



Phonological Variations in Waziri Dialect in District Bannu

Usama Khan

BS Student, Department of English & Applied Linguistics, University of Science & Technology, Bannu, KP, Pakistan.

Muhammad Wasim Khan

Visiting Lecturer (MPhil Scholar), Department of English & Applied Linguistics, University of Science & Technology, Bannu, KP, Pakistan. (Corresponding Author)
wasimafriidofficial@gmail.com

Dr Abdul Karim Khan

Assistant Professor, Department of English & Applied Linguistics, University of Science & Technology, Bannu, KP, Pakistan.

Abstract

The aim of this study is to analyze and investigate the phonological variation in the Waziri dialect in district Bannu. The data is collected through semi-structured interviews with 35 sample sizes and a mixed research design is selected for this study. After collecting the data, the data is processed under the descriptive and analytical theoretical framework of Pashto dialectology. The study found that the vowel sound /əɪ/ is replaced with the vowel sound /e:/, while the vowel sound /o/ is replaced with the vowel sound /ɛ/ in the selected words. Moreover, variations in consonant sounds were also found, but less in number as compared to the vowel sounds of the Waziri dialect. Thus, the variations of vowel sound in the Waziri dialect are the most significant change in the selected areas of district Bannu. It is recommended to conduct a comprehensive study on various dialects of the Pashto language such as lexical and syntactical variations in the Waziri dialect, phonological variation in the Banochi dialect, and other various dialects.

Keywords: Linguistics, Dialectology, Pashto Dialectology, Phonological Variations, Waziri Dialect

Introduction

Dialectology is the systematic and descriptive study of dialects. Dialectology studies different dialects of specific geographic areas. Dialectology needs to investigate how, why, and what the purpose of these different dialects develop in a specific area. Dialectology is the sub-field of linguistics which studies different variations in language. Dialectology is the study of variation in the lexical and structural components of language. Typically, this field of study is linked to the examination of differences in language usage across different regions, particularly in rural locations (Britain, 2010).

Every language has unique varieties that are known as dialects which differentiate them from one another and the study of these dialects is done in the field of dialectology. The study of Pashto dialectology is also done under the same field of dialectology. Pashto is an Indo-European language which is primarily spoken by the people of Afghanistan and Pakistan. Pashto is the first language of the Pashto people. Pashto is the native and national language of Afghanistan and is natively spoken in Khyber Pakhtunkhwa Pakistan, but not the national language of Pakistan. In Afghanistan approximately 7.5 million people speak Pashto, but in Khyber Pakhtunkhwa (KP) Pakistan over ninety percent people approximately 14 million people speak Pashto Language. Pashto Language has two main dialects one northern dialect and other southern dialects. The northern dialect is spoken by the people of Nangarhar, Laghman, and Panjshir in Afghanistan and Pakistan spoken by the people of Quetta, Peshawar, Swat, and Bunir. The northern dialect is subdivided into Yusufzai dialect, Taniwol dialect, Khosti dialect, Mangal dialect, etc. The southern dialect is spoken by the people of Kandahar, Helmand and Farah, but in Pakistan, the people of southern areas of Khyber Pakhtunkhwa like Bannu, Dera Ismail Khan, and FATA and also spoken by the people of Quetta, and Pashin

people. The southern dialect is subdivided into Abdali, Kakar, Khattak, Waziri, and Baniswole dialects.

The current study is related to the Waziri dialect. The Waziri dialect is spoken in North Waziristan, South Waziristan, Tank, Dera Ismail Khan, and Bannu. These are the primary areas where the Wazir people live. There are 30% of Waziri speakers live in district Bannu. The major areas in district Bannu where the Waziri speakers live are Baka Khel, Domail, Landi Jalander, Garerra, Doger Umerzai, and Asperka Sadrawan. The aim of the present study is to identify the phonological variation in the Waziri dialect in District Bannu.

Statement of the Problem

Dialectology is the descriptive and systematic study of dialects of any language. It is the process of documentation, recording, and documenting dialects, including phonology, grammar, vocabulary, and pronunciation. The study investigates and explores the different variations on the phonological level in the Waziri dialect of the Pashto language particularly in district Bannu.

Research Objectives

1. To investigate the phonological variations in the Waziri dialect in district Bannu.
2. To find out and analyze as to how the phonological variations occur in Waziri dialect in district Bannu.

Research Questions

1. What are the phonological variations in the Waziri dialect in district Bannu?
2. How do the phonological variations occur in the Waziri dialect in district Bannu?

Significance of the Study

This study is significant for both the students or scholars and teachers. This study will encourage scholars to conduct research on the other Pashto dialects. This is a comprehensive study on the Waziri dialect which is rarely documented previously. The study is a road map for future scholars to research the mentioned dialect from various other standpoints. It is vital for those scholars who want to conduct a thorough study on BS, MPhil, and PhD level in the field of dialectology, especially Pashto dialectology as it explores the complexity of linguistic variations and change due to geographical factors and so many others, particularly the linguistic diversity of the Waziri dialect.

Literature Review

Dialectology has emerged in response to the need to understand the diversity of language forms arising in different geographical and social contexts. Since its origins in the 19th century, when linguists started systematically documenting language differences among various and different dialects, dialectology has come a long way in different communities. Dialectology originally focused on the descriptive study of geographic language variation, using field studies to collect data. However, the approach to this discipline has transformed significantly over time. Advanced dialectology covers a broad scope of procedures and methods from the quantitative study of corpus data to deep structural study of language deviation. Currently, dialectology not only helps to understand how language variation reflects cultural, historical, and social influences but also plays an important role in preserving linguistic diversity. In the era of globalization and rapid social change, the study of dialects is becoming especially relevant and enabling the preservation of unique linguistic features that may disappear (Hnatyuk, 2024).

Dialectology refers to the analysis of regional forms of language which are said by some specific groups of individuals, especially in fixed geographical areas. These regional forms are called dialects. Dialectology is the subfield of sociolinguistics. Sociolinguistics examines the interconnection between language and individuals. Sociolinguistics helps people understand the differences in language and dialects that arise based on factors such as geographical region, socioeconomic status, age, ethnicity, occupation, gender, and education level (Alupooaicei, 2023).

Dialectology

Dialectology is a vast field having no single methodology instead; it has been developing since the 1960s and becoming an interest of various interconnected fields, including typology, geographic information systems (GIS), historical linguistics and phonetics, etc. Within all these different disciplines, dialectology has become more computational. The study of dialects is one of the oldest and most important fields of language study, as the American Dialect Society was founded in 1889. The results those members produced between then and the 1960s could be considered as a related set of methodologies designed to document words and pronunciations to delineate primarily geographical dialect boundaries and, secondarily, language change. In the 1960s onwards, the study of dialects emerged as fields of language variation, sociolinguistics and computational linguistics. Modern scholars of dialects are aware of the wealth of information produced from the significant effort of the earlier decades of dialectology, and some instances of that finding are cited herein. The example, the journal *American Speech* was established in 1925s, and its early volumes are interesting investigations for modern-era scholars to find out the changes in methodologies and research questions that have occurred. During that time, dialectology did not remain a single entity but instead became a subcomponent of many other disciplines. The majority of language-related handbooks that are now regularly produced often contain content related to dialect variation. Moreover, for the over 6, 900 languages on earth, researchers have come to realize that the thousands of dialects offer opportunities to study how language and society work. Most of the studies based on dialects do focus on linguistic research questions. Along with that, dialect variation has proved an interesting area of focus for scholars of social analysis. Now, that thousands of publications on dialect variation produced over the last five decades, the citations provided here are worthwhile examples and gateways to other quality scholarship. From the works cited here, various avenues for modern dialect research unfold (Hazen, 2022).

Dialectology can be defined as the study of how sounds, words, and grammatical forms differentiate in the analysis of “social and regional” forms within a language. The term dialect is usually used to include both the study of accents and dialects. As a whole, dialectology focuses on the geographical distribution of different accents and dialects, and it has begun to investigate social factors such as age, gender, and position in society (Ifeolluwa, n.d.).

Dialectology is one of the fields of sociolinguistics that studies the systematic variants of a language. The term dialect was first coined in 1577 from the Latin dialect as a way of speaking. Dialectal variation exists in most language areas and has important social implications (Ifeolluwa, n.d.).

Despite general difficulties, there is an impression of mutual intelligibility among numerous speakers of different sub-dialects of English. It is also one of the criteria used in the study of dialects, or dialectology, to distinguish between two different dialects of the same language (whose speakers can usually understand each other) and two different languages (whose speakers cannot usually understand each other). Although this is not the only or the most reliable way of identifying dialects, it helps to establish the fact that each dialect is equally worthy of analysis. It is important to note that from a linguistic point of view, none of the

varieties of a language is inherently “better” than any other or “bad” than others. They are simply different (Yule, 2016).

However, from a social point of view, some varieties get more prestige than others. In fact, the variety that develops as the standard language has usually been one socially prestigious dialect, originally associated with a centre of economic and political power (e.g., London for British English and Paris for French (Yule, 2016).

A dialect is a variety of a spoken language having specific linguistic features of vocabulary, grammar, and pronunciation that distinguish it from other varieties of the same language. The term comes from the ancient “*dialektos*” which means discussion. Regional speech, which is originated from “*dialegesthai*” to discussion. The term is applied most often to regional speech patterns, but a dialect may also be defined by other factors, such as social class. Thus, from a broader perspective, a dialect is a distinct form of a language that is characterized by a particular region or a particular social class or profession. From this point of view, dialects are generally divided into two types regional dialect and social dialect (Haram, n.d.).

Regional Dialect

The most extensive type of dialectal differentiation is geographic or regional. Geographically, dialects are the result of settlement history. Such dialects initiate essentially as a result of the limited connection between different sections of a community due to diverse regional barriers, inclusive of mountain tiers and rivers. Under such a situation, modifications that take areas inside the language of one part of the community do not extend elsewhere. Thus, in groups among which communicate is hard, variations in dialect can broaden. Such distinctive varieties are usually called regional dialects of a language. Linguists observed that language keeps on changing from place to place. At one moment such a situation occurs when people don't find any similarity with the main language. This is called dialect continuum (Haram, n.d.).

The learning of linguistic geography suggests that the distribution of dialects is strongly connected to the landscape. The learning of regional dialects is a big issue, as such linguistics determined it mostly to learn it within sociolinguistics. It was felt that there was a need for a separate field and developed a new discipline called dialectology. A map was made to display the regional distribution of language diversity. It tried to show the difference among dialects with a boundary. This boundary is known as isogloss (Haram, n.d.).

Social Dialect

The learning of social dialects has been mostly concerned with speakers in cities and towns. In the social learning of dialect, it is a social class that is mostly used to explain a community of speakers as having something normal. The two main groups are generally identified as “middle class,” those who have more years of education and perform non-manual work, and “working class,” those who have few years of education and perform manual work of some kind. So, if “working class speaking,” is referred it means a social dialect. The word “upper and lower” is used to sub-divide the category, mostly on an economic basis, creating “upper-middle-class speech” a second type of dialect or sociolect. As in all dialect studies, only certain qualities of language use, are regarded as applicable in the analysis of social dialects. These functions are pronunciations, phrases, or structures that are regularly used in one shape through middle elegance. In Edinburgh, Scotland, for example, the word home is regularly pronounced as [heim], as if rhyming with fame, among lower working-class speakers, and as [hom], as if rhyming with foam, among middle-class speakers. It is a small distinction in pronunciation; however, it is a hallmark of social status. A more recognized instance is

probably the verb ain't, as in I ain't completed yet, which is utilized more often in working-elegance speech than in middle-elegance speech. It is studied for different examples of language use that is probably a function of a social dialect. It deals with elegance, because of the social variable and the pronunciation or phrase because of the linguistic variable. This is rare in all-or-nothing situations, it is usually formed that one group uses a certain form more or less than another and not that only one group or the other uses the form exclusively (Yule, 2016).

Urban Dialectology

It also slowly came to be accomplished that the direction of ancient dialectology or rural dialects had led to almost total neglect, in several nations, of the speech form used by the majority of the citizens, specifically those who resided in towns and cities. This was of course particularly true of heavily urbanized countries such as England, where perhaps 90 percent of the population lives in towns. Linguists and dialectologists had a lack of knowledge about how the majority of citizens in England and elsewhere converse, resulting in a significant amount of linguistic information being overlooked. As a result, the sense developed that the research of urban dialects was not only a fascinating but also a compulsory task. This evolution towards social and urban dialectology has to be seen in its historical context. Initially, dialectological work was driven by comparative philology, which led dialectologists to focus primarily on rural speech forms. Urban dialects have been felt, accurately, to be much less conservative. They are inclined to be incredibly new, frequently because of immigration from neighbouring rural areas, and have been consequently much less exacting for philologists. Similarly, in any given locality, dialectologists were not attentive to any social variations which were present, however, directly collected data at the maximum conservative variety which was spoken there. When the importance of linguistic research changed, the method was opened for the importance of dialectology to a positive extent. The fashion towards the research of social and urban dialects thus indicates the growth in the synchronic method research of language and approach which showed especially quick development from the 1930s onwards. Many initial urban dialects investigated, not surprisingly, have been finished inside the way of conventional dialectology, ignoring the social dimensions, and choosing informants as available. Sivertsen's volume *Cockney Phonology*, published in the 1960s, is a composition in rural dialectology carried out in one of the largest cities in the world. Sivertsen, however, got most of the information from four speakers; they all were female who were above sixty and lived in Bethnal Green. Decamp, similarly, studied the speech of San Francisco, by investigating the speech of citizens known to him, and of citizens known of them. Viereck in the same layer, investigated the speech of Gateshead, a town of 115000 individuals in the northeast of England, by studying the speech of twelve men, ten of them were above seventy. The justification for the study was that he is worried, about not making a correct description of the Gateshead dialect as it is spoken currently, however, to pick out speakers of what he thinks about the 'pure' Gateshead dialect, presumably, from the time previously it was changed with the aid of using outside influences. Linguistic research indicates that there might be no such thing as a 'pure' dialect because most type of language seems variable and reveal symptoms and symptoms of effects from different varieties. These studies, and others like them, provide valuable records of the speech of the people who were interviewed. In a few instances, they may record obsolescent forms and rare constructions. The problem is that there is no way of knowing if what they are describing is truly the language of the town in question or simply that of an individual, the investigator happens to have come across (Chambers & Trudgill, 2004).

Pashto Dialectology

Pashto is the first language of the Pashtun people. Pashto language is spoken both in Pakistan and Afghanistan. In Afghanistan, the Pashto language is spoken in the areas of Kandahar, Helmand, Nangarhar, Paktia, Jalal Abad, and Kabul. In Pakistan, the Pashto language is spoken in Khyber Pakhtunkhwa (KP), Federal Administration Tribal Areas (FATA), and also in Baluchistan. Pashto is the official language of the Afghan people and not the official language of Pakistan (Khyber Pakhtunkhwa and Baluchistan) people. According to Rabson and Tegey (1996), Pashto is the chief language in Afghanistan and Pakistan. It is spoken natively by over half the population of Afghanistan, an estimated 7.5 million, and an estimated 14 million (90% of the population) in the Khyber Pakhtunkhwa of Pakistan. It is also spoken first language in Baluchistan, the province of Pakistan which lies directly south of central Afghanistan, and by a community of over two million native Pashto speakers in Karachi. There are also about 50,000 native Pashto speakers in Iran (Traveler Trails, n.d.).

Pashto is known by names such as Pakhto, Pukhtu, Pushtu, and Paxto. In Afghanistan, it is referred to as the Afghan or Afghani language. The Pashto language is the geographical language of Pakistan. Pashto is spoken as a first language by about 15.42% of Pakistan's 225.2 million people, but it is not given any official status. Pashto is taught in many schools in Pakistan, but the literacy rates for this subject are pretty low. So instead, even Pashtun kids are educated in Urdu, Pakistan's national language. Overall, about 40 million people worldwide speak the Pashto language as their native language (Traveler Trails, n.d.).

Pashto Dialect

Pashto has two main dialects one is Northern and the other one is Southern. The difference between them is linguistic and regional as these two dialects are spoken in different regions both in Pakistan and Afghanistan. The southern dialect is spoken in southern and western Afghanistan, including Kandahar, Southern Khyber Pakhtunkhwa (KP), and northern Baluchistan (specifically in Quetta). At the same time, the northern dialect is spoken in eastern Afghanistan, central, northern, and east Khyber Pakhtunkhwa (KP). The northern dialect is also spoken by the people of Peshawar, Pakistan. There are some differences in the Pashto dialects. However, the morphological differences between the two dialects are rare and difficult to note. The critical distinction between the Pashto diversity is phonological; the discussion rules are easy. Regarding their distinction, the most remarkable one would be their speech. As an illustration, in the southern dialect, the term 'g' is employed, whereas in the northern dialect, the term 'kh' is utilized. One more distinction is that the first one utilizes 'ae' and 'oe' whereas the second one employs 'e' and 'o'. There are also some variations in vocabulary usage. The written style of Pashto is quite different from that of English. There are also some variations in vocabulary usage. The written style of Pashto is quite different from that of English. In common, Pashto uses numerous suffixes and prefixes as compared to English. To those who are not familiar with it, the language can appear extremely complex, once you become acquainted with it, it becomes quite easy (Traveler Trails, n.d.).

Soft and Hard Dialects of Pashto

There are two most important dialects in the Pashto language, which are known as soft and hard dialects. The people of Quetta speak a soft dialect, the people of Waziristan, Kandahar, and other southern Pashtun areas speak a soft dialect, and the hard dialect is spoken by the people of Peshawar, Swat, and Dir. The speakers of the hard dialect "kh" for example (Pekhawar, Pakhto, Pukhtun, Pakhto). While the soft dialect speakers use "sh" for the same words as Peshawar, Pushtun/Pashtun, Pashto/Pushto (Orbala, 2016).

The previous study has looked at the different linguistic variations among the dialects of the Pashto language, which has a highly dialectical variety between communities and areas.

While many Pashto dialects are understandable mutually, there are a variety in the Pashto language which are different from one another in terms of pronunciation, vocabulary, and syntax. In the field of Pashto dialectology, many researches are conducted, such as “Phonological variations in Verb in Pashto spoken in district Swat” (2021) by Rafiq et al, and “Pashto- English Contact: A study of intergenerational lexical variations”, (2023) Iqbal et al, and “Comparison of two dialects of Pashto, spoken in Afghanistan and Pakistan: Kandahari dialect and Yusufzai dialect” (2020) by M. Ali Dinakhel. Thus, the research gap in this study is still present, no comprehensive study has yet been conducted especially on the phonological level of the Waziri dialect. This study aims to fill this gap by analyzing and documenting the phonological variation in the Waziri dialect in district Bannu. This research will illuminate the complex relationship between language variation within Waziri-speaking communities in district Bannu.

Methodology

In this chapter, the research design, data collection tools, population, sampling, data analysis tools, and theoretical framework are discussed. The main aim of the study is to investigate the phonological variations in the Waziri dialect in district Bannu. The research is both qualitative and quantitative.

Research Design

This study chooses both qualitative and quantitative methodologies to find out the different variations in the Waziri dialect in district Bannu. In order to collect data, semi-structured interviews which are based on audio and video recordings converted to descriptive form. For the purpose of sampling, the researcher moves to different areas Baka Khel, Asperka Sadrawan, Dogar Umerzia, Domail city, Domail villages, Landi Jalander, and Garerra in district Bannu. For the collection of data, 35 samples are selected from the mentioned areas in district Bannu. In the process of data collection, mobile phone is a tool used to record audio and video.

Data Collection Tools

The tool for data collection is semi-structured interviews. The semi-structured interview is used for data collection. The interviews are based on audio and video recording and are recorded through a mobile phone.

Population

Population means the area where the researcher conducts research. The researcher conducts the research in district Bannu, but some areas are focused as Baka Khel, Domail city, Painda Khel, Landi Jalander, Asperka Sadrawan, Garerra, and Dogar Umerzia in district Bannu for the collection of data.

Sampling

Sampling means the participants from which the researcher collects data for research. In order to achieve the goal, the researcher selects 35 participants from the different areas of district Bannu.

Ethical Consideration

This study emphasizes both respect and responsibility. Before collecting the data, it confirms that all the participants comprehend the research aims and ethically agree on the collection of information from them. The scholar is knowledgeable of the cultural and linguistic variations inside in Waziri dialect in district Bannu and has prevented any possible

cultural misrepresentation by depicting them truthfully. At last, the scholar ensures all the ethical considerations during this study.

Theoretical Framework

This study focuses on the phonological level of the Waziri dialect in the Pashto language. The present study is conducted under the domain of dialectology. Dialectology provides different theoretical frameworks according to the levels and context of the study. Dialectology offers a descriptive research framework to examine the formal characteristics of different dialects, helping to uncover the distinctions at various levels. As far as Pashto dialectology is concerned, a lack of research has been conducted so far, particularly on the Southern-Karlani dialects. The Pashto language is spoken by millions of people both in Pakistan and Afghanistan. There are mainly two variations in the Pashto language, one is soft and the other is a hard dialect, and are different in terms of pronunciation, tone, and accent. The aspect of phonology is open to research and plays an important part in the varieties of the Pashto language. Therefore, the study aims to investigate the phonological variations in the Waziri dialect in district Bannu. In this regard, 35 interviews are conducted in different areas of district Bannu as Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander, Doger Umerzai, Baka Khel, and Garerra to identify the phonological variations in the Waziri dialect in the same district, but the areas are somehow far away. The Pashto language has 46 phonemes divided into vowels and consonants based on *Descriptive Grammar of Pashto and its Dialects* (2014) by Anne Boyal David. There are 7 simple vowels, 7 diphthong vowels, and 32 consonant sounds in the Pashto language.

Vowels in Pashto Language

There are 7 simple vowels and 7 diphthong vowels in the Pashto language.

Table 01 (Simple Vowel)

	Front	Central	Back
High	I		(û) u
Mid	E	ə	O
Low			Â

Table 02 (Diphthongs)

	Front	Central	Back
High			ui
Mid		əi	oi
Low	ai, aw		ai, aw

Consonants in Pashto language are opposite to other Iranian language. Pashto has several retroflex consonants due to the likely effects of Indo-Aryan language. The second different feature of Pashto phonology, is the frequent presence of consonant clusters at the beginning of a word (Gutman & Avanzati, 2013).

Table 03 (Consonants)

	Labial	Dental/ alveolar	Post- alveolar	Retroflex	Palatal	Velar	Unular	Glottal
Stop	P	T		t		k	(q)	
	B	D		d		g		ʔ

Affricate		Ts	tʃ				
			dz	dʒ			
Fricative	(f)	S	ʃ	ʂ		kh	H
		Z	X	ʒ		ɣ	
Nasal	M	N		ɲ			
Rhotic		R		ɽ			
Glide	W	I			J		

The Vowels and Consonants of Pashto Phonology (Gutman & Avanzati, 2013).

Figure 1 Waziri Vowel (Miller, 2014)

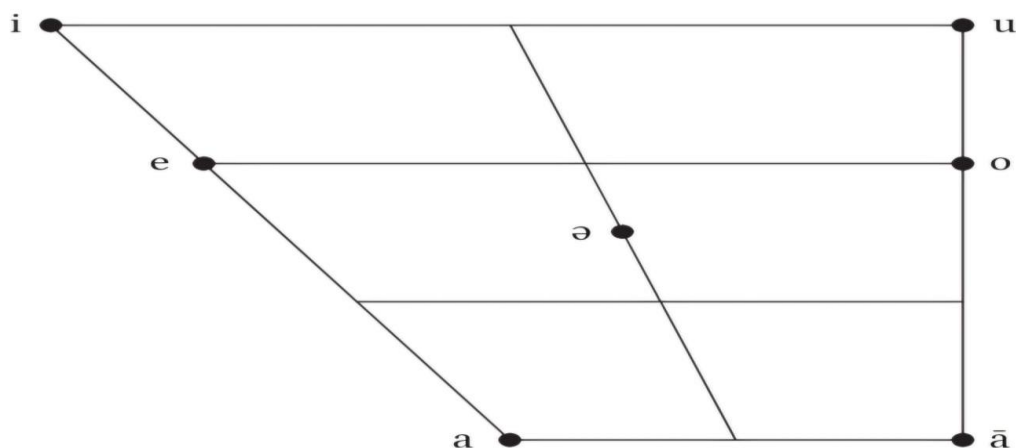
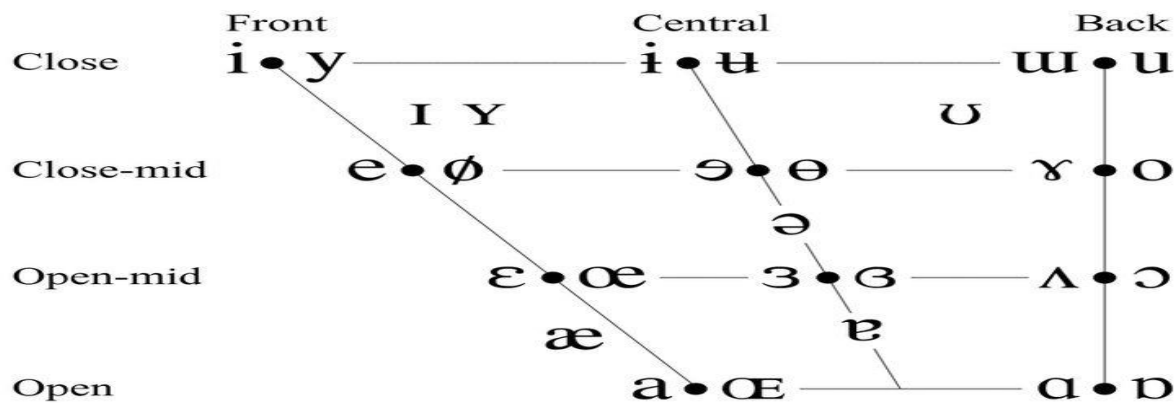


Figure 2 Pashto Vowel IPA, 2005 (Ball et al., 2010)

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

This study consists of three tables 04, 05, and 06 that are split into 50 sub-tables. The selected common Pashto words, words phonologically different from Table 04, and words phonologically different from Table 04 and 05 are tabulated in Tables 04, 05, and 06. Table 04 illustrates the selected Pashto words, their percentage, English transcription, Pashto IPA transcription, and the selected areas in district Bannu. The table is further divided into 7 columns, the first column is for serial number, the second is for English transcription, the third is for the transliteration, the fourth is for the standard spelling of the selected Pashto words based on *Descriptive Grammar of Pashto and its Dialects* (2014) by Anne Boyal David, the fifth is for Pashto IPA transcription based on *Descriptive Grammar of Pashto and*

its Dialects (2014) by Anne Boyal David, and *My Client Is Using Non-English Sounds! A Tutorial in Advanced Phonetic Transcription, Part II: Vowels and Diacritics* by Martin J. Ball et al. (2010) and *The Waziri chain shift* by Corey Miller (2014), the sixth is for the percentage of the selected common Pashto words and the seventh is set for the selected areas of district Bannu. In order to find out the percentage, 35 interviews are conducted in different areas of district Bannu, later on, converted into the value of percentage ratio as 25 conducted interviews are divided by 35 and multiplied by 100% to get the percentage.

Data Analysis

The aim of this study is to investigate and analyze the phonological variations in the Waziri dialect in district Bannu. The methodology of this research is a mixed method, qualitative and quantitative, as data is collected and later converted to descriptive form and present statistical numbers to state facts about the variations between the two dialects. The data is collected through semi-structured interviews which are based on audio and video recordings. For this study, 42 words are selected and presented in tabulated form for conducting interviews. The tabulated data is utilized during the interview process in order to smooth the data collection process. For the collection of data, the researcher selects different areas Baka Khel, Asperka Sadrawan, Dogar Umerzai, Domail city, Domail villages, Landi Jalander, and Garerra in district Bannu. The mentioned areas are selected as they are the main areas where the Waziri speakers live. Moreover, thirty-five (35) participants are selected for the collection of data while in the 35 participants, 5 participants are chosen from each area. In order to demonstrate, English transcription, Pashto IPA transcription, and the transcription of the selected common Pashto words are based on the Pashto word, and the percentage of the selected common Pashto words. There are 35 interviews conducted in different areas of district Bannu which are converted into the value of percentage ratio as 25 conducted interviews are divided by 35 and multiplied by 100% to get the percentage, while the last column represents the different selected areas. For the sake of illustration, the data is tabulated below. There are three main tables, the first table contains the selected common Pashto word, the second table contains those words which are phonological different from the first table and the last table has those words which are phonological different from the already mentioned two tables.

Table 04 Selected 42 Pashto Common Words

S. No	English Transcription	Pashto words Transliteration	Pashto Words Standard Spelling	Pashto IPA Transcription	Percentage	Areas
1	Sugar	Cheeni	Chini	/tʃi:ni/	71.4%	Asperka Sadrawan, Domel city, Painsa Khel, Landi Jalander, Garerra
2	Shoes	Saplay	Saplay	/səp'ləi/	57%	Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander
3	Meal	Marrai	Mārəy	/maɾəi/	57%	Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander

4	Lemon	Nimbo	Nimbo	/nimbo/	28.6%	Asperka Sadrawan, Garerra
5	Cold	Sorr	Sor	/soɪ/	71.4%	Asperka Sadrawan, Dogar Umerzai, Landi Jalander, Domail city, Painda Khel
6	Here	Dilta	Diltā	/dilt'ɑ:/	14.3%	Dogar Umerzai
7	Come	Dilay	Dile	/dɪle:/	14.3%	Dogar Umerzai
8	Black	Tor	Tor	/toɪ/	71.4%	Dogar Umerzai, Asperka Sadrawan, Domail city, Painda Khel Landi Jalander
9	There	Orta	Ortā	/ɔɪtɑ:/	71.4%	Dogar Umerzai, Asperka Sadrawan, Domail city, Painda Khel, Landi Jalander
10	Rupees	Repia	Ripəy	/ri:pai/	57%	Asperka Sadrawan, Domail city, Painda Khel, Landi Jalander
11	Cloths	Joora	Joṛā	/dʒu:ɪɑ:/	28.6%	Asperka Sadrawan, Garerra
12	Take it	Roohla	rohlā	ɪu:xlɑ:/		Dogar Umerzai, Domail city, Painda Khel, Landi Jalander, Asperka Sadrawan, Garerra
13	They	Dayia	Daəy	/d'əɪ/	71.4%	Domail city, Painda Khel, Landi Jalander, Asperka Sadrawan, Garerra
14	Me	Mutah	Mutā	/mu:ɬɔ/	57%	Garerra, Asperka Sadrawan, Dogar Umerzai, Lander Jalander
15	Inform him	Weta	waytā	/weta/	28.6%	Garerra, Dogar Umerzai
16	This time	Dowri	Dowri	/dɔwri/	57%	Asperka Sadrawan, Garerra, Landi Jalander, Domail city
17	Cap	Tepai	Tepəy	/tɛ:pəɪ/	43%	Asperka Sadrawan, Domail city, Garerra
18	Sister	Khor	Khor	/xɔɪ/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
19	Brother	Waror	Wror	/wɔ'rɔɪ/	71.4%	Asperka Sadrawan, Dogar Umerzai,

						Painda Khel, Domail city, Landi Jalander
20	Now	Ous	Os	/os/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
21	Mother	Moor	Mor	/mɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
22	Aunt	Troor	Tror	/trɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
23	Ear	Ghoozh	Ghozh	/yɔʒ/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
24	Oil	Ghori	Ghori	/yɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
25	Healthy	Rogh	Rogh	/rɔy/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
26	Electricity	Bijli	Bijli	/bi:ɖʒli/	57%	Asperka Sadrawan, Painda Khel, Domail city, Landi Jalander
27	And Other	Noor	Nor	/nɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
28	Old Women	Beedai	Bidəy	/bi:ɖəi/	57.2%	Asperka Sadrawan, Painda Khel, Domail city, Landi Jalander
29	Pashtun land	Pashtowatan	Pashtowatan	/pəʃtɔ wətɑ:n/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
30	Who	Souk	tsok	/tsɔk/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander
31	Say	Wayayiyi	Wayayiyi	/wəiɑ:ji/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander

32	Home	Kore	Kor	/kɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
33	Window	Karrkia	Karkəy	/kɾakəi/	43%	Asperka Sadrawan, Domail city, Landi Jalander
34	Sit	Kashania	Kashenəy	/kʃe'nəi/	57%	Asperka Sadrawan, Painsa Khel, Domail city, Landi Jalander
35	Pocket	Joob	Job	/dʒo:b/	14.3%	Dogar Umerzai
36	Four	Salor	Tsalor	/səlɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
37	Sleep	Khob	Khob	/xɔb/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
38	Meat	Ghoshā	Ghoshā	/ɣɔʃa:/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
39	Water	Iba	Ibā	/ibə/	43%	Baka Khel, Dogar Umerzai, Garerra
40	Fan	Baboza	Babozəy	/babɔzai/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
41	Tray	Shakor	Shkor	/ʃakɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
42	Jalebi	Zaalaybia	Zalaybəy	/zələbəi/	57.1%	Asperka Sadrawan, Painsa Khel, Domail city, Landi Jalander

The above table is for the overall description of the collected data for illustration. The tabulated data is categorized into different columns. The first column is for the serial number (S. No) while the second is set for English transcription of the selected Pashto words. The third column is for the Pashto words' transliteration (PWT), the fourth for the selected Pashto words standard spelling (PWSS), whereas the fifth column is for IPA transcription of the selected Pashto words based on the sources *Descriptive Grammar of Pashto and its Dialects* by Anne Boyal David and *My Client Is Using Non-English Sounds! A Tutorial in Advanced Phonetic Transcription, Part II: Vowels and Diacritics* by Martin J. Ball et al. and *The Waziri chain shift* by Corey Miller, the sixth column is for the percentage of the Pashto words. Lastly, the seventh column is for the selected Areas.

The following table shows the selected Pashto words, their IPA transcription, percentage, and the selected areas that are different from the Pashto words mentioned in the above table.

Table 05 Phonological Variation in the Selected 42 Words

S. No.	English Transcription	Different Words Transliteration	Pashto Words Standard Spelling	Pashto IPA Transcription	Percentage	Areas
1	Sugar	Cheena	Chinā	/tʃiːnaː/	28.6%	Baka Khel, Dogar Umerzai
2	Shoes	Saplay	Saple	/səpˈleː/	43%	Baka Khel, Dogar Umerzai, Garerra
3	Meal	Marrey	Mare	/maɾeː/	43%	Baka khel, Dogar Umerzai, Garerra
4	Lemon	Nimba	Nimbə	/nimbə/	57%	Baka Khel, Dogar Umerzai, Domail city, Painsa Khel
5	Cold	Serr	Seɾ	/sɛɪ/	28.6%	Baka Khel, Garerra
6	Here	Delta	Deltā	/dɛltɑː/	85.7%	Baka Khel, Asperka Sadrawan, Domail city, Painsa Khel, Garerra, Landi Jalander
7	Come	Delay	Dele	/dɛleː/	85.7%	Baka Khel, Asperka Sadrawan, Domail city, Painsa Khel, Garerra, Landi Jalander
8	Black	Ter	Ter	/tɛɪ/	28.6%	Baka Khel, Garerra
9	There	Wēɾta	Wɛɾtā	/wɛɪtɑː/	28.6%	Baka Khel, Garerra
10	Rupees	Reepay	Ripe	/ɾiːpeː/	43%	Baka Khel, Dogar Umerzai, Garerra
11	Cloths	Joomah	Jomā	/dʒuːmɑː/	71.4%	Baka Khel, Dogar Umerzai, Domail city, Painsa Khel, Landi Jalander
12	Take it	R Wakhla	R Wəkhla	r wəxlɑː/	15%	Baka Khel

13	They	Dey	De	/d̪'e:/	28.6%	Baka Khel, Dogar Umerzai,
14	Me	Matah	Mətā	/məṭp/	43%	Baka Khel, Domail city, Painsa Khel,
15	Inform him	Wēṛta	Wertā	werta:	71.4%	Baka Khel, Domail city, Painsa Khel, Asperka Sadrawan, Landi Jalander
16	This time	Dowray	Dowre	/d̪owre:/	43%	Baka Khel, Dogar Umerzai, Painsa Khel
17	Cap	Tepay	Tepe	/t̪epe:/	28.6%	Baka Khel, Painsa Khel
18	Sister	Kher	Kher	/xer/	28.6%	Baka Khel, Garerra
19	Brother	Warer	Wrer	/wɔ'rer/	28.6%	Baka Khel, Garerra
20	Now	Wes	Wes	/wes/	28.6%	Baka Khel, Garerra
21	Mother	Mer	Mer	/mer/	28.6%	Baka Khel, Garerra
22	Aunt	Threr	Trer	/t̪rer/	28.6%	Baka Khel, Garerra
23	Ear	Ghezh	Ghezh	/yɛʒ/	28.6%	Baka Khel, Garerra
24	Oil	Gherri	Gheṛi	/yɛɾi/	28.6%	Baka Khel, Garerra
25	Healthy	Regh	Regh	/reɣ/	28.6%	Baka Khel, Garerra
26	Electricity	Bijlay	Bijlay	/bidʒle:/	43%	Baka Khel, Garerra, Dogar Umerzai,
27	And Other	Ner	Ner	/ner/	28.6%	Baka Khel, Garerra
28	Old Women	Booday	Boday	/bo:de:/	28.6%	Baka Khel, Dogar Umerzai
29	Pashtun land	Pashtay watan	Pashtay watan	/pəʃt̪ e: wətɑ:n/	28.6%	Baka Khel, Garerra
30	Who	Sek	Sek	/t̪sek/	28.6%	Baka Khel, Garerra
31	Say	Yaayi	Yayi	/ja:ji/	28.6%	Baka Khel, Garerra
32	Home	Ker	Ker	/ker/	28.6%	Baka Khel, Garerra

33	Window	Karrkay	Kar̄ke	/k̄r̄ake:/	57%	Baka Garerra, Umerzai, Khel, Painda Khel,
34	Sit	Kashana y	Kashenay	/k̄ʃe'ne:/	43%	Baka Garerra, Umerzai Khel, Dogar
35	Pocket	Jeeb	Jib	/d̄ʒɪb/	85.7%	Asperka Sadrawan, Painda Khel, Domail city, Landi Jalander, Baka Khel, Garerra
36	Four	Salwer	Səlwer	/səlwer/	28.6%	Baka Khel, Garerra,
37	Sleep	Kheb	Kheb	/xɛb/	28.6%	Baka Khel, Garerra,
38	Meat	Ghesha	Gheshā	/ɣɛʃɑ:/	28.6%	Baka Khel, Garerra,
39	Water	Eba	Ebə	/ebə/	57%	Asperka Sadrawan, Domail city, Painda Khel, Landi Jalander
40	Fan	Babezai	Babezəy	/babezai/	28.6%	Baka Khel, Garerra,
41	Tray	Shaker	Shaker	/ʃaker/	28.6%	Baka Khel, Garerra,
42	Jalebi	Zaaleba y	Zalebe	/zəlebe:/	28.6%	Baka Khel, Garerra,

The above table is for the overall description of the collected data for illustration. The tabulated data is categorized into different columns. The first column is for the serial number (S. No) while the second is set for English transcription of the selected Pashto words. The third column is for the different words' transliteration (DWT), the fourth is for the selected different Pashto words' standard spelling (DWSS), whereas the fifth column is for IPA transcription of the selected Pashto words based on the sources' *Descriptive Grammar of Pashto and its Dialects* by Anne Boyal David and *My Client Is Using Non-English Sounds! A Tutorial in Advanced Phonetic Transcription, Part II: Vowels and Diacritics* by Martin J. Ball et al. and *The Waziri chain shift* by Corey Miller, the sixth column is for the percentage of the Pashto words. Lastly, the seventh column is for the selected areas in district Bannu.

Furthermore, the below table is about the different words, their IPA transcription, percentage, and areas. The table is different from the above two tables.

Table 06 Phonological Variation of the Selected Words

S. No	English Transcription	Difference Words (Transliteration)	Pashto words (Standard Spelling)	Pashto IPA Transcription	Percentage	Areas
-------	-----------------------	------------------------------------	----------------------------------	--------------------------	------------	-------

1	Lemon	Nambe	Nambi	/n'ɑ:mbi/	14%	Landi Jalander
2	Cap	Topay	Tope	/tɔ:pe:/	14.2%	Dogar Umerzai
3	Jalibi	Zaalepay	Zalepe	/zəlpe:/	14.3%	Dogar Umerzai

The above table is for the overall description of the collected data for illustration. The tabulated data is categorized into different columns as the serial number, English transcription of the selected Pashto words, transliteration, the standard spelling of the selected Pashto words, IPA transcription of the selected Pashto words, the percentage of the Pashto words, and the selected areas.

Table 07 Phonological Variation through Vowel Sound /əɪ/

S. No	English Transcription	PWT	PWSS	IPA Transcription	%	Areas
1	Shoes	Saplai	Sapləy	/səp'ləɪ/	57%	Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander
2	Meal	Marrai	Mārəy	/marəɪ/	57%	Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander
3	Rupees	Reepai	Ripəy	/ripəɪ/	57%	Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander, Garerra
4	Window	Kharkai	Karkəy	/karkəɪ/	57%	Asperka Sadrawan, Domail city, Landi Jalander, Painsa Khel
5	Sit	Kshanai	Kashenəy	/kʃe'nəɪ/	57%	Asperka Sadrawan, Painsa Khel, Domail city, Landi Jalander

In the above table, the words “Sapləy”, “Mārəy”, “Ripəy”, “Karkəy”, “Kashenəy” with their phonetic transcription respectively as /səp'ləɪ/, /marəɪ/, /ripəɪ /, /karkəɪ/, and /kʃe'nəɪ/ contain the phonological similarities as their last sound is the same, but their initial and middle sounds are changed. It means that the similarities are present in the said words through the vowel sound /əɪ/. These words are spoken by the speakers of Asperka Sadrawan, Domail city, Painsa Khel, and Landi Jalander. These speakers use the mid-central vowel sound /əɪ/ at the end of the words. These areas are far away from one another as the distance from Asperka Sadrawan to Domail city is 8.6 km, from Asperka Sadrawan to Painsa Khel is 14 km, from

Asperka Sadrawan to Landi Jalander is 44 km, from Domail city to Painda Khel is 10 km, from Domail city to Landi Jalander is 37 km and from Painda Khel to Landi Jalander is 32 km. Furthermore, the below table contains the words which are phonologically different from the words mentioned in Table 7.

Table 08 Variation through Vowel Sound /e:/

S. No	English Transcription	DWT	DWSS	IPA Transcription	%	Areas
1	Shoes	Saplay	Saple	/səp'le:/	43%	Baka Khel, Dogar Umerzai, Garerra
2	Meal	Marrey	Maṛe	/maṛe:/	43%	Baka Khel, Dogar Umerzai, Garerra
3	Rupees	Reepay	Ripe	/ripe:/	43%	Baka Khel, Dogar Umerzai
4	Window	Kharkay	Kaṛke	/kaṛke:/	43%	Baka Khel, Garerra, Dogar Umerzai,
5	Sit	Kshanay	Kashene	/kʃe'ne:/	43%	Baka Khel, Garerra, Dogar Umerzai

In the above table, the words like “Saple”, “Maṛe”, “Ripe”, “Kaṛke”, “Kashene” with their Pashto IPA transcription respectively as /səp'le:/, /maṛe:/, /ripe:/, /kaṛke:/, /kʃe'ne:/ contain the same sound at the end of each mentioned words, but different in initial and middle sounds. So, the similarity in these words is present due to the mid-front vowel sound /e:/. These words are spoken by the speakers of Baka Khel, Garerra, and Dogar Umerzai. The speakers of these areas use the mid-front vowel sound /e:/ at the end of the words. These areas are far away from one another as the distance from Dogar Umerzai to Baka Khel is 24 km, from Dogar Umerzai to Garerra is 21 km and from Baka Khel to Garerra is 6 km. Now, the differences and similarities within the Waziri dialect are found and tabulated above. In the above tables the areas are divided into two groups (Group A) and (Group B). In Group-A, Asperka Sadrawan, Domail city, Painda Khel, and Landi Jalander are included while in Group-B Baka Khel, Garerra, and Dogar Umerzai are included. The speakers of Group-A use the mid-central vowel sound /əɪ/ whereas the speakers of Group-B use the mid-front vowel sound /e:/ at the end of the words. The sound /əɪ/ that is the mid-central vowel replaced by the close-mid front vowel sound /e:/ so, it is found that the difference between these two groups is present due to the last vowel sound as the other remaining sounds are the same in both groups. When Group-A speakers use the vowel sound /əɪ/, the Group-B speakers replace it with the /e:/ vowel sound. Based on the above two tables, fifty-seven (57%) per cent speakers use the words “Saplay” /səp'ləɪ/, “Māṛəy” /māṛəɪ/, “Ripəy” /ripəɪ/, “Kaṛkəy” /kṛəkəɪ/ “Kshanəy” /kʃe'nəɪ/ in which the last vowel sound /əɪ/ is used, however, forty-three 43% per cent speakers use the words “Saple” /səp'le:/, “Maṛe” /maṛe:/, “Ripe” /ripe:/, “Kaṛke” /kaṛke:/, “Kashene” /kʃe'ne:/ in which the last vowel sound /e:/ is used.

Table 09 Variation through Vowel Sound /ɔ/

S. No	English Transcription	PWT	PWSS	IPA Transcription	%	Areas
1	Cold	Sorr	Sor	/sɔr/		Asperka Sadrawan, Dogar Umerzai, Landi

					71.4 %	Jalander, Domail city, Pinda Khel
2	Black	Tor	Tor	/tɔɪ /	71.4 %	Asperka Sadrawan, Dogar Umerzai, Landi Jalander, Domail city, Pinda Khel
3	Sister	Khor	Khor	/xɔɾ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
4	Brother	Waror	Wrɔɾ	/wɔɾ'ɾɔɾ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
5	Mother	Mor	Mor	/mɔɾ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
6	Aunt	Thror	Trɔɾ	/tɾɔɾ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
7	Ear	Ghoz h	Ghoz h	/yɔɾ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
8	Oil	Ghorri	Ghoɾi	/yɔɾi/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
9	Other	Nor	Nor	/nɔɾ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
10	Who	Sok	tsok	/tsɔk/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
11	Home	Kor	Kor	/kɔɾ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
12	Sleep	Khob	Khob	/xɔb/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Pinda Khel, Domail city, Landi Jalander
13	Fan			/babɔzai/		Asperka Sadrawan, Dogar Umerzai, Pinda

		Babo zai	Baboz əy		71.4 %	Khel, Domail city, Landi Jalander
14	Tray	Shak or	Shakor	/ʃakɔr/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
15	Healthy	Rogh	Rogh	/rɔɣ/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander
16	Meat	Ghos ha	Ghosh ā	/ɣɔʃɑ:/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander

In the above table, the words “Soɾ”, “Toɾ”, “Khor”, “Wroɾ”, “Moɾ”, “Troɾ”, “Ghozɱ”, “Ghoɾi”, “Soɱ”, “Noɾ”, “Koɾ”, “Kɱob”, “Babozəy”, “Shakor”, “Rogh”, “Ghoshā” with their phonetic transcription respectively as /sɔɾ/, /tɔɾ/, /xɔɾ/, /wɔ' rɔɾ/, /mɔɾ/, /tɾɔɾ/, /ɣɔʃ/, /ɣɔɾi/, /nɔɾ/, /tsɔk/, /kɔɾ/, /xɔb/, /babɔzai/, /ʃakɔr/, /ʃakɔɾ/, and /ɣɔʃɑ:/ contain the phonological similarities as their middle sound is the same, but their beginning and the end sounds are changed. It means that the similarities are present in the mentioned words through the vowel sound /ɔ/. These words are spoken by the speakers of Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander. The speakers of these areas use the sound /ɔ/ at the beginning of the words. These areas far away from one another as the distance from Asperka Sadrawan to Dogar Umerzai 2 km, from Asperka Sadrawan to Painsa Khel is 14 km, from Asperka Sadrawan to Domail city is 8.6 km, from Asperka Sadrawan to Landi Jalander is 44 km, from Dogar Umerzai to Painsa Khel is 12 km, from Dogar Umerzai to Domail city is 8 km, from Dogar Umerzai to Landi Jalander is 42 km, from Painsa Khel to Domail city is 10 km, from Painsa Khel to Landi Jalander is 32 km, and from Domail city to Landi Jalander is 37 km. Furthermore, the below table contains the words which are phonologically different from the words mentioned in the previous Table 09.

Table 10 Phonological Variation through Vowel Sound /ɛ/

S. No	English Transcription	DWT	DWSS	Pashto IPA Transcription	%	Areas
1	Cold	Serr	Seɾ	/sɛɾ/	28.4 %	Baka Khel, Garerra
2	Black	Ter	Ter	/tɛɪ/	28.4 %	Baka Khel, Garerra
3	Sister	Kher	Kher	/xɛɾ/	28.4 %	Baka Khel, Garerra
4	Brother	Warer	Wrer	/wɔ' rɛɾ/	28.4 %	Baka Khel, Garerra

5	Mother	Mer	Mer	/mɛr/	28.4 %	Baka Khel, Garerra
6	Aunt	Threr	Trer	/tʁɛr/	28.4 %	Baka Khel, Garerra
7	Ear	Ghezh	Ghezh	/ɣɛʒ/	28.4 %	Baka Khel, Garerra
8	Butter	Gherri	Gheɾi	/ɣɛɾi/	28.4 %	Baka Khel, Garerra
9	Other	Ner	Ner	/nɛr/	28.4 %	Baka Khel, Garerra
10	Who	Sek	tsek	/tsek/	28.4 %	Baka Khel, Garerra
11	Home	Ker	Ker	/kɛr/	28.4 %	Baka Khel, Garerra
12	Sleep	Kheb	Kheb	/xɛb/	28.4 %	Baka Khel, Garerra
13	Fan	Babezai	Babezəy	/babezai/	28.4 %	Baka Khel, Garerra
14	Tray	Shaker	Shaker	/ʃakɛr/	28.4 %	Baka Khel, Garerra
15	Healthy	Regh	Regh	/rɛɣ/	28.4 %	Baka Khel, Garerra
16	Meat	Ghesha	Ghesha	/ɣɛʃɑ:/	28.4 %	Baka Khel, Garerra

In the above table, the words like “Ser”, “Kher”, “Ter”, “Wrer”, “Mer”, “Trer”, “Ghezh”, “Gheɾi”, “Sek”, “Ner”, “Ker”, “Kheb”, “Babezai”, “Shaker”, “Regh”, “Ghesha” and phonetic transcription is /sɛɾ/, /tɛɾ/, /xɛr/, /wɔˈrɛr/, /mɛr/, /tʁɛr/, /ɣɛʒ/, /ɣɛɾi/, /nɛr/, /tsek/, /kɛr/, /xɛb/, /babezai/, /ʃakɛr/, /rɛɣ/, and /ɣɛʃɑ:/ contain the same vowel sound at the middle of each mentioned words, but different sounds are used in the beginning and at the end of the words. Thus, the similarity in these words is present due to the vowel sound /ɛ/. These words are spoken by the speakers of Baka Khel and Garerra areas. These speakers use the vowel sound /ɛ/ in the middle of the words. Besides, these areas are far away from each other as the distance from Baka Khel to Garerra is 6 km.

The areas mentioned in the table 09 and 10 are divided into two groups (Group C) and (Group D). Group-C contains Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, and Landi Jalander areas whereas Group-D consists Baka Khel and Garerra areas. The speakers

of Group-C use the vowel sound /ɔ/ in the middle of the words, but the speakers of Group-D use the vowel sound /ɛ/ in the middle words. The sound /ɔ/ that is a mid-back vowel sound in Group-C is replaced by the open-mid front vowel /ɛ/ in Group-D. So, the difference between these words comes in the middle of the words through the vowel sound, but the remaining sounds are the same in both groups. When Group-C speakers use the mid-back vowel sound /ɔ/ the Group-D speakers replace it with the open-mid front vowel sound /ɛ/. On the basis of the above mentioned two tables, 71.4 percent speakers use the words “Soṛ” /sɔɾ/, “Tor” /tɔɾ/, “Khor” /xɔɾ/, “Wror” /wɔ' rɔɾ/, “Mor” /mɔɾ/, “Tror” /tɾɔɾ/, “Ghozḥ” /ɣɔʒ/, “Ghoṛi” /ɣɔɾi/, “Nor” /nɔɾ/, “tsok” /tsɔk/, “Kor” /kɔɾ/, “Khob” /xɔb/, “Babozəy” /babɔzai/, “Shakor” /ʃakɔɾ/, “Rogh” /ʃakɔɾ/, “Ghoshā” /ɣɔʃa:/ in which the middle vowel sound /ɔ/ is used, however, 28.6 per cent speakers use the words “Ser” /sɛɾ/, “Ter” /tɛɾ/, “Kher” /xɛɾ/, “Wrer” /wɔ' rɛɾ/, “Mer” /mɛɾ/, “Trer” /tɾɛɾ/, “Ghezh” /ɣɛʒ/, “Gheṛi” /ɣɛɾi/, “Ner” /nɛɾ/, “tsək” /tsɛk/, “Ker” /kɛɾ/, “Kheb” /xɛb/, “Babozəy” /babezai/, “Shaker” /ʃakɛɾ/, “Regh’ /rɛɣ/, “Ghesha” /ɣɛʃa:/ in which use /ɛ/ sound in the middle of words.

Table 11 Phonological Variation through Vowel Sound /ɪ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Sugar	Cheeni	Chini	/tʃɪ:ni/	71.4 %	Asperka Sadrawan, Domel city, Painsa Khel, Landi Jalandar, Garerra

Table 12 Phonological Variation through Vowel Sound /a/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Sugar	Cheena	Chinā	/tʃɪ:na/	28.6%	Baka Khel, Dogar Umerzai

The areas are set into two groups (Group E) includes Asperka Sadrawan, Domel city, Painsa Khel, Landi Jalandar, and Garerra, and the other is (Group F) includes Baka Khel, Dogar Umerzai. The speakers of Group-E use the word “Chini” with its IPA transcription /tʃɪ:ni/ which is 71.4 % and the distance, from Asperka Sadrawan to Painsa Khel, Asperka Sadrawan to Domail city, Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Garerra, Painsa Khel to Domail city, Painsa Khel to Landi Jalander, Painsa Khel to Garerra, Domail city to Landi Jalander, Domail city to Garerra, and Landi Jalander to Garerra is 14 km, 8.6 km, 44 km, 23 km, 10 km, 32 km, 28 km, 37 km, 21 km, and 58 km respectively. However, the speakers of Group-E use the word “Chinā” with its phonetic transcription /tʃɪ:na/ which is 28.6% and the distance between these areas is 25 km. The variation of Group-E is different from Group-F due to the last vowel sound as the sound in Group-E variation is /ɪ/ that is the close central vowel replaced with the open front vowel /a/ in Group-F variation.

Table 13 Phonological Variation through Vowel Sound /ɔ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Areas
Lemon	Nimbo	Nimbo	/nimbɔ/	28.6%	Asperka Sadrawan, Garerra

Table 14 Phonological Variation through Vowel Sound /ə/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Lemon	Nimba	Nimbə	/nimbə/	57%	Baka Khel, Dogar Umerzai, Domail city, Painsa Khel

Table 15 Phonological Variation through Vowel Sound /ɑ:/ and /ɪ/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Area
Lemon	Nambe	Nambi	/n'ɑ:mbɪ/	14%	Landi Jalander

The geographical areas mentioned in the table 13, 14, and 15 are divided into three groups (Group G), (Group H), and (Group I). Group-G contains Asperka Sadrawan and Garerra whereas Group-H contains Baka Khel, Dogar Umerzai, Domail city, and Painsa Khel. Additionally, Group-I consists of the Landi Jalander area only. The speakers of Group-G use the word “Nimbo” with its IPA transcription /nimbɔ/ which is 28.6% and the distance between Asperka Sadrawan and Garerra is 23 km, while the speakers of Group-H use the word “Nimbə” with its phonetic transcription /nimbə/ which is 57% and the distance from Dogar Umerzai to Domail city is 6 km, from Dogar Umerzai to Painsa Khel is 12 km, from Dogar Umerzai to Baka Khel is 24 km, from Domail city to Painsa Khel is 10 km, from Domail to Baka Khel is 25 km, and from Painsa Khel to Baka Khel is 33 km. The speakers Group-I use the word “Nambi” with its phonetic transcription /n'ɑ:mbɪ/ which is 14%. The variations of Group-G, Group-H, and Group-I are different from one another because the speakers of Group-G use the words “Nimbo” /nimbɔ/ in which the mid-back vowel sound /ɔ/ is used at the end of the word while the speakers of Group-H use the word “Nimbə” /nimbə/ in which the mid-central vowel sound /ə/ is used at the end of the word, therefore, the /ɔ/ that is the mid back vowel sound is replaced by the mid-central vowel sound /ə/ in Group-H variation and in Group-I, the /ɔ/ that is the mid back vowel sound is replaced with the open central vowel sound /ɪ/ at the end of the word. The initial and middle sounds are the same in Group-G and Group-H variations, but the middle vowel sound is different in Group-I variations. The speakers of Group-I use the open central vowel sound /ɑ:/ in the middle of a word which is different from Group-G and Group-H.

Table 16 Phonological Variation through Vowel Sound /ɪ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Area
Here	Dilta	Diltā	/dilta:/	14.3%	Dogar Umerzai

Table 17 Phonological Variation through Vowel Sound /ɛ/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Here	Delta	Deltā	/delta:/	85.7%	Baka Khel, Asperka Sadrawan, Domail city, Painsa Khel, Garerra, Landi Jalander

The areas are set into two groups (Group K) which includes Asperka Sadrawan, Domail city, Painsa Khel, Baka Khel, Landi Jalander, and Garerra, and the other (Group J) including

Dogar Umerzai. The speakers of Group-J use the words “Diltā” with its IPA transcription /dɪlt'ɑ:/ which is 14.3%, however, the speakers of Group-K use the word “Deltā” with its phonetic transcription /dɛltɑ:/ which is 85.7%. These areas are far away from one another as the distance from Asperka Sadrawan to Painda Khel is 14 km, Asperka Sadrawan to Domail city is 8.6 km, Asperka Sadrawan to Landi Jalander is 44 km, Asperka Sadrawan to Garerra is 23 km, Asperka Sadrawan to Baka Khel is 27 km, Painda Khel to Domail city is 10 km, Painda Khel to Landi Jalander is 32 km, Painda Khel to Garerra is 28 km, Painda Khel to Baka Khel is 33 km, Domail city to Landi Jalander is 37 km, Domail city to Garerra is 21 km, Domail city to Baka Khel is 25 km, Landi Jalander to Garerra is 58 km, Landi Jalander to Baka Khel is 66 km, and Garerra to Baka Khel is 6 km. The speakers of Group-J use the close central vowel sound /ɪ/ in the middle of the selected word, while the speakers of Group-K use the open-mid front vowel sound /ɛ/ in the middle of the selected word. Thus, the variation of Group-J is different from Group-K due to the middle vowel sounds /ɪ/ and /ɛ/ and the initial and final sounds are the same in both groups. In Group-J variation the /ɪ/ that is the close central vowel sound replaced by the open-mid front vowel sound /ɛ/ in Group-K variation.

Table 18 Phonological Variation through Vowel Sound /ɪ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Area
Here	Dilay	Dile	/ɖɪɪe:/	14.3%	Dogar Umerzai

Table 19 Phonological Variation through Vowel Sound /ɛ/

English Transcription	DWT	DWSS	Pashto IPA Transcription	%	Areas
Here	Delay	Dele	/ɖɛɛe:/	85.7%	Baka Khel, Asperka Sadrawan, Domail city, Painda Khel, Garerra, Landi Jalander

The geographical areas are set into two groups (Group L) which include Asperka Sadrawan, Domail city, Painda Khel, Baka Khel, Landi Jalandar, and Garerra, and the other (Group M) includes only Dogar Umerzai. The speakers of Group-L use the word “Dilay” with its IPA transcription /ɖɪɪe:/ which is 14.3%, but the speakers of Group-K use the word “Dele” with its phonetic transcription /ɖɛɛe:/ which is 85.7%. These areas are far away from one another as the distance from Asperka Sadrawan to Painda Khel is 14 km, Asperka Sadrawan to Domail city is 8.6 km, Asperka Sadrawan to Landi Jalander is 44 km, Asperka Sadrawan to Garerra is 23 km, Asperka Sadrawan to Baka Khel is 27 km, Painda Khel to Domail city is 10 km, Painda Khel to Landi Jalander is 32 km, Painda Khel to Garerra is 28 km, Painda Khel to Baka Khel is 33 km, Domail city to Landi Jalander is 37 km, Domail city to Garerra is 21 km, Domail city to Baka Khel is 25 km, Landi Jalander to Garerra is 58 km, Landi Jalander to Baka Khel is 66 km, and Garerra to Baka Khel is 6 km. The speakers of Group-L use the close central vowel sound /ɪ/ in the middle of a word, while the speakers of Group-M use the open-mid front vowel sound /ɛ/ in the middle of a word. Thus, the variation of Group-L is different from Group-M due to the middle vowel sounds /ɪ/, /ɛ/ and the initial and final sounds are the same in both groups. In the Group-L variation, the sound /ɪ/ that is a close central vowel sound replaced by the open-mid front vowel sound /ɛ/ in Group-M variation.

Table 20 Phonological Variation through Vowel Sound /ɔ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
There	Orta	Ortā	/ɔ̌.ɪ.ta:/	71.4%	Dogar Umerzai, Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander

Table 21 Variation through Vowel Sounds /ɛ/ and Omission of Consonant Sound /w/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
There	Wēṛta	Wertā	/wɛ.ɪ.ta:/	28.6%	Baka Khel, Garerra

The areas mentioned in the table 20 and 21 are divided into two groups (Group N) and (Group O). Group-N contains Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander areas, whereas Group-O consist of Baka Khel and Garerra areas. The speakers of Group-N use the word “Ortā” with its IPA transcription /ɔ̌.ɪ.ta:/ which is 71.3%. These areas are far away from one another as the distance from Asperka Sadrawan to Landi Jalander is 44 km, Asperka Sadrawan to Doger Umerzai is 2 km, Asperka Sadrawan to Painsa Khel is 14 km, Asperka Sadrawan to Domail city is 8.6 km, Painsa Khel to Domail city is 10 km, Painsa Khel to Landi Jalander is 32 km, Painsa Khel to Doger Umerzai is 12 km, Domail city to Landi Jalander is 37 km, Domail city to Doger Umerzai is 6 km, and Landi Jalander to Doger Umerzai is 42 km. While the speakers of Group-O use the word “Wertā” with its IPA transcription /wɛ.ɪ.ta:/ which is 28.6%, but the distance from Garerra to Baka Khel is 6 km. The variation of Group-N is different from Group-O due to the vowel and consonant sound at the beginning of a word. The speakers of Group-N use the mid-back vowel sound /ɔ̌/ whereas the speakers of Group-O use the open-mid front vowel sound /ɛ/ and also use one consonant sound /w/. Thus, in the Group-N variation /ɔ̌/ that is the mid-back vowel sound replaced with /w/ which is a velar bilabial and the open-mid front vowel sound /ɛ/ of Group-B variation. The speakers of Group-N omit the sound /w/ at the beginning of a word.

Table 22 Phonological Variation through Consonant Sound /ɾ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Cloths	Jorra	Joṛā	/d͡ʒu.ɾa:/	28.6%	Asperka Sadrawan, Garerra

Table 23 Phonological Variation through Consonant Sound /m/

English Transcription	DWT	DWSS	Pashto IPA Transcription	%	Areas
Colths	Joomah	Jomā	/d͡ʒu.ma:/	71.4%	Baka Khel, Dogar Umerzai, Domail city, Painsa Khel, Landi Jalander

The areas are set into two groups (Group P) which includes Baka Khel, Dogar Umerzai, Domail city, Painsa Khel, and Landi Jalander, and the other is (Group Q) including Asperka Sadrawan and Garerra. The speakers of Group-P use the word “Jomā” with its IPA transcription /d͡ʒu.ma:/ which is 71.4 %, but the distance from Doger Umerzai to Painsa Khel, Doger Umerzai to Domail city, Doger Umerzai to Landi Jalander, Doger Umerzai to Baka

Khel, Painsa Khel to Domail city, Painsa Khel to Landi Jalander, Painsa Khel to Baka Khel, Domail city to Landi Jalander, Domail city to Baka Khel, and Landi Jalander to Baka Khel is 12 km, 6 km, 42 km, 24 km, 10 km, 32 km, 28 km, 37 km, 21 km, and 58 km respectively. However, the speakers of Group-Q use the word “Jorā” with its phonetic transcription /dʒu:ɾɑ:/ which is 28.6%, but the distance between these areas is 25 km. The variation of Group-P is different from Group-Q due to the middle consonant sounds as the sound /m/ in Group-P variation which is a nasal-labial consonant sound replaced with rhotic-retroflex consonant sound /ɽ/ in Group-Q variation.

Table 24 Variation through Vowel Sound /u:/ and omission of Consonant sound /w/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Take it	r Roohla	r rohlā	.u: xla:/	85%	Dogar Umerzai, Domail city, Painsa Khel, Landi Jalander, Asperka Sadrawan, Garerra

Table 25 Phonological Variation through Consonant and Vowel Sound /w/ and /ə/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Area
Take it	r- Wakhla	r- Wəkhla	/r wəxla:/	15%	Baka Khel

The areas mentioned in tables 24 and 25 are divided into two groups (Group R) and (Group S). In Group-R, Dogar Umerzai, Domail city, Painsa Khel, Landi Jalander, Asperka Sadrawan, and Garerra are included, while in Group-S only Baka Khel is included. The speakers of Group-R use the word “rohlā” with its IPA transcription /ɽ.u:xla:/ which is 85%. These areas are far away from one another as the distance from Asperka Sadrawan to Landi Jalander is 44 km, Asperka Sadrawan to Dogar Umerzai is 2 km, Asperka Sadrawan to Painsa Khel is 14 km, Asperka Sadrawan to Domail city is 8.6 km, Asperka Sadrawan to Garerra is 23 km, Painsa Khel to Domail city is 10 km, Painsa Khel to Landi Jalander is 32 km, Painsa Khel to Dogar Umerzai is 12 km, Painsa Khel to Garerra is 28 km, Domail city to Landi Jalander is 37 km, Domail city to Dogar Umerzai is 6 km, Domail city to Garerra is 21 km, Landi Jalander to Garerra is 58 km, Landi Jalander to Dogar Umerzai is 42 km, and Dogar Umerzai to Garerra is 21 km. However, the speakers of Group-S use the word “r- Wəkhla” with its IPA transcription /r wəxla:/ which is 15%. So, the difference between these two groups is both in consonant and vowel sounds. The speakers of Group-R use the word “rohlā” /ɽ.u:xla:/ in which use rhotic post-alveolar consonant sound /ɽ/ and the close back unrounded vowel sound /u:/, however, the speakers of Group-S use the words “r- Wəkhla” /r wəxla:/ in which the glide-bilabial consonant sound /w/ and mid-central vowel sound /ə/ are used. Thus, the variation of Group-R is different from Group-S due to the initial consonant and middle vowel sounds as the rhotic post-alveolar consonant sound /ɽ/ in Group-R variation that is replaced by glide-bilabial consonant sound /w/ in Group-S variation. Moreover, in the Group-R variation, the /u:/ that is close back unrounded vowel sound is replaced with the mid-central vowel sound /ə/ in the Group-S variation.

Table 26 Phonological Variation through Vowel Sounds /ə/ and /ɑ:/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
-----------------------	-----	------	--------------------------	---	-------

They	Dayia	Dəy	/d̪'əɪ/	71.4 %	Domail city, Painsa Khel, Landi Jalander, Asperka Sadrawan, Garerra
------	-------	-----	---------	--------	---

Table 27 Phonological Variation through Vowel Sound /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	%	Areas
They	Dey	Day	/d̪'e:/	28.6%	Baka Khel, Dogar Umerzai,

The areas are set into two groups (Group T) which includes Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander, and Garerra, and the other is (Group U) including Baka Khel and Dogar Umerzai areas. The speakers of Group-T use the word “Dəy” with its IPA transcription /d̪'əɪ/ which is 71.4 %. As, the distance from Asperka Sadrawan to Painsa Khel, Asperka Sadrawan to Domail city, Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Garerra, Painsa Khel to Domail city, Painsa Khel to Landi Jalander, Painsa Khel to Garerra, Domail city to Landi Jalander, Domail city to Garerra, and Landi Jalander to Garerra is 14 km, 8.6 km, 44 km, 23 km, 10 km, 32 km, 28 km, 37 km, 21 km, and 58 km respectively. However, the speakers of Group-U use the word “Day” with its phonetic transcription /d̪'e:/ which is 28.6%, but the distance between these areas is 25 km. The speakers of Group-T use the mid-central vowel sound /ə/ and the low front vowel sound /aɪ/, while the speakers of Group-U use the close-mid front vowel sound /e:/ which is different from Group-T variation.

Table 28 Phonological Variation through Vowel Sound /u:/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Areas
Me	Mutah	Mutā	/mu:ɽp/	57%	Garerra, Asperka Sadrawan, Dogar Umerzai, Landi Jalander

Table 29 Phonological Variation through Vowel Sound /ə/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Me	Matah	Mətā	/məɽp/	43%	Baka Khel, Domail city, Painsa Khel,

The areas are divided into two groups (Group V) which includes Asperka Sadrawan, Dogar Umerzai, Landi Jalander, and Garerra, and the other is (Group X) including Baka Khel, Domail city, and Painsa Khel. The speakers of Group-V use the word “Mutah” with its phonetic transcription /mu:ɽp/ which is 57%. These areas are far away from one another as the distance from Asperka Sadrawan to Dogar Umerzai, Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Garerra, Dogar Umerzai to Landi Jalander, Dogar Umerzai to Garerra, and Landi Jalander to Garerra is 2 km, 44 km, 23 km, 42 km, 21 km, and 58 km respectively. The speakers of Group-X use the word “Mətā” with its IPA transcription /məɽp/ which is 43%, while the distance from Baka Khel to Domail city, Baka Khel to Painsa Khel, Domail city to Painsa Khel is 25 km, 33 km, and 10 km. Therefore, the variation of Group-V is different from Group-X due to the middle close back rounded vowel sound /u:/ as this sound in Group-V variation is replaced by the mid-central vowel /ə/ in Group-X variation.

Table 30 Omission of Consonant Sound /r/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Areas
Inform him	Weta	waytā	/weta/	28.6%	Garerra, Dogar Umerzai

Table 31 Phonological Variation through Consonant Sound /r/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Inform him	Wērta	Wertā	/wertɑ:/	71.4%	Baka Khel, Domail city, Painsa Khel, Asperka Sadrawan, Landi Jalander

The areas mentioned in tables 30 and 31 are divided into two groups (Group Y) and (Group Z). In Group-Y, Garerra and Dogar Umerzai are included, while in Group-Z Baka Khel, Domail city, Painsa Khel, Asperka Sadrawan, and Landi Jalander are included. The speakers of Group-Y use the word “waytā” with its phonetic transcription /weta/ which is 28.6 %, but the distance from Dogar Umerzai to Garerra is 21 km. While the speakers of Group-Z use the word “Wertā” with its phonetic transcription /wertɑ:/ which is 71.4%. These areas are far away from one another as the distance from Asperka Sadrawan to Landi Jalander is 44 km, Asperka Sadrawan to Painsa Khel is 14 km, Asperka Sadrawan to Domail city is 8.6 km, Asperka Sadrawan to Baka Khel is 27 km, Painsa Khel to Domail city is 10 km, Painsa Khel to Landi Jalander is 32 km, Painsa Khel to Baka Khel is 28 km, Domail city to Landi Jalander is 37 km, Domail city to Baka Khel is 25 km, and Landi Jalander to Baka Khel is 66 km. Thus, the difference between these two groups' variation is due to the rhotic-post alveolar consonant sound /r/ because, the speakers of Group-Y omit the sound /r/ which is used in the middle of the word, while the speakers of Group-Z use the sound /r/ in the selected words.

Table 32 Phonological Variation through Vowel Sound /ɪ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
This time	Dowri	Dowri	/dɔwri/	57%	Asperka Sadrawan, Garerra, Landi Jalander, Domail city

Table 33 Phonological Variation through Vowel Sound /e/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
This time	Dowray	Dowre	/dɔwre:/	43%	Baka Khel, Dogar Umerzai, Painsa Khel

The geographical areas are set into two groups (Group AB) which includes Asperka Sadrawan, Garerra, Landi Jalander, and Domail city and the other is (Group BC) which includes Baka Khel, Dogar Umerzai, and Painsa Khel. The speakers of Group-AB use the word “Dowri” with its phonetic transcription /dɔwri/ which is 57%, but the distance from Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Domail city, Asperka Sadrawan to Garerra, Domail city to Landi Jalander, Domail city to Garerra, and from Landi Jalander to Garerra is 44 km, 8.6 km, 23 km, 37 km, 21 km and 58 km. While, the speakers of Group-BC use the word “Dowre” with

its IPA transcription /dɔwre:/ which is 43%, while the distance from Baka Khel to Doger Umerzai, Baka Khel to Painda Khel, Painda Khel to Doger Umerzai is 24 km 28 km and 12 km. Therefore, the variation of Group-AB is different from Group-BC due to the last close central unrounded vowel sound /ɪ/ as the same sound in Group-AB variation is replaced by close-mid front unrounded vowel sound /e:/ in Group-BC variation.

Table 34 Phonological Variation through Vowel Sound /əi/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Cap	Tepai	Tepəy	/tɛpəi/	57%	Asperka Sadrawan, Domail city, Garerra, Landi Jalander

Table 35 Phonological Variation through Vowel Sound /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Cap	Tepay	Tepe	/tɛpe:/	28.6%	Baka Khel, Painda Khel

Table 36 Phonological Variation through Vowel Sounds /o:/ and /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Area
Cap	Topay	Tope	/tɔ:pe:/	14.2%	Dogar Umerzai

The areas mentioned in tables 34, 35, and 36 are divided into 3 groups (Group CD), (Group DE), and (Group DF). Group-CD contains Asperka Sadrawan, Domail city, and Garerra, Group-DE contains Baka Khel and Painda Khel, and Group-DF consists of only the Dogar Umerzai area. The speakers of Group-CD use the word “Tepəy” with its phonetic transcription /tɛpəi/ which is 43%, but the distance from Asperka Sadrawan to Domail city is 8.6 km, Asperka Sadrawan to Garerra is 23 km, Domail city to Garerra is 21 km. The speakers of Group-DE use the word “Tepe” with its phonetic transcription /tɛpe:/ which is 28.6%, but the distance from Baka Khel to Painda Khel is 33 km. Additionally, the speakers of Group-DF use the word “Tope” with its phonetic transcription /tɔ:pe:/ which is 14.2%.

Firstly, the difference between the Group-CD and Group-DE variations is discussed in the following paragraph. The speakers of Group-CD use the word “Tepəy” /tɛpəi/ while the speakers of Group-DE use the word “Tepe” /tɛpe:/, so the initial and the middle sounds are the same between these two groups, but the final vowel sound is changed. The speakers of Group-CD use the mid-central vowel sound /əi/ while the speakers of Group-DE use the close-mid front unrounded vowel sound /e:/ at the end of the words. Therefore, in the Group-CD variation the mid-central vowel sound /əi/ that is replaced by the close-mid front unrounded vowel sound /e:/ in the Group-DE variation.

Secondly, the difference between the variations of Group-CD and Group-DF is investigated. The speakers of Group-CD use the words “Tepəy” /tɛpəi/, but the speakers of Group-DF use the word “tope” /tɔ:pe:/, in which the Group-CD use the open-mid front unrounded vowel sound /ɛ/ in the middle of the word while the Group-DF use the close-mid back vowel sound /o:/ at the middle of the word. Also, Group-CD use the mid-central vowel sound /əi/ and Group-DF use the close mid-front unrounded vowel sound /e:/ at the end of the

word. Thus, the variation of Group-CD is different from Group-DF due to the middle and last vowel sounds as in Group-CD the open-mid front unrounded vowel sound /ɛ/ is replaced by close-mid back vowel sound /o:/ in the middle of the word, while the mid-central vowel sound /ə/ is replaced by the close-mid front unrounded vowel sound /e:/ at the end of the word.

Moreover, the difference between Group-DE and Group-DF variations is mentioned. The speakers of Group-DE use the word “Tepe” /tɛpe:/ in which the open-mid front unrounded vowel sound /ɛ/ is used in the middle of the word while the speakers of Group-DF use the word “Tope” /tɔ:pe:/ in which the close-mid back vowel sound /o:/ is used in the middle of the word. Thus, the variation of Group-DE is different from Group-DF due to the middle vowel sound as in Group-DE variation, the open-mid front unrounded vowel sound /ɛ/ is replaced by the close-mid back vowel sound /o:/ in Group-DF variation.

Table 37 Phonological Variation through Vowel Sounds /ɔ/ and omission of /w/ sound

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Now	Ous	Os	/ɔs/	71.4 %	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander

Table 38 Phonological Variation through Vowel and Consonant Sounds /w/ and /ɛ/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Now	Wes	Wes	/wes/	28.6%	Baka Khel, Garerra

The areas mentioned in tables 37 and 38 are divided into two groups (Group AD) and (Group AC). The Group-AD contains Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander areas, whereas the Group-AC consists of Baka Khel and Garerra areas. The speakers of Group-AD use the word “Os” with its IPA transcription /ɔs/ which is 71.4%. These areas are far away from one another as the distance from Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Dogar Umerzai, Asperka Sadrawan to Painsa Khel, Asperka Sadrawan to Domail city, Painsa Khel to Domail city, Painsa Khel to Landi Jalander, Painsa Khel to Dogar Umerzai, Domail city to Landi Jalander, Domail city to Dogar Umerzai, Landi Jalander to Dogar Umerzai is 44 km, 2 km, 14 km, 8.6 km, 10 km, 32 km, 12 km, 37 km, 6 km and 42 km respectively. However, the speakers of Group-AC use the word “Wes” with its IPA transcription /wes/ which is 28.6% in the distance of 6 km. The speakers of Group-AD use the vowel sound /ɔ/ at the beginning of the word, but the speakers of Group-AC use the consonant sound at the beginning of the word as well as use the vowel sound /ɛ/ in the middle of the word. Therefore, the variation of Group-AD is different from Group-AC due to the middle vowel sound and the initial consonant sound as the speakers of Group-AD omit the glide-bilabial consonant sound /w/ and Group-AC pronounce the /w/ sound at the beginning of a word. Besides, Group-AD variation the /ɔ/ that is the mid-back rounded vowel sound is replaced by the open-mid front unrounded vowel sound /ɛ/ in the Group-AC variation.

Table 39 Phonological Variation through Vowel Sound /i/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Areas
-----------------------	-----	------	--------------------------	------------	-------

Electricity	Bijli	Bijli	/bɪdʒlɪ/	57%	Asperka Sadrawan, Pinda Khel, Domail city, Landi Jalander
-------------	-------	-------	----------	-----	---

Table 40 Phonological Variation through Vowel Sound /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Electricity	Bijlay	Bijlay	/bɪdʒle:/	43%	Baka Khel, Garerra, Dogar Umerzai,

The areas are set into two groups (Group AE) which includes Asperka Sadrawan, Pinda Khel, Domail city, and Landi Jalander, while the other is (Group AF) including Baka Khel, Garerra, and Dogar Umerzai. The speakers of Group-AE use the word “Bijli” with its IPA transcription /bɪdʒlɪ/ which is 57%, but the distance from Asperka Sadrawan to Pinda Khel, Asperka Sadrawan to Domail city, Asperka Sadrawan to Landi Jalander, Pinda Khel to Domail city, Pinda Khel to Landi Jalander, Landi Jalander to Domail city is 14 km, 8.6 km, 44 km, 10 km, 32 km, 37 km respectively. While the speakers of Group-AF use the word “Bijlay” with its IPA transcription /bɪdʒle:/ which is 43%, however, the distance from Baka Khel to Garerra, Baka Khel to Dogar Umerzai, Dogar Umerzai to Garerra is 6 km, 24 km, 21 km respectively. Therefore, the difference between Group-AE and Group-AF variations is due to the last vowel sound as the close central unrounded vowel sound /ɪ/ in the Group-AE variation is replaced by the close-mid front vowel sound /e:/ in the Group-AF variation.

Table 41 Phonological Variation through Vowel Sound /əɪ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Old Women	Beedai	Bidəy	/bɪ:ɖəɪ/	57%	Asperka Sadrawan, Pinda Khel, Domail city, Landi Jalander,

Table 42 Phonological Variation through Vowel Sound /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	%	Areas
Old Women	Booday	Bode	/bo:ɖe:/	28.6%	Baka Khel, Dogar Umerzai

Table 43 Phonological Variation through Vowel Sounds /o:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Area
Old Women	Boodai	Bodəy	/bo:ɖəɪ/	14%	Garerra

The areas mentioned in tables 41, 42, and 43 are divided into three groups (Group BE), (GroupDF), and (Group DC). The first Group-BE contains Asperka Sadrawan, Pinda Khel, Domail city, and Landi Jalander. The second Group-DF consists of Baka Khel and Dogar Umerzai. The third Group DC contains only Garerra. The speakers of Group-BE use the word “Bidəy” with its IPA transcription /bɪ:ɖəɪ/ which is 57%. These areas are far away from one another as the distance from Asperka Sadrawan to Pinda Khel is 14 km, from Asperka Sadrawan to Domail city is 8.6 km, from Asperka Sadrawan to Landi Jalander is 44 km, from Pinda Khel to Domail city is 10 km, from Pinda Khel to Landi Jalander is 32 km, from Domail city to Landi Jalander is 37 km. While, the speakers of Group-DF use the word “Bode”

with its IPA transcription /bo:qɛ:/ which is 28.6%, but the distance from Dogar Umerzai to Baka Khel is 24 km. Additionally, the speakers of Group-DC use the word “Bodəy” with its IPA transcription /bo:qəɪ/ which is 14.2%.

Firstly, the difference between Group-BE and Group-DF variations is discussed. The speakers of Group-BE use the close front unrounded vowel sound /ɪ:/ in the middle of the word and the mid-central vowel sound /əɪ/ is used at the end of the word, while the speakers of Group-DF use the close mid-back vowel sound /o:/ in the middle of the word and the close-mid front vowel sound /e:/ is used at the end of the word. So, the difference between the Group-BE and Group-DF is due to the vowel and the consonant sounds in both groups’ variations. Thus, in the Group-BE variation, the close front unrounded vowel sound /ɪ:/ is replaced by the close mid-back vowel sound /o:/ in the Group-DF variation and the mid-central vowel sound /əɪ/ is replaced by the close-mid front vowel sound /e:/.

Secondly, the difference between Group-BE and Group-DC is mentioned. The speakers of Group-BE use the vowel sound /ɪ/ in the middle of the word, while the speakers of Group-DC use the vowel sound /o:/ in the middle of the word. Therefore, the difference between these two groups is due to the middle vowel sound. However, in the Group-BE variation, the close central unrounded vowel sound /ɪ/ is replaced by the close mid-back vowel sound /o:/ in the Group-DC variation.

Lastly, the difference between the Group-DF and Group-DC is examined. The speakers of Group-DF use the vowel sound /e:/ at the end of the word. While the speakers of Group-DC use the vowel sound /əɪ/ at the end of the word. Thus, the difference between these two groups is due to the last vowel sound. Therefore, in the Group-DF variation the close-mid front unrounded vowel sound /e:/ is replaced by mid-central vowel /əɪ/ in the Group-DC variation.

Table 44 Phonological Variation through Vowel Sound /q/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Pashtun land	Pashto watan	Pashto watan	/pəʃtə wətɑ:n/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, Landi Jalander

Table 45 Phonological Variation through Vowel Sound /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	%	Areas
Pashtun land	Pashtay watan	Pashte watan	/pəʃtɛ: wətɑ:n/	28.6%	Baka Khel, Garerra

The areas mentioned in Tables 44 and 45 are divided into two groups (Group AA) and (Group BB). Group-AA contains Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, and Landi Jalander areas, whereas Group-BB consists Baka Khel and Garerra areas. The speakers of Group-AA use the words “Pashto watan” with their IPA transcription /pəʃtə wətɑ:n/ which is 71.4%, but the distance from Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Doger Umerzai, Asperka Sadrawan to Painda Khel, Asperka Sadarwan to Domail city, Painda Khel to Domail city, Painda Khel to Landi Jalander, Painda Khel to Doger Umerzai, Domail city to Landi Jalander, Domail city to Doger Umerzai, Landi Jalander to Doger Umerzai is 44 km, 2 km, 14 km, 8.6 km, 10 km, 32 km, 12 km, 37 km, 6 km and 42 km respectively. However, the speakers of Group-BB use the words “Pashte watan” with their IPA transcription /pəʃtɛ: wətɑ:n/ which is 28.6%, while the distance from Baka Khel to Garerra is

6 km. The speakers of Group-AA use the vowel sound /ɔ/ in the middle of the word, but the speakers of Group BB use the vowel /e:/ in the middle of the word. Therefore, the variation of Group-AA is different from Group-BB due to the middle vowel sound, as the mid-back rounded vowel sound /ɔ/ in Group-AA variation is replaced by the close-mid front unrounded vowel sound /e:/ in Group BB.

Table 46 Phonological Variation through Consonant and Vowel Sound /w/ and /ə/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Say	Wayayyi	Wayayi	/wəjɑ:ji/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander

Table 47 The Omission of Consonant and Vowel Sound /w/ and /ə/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Say	Yaayi	Yayi	/jɑ:ji/	28.6%	Baka Khel, Garerra

The areas mentioned in tables 46 and 47 are split into two groups (Group DD) and (Group CF). The Group-DD contains Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander areas, however, Group-CF consists of Baka Khel and Garerra areas. The speakers of Group-DD use the word “wayayi” with its IPA transcription /wəjɑ:ji/ which is 71.4%. These areas are far away from one another as the distance from Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Dogar Umerzai, Asperka Sadrawan to Painsa Khel, Asperka Sadrawan to Domail city, Painsa Khel to Domail city, Painsa Khel to Landi Jalander, Painsa Khel to Dogar Umerzai, Domail city to Landi Jalander, Domail city to Dogar Umerzai, Landi Jalander to Dogar Umerzai is 44 km, 2 km, 14 km, 8.6 km, 10 km, 32 km, 12 km, 37 km, 6 km and 42 km respectively. However, the speakers of Group-CF use the word “yayi” with its IPA transcription /jɑ:ji/ which is 28.6%, but the distance from Baka Khel to Garerra is 6 km. The speakers of Group-DD use the vowel sound /ɔ/ in the middle of the word and the speakers of Group-CF use the vowel /e:/ in the middle of the word. Therefore, the variation of Group-DD is different from Group-CF due to the initial consonant and the middle vowel sounds. Therefore, the speakers of Group-DD pronounce the /wə/ sound, but the speakers of Group-CF omit the /wə/ sound.

Table 48 Phonological Variation through Vowel Sound /o:/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Area
Pocket	Joob	Job	/dʒo:b/	14.3%	Dogar Umerzai

Table 49 Phonological Variation through Vowel Sound /i/

English Transcription	DWT	DWSS	Pashto IPA Transcription	%	Areas
-----------------------	-----	------	--------------------------	---	-------

Pocket	Jeeb	Jib	/dʒɪb/	85.7 %	Asperka Sadrawan, Painsa Khel, Domail city, Landi Jalander, Baka Khel, Garerra
--------	------	-----	--------	-----------	--

The areas are set into two groups (Group CG) which includes Dogar Umerzai and the other is (Group DF) including Asperka Sadrawan, Domel city, Painsa Khel, Landi Jalander, Baka Khel, and Garerra. The speakers of Group-CG use the word “Job” with its IPA transcription /dʒo:b/ which is 14.3%, while the speakers of Group-DF use the word “Jib” with its IPA transcription /dʒɪb/ which is 85.7%. These areas are far away from one another as the distance from Asperka Sadrawan to Landi Jalander is 44 km, from Asperka Sadrawan to Baka Khel is 27 km, from Asperka Sadrawan to Painsa Khel is 14 km, from Asperka Sadrawan to Domail city is 8.6 km, from Asperka Sadrawan to Garerra is 23 km, from Painsa Khel to Domail city is 10 km, from Painsa Khel to Landi Jalander is 32 km, from Painsa Khel to Garerra is 12 km, from Painsa Khel to Baka Khel is 33 km, from Domail city to Landi Jalander is 37 km, from Domail city to Baka Khel is 25 km, from Domail city to Garerra is 21 km and from Landi Jalander to Baka Khel is 66 km, from Landi Jalander to Garerra is 58 km. Thus, the variation of Group-CG is different from Group-DF due to the middle vowel sound. The speakers of Group-CG use the close mid-back vowel sound /o:/ in the middle of the word, but the speakers of Group-DF use the close central unrounded vowel sound /ɪ/ in the middle of the word. Thus, in the Group-CG variation, the close mid-back vowel sound /o:/ is replaced by the close central unrounded vowel sound /ɪ/ in the Group-DF variation.

Table 50 Phonological Variation through Vowel Sound /ɔ/ and Omission Sound /w/

English Transcription	PWT	PWSS	Pashto IPA Transcription	%	Areas
Four	Salor	Tsalor	/tsəlɔr/	71.4%	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, Landi Jalander

Table 51 Phonological Variation through Vowel and Consonant Sounds /w/ and /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Four	Salwer	tsəlwer	/tsəlwe:r/	28.6%	Baka Khel, Garerra,

The areas mentioned in tables 50 and 51 are divided into two groups (Group EE) and (Group FF). Group-EE contains Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander areas, whereas Group-FF consists of Baka Khel and Garerra areas. The speakers of Group-EE use the word “tsalor” with its IPA transcription /səlɔr/ which is 71.4%. These areas are far away from one another as the distance from Asperka Sadrawan to Landi Jalander, Asperka Sadrawan to Dogar Umerzai, Asperka Sadrawan to Painsa Khel, Asperka Sadrawan to Domail city, Painsa Khel to Domail city, Painsa Khel to Landi Jalander, Painsa Khel to Dogar Umerzai, Domail city to Landi Jalander, Domail city to Dogar Umerzai, Landi Jalander to Dogar Umerzai is 44 km, 2 km, 14 km, 8.6 km, 10 km, 32 km, 12 km, 37 km, 6 km and 42 km respectively. However, the speakers of Group-FF use the word “tsəlwer” with its IPA transcription /səlwe:r/ which is 28.6%, but the distance from Baka Khel to Garerra is 6 km. The vowel sound /ɔ/ is used by the speakers of Group-EE in the middle of the word and omit the consonant sound /w/ in the middle of the word, while the speakers of Group-FF use

the vowel sound /e:/ in the middle of the word and pronounce the consonant sound /w/ in the middle of the word. Therefore, the variation of Group-EE is different from Group-FF due to the middle consonant and middle vowel sounds. Therefore, the speakers of Group-EE omit the glide-bilabial consonant sound /w/, however, and the speakers of Group-FF pronounce the glide-bilabial consonant sound /w/ in the middle of the words. Additionally, the mid-back rounded vowel sound /ɔ/ in Group-EE variation is replaced by the close-mid front vowel sound /e:/ in Group-FF.

Table 52 Phonological Variation through Vowel Sound /ɪ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Areas
Water	Iba	Ibə	/ɪbə/	43%	Baka Khel, Dogar Umerzai, Garerra

Table 53 Phonological Variation through Vowel Sound /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Water	Eba	ebə	/e:bə/	57%	Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander

The geographical areas mentioned in tables 52 and 53 are divided into two groups (Group GG) and (Group HH). In Group-GG, Baka Khel, Dogar Umerzai, and Garerra areas are included, while Group-HH consists of Asperka Sadrawan, Domail city, Painsa Khel, and Landi Jalander. The speakers of Group GG use the word “Ibə” with its phonetic transcription /ɪbə/ which is 43%, but the distance from Baka Khel to Dogar Umerzai is 24 km, from Baka Khel to Garerra is 6 km, from Dogar Umerzai to Garerra is 21 km. While the speakers of Group-HH use the word “Eba” with its phonetic transcription /e:bə/ which is 57%, the distance from Asperka Sadrawan to Domail city is 8.6 km, from Asperka Sadrawan to Painsa Khel is 14 km, from Asperka Sadrawan to Landi Jalander is 44 km, from Painsa Khel to Domail city is 10 km, from Domail city to Landi Jalander is 37 km, from Landi Jalander to Painsa Khel is 32 km. So, the difference between these two groups is due to the initial vowel sound because the speakers of Group-GG use the vowel /ɪ/ in the initial position of the word, while the vowel sound /e:/ is used by the speakers of Group-HH at the beginning of the word. Therefore, in the Group-GG variation, the close central unrounded vowel sound /ɪ/ is replaced by the close-mid front unrounded vowel sound /e:/ in the Group-HH variation.

Table 54 Phonological Variation through Vowel Sound /əɪ/

English Transcription	PWT	PWSS	Pashto IPA Transcription	Percentage	Areas
Jalebi	Zaalaybia	Zalebəy	/zələbəɪ/	57.1%	Asperka Sadrawan, Painsa Khel, Domail city, Landi Jalander

Table 55 Phonological Variation through Vowel Sound /e:/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Areas
Jalibi	Zaalebay	Zalebe	/zələbe:/	28.6%	Baka Khel, Garerra,

Table 56 Phonological Variation through Consonant Sound /p/

English Transcription	DWT	DWSS	Pashto IPA Transcription	Percentage	Area
Jalibi	Zaalapay	Zalepe	/zələpe:/	14.3%	Dogar Umerzai

The areas are set into three groups (Group KK), (Group JJ), and (Group LL). Group-KK includes Asperka Sadrawan, Painda Khel, Domail city, and Landi Jalander areas, while Group-JJ includes Baka Khel and Garerra. Additionally, Group-LL contains only Doger Umerzai area. The speakers of Group-KK use the word “Zalebəy” with its IPA transcription /zələbəy/ which is 57.1%, but the distance from Asperka Sadrawan to Domail city is 10 km, from Asperka Sadrawan to Painda Khel is 14 km, from Asperka Sadrawan to Landi Jalander is 44 km, from Painda khel to Domail city is 10 km, from Painda Khel to Landi Jalander is 32 km, from Domail city to Landi Jalander is 37 km. Besides, the speakers of Group-JJ use the word “Zlebe” with IPA transcription /zələbe:/ which is 28.6%, but the distance from Baka Khel to Garerra is 6 km. Additionally, speakers of Group-LL use the word “Zalepe” and its IPA transcription /zələpe:/ which is 14.2%.

Firstly, the difference between Group-KK and Group-JJ variations is discussed. The difference between Group-KK and Group-JJ is due to the last vowel sound. The speakers of Group-KK use the mid-central vowel sound /əɪ/ at the end of the word, while the speakers of Group-JJ use the close-mid front unrounded vowel sound /e:/ at the end of the word. Thus, in the Group-KK variation, the mid-central vowel sound /əɪ/ is replaced with the close-mid front unrounded vowel sound /e:/ in the Group-JJ variation.

Secondly, the difference between Group-KK and Group-LL is also investigated. The Group-KK variation is different from Group-LL variation due to the consonant and vowel sounds because the speakers of Group-KK use the consonant sound /b/ in the middle of the word and the vowel sound /əɪ/ at the end of the word, while the speakers of Group-LL use the consonant sound /p/ in the middle of the word and the vowel sound /e:/ at the end of the word. Therefore, in the Group-KK variation, the stop-voiced labial consonant sound /b/ is replaced by stop voiceless labial consonant sound /p/ in the Group-LL variation and the mid-central vowel sound /əɪ/ in Group-KK is replaced by close mid-front unrounded vowel sound /e:/ in Group-LL variation.

Lastly, the difference between Group-JJ and Group-LL variations is examined. The difference between Group-JJ and Group-LL variations is due to the consonant sound. However, the speakers of Group-JJ use the consonant sound /b/ and the speakers of Group-LL use the consonant sound /p/ in the middle of the word. However, in the Group-JJ variation, the stop-voiced labial consonant sound /b/ is replaced with stop-voiceless labial consonant sound /p/ in the Group-LL variation.

Findings

The researcher found different phonological variations in the Waziri dialect in district Bannu. The well-known feature of the Waziri dialect in district Bannu is the variations in vowel sounds. The use of vowel sounds is different in many villages and tribes, as the speakers of some tribes used the diphthong sound /əɪ/ is a mid-central vowel sound while some of the tribes used the sound /e:/ which is a close-mid front vowel sound. The sound /əɪ/ spoken by the

speakers of Asperka Sadrawan, Domail city, Painsa Khel, and Landi Jalander, which is 57% replaced by the speakers of Baka Khel, Garerra, and Dogar Umerzai with /e:/ sound, which is 43%. The study found that the variations on phonological level between Asperka Sadrawan and Doger Umerzai were changed due to the distance of 2 km between these areas while the variations between Asperka Sadrawan and Domail city were unchanged despite the distance of 8.6 km between these areas. Therefore, the scholar found the phonological variations in the distance of 2 km in the selected dialect but was unfound in 8.6 km. Thus, after thorough investigations, the study found the variations between Domail city and Baka Khel in 25 km, but unfound in 37 km. The speakers of Baka Khel, Garerra, and Doger Umerzai used the long /e:/ sound at the end of words as compared to the other areas.

Secondly, the mid-back vowel sound /ɔ/ was used in the middle of the words by the speakers of Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander. While the /ɛ/ open-mid front vowel sound was used by the speakers of Baka Khel and Garerra, however, the speakers of these areas used the vowel sound /ɛ/ in the middle of the words. The variations between Doger Umerzai and Painsa Khel were unfound in 14 km, while the variation between Doger Umerzai and Garerra were found in 21 km. Therefore, the researcher found the speakers of Garerra and Baka Khel used the short /ɛ/ sound in the middle of the words which is 28.6%, but the speakers of Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander used the sound /ɔ/ in the middle of words which is 71.4%.

Additionally, the other vowel sounds like the /ɪ/, /u:/, /ɔ/, and /ɑ/sometimes changed at the beginning of the words, but mostly they changed in the middle and at the end of the words. For example, the close central vowel sound /ɪ/ shift to the open front vowel sound /ɑ/ at the end of words, like in “Chini” /tʃɪ:ni/, the last vowel sound /ɪ/ shift to /ɑ/ sound in “China” /tʃɪ:na/. The word “Chini” /tʃɪ:ni/ was used by the speakers of Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander, and Garerra. While the word “China” /tʃɪ:na/ was used by the speakers of Baka Khel and Doger Umerzai. Also, the vowel sound /ɪ/ shifted to the vowel sound /ɛ/ in the middle of the words, like the word “Dilta” /dɪlta:/ to “Delta” /delta:/. The word “Dilta” /dɪlta:/ was used by the speakers of Doger Umerzai. while the word “Delta” /delta:/ was used by the speakers of Baka Khel, Asperka Sadrawan, Domail city, Painsa Khel, Garerra, and Landi Jalander. Besides, the close central vowel sound /ɪ/ shifted to the mid-back vowel sound /ɔ/ in the middle of the word like “Bidəy” /bɪ:dəɪ/ to “Bodəy” /bo:dəɪ/. The word “Bidəy” /bɪ:dəɪ/ was used by the speakers of Asperka Sadrawan, Painsa Khel, Domail city, and Landi Jalander, while the word “Bodəy” /bo:dəɪ/ was used by the speakers of Garerra.

Secondly, the mid-back vowel sound /ɔ/ was shifted to the mid-central vowel /ə/ at the end of the words. For example, the words “Nimbo” /nɪmbɔ/ and “Nimba” /nɪmbə/, in these two words, the initial and middle sounds were the same, but the last sound was different. Thus, in the first word “Nimbo” /nɪmbɔ/, the last mid-back vowel sound /ɔ/ shifted to the mid-central vowel sound /ə/ in the second word ‘Nimba’ /nɪmbə/. The word “Nimbo” /nɪmbɔ/ was used by the speakers of Asperka Sadrawan and Garerra, while the word “Nimba” /nɪmbə/ was used by the speakers of Baka Khel, Dogar Umerzai, Domail city, and Painsa Khel. Thus, the distance from Asperka Sadrawan to Garerra is 23 km, but the distance from Asperka Sadrawan to Domail city is 8.6 km. Thus, the result found that the variations within dialect were changed in 8.6 km, but not changed in 23 km in district Bannu.

Moreover, the close-back rounded vowel sound /u:/ shifted to the mid-central vowel sound /ə/ in the middle of the words. For example, in the word “Mutā” /mu:ɽp/, the sound of /u:/ shifted to the vowel sound /ə/ in the word “Mətā” /məɽp/. The word “Mutā” /mu:ɽp/ was used by the speakers of Garerra, Asperka Sadrawan, Dogar Umerzai, and Landi Jalander, while the word “Mətā” /məɽp/ used by the speakers of Baka Khel, Domail city, and Painsa Khel. The variation between Asperka Sadrawan and Garerra was unfound in 23 km, but the variation

between Asperka Sadrawan and Painda Khel was found in 14 km. Therefore, the variation within the Waziri dialect was changed by 14 km, while unchanged by 23 km in district Bannu.

Variation in consonant sounds was also found in this study, with different pronunciations of /w/, /m/, /ɽ/, /p/, and /b/ sounds. The speakers of Doger Umerzai replaced the consonant /b/ sound with /p/ sound as in the word “Zalebe” /zələbe:/ that as uttered by the speakers of Baka Khel and Garerra, but the Doger Umerzai speakers replaced the consonant sound /b/ by the consonant sound /p/ as in the word “Zalepe” /zələpe:/.

Secondly, the consonant sound /m/ was replaced with /ɽ/ sound. For example, the word “Jomā” /d̪ʒu:mɑ:/ spoken by the speakers of Baka Khel, Dogar Umerzai, Domail city, Painda Khel, and Landi Jalander, changed to “Joṛā” /d̪ʒu:ɽɑ:/ uttered by the speakers of Asperka Sadrawan and Garerra. Therefore, in these words, the middle consonant sound /m/ was replaced with /ɽ/ sound. The variation between Asperka Sadrawan and Garerra was unfound in 23 km, but the variation between Asperka Sadrawan and Dogar Umerzai was found in 2 km, thus the result found that the variations in dialect changed in 2 km, but unchanged in 23 km.

Lastly, the study found a variation of the consonant sound /w/ which was omitted in many areas, but many of them pronounced the said consonant sound in the words. For example, the word “tsəlwer” /səlwe:r/ was pronounced by the speakers of Baka Khel and Garerra, while the speakers of Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, and Landi Jalander omitted the sound of /w/, changed the sound /ɔ/ to the sound of /e:/ and pronounce the word “tsalor” /tsəlɔr/. Once more, the speakers of Baka Khel, Domail city, Painda Khel, Asperka Sadrawan, and Landi Jalander pronounced the word “Wertā” /werta:/, however, the speakers of Doger Umerzai, and Garerra pronounced the word “Wetā” /weta:/. Thus, the speakers of Doger Umerzai, and Garerra omitted the sound of /r/ in their phonological variation. Thus, the variation between Domail city and Baka Khel was unfound in 24 km but found in 21 km between Domail city and Garerra.

In the last, the study also found that the variations in the Waziri dialect in district Bannu occurred commonly in vowel sounds and less in consonant sounds, but in vowel sounds the variations are in the last vowel sounds such as /əɪ/ and /e:/ and in the middle vowel sounds that are /ɔ/ and /ɛ/. However, the variations occurred in consonant sounds only in the /w/ sound as most of the areas omitted the sound /w/ in their phonological variation.

Conclusion

The study aimed to investigate and analyze the phonological variations in the Waziri dialect in district Bannu. In order to collect the data, different areas such as Baka Khel, Asperka Sadrawan, Dogar Umerzai, Domail city, Domail villages, Landi Jalander, and Garerra in district Bannu were selected as targeted areas. In addition, thirty-five (35) participants were selected for the collection of data and from each area, 5 samples were collected. In the Waziri dialect, the vowel sound /əɪ/ is replaced by the speakers of Baka Khel, Dogar Umerzai, and Garerra with the sound /e:/ at the end of the words at 57% and 43% respectively, therefore, on the basis of the provided percentage, it may be said that the variations' shift of the vowel sounds occurred in the south-west, east and south of the Waziri dialect in Pashto dialectology. Additionally, the vowel sound /ɔ/ is replaced by the speakers of Baka Khel and Garerra with the sound /ɛ/ in the middle of the words with a ratio of 71.4% and 28.6% respectively. Thus, the ratio suggests that the variation shift of the vowel sounds is occurred in the south-west and south of the Waziri dialect. Also, the other vowel sounds are replaced with another vowel sound sometime in the initial position, but most often replaced in the middle of the words with other vowel sounds. The vowel sound /ɪ/ is replaced by the speakers of Baka Khel and Doger Umerzai with the vowel sound /ɑ/ at the end of the word with 71.4% and 28.6%. Furthermore, the vowel sound /ɪ/ is replaced by the speaker of Baka Khel, Garerra, and Dogar Umerzai with

/e:/ sound at the end of words with a ratio of 57% and 43%. Therefore, it may be said that the variations' shift of the vowel sound occurred in the southwest, west and east of the Waziri dialect in Pashto dialectology. It is predicted that the vowel sound /ɪ/ is commonly replaced with long and short /e:/ sounds in the middle and at the end of the words. Further, the vowel sound /ɔ/ is replaced by the speakers of Baka Khel, Dogar Umerzai, Domail city, and Painda Khel with the sound /ə/ at the end of the word with the ratio of 57% and 26.8% respectively. Thus, it suggests the variation shift of the vowel sounds in the southwest, east, and northeast of the Waziri dialect in Pashto dialectology. Moreover, the vowel sound /u:/ is replaced by the speakers of Baka Khel, Domail city, and Painda Khel with the vowel sound /ə/ in the middle of the words with a ratio of 57% and 43%. So, the variation shift of the vowel sounds can be observed in the southwest, northeast, and east of the Waziri dialect. However, the consonant sound /m/ is replaced by the speakers of Asperka Sadrawan and Garerra with the sound /ɾ/ in the middle of the words with 71.4% and 28.6% which highlights the variation shift of the consonant sound in the east and south of the Waziri dialect in Pashto dialectology. Moreover, the consonant sound /b/ was replaced by the speaker of Doger Umerzai with the /p/ sound in the middle of the word at 85.7% and 14.4% which verifies the variation shift of the consonant sounds in the east of the Waziri dialect in the district Bannu. Further, the speakers of Asperka Sadrawan, Dogar Umerzai, Painda Khel, Domail city, and Landi Jalander omit the consonant sound /w/ which is 71.4, but the speakers of Baka Khel and Garerra pronounce the consonant sound /w/ which is 28.6% may point out the vowel change in south and south-west in the Waziri dialect. Lastly, in the selected 42 Pashto words, the study found the shift of the vowel sounds as the most significant change in the selected areas of Bannu. The variation in consonant sound is also present, but less in numbers as compared to the vowel sounds.

Recommendation

It is recommended to conduct a thorough study on the lexical and syntactical variations in the Waziri dialect as well as to investigate the phonological variation in the Banochi dialect in district Bannu. Besides, a comprehensive comparative study may be conducted on the various dialects of the Pashto language.

References

- Alupoacei, M. (2023, September 19). *Dialectology in Linguistics | Definition, Examples & Methods*. Study.com. Retrieved from <https://study.com/academy/lesson/dialectology-linguistics-definition-examples-methods.html>
- Ball, M. J., Muller, N., Klopfenstein, M., & Rutter, B. (2010). My Client is Using Non-English Sound! A Tutorial in Advanced Phonetic Transcription Part II: Vowel and Diacritics. *Contemporary Issues in Communication Science and Disorders*, 37, 103-110. Retrieved on September 6, 2024, From https://www.researchgate.net/publication/334392961_My_Client_Is_Using_Non-English_Sounds_A_Tutorial_in_Advanced_Phonetic_Transcription_Part_II_Vowels_and_Diacritics
- Chambers, J., K., & Trudgill, (2004). *Dialectology*. Cambridge University Press.
- Hazen, K. (2022, September 08). *Dialectology*. Oxford Bibliographies. Retrieved from <https://www.oxfordbibliographies.com/display/document/obo-9780199772810/obo-9780199772810-0163.xml>
- Hnatyuk, M. (2024 April 12). DIALECTOLOGY IN MODERN LINGUISTIC RESEARCH: THEORETICAL APPROACHES AND METHODS. *AD-ALTA Journal of Interdisciplinary*, 14(1), 39-44. DOI: <http://dx.doi.org/10.33543/1401393944>

- Haram, A. (n.d.). *Dialect and Its Types*. Scribd. Retrieved on 2024, May, 18 from <https://www.scribd.com/document/440536491/Dialect-and-Its-Types>
- Ifeoluwa, M. (n.d.). *Dialectology*. Academia. Retrieved from <https://www.academia.edu/27202648/DIALECTOLOGY>
- Yule, G. (2014). *The Study of Language*. Cambridge University Press.
- Traveler Trails. (n.d.). *Pashto Language – The Main Pashto Dialects*. Retrieved on 2024, May, 27 from <https://www.travelertrails.com/pashtun-culture/pashto-language>
- Orbala. (2016, January 10). *The “sh” and “kh” in Pashto: on Pashto dialects – and Pashto-learning materials*. Orbala Wordpress. Retrieved on 3 July 2024 from <https://orbala.wordpress.com/2016/01/10/the-sh-and-kh-in-pashto-on-pashto-dialects-and-pashto-learning-material/>
- Gutman, A., & Avanzati, B. (2013). *Pashto*. The Language Gulper. Retrieved on September 6, 2024, from <https://www.languagesgulper.com/eng/Pashto.html>
- Miller, C. (2014). The Waziri Chain Shift. *Academia. Journal of Persianate Studies*, 7, 124-136. https://www.academia.edu/7171195/The_Waziri_Chain_Shift
- David, A. B. (2014). *Descriptive Grammar of Pashto and its Dialects*. University of Maryland.
- Rafiq, M., Rahman, G., & Hamid, A. (2021). Phonological Variations in Verbs in Pashto Spoken in District Swat. *Pakistan Social Science Review*, 5(4), 689-700. <https://pssr.org.pk/issues/v5/4/phonological-variation-in-verb-in-pashto-spoken-in-district-swat.pdf>
- Ahmad, I., Iqbal, L., & Ullah, I. (2023). Pashto- English Contact: A Study of Intergenerational Lexical variations. *Pakistan Language and Humanities Review*, 7(4), 316-329. DOI: [https://doi.org/10.47205/plhr.2023\(7-IV\)27](https://doi.org/10.47205/plhr.2023(7-IV)27)
- Dinakhel, M. A. (2020). Comparison of two Dialects of Pashto Spoken in Afghanistan and Pakistan: Kandahari Dialect and Yusufzai Dialect. *Central Asia Journal*, 86, 127-139. DOI: <http://dx.doi.org/10.54418/ca-86.77>
- Tegey, H., & Robson, B. (1996). *A Reference Grammar of Pashto*. Center for Applied Linguistics.

List of Abbreviations

No.	Abbreviation	Full Form
1	PWT	Pashto Words Transliteration
2	PWSS	Pashto Words Standard Spelling
3	DWT	Different Words Transliteration
4	DWSS	Different Words Standard Spelling
5	Group A	Asperka Sadrawan, Domail city, Painsa Khel, and Landi Jalander
6	Group B	Baka Khel, Garerra and Dogar Umerzai
7	Group C	Asperka Sadrawan, Domail city, Painsa Khel, Dogar Umerzai, and Landi Jalander
8	Group D	Baka Khel and Garerra
9	Group E	Asperka Sadrawan, Domail city, Painsa Khel, Landi Jalander, and Garerra
10	Group F	Baka Khel, Dogar Umerzai
11	Group G	Asperka Sadrawan and Garerra
12	Group H	Baka Khel, Dogar Umerzai, Domail city, and Painsa



		Khel
13	Group I	Landi Jalandhar
14	Group K	Asperka Sadrawan, Domel city, Painsda Khel, Baka Khel, Landi Jalandar, and Garerra
15	Group J	Dogar Umerzai
16	Group L	Asperka Sadrawan, Domel city, Painsda Khel, Baka Khel, Landi Jalandar, and Garerra
17	Group M	Dogar Umerzai
18	Group N	Asperka Sadrawan, Dogar Umerzai, Painsda Khel, Domail city, and Landi Jalandar
19	Group O	Baka Khel and Garerra
20	Group P	Baka Khel, Dogar Umerzai, Domel city, Painsda Khel, and Landi Jalandar
21	Group Q	Asperka Sadrawan and Garerra
22	Group R	Dogar Umerzai, Domail city, Painsda Khel, Landi Jalandar, Asperka Sadrawan, and Garerra
23	Group S	Baka Khel
24	Group T	Asperka Sadrawan, Domel city, Painsda Khel, Landi Jalandar, and Garerra
25	Group U	Baka Khel and Dogar Umerzai
26	Group V	Asperka Sadrawan, Dogar Umerzai, Landi Jalandar, and Garerra
27	Group X	Baka Khel, Domail city, and Painsda Khel
28	Group Y	Garerra and Dogar Umerzai
30	Group Z	Baka Khel, Domail city, Painsda Khel, Asperka Sadrawan, and Landi Jalandar
31	Group AB	Asperka Sadrawan, Garerra, Landi Jalandar, and Domail city
32	Group BC	Baka Khel, Dogar Umerzai, and Painsda Khel
33	Group CD	Asperka Sadrawan, Domail city, and Garerra,
34	Group DE	Baka Khel and Painsda Khel
35	Group DF	Dogar Umerzai
36	Group AD	Asperka Sadrawan, Dogar Umerzai, Painsda Khel, Domail city, and Landi Jalandar
37	Group AC	Baka Khel and Garerra
38	Group AE	Asperka Sadrawan, Painsda Khel, Domail city, and Landi Jalandar
39	Group AF	Baka Khel, Garerra, and Dogar Umerzai
40	Group BE	Asperka Sadrawan, Painsda Khel, Domail city, and Landi Jalandar
41	Group DF	Baka Khel and Dogar Umerzai
42	Group DC	Garerra
43	Group AA	Asperka Sadrawan, Dogar Umerzai, Painsda Khel, Domail city, and Landi Jalandar
44	Group BB	Baka Khel and Garerra
45	Group DD	Asperka Sadrawan, Dogar Umerzai, Painsda Khel, Domail city, and Landi Jalandar
46	Group CF	Baka Khel and Garerra
47	Group CG	Dogar Umerzai

48	Group DF	Asperka Sadrawan, Domel city, Painsa Khel, Landi Jalander, Baka Khel, and Garerra
49	Group EE	Asperka Sadrawan, Dogar Umerzai, Painsa Khel, Domail city, and Landi Jalander
50	Group FF	Baka Khel and Garerra
51	Group GG	Baka Khel, Dogar Umerzai, and Garerra
52	Group HH	Asperka Sadrawan, Domail city, Painsa Khel, and Landi Jalander
53	Group KK	Asperka Sadrawan, Painsa Khel, Domail city, and Landi Jalander
54	Group JJ	Baka Khel and Garerra
55	Group LL	Doger Umerzai