	-2.75	-0.68	-1.90	-1.60	-0.88	-0.49	-0.42	-0.74	-1.50	0.17	-1.81	-2.62	-0.06	-0.56	0.27
Bannu-Kohistan	1.11	2.57	1.57	1.87	1.81	3.18	2.48	2.73	2.42	3.28	0.27	-0.12	2.55	-1.73	2.81
Bannu-Mansehra	-1.78	0.00	-0.99	-0.62	-0.35	1.37	0.42	0.22	-0.81	1.44	-0.43	-1.27	0.65	-0.34	0.45
Bannu-Tor Garh	1.19	3.08	2.39	1.96	2.56	1.97	2.30	2.43	1.18	4.11	0.28	0.17	2.79	1.16	0.04
Bannu-Hangu	0.22	0.43	0.49	0.62	-0.40	0.11	0.55	0.44	-0.86	0.10	-0.48	-1.37	0.06	-2.62	1.56
Bannu-Karak	-1.11	-0.77	-0.74	-0.71	-0.49	1.81	-1.03	0.52	0.11	0.59	-2.30	0.13	0.66	-1.27	2.28
Bannu-Kohat	-0.89	-0.09	-0.58	0.18	-0.71	-0.11	0.18	0.00	-0.59	0.49	-0.92	-1.51	0.36	-0.93	0.98
Bannu-Bonair	0.07	1.20	0.66	0.00	-0.40	0.88	0.30	0.59	0.21	0.64	0.20	-1.90	0.60	-0.39	1.03
Bannu-Chitral	-1.41	0.09	-0.74	0.00	-1.19	-0.60	-0.42	-0.07	-1.40	0.28	0.28	0.04	2.51	-2.75	-0.62
Bannu-Lower Dir	-0.45	0.86	0.00	0.98	-1.46	1.04	0.24	0.81	-0.97	0.20	0.10	-1.21	1.20	-1.13	1.43
Bannu-Malakand	-1.56	-0.09	-0.91	-0.18	-1.55	-0.71	0.12	0.37	-0.21	0.05	-1.31	-1.84	0.91	-1.67	1.38
Bannu-Shangla	0.45	1.62	0.82	1.87	0.18	0.66	1.45	1.99	-0.16	0.49	0.28	-0.63	1.70	0.88	0.54
Bannu-Swat	-0.52	0.43	-0.41	0.80	-0.97	0.22	-0.24	0.37	-1.50	0.09	-0.21	-2.24	0.32	0.69	0.67
Bannu-Upper Dir	0.22	1.80	0.16	1.51	-0.53	0.93	1.33	1.62	0.16	0.30	0.20	-0.26	2.26	-0.78	2.59
Bannu-Mardan	-0.67	0.60	-0.08	-0.18	-1.41	-0.33	0.36	0.44	-1.02	0.12	-1.22	-1.75	-0.10	0.23	2.19
Bannu-Swabi	-0.82	0.51	0.08	-0.98	-0.97	0.55	0.61	0.52	-1.13	0.16	-0.32	-2.63	-0.57	0.08	2.41
Bannu-Charsada	-0.37	0.51	0.16	-0.27	-1.46	-0.60	-0.18	-0.07	-0.86	0.11	-1.14	-1.06	0.14	-0.28	2.45
Bannu-Nowshera	-1.26	-0.09	-0.82	-0.53	-1.02	0.11	0.06	0.52	-1.29	0.23	-2.36	-1.87	-0.17	0.95	1.29
Bannu-Peshawar	-1.34	-0.09	-0.99	-0.44	-1.32	-0.44	-1.03	-1.03	-1.56	0.12	-3.25	-2.56	-0.55	-0.98	0.58

Table: Distance from Lakki Marwat to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Lakki Marwat-D.I.Khan	0.07	1.45	0.99	1.07	-1.02	0.38	1.27	0.96	0.05	0.54	0.02	0.07	0.85	0.03	0.27
Lakki Marwat-Tank	0.89	1.62	1.32	1.07	-0.88	1.04	1.76	1.55	0.54	-0.01	0.08	0.08	1.01	0.24	-0.67
Lakki Marwat-Abbottabad	-2.30	-0.86	-1.73	-1.42	-1.90	-1.31	-1.33	-1.62	-1.83	0.00	-1.50	-2.31	-0.86	-0.44	-1.70
Lakki Marwat-Batagram	0.74	1.11	0.74	-0.44	-0.13	-0.49	-0.48	-0.66	-1.29	0.13	0.23	-1.46	-0.39	-0.97	-1.56
Lakki Marwat-Haripur	-2.23	-0.43	-1.57	-2.04	-1.46	-1.53	-1.03	-1.55	-2.04	0.13	-1.82	-2.71	-0.86	0.24	-0.94
Lakki Marwat-Kohistan	1.63	2.82	1.90	1.42	1.24	2.14	1.88	1.92	1.88	3.23	0.26	-0.20	1.76	-0.93	1.61
Lakki Marwat-Mansehra	-1.26	0.26	-0.66	-1.07	-0.93	0.33	-0.18	-0.59	-1.34	1.39	-0.44	-1.36	-0.14	0.46	-0.76
Lakki Marwat-Tor Garh	1.71	3.33	2.72	1.51	1.99	0.93	1.70	1.62	0.64	4.06	0.27	0.09	2.00	1.96	-1.16
Lakki Marwat-Hangu	0.74	0.68	0.82	0.18	-0.97	-0.93	-0.06	-0.37	-1.40	0.06	-0.49	-1.46	-0.73	-1.82	0.36
Lakki Marwat-Karak	-0.59	-0.51	-0.41	-1.16	-1.06	0.77	-1.64	-0.30	-0.43	0.54	-2.31	0.04	-0.14	-0.47	1.07
Lakki Marwat-Kohat	-0.37	0.17	-0.25	-0.27	-1.28	-1.15	-0.42	-0.81	-1.13	0.44	-0.93	-1.59	-0.43	-0.13	-0.22
Lakki Marwat-Bonair	0.59	1.45	0.99	-0.44	-0.97	-0.16	-0.30	-0.22	-0.32	0.59	0.19	-1.98	-0.19	0.41	-0.18
Lakki Marwat-Chitral	-0.89	0.34	-0.41	-0.44	-1.77	-1.64	-1.03	-0.89	-1.93	0.23	0.27	-0.05	1.72	-1.95	-1.83
Lakki Marwat-Lower Dir	0.07	1.11	0.33	0.53	-2.03	0.00	-0.36	0.00	-1.50	0.15	0.08	-1.30	0.41	-0.33	0.22
Lakki Marwat-Malakand	-1.04	0.17	-0.58	-0.62	-2.12	-1.75	-0.48	-0.44	-0.75	0.00	-1.32	-1.92	0.12	-0.87	0.18
Lakki Marwat-Shangla	0.96	1.88	1.15	1.42	-0.40	-0.38	0.85	1.18	-0.70	0.44	0.27	-0.71	0.91	1.68	-0.67
Lakki Marwat-Swat	0.00	0.68	-0.08	0.36	-1.55	-0.82	-0.85	-0.44	-2.04	0.04	-0.22	-2.32	-0.48	1.50	-0.54
Lakki Marwat-Upper Dir	0.74	2.05	0.49	1.07	-1.10	-0.11	0.73	0.81	-0.38	0.25	0.19	-0.34	1.47	0.02	1.38
Lakki Marwat-Mardan	-0.15	0.86	0.25	-0.62	-1.99	-1.37	-0.24	-0.37	-1.56	0.07	-1.23	-1.84	-0.89	1.03	0.98
Lakki Marwat-Swabi	-0.30	0.77	0.41	-1.42	-1.55	-0.49	0.00	-0.30	-1.67	0.11	-0.33	-2.71	-1.36	0.89	1.20
Lakki Marwat-Charsada	0.15	0.77	0.49	-0.71	-2.03	-1.64	-0.79	-0.89	-1.40	0.06	-1.16	-1.14	-0.65	0.52	1.25
Lakki Marwat-Nowshera	-0.74	0.17	-0.49	-0.98	-1.59	-0.93	-0.55	-0.30	-1.83	0.18	-2.38	-1.96	-0.96	1.75	0.09
Lakki Marwat-Peshawar	-0.82	0.17	-0.66	-0.89	-1.90	-1.48	-1.64	-1.84	-2.09	0.08	-3.26	-2.64	-1.34	-0.17	-0.62

Table: Distance from D.I Khan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
D.I.Khan-Tank	2.45	2.65	2.56	2.31	3.13	3.61	3.51	3.76	3.97	3.16	3.52	2.44	3.10	-0.75	2.23
D.I.Khan-Abbottabad	1.11	2.57	1.57	1.87	1.81	3.18	2.48	2.73	2.42	3.28	0.27	-0.12	2.55	-1.73	2.81
D.I.Khan-Batagram	0.84	2.50	1.46	1.67	1.48	2.09	2.12	2.07	2.13	3.28	0.27	-0.12	1.93	-2.37	1.36
D.I.Khan-Haripur	0.91	1.13	1.13	-0.42	1.62	1.15	-1.04	-0.40	2.07	2.93	0.27	-0.14	-0.16	-2.32	0.64
D.I.Khan-Kohistan	0.98	0.69	0.59	-0.42	1.71	-1.15	-3.10	-2.84	1.26	3.28	0.26	-0.14	-0.67	-2.04	2.52
D.I.Khan-Mansehra	-6.84	1.33	-2.68	0.91	0.06	3.10	1.96	2.07	0.76	3.28	-1.94	-5.07	2.55	-3.26	2.57
D.I.Khan-Tor Garh	1.06	1.83	1.40	1.87	1.62	2.88	2.47	2.71	1.85	3.25	0.21	-2.02	2.39	-4.86	2.68
D.I.Khan-Hangu	-6.43	2.10	-2.03	-0.69	1.03	2.93	2.30	2.18	0.16	3.25	-3.00	-7.00	2.55	-2.04	2.74
D.I.Khan-Karak	-0.13	-4.02	-0.89	-1.62	-1.47	-6.91	-3.69	-4.72	-3.42	-7.48	0.20	-0.13	-3.96	-4.72	-5.09
D.I.Khan-Kohat	-2.06	2.57	0.59	1.48	1.69	1.30	2.30	2.68	1.77	1.21	0.09	-1.74	2.13	-1.84	2.61
D.I.Khan-Bonair	-0.30	-6.91	-4.15	-1.96	-4.75	-0.71	-2.82	-3.20	1.02	-13.58	0.19	-0.14	-5.21	-3.07	2.81
D.I.Khan-Chitral	1.06	2.38	1.32	1.48	1.65	3.16	2.19	2.53	1.68	3.27	0.04	-2.00	2.55	-8.61	0.37
D.I.Khan-Lower Dir	-0.13	1.97	1.02	1.36	1.57	-0.09	1.42	2.46	2.41	2.93	-5.03	-0.13	2.12	-3.34	-2.37
D.I.Khan-Malakand	0.32	2.56	1.23	1.83	1.31	3.16	2.45	2.73	2.07	3.04	-0.57	-2.40	2.42	-2.60	1.85
D.I.Khan-Shangla	1.11	1.13	1.13	1.87	1.65	2.41	2.39	2.38	2.37	2.87	0.23	-3.72	2.19	-1.88	1.76
D.I.Khan-Swat	-0.87	2.56	1.02	1.87	0.39	2.81	2.30	2.72	0.47	3.20	0.19	-0.12	-3.73	-9.30	2.42
D.I.Khan-Upper Dir	0.91	1.83	1.57	0.91	-0.31	2.09	2.43	2.07	1.48	3.24	0.26	-1.59	1.11	-3.00	0.77
D.I.Khan-Mardan	-1.32	2.56	0.74	1.83	-0.58	2.67	2.47	2.59	2.37	3.28	-1.44	-3.50	1.72	-4.52	0.90
D.I.Khan-Swabi	0.91	-0.07	0.89	-1.62	1.78	2.74	0.37	-1.24	2.39	3.04	0.19	-0.51	-0.34	-2.50	2.52
D.I.Khan-Charsada	0.84	2.38	1.40	1.23	0.87	3.13	2.43	2.59	0.16	3.27	0.23	-5.12	2.45	-2.21	2.36
D.I.Khan-Nowshera	1.06	-0.66	1.54	-0.42	1.53	2.31	0.71	0.10	2.39	3.19	0.23	-0.18	-2.55	-2.33	-3.89
D.I.Khan-Peshawar	0.67	2.21	1.56	1.83	-0.19	3.07	2.35	2.53	1.38	3.27	-1.21	-3.19	2.54	-1.78	-1.97

Table: Distance from Tank to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Tank-Abbottabad	-3.19	-2.48	-3.05	-2.49	-1.02	-2.35	-3.09	-3.17	-2.36	0.01	-1.58	-2.39	-1.86	-0.68	-1.03
Tank-Batagram	-0.15	-0.51	-0.58	-1.51	0.75	-1.53	-2.24	-2.21	-1.83	0.14	0.14	-1.54	-1.40	-1.21	-0.89
Tank-Haripur	-3.12	-2.05	-2.88	-3.11	-0.57	-2.57	-2.79	-3.10	-2.58	0.13	-1.90	-2.79	-1.86	0.00	-0.27
Tank-Kohistan	0.74	1.20	0.58	0.36	2.12	1.10	0.12	0.37	1.34	3.24	0.17	-0.28	0.76	-1.17	2.28
Tank-Mansehra	-2.15	-1.37	-1.98	-2.13	-0.04	-0.71	-1.94	-2.14	-1.88	1.40	-0.53	-1.44	-1.15	0.22	-0.09
Tank-Tor Garh	0.82	1.71	1.40	0.44	2.87	-0.11	-0.06	0.07	0.11	4.06	0.19	0.01	0.99	1.71	-0.49
Tank-Hangu	-0.15	-0.94	-0.49	-0.89	-0.09	-1.97	-1.82	-1.92	-1.93	0.06	-0.57	-1.53	-1.74	-2.07	1.03
Tank-Karak	-1.48	-2.14	-1.73	-2.22	-0.18	-0.27	-3.39	-1.84	-0.97	0.55	-2.40	-0.04	-1.14	-0.71	1.74
Tank-Kohat	-1.26	-1.45	-1.57	-1.33	-0.40	-2.19	-2.18	-2.36	-1.67	0.44	-1.01	-1.67	-1.43	-0.38	0.45
Tank-Bonair	-0.30	-0.17	-0.33	-1.51	-0.09	-1.20	-2.06	-1.77	-0.86	0.60	0.10	-2.06	-1.20	0.17	0.49
Tank-Chitral	-1.78	-1.28	-1.73	-1.51	-0.88	-2.68	-2.79	-2.43	-2.47	0.24	0.18	-0.12	0.71	-2.19	-1.16
Tank-Lower Dir	-0.82	-0.51	-0.99	-0.53	-1.15	-1.04	-2.12	-1.55	-2.04	0.15	0.00	-1.38	-0.60	-0.57	0.89
Tank-Malakand	-1.93	-1.45	-1.90	-1.69	-1.24	-2.79	-2.24	-1.99	-1.29	0.01	-1.40	-2.00	-0.88	-1.11	0.85
Tank-Shangla	0.07	0.26	-0.16	0.36	0.49	-1.42	-0.91	-0.37	-1.24	0.45	0.19	-0.79	-0.10	1.44	0.00
Tank-Swat	-0.89	-0.94	-1.40	-0.71	-0.66	-1.86	-2.61	-1.99	-2.58	0.04	-0.30	-2.40	-1.48	1.25	0.13
Tank-Upper Dir	-0.15	0.43	-0.82	0.00	-0.22	-1.15	-1.03	-0.74	-0.91	0.26	0.10	-0.42	0.46	-0.22	2.05
Tank-Mardan	-1.04	-0.77	-1.07	-1.69	-1.10	-2.41	-2.00	-1.92	-2.09	0.08	-1.31	-1.92	-1.90	0.78	1.65
Tank-Swabi	-1.19	-0.86	-0.91	-2.49	-0.66	-1.53	-1.76	-1.84	-2.20	0.12	-0.42	-2.79	-2.37	0.64	1.87
Tank-Charsada	-0.74	-0.86	-0.82	-1.78	-1.15	-2.68	-2.54	-2.43	-1.93	0.07	-1.24	-1.22	-1.66	0.28	1.92
Tank-Nowshera	-1.63	-1.45	-1.81	-2.04	-0.71	-1.97	-2.30	-1.84	-2.36	0.19	-2.46	-2.03	-1.96	1.51	0.76
Tank-Peshawar	-1.71	-1.45	-1.98	-1.96	-1.02	-2.52	-3.39	-3.39	-2.63	0.08	-3.34	-2.72	-2.34	-0.42	0.04

Table: Distance from Abbotabad to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Abbottabad-Batagram	3.04	1.97	2.47	0.98	1.77	0.82	0.85	0.96	0.54	0.13	1.73	0.85	0.47	-0.53	0.13
Abbottabad-Haripur	0.07	0.43	0.16	-0.62	0.44	-0.22	0.30	0.07	-0.21	0.13	-0.32	-0.40	0.00	0.68	0.76
Abbottabad-Kohistan	3.93	3.68	3.63	2.84	3.13	3.45	3.21	3.54	3.71	3.23	1.76	2.11	2.62	-0.49	3.30
Abbottabad-Mansehra	1.04	1.11	1.07	0.36	0.97	1.64	1.15	1.03	0.48	1.39	1.06	0.95	0.71	0.90	0.94
Abbottabad-Tor Garh	4.01	4.19	4.45	2.93	3.89	2.25	3.03	3.25	2.47	4.06	1.77	2.40	2.85	2.40	0.54
Abbottabad-Hangu	3.04	1.54	2.56	1.60	0.93	0.38	1.27	1.25	0.43	0.06	1.01	0.85	0.13	-1.39	2.05
Abbottabad-Karak	1.71	0.34	1.32	0.27	0.84	2.08	-0.30	1.33	1.40	0.54	-0.82	2.35	0.72	-0.03	2.77
Abbottabad-Kohat	1.93	1.03	1.48	1.16	0.62	0.16	0.91	0.81	0.70	0.44	0.57	0.71	0.43	0.30	1.47
Abbottabad-Bonair	2.89	2.31	2.72	0.98	0.93	1.15	1.03	1.40	1.50	0.59	1.69	0.33	0.67	0.85	1.52
Abbottabad-Chitral	1.41	1.20	1.32	0.98	0.13	-0.33	0.30	0.74	-0.11	0.23	1.76	2.26	2.57	-1.51	-0.13
Abbottabad-Lower Dir	2.37	1.97	2.06	1.96	-0.13	1.31	0.97	1.62	0.32	0.15	1.58	1.01	1.27	0.11	1.92
Abbottabad-Malakand	1.26	1.03	1.15	0.80	-0.22	-0.44	0.85	1.18	1.07	0.01	0.18	0.38	0.98	-0.43	1.87
Abbottabad-Shangla	3.27	2.74	2.88	2.84	1.50	0.93	2.18	2.80	1.13	0.44	1.77	1.59	1.77	2.12	1.03
Abbottabad-Swat	2.30	1.54	1.65	1.78	0.35	0.49	0.48	1.18	-0.21	0.04	1.28	-0.01	0.38	1.93	1.16
Abbottabad-Upper Dir	3.04	2.91	2.23	2.49	0.79	1.20	2.06	2.43	1.45	0.25	1.69	1.97	2.33	0.46	3.08
Abbottabad-Mardan	2.15	1.71	1.98	0.80	-0.09	-0.05	1.09	1.25	0.27	0.07	0.27	0.47	-0.04	1.47	2.68
Abbottabad-Swabi	2.00	1.62	2.14	0.00	0.35	0.82	1.33	1.33	0.16	0.11	1.16	-0.40	-0.51	1.32	2.90
Abbottabad-Charsada	2.45	1.62	2.23	0.71	-0.13	-0.33	0.55	0.74	0.43	0.06	0.34	1.17	0.21	0.96	2.95
Abbottabad-Nowshera	1.56	1.03	1.24	0.44	0.31	0.38	0.79	1.33	0.00	0.18	-0.88	0.35	-0.10	2.19	1.78
Abbottabad-Peshawar	1.48	1.03	1.07	0.53	0.00	-0.16	-0.30	-0.22	-0.27	0.08	-1.76	-0.33	-0.48	0.26	1.07

Table: Distance from Batagram to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Batagram-Haripur	-2.97	-1.54	-2.31	-1.60	-1.32	-1.04	-0.55	-0.89	-0.75	0.00	-2.05	-1.24	-0.46	1.21	0.62
Batagram-Kohistan	0.89	1.71	1.15	1.87	1.37	2.63	2.36	2.58	3.17	3.10	0.03	1.26	2.15	0.04	3.17
Batagram-Mansehra	-2.00	-0.86	-1.40	-0.62	-0.79	0.82	0.30	0.07	-0.05	1.26	-0.67	0.11	0.25	1.43	0.80
Batagram-Tor Garh	0.96	2.22	1.98	1.96	2.12	1.42	2.18	2.29	1.93	3.93	0.04	1.55	2.39	2.93	0.40
Batagram-Hangu	0.00	-0.43	0.08	0.62	-0.84	-0.44	0.42	0.30	-0.11	-0.07	-0.72	0.01	-0.34	-0.85	1.92
Batagram-Karak	-1.34	-1.62	-1.15	-0.71	-0.93	1.26	-1.15	0.37	0.86	0.41	-2.54	1.50	0.26	0.50	2.63
Batagram-Kohat	-1.11	-0.94	-0.99	0.18	-1.15	-0.66	0.06	-0.15	0.16	0.31	-1.16	-0.13	-0.04	0.84	1.34
Batagram-Bonair	-0.15	0.34	0.25	0.00	-0.84	0.33	0.18	0.44	0.97	0.46	-0.04	-0.52	0.20	1.38	1.38
Batagram-Chitral	-1.63	-0.77	-1.15	0.00	-1.63	-1.15	-0.55	-0.22	-0.64	0.10	0.04	1.42	2.11	-0.98	-0.27
Batagram-Lower Dir	-0.67	0.00	-0.41	0.98	-1.90	0.49	0.12	0.66	-0.21	0.02	-0.15	0.17	0.80	0.64	1.78
Batagram-Malakand	-1.78	-0.94	-1.32	-0.18	-1.99	-1.26	0.00	0.22	0.54	-0.12	-1.55	-0.46	0.52	0.10	1.74
Batagram-Shangla	0.22	0.77	0.41	1.87	-0.26	0.11	1.33	1.84	0.59	0.31	0.04	0.75	1.30	2.65	0.89
Batagram-Swat	-0.74	-0.43	-0.82	0.80	-1.41	-0.33	-0.36	0.22	-0.75	-0.09	-0.45	-0.86	-0.08	2.46	1.03
Batagram-Upper Dir	0.00	0.94	-0.25	1.51	-0.97	0.38	1.21	1.48	0.91	0.12	-0.04	1.12	1.86	0.99	2.95
Batagram-Mardan	-0.89	-0.26	-0.49	-0.18	-1.85	-0.88	0.24	0.30	-0.27	-0.06	-1.46	-0.37	-0.50	2.00	2.54
Batagram-Swabi	-1.04	-0.34	-0.33	-0.98	-1.41	0.00	0.48	0.37	-0.38	-0.02	-0.56	-1.25	-0.97	1.85	2.77
Batagram-Charsada	-0.59	-0.34	-0.25	-0.27	-1.90	-1.15	-0.30	-0.22	-0.11	-0.07	-1.39	0.32	-0.26	1.49	2.81
Batagram-Nowshera	-1.48	-0.94	-1.24	-0.53	-1.46	-0.44	-0.06	0.37	-0.54	0.05	-2.61	-0.49	-0.56	2.72	1.65
Batagram-Peshawar	-1.56	-0.94	-1.40	-0.44	-1.77	-0.99	-1.15	-1.18	-0.81	-0.05	-3.49	-1.18	-0.95	0.79	0.94

Table: Distance from Haripur to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Haripur-Kohistan	3.86	3.25	3.46	3.47	2.69	3.67	2.91	3.47	3.92	3.11	2.08	2.51	2.62	-1.17	2.54
Haripur-Mansehra	0.96	0.68	0.91	0.98	0.53	1.86	0.85	0.96	0.70	1.27	1.38	1.35	0.71	0.22	0.18
Haripur-Tor Garh	3.93	3.76	4.29	3.55	3.44	2.46	2.73	3.17	2.69	3.93	2.09	2.79	2.85	1.71	-0.22
Haripur-Hangu	2.97	1.11	2.39	2.22	0.49	0.60	0.97	1.18	0.64	-0.07	1.33	1.25	0.12	-2.07	1.29
Haripur-Karak	1.63	-0.09	1.15	0.89	0.40	2.30	-0.61	1.25	1.61	0.42	-0.49	2.75	0.72	-0.71	2.01
Haripur-Kohat	1.86	0.60	1.32	1.78	0.18	0.38	0.61	0.74	0.91	0.31	0.89	1.11	0.43	-0.38	0.71
Haripur-Bonair	2.82	1.88	2.56	1.60	0.49	1.37	0.73	1.33	1.72	0.46	2.01	0.73	0.67	0.17	0.76
Haripur-Chitral	1.34	0.77	1.15	1.60	-0.31	-0.11	0.00	0.66	0.11	0.10	2.09	2.66	2.57	-2.19	-0.89
Haripur-Lower Dir	2.30	1.54	1.90	2.58	-0.57	1.53	0.67	1.55	0.54	0.02	1.90	1.41	1.27	-0.57	1.16
Haripur-Malakand	1.19	0.60	0.99	1.42	-0.66	-0.22	0.55	1.11	1.29	-0.12	0.50	0.78	0.98	-1.11	1.12
Haripur-Shangla	3.19	2.31	2.72	3.47	1.06	1.15	1.88	2.73	1.34	0.31	2.09	1.99	1.77	1.44	0.27
Haripur-Swat	2.23	1.11	1.48	2.40	-0.09	0.71	0.18	1.11	0.00	-0.09	1.60	0.39	0.38	1.25	0.40
Haripur-Upper Dir	2.97	2.48	2.06	3.11	0.35	1.42	1.76	2.36	1.67	0.12	2.01	2.36	2.32	-0.22	2.32
Haripur-Mardan	2.08	1.28	1.81	1.42	-0.53	0.16	0.79	1.18	0.48	-0.06	0.59	0.87	-0.04	0.78	1.92
Haripur-Swabi	1.93	1.20	1.98	0.62	-0.09	1.04	1.03	1.25	0.38	-0.02	1.49	0.00	-0.51	0.64	2.14
Haripur-Charsada	2.37	1.20	2.06	1.33	-0.57	-0.11	0.24	0.66	0.64	-0.07	0.66	1.57	0.20	0.28	2.19
Haripur-Nowshera	1.48	0.60	1.07	1.07	-0.13	0.60	0.48	1.25	0.21	0.05	-0.56	0.75	-0.10	1.51	1.03
Haripur-Peshawar	1.41	0.60	0.91	1.16	-0.44	0.05	-0.61	-0.30	-0.05	-0.05	-1.44	0.07	-0.48	-0.42	0.31

Table: Distance from Kohistan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Kohistan-Mansehra	-2.89	-2.57	-2.56	-2.49	-2.16	-1.81	-2.06	-2.51	-3.22	-1.84	-0.70	-1.16	-1.91	1.39	-2.36
Kohistan-Tor Garh	0.07	0.51	0.82	0.09	0.75	-1.20	-0.18	-0.30	-1.24	0.83	0.01	0.29	0.23	2.89	-2.77
Kohistan-Hangu	-0.89	-2.14	-1.07	-1.24	-2.21	-3.07	-1.94	-2.29	-3.28	-3.18	-0.75	-1.26	-2.49	-0.89	-1.25
Kohistan-Karak	-2.23	-3.33	-2.31	-2.58	-2.30	-1.37	-3.51	-2.21	-2.31	-2.69	-2.57	0.24	-1.90	0.46	-0.54
Kohistan-Kohat	-2.00	-2.65	-2.14	-1.69	-2.52	-3.29	-2.30	-2.73	-3.01	-2.79	-1.19	-1.39	-2.19	0.80	-1.83
Kohistan-Bonair	-1.04	-1.37	-0.91	-1.87	-2.21	-2.30	-2.18	-2.14	-2.20	-2.64	-0.07	-1.78	-1.95	1.34	-1.78
Kohistan-Chitral	-2.52	-2.48	-2.31	-1.87	-3.00	-3.78	-2.91	-2.80	-3.81	-3.00	0.01	0.15	-0.05	-1.02	-3.44
Kohistan-Lower Dir	-1.56	-1.71	-1.57	-0.89	-3.27	-2.14	-2.24	-1.92	-3.38	-3.08	-0.18	-1.10	-1.35	0.60	-1.38
Kohistan-Malakand	-2.67	-2.65	-2.47	-2.04	-3.36	-3.89	-2.36	-2.36	-2.63	-3.23	-1.58	-1.73	-1.64	0.06	-1.43
Kohistan-Shangla	-0.67	-0.94	-0.74	0.00	-1.63	-2.52	-1.03	-0.74	-2.58	-2.79	0.01	-0.52	-0.85	2.61	-2.28
Kohistan-Swat	-1.63	-2.14	-1.98	-1.07	-2.78	-2.96	-2.73	-2.36	-3.92	-3.19	-0.48	-2.12	-2.24	2.42	-2.14
Kohistan-Upper Dir	-0.89	-0.77	-1.40	-0.36	-2.34	-2.25	-1.15	-1.11	-2.26	-2.98	-0.07	-0.14	-0.29	0.95	-0.22
Kohistan-Mardan	-1.78	-1.97	-1.65	-2.04	-3.22	-3.50	-2.12	-2.29	-3.44	-3.16	-1.49	-1.64	-2.66	1.96	-0.62
Kohistan-Swabi	-1.93	-2.05	-1.48	-2.84	-2.78	-2.63	-1.88	-2.21	-3.54	-3.12	-0.59	-2.51	-3.13	1.81	-0.40
Kohistan-Charsada	-1.48	-2.05	-1.40	-2.13	-3.27	-3.78	-2.67	-2.80	-3.28	-3.17	-1.42	-0.94	-2.41	1.45	-0.36
Kohistan-Nowshera	-2.37	-2.65	-2.39	-2.40	-2.83	-3.07	-2.42	-2.21	-3.71	-3.05	-2.64	-1.76	-2.72	2.68	-1.52
Kohistan-Peshawar	-2.45	-2.65	-2.56	-2.31	-3.13	-3.61	-3.51	-3.76	-3.97	-3.16	-3.52	-2.44	-3.10	0.75	-2.23

Table: Distance from Mansehra to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Mansehra-Tor Garh	2.97	3.08	3.38	2.58	2.91	0.60	1.88	2.21	1.99	2.67	0.71	1.44	2.14	1.50	-0.40
Mansehra-Hangu	2.00	0.43	1.48	1.24	-0.04	-1.26	0.12	0.22	-0.05	-1.34	-0.05	-0.10	-0.59	-2.29	1.12
Mansehra-Karak	0.67	-0.77	0.25	-0.09	-0.13	0.44	-1.45	0.30	0.91	-0.85	-1.87	1.40	0.01	-0.93	1.83
Mansehra-Kohat	0.89	-0.09	0.41	0.80	-0.35	-1.48	-0.24	-0.22	0.21	-0.95	-0.49	-0.24	-0.29	-0.60	0.54
Mansehra-Bonair	1.86	1.20	1.65	0.62	-0.04	-0.49	-0.12	0.37	1.02	-0.80	0.63	-0.62	-0.05	-0.05	0.58
Mansehra-Chitral	0.37	0.09	0.25	0.62	-0.84	-1.97	-0.85	-0.30	-0.59	-1.16	0.71	1.31	1.86	-2.41	-1.07
Mansehra-Lower Dir	1.34	0.86	0.99	1.60	-1.10	-0.33	-0.18	0.59	-0.16	-1.24	0.52	0.06	0.55	-0.79	0.98
Mansehra-Malakand	0.22	-0.09	0.08	0.44	-1.19	-2.08	-0.30	0.15	0.59	-1.39	-0.88	-0.57	0.27	-1.33	0.94
Mansehra-Shangla	2.23	1.62	1.81	2.49	0.53	-0.71	1.03	1.77	0.64	-0.95	0.71	0.64	1.05	1.22	0.09
Mansehra-Swat	1.26	0.43	0.58	1.42	-0.62	-1.15	-0.67	0.15	-0.70	-1.35	0.22	-0.96	-0.33	1.03	0.22
Mansehra-Upper Dir	2.00	1.80	1.15	2.13	-0.18	-0.44	0.91	1.40	0.97	-1.14	0.63	1.01	1.61	-0.44	2.14
Mansehra-Mardan	1.11	0.60	0.91	0.44	-1.06	-1.70	-0.06	0.22	-0.21	-1.32	-0.79	-0.48	-0.75	0.56	1.74
Mansehra-Swabi	0.96	0.51	1.07	-0.36	-0.62	-0.82	0.18	0.30	-0.32	-1.28	0.11	-1.35	-1.22	0.42	1.96
Mansehra-Charsada	1.41	0.51	1.15	0.36	-1.10	-1.97	-0.61	-0.30	-0.05	-1.33	-0.72	0.22	-0.51	0.06	2.01
Mansehra-Nowshera	0.52	-0.09	0.16	0.09	-0.66	-1.26	-0.36	0.30	-0.48	-1.21	-1.94	-0.60	-0.81	1.29	0.85
Mansehra-Peshawar	0.45	-0.09	0.00	0.18	-0.97	-1.81	-1.45	-1.25	-0.75	-1.32	-2.82	-1.29	-1.19	-0.64	0.13

Table: Distance from Tor Garh to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Tor Garh-Hangu	-0.96	-2.65	-1.90	-1.33	-2.96	-1.86	-1.76	-1.99	-2.04	-4.00	-0.76	-1.54	-2.73	-3.78	1.52
Tor Garh-Karak	-2.30	-3.85	-3.13	-2.67	-3.05	-0.16	-3.33	-1.92	-1.07	-3.52	-2.59	-0.05	-2.13	-2.43	2.23
Tor Garh-Kohat	-2.08	-3.16	-2.97	-1.78	-3.27	-2.08	-2.12	-2.43	-1.77	-3.62	-1.20	-1.68	-2.43	-2.09	0.94
Tor Garh-Bonair	-1.11	-1.88	-1.73	-1.96	-2.96	-1.10	-2.00	-1.84	-0.97	-3.47	-0.08	-2.07	-2.19	-1.55	0.98
Tor Garh-Chitral	-2.60	-2.99	-3.13	-1.96	-3.75	-2.57	-2.73	-2.51	-2.58	-3.83	0.00	-0.13	-0.28	-3.91	-0.67
Tor Garh-Lower Dir	-1.63	-2.22	-2.39	-0.98	-4.02	-0.93	-2.06	-1.62	-2.15	-3.91	-0.19	-1.39	-1.59	-2.29	1.38
Tor Garh-Malakand	-2.75	-3.16	-3.30	-2.13	-4.11	-2.68	-2.18	-2.07	-1.40	-4.05	-1.59	-2.01	-1.87	-2.83	1.34
Tor Garh-Shangla	-0.74	-1.45	-1.57	-0.09	-2.38	-1.31	-0.85	-0.44	-1.34	-3.62	0.00	-0.80	-1.09	-0.28	0.49
Tor Garh-Swat	-1.71	-2.65	-2.80	-1.16	-3.53	-1.75	-2.54	-2.07	-2.69	-4.02	-0.49	-2.41	-2.47	-0.46	0.62
Tor Garh-Upper Dir	-0.96	-1.28	-2.23	-0.44	-3.09	-1.04	-0.97	-0.81	-1.02	-3.81	-0.08	-0.43	-0.53	-1.93	2.54
Tor Garh-Mardan	-1.86	-2.48	-2.47	-2.13	-3.97	-2.30	-1.94	-1.99	-2.20	-3.99	-1.50	-1.92	-2.89	-0.93	2.14
Tor Garh-Swabi	-2.00	-2.57	-2.31	-2.93	-3.53	-1.42	-1.70	-1.92	-2.31	-3.95	-0.61	-2.80	-3.36	-1.07	2.36
Tor Garh-Charsada	-1.56	-2.57	-2.23	-2.22	-4.02	-2.57	-2.48	-2.51	-2.04	-4.00	-1.43	-1.23	-2.65	-1.44	2.41
Tor Garh-Nowshera	-2.45	-3.16	-3.21	-2.49	-3.58	-1.86	-2.24	-1.92	-2.47	-3.88	-2.65	-2.04	-2.95	-0.20	1.25
Tor Garh-Peshawar	-2.52	-3.16	-3.38	-2.40	-3.89	-2.41	-3.33	-3.47	-2.74	-3.98	-3.53	-2.73	-3.33	-2.13	0.54

Table: Distance from Hangu to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Hangu-Karak	-1.34	-1.20	-1.24	-1.33	-0.09	1.70	-1.58	0.07	0.97	0.49	-1.82	1.50	0.60	1.36	0.71
Hangu-Kohat	-1.11	-0.51	-1.07	-0.44	-0.31	-0.22	-0.36	-0.44	0.27	0.38	-0.44	-0.14	0.30	1.69	-0.58
Hangu-Bonair	-0.15	0.77	0.16	-0.62	0.00	0.77	-0.24	0.15	1.07	0.53	0.68	-0.53	0.54	2.24	-0.54
Hangu-Chitral	-1.63	-0.34	-1.24	-0.62	-0.79	-0.71	-0.97	-0.52	-0.54	0.17	0.76	1.41	2.45	-0.13	-2.19
Hangu-Lower Dir	-0.67	0.43	-0.49	0.36	-1.06	0.93	-0.30	0.37	-0.11	0.09	0.57	0.16	1.14	1.50	-0.13
Hangu-Malakand	-1.78	-0.51	-1.40	-0.80	-1.15	-0.82	-0.42	-0.07	0.64	-0.05	-0.83	-0.47	0.86	0.95	-0.18
Hangu-Shangla	0.22	1.20	0.33	1.24	0.57	0.55	0.91	1.55	0.70	0.38	0.76	0.74	1.64	3.50	-1.03
Hangu-Swat	-0.74	0.00	-0.91	0.18	-0.57	0.11	-0.79	-0.07	-0.64	-0.02	0.27	-0.87	0.26	3.32	-0.89
Hangu-Upper Dir	0.00	1.37	-0.33	0.89	-0.13	0.82	0.79	1.18	1.02	0.19	0.68	1.11	2.20	1.85	1.03
Hangu-Mardan	-0.89	0.17	-0.58	-0.80	-1.02	-0.44	-0.18	0.00	-0.16	0.01	-0.74	-0.38	-0.16	2.85	0.62
Hangu-Swabi	-1.04	0.09	-0.41	-1.60	-0.57	0.44	0.06	0.07	-0.27	0.05	0.16	-1.25	-0.63	2.71	0.85
Hangu-Charsada	-0.59	0.09	-0.33	-0.89	-1.06	-0.71	-0.73	-0.52	0.00	0.00	-0.67	0.31	0.08	2.35	0.89
Hangu-Nowshera	-1.48	-0.51	-1.32	-1.16	-0.62	0.00	-0.48	0.07	-0.43	0.12	-1.89	-0.50	-0.22	3.58	-0.27
Hangu-Peshawar	-1.56	-0.51	-1.48	-1.07	-0.93	-0.55	-1.58	-1.48	-0.70	0.02	-2.77	-1.19	-0.61	1.65	-0.98

Table: Distance from Karak to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Karak-Kohat	0.22	0.68	0.16	0.89	-0.22	-1.92	1.21	-0.52	-0.70	-0.10	1.38	-1.64	-0.29	0.33	-1.29
Karak-Bonair	1.19	1.97	1.40	0.71	0.09	-0.93	1.33	0.07	0.11	0.05	2.50	-2.02	-0.05	0.88	-1.25
Karak-Chitral	-0.30	0.86	0.00	0.71	-0.71	-2.41	0.61	-0.59	-1.50	-0.31	2.58	-0.09	1.85	-1.48	-2.90
Karak-Lower Dir	0.67	1.62	0.74	1.69	-0.97	-0.77	1.27	0.30	-1.07	-0.39	2.40	-1.34	0.54	0.14	-0.85
Karak-Malakand	-0.45	0.68	-0.16	0.53	-1.06	-2.52	1.15	-0.15	-0.32	-0.54	0.99	-1.97	0.26	-0.40	-0.89
Karak-Shangla	1.56	2.39	1.57	2.58	0.66	-1.15	2.48	1.48	-0.27	-0.10	2.59	-0.76	1.05	2.15	-1.74
Karak-Swat	0.59	1.20	0.33	1.51	-0.49	-1.59	0.79	-0.15	-1.61	-0.50	2.09	-2.36	-0.34	1.96	-1.61
Karak-Upper Dir	1.34	2.57	0.91	2.22	-0.04	-0.88	2.36	1.11	0.05	-0.29	2.50	-0.39	1.60	0.49	0.31
Karak-Mardan	0.45	1.37	0.66	0.53	-0.93	-2.14	1.39	-0.07	-1.13	-0.47	1.09	-1.88	-0.76	1.50	-0.09
Karak-Swabi	0.30	1.28	0.82	-0.27	-0.49	-1.26	1.64	0.00	-1.24	-0.43	1.98	-2.75	-1.23	1.35	0.13
Karak-Charsada	0.74	1.28	0.91	0.44	-0.97	-2.41	0.85	-0.59	-0.97	-0.48	1.16	-1.18	-0.52	0.99	0.18
Karak-Nowshera	-0.15	0.68	-0.08	0.18	-0.53	-1.70	1.09	0.00	-1.40	-0.36	-0.06	-2.00	-0.82	2.22	-0.98
Karak-Peshawar	-0.22	0.68	-0.25	0.27	-0.84	-2.25	0.00	-1.55	-1.67	-0.47	-0.95	-2.68	-1.20	0.29	-1.70

Table: Distance from Kohat to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Kohat-Bonair	0.96	1.28	1.24	-0.18	0.31	0.99	0.12	0.59	0.81	0.15	1.12	-0.39	0.24	0.55	0.04
Kohat-Chitral	-0.52	0.17	-0.16	-0.18	-0.49	-0.49	-0.61	-0.07	-0.81	-0.21	1.20	1.55	2.14	-1.82	-1.61
Kohat-Lower Dir	0.45	0.94	0.58	0.80	-0.75	1.15	0.06	0.81	-0.38	-0.29	1.01	0.30	0.84	-0.19	0.45
Kohat-Malakand	-0.67	0.00	-0.33	-0.36	-0.84	-0.60	-0.06	0.37	0.38	-0.43	-0.39	-0.33	0.55	-0.74	0.40
Kohat-Shangla	1.34	1.71	1.40	1.69	0.88	0.77	1.27	1.99	0.43	0.00	1.20	0.88	1.34	1.81	-0.45
Kohat-Swat	0.37	0.51	0.16	0.62	-0.26	0.33	-0.42	0.37	-0.91	-0.40	0.71	-0.73	-0.05	1.63	-0.31
Kohat-Upper Dir	1.11	1.88	0.74	1.33	0.18	1.04	1.15	1.62	0.75	-0.19	1.12	1.25	1.90	0.16	1.61
Kohat-Mardan	0.22	0.68	0.49	-0.36	-0.71	-0.22	0.18	0.44	-0.43	-0.37	-0.30	-0.24	-0.47	1.16	1.20
Kohat-Swabi	0.07	0.60	0.66	-1.16	-0.26	0.66	0.42	0.52	-0.54	-0.33	0.59	-1.12	-0.94	1.02	1.43
Kohat-Charsada	0.52	0.60	0.74	-0.44	-0.75	-0.49	-0.36	-0.07	-0.27	-0.38	-0.23	0.45	-0.22	0.66	1.47
Kohat-Nowshera	-0.37	0.00	-0.25	-0.71	-0.31	0.22	-0.12	0.52	-0.70	-0.26	-1.45	-0.36	-0.53	1.89	0.31
Kohat-Peshawar	-0.45	0.00	-0.41	-0.62	-0.62	-0.33	-1.21	-1.03	-0.97	-0.36	-2.33	-1.05	-0.91	-0.04	-0.40

Table: Distance from Bonair to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bonair-Chitral	-1.48	-1.11	-1.40	0.00	-0.79	-1.48	-0.73	-0.66	-1.61	-0.36	0.08	1.94	1.91	-2.36	-1.65
Bonair-Lower Dir	-0.52	-0.34	-0.66	0.98	-1.06	0.16	-0.06	0.22	-1.18	-0.44	-0.10	0.68	0.60	-0.74	0.40
Bonair-Malakand	-1.63	-1.28	-1.57	-0.18	-1.15	-1.59	-0.18	-0.22	-0.43	-0.58	-1.51	0.06	0.31	-1.28	0.36
Bonair-Shangla	0.37	0.43	0.16	1.87	0.57	-0.22	1.15	1.40	-0.38	-0.15	0.08	1.27	1.10	1.27	-0.49
Bonair-Swat	-0.59	-0.77	-1.07	0.80	-0.57	-0.66	-0.55	-0.22	-1.72	-0.55	-0.41	-0.34	-0.29	1.08	-0.36
Bonair-Upper Dir	0.15	0.60	-0.49	1.51	-0.13	0.05	1.03	1.03	-0.05	-0.34	0.00	1.64	1.66	-0.39	1.56
Bonair-Mardan	-0.74	-0.60	-0.74	-0.18	-1.02	-1.20	0.06	-0.15	-1.24	-0.52	-1.42	0.14	-0.70	0.61	1.16
Bonair-Swabi	-0.89	-0.68	-0.58	-0.98	-0.57	-0.33	0.30	-0.07	-1.34	-0.48	-0.52	-0.73	-1.17	0.47	1.38
Bonair-Charsada	-0.45	-0.68	-0.49	-0.27	-1.06	-1.48	-0.48	-0.66	-1.07	-0.53	-1.34	0.84	-0.46	0.11	1.43
Bonair-Nowshera	-1.34	-1.28	-1.48	-0.53	-0.62	-0.77	-0.24	-0.07	-1.50	-0.41	-2.56	0.03	-0.77	1.34	0.27
Bonair-Peshawar	-1.41	-1.28	-1.65	-0.44	-0.93	-1.31	-1.33	-1.62	-1.77	-0.51	-3.45	-0.66	-1.15	-0.59	-0.45

Table: Distance from Chitral to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Chitral-Lower Dir	0.96	0.77	0.74	0.98	-0.26	1.64	0.67	0.89	0.43	-0.08	-0.18	-1.25	-1.31	1.62	2.05
Chitral-Malakand	-0.15	-0.17	-0.16	-0.18	-0.35	-0.11	0.55	0.44	1.18	-0.22	-1.59	-1.88	-1.59	1.08	2.01
Chitral-Shangla	1.86	1.54	1.57	1.87	1.37	1.26	1.88	2.07	1.24	0.21	0.00	-0.67	-0.81	3.63	1.16
Chitral-Swat	0.89	0.34	0.33	0.80	0.22	0.82	0.18	0.44	-0.11	-0.19	-0.49	-2.28	-2.19	3.44	1.29
Chitral-Upper Dir	1.63	1.71	0.91	1.51	0.66	1.53	1.76	1.70	1.56	0.02	-0.08	-0.30	-0.25	1.97	3.21
Chitral-Mardan	0.74	0.51	0.66	-0.18	-0.22	0.27	0.79	0.52	0.38	-0.16	-1.49	-1.79	-2.61	2.98	2.81
Chitral-Swabi	0.59	0.43	0.82	-0.98	0.22	1.15	1.03	0.59	0.27	-0.12	-0.60	-2.67	-3.08	2.84	3.03
Chitral-Charsada	1.04	0.43	0.91	-0.27	-0.26	0.00	0.24	0.00	0.54	-0.17	-1.42	-1.10	-2.37	2.47	3.08
Chitral-Nowshera	0.15	-0.17	-0.08	-0.53	0.18	0.71	0.48	0.59	0.11	-0.05	-2.64	-1.91	-2.67	3.70	1.92
Chitral-Peshawar	0.07	-0.17	-0.25	-0.44	-0.13	0.16	-0.61	-0.96	-0.16	-0.15	-3.53	-2.60	-3.05	1.77	1.20

Table: Distance from Lower Dir to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Lower Dir-Malakand	-1.11	-0.94	-0.91	-1.16	-0.09	-1.75	-0.12	-0.44	0.75	-0.14	-1.40	-0.63	-0.29	-0.54	-0.04
Lower Dir-Shangla	0.89	0.77	0.82	0.89	1.63	-0.38	1.21	1.18	0.81	0.29	0.19	0.58	0.50	2.01	-0.89
Lower Dir-Swat	-0.07	-0.43	-0.41	-0.18	0.49	-0.82	-0.48	-0.44	-0.54	-0.11	-0.30	-1.02	-0.88	1.82	-0.76
Lower Dir-Upper Dir	0.67	0.94	0.16	0.53	0.93	-0.11	1.09	0.81	1.13	0.10	0.11	0.95	1.06	0.35	1.16
Lower Dir-Mardan	-0.22	-0.26	-0.08	-1.16	0.04	-1.37	0.12	-0.37	-0.05	-0.08	-1.31	-0.54	-1.30	1.36	0.76
Lower Dir-Swabi	-0.37	-0.34	0.08	-1.96	0.49	-0.49	0.36	-0.30	-0.16	-0.04	-0.42	-1.41	-1.77	1.21	0.98
Lower Dir-Charsada	0.07	-0.34	0.16	-1.24	0.00	-1.64	-0.42	-0.89	0.11	-0.09	-1.24	0.16	-1.06	0.85	1.03
Lower Dir-Nowshera	-0.82	-0.94	-0.82	-1.51	0.44	-0.93	-0.18	-0.30	-0.32	0.03	-2.46	-0.66	-1.37	2.08	-0.13
Lower Dir-Peshawar	-0.89	-0.94	-0.99	-1.42	0.13	-1.48	-1.27	-1.84	-0.59	-0.07	-3.34	-1.34	-1.75	0.15	-0.85

Table: Distance from Malakand to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Malakand-Shangla	2.00	1.71	1.73	2.04	1.72	1.37	1.33	1.62	0.05	0.43	1.59	1.21	0.79	2.55	-0.85
Malakand-Swat	1.04	0.51	0.49	0.98	0.57	0.93	-0.36	0.00	-1.29	0.03	1.10	-0.40	-0.60	2.36	-0.71
Malakand-Upper Dir	1.78	1.88	1.07	1.69	1.02	1.64	1.21	1.25	0.38	0.25	1.51	1.58	1.34	0.89	1.20
Malakand-Mardan	0.89	0.68	0.82	0.00	0.13	0.38	0.24	0.07	-0.81	0.06	0.09	0.09	-1.02	1.90	0.80
Malakand-Swabi	0.74	0.60	0.99	-0.80	0.57	1.26	0.48	0.15	-0.91	0.11	0.98	-0.79	-1.49	1.75	1.03
Malakand-Charsada	1.19	0.60	1.07	-0.09	0.09	0.11	-0.30	-0.44	-0.64	0.05	0.16	0.78	-0.78	1.39	1.07
Malakand-Nowshera	0.30	0.00	0.08	-0.36	0.53	0.82	-0.06	0.15	-1.07	0.17	-1.06	-0.03	-1.08	2.62	-0.09
Malakand-Peshawar	0.22	0.00	-0.08	-0.27	0.22	0.27	-1.15	-1.40	-1.34	0.07	-1.94	-0.72	-1.46	0.69	-0.80

Table: Distance from Shangla to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Shangla-Swat	-0.96	-1.20	-1.24	-1.07	-1.15	-0.44	-1.70	-1.62	-1.34	-0.40	-0.49	-1.61	-1.39	-0.18	0.13
Shangla-Upper Dir	-0.22	0.17	-0.66	-0.36	-0.71	0.27	-0.12	-0.37	0.32	-0.19	-0.08	0.37	0.56	-1.65	2.05
Shangla-Mardan	-1.11	-1.03	-0.91	-2.04	-1.59	-0.99	-1.09	-1.55	-0.86	-0.37	-1.50	-1.12	-1.80	-0.65	1.65
Shangla-Swabi	-1.26	-1.11	-0.74	-2.84	-1.15	-0.11	-0.85	-1.48	-0.97	-0.33	-0.61	-2.00	-2.27	-0.79	1.87
Shangla-Charsada	-0.82	-1.11	-0.66	-2.13	-1.63	-1.26	-1.64	-2.07	-0.70	-0.38	-1.43	-0.43	-1.56	-1.16	1.92
Shangla-Nowshera	-1.71	-1.71	-1.65	-2.40	-1.19	-0.55	-1.39	-1.48	-1.13	-0.26	-2.65	-1.24	-1.87	0.07	0.76
Shangla-Peshawar	-1.78	-1.71	-1.81	-2.31	-1.50	-1.10	-2.48	-3.02	-1.40	-0.36	-3.53	-1.93	-2.25	-1.85	0.04

Table: Distance from Swat to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Swat-Upper Dir	0.74	1.37	0.58	0.71	0.44	0.71	1.58	1.25	1.67	0.21	0.41	1.98	1.94	-1.47	1.92
Swat-Mardan	-0.15	0.17	0.33	-0.98	-0.44	-0.55	0.61	0.07	0.48	0.03	-1.01	0.48	-0.42	-0.47	1.52
Swat-Swabi	-0.30	0.09	0.49	-1.78	0.00	0.33	0.85	0.15	0.38	0.07	-0.11	-0.39	-0.89	-0.61	1.74
Swat-Charsada	0.15	0.09	0.58	-1.07	-0.49	-0.82	0.06	-0.44	0.64	0.02	-0.94	1.18	-0.18	-0.97	1.78
Swat-Nowshera	-0.74	-0.51	-0.41	-1.33	-0.04	-0.11	0.30	0.15	0.21	0.14	-2.16	0.37	-0.48	0.26	0.62
Swat-Peshawar	-0.82	-0.51	-0.58	-1.24	-0.35	-0.66	-0.79	-1.40	-0.05	0.04	-3.04	-0.32	-0.86	-1.67	-0.09

Table: Distance from Upper Dir to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Upper Dir-Mardan	-0.89	-1.20	-0.25	-1.69	-0.88	-1.26	-0.97	-1.18	-1.18	-0.18	-1.42	-1.49	-2.36	1.00	-0.40
Upper Dir-Swabi	-1.04	-1.28	-0.08	-2.49	-0.44	-0.38	-0.73	-1.11	-1.29	-0.14	-0.52	-2.37	-2.83	0.86	-0.18
Upper Dir-Charsada	-0.59	-1.28	0.00	-1.78	-0.93	-1.53	-1.51	-1.70	-1.02	-0.19	-1.35	-0.80	-2.12	0.50	-0.13
Upper Dir-Nowshera	-1.48	-1.88	-0.99	-2.04	-0.49	-0.82	-1.27	-1.11	-1.45	-0.07	-2.57	-1.61	-2.42	1.73	-1.29
Upper Dir-Peshawar	-1.56	-1.88	-1.15	-1.96	-0.79	-1.37	-2.36	-2.66	-1.72	-0.17	-3.45	-2.30	-2.81	-0.20	-2.01

Table: Distance from Mardan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Mardan-Swabi	-0.15	-0.09	0.16	-0.80	0.44	0.88	0.24	0.07	-0.11	0.04	0.89	-0.87	-0.47	-0.14	0.22
Mardan-Charsada	0.30	-0.09	0.25	-0.09	-0.04	-0.27	-0.55	-0.52	0.16	-0.01	0.07	0.70	0.24	-0.50	0.27
Mardan-Nowshera	-0.59	-0.68	-0.74	-0.36	0.40	0.44	-0.30	0.07	-0.27	0.11	-1.15	-0.12	-0.06	0.73	-0.89
Mardan-Peshawar	-0.67	-0.68	-0.91	-0.27	0.09	-0.11	-1.39	-1.48	-0.54	0.01	-2.03	-0.80	-0.44	-1.20	-1.61

Table: Distance from Swabi to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Swabi-Charsada	0.45	0.00	0.08	0.71	-0.49	-1.15	-0.79	-0.59	0.27	-0.05	-0.82	1.57	0.71	-0.36	0.04
Swabi-Nowshera	-0.45	-0.60	-0.91	0.44	-0.04	-0.44	-0.55	0.00	-0.16	0.07	-2.04	0.75	0.41	0.87	-1.12
Swabi-Peshawar	-0.52	-0.60	-1.07	0.53	-0.35	-0.99	-1.64	-1.55	-0.43	-0.03	-2.92	0.07	0.03	-1.06	-1.83

Table: Distance from Charsada to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Charsada-Nowshera	-0.89	-0.60	-0.99	-0.27	0.44	0.71	0.24	0.59	-0.43	0.12	-1.22	-0.81	-0.30	1.23	-1.16
Charsada-Peshawar	-0.96	-0.60	-1.15	-0.18	0.13	0.16	-0.85	-0.96	-0.70	0.02	-2.10	-1.50	-0.69	-0.70	-1.87

Table: Distance from Nowshera to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn.	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Nowshera-Peshawar	-0.07	0.00	-0.16	0.09	-0.31	-0.55	-1.09	-1.55	-0.27	-0.10	-0.88	-0.69	-0.38	-1.93	-0.71

Interim Distance between Districts of Sindh

Table: Distance from Badin to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Badin-Dadu	-1.17	-2.17	-1.97	-2.08	-1.96	-0.47	1.63	1.52	-1.05	-1.99	-0.65	0.16	-1.12	-0.60	0.28
Badin-Hyderabad	-2.65	-2.60	-3.04	-2.93	-1.74	-1.94	-1.52	-1.70	-3.42	-2.15	-3.13	-3.07	-3.42	-1.65	-2.72
Badin-Jamshoro	-0.78	-1.19	-0.71	-0.37	-1.60	-0.07	0.51	0.35	-1.09	-1.58	-0.77	-0.09	-1.44	-0.86	-1.11
Badin-Matiari	-1.01	-1.30	-1.16	-0.61	-1.38	-1.81	-0.22	-0.47	-1.09	-1.90	-1.03	-0.13	-1.57	-0.81	0.32
Badin-Tando Allah Yar	-0.70	-0.43	-0.98	0.12	-1.09	0.27	0.06	-0.12	-1.14	-1.86	-1.09	-0.27	-1.35	0.18	0.23
Badin-TandoMuhd Khan	-0.31	0.00	-0.89	0.98	0.22	-0.27	-0.06	0.00	-0.67	-0.65	-0.81	-0.23	-0.40	-0.51	0.28
Badin-Thatta	0.00	0.43	-0.09	1.22	0.15	0.60	0.84	1.29	-0.10	0.83	-0.21	-0.68	0.17	0.40	-0.09
Badin-Karachi	-4.21	-4.01	-4.11	-2.44	-1.96	-2.41	-1.80	-1.70	-3.94	-2.08	-3.99	-3.75	-3.76	-3.74	-3.32
Badin-Jaccobabad	0.00	-0.76	-0.09	-0.37	1.09	0.47	2.13	2.05	-1.90	-1.81	-1.03	0.20	-0.97	-0.59	0.28
Badin-Kashmore	0.23	-0.87	-0.09	0.12	0.15	0.74	2.30	2.16	-1.14	-1.55	-0.31	0.11	-0.85	-1.23	0.55
Badin-Larkana	-1.01	-2.17	-1.34	-1.95	-1.60	-0.74	0.96	0.88	-2.52	-2.07	-1.57	0.06	-1.04	-1.81	0.60
Badin-Shahdadkot	-0.08	-0.76	-0.18	-0.85	-1.45	-0.20	1.40	1.29	-1.38	-2.18	-0.83	0.16	-0.83	-1.40	-0.09
Badin-Shikarpur	-0.47	-1.62	-0.89	-1.10	-1.45	-0.53	0.79	0.82	-1.52	-2.05	-0.88	0.17	-0.63	-1.01	0.60
Badin-Mir PurKhas	-0.55	-0.43	-0.89	-0.49	0.44	1.27	0.90	0.99	-1.52	-0.80	-0.38	-0.59	-0.38	-1.96	-0.97
Badin-Sanghar	-0.78	-1.62	-1.43	-1.22	0.51	0.80	0.90	0.76	-1.81	-1.54	-1.05	-0.26	-1.02	-1.10	0.00
Badin-Tharparkar	0.00	-0.76	-0.18	-0.85	1.31	0.00	1.52	1.52	0.29	1.52	0.37	0.11	0.73	-3.43	0.32
Badin-UmerKot	0.16	-0.22	-0.27	-0.61	-1.60	1.54	1.63	1.52	-0.71	-0.39	0.38	-0.01	-0.15	-2.12	-0.74
Badin-Ghotki	0.00	-1.73	-0.63	-0.98	-0.07	0.87	1.12	0.88	-2.14	-1.80	-0.51	0.15	-1.57	-0.73	0.09
Badin-Khairpur	-0.55	-1.41	-1.34	-1.22	-1.02	0.00	1.24	1.05	-1.19	-1.68	-0.55	0.17	-1.13	-1.38	0.18
Badin-NowsheroFeroze	-1.01	-1.52	-1.97	-1.59	-1.31	0.87	1.07	0.88	-1.38	-1.48	-0.38	0.13	-1.42	-0.58	0.00
Badin-Nawabshah	-0.23	-1.19	-1.25	-0.98	-0.51	-0.80	0.62	0.99	-1.43	-2.06	-1.07	-0.06	-1.39	-1.03	0.32
Badin-Sukkur	-1.40	-2.27	-1.61	-1.59	-0.65	-0.53	0.28	0.12	-2.52	-1.99	-1.96	-0.33	-1.63	-1.88	-0.83

Table: Distance from Dadu to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Dadu-Hyderabad	-1.48	-0.43	-1.07	-0.85	0.22	-1.47	-3.15	-3.22	-2.38	-0.17	-2.48	-3.22	-2.30	-1.05	-3.00
Dadu-Jamshoro	0.39	0.97	1.25	1.71	0.36	0.40	-1.12	-1.17	-0.05	0.41	-0.12	-0.25	-0.32	-0.26	-1.38
Dadu-Matiari	0.16	0.87	0.80	1.47	0.58	-1.34	-1.85	-1.99	-0.05	0.09	-0.38	-0.29	-0.45	-0.21	0.05
Dadu-Tando Allah Yar	0.47	1.73	0.98	2.20	0.87	0.74	-1.57	-1.64	-0.10	0.12	-0.44	-0.43	-0.23	0.78	-0.05
Dadu-Tando Muhd Khan	0.86	2.17	1.07	3.05	2.18	0.20	-1.69	-1.52	0.38	1.34	-0.16	-0.39	0.72	0.09	0.00
Dadu-Thatta	1.17	2.60	1.88	3.30	2.10	1.07	-0.79	-0.23	0.95	2.82	0.44	-0.83	1.29	1.00	-0.37
Dadu-Karachi	-3.04	-1.84	-2.14	-0.37	0.00	-1.94	-3.43	-3.22	-2.90	-0.09	-3.33	-3.91	-2.64	-3.14	-3.59
Dadu-Jaccobabad	1.17	1.41	1.88	1.71	3.05	0.94	0.51	0.53	-0.86	0.18	-0.38	0.04	0.14	0.01	0.00
Dadu-Kashmore	1.40	1.30	1.88	2.20	2.10	1.20	0.67	0.64	-0.10	0.44	0.34	-0.05	0.27	-0.63	0.28
Dadu-Larkana	0.16	0.00	0.63	0.12	0.36	-0.27	-0.67	-0.64	-1.47	-0.08	-0.91	-0.10	0.08	-1.21	0.32
Dadu-Shahdadkot	1.09	1.41	1.79	1.22	0.51	0.27	-0.22	-0.23	-0.33	-0.20	-0.18	0.00	0.29	-0.80	-0.37
Dadu-Shikarpur	0.70	0.54	1.07	0.98	0.51	-0.07	-0.84	-0.70	-0.48	-0.07	-0.22	0.01	0.49	-0.41	0.32
Dadu-Mir Pur Khas	0.62	1.73	1.07	1.59	2.39	1.74	-0.73	-0.53	-0.48	1.19	0.27	-0.75	0.74	-1.36	-1.24
Dadu-Sanghar	0.39	0.54	0.54	0.85	2.47	1.27	-0.73	-0.76	-0.76	0.45	-0.40	-0.42	0.10	-0.50	-0.28
Dadu-Tharparkar	1.17	1.41	1.79	1.22	3.26	0.47	-0.11	0.00	1.33	3.51	1.03	-0.05	1.85	-2.83	0.05
Dadu-Umer Kot	1.32	1.95	1.70	1.47	0.36	2.01	0.00	0.00	0.33	1.60	1.03	-0.17	0.97	-1.52	-1.01
Dadu-Ghotki	1.17	0.43	1.34	1.10	1.89	1.34	-0.51	-0.64	-1.09	0.19	0.15	-0.01	-0.45	-0.13	-0.18
Dadu-Khairpur	0.62	0.76	0.63	0.85	0.94	0.47	-0.39	-0.47	-0.14	0.31	0.11	0.02	-0.01	-0.78	-0.09
Dadu-Nowshero Feroze	0.16	0.65	0.00	0.49	0.65	1.34	-0.56	-0.64	-0.33	0.51	0.27	-0.02	-0.30	0.03	-0.28
Dadu-Nawabshah	0.93	0.97	0.71	1.10	1.45	-0.33	-1.01	-0.53	-0.38	-0.07	-0.42	-0.22	-0.27	-0.43	0.05
Dadu-Sukkur	-0.23	-0.11	0.36	0.49	1.31	-0.07	-1.35	-1.40	-1.47	0.00	-1.30	-0.49	-0.51	-1.27	-1.11

Table: Distance from Hyderabad to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Hyderabad-Jamshoro	1.87	1.41	2.32	2.56	0.15	1.87	2.02	2.05	2.33	0.58	2.36	2.97	1.99	0.79	1.61
Hyderabad-Matiari	1.64	1.30	1.88	2.32	0.36	0.13	1.29	1.23	2.33	0.25	2.10	2.93	1.85	0.84	3.04
Hyderabad-Tando Allah Yar	1.95	2.17	2.05	3.05	0.65	2.21	1.57	1.58	2.28	0.29	2.04	2.80	2.07	1.83	2.95
Hyderabad-Tando Muhd Khan	2.34	2.60	2.14	3.91	1.96	1.67	1.46	1.70	2.76	1.50	2.33	2.83	3.02	1.14	3.00
Hyderabad-Thatta	2.65	3.03	2.95	4.15	1.89	2.54	2.36	2.98	3.33	2.99	2.93	2.39	3.59	2.05	2.63
Hyderabad-Karachi	-1.56	-1.41	-1.07	0.49	-0.22	-0.47	-0.28	0.00	-0.52	0.08	-0.85	-0.69	-0.34	-2.09	-0.60
Hyderabad-Jaccobabad	2.65	1.84	2.95	2.56	2.83	2.41	3.65	3.74	1.52	0.34	2.11	3.26	2.45	1.06	3.00
Hyderabad-Kashmore	2.88	1.73	2.95	3.05	1.89	2.67	3.82	3.86	2.28	0.60	2.82	3.17	2.57	0.42	3.27
Hyderabad-Larkana	1.64	0.43	1.70	0.98	0.15	1.20	2.47	2.57	0.90	0.08	1.57	3.12	2.38	-0.16	3.32
Hyderabad-Shahdadkot	2.57	1.84	2.86	2.08	0.29	1.74	2.92	2.98	2.04	-0.03	2.31	3.23	2.59	0.25	2.63
Hyderabad-Shikarpur	2.18	0.97	2.14	1.83	0.29	1.40	2.30	2.52	1.90	0.10	2.26	3.23	2.80	0.64	3.32
Hyderabad-Mir Pur Khas	2.10	2.17	2.14	2.44	2.18	3.21	2.42	2.69	1.90	1.36	2.76	2.48	3.04	-0.31	1.75
Hyderabad-Sanghar	1.87	0.97	1.61	1.71	2.25	2.74	2.42	2.46	1.62	0.62	2.08	2.80	2.40	0.55	2.72
Hyderabad-Tharparkar	2.65	1.84	2.86	2.08	3.05	1.94	3.03	3.22	3.71	3.68	3.51	3.17	4.15	-1.78	3.04
Hyderabad-Umer Kot	2.80	2.38	2.77	2.32	0.15	3.48	3.15	3.22	2.71	1.76	3.52	3.06	3.27	-0.47	1.98
Hyderabad-Ghotki	2.65	0.87	2.41	1.95	1.67	2.81	2.64	2.57	1.28	0.36	2.63	3.21	1.86	0.92	2.81
Hyderabad-Khairpur	2.10	1.19	1.70	1.71	0.73	1.94	2.75	2.75	2.23	0.48	2.59	3.24	2.29	0.27	2.90
Hyderabad-Nowshero Feroze	1.64	1.08	1.07	1.34	0.44	2.81	2.58	2.57	2.04	0.68	2.75	3.20	2.00	1.07	2.72
Hyderabad-Nawabshah	2.41	1.41	1.79	1.95	1.23	1.14	2.13	2.69	2.00	0.09	2.06	3.00	2.03	0.62	3.04
Hyderabad-Sukkur	1.25	0.32	1.43	1.34	1.09	1.40	1.80	1.81	0.90	0.16	1.18	2.74	1.79	-0.23	1.89

Table: Distance from Jamshoro to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Jamshoro-Matiari	-0.23	-0.11	-0.45	-0.24	0.22	-1.74	-0.73	-0.82	0.00	-0.32	-0.26	-0.04	-0.13	0.05	1.43
Jamshoro-Tando Allah Yar	0.08	0.76	-0.27	0.49	0.51	0.33	-0.45	-0.47	-0.05	-0.29	-0.32	-0.18	0.08	1.05	1.34
Jamshoro-Tando Muhd Khan	0.47	1.19	-0.18	1.34	1.81	-0.20	-0.56	-0.35	0.43	0.93	-0.04	-0.14	1.04	0.36	1.38
Jamshoro-Thatta	0.78	1.62	0.63	1.59	1.74	0.67	0.34	0.94	1.00	2.41	0.56	-0.59	1.60	1.26	1.01
Jamshoro-Karachi	-3.43	-2.82	-3.40	-2.08	-0.36	-2.34	-2.30	-2.05	-2.85	-0.50	-3.22	-3.66	-2.32	-2.88	-2.21
Jamshoro-Jaccobabad	0.78	0.43	0.63	0.00	2.68	0.53	1.63	1.70	-0.81	-0.23	-0.26	0.29	0.46	0.27	1.38
Jamshoro-Kashmore	1.01	0.32	0.63	0.49	1.74	0.80	1.80	1.81	-0.05	0.03	0.46	0.20	0.59	-0.36	1.66
Jamshoro-Larkana	-0.23	-0.97	-0.63	-1.59	0.00	-0.67	0.45	0.53	-1.43	-0.49	-0.79	0.15	0.40	-0.95	1.70
Jamshoro-Shahdadkot	0.70	0.43	0.54	-0.49	0.15	-0.13	0.90	0.94	-0.29	-0.61	-0.06	0.25	0.60	-0.53	1.01
Jamshoro-Shikarpur	0.31	-0.43	-0.18	-0.73	0.15	-0.47	0.28	0.47	-0.43	-0.48	-0.10	0.26	0.81	-0.15	1.70
Jamshoro-Mir Pur Khas	0.23	0.76	-0.18	-0.12	2.03	1.34	0.39	0.64	-0.43	0.78	0.39	-0.50	1.06	-1.10	0.14
Jamshoro-Sanghar	0.00	-0.43	-0.71	-0.85	2.10	0.87	0.39	0.41	-0.71	0.04	-0.28	-0.17	0.42	-0.24	1.11
Jamshoro-Tharparkar	0.78	0.43	0.54	-0.49	2.90	0.07	1.01	1.17	1.38	3.10	1.14	0.20	2.16	-2.56	1.43
Jamshoro-Umer Kot	0.93	0.97	0.45	-0.24	0.00	1.60	1.12	1.17	0.38	1.19	1.15	0.08	1.29	-1.26	0.37
Jamshoro-Ghotki	0.78	-0.54	0.09	-0.61	1.52	0.94	0.62	0.53	-1.05	-0.22	0.27	0.24	-0.13	0.13	1.20
Jamshoro-Khairpur	0.23	-0.22	-0.63	-0.85	0.58	0.07	0.73	0.70	-0.10	-0.10	0.23	0.27	0.31	-0.51	1.29
Jamshoro-Nowshero Feroze	-0.23	-0.32	-1.25	-1.22	0.29	0.94	0.56	0.53	-0.29	0.10	0.39	0.23	0.02	0.29	1.11
Jamshoro-Nawabshah	0.55	0.00	-0.54	-0.61	1.09	-0.74	0.11	0.64	-0.33	-0.48	-0.30	0.03	0.05	-0.16	1.43
Jamshoro-Sukkur	-0.62	-1.08	-0.89	-1.22	0.94	-0.47	-0.22	-0.23	-1.43	-0.41	-1.19	-0.24	-0.19	-1.01	0.28

Table: Distance from Matiari to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Matiari-Tando Allah Yar	0.31	0.87	0.18	0.73	0.29	2.07	0.28	0.35	-0.05	0.04	-0.06	-0.14	0.22	0.99	-0.09
Matiari-Tando Muhd Khan	0.70	1.30	0.27	1.59	1.60	1.54	0.17	0.47	0.43	1.25	0.22	-0.10	1.17	0.30	-0.05
Matiari-Thatta	1.01	1.73	1.07	1.83	1.52	2.41	1.07	1.76	1.00	2.73	0.82	-0.55	1.74	1.21	-0.41
Matiari-Karachi	-3.19	-2.71	-2.95	-1.83	-0.58	-0.60	-1.57	-1.23	-2.85	-0.18	-2.96	-3.62	-2.19	-2.93	-3.64
Matiari-Jaccobabad	1.01	0.54	1.07	0.24	2.47	2.27	2.36	2.52	-0.81	0.09	0.00	0.33	0.59	0.22	-0.05
Matiari-Kashmore	1.25	0.43	1.07	0.73	1.52	2.54	2.53	2.63	-0.05	0.35	0.72	0.24	0.72	-0.42	0.23
Matiari-Larkana	0.00	-0.87	-0.18	-1.34	-0.22	1.07	1.18	1.35	-1.43	-0.17	-0.54	0.19	0.53	-1.00	0.28
Matiari-Shahdadkot	0.93	0.54	0.98	-0.24	-0.07	1.60	1.63	1.76	-0.29	-0.29	0.20	0.29	0.74	-0.59	-0.41
Matiari-Shikarpur	0.55	-0.32	0.27	-0.49	-0.07	1.27	1.01	1.29	-0.43	-0.15	0.15	0.30	0.94	-0.20	0.28
Matiari-Mir Pur Khas	0.47	0.87	0.27	0.12	1.81	3.08	1.12	1.46	-0.43	1.10	0.65	-0.46	1.19	-1.15	-1.29
Matiari-Sanghar	0.23	-0.32	-0.27	-0.61	1.89	2.61	1.12	1.23	-0.71	0.36	-0.02	-0.13	0.55	-0.29	-0.32
Matiari-Tharparkar	1.01	0.54	0.98	-0.24	2.68	1.81	1.74	1.99	1.38	3.42	1.40	0.24	2.30	-2.62	0.00
Matiari-Umer Kot	1.17	1.08	0.89	0.00	-0.22	3.34	1.85	1.99	0.38	1.51	1.41	0.12	1.42	-1.31	-1.06
Matiari-Ghotki	1.01	-0.43	0.54	-0.37	1.31	2.67	1.35	1.35	-1.05	0.10	0.52	0.28	0.00	0.08	-0.23
Matiari-Khairpur	0.47	-0.11	-0.18	-0.61	0.36	1.81	1.46	1.52	-0.10	0.22	0.48	0.31	0.44	-0.57	-0.14
Matiari-Nowshero Feroze	0.00	-0.22	-0.80	-0.98	0.07	2.67	1.29	1.35	-0.29	0.42	0.65	0.27	0.15	0.23	-0.32
Matiari-Nawabshah	0.78	0.11	-0.09	-0.37	0.87	1.00	0.84	1.46	-0.33	-0.16	-0.04	0.07	0.18	-0.22	0.00
Matiari-Sukkur	-0.39	-0.97	-0.45	-0.98	0.73	1.27	0.51	0.59	-1.43	-0.09	-0.93	-0.20	-0.06	-1.07	-1.15

Table: Distance from Tando Allah Yar to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Tando Allah Yar-Tando Muhd Khan	0.39	1.23	0.18	1.82	0.88	-0.18	-0.78	-0.67	0.77	0.69	0.11	0.10	0.68	0.69	0.51
Tando Allah Yar-Thatta	0.70	1.66	0.99	2.06	0.80	0.69	0.12	0.61	1.34	2.17	0.71	-0.34	1.24	1.59	0.14
Tando Allah Yar-Karachi	-3.50	-2.78	-3.04	-1.60	-1.30	-2.32	-2.52	-2.37	-2.51	-0.74	-3.07	-3.42	-2.68	-2.55	-3.08
Tando Allah Yar-Jaccobabad	0.70	0.47	0.99	0.48	1.75	0.55	1.41	1.37	-0.47	-0.47	-0.11	0.53	0.10	0.60	0.51
Tando Allah Yar-Kashmore	0.93	0.36	0.99	0.97	0.80	0.82	1.58	1.49	0.29	-0.21	0.60	0.44	0.23	-0.03	0.79
Tando Allah Yar-Larkana	-0.31	-0.94	-0.27	-1.11	-0.94	-0.65	0.23	0.20	-1.09	-0.73	-0.65	0.39	0.04	-0.62	0.83
Tando Allah Yar-Shahdadkot	0.62	0.47	0.90	-0.01	-0.79	-0.12	0.68	0.61	0.06	-0.84	0.09	0.49	0.24	-0.20	0.14
Tando Allah Yar-Shikarpur	0.23	-0.40	0.18	-0.26	-0.79	-0.45	0.06	0.15	-0.09	-0.71	0.04	0.50	0.45	0.18	0.83
Tando Allah Yar-Mir Pur Khas	0.16	0.79	0.18	0.35	1.09	1.36	0.17	0.32	-0.09	0.55	0.54	-0.26	0.70	-0.77	-0.73
Tando Allah Yar-Sanghar	-0.08	-0.40	-0.35	-0.38	1.17	0.89	0.17	0.09	-0.37	-0.19	-0.14	0.07	0.06	0.09	0.24
Tando Allah Yar-Tharparkar	0.70	0.47	0.90	-0.01	1.96	0.08	0.79	0.85	1.72	2.87	1.29	0.44	1.81	-2.24	0.56
Tando Allah Yar-Umer Kot	0.86	1.01	0.81	0.23	-0.94	1.62	0.90	0.85	0.72	0.95	1.30	0.32	0.93	-0.93	-0.50
Tando Allah Yar-Ghotki	0.70	-0.51	0.45	-0.13	0.59	0.95	0.40	0.20	-0.70	-0.46	0.41	0.48	-0.49	0.46	0.33
Tando Allah Yar-Khairpur	0.16	-0.18	-0.27	-0.38	-0.36	0.08	0.51	0.38	0.25	-0.33	0.37	0.51	-0.05	-0.18	0.42
Tando Allah Yar-Nowshero Feroze	-0.31	-0.29	-0.89	-0.74	-0.65	0.95	0.34	0.20	0.06	-0.13	0.53	0.47	-0.34	0.62	0.24
Tando Allah Yar-Nawabshah	0.47	0.03	-0.18	-0.13	0.15	-0.72	-0.11	0.32	0.01	-0.72	-0.16	0.27	-0.31	0.16	0.56
Tando Allah Yar-Sukkur	-0.70	-1.05	-0.53	-0.74	0.01	-0.45	-0.44	-0.56	-1.09	-0.65	-1.04	0.00	-0.55	-0.68	-0.59

Table: Distance from Tando Muhammad Khan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Tando Muhd Khan-Thatta	0.31	0.43	0.80	0.24	-0.07	0.87	0.90	1.29	0.57	1.48	0.60	-0.44	0.57	0.90	-0.37
Tando Muhd Khan-Karachi	-3.89	-4.01	-3.22	-3.42	-2.18	-2.14	-1.74	-1.70	-3.28	-1.43	-3.18	-3.52	-3.36	-3.23	-3.59
Tando Muhd Khan-Jaccobabad	0.31	-0.76	0.80	-1.34	0.87	0.74	2.19	2.05	-1.24	-1.16	-0.22	0.43	-0.57	-0.08	0.00
Tando Muhd Khan-Kashmore	0.55	-0.87	0.80	-0.85	-0.07	1.00	2.36	2.16	-0.48	-0.90	0.50	0.34	-0.45	-0.72	0.28
Tando Muhd Khan-Larkana	-0.70	-2.17	-0.45	-2.93	-1.81	-0.47	1.01	0.88	-1.85	-1.42	-0.76	0.29	-0.64	-1.31	0.32
Tando Muhd Khan-Shahdadkot	0.23	-0.76	0.71	-1.83	-1.67	0.07	1.46	1.29	-0.71	-1.54	-0.02	0.39	-0.43	-0.89	-0.37
Tando Muhd Khan-Shikarpur	-0.16	-1.62	0.00	-2.08	-1.67	-0.27	0.84	0.82	-0.86	-1.41	-0.07	0.40	-0.23	-0.50	0.32
Tando Muhd Khan-Mir Pur Khas	-0.23	-0.43	0.00	-1.47	0.22	1.54	0.96	0.99	-0.86	-0.15	0.43	-0.36	0.02	-1.45	-1.24
Tando Muhd Khan-Sanghar	-0.47	-1.62	-0.54	-2.20	0.29	1.07	0.96	0.76	-1.14	-0.89	-0.24	-0.03	-0.62	-0.59	-0.28
Tando Muhd Khan-Tharparkar	0.31	-0.76	0.71	-1.83	1.09	0.27	1.57	1.52	0.95	2.17	1.18	0.34	1.13	-2.92	0.05
Tando Muhd Khan-Umer Kot	0.47	-0.22	0.63	-1.59	-1.81	1.81	1.69	1.52	-0.05	0.26	1.19	0.23	0.25	-1.61	-1.01
Tando Muhd Khan-Ghotki	0.31	-1.73	0.27	-1.95	-0.29	1.14	1.18	0.88	-1.47	-1.15	0.30	0.38	-1.17	-0.22	-0.18
Tando Muhd Khan-Khairpur	-0.23	-1.41	-0.45	-2.20	-1.23	0.27	1.29	1.05	-0.52	-1.03	0.26	0.41	-0.73	-0.87	-0.09
Tando Muhd Khan-Nowshero Feroze	-0.70	-1.52	-1.07	-2.56	-1.52	1.14	1.12	0.88	-0.71	-0.83	0.43	0.37	-1.02	-0.07	-0.28
Tando Muhd Khan-Nawabshah	0.08	-1.19	-0.36	-1.95	-0.73	-0.53	0.67	0.99	-0.76	-1.41	-0.26	0.17	-0.99	-0.52	0.05
Tando Muhd Khan-Sukkur	-1.09	-2.27	-0.71	-2.56	-0.87	-0.27	0.34	0.12	-1.85	-1.34	-1.15	-0.09	-1.23	-1.37	-1.11

Table: Distance from Thatta to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Thatta-Karachi	-4.21	-4.44	-4.02	-3.66	-2.10	-3.01	-2.64	-2.98	-3.85	-2.91	-3.78	-3.07	-3.93	-4.14	-3.23
Thatta-Jaccobabad	0.00	-1.19	0.00	-1.59	0.94	-0.13	1.29	0.76	-1.81	-2.64	-0.82	0.87	-1.14	-0.99	0.37
Thatta-Kashmore	0.23	-1.30	0.00	-1.10	0.00	0.13	1.46	0.88	-1.05	-2.38	-0.10	0.78	-1.02	-1.62	0.65
Thatta-Larkana	-1.01	-2.60	-1.25	-3.18	-1.74	-1.34	0.11	-0.41	-2.42	-2.90	-1.36	0.73	-1.21	-2.21	0.69
Thatta-Shahdadkot	-0.08	-1.19	-0.09	-2.08	-1.60	-0.80	0.56	0.00	-1.28	-3.02	-0.62	0.84	-1.00	-1.79	0.00
Thatta-Shikarpur	-0.47	-2.06	-0.80	-2.32	-1.60	-1.14	-0.06	-0.47	-1.43	-2.89	-0.67	0.85	-0.79	-1.41	0.69
Thatta-Mir Pur Khas	-0.55	-0.87	-0.80	-1.71	0.29	0.67	0.06	-0.29	-1.43	-1.63	-0.17	0.09	-0.55	-2.36	-0.88
Thatta-Sanghar	-0.78	-2.06	-1.34	-2.44	0.36	0.20	0.06	-0.53	-1.71	-2.37	-0.84	0.42	-1.19	-1.50	0.09
Thatta-Tharparkar	0.00	-1.19	-0.09	-2.08	1.16	-0.60	0.67	0.23	0.38	0.69	0.58	0.78	0.56	-3.82	0.41
Thatta-Umer Kot	0.16	-0.65	-0.18	-1.83	-1.74	0.94	0.79	0.23	-0.62	-1.22	0.59	0.67	-0.31	-2.52	-0.65
Thatta-Ghotki	0.00	-2.17	-0.54	-2.20	-0.22	0.27	0.28	-0.41	-2.04	-2.63	-0.30	0.83	-1.73	-1.13	0.18
Thatta-Khairpur	-0.55	-1.84	-1.25	-2.44	-1.16	-0.60	0.39	-0.23	-1.09	-2.51	-0.34	0.85	-1.30	-1.77	0.28
Thatta-Nowshero Feroze	-1.01	-1.95	-1.88	-2.81	-1.45	0.27	0.22	-0.41	-1.28	-2.31	-0.17	0.81	-1.58	-0.97	0.09
Thatta-Nawabshah	-0.23	-1.62	-1.16	-2.20	-0.65	-1.40	-0.22	-0.29	-1.33	-2.89	-0.86	0.61	-1.56	-1.42	0.41
Thatta-Sukkur	-1.40	-2.71	-1.52	-2.81	-0.80	-1.14	-0.56	-1.17	-2.42	-2.82	-1.75	0.35	-1.80	-2.27	-0.74

Table: Distance from Karachi to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Karachi-Jaccobabad	4.21	3.25	4.02	2.08	3.05	2.88	3.93	3.74	2.04	0.27	2.96	3.95	2.78	3.15	3.59
Karachi-Kashmore	4.44	3.14	4.02	2.56	2.10	3.14	4.10	3.86	2.80	0.53	3.68	3.86	2.91	2.51	3.87
Karachi-Larkana	3.19	1.84	2.77	0.49	0.36	1.67	2.75	2.57	1.43	0.01	2.42	3.81	2.72	1.93	3.92
Karachi-Shahdadkot	4.13	3.25	3.93	1.59	0.51	2.21	3.20	2.98	2.57	-0.11	3.16	3.91	2.93	2.34	3.23
Karachi-Shikarpur	3.74	2.38	3.22	1.34	0.51	1.87	2.58	2.52	2.42	0.02	3.11	3.92	3.13	2.73	3.92
Karachi-Mir Pur Khas	3.66	3.57	3.22	1.95	2.39	3.68	2.70	2.69	2.42	1.28	3.61	3.16	3.38	1.78	2.35
Karachi-Sanghar	3.43	2.38	2.68	1.22	2.47	3.21	2.70	2.46	2.14	0.54	2.94	3.49	2.74	2.64	3.32
Karachi-Tharparkar	4.21	3.25	3.93	1.59	3.26	2.41	3.31	3.22	4.23	3.60	4.36	3.86	4.49	0.31	3.64
Karachi-Umer Kot	4.36	3.79	3.84	1.83	0.36	3.95	3.43	3.22	3.23	1.69	4.37	3.74	3.61	1.62	2.58
Karachi-Ghotki	4.21	2.27	3.48	1.47	1.89	3.28	2.92	2.57	1.81	0.28	3.48	3.90	2.19	3.01	3.41
Karachi-Khairpur	3.66	2.60	2.77	1.22	0.94	2.41	3.03	2.75	2.76	0.40	3.44	3.93	2.63	2.36	3.50
Karachi-Nowshero Feroze	3.19	2.49	2.14	0.85	0.65	3.28	2.87	2.57	2.57	0.60	3.61	3.89	2.34	3.16	3.32
Karachi-Nawabshah	3.97	2.82	2.86	1.47	1.45	1.60	2.42	2.69	2.52	0.02	2.92	3.69	2.37	2.71	3.64
Karachi-Sukkur	2.80	1.73	2.50	0.85	1.31	1.87	2.08	1.81	1.43	0.09	2.03	3.42	2.13	1.87	2.49

Table: Distance from Jaccobabad to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Jaccobabad-Kashmore	0.23	-0.11	0.00	0.49	-0.94	0.27	0.17	0.12	0.76	0.26	0.72	-0.09	0.13	-0.63	0.28
Jaccobabad-Larkana	-1.01	-1.41	-1.25	-1.59	-2.68	-1.20	-1.18	-1.17	-0.62	-0.26	-0.54	-0.14	-0.06	-1.22	0.32
Jaccobabad-Shahdadkot	-0.08	0.00	-0.09	-0.49	-2.54	-0.67	-0.73	-0.76	0.52	-0.37	0.20	-0.04	0.14	-0.80	-0.37
Jaccobabad-Shikarpur	-0.47	-0.87	-0.80	-0.73	-2.54	-1.00	-1.35	-1.23	0.38	-0.24	0.15	-0.03	0.35	-0.42	0.32
Jaccobabad-Mir Pur Khas	-0.55	0.32	-0.80	-0.12	-0.65	0.80	-1.24	-1.05	0.38	1.02	0.65	-0.79	0.60	-1.37	-1.24
Jaccobabad-Sanghar	-0.78	-0.87	-1.34	-0.85	-0.58	0.33	-1.24	-1.29	0.10	0.28	-0.02	-0.46	-0.04	-0.51	-0.28
Jaccobabad-Tharparkar	0.00	0.00	-0.09	-0.49	0.22	-0.47	-0.62	-0.53	2.19	3.34	1.40	-0.09	1.70	-2.84	0.05
Jaccobabad-Umer Kot	0.16	0.54	-0.18	-0.24	-2.68	1.07	-0.51	-0.53	1.19	1.42	1.41	-0.20	0.83	-1.53	-1.01
Jaccobabad-Ghotki	0.00	-0.97	-0.54	-0.61	-1.16	0.40	-1.01	-1.17	-0.24	0.01	0.52	-0.05	-0.59	-0.14	-0.18
Jaccobabad-Khairpur	-0.55	-0.65	-1.25	-0.85	-2.10	-0.47	-0.90	-0.99	0.71	0.13	0.48	-0.02	-0.15	-0.79	-0.09
Jaccobabad-Nowshero Feroze	-1.01	-0.76	-1.88	-1.22	-2.39	0.40	-1.07	-1.17	0.52	0.34	0.65	-0.06	-0.44	0.02	-0.28
Jaccobabad-Nawabshah	-0.23	-0.43	-1.16	-0.61	-1.60	-1.27	-1.52	-1.05	0.48	-0.25	-0.04	-0.26	-0.41	-0.44	0.05
Jaccobabad-Sukkur	-1.40	-1.52	-1.52	-1.22	-1.74	-1.00	-1.85	-1.93	-0.62	-0.18	-0.93	-0.52	-0.65	-1.28	-1.11

Table: Distance from Kashmore to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Kashmore-Larkana	-1.25	-1.30	-1.25	-2.08	-1.74	-1.47	-1.35	-1.29	-1.38	-0.52	-1.26	-0.05	-0.19	-0.59	0.05
Kashmore-Shahdadkot	-0.31	0.11	-0.09	-0.98	-1.60	-0.94	-0.90	-0.88	-0.24	-0.63	-0.52	0.05	0.02	-0.17	-0.65
Kashmore-Shikarpur	-0.70	-0.76	-0.80	-1.22	-1.60	-1.27	-1.52	-1.35	-0.38	-0.50	-0.56	0.06	0.22	0.21	0.05
Kashmore-Mir Pur Khas	-0.78	0.43	-0.80	-0.61	0.29	0.53	-1.40	-1.17	-0.38	0.76	-0.07	-0.70	0.47	-0.73	-1.52
Kashmore-Sanghar	-1.01	-0.76	-1.34	-1.34	0.36	0.07	-1.40	-1.40	-0.67	0.02	-0.74	-0.37	-0.17	0.13	-0.55
Kashmore-Tharparkar	-0.23	0.11	-0.09	-0.98	1.16	-0.74	-0.79	-0.64	1.43	3.08	0.68	0.00	1.58	-2.20	-0.23
Kashmore-Umer Kot	-0.08	0.65	-0.18	-0.73	-1.74	0.80	-0.67	-0.64	0.43	1.16	0.69	-0.12	0.70	-0.89	-1.29
Kashmore-Ghotki	-0.23	-0.87	-0.54	-1.10	-0.22	0.13	-1.18	-1.29	-1.00	-0.25	-0.20	0.04	-0.72	0.50	-0.46
Kashmore-Khairpur	-0.78	-0.54	-1.25	-1.34	-1.16	-0.74	-1.07	-1.11	-0.05	-0.13	-0.24	0.07	-0.28	-0.15	-0.37
Kashmore-Nowshero Feroze	-1.25	-0.65	-1.88	-1.71	-1.45	0.13	-1.24	-1.29	-0.24	0.08	-0.07	0.03	-0.57	0.65	-0.55
Kashmore-Nawabshah	-0.47	-0.32	-1.16	-1.10	-0.65	-1.54	-1.69	-1.17	-0.29	-0.51	-0.76	-0.17	-0.54	0.20	-0.23
Kashmore-Sukkur	-1.64	-1.41	-1.52	-1.71	-0.80	-1.27	-2.02	-2.05	-1.38	-0.44	-1.65	-0.44	-0.78	-0.65	-1.38

Table: Distance from Larkana to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Larkana-Shahdadkot	0.93	1.41	1.16	1.10	0.15	0.53	0.45	0.41	1.14	-0.11	0.74	0.10	0.21	0.42	-0.69
Larkana-Shikarpur	0.55	0.54	0.45	0.85	0.15	0.20	-0.17	-0.06	1.00	0.02	0.69	0.11	0.41	0.80	0.00
Larkana-Mir Pur Khas	0.47	1.73	0.45	1.47	2.03	2.01	-0.06	0.12	1.00	1.28	1.19	-0.65	0.66	-0.15	-1.57
Larkana-Sanghar	0.23	0.54	-0.09	0.73	2.10	1.54	-0.06	-0.12	0.71	0.54	0.51	-0.32	0.02	0.71	-0.60
Larkana-Tharparkar	1.01	1.41	1.16	1.10	2.90	0.74	0.56	0.64	2.80	3.60	1.94	0.05	1.77	-1.62	-0.28
Larkana-Umer Kot	1.17	1.95	1.07	1.34	0.00	2.27	0.67	0.64	1.81	1.68	1.95	-0.07	0.89	-0.31	-1.34
Larkana-Ghotki	1.01	0.43	0.71	0.98	1.52	1.60	0.17	0.00	0.38	0.27	1.06	0.09	-0.53	1.08	-0.51
Larkana-Khairpur	0.47	0.76	0.00	0.73	0.58	0.74	0.28	0.18	1.33	0.39	1.02	0.12	-0.09	0.44	-0.41
Larkana-Nowshero Feroze	0.00	0.65	-0.63	0.37	0.29	1.60	0.11	0.00	1.14	0.60	1.18	0.08	-0.38	1.24	-0.60
Larkana-Nawabshah	0.78	0.97	0.09	0.98	1.09	-0.07	-0.34	0.12	1.09	0.01	0.49	-0.12	-0.35	0.78	-0.28
Larkana-Sukkur	-0.39	-0.11	-0.27	0.37	0.94	0.20	-0.67	-0.76	0.00	0.08	-0.39	-0.39	-0.59	-0.06	-1.43

Table: Distance from Shadadkot to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Shahdadkot-Shikarpur	-0.39	-0.87	-0.71	-0.24	0.00	-0.33	-0.62	-0.47	-0.14	0.13	-0.05	0.01	0.21	0.39	0.69
Shahdadkot-Mir Pur Khas	-0.47	0.32	-0.71	0.37	1.89	1.47	-0.51	-0.29	-0.14	1.39	0.45	-0.75	0.45	-0.56	-0.88
Shahdadkot-Sanghar	-0.70	-0.87	-1.25	-0.37	1.96	1.00	-0.51	-0.53	-0.43	0.65	-0.22	-0.42	-0.19	0.30	0.09
Shahdadkot-Tharparkar	0.08	0.00	0.00	0.00	2.76	0.20	0.11	0.23	1.66	3.71	1.20	-0.05	1.56	-2.03	0.41
Shahdadkot-Umer Kot	0.23	0.54	-0.09	0.24	-0.15	1.74	0.22	0.23	0.67	1.80	1.21	-0.17	0.69	-0.72	-0.65
Shahdadkot-Ghotki	0.08	-0.97	-0.45	-0.12	1.38	1.07	-0.28	-0.41	-0.76	0.39	0.32	-0.01	-0.73	0.67	0.18
Shahdadkot-Khairpur	-0.47	-0.65	-1.16	-0.37	0.44	0.20	-0.17	-0.23	0.19	0.51	0.28	0.01	-0.29	0.02	0.28
Shahdadkot-Nowshero Feroze	-0.93	-0.76	-1.79	-0.73	0.15	1.07	-0.34	-0.41	0.00	0.71	0.45	-0.03	-0.58	0.82	0.09
Shahdadkot-Nawabshah	-0.16	-0.43	-1.07	-0.12	0.94	-0.60	-0.79	-0.29	-0.05	0.13	-0.24	-0.22	-0.56	0.37	0.41
Shahdadkot-Sukkur	-1.32	-1.52	-1.43	-0.73	0.80	-0.33	-1.12	-1.17	-1.14	0.19	-1.13	-0.49	-0.80	-0.48	-0.74

Table: Distance from Shikarpur to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Shikarpur-Mir Pur Khas	-0.08	1.19	0.00	0.61	1.89	1.81	0.11	0.18	0.00	1.26	0.50	-0.76	0.25	-0.95	-1.57
Shikarpur-Sanghar	-0.31	0.00	-0.54	-0.12	1.96	1.34	0.11	-0.06	-0.29	0.52	-0.18	-0.43	-0.39	-0.09	-0.60
Shikarpur-Tharparkar	0.47	0.87	0.71	0.24	2.76	0.53	0.73	0.70	1.81	3.58	1.25	-0.06	1.35	-2.42	-0.28
Shikarpur-Umer Kot	0.62	1.41	0.63	0.49	-0.15	2.07	0.84	0.70	0.81	1.66	1.26	-0.18	0.48	-1.11	-1.34
Shikarpur-Ghotki	0.47	-0.11	0.27	0.12	1.38	1.40	0.34	0.06	-0.62	0.26	0.37	-0.02	-0.94	0.28	-0.51
Shikarpur-Khairpur	-0.08	0.22	-0.45	-0.12	0.44	0.53	0.45	0.23	0.33	0.38	0.33	0.01	-0.50	-0.37	-0.41
Shikarpur-Nowshero Feroze	-0.55	0.11	-1.07	-0.49	0.15	1.40	0.28	0.06	0.14	0.58	0.49	-0.03	-0.79	0.44	-0.60
Shikarpur-Nawabshah	0.23	0.43	-0.36	0.12	0.94	-0.27	-0.17	0.18	0.10	-0.01	-0.20	-0.23	-0.76	-0.02	-0.28
Shikarpur-Sukkur	-0.93	-0.65	-0.71	-0.49	0.80	0.00	-0.51	-0.70	-1.00	0.06	-1.08	-0.50	-1.00	-0.86	-1.43

Table: Distance from Mir Pur Khas to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Mir Pur Khas-Sanghar	-0.23	-1.19	-0.54	-0.73	0.07	-0.47	0.00	-0.23	-0.29	-0.74	-0.67	0.33	-0.64	0.86	0.97
Mir Pur Khas-Tharparkar	0.55	-0.32	0.71	-0.37	0.87	-1.27	0.62	0.53	1.81	2.32	0.75	0.70	1.11	-1.47	1.29
Mir Pur Khas-Umer Kot	0.70	0.22	0.63	-0.12	-2.03	0.27	0.73	0.53	0.81	0.41	0.76	0.58	0.23	-0.16	0.23
Mir Pur Khas-Ghotki	0.55	-1.30	0.27	-0.49	-0.51	-0.40	0.22	-0.12	-0.62	-1.00	-0.13	0.74	-1.19	1.23	1.06
Mir Pur Khas-Khairpur	0.00	-0.97	-0.45	-0.73	-1.45	-1.27	0.34	0.06	0.33	-0.88	-0.17	0.76	-0.75	0.58	1.15
Mir Pur Khas-Nowshero Feroze	-0.47	-1.08	-1.07	-1.10	-1.74	-0.40	0.17	-0.12	0.14	-0.68	0.00	0.72	-1.04	1.38	0.97
Mir Pur Khas-Nawabshah	0.31	-0.76	-0.36	-0.49	-0.94	-2.07	-0.28	0.00	0.10	-1.26	-0.69	0.53	-1.01	0.93	1.29
Mir Pur Khas-Sukkur	-0.86	-1.84	-0.71	-1.10	-1.09	-1.81	-0.62	-0.88	-1.00	-1.19	-1.58	0.26	-1.25	0.08	0.14

Table: Distance from Sanghar to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Sanghar-Tharparkar	0.78	0.87	1.25	0.37	0.80	-0.80	0.62	0.76	2.09	3.06	1.42	0.37	1.75	-2.33	0.32
Sanghar-Umer Kot	0.93	1.41	1.16	0.61	-2.10	0.74	0.73	0.76	1.09	1.15	1.43	0.25	0.87	-1.02	-0.74
Sanghar-Ghotki	0.78	-0.11	0.80	0.24	-0.58	0.07	0.22	0.12	-0.33	-0.26	0.55	0.41	-0.55	0.37	0.09
Sanghar-Khairpur	0.23	0.22	0.09	0.00	-1.52	-0.80	0.34	0.29	0.62	-0.14	0.51	0.44	-0.11	-0.28	0.18
Sanghar-Nowshero Feroze	-0.23	0.11	-0.54	-0.37	-1.81	0.07	0.17	0.12	0.43	0.06	0.67	0.40	-0.40	0.53	0.00
Sanghar-Nawabshah	0.55	0.43	0.18	0.24	-1.02	-1.60	-0.28	0.23	0.38	-0.52	-0.02	0.20	-0.37	0.07	0.32
Sanghar-Sukkur	-0.62	-0.65	-0.18	-0.37	-1.16	-1.34	-0.62	-0.64	-0.71	-0.46	-0.91	-0.07	-0.61	-0.77	-0.83

Table: Distance from Tharparkar to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Tharparkar-Umer Kot	0.16	0.54	-0.09	0.24	-2.90	1.54	0.11	0.00	-1.00	-1.91	0.01	-0.12	-0.87	1.31	-1.06
Tharparkar-Ghotki	0.00	-0.97	-0.45	-0.12	-1.38	0.87	-0.39	-0.64	-2.42	-3.32	-0.88	0.04	-2.29	2.70	-0.23
Tharparkar-Khairpur	-0.55	-0.65	-1.16	-0.37	-2.32	0.00	-0.28	-0.47	-1.47	-3.20	-0.92	0.07	-1.86	2.05	-0.14
Tharparkar-Nowshero Feroze	-1.01	-0.76	-1.79	-0.73	-2.61	0.87	-0.45	-0.64	-1.66	-3.00	-0.75	0.03	-2.15	2.85	-0.32
Tharparkar-Nawabshah	-0.23	-0.43	-1.07	-0.12	-1.81	-0.80	-0.90	-0.53	-1.71	-3.58	-1.44	-0.17	-2.12	2.40	0.00
Tharparkar-Sukkur	-1.40	-1.52	-1.43	-0.73	-1.96	-0.53	-1.24	-1.40	-2.80	-3.51	-2.33	-0.44	-2.36	1.55	-1.15

Table: Distance from Umer Kot to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Umer Kot-Ghotki	-0.16	-1.52	-0.36	-0.37	1.52	-0.67	-0.51	-0.64	-1.43	-1.41	-0.89	0.16	-1.42	1.39	0.83
Umer Kot-Khairpur	-0.70	-1.19	-1.07	-0.61	0.58	-1.54	-0.39	-0.47	-0.48	-1.29	-0.93	0.18	-0.98	0.74	0.92
Umer Kot-Nowshero Feroze	-1.17	-1.30	-1.70	-0.98	0.29	-0.67	-0.56	-0.64	-0.67	-1.09	-0.76	0.14	-1.27	1.55	0.74
Umer Kot-Nawabshah	-0.39	-0.97	-0.98	-0.37	1.09	-2.34	-1.01	-0.53	-0.71	-1.67	-1.45	-0.06	-1.24	1.09	1.06
Umer Kot-Sukkur	-1.56	-2.06	-1.34	-0.98	0.94	-2.07	-1.35	-1.40	-1.81	-1.60	-2.34	-0.32	-1.48	0.25	-0.09

Table: Distance from Ghotki to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Ghotki-Khairpur	-0.55	0.32	-0.71	-0.24	-0.94	-0.87	0.11	0.18	0.95	0.12	-0.04	0.03	0.44	-0.65	0.09
Ghotki-Nowshero Feroze	-1.01	0.22	-1.34	-0.61	-1.23	0.00	-0.06	0.00	0.76	0.32	0.13	-0.01	0.15	0.15	-0.09
Ghotki-Nawabshah	-0.23	0.54	-0.63	0.00	-0.44	-1.67	-0.51	0.12	0.71	-0.26	-0.56	-0.21	0.18	-0.30	0.23
Ghotki-Sukkur	-1.40	-0.54	-0.98	-0.61	-0.58	-1.40	-0.84	-0.76	-0.38	-0.19	-1.45	-0.48	-0.06	-1.15	-0.92

Table: Distance from Khairpur to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Khairpur-Nowshero Feroze	-0.47	-0.11	-0.63	-0.37	-0.29	0.87	-0.17	-0.18	-0.19	0.20	0.16	-0.04	-0.29	0.80	-0.18
Khairpur-Nawabshah	0.31	0.22	0.09	0.24	0.51	-0.80	-0.62	-0.06	-0.24	-0.38	-0.53	-0.24	-0.26	0.35	0.14
Khairpur-Sukkur	-0.86	-0.87	-0.27	-0.37	0.36	-0.53	-0.96	-0.94	-1.33	-0.31	-1.41	-0.50	-0.50	-0.50	-1.01

Table: Distance from Nowshero Feroze to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Nowshero Feroze-Nawabshah	0.78	0.32	0.71	0.61	0.80	-1.67	-0.45	0.12	-0.05	-0.58	-0.69	-0.20	0.03	-0.45	0.32
Nowshero Feroze-Sukkur	-0.39	-0.76	0.36	0.00	0.65	-1.40	-0.79	-0.76	-1.14	-0.51	-1.58	-0.46	-0.21	-1.30	-0.83

Interim Distance between Districts of Punjab

Table: Distance from Islamabad to other Districts

Districts	Female-Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
ISB-Bahawalnag	2.63	3.39	2.91	3.19	0.00	3.79	2.74	2.76	2.13	1.03	3.28	3.40	1.48	2.49	0.74
ISB-Bahawalpur	2.91	3.76	3.33	4.08	2.15	2.82	3.11	2.76	2.20	1.82	2.67	3.60	1.70	3.05	2.33
ISB-RYK	3.18	3.85	3.59	3.88	2.33	3.40	3.47	3.17	2.40	1.72	2.69	3.76	1.80	3.36	2.52
ISB-DGK	3.74	3.58	3.93	1.99	2.15	3.21	4.20	4.03	3.73	2.49	3.07	3.75	3.65	1.04	1.72
ISB-LAYYAH	2.63	2.48	2.65	0.60	-0.90	0.78	3.53	3.51	1.73	2.60	3.35	3.77	1.73	1.75	2.89
ISB-MUZAFFAR	3.18	3.58	3.42	2.99	0.72	2.14	3.41	3.28	2.66	1.80	2.93	3.72	2.85	3.79	3.13
ISB-RJP	3.88	4.58	4.45	3.28	-0.36	1.56	4.32	3.92	3.06	4.41	3.46	3.80	4.04	2.85	2.64
ISB-CHINIOT	2.77	2.93	3.33	2.59	0.00	2.04	2.07	1.67	2.66	0.45	2.34	3.57	0.82	1.95	3.01
ISB-FSD	1.11	1.74	1.45	1.69	1.43	1.95	1.64	1.38	0.47	-0.05	1.22	3.01	0.02	1.59	2.15
ISB-JHANG	2.98	2.93	3.08	2.69	0.54	3.40	2.68	2.76	3.00	1.64	2.90	3.71	1.49	1.83	3.07
ISB-TTS	1.45	2.02	1.62	1.29	0.00	1.65	2.01	1.61	1.66	-0.16	2.32	3.61	0.35	1.43	1.35
ISB-GJW	0.83	2.02	1.28	1.89	0.18	0.78	1.40	1.27	0.20	-0.13	0.70	1.49	-0.03	1.29	3.01
ISB-GUJRAT	0.97	1.65	1.54	1.09	-1.07	0.29	1.04	0.81	0.67	-0.04	0.87	1.99	0.00	0.94	1.72
ISB-HAFIZABAD	1.94	2.66	2.31	1.79	-0.54	0.88	2.01	1.78	1.33	0.10	1.25	3.08	0.31	1.36	3.19
ISB-MANDI	1.38	1.83	1.71	1.19	-0.54	0.39	2.80	2.42	1.13	-0.27	2.58	2.87	-0.08	1.46	2.89
ISB-NARROWAL	1.52	2.20	2.14	0.60	-0.36	0.88	2.80	2.25	1.27	-0.22	3.29	3.11	0.29	1.60	2.76
ISB-SIALKOT	0.83	2.02	1.37	0.90	-0.72	0.29	1.52	2.07	0.33	0.04	1.59	1.62	-0.04	0.97	1.90
ISB-KASUR	2.56	3.30	2.99	2.09	1.07	1.75	1.77	1.55	0.80	0.04	2.72	3.22	0.16	3.44	2.33
ISB-LHR	0.42	1.19	0.60	1.39	0.18	0.78	0.49	0.29	0.07	0.06	-0.40	0.51	-0.06	2.24	-1.23
ISB-NANKANA	1.80	2.38	2.22	1.89	-1.61	1.65	2.25	1.96	0.87	0.20	2.11	3.19	0.59	2.10	2.76
ISB-SHIKUPURA	1.38	2.48	1.97	2.09	1.07	1.26	1.34	1.09	0.33	-0.11	1.11	2.09	0.26	1.90	1.97
ISB-KHANEWAL	2.56	2.66	2.56	1.89	0.54	1.85	2.98	2.82	2.60	0.66	2.34	3.57	1.40	2.11	3.13
ISB-LODHRAN	2.98	3.12	3.16	2.89	-0.36	2.24	3.29	3.34	2.53	1.33	3.15	3.69	1.76	2.48	2.33
ISB-MULTAN	2.21	2.84	2.31	2.09	-0.90	2.24	2.31	2.36	1.53	0.60	1.50	3.21	1.40	3.23	2.52
ISB-VEHARI	2.77	3.48	2.91	2.59	-0.90	1.36	2.07	2.02	2.60	0.77	3.08	3.68	1.11	2.45	2.64
ISB-ATTOCK	1.59	1.47	1.54	1.00	-1.25	0.49	1.58	1.32	1.46	-0.03	1.35	1.98	0.52	0.53	1.17
ISB-CHKWAL	0.90	0.83	0.94	-0.10	-0.18	2.63	1.28	1.04	0.87	0.01	2.04	2.99	0.32	0.03	1.29
ISB-JEH;UM	0.62	0.83	1.28	0.20	-0.90	0.97	0.91	1.04	0.87	-0.18	1.99	2.34	0.84	0.32	0.92
ISB-RWP	0.48	0.55	0.34	0.90	-0.54	0.78	0.67	0.46	0.80	0.12	0.66	0.82	0.35	0.05	0.43
ISB-OKARA	2.70	3.03	2.91	0.70	-0.36	2.24	2.98	2.99	1.53	0.28	2.32	3.49	0.79	2.81	2.64
ISB-PAKPATTAN	2.84	3.30	2.99	1.69	1.43	2.53	3.11	3.11	2.80	0.37	3.17	3.63	1.79	3.24	2.58
ISB-SAHIWAL	2.35	2.84	2.56	1.69	-1.07	2.82	2.68	2.59	1.86	0.72	2.46	3.56	0.59	2.23	2.58
ISB-BHAKKAR	3.18	3.03	2.82	2.29	-1.07	2.04	2.31	2.30	3.53	0.89	3.39	3.76	1.94	1.98	3.01
ISB-KHUSHAB	2.63	2.20	2.48	1.59	0.54	1.26	2.80	2.71	1.66	0.80	2.84	3.62	0.74	0.85	1.41
ISB-MIALWALI	2.56	2.29	2.48	1.79	0.54	0.39	2.01	2.76	1.80	1.15	3.06	3.62	1.07	2.24	1.72
ISB-SARGODHA	2.21	2.02	2.14	1.69	0.72	0.88	2.07	1.90	1.20	0.01	2.31	3.51	0.63	1.55	2.95

Table: Distance from Bahawalnagar to other Districts

Districts	Female-Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bhawalnagar-Bahawalpur	0.28	0.37	0.43	0.90	2.15	-0.97	0.37	0.00	0.07	0.79	-0.61	0.20	0.22	0.57	1.60
Bhawalnagar-RYK	0.55	0.46	0.68	0.70	2.33	-0.39	0.73	0.40	0.27	0.69	-0.59	0.36	0.32	0.87	1.78
Bhawalnagar-DGK	1.11	0.18	1.03	-1.19	2.15	-0.58	1.46	1.27	1.60	1.46	-0.21	0.35	2.16	-1.45	0.98
Bhawalnagar-LAYYAH	0.00	-0.92	-0.26	-2.59	-0.90	-3.02	0.79	0.75	-0.40	1.57	0.07	0.37	0.25	-0.74	2.15
Bhawalnagar-MUZAFFAR	0.55	0.18	0.51	-0.20	0.72	-1.65	0.67	0.52	0.53	0.77	-0.35	0.32	1.36	1.31	2.39
Bhawalnagar-RJP	1.25	1.19	1.54	0.10	-0.36	-2.24	1.58	1.15	0.93	3.38	0.18	0.40	2.56	0.36	1.90
Bhawalnagar-CHINIOT	0.14	-0.46	0.43	-0.60	0.00	-1.75	-0.67	-1.09	0.53	-0.58	-0.94	0.17	-0.67	-0.53	2.27
Bhawalnagar-FSD	-1.52	-1.65	-1.45	-1.49	1.43	-1.85	-1.10	-1.38	-1.66	-1.08	-2.06	-0.39	-1.46	-0.90	1.41
Bhawalnagar-JHANG	0.35	-0.46	0.17	-0.50	0.54	-0.39	-0.06	0.00	0.87	0.61	-0.38	0.31	0.01	-0.66	2.33
Bhawalnagar-TTS	-1.18	-1.38	-1.28	-1.89	0.00	-2.14	-0.73	-1.15	-0.47	-1.19	-0.96	0.21	-1.13	-1.06	0.61
Bhawalnagar-GJW	-1.80	-1.38	-1.62	-1.29	0.18	-3.02	-1.34	-1.50	-1.93	-1.16	-2.58	-1.91	-1.51	-1.20	2.27
Bhawalnagar-GUJRAT	-1.66	-1.74	-1.37	-2.09	-1.07	-3.50	-1.71	-1.96	-1.46	-1.07	-2.41	-1.41	-1.48	-1.55	0.98
Bhawalnagar-HAFIZABAD	-0.69	-0.73	-0.60	-1.39	-0.54	-2.92	-0.73	-0.98	-0.80	-0.93	-2.04	-0.32	-1.18	-1.12	2.46
Bhawalnagar-MANDI	-1.25	-1.56	-1.20	-1.99	-0.54	-3.40	0.06	-0.35	-1.00	-1.30	-0.70	-0.53	-1.56	-1.03	2.15
Bhawalnagar-NARROWAL	-1.11	-1.19	-0.77	-2.59	-0.36	-2.92	0.06	-0.52	-0.87	-1.26	0.00	-0.29	-1.20	-0.89	2.03
Bhawalnagar-SIALKOT	-1.80	-1.38	-1.54	-2.29	-0.72	-3.50	-1.22	-0.69	-1.80	-0.99	-1.70	-1.78	-1.52	-1.51	1.17
Bhawalnagar-KASUR	-0.07	-0.09	0.09	-1.09	1.07	-2.04	-0.97	-1.21	-1.33	-0.99	-0.57	-0.18	-1.32	0.95	1.60
Bhawalnagar-LHR	-2.21	-2.20	-2.31	-1.79	0.18	-3.02	-2.25	-2.48	-2.06	-0.97	-3.69	-2.89	-1.54	-0.25	-1.97
Bhawalnagar-NANKANA	-0.83	-1.01	-0.68	-1.29	-1.61	-2.14	-0.49	-0.81	-1.27	-0.83	-1.17	-0.21	-0.89	-0.38	2.03
Bhawalnagar-SHIKUPURA	-1.25	-0.92	-0.94	-1.09	1.07	-2.53	-1.40	-1.67	-1.80	-1.14	-2.17	-1.31	-1.22	-0.59	1.23
Bhawalnagar-KHANEWAL	-0.07	-0.73	-0.34	-1.29	0.54	-1.95	0.24	0.06	0.47	-0.37	-0.94	0.17	-0.08	-0.37	2.39
Bhawalnagar-LODHRAN	0.35	-0.28	0.26	-0.30	-0.36	-1.56	0.55	0.58	0.40	0.30	-0.13	0.29	0.28	0.00	1.60
Bhawalnagar-MULTAN	-0.42	-0.55	-0.60	-1.09	-0.90	-1.56	-0.43	-0.40	-0.60	-0.43	-1.79	-0.19	-0.08	0.74	1.78
Bhawalnagar-VEHARI	0.14	0.09	0.00	-0.60	-0.90	-2.43	-0.67	-0.75	0.47	-0.26	-0.20	0.28	-0.38	-0.03	1.90
Bhawalnagar-ATTOCK	-1.04	-1.93	-1.37	-2.19	-1.25	-3.31	-1.16	-1.44	-0.67	-1.06	-1.94	-1.42	-0.96	-1.95	0.43
Bhawalnagar-CHKWAL	-1.73	-2.57	-1.97	-3.28	-0.18	-1.17	-1.46	-1.73	-1.27	-1.02	-1.24	-0.41	-1.16	-2.45	0.55
Bhawalnagar-JEH;UM	-2.01	-2.57	-1.62	-2.99	-0.90	-2.82	-1.83	-1.73	-1.27	-1.21	-1.29	-1.06	-0.64	-2.17	0.18
Bhawalnagar-RWP	-2.15	-2.84	-2.56	-2.29	-0.54	-3.02	-2.07	-2.30	-1.33	-0.91	-2.63	-2.58	-1.13	-2.44	-0.31
Bhawalnagar-OKARA	0.07	-0.37	0.00	-2.49	-0.36	-1.56	0.24	0.23	-0.60	-0.75	-0.97	0.09	-0.69	0.32	1.90
Bhawalnagar-PAKPATTAN	0.21	-0.09	0.09	-1.49	1.43	-1.26	0.37	0.35	0.67	-0.66	-0.12	0.23	0.31	0.76	1.84
Bhawalnagar-SAHIWAL	-0.28	-0.55	-0.34	-1.49	-1.07	-0.97	-0.06	-0.17	-0.27	-0.31	-0.82	0.16	-0.89	-0.25	1.84
Bhawalnagar-BHAKKAR	0.55	-0.37	-0.09	-0.90	-1.07	-1.75	-0.43	-0.46	1.40	-0.14	0.11	0.36	0.46	-0.50	2.27
Bhawalnagar-KHUSHAB	0.00	-1.19	-0.43	-1.59	0.54	-2.53	0.06	-0.06	-0.47	-0.24	-0.44	0.22	-0.74	-1.64	0.68
Bhawalnagar-MIALWALI	-0.07	-1.10	-0.43	-1.39	0.54	-3.40	-0.73	0.00	-0.33	0.12	-0.23	0.22	-0.42	-0.25	0.98
Bhawalnagar-SARGODHA	-0.42	-1.38	-0.77	-1.49	0.72	-2.92	-0.67	-0.86	-0.93	-1.02	-0.97	0.11	-0.86	-0.94	2.21

Table: Distance from BahawalPur to other Districts

Districts	Female-Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bhawalpur-RYK	0.28	0.09	0.26	-0.20	0.18	0.58	0.37	0.40	0.20	-0.10	0.02	0.16	0.10	0.30	0.18
Bhawalpur-DGK	0.83	-0.18	0.60	-2.09	0.00	0.39	1.10	1.27	1.53	0.67	0.40	0.15	1.94	-2.02	-0.61
Bhawalpur-LAYYAH	-0.28	-1.28	-0.68	-3.48	-3.05	-2.04	0.43	0.75	-0.47	0.78	0.68	0.17	0.03	-1.31	0.55
Bhawalpur-MUZAFFAR	0.28	-0.18	0.09	-1.09	-1.43	-0.68	0.30	0.52	0.47	-0.02	0.26	0.12	1.14	0.74	0.80
Bhawalpur-RJP	0.97	0.83	1.11	-0.80	-2.51	-1.26	1.22	1.15	0.87	2.59	0.79	0.20	2.34	-0.20	0.31
Bhawalpur-CHINIOT	-0.14	-0.83	0.00	-1.49	-2.15	-0.78	-1.04	-1.09	0.47	-1.37	-0.33	-0.02	-0.89	-1.10	0.68
Bhawalpur-FSD	-1.80	-2.02	-1.88	-2.39	-0.72	-0.88	-1.46	-1.38	-1.73	-1.87	-1.45	-0.58	-1.68	-1.47	-0.18
Bhawalpur-JHANG	0.07	-0.83	-0.26	-1.39	-1.61	0.58	-0.43	0.00	0.80	-0.18	0.23	0.11	-0.21	-1.23	0.74
Bhawalpur-TTS	-1.45	-1.74	-1.71	-2.79	-2.15	-1.17	-1.10	-1.15	-0.53	-1.98	-0.35	0.02	-1.35	-1.62	-0.98
Bhawalpur-GJW	-2.08	-1.74	-2.05	-2.19	-1.97	-2.04	-1.71	-1.50	-2.00	-1.95	-1.97	-2.10	-1.73	-1.77	0.68
Bhawalpur-GUJRAT	-1.94	-2.11	-1.80	-2.99	-3.22	-2.53	-2.07	-1.96	-1.53	-1.86	-1.80	-1.61	-1.70	-2.12	-0.61
Bhawalpur-HAFIZABAD	-0.97	-1.10	-1.03	-2.29	-2.69	-1.95	-1.10	-0.98	-0.87	-1.72	-1.43	-0.51	-1.40	-1.69	0.86
Bhawalpur-MANDI	-1.52	-1.93	-1.62	-2.89	-2.69	-2.43	-0.30	-0.35	-1.07	-2.09	-0.09	-0.72	-1.78	-1.60	0.55
Bhawalpur-NARROWAL	-1.38	-1.56	-1.20	-3.48	-2.51	-1.95	-0.30	-0.52	-0.93	-2.04	0.61	-0.49	-1.42	-1.46	0.43
Bhawalpur-SIALKOT	-2.08	-1.74	-1.97	-3.19	-2.87	-2.53	-1.58	-0.69	-1.86	-1.78	-1.09	-1.98	-1.74	-2.08	-0.43
Bhawalpur-KASUR	-0.35	-0.46	-0.34	-1.99	-1.07	-1.07	-1.34	-1.21	-1.40	-1.78	0.04	-0.38	-1.54	0.39	0.00
Bhawalpur-LHR	-2.49	-2.57	-2.74	-2.69	-1.97	-2.04	-2.62	-2.48	-2.13	-1.76	-3.08	-3.08	-1.76	-0.82	-3.56
Bhawalpur-NANKANA	-1.11	-1.38	-1.11	-2.19	-3.76	-1.17	-0.85	-0.81	-1.33	-1.62	-0.56	-0.41	-1.11	-0.95	0.43
Bhawalpur-SHIKUPURA	-1.52	-1.28	-1.37	-1.99	-1.07	-1.56	-1.77	-1.67	-1.86	-1.93	-1.56	-1.50	-1.44	-1.15	-0.37
Bhawalpur-KHANEWAL	-0.35	-1.10	-0.77	-2.19	-1.61	-0.97	-0.12	0.06	0.40	-1.16	-0.33	-0.02	-0.30	-0.94	0.80
Bhawalpur-LODHRAN	0.07	-0.64	-0.17	-1.19	-2.51	-0.58	0.18	0.58	0.33	-0.49	0.48	0.09	0.06	-0.57	0.00
Bhawalpur-MULTAN	-0.69	-0.92	-1.03	-1.99	-3.05	-0.58	-0.79	-0.40	-0.67	-1.22	-1.18	-0.39	-0.30	0.17	0.18
Bhawalpur-VEHARI	-0.14	-0.28	-0.43	-1.49	-3.05	-1.46	-1.04	-0.75	0.40	-1.05	0.41	0.08	-0.60	-0.60	0.31
Bhawalpur-ATTOCK	-1.31	-2.29	-1.80	-3.09	-3.40	-2.33	-1.52	-1.44	-0.73	-1.85	-1.33	-1.62	-1.18	-2.52	-1.17
Bhawalpur-CHKWAL	-2.01	-2.93	-2.39	-4.18	-2.33	-0.19	-1.83	-1.73	-1.33	-1.81	-0.63	-0.60	-1.38	-3.02	-1.04
Bhawalpur-JEH;UM	-2.28	-2.93	-2.05	-3.88	-3.05	-1.85	-2.19	-1.73	-1.33	-2.00	-0.68	-1.26	-0.86	-2.74	-1.41
Bhawalpur-RWP	-2.42	-3.21	-2.99	-3.19	-2.69	-2.04	-2.44	-2.30	-1.40	-1.70	-2.02	-2.78	-1.35	-3.01	-1.90
Bhawalpur-OKARA	-0.21	-0.73	-0.43	-3.38	-2.51	-0.58	-0.12	0.23	-0.67	-1.54	-0.36	-0.11	-0.91	-0.25	0.31
Bhawalpur-PAKPATTAN	-0.07	-0.46	-0.34	-2.39	-0.72	-0.29	0.00	0.35	0.60	-1.45	0.49	0.03	0.09	0.19	0.25
Bhawalpur-SAHIWAL	-0.55	-0.92	-0.77	-2.39	-3.22	0.00	-0.43	-0.17	-0.33	-1.10	-0.21	-0.04	-1.11	-0.82	0.25
Bhawalpur-BHAKKAR	0.28	-0.73	-0.51	-1.79	-3.22	-0.78	-0.79	-0.46	1.33	-0.93	0.72	0.16	0.24	-1.07	0.68
Bhawalpur-KHUSHAB	-0.28	-1.56	-0.85	-2.49	-1.61	-1.56	-0.30	-0.06	-0.53	-1.03	0.17	0.03	-0.96	-2.20	-0.92
Bhawalpur-MIALWALI	-0.35	-1.47	-0.85	-2.29	-1.61	-2.43	-1.10	0.00	-0.40	-0.67	0.38	0.02	-0.64	-0.82	-0.61
Bhawalpur-SARGODHA	-0.69	-1.74	-1.20	-2.39	-1.43	-1.95	-1.04	-0.86	-1.00	-1.81	-0.36	-0.09	-1.08	-1.51	0.61

Table: Distance from Rahim Yar Khan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
RYK-DGK	0.55	-0.28	0.34	-1.89	-0.18	-0.19	0.73	0.86	1.33	0.77	0.39	-0.01	1.85	-2.32	-0.80
RYK-LAYYAH	-0.55	-1.38	-0.94	-3.28	-3.22	-2.63	0.06	0.35	-0.67	0.89	0.66	0.01	-0.07	-1.61	0.37
RYK-MUZAFFAR	0.00	-0.28	-0.17	-0.90	-1.61	-1.26	-0.06	0.12	0.27	0.08	0.24	-0.04	1.05	0.43	0.61
RYK-RJP	0.69	0.73	0.85	-0.60	-2.69	-1.85	0.85	0.75	0.67	2.69	0.77	0.04	2.24	-0.51	0.12
RYK-CHINIOT	-0.42	-0.92	-0.26	-1.29	-2.33	-1.36	-1.40	-1.50	0.27	-1.26	-0.35	-0.19	-0.98	-1.40	0.49
RYK-FSD	-2.08	-2.11	-2.14	-2.19	-0.90	-1.46	-1.83	-1.78	-1.93	-1.77	-1.46	-0.75	-1.77	-1.77	-0.37
RYK-JHANG	-0.21	-0.92	-0.51	-1.19	-1.79	0.00	-0.79	-0.40	0.60	-0.08	0.21	-0.06	-0.31	-1.53	0.55
RYK-TTS	-1.73	-1.83	-1.97	-2.59	-2.33	-1.75	-1.46	-1.55	-0.73	-1.87	-0.37	-0.15	-1.45	-1.93	-1.17
RYK-GJW	-2.35	-1.83	-2.31	-1.99	-2.15	-2.63	-2.07	-1.90	-2.20	-1.85	-1.99	-2.27	-1.83	-2.07	0.49
RYK-GUJRAT	-2.21	-2.20	-2.05	-2.79	-3.40	-3.11	-2.44	-2.36	-1.73	-1.76	-1.82	-1.77	-1.79	-2.42	-0.80
RYK-HAFIZABAD	-1.25	-1.19	-1.28	-2.09	-2.87	-2.53	-1.46	-1.38	-1.07	-1.62	-1.44	-0.68	-1.49	-1.99	0.68
RYK-MANDI	-1.80	-2.02	-1.88	-2.69	-2.87	-3.02	-0.67	-0.75	-1.27	-1.99	-0.10	-0.89	-1.87	-1.90	0.37
RYK-NARROWAL	-1.66	-1.65	-1.45	-3.28	-2.69	-2.53	-0.67	-0.92	-1.13	-1.94	0.60	-0.65	-1.51	-1.76	0.25
RYK-SIALKOT	-2.35	-1.83	-2.22	-2.99	-3.05	-3.11	-1.95	-1.09	-2.06	-1.68	-1.10	-2.14	-1.84	-2.39	-0.61
RYK-KASUR	-0.62	-0.55	-0.60	-1.79	-1.25	-1.65	-1.71	-1.61	-1.60	-1.67	0.03	-0.54	-1.64	0.08	-0.18
RYK-LHR	-2.77	-2.66	-2.99	-2.49	-2.15	-2.63	-2.98	-2.88	-2.33	-1.66	-3.09	-3.25	-1.86	-1.12	-3.75
RYK-NANKANA	-1.38	-1.47	-1.37	-1.99	-3.94	-1.75	-1.22	-1.21	-1.53	-1.52	-0.57	-0.57	-1.21	-1.25	0.25
RYK-SHIKUPURA	-1.80	-1.38	-1.62	-1.79	-1.25	-2.14	-2.13	-2.07	-2.06	-1.83	-1.58	-1.67	-1.54	-1.46	-0.55
RYK-KHANEWAL	-0.62	-1.19	-1.03	-1.99	-1.79	-1.56	-0.49	-0.35	0.20	-1.05	-0.35	-0.19	-0.40	-1.24	0.61
RYK-LODHRAN	-0.21	-0.73	-0.43	-1.00	-2.69	-1.17	-0.18	0.17	0.13	-0.38	0.46	-0.07	-0.04	-0.87	-0.18
RYK-MULTAN	-0.97	-1.01	-1.28	-1.79	-3.22	-1.17	-1.16	-0.81	-0.87	-1.11	-1.19	-0.55	-0.40	-0.13	0.00
RYK-VEHARI	-0.42	-0.37	-0.68	-1.29	-3.22	-2.04	-1.40	-1.15	0.20	-0.95	0.39	-0.08	-0.69	-0.90	0.12
RYK-ATTOCK	-1.59	-2.38	-2.05	-2.89	-3.58	-2.92	-1.89	-1.84	-0.93	-1.75	-1.34	-1.78	-1.28	-2.82	-1.35
RYK-CHKWAL	-2.28	-3.03	-2.65	-3.98	-2.51	-0.78	-2.19	-2.13	-1.53	-1.71	-0.64	-0.77	-1.48	-3.33	-1.23
RYK-JEH;UM	-2.56	-3.03	-2.31	-3.68	-3.22	-2.43	-2.56	-2.13	-1.53	-1.90	-0.70	-1.42	-0.96	-3.04	-1.60
RYK-RWP	-2.70	-3.30	-3.25	-2.99	-2.87	-2.63	-2.80	-2.71	-1.60	-1.60	-2.03	-2.94	-1.45	-3.31	-2.09
RYK-OKARA	-0.48	-0.83	-0.68	-3.19	-2.69	-1.17	-0.49	-0.17	-0.87	-1.44	-0.37	-0.27	-1.01	-0.55	0.12
RYK-PAKPATTAN	-0.35	-0.55	-0.60	-2.19	-0.90	-0.88	-0.37	-0.06	0.40	-1.35	0.48	-0.14	-0.01	-0.11	0.06
RYK-SAHIWAL	-0.83	-1.01	-1.03	-2.19	-3.40	-0.58	-0.79	-0.58	-0.53	-1.00	-0.22	-0.20	-1.21	-1.13	0.06
RYK-BHAKKAR	0.00	-0.83	-0.77	-1.59	-3.40	-1.36	-1.16	-0.86	1.13	-0.83	0.70	0.00	0.14	-1.37	0.49
RYK-KHUSHAB	-0.55	-1.65	-1.11	-2.29	-1.79	-2.14	-0.67	-0.46	-0.73	-0.92	0.16	-0.14	-1.06	-2.51	-1.11
RYK-MIALWALI	-0.62	-1.56	-1.11	-2.09	-1.79	-3.02	-1.46	-0.40	-0.60	-0.57	0.37	-0.15	-0.73	-1.12	-0.80
RYK-SARGODHA	-0.97	-1.83	-1.45	-2.19	-1.61	-2.53	-1.40	-1.27	-1.20	-1.70	-0.37	-0.25	-1.17	-1.81	0.43

Table: Distance from Dera Ghazi Khan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
DGK-LAYYAH	-1.11	-1.10	-1.28	-1.39	-3.05	-2.43	-0.67	-0.52	-2.00	0.12	0.28	0.02	-1.91	0.71	1.17
DGK-MUZAFFAR	-0.55	0.00	-0.51	1.00	-1.43	-1.07	-0.79	-0.75	-1.07	-0.68	-0.15	-0.03	-0.80	2.76	1.41
DGK-RJP	0.14	1.01	0.51	1.29	-2.51	-1.65	0.12	-0.12	-0.67	1.92	0.39	0.05	0.39	1.81	0.92
DGK-CHINIOT	-0.97	-0.64	-0.60	0.60	-2.15	-1.17	-2.13	-2.36	-1.07	-2.03	-0.73	-0.17	-2.83	0.92	1.29
DGK-FSD	-2.63	-1.83	-2.48	-0.30	-0.72	-1.26	-2.56	-2.65	-3.26	-2.54	-1.85	-0.73	-3.62	0.55	0.43
DGK-JHANG	-0.76	-0.64	-0.85	0.70	-1.61	0.19	-1.52	-1.27	-0.73	-0.85	-0.17	-0.04	-2.16	0.79	1.35
DGK-TTS	-2.28	-1.56	-2.31	-0.70	-2.15	-1.56	-2.19	-2.42	-2.06	-2.64	-0.76	-0.14	-3.30	0.39	-0.37
DGK-GJW	-2.91	-1.56	-2.65	-0.10	-1.97	-2.43	-2.80	-2.76	-3.53	-2.62	-2.37	-2.25	-3.67	0.25	1.29
DGK-GUJRAT	-2.77	-1.93	-2.39	-0.90	-3.22	-2.92	-3.17	-3.22	-3.06	-2.53	-2.21	-1.76	-3.64	-0.10	0.00
DGK-HAFIZABAD	-1.80	-0.92	-1.62	-0.20	-2.69	-2.33	-2.19	-2.25	-2.40	-2.39	-1.83	-0.66	-3.34	0.33	1.47
DGK-MANDI	-2.35	-1.74	-2.22	-0.80	-2.69	-2.82	-1.40	-1.61	-2.60	-2.76	-0.49	-0.87	-3.72	0.42	1.17
DGK-NARROWAL	-2.21	-1.38	-1.80	-1.39	-2.51	-2.33	-1.40	-1.78	-2.46	-2.71	0.21	-0.64	-3.36	0.56	1.04
DGK-SIALKOT	-2.91	-1.56	-2.56	-1.09	-2.87	-2.92	-2.68	-1.96	-3.40	-2.45	-1.49	-2.13	-3.69	-0.06	0.18
DGK-KASUR	-1.18	-0.28	-0.94	0.10	-1.07	-1.46	-2.44	-2.48	-2.93	-2.44	-0.36	-0.53	-3.48	2.40	0.61
DGK-LHR	-3.32	-2.38	-3.33	-0.60	-1.97	-2.43	-3.71	-3.74	-3.66	-2.43	-3.48	-3.23	-3.71	1.20	-2.95
DGK-NANKANA	-1.94	-1.19	-1.71	-0.10	-3.76	-1.56	-1.95	-2.07	-2.86	-2.29	-0.96	-0.56	-3.05	1.07	1.04
DGK-SHIKUPURA	-2.35	-1.10	-1.97	0.10	-1.07	-1.95	-2.86	-2.94	-3.40	-2.59	-1.97	-1.65	-3.38	0.86	0.25
DGK-KHANEWAL	-1.18	-0.92	-1.37	-0.10	-1.61	-1.36	-1.22	-1.21	-1.13	-1.82	-0.74	-0.17	-2.25	1.08	1.41
DGK-LODHRAN	-0.76	-0.46	-0.77	0.90	-2.51	-0.97	-0.91	-0.69	-1.20	-1.15	0.08	-0.06	-1.89	1.45	0.61
DGK-MULTAN	-1.52	-0.73	-1.62	0.10	-3.05	-0.97	-1.89	-1.67	-2.20	-1.88	-1.58	-0.54	-2.24	2.19	0.80
DGK-VEHARI	-0.97	-0.09	-1.03	0.60	-3.05	-1.85	-2.13	-2.02	-1.13	-1.72	0.00	-0.07	-2.54	1.42	0.92
DGK-ATTOCK	-2.15	-2.11	-2.39	-1.00	-3.40	-2.72	-2.62	-2.71	-2.26	-2.52	-1.73	-1.77	-3.13	-0.50	-0.55
DGK-CHKWAL	-2.84	-2.75	-2.99	-2.09	-2.33	-0.58	-2.92	-2.99	-2.86	-2.47	-1.03	-0.75	-3.33	-1.00	-0.43
DGK-JEH;UM	-3.11	-2.75	-2.65	-1.79	-3.05	-2.24	-3.29	-2.99	-2.86	-2.67	-1.09	-1.41	-2.80	-0.72	-0.80
DGK-RWP	-3.25	-3.03	-3.59	-1.09	-2.69	-2.43	-3.53	-3.57	-2.93	-2.36	-2.42	-2.93	-3.30	-0.99	-1.29
DGK-OKARA	-1.04	-0.55	-1.03	-1.29	-2.51	-0.97	-1.22	-1.04	-2.20	-2.21	-0.76	-0.26	-2.86	1.77	0.92
DGK-PAKPATTAN	-0.90	-0.28	-0.94	-0.30	-0.72	-0.68	-1.10	-0.92	-0.93	-2.12	0.09	-0.12	-1.86	2.21	0.86
DGK-SAHIWAL	-1.38	-0.73	-1.37	-0.30	-3.22	-0.39	-1.52	-1.44	-1.86	-1.77	-0.61	-0.19	-3.06	1.20	0.86
DGK-BHAKKAR	-0.55	-0.55	-1.11	0.30	-3.22	-1.17	-1.89	-1.73	-0.20	-1.60	0.32	0.01	-1.71	0.95	1.29
DGK-KHUSHAB	-1.11	-1.38	-1.45	-0.40	-1.61	-1.95	-1.40	-1.32	-2.06	-1.69	-0.23	-0.12	-2.91	-0.19	-0.31
DGK-MIALWALI	-1.18	-1.28	-1.45	-0.20	-1.61	-2.82	-2.19	-1.27	-1.93	-1.34	-0.02	-0.13	-2.58	1.20	0.00
DGK-SARGODHA	-1.52	-1.56	-1.80	-0.30	-1.43	-2.33	-2.13	-2.13	-2.53	-2.47	-0.76	-0.24	-3.02	0.51	1.23

Table: Distance from Layyah to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Layyah-MUZAFFAR	0.55	1.10	0.77	2.39	1.61	1.36	-0.12	-0.23	0.93	-0.80	-0.42	-0.05	1.11	2.04	0.25
Layyah-RJP	1.25	2.11	1.80	2.69	0.54	0.78	0.79	0.40	1.33	1.80	0.11	0.03	2.31	1.10	-0.25
Layyah-CHINIOT	0.14	0.46	0.68	1.99	0.90	1.26	-1.46	-1.84	0.93	-2.15	-1.01	-0.20	-0.92	0.20	0.12
Layyah-FSD	-1.52	-0.73	-1.20	1.09	2.33	1.17	-1.89	-2.13	-1.27	-2.66	-2.13	-0.76	-1.71	-0.16	-0.74
Layyah-JHANG	0.35	0.46	0.43	2.09	1.43	2.63	-0.85	-0.75	1.27	-0.97	-0.45	-0.07	-0.24	0.08	0.18
Layyah-TTS	-1.18	-0.46	-1.03	0.70	0.90	0.88	-1.52	-1.90	-0.07	-2.76	-1.03	-0.16	-1.38	-0.32	-1.54
Layyah-GJW	-1.80	-0.46	-1.37	1.29	1.07	0.00	-2.13	-2.25	-1.53	-2.74	-2.65	-2.28	-1.76	-0.46	0.12
Layyah-GUJRAT	-1.66	-0.83	-1.11	0.50	-0.18	-0.49	-2.50	-2.71	-1.07	-2.65	-2.48	-1.78	-1.73	-0.81	-1.17
Layyah-HAFIZABAD	-0.69	0.18	-0.34	1.19	0.36	0.10	-1.52	-1.73	-0.40	-2.51	-2.10	-0.69	-1.43	-0.39	0.31
Layyah-MANDI	-1.25	-0.64	-0.94	0.60	0.36	-0.39	-0.73	-1.09	-0.60	-2.88	-0.77	-0.90	-1.81	-0.29	0.00
Layyah-NARROWAL	-1.11	-0.28	-0.51	0.00	0.54	0.10	-0.73	-1.27	-0.47	-2.83	-0.06	-0.66	-1.45	-0.15	-0.12
Layyah-SIALKOT	-1.80	-0.46	-1.28	0.30	0.18	-0.49	-2.01	-1.44	-1.40	-2.57	-1.76	-2.15	-1.77	-0.78	-0.98
Layyah-KASUR	-0.07	0.83	0.34	1.49	1.97	0.97	-1.77	-1.96	-0.93	-2.56	-0.63	-0.55	-1.57	1.69	-0.55
Layyah-LHR	-2.21	-1.28	-2.05	0.80	1.07	0.00	-3.04	-3.22	-1.66	-2.55	-3.75	-3.26	-1.79	0.49	-4.11
Layyah-NANKANA	-0.83	-0.09	-0.43	1.29	-0.72	0.88	-1.28	-1.55	-0.87	-2.40	-1.24	-0.58	-1.14	0.35	-0.12
Layyah-SHIKUPURA	-1.25	0.00	-0.68	1.49	1.97	0.49	-2.19	-2.42	-1.40	-2.71	-2.24	-1.68	-1.47	0.15	-0.92
Layyah-KHANEWAL	-0.07	0.18	-0.09	1.29	1.43	1.07	-0.55	-0.69	0.87	-1.94	-1.01	-0.20	-0.33	0.36	0.25
Layyah-LODHRAN	0.35	0.64	0.51	2.29	0.54	1.46	-0.24	-0.17	0.80	-1.27	-0.20	-0.08	0.03	0.73	-0.55
Layyah-MULTAN	-0.42	0.37	-0.34	1.49	0.00	1.46	-1.22	-1.15	-0.20	-2.00	-1.85	-0.56	-0.33	1.48	-0.37
Layyah-VEHARI	0.14	1.01	0.26	1.99	0.00	0.58	-1.46	-1.50	0.87	-1.84	-0.27	-0.09	-0.62	0.71	-0.25
Layyah-ATTOCK	-1.04	-1.01	-1.11	0.40	-0.36	-0.29	-1.95	-2.19	-0.27	-2.64	-2.00	-1.79	-1.21	-1.22	-1.72
Layyah-CHKWAL	-1.73	-1.65	-1.71	-0.70	0.72	1.85	-2.25	-2.48	-0.87	-2.59	-1.31	-0.78	-1.41	-1.72	-1.60
Layyah-JEH;UM	-2.01	-1.65	-1.37	-0.40	0.00	0.19	-2.62	-2.48	-0.87	-2.79	-1.36	-1.43	-0.89	-1.43	-1.97
Layyah-RWP	-2.15	-1.93	-2.31	0.30	0.36	0.00	-2.86	-3.05	-0.93	-2.48	-2.69	-2.95	-1.38	-1.70	-2.46
Layyah-OKARA	0.07	0.55	0.26	0.10	0.54	1.46	-0.55	-0.52	-0.20	-2.33	-1.03	-0.28	-0.94	1.06	-0.25
Layyah-PAKPATTAN	0.21	0.83	0.34	1.09	2.33	1.75	-0.43	-0.40	1.07	-2.24	-0.18	-0.15	0.06	1.50	-0.31
Layyah-SAHIWAL	-0.28	0.37	-0.09	1.09	-0.18	2.04	-0.85	-0.92	0.13	-1.89	-0.89	-0.21	-1.14	0.48	-0.31
Layyah-BHAKKAR	0.55	0.55	0.17	1.69	-0.18	1.26	-1.22	-1.21	1.80	-1.72	0.04	-0.01	0.21	0.23	0.12
Layyah-KHUSHAB	0.00	-0.28	-0.17	1.00	1.43	0.49	-0.73	-0.81	-0.07	-1.81	-0.50	-0.15	-0.99	-0.90	-1.47
Layyah-MIALWALI	-0.07	-0.18	-0.17	1.19	1.43	-0.39	-1.52	-0.75	0.07	-1.46	-0.29	-0.16	-0.67	0.49	-1.17
Layyah-SARGODHA	-0.42	-0.46	-0.51	1.09	1.61	0.10	-1.46	-1.61	-0.53	-2.59	-1.04	-0.26	-1.11	-0.20	0.06

Table: Distance from Muzafar Garh to other Districts

Districts	Female-Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Muzafar Garh-RJP	0.69	1.01	1.03	0.30	-1.07	-0.58	0.91	0.63	0.40	2.60	0.53	0.08	1.19	-0.94	-0.49
Muzafar Garh-CHINIOT	-0.42	-0.64	-0.09	-0.40	-0.72	-0.10	-1.34	-1.61	0.00	-1.35	-0.59	-0.14	-2.03	-1.84	-0.12
Muzafar Garh-FSD	-2.08	-1.83	-1.97	-1.29	0.72	-0.19	-1.77	-1.90	-2.20	-1.85	-1.70	-0.70	-2.82	-2.20	-0.98
Muzafar Garh-JHANG	-0.21	-0.64	-0.34	-0.30	-0.18	1.26	-0.73	-0.52	0.33	-0.17	-0.03	-0.01	-1.36	-1.96	-0.06
Muzafar Garh-TTS	-1.73	-1.56	-1.80	-1.69	-0.72	-0.49	-1.40	-1.67	-1.00	-1.96	-0.61	-0.11	-2.49	-2.36	-1.78
Muzafar Garh-GJW	-2.35	-1.56	-2.14	-1.09	-0.54	-1.36	-2.01	-2.02	-2.46	-1.94	-2.23	-2.22	-2.87	-2.51	-0.12
Muzafar Garh-GUJRAT	-2.21	-1.93	-1.88	-1.89	-1.79	-1.85	-2.37	-2.48	-2.00	-1.84	-2.06	-1.73	-2.84	-2.85	-1.41
Muzafar Garh-HAFIZABAD	-1.25	-0.92	-1.11	-1.19	-1.25	-1.26	-1.40	-1.50	-1.33	-1.70	-1.68	-0.63	-2.54	-2.43	0.06
Muzafar Garh-MANDI	-1.80	-1.74	-1.71	-1.79	-1.25	-1.75	-0.61	-0.86	-1.53	-2.07	-0.35	-0.84	-2.92	-2.34	-0.25
Muzafar Garh-NARROWAL	-1.66	-1.38	-1.28	-2.39	-1.07	-1.26	-0.61	-1.04	-1.40	-2.03	0.36	-0.61	-2.56	-2.19	-0.37
Muzafar Garh-SIALKOT	-2.35	-1.56	-2.05	-2.09	-1.43	-1.85	-1.89	-1.21	-2.33	-1.76	-1.34	-2.10	-2.89	-2.82	-1.23
Muzafar Garh-KASUR	-0.62	-0.28	-0.43	-0.90	0.36	-0.39	-1.64	-1.73	-1.86	-1.76	-0.21	-0.50	-2.68	-0.35	-0.80
Muzafar Garh-LHR	-2.77	-2.38	-2.82	-1.59	-0.54	-1.36	-2.92	-2.99	-2.60	-1.74	-3.33	-3.20	-2.91	-1.56	-4.36
Muzafar Garh-NANKANA	-1.38	-1.19	-1.20	-1.09	-2.33	-0.49	-1.16	-1.32	-1.80	-1.60	-0.82	-0.53	-2.25	-1.69	-0.37
Muzafar Garh-SHIKUPURA	-1.80	-1.10	-1.45	-0.90	0.36	-0.88	-2.07	-2.19	-2.33	-1.91	-1.82	-1.62	-2.58	-1.89	-1.17
Muzafar Garh-KHANEWAL	-0.62	-0.92	-0.85	-1.09	-0.18	-0.29	-0.43	-0.46	-0.07	-1.14	-0.59	-0.14	-1.45	-1.68	0.00
Muzafar Garh-LODHRAN	-0.21	-0.46	-0.26	-0.10	-1.07	0.10	-0.12	0.06	-0.13	-0.47	0.22	-0.03	-1.09	-1.31	-0.80
Muzafar Garh-MULTAN	-0.97	-0.73	-1.11	-0.90	-1.61	0.10	-1.10	-0.92	-1.13	-1.20	-1.43	-0.51	-1.44	-0.56	-0.61
Muzafar Garh-VEHARI	-0.42	-0.09	-0.51	-0.40	-1.61	-0.78	-1.34	-1.27	-0.07	-1.03	0.15	-0.04	-1.74	-1.34	-0.49
Muzafar Garh-ATTOCK	-1.59	-2.11	-1.88	-1.99	-1.97	-1.65	-1.83	-1.96	-1.20	-1.83	-1.58	-1.74	-2.32	-3.26	-1.97
Muzafar Garh-CHKWAL	-2.28	-2.75	-2.48	-3.09	-0.90	0.49	-2.13	-2.25	-1.80	-1.79	-0.89	-0.72	-2.53	-3.76	-1.84
Muzafar Garh-JEH;UM	-2.56	-2.75	-2.14	-2.79	-1.61	-1.17	-2.50	-2.25	-1.80	-1.99	-0.94	-1.38	-2.00	-3.47	-2.21
Muzafar Garh-RWP	-2.70	-3.03	-3.08	-2.09	-1.25	-1.36	-2.74	-2.82	-1.86	-1.68	-2.27	-2.90	-2.50	-3.74	-2.70
Muzafar Garh-OKARA	-0.48	-0.55	-0.51	-2.29	-1.07	0.10	-0.43	-0.29	-1.13	-1.53	-0.61	-0.23	-2.06	-0.98	-0.49
Muzafar Garh-PAKPATTAN	-0.35	-0.28	-0.43	-1.29	0.72	0.39	-0.30	-0.17	0.13	-1.43	0.24	-0.09	-1.05	-0.55	-0.55
Muzafar Garh-SAHIWAL	-0.83	-0.73	-0.85	-1.29	-1.79	0.68	-0.73	-0.69	-0.80	-1.09	-0.46	-0.16	-2.26	-1.56	-0.55
Muzafar Garh-BHAKKAR	0.00	-0.55	-0.60	-0.70	-1.79	-0.10	-1.10	-0.98	0.87	-0.92	0.46	0.04	-0.91	-1.81	-0.12
Muzafar Garh-KHUSHAB	-0.55	-1.38	-0.94	-1.39	-0.18	-0.88	-0.61	-0.58	-1.00	-1.01	-0.08	-0.09	-2.11	-2.94	-1.72
Muzafar Garh-MIALWALI	-0.62	-1.28	-0.94	-1.19	-0.18	-1.75	-1.40	-0.52	-0.87	-0.65	0.13	-0.10	-1.78	-1.55	-1.41
Muzafar Garh-SARGODHA	-0.97	-1.56	-1.28	-1.29	0.00	-1.26	-1.34	-1.38	-1.46	-1.79	-0.61	-0.21	-2.22	-2.24	-0.18

Table: Distance from RajanPur to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Rajan Pur-CHINIOT	-1.11	-1.65	-1.11	-0.70	0.36	0.49	-2.25	-2.25	-0.40	-3.95	-1.12	-0.23	-3.22	-0.90	0.37
Rajan Pur-FSD	-2.77	-2.84	-2.99	-1.59	1.79	0.39	-2.68	-2.53	-2.60	-4.46	-2.24	-0.79	-4.02	-1.26	-0.49
Rajan Pur-JHANG	-0.90	-1.65	-1.37	-0.60	0.90	1.85	-1.64	-1.15	-0.07	-2.77	-0.56	-0.09	-2.55	-1.02	0.43
Rajan Pur-TTS	-2.42	-2.57	-2.82	-1.99	0.36	0.10	-2.31	-2.30	-1.40	-4.56	-1.14	-0.19	-3.69	-1.42	-1.29
Rajan Pur-GJW	-3.05	-2.57	-3.16	-1.39	0.54	-0.78	-2.92	-2.65	-2.86	-4.54	-2.76	-2.31	-4.07	-1.56	0.37
Rajan Pur-GUJRAT	-2.91	-2.93	-2.91	-2.19	-0.72	-1.26	-3.29	-3.11	-2.40	-4.45	-2.59	-1.81	-4.04	-1.91	-0.92
Rajan Pur-HAFIZABAD	-1.94	-1.93	-2.14	-1.49	-0.18	-0.68	-2.31	-2.13	-1.73	-4.31	-2.21	-0.72	-3.73	-1.49	0.55
Rajan Pur-MANDI	-2.49	-2.75	-2.74	-2.09	-0.18	-1.17	-1.52	-1.50	-1.93	-4.68	-0.88	-0.93	-4.12	-1.40	0.25
Rajan Pur-NARROWAL	-2.35	-2.38	-2.31	-2.69	0.00	-0.68	-1.52	-1.67	-1.80	-4.63	-0.17	-0.69	-3.76	-1.25	0.12
Rajan Pur-SIALKOT	-3.05	-2.57	-3.08	-2.39	-0.36	-1.26	-2.80	-1.84	-2.73	-4.37	-1.87	-2.18	-4.08	-1.88	-0.74
Rajan Pur-KASUR	-1.31	-1.28	-1.45	-1.19	1.43	0.19	-2.56	-2.36	-2.26	-4.36	-0.74	-0.58	-3.88	0.59	-0.31
Rajan Pur-LHR	-3.46	-3.39	-3.85	-1.89	0.54	-0.78	-3.84	-3.63	-3.00	-4.35	-3.86	-3.29	-4.10	-0.61	-3.87
Rajan Pur-NANKANA	-2.08	-2.20	-2.22	-1.39	-1.25	0.10	-2.07	-1.96	-2.20	-4.21	-1.35	-0.61	-3.45	-0.75	0.12
Rajan Pur-SHIKUPURA	-2.49	-2.11	-2.48	-1.19	1.43	-0.29	-2.98	-2.82	-2.73	-4.51	-2.35	-1.71	-3.78	-0.95	-0.68
Rajan Pur-KHANEWAL	-1.31	-1.93	-1.88	-1.39	0.90	0.29	-1.34	-1.09	-0.47	-3.74	-1.12	-0.23	-2.64	-0.74	0.49
Rajan Pur-LODHRAN	-0.90	-1.47	-1.28	-0.40	0.00	0.68	-1.04	-0.58	-0.53	-3.07	-0.31	-0.11	-2.28	-0.37	-0.31
Rajan Pur-MULTAN	-1.66	-1.74	-2.14	-1.19	-0.54	0.68	-2.01	-1.55	-1.53	-3.80	-1.96	-0.59	-2.64	0.38	-0.12
Rajan Pur-VEHARI	-1.11	-1.10	-1.54	-0.70	-0.54	-0.19	-2.25	-1.90	-0.47	-3.64	-0.38	-0.12	-2.93	-0.40	0.00
Rajan Pur-ATTOCK	-2.28	-3.12	-2.91	-2.29	-0.90	-1.07	-2.74	-2.59	-1.60	-4.44	-2.11	-1.82	-3.52	-2.32	-1.47
Rajan Pur-CHKWAL	-2.98	-3.76	-3.51	-3.38	0.18	1.07	-3.04	-2.88	-2.20	-4.39	-1.42	-0.81	-3.72	-2.82	-1.35
Rajan Pur-JEH;UM	-3.25	-3.76	-3.16	-3.09	-0.54	-0.58	-3.41	-2.88	-2.20	-4.59	-1.47	-1.46	-3.20	-2.53	-1.72
Rajan Pur-RWP	-3.39	-4.03	-4.10	-2.39	-0.18	-0.78	-3.65	-3.45	-2.26	-4.28	-2.80	-2.98	-3.69	-2.80	-2.21
Rajan Pur-OKARA	-1.18	-1.56	-1.54	-2.59	0.00	0.68	-1.34	-0.92	-1.53	-4.13	-1.14	-0.31	-3.25	-0.04	0.00
Rajan Pur-PAKPATTAN	-1.04	-1.28	-1.45	-1.59	1.79	0.97	-1.22	-0.81	-0.27	-4.04	-0.29	-0.17	-2.25	0.39	-0.06
Rajan Pur-SAHIWAL	-1.52	-1.74	-1.88	-1.59	-0.72	1.26	-1.64	-1.32	-1.20	-3.69	-1.00	-0.24	-3.45	-0.62	-0.06
Rajan Pur-BHAKKAR	-0.69	-1.56	-1.62	-1.00	-0.72	0.49	-2.01	-1.61	0.47	-3.52	-0.07	-0.04	-2.10	-0.87	0.37
Rajan Pur-KHUSHAB	-1.25	-2.38	-1.97	-1.69	0.90	-0.29	-1.52	-1.21	-1.40	-3.61	-0.62	-0.18	-3.30	-2.00	-1.23
Rajan Pur-MIALWALI	-1.31	-2.29	-1.97	-1.49	0.90	-1.17	-2.31	-1.15	-1.27	-3.26	-0.40	-0.18	-2.97	-0.61	-0.92
Rajan Pur-SARGODHA	-1.66	-2.57	-2.31	-1.59	1.07	-0.68	-2.25	-2.02	-1.86	-4.39	-1.15	-0.29	-3.41	-1.30	0.31

Table: Distance from Chiniot to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Chaniot-FSD	-1.66	-1.19	-1.88	-0.90	1.43	-0.10	-0.43	-0.29	-2.20	-0.51	-1.12	-0.56	-0.79	-0.37	-0.86
Chaniot-JHANG	0.21	0.00	-0.26	0.10	0.54	1.36	0.61	1.09	0.33	1.18	0.56	0.13	0.67	-0.13	0.06
Chaniot-TTS	-1.31	-0.92	-1.71	-1.29	0.00	-0.39	-0.06	-0.06	-1.00	-0.61	-0.02	0.04	-0.47	-0.52	-1.66
Chaniot-GJW	-1.94	-0.92	-2.05	-0.70	0.18	-1.26	-0.67	-0.40	-2.46	-0.59	-1.64	-2.08	-0.84	-0.67	0.00
Chaniot-GUJRAT	-1.80	-1.28	-1.80	-1.49	-1.07	-1.75	-1.04	-0.86	-2.00	-0.50	-1.47	-1.58	-0.81	-1.01	-1.29
Chaniot-HAFIZABAD	-0.83	-0.28	-1.03	-0.80	-0.54	-1.17	-0.06	0.12	-1.33	-0.36	-1.10	-0.49	-0.51	-0.59	0.18
Chaniot-MANDI	-1.38	-1.10	-1.62	-1.39	-0.54	-1.65	0.73	0.75	-1.53	-0.73	0.24	-0.70	-0.89	-0.50	-0.12
Chaniot-NARROWAL	-1.25	-0.73	-1.20	-1.99	-0.36	-1.17	0.73	0.58	-1.40	-0.68	0.94	-0.47	-0.53	-0.36	-0.25
Chaniot-SIALKOT	-1.94	-0.92	-1.97	-1.69	-0.72	-1.75	-0.55	0.40	-2.33	-0.42	-0.76	-1.95	-0.86	-0.98	-1.11
Chaniot-KASUR	-0.21	0.37	-0.34	-0.50	1.07	-0.29	-0.30	-0.12	-1.86	-0.41	0.37	-0.35	-0.66	1.49	-0.68
Chaniot-LHR	-2.35	-1.74	-2.74	-1.19	0.18	-1.26	-1.58	-1.38	-2.60	-0.40	-2.75	-3.06	-0.88	0.28	-4.24
Chaniot-NANKANA	-0.97	-0.55	-1.11	-0.70	-1.61	-0.39	0.18	0.29	-1.80	-0.25	-0.23	-0.38	-0.22	0.15	-0.25
Chaniot-SHIKUPURA	-1.38	-0.46	-1.37	-0.50	1.07	-0.78	-0.73	-0.58	-2.33	-0.56	-1.23	-1.48	-0.55	-0.05	-1.04
Chaniot-KHANEWAL	-0.21	-0.28	-0.77	-0.70	0.54	-0.19	0.91	1.15	-0.07	0.21	0.00	0.00	0.58	0.16	0.12
Chaniot-LODHRAN	0.21	0.18	-0.17	0.30	-0.36	0.19	1.22	1.67	-0.13	0.88	0.81	0.11	0.94	0.53	-0.68
Chaniot-MULTAN	-0.55	-0.09	-1.03	-0.50	-0.90	0.19	0.24	0.69	-1.13	0.15	-0.85	-0.36	0.59	1.27	-0.49
Chaniot-VEHARI	0.00	0.55	-0.43	0.00	-0.90	-0.68	0.00	0.35	-0.07	0.31	0.74	0.11	0.29	0.50	-0.37
Chaniot-ATTOCK	-1.18	-1.47	-1.80	-1.59	-1.25	-1.56	-0.49	-0.35	-1.20	-0.49	-1.00	-1.60	-0.30	-1.42	-1.84
Chaniot-CHKWAL	-1.87	-2.11	-2.39	-2.69	-0.18	0.58	-0.79	-0.63	-1.80	-0.44	-0.30	-0.58	-0.50	-1.92	-1.72
Chaniot-JEH;UM	-2.15	-2.11	-2.05	-2.39	-0.90	-1.07	-1.16	-0.63	-1.80	-0.64	-0.35	-1.24	0.02	-1.64	-2.09
Chaniot-RWP	-2.28	-2.38	-2.99	-1.69	-0.54	-1.26	-1.40	-1.21	-1.86	-0.33	-1.69	-2.75	-0.47	-1.91	-2.58
Chaniot-OKARA	-0.07	0.09	-0.43	-1.89	-0.36	0.19	0.91	1.32	-1.13	-0.18	-0.03	-0.08	-0.03	0.85	-0.37
Chaniot-PAKPATTAN	0.07	0.37	-0.34	-0.90	1.43	0.49	1.04	1.44	0.13	-0.09	0.82	0.05	0.97	1.29	-0.43
Chaniot-SAHIWAL	-0.42	-0.09	-0.77	-0.90	-1.07	0.78	0.61	0.92	-0.80	0.26	0.12	-0.01	-0.23	0.28	-0.43
Chaniot-BHAKKAR	0.42	0.09	-0.51	-0.30	-1.07	0.00	0.24	0.63	0.87	0.43	1.05	0.19	1.12	0.03	0.00
Chaniot-KHUSHAB	-0.14	-0.73	-0.85	-1.00	0.54	-0.78	0.73	1.04	-1.00	0.34	0.50	0.05	-0.08	-1.10	-1.60
Chaniot-MIALWALI	-0.21	-0.64	-0.85	-0.80	0.54	-1.65	-0.06	1.09	-0.87	0.69	0.71	0.04	0.25	0.28	-1.29
Chaniot-SARGODHA	-0.55	-0.92	-1.20	-0.90	0.72	-1.17	0.00	0.23	-1.46	-0.44	-0.03	-0.06	-0.19	-0.40	-0.06

Table: Distance from Faisalabad to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
FSD-JHANG	1.87	1.19	1.62	1.00	-0.90	1.46	1.04	1.38	2.53	1.69	1.68	0.69	1.46	0.24	0.92
FSD-TTS	0.35	0.28	0.17	-0.40	-1.43	-0.29	0.37	0.23	1.20	-0.11	1.09	0.60	0.33	-0.16	-0.80
FSD-GJW	-0.28	0.28	-0.17	0.20	-1.25	-1.17	-0.24	-0.12	-0.27	-0.08	-0.52	-1.52	-0.05	-0.30	0.86
FSD-GUJRAT	-0.14	-0.09	0.09	-0.60	-2.51	-1.65	-0.61	-0.58	0.20	0.01	-0.36	-1.02	-0.02	-0.65	-0.43
FSD-HAFIZABAD	0.83	0.92	0.85	0.10	-1.97	-1.07	0.37	0.40	0.87	0.15	0.02	0.07	0.28	-0.22	1.04
FSD-MANDI	0.28	0.09	0.26	-0.50	-1.97	-1.56	1.16	1.04	0.67	-0.22	1.36	-0.14	-0.10	-0.13	0.74
FSD-NARROWAL	0.42	0.46	0.68	-1.09	-1.79	-1.07	1.16	0.86	0.80	-0.17	2.06	0.10	0.26	0.01	0.61
FSD-SIALKOT	-0.28	0.28	-0.09	-0.80	-2.15	-1.65	-0.12	0.69	-0.13	0.09	0.36	-1.39	-0.07	-0.62	-0.25
FSD-KASUR	1.45	1.56	1.54	0.40	-0.36	-0.19	0.12	0.17	0.33	0.09	1.49	0.21	0.14	1.85	0.18
FSD-LHR	-0.69	-0.55	-0.85	-0.30	-1.25	-1.17	-1.16	-1.09	-0.40	0.11	-1.63	-2.50	-0.09	0.65	-3.38
FSD-NANKANA	0.69	0.64	0.77	0.20	-3.05	-0.29	0.61	0.58	0.40	0.25	0.89	0.18	0.57	0.51	0.61
FSD-SHIKUPURA	0.28	0.73	0.51	0.40	-0.36	-0.68	-0.30	-0.29	-0.13	-0.06	-0.12	-0.92	0.24	0.31	-0.18
FSD-KHANEWAL	1.45	0.92	1.11	0.20	-0.90	-0.10	1.34	1.44	2.13	0.71	1.11	0.56	1.38	0.53	0.98
FSD-LODHRAN	1.87	1.38	1.71	1.19	-1.79	0.29	1.64	1.96	2.06	1.38	1.93	0.68	1.73	0.90	0.18
FSD-MULTAN	1.11	1.10	0.85	0.40	-2.33	0.29	0.67	0.98	1.07	0.65	0.27	0.20	1.38	1.64	0.37
FSD-VEHARI	1.66	1.74	1.45	0.90	-2.33	-0.58	0.43	0.63	2.13	0.82	1.85	0.67	1.08	0.87	0.49
FSD-ATTOCK	0.48	-0.28	0.09	-0.70	-2.69	-1.46	-0.06	-0.06	1.00	0.02	0.12	-1.04	0.50	-1.06	-0.98
FSD-CHKWAL	-0.21	-0.92	-0.51	-1.79	-1.61	0.68	-0.37	-0.35	0.40	0.06	0.82	-0.02	0.30	-1.56	-0.86
FSD-JEH;UM	-0.48	-0.92	-0.17	-1.49	-2.33	-0.97	-0.73	-0.35	0.40	-0.13	0.76	-0.68	0.82	-1.27	-1.23
FSD-RWP	-0.62	-1.19	-1.11	-0.80	-1.97	-1.17	-0.97	-0.92	0.33	0.17	-0.57	-2.19	0.33	-1.54	-1.72
FSD-OKARA	1.59	1.28	1.45	-1.00	-1.79	0.29	1.34	1.61	1.07	0.33	1.09	0.48	0.76	1.22	0.49
FSD-PAKPATTAN	1.73	1.56	1.54	0.00	0.00	0.58	1.46	1.73	2.33	0.42	1.94	0.61	1.77	1.66	0.43
FSD-SAHIWAL	1.25	1.10	1.11	0.00	-2.51	0.88	1.04	1.21	1.40	0.77	1.24	0.55	0.57	0.64	0.43
FSD-BHAKKAR	2.08	1.28	1.37	0.60	-2.51	0.10	0.67	0.92	3.06	0.94	2.17	0.75	1.92	0.39	0.86
FSD-KHUSHAB	1.52	0.46	1.03	-0.10	-0.90	-0.68	1.16	1.32	1.20	0.85	1.62	0.61	0.72	-0.74	-0.74
FSD-MIALWALI	1.45	0.55	1.03	0.10	-0.90	-1.56	0.37	1.38	1.33	1.20	1.83	0.60	1.04	0.65	-0.43
FSD-SARGODHA	1.11	0.28	0.68	0.00	-0.72	-1.07	0.43	0.52	0.73	0.06	1.09	0.50	0.60	-0.04	0.80

Table: Distance from Jhang to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Jhang-TTS	-1.52	-0.92	-1.45	-1.39	-0.54	-1.75	-0.67	-1.15	-1.33	-1.79	-0.58	-0.09	-1.14	-0.40	-1.72
Jhang-GJW	-2.15	-0.92	-1.80	-0.80	-0.36	-2.63	-1.28	-1.50	-2.80	-1.77	-2.20	-2.21	-1.52	-0.54	-0.06
Jhang-GUJRAT	-2.01	-1.28	-1.54	-1.59	-1.61	-3.11	-1.64	-1.96	-2.33	-1.68	-2.03	-1.72	-1.48	-0.89	-1.35
Jhang-HAFIZABAD	-1.04	-0.28	-0.77	-0.90	-1.07	-2.53	-0.67	-0.98	-1.66	-1.54	-1.65	-0.62	-1.18	-0.46	0.12
Jhang-MANDI	-1.59	-1.10	-1.37	-1.49	-1.07	-3.02	0.12	-0.35	-1.86	-1.91	-0.32	-0.83	-1.56	-0.37	-0.18
Jhang-NARROWAL	-1.45	-0.73	-0.94	-2.09	-0.90	-2.53	0.12	-0.52	-1.73	-1.86	0.39	-0.60	-1.20	-0.23	-0.31
Jhang-SIALKOT	-2.15	-0.92	-1.71	-1.79	-1.25	-3.11	-1.16	-0.69	-2.66	-1.60	-1.32	-2.09	-1.53	-0.85	-1.17
Jhang-KASUR	-0.42	0.37	-0.09	-0.60	0.54	-1.65	-0.91	-1.21	-2.20	-1.59	-0.19	-0.49	-1.33	1.61	-0.74
Jhang-LHR	-2.56	-1.74	-2.48	-1.29	-0.36	-2.63	-2.19	-2.48	-2.93	-1.58	-3.30	-3.19	-1.55	0.41	-4.30
Jhang-NANKANA	-1.18	-0.55	-0.85	-0.80	-2.15	-1.75	-0.43	-0.81	-2.13	-1.44	-0.79	-0.52	-0.90	0.28	-0.31
Jhang-SHIKUPURA	-1.59	-0.46	-1.11	-0.60	0.54	-2.14	-1.34	-1.67	-2.66	-1.74	-1.79	-1.61	-1.23	0.07	-1.11
Jhang-KHANEWAL	-0.42	-0.28	-0.51	-0.80	0.00	-1.56	0.30	0.06	-0.40	-0.97	-0.56	-0.13	-0.09	0.29	0.06
Jhang-LODHRAN	0.00	0.18	0.09	0.20	-0.90	-1.17	0.61	0.58	-0.47	-0.30	0.25	-0.02	0.27	0.66	-0.74
Jhang-MULTAN	-0.76	-0.09	-0.77	-0.60	-1.43	-1.17	-0.37	-0.40	-1.46	-1.03	-1.40	-0.49	-0.09	1.40	-0.55
Jhang-VEHARI	-0.21	0.55	-0.17	-0.10	-1.43	-2.04	-0.61	-0.75	-0.40	-0.87	0.18	-0.03	-0.38	0.63	-0.43
Jhang-ATTOCK	-1.38	-1.47	-1.54	-1.69	-1.79	-2.92	-1.10	-1.44	-1.53	-1.67	-1.56	-1.73	-0.97	-1.29	-1.90
Jhang-CHKWAL	-2.08	-2.11	-2.14	-2.79	-0.72	-0.78	-1.40	-1.73	-2.13	-1.62	-0.86	-0.71	-1.17	-1.80	-1.78
Jhang-JEH;UM	-2.35	-2.11	-1.80	-2.49	-1.43	-2.43	-1.77	-1.73	-2.13	-1.82	-0.91	-1.37	-0.65	-1.51	-2.15
Jhang-RWP	-2.49	-2.38	-2.74	-1.79	-1.07	-2.63	-2.01	-2.30	-2.20	-1.51	-2.24	-2.89	-1.14	-1.78	-2.64
Jhang-OKARA	-0.28	0.09	-0.17	-1.99	-0.90	-1.17	0.30	0.23	-1.46	-1.36	-0.58	-0.22	-0.70	0.98	-0.43
Jhang-PAKPATTAN	-0.14	0.37	-0.09	-1.00	0.90	-0.88	0.43	0.35	-0.20	-1.27	0.26	-0.08	0.30	1.42	-0.49
Jhang-SAHIWAL	-0.62	-0.09	-0.51	-1.00	-1.61	-0.58	0.00	-0.17	-1.13	-0.92	-0.44	-0.15	-0.90	0.40	-0.49
Jhang-BHAKKAR	0.21	0.09	-0.26	-0.40	-1.61	-1.36	-0.37	-0.46	0.53	-0.75	0.49	0.05	0.45	0.16	-0.06
Jhang-KHUSHAB	-0.35	-0.73	-0.60	-1.09	0.00	-2.14	0.12	-0.06	-1.33	-0.84	-0.06	-0.08	-0.75	-0.98	-1.66
Jhang-MIALWALI	-0.42	-0.64	-0.60	-0.90	0.00	-3.02	-0.67	0.00	-1.20	-0.49	0.16	-0.09	-0.42	0.41	-1.35
Jhang-SARGODHA	-0.76	-0.92	-0.94	-1.00	0.18	-2.53	-0.61	-0.86	-1.80	-1.62	-0.59	-0.19	-0.86	-0.28	-0.12

Table: Distance from Toba Tek Singh to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
TTS-GJW	-0.62	0.00	-0.34	0.60	0.18	-0.88	-0.61	-0.35	-1.46	0.02	-1.62	-2.12	-0.38	-0.14	1.66
TTS-GUJRAT	-0.48	-0.37	-0.09	-0.20	-1.07	-1.36	-0.97	-0.81	-1.00	0.11	-1.45	-1.62	-0.35	-0.49	0.37
TTS-HAFIZABAD	0.48	0.64	0.68	0.50	-0.54	-0.78	0.00	0.17	-0.33	0.25	-1.07	-0.53	-0.04	-0.07	1.84
TTS-MANDI	-0.07	-0.18	0.09	-0.10	-0.54	-1.26	0.79	0.81	-0.53	-0.12	0.26	-0.74	-0.43	0.02	1.54
TTS-NARROWAL	0.07	0.18	0.51	-0.70	-0.36	-0.78	0.79	0.63	-0.40	-0.07	0.97	-0.50	-0.07	0.17	1.41
TTS-SIALKOT	-0.62	0.00	-0.26	-0.40	-0.72	-1.36	-0.49	0.46	-1.33	0.19	-0.73	-1.99	-0.39	-0.46	0.55
TTS-KASUR	1.11	1.28	1.37	0.80	1.07	0.10	-0.24	-0.06	-0.87	0.20	0.40	-0.39	-0.19	2.01	0.98
TTS-LHR	-1.04	-0.83	-1.03	0.10	0.18	-0.88	-1.52	-1.32	-1.60	0.21	-2.72	-3.10	-0.41	0.80	-2.58
TTS-NANKANA	0.35	0.37	0.60	0.60	-1.61	0.00	0.24	0.35	-0.80	0.36	-0.21	-0.42	0.24	0.67	1.41
TTS-SHIKUPURA	-0.07	0.46	0.34	0.80	1.07	-0.39	-0.67	-0.52	-1.33	0.05	-1.21	-1.52	-0.09	0.47	0.61
TTS-KHANEWAL	1.11	0.64	0.94	0.60	0.54	0.19	0.97	1.21	0.93	0.82	0.02	-0.04	1.05	0.68	1.78
TTS-LODHRAN	1.52	1.10	1.54	1.59	-0.36	0.58	1.28	1.73	0.87	1.49	0.83	0.08	1.41	1.05	0.98
TTS-MULTAN	0.76	0.83	0.68	0.80	-0.90	0.58	0.30	0.75	-0.13	0.76	-0.82	-0.40	1.05	1.80	1.17
TTS-VEHARI	1.31	1.47	1.28	1.29	-0.90	-0.29	0.06	0.40	0.93	0.93	0.76	0.07	0.76	1.02	1.29
TTS-ATTOCK	0.14	-0.55	-0.09	-0.30	-1.25	-1.17	-0.43	-0.29	-0.20	0.12	-0.97	-1.63	0.17	-0.90	-0.18
TTS-CHKWAL	-0.55	-1.19	-0.68	-1.39	-0.18	0.97	-0.73	-0.58	-0.80	0.17	-0.28	-0.62	-0.03	-1.40	-0.06
TTS-JEH;UM	-0.83	-1.19	-0.34	-1.09	-0.90	-0.68	-1.10	-0.58	-0.80	-0.03	-0.33	-1.28	0.49	-1.11	-0.43
TTS-RWP	-0.97	-1.47	-1.28	-0.40	-0.54	-0.88	-1.34	-1.15	-0.87	0.28	-1.66	-2.79	0.00	-1.38	-0.92
TTS-OKARA	1.25	1.01	1.28	-0.60	-0.36	0.58	0.97	1.38	-0.13	0.43	0.00	-0.12	0.44	1.38	1.29
TTS-PAKPATTAN	1.38	1.28	1.37	0.40	1.43	0.88	1.10	1.50	1.13	0.52	0.85	0.01	1.44	1.81	1.23
TTS-SAHIWAL	0.90	0.83	0.94	0.40	-1.07	1.17	0.67	0.98	0.20	0.87	0.15	-0.05	0.24	0.80	1.23
TTS-BHAKKAR	1.73	1.01	1.20	1.00	-1.07	0.39	0.30	0.69	1.86	1.04	1.07	0.15	1.59	0.55	1.66
TTS-KHUSHAB	1.18	0.18	0.85	0.30	0.54	-0.39	0.79	1.09	0.00	0.95	0.53	0.01	0.39	-0.58	0.06
TTS-MIALWALI	1.11	0.28	0.85	0.50	0.54	-1.26	0.00	1.15	0.13	1.30	0.74	0.00	0.72	0.81	0.37
TTS-SARGODHA	0.76	0.00	0.51	0.40	0.72	-0.78	0.06	0.29	-0.47	0.17	0.00	-0.10	0.28	0.12	1.60

Table: Distance from Gujranwala to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Gujranwala-GUJRAT	0.14	-0.37	0.26	-0.80	-1.25	-0.49	-0.37	-0.46	0.47	0.09	0.17	0.50	0.03	-0.35	-1.29
Gujranwala-HAFIZABAD	1.11	0.64	1.03	-0.10	-0.72	0.10	0.61	0.52	1.13	0.23	0.54	1.59	0.33	0.08	0.18
Gujranwala-MANDI	0.55	-0.18	0.43	-0.70	-0.72	-0.39	1.40	1.15	0.93	-0.14	1.88	1.38	-0.05	0.17	-0.12
Gujranwala-NARROWAL	0.69	0.18	0.85	-1.29	-0.54	0.10	1.40	0.98	1.07	-0.09	2.58	1.62	0.31	0.31	-0.25
Gujranwala-SIALKOT	0.00	0.00	0.09	-1.00	-0.90	-0.49	0.12	0.81	0.13	0.17	0.88	0.13	-0.01	-0.31	-1.11
Gujranwala-KASUR	1.73	1.28	1.71	0.20	0.90	0.97	0.37	0.29	0.60	0.18	2.01	1.73	0.19	2.15	-0.68
Gujranwala-LHR	-0.42	-0.83	-0.68	-0.50	0.00	0.00	-0.91	-0.98	-0.13	0.19	-1.10	-0.98	-0.03	0.95	-4.24
Gujranwala-NANKANA	0.97	0.37	0.94	0.00	-1.79	0.88	0.85	0.69	0.67	0.33	1.41	1.70	0.62	0.82	-0.25
Gujranwala-SHIKUPURA	0.55	0.46	0.68	0.20	0.90	0.49	-0.06	-0.17	0.13	0.03	0.41	0.60	0.29	0.61	-1.04
Gujranwala-KHANEWAL	1.73	0.64	1.28	0.00	0.36	1.07	1.58	1.55	2.40	0.80	1.64	2.08	1.43	0.83	0.12
Gujranwala-LODHRAN	2.15	1.10	1.88	1.00	-0.54	1.46	1.89	2.07	2.33	1.47	2.45	2.20	1.79	1.20	-0.68
Gujranwala-MULTAN	1.38	0.83	1.03	0.20	-1.07	1.46	0.91	1.09	1.33	0.74	0.79	1.72	1.43	1.94	-0.49
Gujranwala-VEHARI	1.94	1.47	1.62	0.70	-1.07	0.58	0.67	0.75	2.40	0.90	2.38	2.19	1.14	1.17	-0.37
Gujranwala-ATTOCK	0.76	-0.55	0.26	-0.90	-1.43	-0.29	0.18	0.06	1.27	0.10	0.64	0.48	0.55	-0.75	-1.84
Gujranwala-CHKWAL	0.07	-1.19	-0.34	-1.99	-0.36	1.85	-0.12	-0.23	0.67	0.15	1.34	1.50	0.35	-1.25	-1.72
Gujranwala-JEH;UM	-0.21	-1.19	0.00	-1.69	-1.07	0.19	-0.49	-0.23	0.67	-0.05	1.29	0.84	0.87	-0.97	-2.09
Gujranwala-RWP	-0.35	-1.47	-0.94	-1.00	-0.72	0.00	-0.73	-0.81	0.60	0.25	-0.05	-0.67	0.38	-1.24	-2.58
Gujranwala-OKARA	1.87	1.01	1.62	-1.19	-0.54	1.46	1.58	1.73	1.33	0.41	1.61	2.00	0.82	1.52	-0.37
Gujranwala-PAKPATTAN	2.01	1.28	1.71	-0.20	1.25	1.75	1.71	1.84	2.60	0.50	2.46	2.13	1.82	1.96	-0.43
Gujranwala-SAHIWAL	1.52	0.83	1.28	-0.20	-1.25	2.04	1.28	1.32	1.66	0.85	1.76	2.07	0.62	0.95	-0.43
Gujranwala-BHAKKAR	2.35	1.01	1.54	0.40	-1.25	1.26	0.91	1.04	3.33	1.02	2.69	2.27	1.97	0.70	0.00
Gujranwala-KHUSHAB	1.80	0.18	1.20	-0.30	0.36	0.49	1.40	1.44	1.46	0.93	2.14	2.13	0.77	-0.44	-1.60
Gujranwala-MIALWALI	1.73	0.28	1.20	-0.10	0.36	-0.39	0.61	1.50	1.60	1.28	2.35	2.12	1.10	0.95	-1.29
Gujranwala-SARGODHA	1.38	0.00	0.85	-0.20	0.54	0.10	0.67	0.63	1.00	0.15	1.61	2.02	0.66	0.26	-0.06

Table: Distance from Gujrat to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Gujrat-Hafizabad	0.97	1.01	0.77	0.70	0.54	0.58	0.97	0.98	0.67	0.14	0.38	1.09	0.30	0.42	1.47
Gujrat-MANDI	0.42	0.18	0.17	0.10	0.54	0.10	1.77	1.61	0.47	-0.23	1.72	0.88	-0.08	0.52	1.17
Gujrat-NARROWAL	0.55	0.55	0.60	-0.50	0.72	0.58	1.77	1.44	0.60	-0.18	2.42	1.12	0.28	0.66	1.04
Gujrat-SIALKOT	-0.14	0.37	-0.17	-0.20	0.36	0.00	0.49	1.27	-0.33	0.08	0.72	-0.37	-0.05	0.03	0.18
Gujrat-KASUR	1.59	1.65	1.45	1.00	2.15	1.46	0.73	0.75	0.13	0.09	1.85	1.23	0.16	2.50	0.61
Gujrat-LHR	-0.55	-0.46	-0.94	0.30	1.25	0.49	-0.55	-0.52	-0.60	0.10	-1.27	-1.48	-0.07	1.30	-2.95
Gujrat-NANKANA	0.83	0.73	0.68	0.80	-0.54	1.36	1.22	1.15	0.20	0.24	1.25	1.20	0.59	1.16	1.04
Gujrat-SHIKUPURA	0.42	0.83	0.43	1.00	2.15	0.97	0.30	0.29	-0.33	-0.06	0.24	0.10	0.26	0.96	0.25
Gujrat-KHANEWAL	1.59	1.01	1.03	0.80	1.61	1.56	1.95	2.02	1.93	0.71	1.47	1.58	1.40	1.17	1.41
Gujrat-LODHRAN	2.01	1.47	1.62	1.79	0.72	1.95	2.25	2.53	1.86	1.38	2.28	1.70	1.75	1.54	0.61
Gujrat-MULTAN	1.25	1.19	0.77	1.00	0.18	1.95	1.28	1.55	0.87	0.65	0.63	1.22	1.40	2.29	0.80
Gujrat-VEHARI	1.80	1.83	1.37	1.49	0.18	1.07	1.04	1.21	1.93	0.81	2.21	1.69	1.10	1.52	0.92
Gujrat-ATTOCK	0.62	-0.18	0.00	-0.10	-0.18	0.19	0.55	0.52	0.80	0.01	0.48	-0.01	0.52	-0.41	-0.55
Gujrat-CHKWAL	-0.07	-0.83	-0.60	-1.19	0.90	2.33	0.24	0.23	0.20	0.05	1.18	1.00	0.32	-0.91	-0.43
Gujrat-JEH;UM	-0.35	-0.83	-0.26	-0.90	0.18	0.68	-0.12	0.23	0.20	-0.14	1.12	0.35	0.84	-0.62	-0.80
Gujrat-RWP	-0.48	-1.10	-1.20	-0.20	0.54	0.49	-0.37	-0.35	0.13	0.16	-0.21	-1.17	0.35	-0.89	-1.29
Gujrat-OKARA	1.73	1.38	1.37	-0.40	0.72	1.95	1.95	2.19	0.87	0.32	1.45	1.50	0.78	1.87	0.92
Gujrat-PAKPATTAN	1.87	1.65	1.45	0.60	2.51	2.24	2.07	2.30	2.13	0.41	2.30	1.64	1.79	2.31	0.86
Gujrat-SAHIWAL	1.38	1.19	1.03	0.60	0.00	2.53	1.64	1.78	1.20	0.76	1.60	1.57	0.59	1.29	0.86
Gujrat-BHAKKAR	2.21	1.38	1.28	1.19	0.00	1.75	1.28	1.50	2.86	0.93	2.52	1.77	1.94	1.04	1.29
Gujrat-KHUSHAB	1.66	0.55	0.94	0.50	1.61	0.97	1.77	1.90	1.00	0.84	1.98	1.63	0.74	-0.09	-0.31
Gujrat-MIALWALI	1.59	0.64	0.94	0.70	1.61	0.10	0.97	1.96	1.13	1.19	2.19	1.63	1.06	1.30	0.00
Gujrat-SARGODHA	1.25	0.37	0.60	0.60	1.79	0.58	1.04	1.09	0.53	0.06	1.45	1.52	0.62	0.61	1.23

Table: Distance from Hafizabad to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD⁻	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Hafizabad-MANDI	-0.55	-0.83	-0.60	-0.60	0.00	-0.49	0.79	0.63	-0.20	-0.37	1.34	-0.21	-0.38	0.09	-0.31
Hafizabad-NARROWAL	-0.42	-0.46	-0.17	-1.19	0.18	0.00	0.79	0.46	-0.07	-0.32	2.04	0.02	-0.02	0.23	-0.43
Hafizabad-SIALKOT	-1.11	-0.64	-0.94	-0.90	-0.18	-0.58	-0.49	0.29	-1.00	-0.06	0.34	-1.46	-0.35	-0.39	-1.29
Hafizabad-KASUR	0.62	0.64	0.68	0.30	1.61	0.88	-0.24	-0.23	-0.53	-0.05	1.47	0.14	-0.14	2.08	-0.86
Hafizabad-LHR	-1.52	-1.47	-1.71	-0.40	0.72	-0.10	-1.52	-1.50	-1.27	-0.04	-1.65	-2.57	-0.37	0.87	-4.42
Hafizabad-NANKANA	-0.14	-0.28	-0.09	0.10	-1.07	0.78	0.24	0.17	-0.47	0.10	0.87	0.11	0.29	0.74	-0.43
Hafizabad-SHIKUPURA	-0.55	-0.18	-0.34	0.30	1.61	0.39	-0.67	-0.69	-1.00	-0.21	-0.14	-0.99	-0.04	0.54	-1.23
Hafizabad-KHANEWAL	0.62	0.00	0.26	0.10	1.07	0.97	0.97	1.04	1.27	0.57	1.09	0.49	1.09	0.75	-0.06
Hafizabad-LODHRAN	1.04	0.46	0.85	1.09	0.18	1.36	1.28	1.55	1.20	1.24	1.91	0.60	1.45	1.12	-0.86
Hafizabad-MULTAN	0.28	0.18	0.00	0.30	-0.36	1.36	0.30	0.58	0.20	0.51	0.25	0.13	1.10	1.86	-0.68
Hafizabad-VEHARI	0.83	0.83	0.60	0.80	-0.36	0.49	0.06	0.23	1.27	0.67	1.83	0.60	0.80	1.09	-0.55
Hafizabad-ATTOCK	-0.35	-1.19	-0.77	-0.80	-0.72	-0.39	-0.43	-0.46	0.13	-0.13	0.10	-1.11	0.21	-0.83	-2.03
Hafizabad-CHKWAL	-1.04	-1.83	-1.37	-1.89	0.36	1.75	-0.73	-0.75	-0.47	-0.09	0.80	-0.09	0.01	-1.33	-1.90
Hafizabad-JEH;UM	-1.31	-1.83	-1.03	-1.59	-0.36	0.10	-1.10	-0.75	-0.47	-0.28	0.74	-0.75	0.53	-1.05	-2.27
Hafizabad-RWP	-1.45	-2.11	-1.97	-0.90	0.00	-0.10	-1.34	-1.32	-0.53	0.02	-0.59	-2.26	0.04	-1.32	-2.76
Hafizabad-OKARA	0.76	0.37	0.60	-1.09	0.18	1.36	0.97	1.21	0.20	0.18	1.07	0.41	0.48	1.44	-0.55
Hafizabad-PAKPATTAN	0.90	0.64	0.68	-0.10	1.97	1.65	1.10	1.32	1.46	0.27	1.92	0.54	1.48	1.88	-0.61
Hafizabad-SAHIWAL	0.42	0.18	0.26	-0.10	-0.54	1.95	0.67	0.81	0.53	0.62	1.22	0.48	0.28	0.87	-0.61
Hafizabad-BHAKKAR	1.25	0.37	0.51	0.50	-0.54	1.17	0.30	0.52	2.20	0.79	2.15	0.68	1.63	0.62	-0.18
Hafizabad-KHUSHAB	0.69	-0.46	0.17	-0.20	1.07	0.39	0.79	0.92	0.33	0.70	1.60	0.54	0.43	-0.51	-1.78
Hafizabad-MIALWALI	0.62	-0.37	0.17	0.00	1.07	-0.49	0.00	0.98	0.47	1.05	1.81	0.53	0.76	0.87	-1.47
Hafizabad-SARGODHA	0.28	-0.64	-0.17	-0.10	1.25	0.00	0.06	0.12	-0.13	-0.08	1.07	0.43	0.32	0.19	-0.25

Table: Distance from Mandi Bhaudin to other Districts

Districts	Female-Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Mandi Bhaudin-NARROWAL	0.14	0.37	0.43	-0.60	0.18	0.49	0.00	-0.17	0.13	0.05	0.70	0.24	0.36	0.14	-0.12
Mandi Bhaudin-SIALKOT	-0.55	0.18	-0.34	-0.30	-0.18	-0.10	-1.28	-0.35	-0.80	0.31	-1.00	-1.25	0.03	-0.48	-0.98
Mandi Bhaudin-KASUR	1.18	1.47	1.28	0.90	1.61	1.36	-1.04	-0.86	-0.33	0.32	0.13	0.35	0.24	1.99	-0.55
Mandi Bhaudin-LHR	-0.97	-0.64	-1.11	0.20	0.72	0.39	-2.31	-2.13	-1.07	0.33	-2.99	-2.36	0.01	0.78	-4.11
Mandi Bhaudin-NANKANA	0.42	0.55	0.51	0.70	-1.07	1.26	-0.55	-0.46	-0.27	0.47	-0.47	0.32	0.67	0.65	-0.12
Mandi Bhaudin-SHIKUPURA	0.00	0.64	0.26	0.90	1.61	0.88	-1.46	-1.32	-0.80	0.16	-1.48	-0.78	0.34	0.45	-0.92
Mandi Bhaudin-KHANEWAL	1.18	0.83	0.85	0.70	1.07	1.46	0.18	0.40	1.46	0.94	-0.25	0.70	1.48	0.66	0.25
Mandi Bhaudin-LODHRAN	1.59	1.28	1.45	1.69	0.18	1.85	0.49	0.92	1.40	1.61	0.57	0.82	1.83	1.03	-0.55
Mandi Bhaudin-MULTAN	0.83	1.01	0.60	0.90	-0.36	1.85	-0.49	-0.06	0.40	0.88	-1.09	0.34	1.48	1.77	-0.37
Mandi Bhaudin-VEHARI	1.38	1.65	1.20	1.39	-0.36	0.97	-0.73	-0.40	1.46	1.04	0.50	0.81	1.18	1.00	-0.25
Mandi Bhaudin-ATTOCK	0.21	-0.37	-0.17	-0.20	-0.72	0.10	-1.22	-1.09	0.33	0.24	-1.24	-0.89	0.60	-0.92	-1.72
Mandi Bhaudin-CHKWAL	-0.48	-1.01	-0.77	-1.29	0.36	2.24	-1.52	-1.38	-0.27	0.28	-0.54	0.12	0.40	-1.42	-1.60
Mandi Bhaudin-JEHLUM	-0.76	-1.01	-0.43	-1.00	-0.36	0.58	-1.89	-1.38	-0.27	0.09	-0.60	-0.54	0.92	-1.14	-1.97
Mandi Bhaudin-RWP	-0.90	-1.28	-1.37	-0.30	0.00	0.39	-2.13	-1.96	-0.33	0.39	-1.93	-2.05	0.43	-1.41	-2.46
Mandi Bhaudin-OKARA	1.31	1.19	1.20	-0.50	0.18	1.85	0.18	0.58	0.40	0.55	-0.27	0.62	0.86	1.35	-0.25
Mandi Bhaudin-PAKPATTAN	1.45	1.47	1.28	0.50	1.97	2.14	0.30	0.69	1.66	0.64	0.58	0.75	1.87	1.79	-0.31
Mandi Bhaudin-SAHIWAL	0.97	1.01	0.85	0.50	-0.54	2.43	-0.12	0.17	0.73	0.99	-0.12	0.69	0.67	0.78	-0.31
Mandi Bhaudin-BHAKKAR	1.80	1.19	1.11	1.09	-0.54	1.65	-0.49	-0.12	2.40	1.16	0.81	0.89	2.02	0.53	0.12
Mandi Bhaudin-KHUSHAB	1.25	0.37	0.77	0.40	1.07	0.88	0.00	0.29	0.53	1.07	0.26	0.75	0.82	-0.60	-1.47
Mandi Bhaudin-MIALWALI	1.18	0.46	0.77	0.60	1.07	0.00	-0.79	0.35	0.67	1.42	0.47	0.74	1.14	0.78	-1.17
Mandi Bhaudin-SARGODHA	0.83	0.18	0.43	0.50	1.25	0.49	-0.73	-0.52	0.07	0.29	-0.27	0.64	0.70	0.09	0.06

Table: Distance from Narowal to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Narowal-SIALKOT	-0.69	-0.18	-0.77	0.30	-0.36	-0.58	-1.28	-0.17	-0.93	0.26	-1.70	-1.49	-0.33	-0.62	-0.86
Narowal-KASUR	1.04	1.10	0.85	1.49	1.43	0.88	-1.04	-0.69	-0.47	0.27	-0.57	0.11	-0.12	1.84	-0.43
Narowal-LHR	-1.11	-1.01	-1.54	0.80	0.54	-0.10	-2.31	-1.96	-1.20	0.28	-3.69	-2.59	-0.35	0.64	-3.99
Narowal-NANKANA	0.28	0.18	0.09	1.29	-1.25	0.78	-0.55	-0.29	-0.40	0.42	-1.17	0.08	0.31	0.51	0.00
Narowal-SHIKUPURA	-0.14	0.28	-0.17	1.49	1.43	0.39	-1.46	-1.15	-0.93	0.12	-2.18	-1.01	-0.02	0.30	-0.80
Narowal-KHANEWAL	1.04	0.46	0.43	1.29	0.90	0.97	0.18	0.58	1.33	0.89	-0.95	0.46	1.12	0.52	0.37
Narowal-LODHRAN	1.45	0.92	1.03	2.29	0.00	1.36	0.49	1.09	1.27	1.56	-0.13	0.58	1.47	0.89	-0.43
Narowal-MULTAN	0.69	0.64	0.17	1.49	-0.54	1.36	-0.49	0.12	0.27	0.83	-1.79	0.10	1.12	1.63	-0.25
Narowal-VEHARI	1.25	1.28	0.77	1.99	-0.54	0.49	-0.73	-0.23	1.33	0.99	-0.21	0.57	0.82	0.86	-0.12
Narowal-ATTOCK	0.07	-0.73	-0.60	0.40	-0.90	-0.39	-1.22	-0.92	0.20	0.19	-1.94	-1.13	0.24	-1.06	-1.60
Narowal-CHKWAL	-0.62	-1.38	-1.20	-0.70	0.18	1.75	-1.52	-1.21	-0.40	0.24	-1.24	-0.11	0.04	-1.57	-1.47
Narowal-JEHLUM	-0.90	-1.38	-0.85	-0.40	-0.54	0.10	-1.89	-1.21	-0.40	0.04	-1.30	-0.77	0.56	-1.28	-1.84
Narowal-RWP	-1.04	-1.65	-1.80	0.30	-0.18	-0.10	-2.13	-1.78	-0.47	0.35	-2.63	-2.29	0.06	-1.55	-2.33
Narowal-OKARA	1.18	0.83	0.77	0.10	0.00	1.36	0.18	0.75	0.27	0.50	-0.97	0.38	0.50	1.21	-0.12
Narowal-PAKPATTAN	1.31	1.10	0.85	1.09	1.79	1.65	0.30	0.86	1.53	0.59	-0.12	0.52	1.51	1.65	-0.18
Narowal-SAHIWAL	0.83	0.64	0.43	1.09	-0.72	1.95	-0.12	0.35	0.60	0.94	-0.82	0.45	0.31	0.63	-0.18
Narowal-BHAKKAR	1.66	0.83	0.68	1.69	-0.72	1.17	-0.49	0.06	2.26	1.11	0.11	0.65	1.65	0.39	0.25
Narowal-KHUSHAB	1.11	0.00	0.34	1.00	0.90	0.39	0.00	0.46	0.40	1.02	-0.44	0.51	0.45	-0.75	-1.35
Narowal-MIALWALI	1.04	0.09	0.34	1.19	0.90	-0.49	-0.79	0.52	0.53	1.37	-0.23	0.51	0.78	0.64	-1.04
Narowal-SARGODHA	0.69	-0.18	0.00	1.09	1.07	0.00	-0.73	-0.35	-0.07	0.24	-0.97	0.40	0.34	-0.05	0.18

Table: Distance from Sialkot to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Sialkot-KASUR	1.73	1.28	1.62	1.19	1.79	1.46	0.24	-0.52	0.47	0.01	1.13	1.60	0.20	2.47	0.43
Sialkot-LHR	-0.42	-0.83	-0.77	0.50	0.90	0.49	-1.04	-1.78	-0.27	0.02	-1.99	-1.11	-0.02	1.26	-3.13
Sialkot-NANKANA	0.97	0.37	0.85	1.00	-0.90	1.36	0.73	-0.12	0.53	0.16	0.53	1.57	0.63	1.13	0.86
Sialkot-SHIKUPURA	0.55	0.46	0.60	1.19	1.79	0.97	-0.18	-0.98	0.00	-0.15	-0.48	0.47	0.31	0.93	0.06
Sialkot-KHANEWAL	1.73	0.64	1.20	1.00	1.25	1.56	1.46	0.75	2.26	0.62	0.75	1.95	1.44	1.14	1.23
Sialkot-LODHRAN	2.15	1.10	1.80	1.99	0.36	1.95	1.77	1.27	2.20	1.30	1.57	2.07	1.80	1.51	0.43
Sialkot-MULTAN	1.38	0.83	0.94	1.19	-0.18	1.95	0.79	0.29	1.20	0.57	-0.09	1.59	1.45	2.25	0.61
Sialkot-VEHARI	1.94	1.47	1.54	1.69	-0.18	1.07	0.55	-0.06	2.26	0.73	1.49	2.06	1.15	1.48	0.74
Sialkot-ATTOCK	0.76	-0.55	0.17	0.10	-0.54	0.19	0.06	-0.75	1.13	-0.07	-0.24	0.36	0.56	-0.44	-0.74
Sialkot-CHKWAL	0.07	-1.19	-0.43	-1.00	0.54	2.33	-0.24	-1.04	0.53	-0.03	0.46	1.37	0.36	-0.94	-0.61
Sialkot-JEH;UM	-0.21	-1.19	-0.09	-0.70	-0.18	0.68	-0.61	-1.04	0.53	-0.22	0.40	0.72	0.88	-0.65	-0.98
Sialkot-RWP	-0.35	-1.47	-1.03	0.00	0.18	0.49	-0.85	-1.61	0.47	0.08	-0.93	-0.80	0.39	-0.93	-1.47
Sialkot-OKARA	1.87	1.01	1.54	-0.20	0.36	1.95	1.46	0.92	1.20	0.24	0.73	1.87	0.83	1.83	0.74
Sialkot-PAKPATTAN	2.01	1.28	1.62	0.80	2.15	2.24	1.58	1.04	2.46	0.33	1.58	2.01	1.83	2.27	0.68
Sialkot-SAHIWAL	1.52	0.83	1.20	0.80	-0.36	2.53	1.16	0.52	1.53	0.68	0.88	1.94	0.63	1.26	0.68
Sialkot-BHAKKAR	2.35	1.01	1.45	1.39	-0.36	1.75	0.79	0.23	3.20	0.85	1.81	2.14	1.98	1.01	1.11
Sialkot-KHUSHAB	1.80	0.18	1.11	0.70	1.25	0.97	1.28	0.63	1.33	0.76	1.26	2.00	0.78	-0.12	-0.49
Sialkot-MIALWALI	1.73	0.28	1.11	0.90	1.25	0.10	0.49	0.69	1.46	1.11	1.47	2.00	1.11	1.26	-0.18
Sialkot-SARGODHA	1.38	0.00	0.77	0.80	1.43	0.58	0.55	-0.17	0.87	-0.02	0.73	1.89	0.67	0.58	1.04

Table: Distance from Kasur to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Kasur-LHR	-2.15	-2.11	-2.39	-0.70	-0.90	-0.97	-1.28	-1.27	-0.73	0.01	-3.12	-2.71	-0.22	-1.20	-3.56
Kasur-NANKANA	-0.76	-0.92	-0.77	-0.20	-2.69	-0.10	0.49	0.40	0.07	0.16	-0.60	-0.03	0.43	-1.34	0.43
Kasur-SHIKUPURA	-1.18	-0.83	-1.03	0.00	0.00	-0.49	-0.43	-0.46	-0.47	-0.15	-1.61	-1.13	0.10	-1.54	-0.37
Kasur-KHANEWAL	0.00	-0.64	-0.43	-0.20	-0.54	0.10	1.22	1.27	1.80	0.62	-0.38	0.35	1.24	-1.33	0.80
Kasur-LODHRAN	0.42	-0.18	0.17	0.80	-1.43	0.49	1.52	1.78	1.73	1.29	0.44	0.47	1.60	-0.96	0.00
Kasur-MULTAN	-0.35	-0.46	-0.68	0.00	-1.97	0.49	0.55	0.81	0.73	0.56	-1.22	-0.01	1.24	-0.21	0.18
Kasur-VEHARI	0.21	0.18	-0.09	0.50	-1.97	-0.39	0.30	0.46	1.80	0.72	0.36	0.46	0.95	-0.99	0.31
Kasur-ATTOCK	-0.97	-1.83	-1.45	-1.09	-2.33	-1.26	-0.18	-0.23	0.67	-0.08	-1.37	-1.24	0.36	-2.91	-1.17
Kasur-CHKWAL	-1.66	-2.48	-2.05	-2.19	-1.25	0.88	-0.49	-0.52	0.07	-0.03	-0.67	-0.23	0.16	-3.41	-1.04
Kasur-JEH;UM	-1.94	-2.48	-1.71	-1.89	-1.97	-0.78	-0.85	-0.52	0.07	-0.23	-0.73	-0.88	0.68	-3.12	-1.41
Kasur-RWP	-2.08	-2.75	-2.65	-1.19	-1.61	-0.97	-1.10	-1.09	0.00	0.08	-2.06	-2.40	0.19	-3.39	-1.90
Kasur-OKARA	0.14	-0.28	-0.09	-1.39	-1.43	0.49	1.22	1.44	0.73	0.23	-0.40	0.27	0.63	-0.63	0.31
Kasur-PAKPATTAN	0.28	0.00	0.00	-0.40	0.36	0.78	1.34	1.55	2.00	0.32	0.45	0.41	1.63	-0.20	0.25
Kasur-SAHIWAL	-0.21	-0.46	-0.43	-0.40	-2.15	1.07	0.91	1.04	1.07	0.67	-0.25	0.34	0.43	-1.21	0.25
Kasur-BHAKKAR	0.62	-0.28	-0.17	0.20	-2.15	0.29	0.55	0.75	2.73	0.84	0.68	0.54	1.78	-1.46	0.68
Kasur-KHUSHAB	0.07	-1.10	-0.51	-0.50	-0.54	-0.49	1.04	1.15	0.87	0.75	0.13	0.40	0.58	-2.59	-0.92
Kasur-MIALWALI	0.00	-1.01	-0.51	-0.30	-0.54	-1.36	0.24	1.21	1.00	1.10	0.34	0.40	0.91	-1.20	-0.61
Kasur-SARGODHA	-0.35	-1.28	-0.85	-0.40	-0.36	-0.88	0.30	0.35	0.40	-0.03	-0.40	0.29	0.47	-1.89	0.61

Table: Distance from Lahore to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
LHR-NANKANA	1.38	1.19	1.62	0.50	-1.79	0.88	1.77	1.67	0.80	0.14	2.52	2.67	0.65	-0.13	3.99
LHR-SHIKUPURA	0.97	1.28	1.37	0.70	0.90	0.49	0.85	0.81	0.27	-0.16	1.51	1.58	0.32	-0.33	3.19
LHR-KHANEWAL	2.15	1.47	1.97	0.50	0.36	1.07	2.50	2.53	2.53	0.61	2.74	3.06	1.46	-0.12	4.36
LHR-LODHRAN	2.56	1.93	2.56	1.49	-0.54	1.46	2.80	3.05	2.46	1.28	3.56	3.17	1.82	0.25	3.56
LHR-MULTAN	1.80	1.65	1.71	0.70	-1.07	1.46	1.83	2.07	1.46	0.55	1.90	2.70	1.46	0.99	3.75
LHR-VEHARI	2.35	2.29	2.31	1.19	-1.07	0.58	1.58	1.73	2.53	0.71	3.48	3.17	1.17	0.22	3.87
LHR-ATTOCK	1.18	0.28	0.94	-0.40	-1.43	-0.29	1.10	1.04	1.40	-0.09	1.75	1.46	0.58	-1.70	2.39
LHR-CHKWAL	0.48	-0.37	0.34	-1.49	-0.36	1.85	0.79	0.75	0.80	-0.05	2.45	2.48	0.38	-2.20	2.52
LHR-JEH;UM	0.21	-0.37	0.68	-1.19	-1.07	0.19	0.43	0.75	0.80	-0.24	2.39	1.82	0.90	-1.92	2.15
LHR-RWP	0.07	-0.64	-0.26	-0.50	-0.72	0.00	0.18	0.17	0.73	0.06	1.06	0.30	0.41	-2.19	1.66
LHR-OKARA	2.28	1.83	2.31	-0.70	-0.54	1.46	2.50	2.71	1.46	0.22	2.72	2.97	0.85	0.57	3.87
LHR-PAKPATTAN	2.42	2.11	2.39	0.30	1.25	1.75	2.62	2.82	2.73	0.31	3.57	3.11	1.85	1.01	3.81
LHR-SAHIWAL	1.94	1.65	1.97	0.30	-1.25	2.04	2.19	2.30	1.80	0.66	2.87	3.05	0.65	0.00	3.81
LHR-BHAKKAR	2.77	1.83	2.22	0.90	-1.25	1.26	1.83	2.02	3.46	0.83	3.80	3.24	2.00	-0.25	4.24
LHR-KHUSHAB	2.21	1.01	1.88	0.20	0.36	0.49	2.31	2.42	1.60	0.74	3.25	3.11	0.80	-1.38	2.64
LHR-MIALWALI	2.15	1.10	1.88	0.40	0.36	-0.39	1.52	2.48	1.73	1.09	3.46	3.10	1.13	0.00	2.95
LHR-SARGODHA	1.80	0.83	1.54	0.30	0.54	0.10	1.58	1.61	1.13	-0.04	2.72	3.00	0.69	-0.69	4.18

Table: Distance from Nankana Sahib to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Nankana Sb-SHIKUPURA	-0.42	0.09	-0.26	0.20	2.69	-0.39	-0.91	-0.86	-0.53	-0.31	-1.01	-1.09	-0.33	-0.20	-0.80
Nankana Sb-KHANEWAL	0.76	0.28	0.34	0.00	2.15	0.19	0.73	0.86	1.73	0.46	0.22	0.38	0.81	0.01	0.37
Nankana Sb-LODHRAN	1.18	0.73	0.94	1.00	1.25	0.58	1.04	1.38	1.66	1.13	1.04	0.50	1.17	0.38	-0.43
Nankana Sb-MULTAN	0.42	0.46	0.09	0.20	0.72	0.58	0.06	0.40	0.67	0.40	-0.62	0.02	0.81	1.12	-0.25
Nankana Sb-VEHARI	0.97	1.10	0.68	0.70	0.72	-0.29	-0.18	0.06	1.73	0.57	0.97	0.49	0.51	0.35	-0.12
Nankana Sb-ATTOCK	-0.21	-0.92	-0.68	-0.90	0.36	-1.17	-0.67	-0.63	0.60	-0.23	-0.77	-1.21	-0.07	-1.57	-1.60
Nankana Sb-CHKWAL	-0.90	-1.56	-1.28	-1.99	1.43	0.97	-0.97	-0.92	0.00	-0.19	-0.07	-0.20	-0.27	-2.07	-1.47
Nankana Sb-JEH;UM	-1.18	-1.56	-0.94	-1.69	0.72	-0.68	-1.34	-0.92	0.00	-0.38	-0.13	-0.85	0.25	-1.78	-1.84
Nankana Sb-RWP	-1.31	-1.83	-1.88	-1.00	1.07	-0.88	-1.58	-1.50	-0.07	-0.08	-1.46	-2.37	-0.24	-2.06	-2.33
Nankana Sb-OKARA	0.90	0.64	0.68	-1.19	1.25	0.58	0.73	1.04	0.67	0.08	0.20	0.30	0.20	0.70	-0.12
Nankana Sb-PAKPATTAN	1.04	0.92	0.77	-0.20	3.05	0.88	0.85	1.15	1.93	0.17	1.05	0.44	1.20	1.14	-0.18
Nankana Sb-SAHIWAL	0.55	0.46	0.34	-0.20	0.54	1.17	0.43	0.63	1.00	0.52	0.35	0.37	0.00	0.13	-0.18
Nankana Sb-BHAKKAR	1.38	0.64	0.60	0.40	0.54	0.39	0.06	0.35	2.66	0.69	1.28	0.57	1.35	-0.12	0.25
Nankana Sb-KHUSHAB	0.83	-0.18	0.26	-0.30	2.15	-0.39	0.55	0.75	0.80	0.60	0.73	0.43	0.15	-1.25	-1.35
Nankana Sb-MIALWALI	0.76	-0.09	0.26	-0.10	2.15	-1.26	-0.24	0.81	0.93	0.95	0.94	0.43	0.47	0.13	-1.04
Nankana Sb-SARGODHA	0.42	-0.37	-0.09	-0.20	2.33	-0.78	-0.18	-0.06	0.33	-0.19	0.20	0.32	0.03	-0.55	0.18

Table: Distance from Shaikhupurato other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
ShaikhuPura-KHANEWAL	1.18	0.18	0.60	-0.20	-0.54	0.58	1.64	1.73	2.26	0.77	1.23	1.48	1.14	0.21	1.17
ShaikhuPura-LODHRAN	1.59	0.64	1.20	0.80	-1.43	0.97	1.95	2.25	2.20	1.44	2.04	1.59	1.50	0.58	0.37
ShaikhuPura-MULTAN	0.83	0.37	0.34	0.00	-1.97	0.97	0.97	1.27	1.20	0.71	0.39	1.12	1.14	1.33	0.55
ShaikhuPura-VEHARI	1.38	1.01	0.94	0.50	-1.97	0.10	0.73	0.92	2.26	0.88	1.97	1.59	0.84	0.55	0.68
ShaikhuPura-ATTOCK	0.21	-1.01	-0.43	-1.09	-2.33	-0.78	0.24	0.23	1.13	0.08	0.24	-0.12	0.26	-1.37	-0.80
ShaikhuPura-CHKWAL	-0.48	-1.65	-1.03	-2.19	-1.25	1.36	-0.06	-0.06	0.53	0.12	0.93	0.90	0.06	-1.87	-0.68
ShaikhuPura-JEH;UM	-0.76	-1.65	-0.68	-1.89	-1.97	-0.29	-0.43	-0.06	0.53	-0.08	0.88	0.24	0.58	-1.58	-1.04
ShaikhuPura-RWP	-0.90	-1.93	-1.62	-1.19	-1.61	-0.49	-0.67	-0.63	0.47	0.23	-0.45	-1.27	0.09	-1.85	-1.54
ShaikhuPura-OKARA	1.31	0.55	0.94	-1.39	-1.43	0.97	1.64	1.90	1.20	0.38	1.21	1.39	0.53	0.91	0.68
ShaikhuPura-PAKPATTAN	1.45	0.83	1.03	-0.40	0.36	1.26	1.77	2.02	2.46	0.48	2.06	1.53	1.53	1.34	0.61
ShaikhuPura-SAHIWAL	0.97	0.37	0.60	-0.40	-2.15	1.56	1.34	1.50	1.53	0.82	1.36	1.47	0.33	0.33	0.61
ShaikhuPura-BHAKKAR	1.80	0.55	0.85	0.20	-2.15	0.78	0.97	1.21	3.20	0.99	2.28	1.67	1.68	0.08	1.04
ShaikhuPura-KHUSHAB	1.25	-0.28	0.51	-0.50	-0.54	0.00	1.46	1.61	1.33	0.90	1.74	1.53	0.48	-1.05	-0.55
ShaikhuPura-MIALWALI	1.18	-0.18	0.51	-0.30	-0.54	-0.88	0.67	1.67	1.46	1.26	1.95	1.52	0.80	0.34	-0.25
ShaikhuPura-SARGODHA	0.83	-0.46	0.17	-0.40	-0.36	-0.39	0.73	0.81	0.87	0.12	1.21	1.42	0.36	-0.35	0.98

Table: Distance from Khanewal to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Khanewal-LODHRAN	0.42	0.46	0.60	1.00	-0.90	0.39	0.30	0.52	-0.07	0.67	0.81	0.12	0.36	0.37	-0.80
Khanewal-MULTAN	-0.35	0.18	-0.26	0.20	-1.43	0.39	-0.67	-0.46	-1.07	-0.06	-0.84	-0.36	0.00	1.11	-0.61
Khanewal-VEHARI	0.21	0.83	0.34	0.70	-1.43	-0.49	-0.91	-0.81	0.00	0.11	0.74	0.11	-0.29	0.34	-0.49
Khanewal-ATTOCK	-0.97	-1.19	-1.03	-0.90	-1.79	-1.36	-1.40	-1.50	-1.13	-0.70	-0.99	-1.60	-0.88	-1.58	-1.97
Khanewal-CHKWAL	-1.66	-1.83	-1.62	-1.99	-0.72	0.78	-1.71	-1.78	-1.73	-0.65	-0.30	-0.58	-1.08	-2.08	-1.84
Khanewal-JEH;UM	-1.94	-1.83	-1.28	-1.69	-1.43	-0.88	-2.07	-1.78	-1.73	-0.85	-0.35	-1.24	-0.56	-1.79	-2.21
Khanewal-RWP	-2.08	-2.11	-2.22	-1.00	-1.07	-1.07	-2.31	-2.36	-1.80	-0.54	-1.68	-2.75	-1.05	-2.07	-2.70
Khanewal-OKARA	0.14	0.37	0.34	-1.19	-0.90	0.39	0.00	0.17	-1.07	-0.39	-0.02	-0.08	-0.61	0.69	-0.49
Khanewal-PAKPATTAN	0.28	0.64	0.43	-0.20	0.90	0.68	0.12	0.29	0.20	-0.29	0.83	0.05	0.39	1.13	-0.55
Khanewal-SAHIWAL	-0.21	0.18	0.00	-0.20	-1.61	0.97	-0.30	-0.23	-0.73	0.05	0.13	-0.01	-0.81	0.12	-0.55
Khanewal-BHAKKAR	0.62	0.37	0.26	0.40	-1.61	0.19	-0.67	-0.52	0.93	0.22	1.05	0.19	0.54	-0.13	-0.12
Khanewal-KHUSHAB	0.07	-0.46	-0.09	-0.30	0.00	-0.58	-0.18	-0.12	-0.93	0.13	0.51	0.05	-0.66	-1.26	-1.72
Khanewal-MIALWALI	0.00	-0.37	-0.09	-0.10	0.00	-1.46	-0.97	-0.06	-0.80	0.48	0.72	0.04	-0.33	0.12	-1.41
Khanewal-SARGODHA	-0.35	-0.64	-0.43	-0.20	0.18	-0.97	-0.91	-0.92	-1.40	-0.65	-0.02	-0.06	-0.77	-0.56	-0.18

Table: Distance from Lodhran to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Lodhran-MULTAN	-0.76	-0.28	-0.85	-0.80	-0.54	0.00	-0.97	-0.98	-1.00	-0.73	-1.66	-0.48	-0.35	0.74	0.18
Lodhran-VEHARI	-0.21	0.37	-0.26	-0.30	-0.54	-0.88	-1.22	-1.32	0.07	-0.57	-0.07	-0.01	-0.65	-0.03	0.31
Lodhran-ATTOCK	-1.38	-1.65	-1.62	-1.89	-0.90	-1.75	-1.71	-2.02	-1.07	-1.37	-1.81	-1.71	-1.24	-1.95	-1.17
Lodhran-CHKWAL	-2.08	-2.29	-2.22	-2.99	0.18	0.39	-2.01	-2.30	-1.66	-1.32	-1.11	-0.69	-1.44	-2.45	-1.04
Lodhran-JEH;UM	-2.35	-2.29	-1.88	-2.69	-0.54	-1.26	-2.37	-2.30	-1.66	-1.52	-1.16	-1.35	-0.92	-2.17	-1.41
Lodhran-RWP	-2.49	-2.57	-2.82	-1.99	-0.18	-1.46	-2.62	-2.88	-1.73	-1.21	-2.50	-2.87	-1.41	-2.44	-1.90
Lodhran-OKARA	-0.28	-0.09	-0.26	-2.19	0.00	0.00	-0.30	-0.35	-1.00	-1.06	-0.84	-0.20	-0.97	0.32	0.31
Lodhran-PAKPATTAN	-0.14	0.18	-0.17	-1.19	1.79	0.29	-0.18	-0.23	0.27	-0.97	0.01	-0.06	0.03	0.76	0.25
Lodhran-SAHIWAL	-0.62	-0.28	-0.60	-1.19	-0.72	0.58	-0.61	-0.75	-0.67	-0.62	-0.69	-0.13	-1.17	-0.25	0.25
Lodhran-BHAKKAR	0.21	-0.09	-0.34	-0.60	-0.72	-0.19	-0.97	-1.04	1.00	-0.45	0.24	0.07	0.18	-0.50	0.68
Lodhran-KHUSHAB	-0.35	-0.92	-0.68	-1.29	0.90	-0.97	-0.49	-0.63	-0.87	-0.54	-0.31	-0.06	-1.02	-1.63	-0.92
Lodhran-MIALWALI	-0.42	-0.83	-0.68	-1.09	0.90	-1.85	-1.28	-0.58	-0.73	-0.19	-0.10	-0.07	-0.69	-0.25	-0.61
Lodhran-SARGODHA	-0.76	-1.10	-1.03	-1.19	1.07	-1.36	-1.22	-1.44	-1.33	-1.32	-0.84	-0.18	-1.13	-0.94	0.61

Table: Distance from Multan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
MLTN-VEHARI	0.55	0.64	0.60	0.50	0.00	-0.88	-0.24	-0.35	1.07	0.16	1.58	0.47	-0.30	-0.77	0.12
MLTN-ATTOCK	-0.62	-1.38	-0.77	-1.09	-0.36	-1.75	-0.73	-1.04	-0.07	-0.64	-0.15	-1.23	-0.88	-2.69	-1.35
MLTN-CHKWAL	-1.31	-2.02	-1.37	-2.19	0.72	0.39	-1.04	-1.32	-0.67	-0.59	0.55	-0.22	-1.08	-3.20	-1.23
MLTN-JEH;UM	-1.59	-2.02	-1.03	-1.89	0.00	-1.26	-1.40	-1.32	-0.67	-0.79	0.49	-0.87	-0.56	-2.91	-1.60
MLTN-RWP	-1.73	-2.29	-1.97	-1.19	0.36	-1.46	-1.64	-1.90	-0.73	-0.48	-0.84	-2.39	-1.05	-3.18	-2.09
MLTN-OKARA	0.48	0.18	0.60	-1.39	0.54	0.00	0.67	0.63	0.00	-0.33	0.82	0.28	-0.62	-0.42	0.12
MLTN-PAKPATTAN	0.62	0.46	0.68	-0.40	2.33	0.29	0.79	0.75	1.27	-0.24	1.67	0.42	0.39	0.02	0.06
MLTN-SAHIWAL	0.14	0.00	0.26	-0.40	-0.18	0.58	0.37	0.23	0.33	0.11	0.97	0.35	-0.81	-1.00	0.06
MLTN-BHAKKAR	0.97	0.18	0.51	0.20	-0.18	-0.19	0.00	-0.06	2.00	0.28	1.90	0.55	0.54	-1.24	0.49
MLTN-KHUSHAB	0.42	-0.64	0.17	-0.50	1.43	-0.97	0.49	0.35	0.13	0.19	1.35	0.41	-0.66	-2.38	-1.11
MLTN-MIALWALI	0.35	-0.55	0.17	-0.30	1.43	-1.85	-0.30	0.40	0.27	0.54	1.56	0.40	-0.34	-0.99	-0.80
MLTN-SARGODHA	0.00	-0.83	-0.17	-0.40	1.61	-1.36	-0.24	-0.46	-0.33	-0.59	0.82	0.30	-0.78	-1.68	0.43

Table: Distance from Vehari to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Vehari-ATTOCK	-1.18	-2.02	-1.37	-1.59	-0.36	-0.88	-0.49	-0.69	-1.13	-0.80	-1.73	-1.70	-0.59	-1.92	-1.47
Vehari-CHKWAL	-1.87	-2.66	-1.97	-2.69	0.72	1.26	-0.79	-0.98	-1.73	-0.76	-1.04	-0.69	-0.79	-2.42	-1.35
Vehari-JEH;UM	-2.15	-2.66	-1.62	-2.39	0.00	-0.39	-1.16	-0.98	-1.73	-0.95	-1.09	-1.34	-0.27	-2.14	-1.72
Vehari-RWP	-2.28	-2.93	-2.56	-1.69	0.36	-0.58	-1.40	-1.55	-1.80	-0.65	-2.42	-2.86	-0.76	-2.41	-2.21
Vehari-OKARA	-0.07	-0.46	0.00	-1.89	0.54	0.88	0.91	0.98	-1.07	-0.49	-0.76	-0.19	-0.32	0.35	0.00
Vehari-PAKPATTAN	0.07	-0.18	0.09	-0.90	2.33	1.17	1.04	1.09	0.20	-0.40	0.09	-0.05	0.68	0.79	-0.06
Vehari-SAHIWAL	-0.42	-0.64	-0.34	-0.90	-0.18	1.46	0.61	0.58	-0.73	-0.05	-0.61	-0.12	-0.52	-0.22	-0.06
Vehari-BHAKKAR	0.42	-0.46	-0.09	-0.30	-0.18	0.68	0.24	0.29	0.93	0.12	0.31	0.08	0.83	-0.47	0.37
Vehari-KHUSHAB	-0.14	-1.28	-0.43	-1.00	1.43	-0.10	0.73	0.69	-0.93	0.03	-0.23	-0.06	-0.37	-1.60	-1.23
Vehari-MIALWALI	-0.21	-1.19	-0.43	-0.80	1.43	-0.97	-0.06	0.75	-0.80	0.38	-0.02	-0.06	-0.04	-0.22	-0.92
Vehari-SARGODHA	-0.55	-1.47	-0.77	-0.90	1.61	-0.49	0.00	-0.12	-1.40	-0.75	-0.76	-0.17	-0.48	-0.91	0.31

Table: Distance from Attock to other Districts

Districts	Education	Education	Literacy Rate	Rate	Immunized	Women	Total LOD	Total SD	Sanitation	conn	Gas	Solid Roof	Burnt Bricks	1	Safe Water
Attock-CHKWAL	-0.69	-0.64	-0.60	-1.09	1.07	2.14	-0.30	-0.29	-0.60	0.04	0.70	1.02	-0.20	-0.50	0.12
Attock-JEHLUM	-0.97	-0.64	-0.26	-0.80	0.36	0.49	-0.67	-0.29	-0.60	-0.15	0.64	0.36	0.32	-0.21	-0.25
Attock-RWP	-1.11	-0.92	-1.20	-0.10	0.72	0.29	-0.91	-0.86	-0.67	0.15	-0.69	-1.16	-0.17	-0.49	-0.74
Attock-OKARA	1.11	1.56	1.37	-0.30	0.90	1.75	1.40	1.67	0.07	0.31	0.97	1.51	0.27	2.27	1.47
Attock-PAKPATTAN	1.25	1.83	1.45	0.70	2.69	2.04	1.52	1.78	1.33	0.40	1.82	1.65	1.27	2.71	1.41
Attock-SAHIWAL	0.76	1.38	1.03	0.70	0.18	2.33	1.10	1.27	0.40	0.75	1.12	1.58	0.07	1.70	1.41
Attock-BHAKKAR	1.59	1.56	1.28	1.29	0.18	1.56	0.73	0.98	2.06	0.92	2.05	1.78	1.42	1.45	1.84
Attock-KHUSHAB	1.04	0.73	0.94	0.60	1.79	0.78	1.22	1.38	0.20	0.83	1.50	1.65	0.22	0.32	0.25
Attock-MIALWALI	0.97	0.83	0.94	0.80	1.79	-0.10	0.43	1.44	0.33	1.18	1.71	1.64	0.55	1.70	0.55
Attock-SARGODHA	0.62	0.55	0.60	0.70	1.97	0.39	0.49	0.58	-0.27	0.05	0.97	1.53	0.11	1.02	1.78

Table: Distance from Chakwal to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Chakwal-JEHLUM	-0.28	0.00	0.34	0.30	-0.72	-1.65	-0.37	0.00	0.00	-0.20	-0.05	-0.66	0.52	0.29	-0.37
Chakwal-RWP	-0.42	-0.28	-0.60	1.00	-0.36	-1.85	-0.61	-0.58	-0.07	0.11	-1.39	-2.17	0.03	0.02	-0.86
Chakwal-OKARA	1.80	2.20	1.97	0.80	-0.18	-0.39	1.71	1.96	0.67	0.26	0.27	0.50	0.47	2.78	1.35
Chakwal-PAKPATTAN	1.94	2.48	2.05	1.79	1.61	-0.10	1.83	2.07	1.93	0.36	1.12	0.63	1.47	3.21	1.29
Chakwal-SAHIWAL	1.45	2.02	1.62	1.79	-0.90	0.19	1.40	1.55	1.00	0.70	0.42	0.57	0.27	2.20	1.29
Chakwal-BHAKKAR	2.28	2.20	1.88	2.39	-0.90	-0.58	1.04	1.27	2.66	0.87	1.35	0.77	1.62	1.95	1.72
Chakwal-KHUSHAB	1.73	1.38	1.54	1.69	0.72	-1.36	1.52	1.67	0.80	0.78	0.80	0.63	0.42	0.82	0.12
Chakwal-MIALWALI	1.66	1.47	1.54	1.89	0.72	-2.24	0.73	1.73	0.93	1.14	1.01	0.62	0.75	2.20	0.43
Chakwal-SARGODHA	1.31	1.19	1.20	1.79	0.90	-1.75	0.79	0.86	0.33	0.00	0.27	0.52	0.31	1.52	1.66

Table: Distance from Jehlum to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Jehlum-RWP	-0.14	-0.28	-0.94	0.70	0.36	-0.19	-0.24	-0.58	-0.07	0.31	-1.33	-1.52	-0.49	-0.27	-0.49
Jehlum-OKARA	2.08	2.20	1.62	0.50	0.54	1.26	2.07	1.96	0.67	0.46	0.33	1.15	-0.05	2.49	1.72
Jehlum-PAKPATTAN	2.21	2.48	1.71	1.49	2.33	1.56	2.19	2.07	1.93	0.55	1.18	1.29	0.95	2.93	1.66
Jehlum-SAHIWAL	1.73	2.02	1.28	1.49	-0.18	1.85	1.77	1.55	1.00	0.90	0.48	1.22	-0.25	1.91	1.66
Jehlum-BHAKKAR	2.56	2.20	1.54	2.09	-0.18	1.07	1.40	1.27	2.66	1.07	1.40	1.42	1.10	1.66	2.09
Jehlum-KHUSHAB	2.01	1.38	1.20	1.39	1.43	0.29	1.89	1.67	0.80	0.98	0.86	1.29	-0.10	0.53	0.49
Jehlum-MIALWALI	1.94	1.47	1.20	1.59	1.43	-0.58	1.10	1.73	0.93	1.33	1.07	1.28	0.23	1.92	0.80
Jehlum-SARGODHA	1.59	1.19	0.85	1.49	1.61	-0.10	1.16	0.86	0.33	0.20	0.33	1.17	-0.21	1.23	2.03

Table: Distance from Rawalpindi to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
RWP-OKARA	2.21	2.48	2.56	-0.20	0.18	1.46	2.31	2.53	0.73	0.15	1.66	2.67	0.44	2.76	2.21
RWP-PAKPATTAN	2.35	2.75	2.65	0.80	1.97	1.75	2.44	2.65	2.00	0.25	2.51	2.81	1.44	3.20	2.15
RWP-SAHIWAL	1.87	2.29	2.22	0.80	-0.54	2.04	2.01	2.13	1.07	0.60	1.81	2.74	0.24	2.18	2.15
RWP-BHAKKAR	2.70	2.48	2.48	1.39	-0.54	1.26	1.64	1.84	2.73	0.77	2.74	2.94	1.59	1.94	2.58
RWP-KHUSHAB	2.15	1.65	2.14	0.70	1.07	0.49	2.13	2.25	0.87	0.67	2.19	2.80	0.39	0.80	0.98
RWP-MIALWALI	2.08	1.74	2.14	0.90	1.07	-0.39	1.34	2.30	1.00	1.03	2.40	2.80	0.72	2.19	1.29
RWP-SARGODHA	1.73	1.47	1.80	0.80	1.25	0.10	1.40	1.44	0.40	-0.11	1.66	2.69	0.28	1.50	2.52

Table: Distance from Okara to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Okara-PAKPATTAN	0.14	0.28	0.09	1.00	1.79	0.29	0.12	0.12	1.27	0.09	0.85	0.14	1.00	0.44	-0.06
Okara-SAHIWAL	-0.35	-0.18	-0.34	1.00	-0.72	0.58	-0.30	-0.40	0.33	0.44	0.15	0.07	-0.20	-0.58	-0.06
Okara-BHAKKAR	0.48	0.00	-0.09	1.59	-0.72	-0.19	-0.67	-0.69	2.00	0.61	1.08	0.27	1.15	-0.82	0.37
Okara-KHUSHAB	-0.07	-0.83	-0.43	0.90	0.90	-0.97	-0.18	-0.29	0.13	0.52	0.53	0.13	-0.05	-1.96	-1.23
Okara-MIALWALI	-0.14	-0.73	-0.43	1.09	0.90	-1.85	-0.97	-0.23	0.27	0.87	0.74	0.13	0.28	-0.57	-0.92
Okara-SARGODHA	-0.48	-1.01	-0.77	1.00	1.07	-1.36	-0.91	-1.09	-0.33	-0.26	0.00	0.02	-0.16	-1.26	0.31

Table: Distance from Pakpatan to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Pakpatan-SAHIWAL	-0.48	-0.46	-0.43	0.00	-2.51	0.29	-0.43	-0.52	-0.93	0.35	-0.70	-0.07	-1.20	-1.01	0.00
Pakpatan-BHAKKAR	0.35	-0.28	-0.17	0.60	-2.51	-0.49	-0.79	-0.81	0.73	0.52	0.23	0.13	0.15	-1.26	0.43
Pakpatan-KHUSHAB	-0.21	-1.10	-0.51	-0.10	-0.90	-1.26	-0.30	-0.40	-1.13	0.43	-0.32	0.00	-1.05	-2.39	-1.17
Pakpatan-MIALWALI	-0.28	-1.01	-0.51	0.10	-0.90	-2.14	-1.10	-0.35	-1.00	0.78	-0.11	-0.01	-0.72	-1.01	-0.86
Pakpatan-SARGODHA	-0.62	-1.28	-0.85	0.00	-0.72	-1.65	-1.04	-1.21	-1.60	-0.35	-0.85	-0.12	-1.16	-1.70	0.37

Table: Distance from Sahiwal to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Sahiwal-BHAKKAR	0.83	0.18	0.26	0.60	0.00	-0.78	-0.37	-0.29	1.66	0.17	0.93	0.20	1.35	-0.25	0.43
Sahiwal-KHUSHAB	0.28	-0.64	-0.09	-0.10	1.61	-1.56	0.12	0.12	-0.20	0.08	0.38	0.06	0.15	-1.38	-1.17
Sahiwal-MIALWALI	0.21	-0.55	-0.09	0.10	1.61	-2.43	-0.67	0.17	-0.07	0.43	0.59	0.05	0.48	0.01	-0.86
Sahiwal-SARGODHA	-0.14	-0.83	-0.43	0.00	1.79	-1.95	-0.61	-0.69	-0.67	-0.70	-0.15	-0.05	0.04	-0.68	0.37

Table: Distance from Bhakar to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Bhakar-KHUSHAB	-0.55	-0.83	-0.34	-0.70	1.61	-0.78	0.49	0.40	-1.86	-0.09	-0.55	-0.14	-1.20	-1.13	-1.60
Bhakar-MIALWALI	-0.62	-0.73	-0.34	-0.50	1.61	-1.65	-0.30	0.46	-1.73	0.26	-0.34	-0.14	-0.87	0.25	-1.29
Bhakar-SARGODHA	-0.97	-1.01	-0.68	-0.60	1.79	-1.17	-0.24	-0.40	-2.33	-0.87	-1.08	-0.25	-1.31	-0.43	-0.06

Table: Distance from Khushab to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Khushab-MIALWALI	-0.07	0.09	0.00	0.20	0.00	-0.88	-0.79	0.06	0.13	0.35	0.21	-0.01	0.33	1.39	0.31
Khushab-SARGODHA	-0.42	-0.18	-0.34	0.10	0.18	-0.39	-0.73	-0.81	-0.47	-0.78	-0.53	-0.11	-0.11	0.70	1.54

Table: Distance from Mianwali to other Districts

Districts	Education	Male-Education	Literacy Rate	Rate	Fully Immunized	Pregnant Women	Total LOD	Total SD⁻	Sanitation	Electricity conn	Gas	Solid Roof	Burnt Bricks	Rooms above 1	Safe Water
Mianwali-Sargodha	-0.35	-0.28	-0.34	-0.10	0.18	0.49	0.06	-0.86	-0.60	-1.13	-0.74	-0.10	-0.44	-0.69	1.23