

**Developing a Policy Solution to Address Child Labor:
The Case of Afghan Refugee of Saranan & Surkhab
Refugee Camps of Quetta.**



Submitted by

Muhammad Ajmal Khan

MPhil Development Studies

Supervised by

Dr. Nasir Iqbal

Assistant Professor

Department of Development Studies

Pakistan Institute of Development Economics

Islamabad, Pakistan

2021

Pakistan Institute of Development Economics, Islamabad
PIDE School of Social Sciences

CERTIFICATE

This is to certify that this thesis entitled: **“Developing a Policy Solution to Address Child Labor: The case of Afghan Refugee of Saranan & Surkhab Refugee Camps of Quetta”** submitted by **Muhammad Ajmal Khanis** accepted in its present form by the PIDE School of Social Sciences, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree in Master of Philosophy in Development Studies.

Supervisor:

Dr. Nasir Iqbal 

External Examiner:

Dr. Mirajul Haq 

Head,
PIDE School of Social Sciences:

Dr. Hafsa Hina 

Author Declaration

I am Ajmal Kakar hereby state that my MPHIL thesis titled "Developing a Policy Solution to Address Child Labor: The Case of Afghan Refugee of Saranan & Surkhab Refugee Camps of Quetta" is my own work and has not been submitted previously by for taking any degree from Pakistan Institute of Development Economics or anywhere else in the country/world.

At any time if my statement is found to be incorrect even after my Graduation the university has the right to withdraw my MPHIL degree.



Ajmal Kakar

Dedicated

To

My parents.

The spiritual teachers of mine...

For their

Eternal love, encouragement & countless

Prayers...

ACKNOWLEDGEMENT

I am thankful to ALLAH ALMIGHTY for granting me strength and the opportunity to complete this research. Several times during the study my will to complete it, broke and every time, I lost my heart, but something pushed me up from within, and this was nothing but the blessings of ALLAH. I would like to thank my supervisor, Dr. Nasir Iqbal who dedicatedly guided me and pursued the timely completion of my thesis. He also provided me moral support and guidance during this time period. I have learnt a lot from his research experience. I am really thankful to him for his precious guidance, advice, creativity, affectionate criticism and keen interest in my research work. I am thankful to Dr. Nasir Iqbal for providing me an opportunity to learn from their experience and giving me confidence.

I am really privileged and feel great pleasure to express my heartiest felicitation for my teachers Dr. Jehangir Khan, Dr. Zulfiqar Ali Kalhoro, Dr. Huma Haque, Dr. Saman Nazir, Henna Ahsan (Research Economist PIDE), and other faculty members of PIDE. And also I am grateful to my teachers including Hassan Achkzai, Hammal Baloch, and Sahar Faiz Khan faculty member of BUIITEMS. I express my gratitude with great pleasure to Fahd Zulfiqar for supporting and providing me guidance throughout my research work. I am obliged to the PIDE University, for providing us a platform and all the facilities to have such an experience. I am also thankful to my heartiest friends Naqeeb Achkzai, Asad Kakar, Qaisar Iqbal, Zain-Ul-Abedin, Moeen Khan, Farishta Ahmed, Saba Firdous and Shammouna Mehik during the development phase of my thesis. This work would not have been completed without support of my parents and my siblings. Last but not the least; I am thankful to my respondents, without their cooperation, I would not be able to accomplish my goal.

Muhammad Ajmal Khan

Abstract

Among socio-economic issues that are closely linked with the formation of human capital is the threat of child labor. And, the right to acquire education is the fundamental human right. Indeed, the phenomenon of child labor is prominent among Afghan refugees living in Pakistan. The socioeconomic factors play an important role in determining child labor. These factors are the main driving forces of the country's economic development. Therefore, the objective of this study is to identify the socioeconomic factors of child labor among Afghan refugees and to empirically analyze the Afghan refugee's migration profile. The sample for this study comprises of 281 refugee's household, and, 916 Afghani's children aged 5-14 years are obtained through household survey conducted in district Quetta, Pishin and Loralahi. And, logistic regression is used for empirical analysis. And, for the refugee's migration profile the statistical tool pie chart is used in study. The empirical analysis show that the child factors Age and Ethnicity has significant impact on child labor but the factors Child Education and Sex are insignificant. In fact, the probability of child labor is high if the child is female. Moreover, the household head factors such as Occupation and Literacy has statistically significant impact of child labor among afghan refugees. and, the probability of child labor is less when the household size is large, and decreases with Monthly income but the impact is insignificant. Further, the social indicators show that the factors such as Gas connection, NGO's presence, access to Public School, and 5-6 Rooms have statistically negative impact on child labor. And, the variables Distance to main source of water, willingness to return to Afghanistan, NGO' run special schools are positively associated with the child labor and the impact is significant. Furthermore, the refugee's migration profile shows that about 18% of refugees are refugees by birth and half of the refugees are living in Quetta, Blaochistan. The largest influx according to the study is between 1676-1980. The major reason behind migration are "war" 33%, "lack of safety" 19%, "protection of modesty" 15% and 11% reported Pakistan was safe place for them. Currently, about 76% are not willing to return to Afghanistan. The reasons reported includes "lack of safety" 45%, "lack of services" 14% and 11% reported that they are happy in Pakistan therefore they are not willing to return to Afghanistan.

Key Words: Child Labor, Afghan Refugees, Migration, Socioeconomic Factors, Welfare Indicator.

Contents

CHAPTER 1	1
INTRODUCTION	1
Statement of the Problem (SOP)	3
Research Questions	4
Objectives of the Research	4
Significance of the Study.....	5
Research Gap	5
Explanation of the Key Terms/Concepts.....	6
1.6.1 Child.....	6
1.6.2 Child labor	6
1.6.3 Refugees.....	7
1.6.4 Afghan	7
1.6.5 Migration.....	7
1.7 Units of Data Collection.....	7
1.7.1 UDC 1, Household Head	7
1.7.2 UDC2, Children Parents.....	8
1.7.3 UDC 3, Working Children.....	8
1.7.4 UDC4, NCRC Member of Baluchistan	8
1.7.5 UDC5, NCRC Member of Sind.....	8
1.7.6 UDC6, Deputy Director NCCWD	8
Chapter 2	10
Literature Review and Theoretical Framework	10
2.1 Literature review	10
2.1.1 Per Capita Income and Incidence of Child Labor	10
2.1.2 Child Labor as a result of Household Poverty	11
2.1.3 Intergeneration Persistence of Child Labor	13
2.1.4 Child labor and Land Ownership	14
2.1.5 Child Labor and Inequality.....	14
2.1.6 Trade Liberalization and Child Labor.....	15
2.1.7 Low Return to Education and Child labor	16
2.1.8 Child Labor and Refugees.....	16

2.1.9	Refugees Exodus and Reparation.....	17
2.1.10	Child labor and0 Way forward	20
2.2	Theoretical Framework	22
2.2.1	Human Capital Theory.....	22
2.3	Conceptual Framework.....	23
CHAPTER 3.....	25
Research Methodology	25
3.1	Research Strategy.....	25
3.2	Research Design	25
3.3	Data Collection Tools	26
3.3.1	Household Survey	26
3.3.2	Semi-Structured Interviews.....	27
3.4	Sampling Design and Selection of Sample Size	27
3.4.1	Sampling Design	27
3.4.2	Sample Size.....	28
3.5	Data Analysis Techniques.....	30
3.5.1	Summary Statistics	30
3.5.2	Graphs	30
3.5.3	Econometric Models	31
	The logistic model used for child labor in this study is given as follows.....	33
3.6	Definition and Explanation of Variables.....	36
3.6.1	Rationales for the explanatory variables used in the study.....	40
3.7	Locale of the Study.....	42
Chapter 4.....	44
Descriptive Analysis	44
4.1	Descriptive Analysis.....	44
4.2	Descriptive statistics of child labor Model	44
4.3	Descriptive statistics of child labor with respect to child characteristics	46
4.4	Descriptive statistics of Household Characteristics	48
4.5	Summary Statistics of Household Head Characteristics	50
4.6	Summary Statistics of Welfare Indicators	51
4.7	Summary Statistics with Regard to Migration	55
4.8	The Incidence of Child Labor with respect to socioeconomic factors	57

4.8.1	Child Labor with regards to child age.....	58
4.8.2	Child Labor with respect to Child Sex.....	58
4.9.3	Child labor with respect to child education:	59
4.8.3	Child Labor with regards to child Ethnicity	60
4.8.4	Child Labor with respect to household Size	61
4.8.5	Child Labor with regards to Locale (Districts)	62
4.8.6	Child labor with regards to Region (rural/urban).....	63
4.8.7	Child Labor with respect to household level of income.....	64
4.8.8	Child Labor with regards to Household Head Occupation.....	65
4.8.9	Child labor with respect to Household Head Occupation.....	66
4.9	Incidence of Child Labor among Afghan Refugees with regards to Standard of Life.....	67
4.9.1	Child Labor with respect to Availability of Electricity	67
4.9.2	Child Labor with respect to Gas Connection.....	68
4.9.4	Child Labor with regards to Afghan Citizen Cards.....	69
4.9.5	Child Labor with respect to Access to Public School.....	70
4.9.6	Child Labor with regards to Access to Special School	70
4.9.7	Child Labor with respect to Access to Clean Drinking Water.....	71
4.9.8	Child Labor with respect to Land Ownership.....	72
4.9.9	Child Labor with respect to Basic Health Unit.....	72
4.9.10	Child Labor with respect to NGO Presence	73
4.9.11	Child Labor with respect to Time Consume to Main Source of Drinking Water.....	74
4.9.12	Child Labor with respect to Main Source of Drinking Water	75
4.9.13	Child Labor with respect to Availability of Water in Tap	76
4.9.14	Child Labor with respect to No of Rooms	77
4.9.15	Child Labor with respect to Refugees Perception.....	78
Chapter 5	80
Afghan Refugees Migration Profile	80
5.1	Migration.....	80
5.2	Stoffer’s Theory of Intervening Obstacles.....	80
5.3	Household Head’s Country of Birth	81
5.4	Household Head Birth in Pakistan by Districts.....	82
5.5	Refugees Years of Migration	83
5.6	Major Reasons of Afghan Refugees Migration	84

5.7 Refugees Willingness to Return to Afghanistan.....	86
5.8 Refugees primary reasons for not returning to Afghanistan	87
5.9 Child Labor with regards to Refugees Years of Migration	88
5.10 Child Labor with respect to Household Birth place	89
Chapter 6.....	90
Empirical Findings	90
6.1 Logistic Regression of Equation one (Model 1).....	90
6.2 Logistic Regression of Equation Two (Model 2).....	96
6.3 Logistic Regression of Merged/ Equation Three (Model 3)	103
6.3.1 Empirical Analysis of Merged Equation for Child Characteristics	103
6.3.2 Empirical Analysis of Merged Equation for Household Characteristics	105
6.4 Empirical Analysis of Merged Equation for Household Head Characteristics	106
6.4.1 Empirical Analysis of Merged Equation for Social Indicators.....	108
CHAPTER 7.....	116
DISCUSTIONS, CONCLUSION AND POLICY PROPOSALS	116
7.1 Discussion and Conclusion	116
7.2 Policy Proposal	119
References.....	122
Appendix	127

List of Tables and figures

Table

Table 1 Illustration of Variables Used in Analysis:	37
Table 2 Summary Statistics of Child Labor Model	44
Table 3 Summary Statistics of Children	46
Table 4 Summary Statistics of Household Characteristics	48
Table 5 Summary Statistics of Household Head Characteristics	50
Table 6 Summary statistics of Welfare Indicators	51
Table 7 summary statistics of Afghan Refugees Migration Profile	55
Table 8 Logistic Regression Results of Equation 1	91
Table 9 logistic regression of model two	97
Table 10 Combined Logistic Regression result of Child Characteristics.....	103
Table 11 Combined Logistic Regression result of Household Characteristics	105
Table 12 Combined Logistic Regression result of Household Head Characteristics.....	107
Table 13 Combined Logistic Regression result of Social Indicators	108

Figures

Figure 1 Conceptual Framework of Socioeconomic Factors of Child Labor Among Afghan Refugees.....	23
Figure 2 Selection of Sample size.....	29
Figure 3 Map of Quetta city	43
Figure 4 Child Labor with regards to child Age	58
Figure 5 Child labor with regards to child sex.....	59
Figure 6 Child Labor with regards to Child Education.....	59
Figure 7 Child labor with regards to Child Ethnicity	60
Figure 8 Child Labor with regards to Household Size	61
Figure 9 Child labor with respect to locale	62
Figure 10 Child labor with regards to Region	63
Figure 11 Child labor with respect to household monthly income	64
Figure 12 Child labor with respect to head occupation.....	65
Figure 13 Child Labor with regards to Household Head Occupation.....	66
Figure 14 Child labor with respect to Access to Electricity.....	67
Figure 15 Child Labor with regards to Gas Connection	68
Figure 16 Child Labor with respect to Afghan Citizen Cards.....	69
Figure 17 Child Labor with regards to Access to Public School	70
Figure 18 Child labor with respect to Access to Special School.....	70
Figure 19 Child Labor with respect to Access to Clean Drinking Water	71
Figure 20 child labor with respect to land ownership	72
Figure 21 Child Labor with respect to Basic Health Unit	72
Figure 22 Child Labor with respect to NGO Presence.....	73
Figure 23 Child Labor with respect to time consume to main source of Drinking Water	74
Figure 24 Child Labor with respect to main source of Drinking Water	75
Figure 25 Child Labor with respect Availability of water in Tap	76
Figure 26 Child Labor with respect No of Rooms	77
Figure 27 Child Labor with respect Refugees Perception	78
Figure 28 household head country of birth	81
Figure 29 Household birth in Pakistan by district	82
Figure 30 refugee year of migration	83
Figure 31 major reason of afghan refugees migration	84
Figure 32 Causes of migration	85
Figure 33 refugees willingness to return to afghanistan	86
Figure 34 Refugees primary reason for not returning to Afghanistan	87
Figure 35 Child labor with regards to refugees years of migration	88
Figure 36 Child labor with respect to household birth place.....	89

CHAPTER 1

INTRODUCTION

Among socio-political issues that are closely linked with the formation of human capital of a country is threat of child labor. Working of school-aged children leads to loss of educational and developmental milestones and leads to insufferable damage to child future. The International Labor Organization (ILO) defines the term “Child Labor” as “a work that destitute children of their childhood, their potential and dignity, additionally that is harmful to mental and physical development of child. Actually, it refers to work that is; socially, morally, mentally and physically hazardous and detrimental to child development. And, interferes with child schooling by, depriving them to attend school and compel them to leave school permanently or combine school attendance and work (ILO, 2021).

In recent years, there has been a growing interest in child labor among academics, professionals, media and many international organizations. All stakeholders have universal agreement that child labor is undesirable and should be eradicated. But, have no common agenda to tackle this problem. Though, it's generally believed that the starting point for child labor is associated with Industrial revolution in Europe. However, historians believe that child labor was at its peak during expansion of domestic season before the industrial revolution. And, the industrial countries first felt the negative outcome of child labor. Therefore, the incidence of child labor latter on reduced in industrial states owing to economic prosperity, the demand for child labor reduced and child labor supply was absorbed by universal schooling (Fyfe, 1989).

On the other hand, incidence of child labor is rooted in developing countries. Asia, having largest number of child labor in world reveled by the International Labor Organization (ILO, 1996). Pakistan, being a developing country is also facing the incidence of child labor in different forms. In subcontinent children were always engage in agricultural sector. Because, in majority of the villages a single school was not available. Thus, parents considered child working in farm as batter option and as a form of capital investment because children were learning while doing work in farms. However, with British entry massive exploitation of children beguine in subcontinent. In fact, child labor in Pakistan began during Ayoub khan era of 1960s when he

committed to enlarge the industrial sector in Pakistan. However, two laws were passed in Pakistan to eradicate the incidence of child labor in country. The first 1991 Employment of Children Act (ECA) (PECA, 1991) which prevented the use of children under age of 14 in hazardous environment in industries or mine. And, in 1992 second law was passed as Bonded Labor Act (BLA) (BLA, 1992), which banned Peshgi system. Furthermore, Pakistan ratified Convention No 182 of UN in 2001 (UN 182, 2001, p. 18).but still exploitation of children exists in Pakistan on large scale.

Child labor is widely believed to be a social evil and have negative repercussions on socioeconomic development of developing countries such as Pakistan. And a prominent issue in Pakistan. According to child labor survey in Pakistan (1996) - ILO child labor was 3.3 million (Pakistanis ILO, 1996). however, the number of child labor increased to 12.5 million by 2015, (Labor Force Survey 2014-15, 2014). Moreover, Pakistan Social and Living Standard 2018-19 survey reveals that in Pakistan 30% of children aged between 5- 6 are out of school. Indeed, regional disparity exists largest for Balochistan 59% followed by Sindh 42%. Similarly, the literacy rate in Pakistan according to PSLM 2018-19 is 60% and lowest in Balochistan with only 40% population in Provence are literate (PSLM / HIES 2018-19, 2018). The incidence of child labor is also common among Afghan refugee children living in Balochistan. (ILO, 2012) 45417 children having age between 10 -14 were working. In fact, majority of them belongs to afghan refugee's children. In the same way, (Tufail et al., 2004), founded that there were around 15,000 street children in Quetta city, the key reason behind huge number is afghan immigrants. According to the United Nation of High Commissioner for Refugees (UNHCR), repot, Net enrolment ratio in primary education of refugees living in camps 12% (M), 10 % (F). And, in urban area 13 % (M), 11% (F). Proportion of students starting grade 1 who reach grade 5 among refugees who live in camps is 52 % (M), 30% (F) urban area 46% (M), 35% (F). Moreover, Literacy rate of 15-24 year-olds in camps 39% and in urban area literacy rate is 47%.

Although, work make some positive contributions to child development. Such as it makes one responsible, independent, and befit their families financially to meet subsistence, or provide an opportunity to learn some skills. On the other hand, working children face many problems and serious repercussions on child personal life and society as a whole. There is more probability of morbidity, injury and hazard risk for working children. Along with adverse health outcomes,

they are exposed to environmental and psychological hazard in workplace (Graiter and lerer, 1998). Thus negative impacts are more than positive contributions. Therefore, it's important to investigate the issue before the formation of remedial measures.

Unfortunately, there is no single study that cover the issue of child labor among Afghan refugees living in Pakistan for last 40 years, with 2.4 million register population in the country (UNHCR). They are ignored by all stakeholders. In fact, the incidence of child labor among Afghan refugee's children living in Balochistan is high (45415 working children (ILO, 2012). And, have different situation therefore there might be different socioeconomic factors behind child labor among Afghan Refugees. Therefore, it's important to investigate the root causes with in context of Afghan refugees. Similarly, they deserve special policy measures to eradicate the incidence of child labor among Afghan refugees. Therefore, this study attempts to investigate the socioeconomic factors behind child labor among afghan refugees. And, to analyze the existing policies and will compare with policies of other countries hosting refugees, in order to provide policy proposal.

Statement of the Problem (SOP)

Child labor is widely believed to be a social evil and have negative repercussions on socioeconomic development of developing countries such as Pakistan. Child labor is very prominent issue in Pakistan and same is true for other developing countries. According to child labor survey in Pakistan (Pakistanis ILO, 1996)- ILO child labor was 3.3 million. however, the number of child labor increased to 12.5 million by 2015, (Labour Force Survey 2014-15, 2014). Moreover, Pakistan Social and Living Standard (PSLM / HIES 2018-19, 2018) survey reveals that in Pakistan 30% of children aged between 5-6 are out of school. Indeed, regional disparity exists largest for Balochistan 59% followed by Sindh 42%. Similarly, the literacy rate in Pakistan according to (PSLM 2018-19) is 60% and lowest in Blaochistan with only 40% population in Provence are literate. The incidence of child labor is also common among Afghan refugee children living in Balochistan. (ILO, 2012) 45417 children aged between 10 -14 were working. In fact, majority of them belongs to afghan refugee's children. In the same way, (Tufail et al., 2004), founded that there were around 15,000 street children in Quetta city, the key reason behind huge number is afghan immigrants. According to the United Nation of High

Commissioner for Refugees (NUHCR), report, Net enrolment ratio in primary education of refugees living in camps 12% (M), 10% (F). And, in urban area 13% (M), 11% (F). Proportion of students starting grade 1 who reach grade 5 among refugees who live in camps is 52% (M), 30% (F) urban area 46% (M), 35% (F). Moreover, Literacy rate of 15-24 year-olds in camps 39% and in urban area literacy rate is 47%.

Unfortunately, no academic study is conducted to investigate child rights among afghan refugee in Pakistan. And, it's important to have better understanding of the determinants behind child labor among afghan refugees and the government policies toward them, before the formulation of an appropriate policies to curb this phenomenon. Therefore, this study is designed to investigate socio-economic factors that leads to child labor among afghan refugees. And, will critically review existing child labor policies in Pakistan and will compare with other developing countries child labor policies.

Based on the narrative of SOP as stated in the preceding text, the study has narrowed down the research problem into **“Developing a policy solution to address child labor; The Case of Afghan Refugee of Saranan & Surkhab Refugee Camps of Quetta”**. And have operationalized my topic into following research questions and objectives.

Research Questions

This study is designed to address the following questions;

- What are the socioeconomic factors that leads to child labor among afghan refugees in, Baluchistan?
- What are the reason of Afghan refugee's influx to Pakistan? And why Afghan Refugees are not willing to repatriate to Afghanistan?

Objectives of the Research

In order to effectively address the incidence of child labor among Afghan refugees at policy level, it's indispensable to determine the factors responsible for child labor and the policy gap that need to be address adequately. Moreover, the study has examined the Afghan Refugees Migration profile. However, the specific objectives of the study are given below.

- To study the socioeconomic factors that leads to child labor among afghan refugees.
- To investigate the Afghan Refugees Migration profile, including Afghan refugees causes of exodus and their willingness to repatriate to Afghanistan.

Significance of the Study

There are numbers of laws in Pakistan, which are protecting the rights of children or protecting children from work. These laws include, The Factories Act 1934(PAKISTAN. THE FACTORIES ACT, 1934, 1934), The Employment of Children Act 1991, The Bounded Labor System Abolition Act 1992 and many more laws which protect children rights. Similarly, the Government of Baluchistan has initiated The Baluchistan Child Protection Act 2016 in order to eliminate child labor. But, all these laws or policies are limited to the documents and are not implemented in the country. As it is reflected by large number of child labor in the country, approximately 3.3 million (ILO) especially in Baluchistan. Surprisingly, the government of Pakistan has no refugee's law yet. Although, (Pakistan) host most of the world refugees in the world. Similarly, there also exist the incidence of child labor among these refugees. Indeed, they have different reason behind child labor among these refugees. But, both at national and provincial level they have ignored the issues of refugee's .in fact, they deserve sophisticated policies to address child labor among them. Thus, the findings of the study could help the policy makers, local communities, and welfare organization, NGOs or the Government of Baluchistan to address the issue effectively. Moreover, this study would lead to form of legislation or laws for afghan refugees as there is no refugee law in Pakistan

Research Gap

Acceding to (UNHCR, 2021) there are approximately 1.4 million refugees living in Pakistan and Pakistan is hosting largest number of refugees of the world. Majority of the refugees living in Pakistan are Afghani's. However, this marginalized community is ignored by all the stake holders. Majority of Afghan children are engage in child labor in different form such as working in market for earnings, collecting garbage or wood for household, reported in various newspapers. And, the studies conducted in Pakistan on the phenomenon of child labor has also excluded the Afghan Children or they have not identified the magnitude and factors of child

labor among afghan refugees. In fact, Afghan refugees have different situation and have different hurdles that lead to the persistence of child labor. Moreover, the existing literature associate child labor with characteristics of children, family, and parents (Lodhi et al., 2011) or relates child labor with poverty (Amin et al., 2004), Sidiqi (1995), (Basu & Van, 1998) and some other aspects of child labor. there is no single study that have associated child labor with the social indicators such as availability of water, electricity and gas, or the identity, presence or absence of NGO; s, main sources of water, and distance to main source of water. Indeed, these factors are very important in context of refugees in general and Afghan refugees in particular. As most of the refugees have no access to school, electricity, gas and water, and it became duty of the children to complete these requirement of household. Moreover, they (Refugees children) consume number of hours to do so, which deprive them from getting education. Therefore, it's very crucial to analyze the child labor in context of Afghan refugees in order to formulate an effective child labor policy for the refugees. Additionally, the government of Pakistan has initiated the repatriation of Afghan refugees with the collaboration of UNHCR. And according to 1915 convention on the status of refugees the legal principle of “non-repolmant” stress on the voluntary repatriation of the refugees. Therefore, it's important to study the willingness of refugees to return to Afghanistan either they follow the principle of customary international law or bridge it. (Hiegemann, 2014) recommends immediate research on the repatriation process of Afghan refugees, in order to check the validity of non-refolmant principle of international law in context of Pakistan. Therefore, this study will fill this gape as well.

Explanation of the Key Terms/Concepts

1.6.1 Child

According to Article 1 of United Nation Convention on the Rights of the Child, child refers to any human being below 18 years of age (Herath & Sharma, 2007). In fact, for this study we consider anyone below 18 years of age as a child.

1.6.2 Child labor

According to international labor organization (ILO, 2021) child labor is defined as the involvement of school-aged children in labor force in order to earn livelihood for themselves or their families. And, have harmful outcomes on child development (Canagarajah & Coulombe,

1997). However, this study defines child labor; the children aged ranging from 5-14, work for two or more than two hours per day, either for household or participate in market for earnings.

1.6.3 Refugees

The 1951 Convention of UNHCR defines a Refugee as “Someone who is impotent or reluctant to return to their homeland because of well-founded fear of being ill-treated owing to his/her race, religion, nationality, or owing to any affiliation with social or political groups” (Refugees, 2021).

As in this study our focus is only on afghan refugees therefore, by refugees we mean those Afghan refugees living in Quetta, Balochistan. And, they are unable and unwilling to go back to their state of origin for different reasons including war, terror, and fear of being persecuted on the bases of race, nationality or religion or any link with social or political groups in the country (Afghanistan)

1.6.4 Afghan

The term Afghan is an ethno-geographic term usually referred to the inhabitants of land between River Oxus and River Indus (Elahi & Khan, 2019). However, for this study the term Afghan is used for the inhabitants of Afghanistan lining here in Pakistan as refugees in camps or outside the camps.

1.6.5 Migration

Migration is generally defined, as the temporary or permanent change in residence is a movement of people from one place (the place of origin) to some other place (place of destination) for batter life such as batter livelihood, more income, good food supply and additionally to get refugee from instability, conflict and natural disasters (Vargas-Lundius et.al. 2008).

1.7 Units of Data Collection

1.7.1 UDC 1, Household Head

In order to find the socioeconomic factors behind child labor among afghan refugees, and to examine the Afghan refugee's migration profile the study has conducted interviews with the household head/ child parents through household survey. In fact, the survey used for the data collection is borrowed from Pakistan Bureau of Statistics (PBS) and modified according to the objectives of the study. Moreover, survey consist of the questioners.

1.7.2 UDC2, Children Parents

The second unit of data collection used for the data collection includes the parents of Afghan refugee's children. In fact, we have conducted interviews with the parents of children for data collection. The data collection tool used for the parents are the same question which the researcher asked from the Afghan refugee's household head.

1.7.3 UDC 3, Working Children

The third Unit of Data Collection (UDC), of the study is working children. In fact, we may get data from the working children among Afghan refugees working such as while working (collecting garbage, bringing water, or collecting wood form the garbage to be used for cooking purpose). Indeed, the research instrument for this unit of data collection (UDC) are the same questionnaires as we have designed for the head of household and parents.

1.7.4 UDC4, NCRC Member of Baluchistan

For the policy proposal the researcher has conducted semi structured interview based on the finding of the study with the member of Balochistan (Muhammd Hashim Kakar) from NCRC (National Commission on the Rights of Child), Islamabad.

1.7.5 UDC5, NCRC Member of Sind

Similarly, for the recommendations and remedial measures of Afghan refugees the researcher has conducted semi structured interview based on the findings with the member of Sind from NCRC (National Commission on the Rights of Child), Islamabad.

1.7.6 UDC6, Deputy Director NCCWD

Additionally, in order to provide policy recommendation for Afghan refugees, the researcher has conducted semi structured interview with the deputy director Mr. Haroon, NCCWD (National Commission Child Welfare, Development), Islamabad.

Chapter 2

Literature Review and Theoretical Framework

2.1 Literature review

Indeed, it's very necessary to have a comprehensive idea of the existing theoretical and empirical studies on the socioeconomic factors of child labor among Afghan refugees. This, require to study the existing literature relevant to the objective of the study, and to identify the gap and make clear the procedure to cover the gaps. Although there exist large number of theoretical and empirical literature on the determinants of child labor and migration. However, there are very limited literature on Afghan refugees. Thus, this section comprises of the resisting literature relevant to the objectives of the study. In fact, the literature of the study is give thematically as given below.

2.1.1 Per Capita Income and Incidence of Child Labor

This part of literature review shows that how child labor very with household income level. In fact, the existing literature revels that child labor incidence have inverse relationship with the level of household income level. In other words, child labor decries with rise in income of household. On the other hand, the incidence of child labor increases with decline in per capita income. (Lodhi et al., 2011), analyzed the effects of various individual, household and community level characteristics on probability that children engage in different activities. They found that per capita income had a significant impact in determining child activities. Increased income was associated with a decline in child labor, combined work and secular attendance, inactivity and rise in secular school attendance. This indicates that poverty may favor decision to allow children to inactive, and to work and attend school. They also suggested that higher the level of education of head of household was associated with fall in probability of child labor, idleness or combination of work and secular schooling. The study also provided evidence of gender gap in schooling.

(Joelle Saad-Lessler, 2016), at macro level studied determinants of child labor among courtiers having positive rate of child labor. In fact, he included GDP per capita, GDP growth rate, percentage of rural population, educational expenditure (public), and life expectancy, shear of

labor force in industrial and agricultural sector, member of minimum age convention, female employment, fertility rate, trade and credit as determinants of child labor across countries. And, these variables show 83% of variation in child labor among countries. Indeed, the findings of study indicate that on average child labor rate for a country increases with rise in rural population, labor force participation and fertility. And, child labor rate is inversely associated with rise in GDP per capita, an increase in public educational expenditure, life expectancy and shear of labor force in industrial and agricultural sector rather than in services sector. Additionally, child labor falls with tread expansion. However, the primary determinant he identified was GDP per capita, followed by rural population, female participation in labor force and trade that determine deviations in each countries child labor rate.

(Amin et al., 2004), using 1995-96 household Expenditure Survey (HES) of Bangladesh, studied the determinants of child labor in Bangladesh. In fact, they estimated disconnected models for older and younger girls and boys in rural and urban areas. Moreover, the findings of the study support the idea household (income) poverty is the prominent factor in deciding child work status. And, they can't afford to keep their children away from work. Furthermore, the study reflects that being in household headed by male is the second key factor of child work status. Additionally, child work probability increase with age and decrees with another year of schooling. And, household size has positive impact on child labor. Indeed, one-unit increase in household size leads to increase child work probability by 0.7. And, child parental education is negatively associated with child labor.

2.1.2 Child Labor as a result of Household Poverty

This section of the study covers the existing literature on child labor as a result of poverty. That most of the parents send their children for work in labor market as a result of poverty. Indeed, the parents send their children to participate in labor market in order to meet the subsistence level. And, when they meet the threshold level, they (parents) start withdrawing their children from labor markets. The studies which covers this area are given below.

(Basu & Van, 1998) in economics of child labor express two axioms as the "luxury" and "substitution". They assume child labor is due to the parent's poverty. In fact, parents value the leisure of child but if they are poor, they may not afford. In the first version of hypothesis "strong"

version says parents send their children to work only if their income is below the subsistence level. The second "weak" version: above the subsistence level parent's tradeoff between consumption of household and child leisure. And this phenomenon leads to multiple equilibrium, in low equilibrium both parents and child work. Whereas, in high equilibrium, parent's wages are high enough and they avoid child work. In substitution axiom, they assume child and adults as substitute for each other.

In a paper (Ranjan, 1999) developed a model which shows how poverty and imperfect credit market pushes to incidence of child labor. In fact, the study concludes that if parents have enough borrowing sources and the return to education is greater than the financing cost. In such circumstances parents will send their children to school rather than labor market irrespective of parent's level of income. Moreover, in absence of credit opportunity child labor act as smoothing the household consumption. Therefore, inadequate borrowing opportunities along with poverty leads to phenomenon of child labor in developing countries. Furthermore, as policy recommendations, this study stress to improve the well-being of household to send their children to school through, income support. And, a ban on child labor further augments the difficulties of impoverished household.

Sidiqi (1995), studied key determinants of child labor in Lahore city, Pakistan. The study reveals that poverty is the most important reason of child labor in case of Lahore city, followed by household size that larger the size of household the more will be number of working children. And, third important factor is type of work which is actually demand driven. And, then comes the income of household. At fifth number the study indicated that location of household matter. Indeed, families living near industrial zones increase the probability of child labor as compared to household living in residential areas. Finally, the study claims household structure and gender of household head are the important factors of child labor. Surprisingly, literacy have no rule in child labor in case of Lahore city. To sum up, its economic, social and cultural pressure that leads household to send their children to work.

(Avais et al., 2014), investigated socio-economic factors of child labor in carpet weaving industry in Ali Wahan, district Sakker. The finding of the shows that 58% of respondents were never enrolled to school. And, 84% of the respondents started work owing to poverty. In fact, majority of the respondents reveled they were interested to go to school. Moreover, working

children's parents were illiterate. To sum up, the study shows that poverty constraint is the primary factor behind child labor in carpet weaving industry. Other socio-economic factor includes the lack of education, discrimination towards female education, lack of awareness and materialistic objectives.

2.1.3 Intergeneration Persistence of Child Labor

The persistence of child labor sometime is intergenerational. In fact, the families or the parents who are uneducated or experience child labor lead to child labor trap. And, their children also experience child labor in future. The existing literature on the child labor trap or intergenerational persistence of the phenomenon is given as follows.

(Emerson & Souza, 2003), empirically studied intergeneration persistence of child labor or child labor trap in Brazil. In fact, they have found the evidence of child labor trap in economy. Moreover, the study reveals statistically significant association between parent's child labor, and education with those of the children. They found that children were more likely to be working if their parents had experience in their childhood. And, higher the level of education of parents the less likely the children are in labor market. Moreover, the grandparent's education level indirectly impacts the child labor status through parent's education. Additionally, earning of an adult are less if he/she enters the market earlier. All in all, the study indicates the child labor trap, when parents experience child labor incidence, they will have lower income owing to low level of human capital and thus, will choose to send their children to work. And this chain continues. Therefore, the policy makers should target household rather than individuals in order to break this cycle.

(Togunde & WEBER, 2007) have studied intergenerational persistence of child labor in urban Nigeria. In fact, the analysis of the study is derived from 2002 survey which comprises of 1535 interviews from parents and children. The findings of the study show that poverty is the major cause of child labor in Nigeria. Furthermore, they perceive child work as training for future occupation. Moreover, the study reveals that child labor is a cultural practice that passes from one generation to another. In fact, the parents own socialization in child labor also leads to ask their children to participate in labor market. However, majority of the children revealed that they do not want to continue this cycle of child labor for next generation, owing to their own bad experience in work. Furthermore, the study shows higher level of parental education, income, smaller family

size, professional occupation of parents discourages children to pass this cultural practice of child labor. Thus, parent's socio-economic status strongly influences the children desire to end intergenerational persistence of child labor.

2.1.4 Child labor and Land Ownership

Some studies examine the relationship between child labor and land ownership. In fact, the existing literature indicate that child labor initially increases with rise in land ownership. But, as the household land ownership keeps rising the incidence of child labor starts declining. So there is some threshold level at which the land ownership and child labor have inverse relation. Given below studies explain this phenomenon.

(Bar & Basu, 2009) examine the impacts of rising household land ownership on incidence of child labor using overlapping generation model. The results indicate that child labor rises with small rise in land ownership. And, as the household land ownerships continues to rise the child labor declines. All in all, a rise in land ownership increase incidence of child labor in short-run but, in long-run child labor declines with land ownership. And, (S. Bhalotra & Heady, 2003) stated that in developing countries most of the children are engage in agriculture activities operated by the household. And the children with more possession of land are more likely to be in child labor as compare to the land less household.

2.1.5 Child Labor and Inequality

The incidence of child labor or child education has strong relation with distribution of income or resources. When the resources or income are divided unevenly, this leads to many social issues Child Labor is one of the outcome. However, the literature on the relationship between child labor and inequality is given as follows.

(Swinnerton & Rogers, 1999) have added an additional axiom to (Basu & Van, 1998) which is important for macro level behavior. That is "Distribution Axiom" which state that the income from non-labor sources are concentrated to few elites in economy. And, if the wealth is distributed equally than a bad equilibrium in BV model cannot exist. Moreover, they indicated three possible levels of labor supply. One is same is that of BVs good equilibrium where, the adult wages are high enough to cover subsistence consumption. Similarly, other as BVs bad equilibrium,

where all household send their children to work. And, finally only those send children to work who do not get dividends. And, the children belonging to households who own capital do not send children to work. Thus, the main reason behind child labor they consider is inequality or uneven distribution of incomes.

The study conducted by (Tanaka, 2003) on the topic inequality as determinant of child labor. The study actually examines the association between the persistence of child labor and public schooling under the majority voting. The findings of the research suggest that when the income is not equally distributed public schooling is not supported by most of the people. Moreover, this phenomenon of inequality leads to accelerate child labor.

2.1.6 Trade Liberalization and Child Labor

This section of the literature review comprises of the relationship between child labor and trade liberalization. That how, trade policies (openness and tightness) affects the incidence of child labor.

(Ul-Haq et al., 2020) studied the relationship between trade liberalization (measured through imports tariff rate) and child labor in urban areas of Pakistan. Using, the data for years ranging from 1990-2005. The findings of the study reveals that trade liberalization/ trade openness are significantly related to each other's. In fact, they are positively related which reflects that trade liberalization leads to reduce the incidence of child labor in the country. Because, it enables the household to earn more or manipulate the household income. Indeed, the study show that 1% decline in trade protection leads to reduce child labor by 0.1% point in urban areas, keeping all other factors equal. Moreover, the findings of the study are significant after including other controlled variables such as poverty, household income and income inequality in the model. And, the results of controlled variables show that child labor have statistically positive association with poverty and inequality but have negative association with rise in family level of income.

Bonnal (2015), examines the relationship between child labor, trade openness, investment in human capital, foreign direct investment, technological innovation and credit market constraints, using panel data from 1980-2004, for 101 countries. The findings of the study indicate that the countries with more open trade strategy, have invested in human capital and technology or the countries with limited or low credit market constraints are the countries with low level of

child labor and vice versa. Moreover, the study reveal that there are many economic and social factors that influence child labor such as public expenditure on education, school enrolment, providing conditional cash transfer, food stamp or improvements in technology.

2.1.7 Low Return to Education and Child labor

This section of the literature reviews comprises of the future returns associated with human capital formation or child education and child labor.

(Kuépié, 2018) tested the hypothesis that child labor is rational response to low returns to education in Mali. Using Malian permanent household survey. To test the above hypothesis, the author builds conceptual model that link child labor by comparing expected return to education and experience after the literature review. And, empirically analyzed the hypothesis through parental expectations about return to education which is measured by two variables. First, the gap between actual and predicted earnings of household given his/her education. The second is through predicted returns to education in labor market. The results of the study show that when the earn more than predicted given their education level or when they perceive that return to education are high in labor market this leads to lower the probability of child being engage in work, vice versa. Moreover, the conceptual model after the literature review suggest that education is not always a guarantee of good integration in Sub-Saharan African labor markets and revels that this failure is the result of insufficient investment in education of children by parents.

2.1.8 Child Labor and Refugees

(Habib et al., 2020) explored ergonomic and musculoskeletal disorder differences between boys and girls among Syrian refugees' children in Bekaa Valley, Labnan. The study identified that children are engaged in strenuous work. However, ergonomic exposure varies by gender, with girls are likely to participate in repetitive movement and boys in heavy lifting. Girls perform both external and domestic work thus, faces more wrist and hand pain. Furthermore, Syrian refugee workers are working in unfavorable working condition that may have adverse effect on their health.

In context of Tanzania (Kofol & Naghsh Nejad, 2017) estimated the short and long-run repercussions of hosting refugees in different areas closed to border in Tanzania on child labor.

Moreover, the study also explores the machines which contributed in variation in child labor such as variation in household income or consumption and changes in school enrolment using longitudinal data for years between 1991 -2004. However, the results of the study indicate that the influx of refugee living in Kogera reduced the child labor in short-run (1991-1994). In long-run the incidence of child labor increases with arrival of refugees (1991-2004) and have different repercussions on different age group and gender. In fact, the study explains the variation in child labor through different mechanism such as household expenditure / welfare and enrolment both for short and long term effects of hosting refugees on child labor. And suggest that in short run child labor probability reduces owing to an increase in household expenditure or wellbeing, but in long-run the influx of the refugees adversely affect the wellbeing of household between 1991/2004. Thus, resulting in acceleration of child labor. And, the school enrolment for areas closed to border reduced both in short and long run. And, the impact shown is statistically significant for girls.

(Dimova et al., 2015) examine the incidence of child labor using household ability to hire labor outside of household. The study used migration and remittances as explanatory variables that how these variables leads to induce child labor. Using Living Standards Measurement Survey (LSMs) data for Kagera in Tanzania. Further, the findings of the study support the hypothesis that both migration of household and remittances they receive results in decrees in child labor. However, the third main variable in the hypothesis (hired labor) is not insignificant. Further, the findings of the study indicate that longer the land ownership in context of agriculture the more will be the child labor on the farm. On the other hand, off-farm activities inform of trade and business reduces the supply of child labor. And, the larger the family size results in an increase in supply of working children's.

2.1.9 Refugees Exodus and Reparation

This section of the literature revives consist of the causes behind refugees forced migration and their willingness to return to the country of origin. The literature covered is given as follows.

(Schmeidl, 1997) investigated the reasons behind involuntary migration using time-series, cross-national data for the years ranging from 1971- 1990. The variables used in the study includes, level of economic development, background situation, reasons for human rights violation, civil

war, ethnic contestation along with interstate war. The findings of the study factors genocides, ethnic conflicts, civil war and external intervention are the statistically significantly associated with refugee's outflows. Furthermore, her findings such as domestic war, violation of civil rights and population not related with refugee's exodus. Finally, she states that poverty augments the migration in presence of political conflicts.

the migration scholar (Moore & Shellman, 2004) , examined the factors that determine the forced migration. In fact, the study mainly focused on the 'Push Factors' of migration. The factors of migration the author has examined includes the characteristics of countries that encourage large influx of the people to reallocate elsewhere. The study suggests that forced migration depends on the macro level information at national level. The findings of the study indicate that the dominant determinant of forced migration includes, the violent behavior of the state dissidents. However, the impact of the high level of dissident is comparatively strong. Moreover, the determinants such as institutional democracy and income or size of economy do effect the involuntary migration flows, but the influence is comparatively small. All in all, the 'Push Factors' of the migration 'violence' drives the migration process.

Neumayer, (2005) studied the factors of asylum migration to Western Europe. The findings of the study confirm that economic hurdles and discrimination bases on the ethnic minorities leads to higher flows of migration. And, the factors such as political oppression human rights violation, war/ conflict and state failure also play key role in determining the migration flows. The variables such as migration network, proximity of geography are main determinants of migration flows. And, the contract or agreement and advanced economies are not. Furthermore, the determinants such as national catastrophes, droughts are significant factors. In fact, effect of these factors are for short time period. Finally, the author recommends the road map for the western European stats, that to deal with the issue of refugees or asylum inflows that they are supposed to take steps that speed up the economic prosperity, role of law (democracy), protection of human rights and peaceful resolution to the conflicts in the country of origin.

Studies (Kibreab, 1985) , (Edmonston & Passel, 1992) and (Wood, 1994)) tested the hypothesis that poverty accelerate the probability of refugee's migration, furthermore, poverty or economic underdevelopment augments the migration once the exodus has taken place. Indeed, they agree that poverty can play main role in refugees' movement or outflows. And, the developing

countries are more likely to generate refugee's migration as compared to developed economies. Moreover, these refugees migrate to the countries that are underdeveloped themselves and experiencing political instability. Therefore, poverty and economic hurdles accelerate the refugee's flows, along with the political instability that push to involuntary exodus. And, the scholars agreed that poverty in conjunction of political instability leads to the formation of refugee exodus.

Large number of refugee migration writers such as (Ferris, 1987) and (Zolberg et al, 1989) agree that most of the government suppression take place owing to the participation of Arm forces and external powers. Civil and ethnic contestation is actually characterized by involvement of other states. Main wail, the rebellions and the government fight for power gain in the country of origin. And, the authorities at international level make use of these groups for their own political gain. They actively make alliance with the government or the insurgency groups who are fighting for power distribution. Similarly, this was the case during cold war (war between capitalism and communism) and a number of civil and ethnic conflicts were proxy wars of great powers instead of the local inhabitants. In fact, these great power do not directly violate the human rights, rather they indirectly violate the human rights through provision of means for them.

(The News, 2017), in response to insurgency activities and political contestation between Pakistan and Afghanistan, the government of Pakistan in second half of 2016, campaigned to push back the Afghan refugees to Afghanistan. In fact, the Pakistani authorities in the second half of 2016, deported approximately 1.5 million registered and about 1 million undocumented refugees to Afghanistan, where these refugees were at risk and faced many issues such as unavailability of services and humanitarian crisis. In fact, the study was based on the 115 interviews with returnees to Afghanistan. The respondents revealed that they had no option in 2016, but had to leave the Pakistan. Although they (Returnees) were not willing to flee from Pakistan.

(Hiegemann, 2014) studied the legal aspects of refugees and repatriation process of Afghan refugees residing in Pakistan. The study suggests that despite presence of legal principle of non-refoulement, the government of Pakistan pressurized many afghan refugees to return to their country of origin (Afghanistan). Where they are at risk. Additionally, the study recommends immediate research on the repatriation process of Afghan refugees, in order to check the validity of non-refoulement principle of international law in context of Pakistan.

To sum up, there are number of studies that covers the literature on determinants of forced migration, which mainly covers migration process in context of west and there is very less literature available in context of subcontinent who are actually the host countries to many refugees. Particularly the Afghan refugees' exodus is not scientifically analyzed. Moreover, there is no literature on the refugee's willingness to relocate to the country of origin. Therefore, this study focus on the reason of Afghan refugee's influx to Pakistan and has analyzed the refugee's willingness weather they are willing to return to the country of origin or they are forced to flee from Pakistan.

2.1.10 Child labor and0 Way forward

Finally, the literature included in this study comprises of the solution for child labor. Different studies have highlighted different ways to root out the child labor. Although some scholar of child labor agrees on some remedial measures. The literature on road map for child labor is given as follows.

(Mohamed Baqutayan et al., 2020) examined the issues and way forward to eliminate child labor, based on opinion of Malaysian Civil Servant. Moreover, grouped eight factors which are contributing to curb the incidence of child labor. These are religion, awareness, humanity, ethic, culture, demand side, supply side and policy. The results indicate that from religious points of view, importance of knowledge as an obligation is key factor that influence child labor issues. Similarly, awareness on child education as long-run returns associated. Moreover, among humanity factor lack of access to education and socio-economic disparities are contributing to child labor. And, cultural factor indicate that cast system, discrimination and biasness towards girls leads them to child labor. In addition to, on supply side study revels child labor as household poverty driven. And on demand side its low cost of hiring child labor as compare to adult. Finally, this study emphasis on need of particular child labor policy to overcome all form of child labor in Malaysia.

(Jafarey & Lahiri, 2005) examine the effects of two main policy proposals related to child labor, which includes food for education and investment in education system both in quantity and quality of education, that how these effects the household decision to send children in market for works. And, their choice of sending children to school, Using two period model. The findings of

the study suggest that an increase in food for education subsidies financed through foreign aid will decrease the incidence of child labor irrespective of credit market situation. On the other hand, the second policy proposal investment or improvement in the quality of education will reduce child labor if the supply curve of the credit is elastic. However, if the credit is inelastic, the supply tends to sufficiently inelastic, then the investment in education can augment child labor. Additionally, the study reveals the best option between two policy proposals depends on nature of elasticity of credit supply, thus given the fixed amount of resources, more resources should be allocated for food-for education if the credit supply is inelastic. Because these will prevent from borrowing, but if they (household) have no borrowing constraints and, faces elastic supply of credit, then the best option is to allocate more resources for improvement in education.

Although the existing studies covers different aspects of child labor. But, there is very limited literature on refugees in general and Afghan refugees in particular. In fact, these refugees have different situation, thus the determinant among the refugees are different which need to examined in context of the refugees. Moreover, the current studies have not included the social welfare indicators with the incidence of child labor such as availability of water, gas, electricity, number of room, sources of water, the distance to main source of water, the time they consume for a round trip and Identity crisis with the incidence of child labor especially in context of refugees. Therefore, for this study has investigated these social welfare indicators in context of Afghan refugees that how the probability of child labor very with the variation in social welfare indicators among Afghan refugees.

2.2 Theoretical Framework

2.2.1 Human Capital Theory

Anything that increase income or yield useful output with passage of time is capital. Thus, investment in education, training, health and honesty are capital. Because these are associated with increased income, better health and skills. And, these are called human capital because these produces human and one can't separate health, skills or knowledge from a person. However, education and training are the most important investment in human capital (Becker, 2009). In fact, investment in human capital is associated with increased earnings and productivity. Moreover, education is key element for human capital and essential for sustainable socio-economic development of a society. Indeed, education leads to reduce poverty, inequality, improved health and civilized society.

(Nelson, 1996), suggested that education increases human capital formation, which intern leads to economic growth and development. (Sianesi & Reenen, 2003) identified that along with direct effect of education to economic growth it enhances economic growth and development indirectly by providing other inputs of production. Different studies have suggested different impacts of level of education at different stages of economic growth of a country. (Petraakis & Stamatakis, 2002) suggested that for developing countries primary and secondary education more impacts on their economic growth. And, founded that higher education is more important for economic growth in developed countries. All in all, human capital formation leads to economic growth, better health, reduces inequality, civilized society and implementation of law and order in country.

However, the findings of the study suggest loss of human capital in context of Afghan Refugees, living in Baluchistan, Pakistan which has, serious repercussion on socioeconomic development. Indeed, the study shows the on average 74% of the household head are illiterate and, the literates are only able to read and write but have no skills. Moreover, more than 52% of the children among Afghan refugees have no formal education. Likewise, about 53% of the children are participating in child labor. These facts reveal the loss of capital formation among afghan

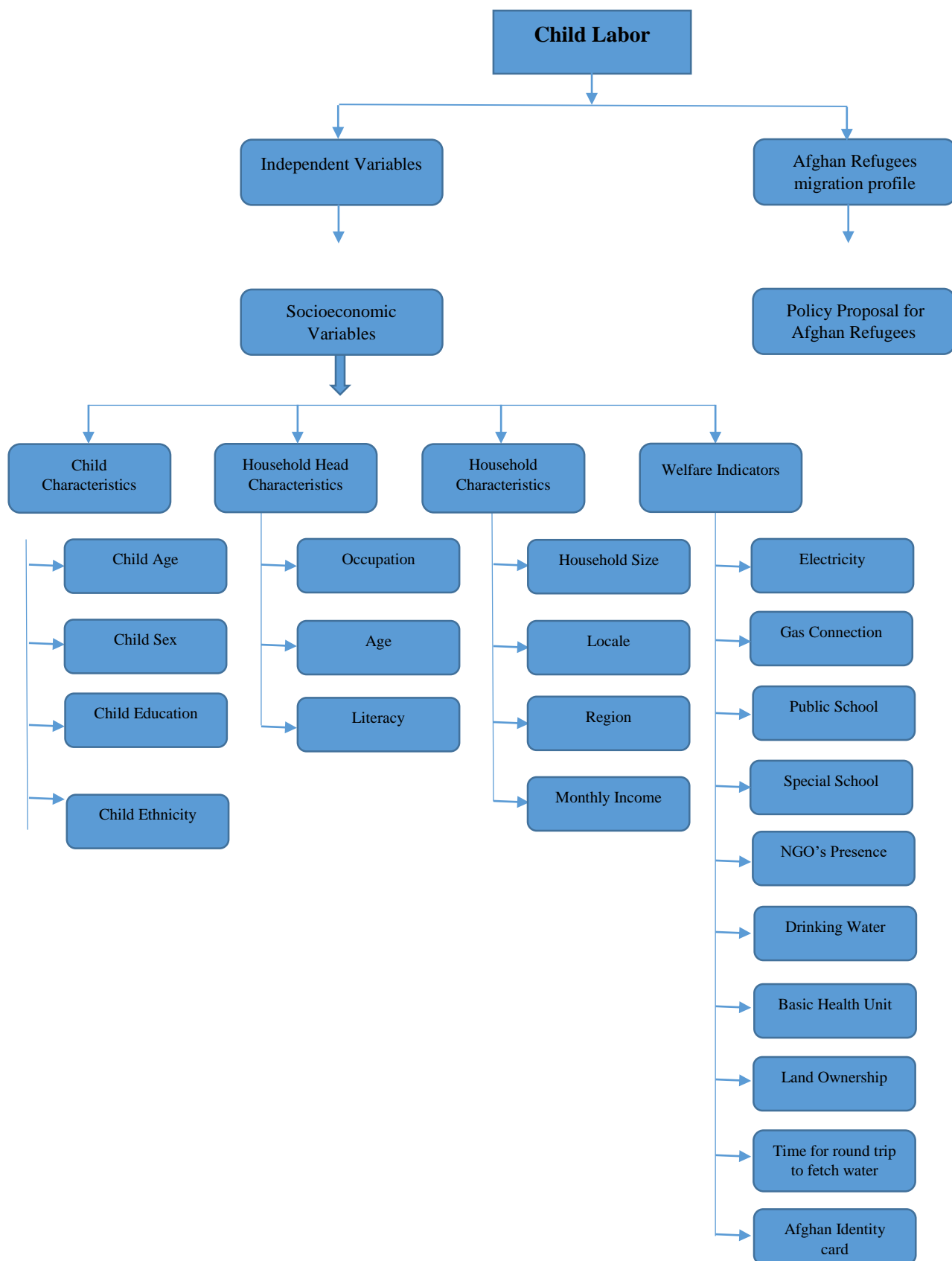
refugees. And, they will have stuck in this trap for long time, if didn't invested in education. Similarly, the lack of human capital adversely affects the refugee's standard of living as indicated in the study.

2.3 Conceptual Framework

There are many determinants of child labor. Including, household demographic variables, parenteral or household head characteristics and socioeconomic variables. In fact, the literature identify that child labor is intergenerational. The determinants under study are mentioned in figure below. This study has the variables that either directly or indirectly linked with incidence of child labor among Afghan Refugees. The dependent variable used in the study is "Child Labor" and explanatory variable includes "Socioeconomic variables, which consist of Child Characteristics, Household Characteristics, Household Head Characteristics and Welfare Indicators. In fact, the child characteristics include age, sex, and education level and child ethnicity, that how these variables are associated with child labor. And how, change in these independent variables leads to change child labor among afghan refugees.

The second socioeconomic variable used in the study is household head characteristics which comprises of age, literacy, and occupation. The third, socioeconomic variable is household characteristics and comprises of family size, locale (districts), region (rural/urban) and monthly income. In fact, the purpose is how incidence of child labor very with changes in household characteristics. Finally, the welfare indicators include, electricity, gas connection, availability of public school, access to Afghan special school, NGO's presence, access to clean drinking water, access to basic health unit, main source of drinking water, time consume for a round trip to fetch water, distance of main source of drinking water, Afghan identity, and land ownership. On the right side of the figure 1, we have plotted the Afghan Refugees Migration profile and finally the policy proposal for afghan refugees living in Pakistan.

FIGURE 1 CONCEPTUAL FRAMEWORK OF SOCIOECONOMIC FACTORS OF CHILD LABOR AMONG AFGHAN REFUGEES



CHAPTER 3

Research Methodology

3.1 Research Strategy

For this study we are using mixed research strategy. In fact, mixed research strategy or method is defined as “The combination of quantitative and qualitative research within a single project” (Bryman, 2016). We have adopted this method because we are using both approaches to achieve the objectives of the study. As the first and second objective “socioeconomic factors behind child labor among afghan refugees” and the “Migration profile” clearly indicate the quantitative research approach. Which of course is deductive, relying on existing theories and collected observations will be tested in order to confirm or refute the existing literature/ theory. Moreover, this part of the study from epistemological perspective is based on objectivity or positivism. And, from ontological point of view it’s based on objectivism

However, for the policy proposal the study has adopted qualitative approach. Furthermore, from epistemological consideration it’s based on Interpretivism (subjectivity) and constructivism ontologically. Therefore, we rely on mixed research approach for this study.

3.2 Research Design

For this study we are using explanatory research design. In fact, explanatory research/ study sets out to explain and accounts for descriptive information. The descriptive research design/ studies always answer/ask “what” kind of questions. On the other hand, explanatory research/study aims to address or ask “why and how” type of questions (Wilkerson et al., 2014). And, it builds on exploratory and descriptive research and go on to highlight the actual causes behind any problem. Moreover, it identifies causes and provide empirical proof to support or refute the explanation/ predictions. Explanatory research is actually conducted to explore and state some relationship among various aspects of the problem under investigation.

We are adopting explanatory research design because this study aims to identify the causes behind child labor among afghan refugees in Quetta, Balochistan. That “why” the Afghan refugee’s children are working rather than attending school, the reasons behind this phenomenon. And, “how” different variables (socioeconomic variables) are linked with this phenomenon. And the Afghan Refugees Migration profile. Based on the findings of the study we may provide some support for the variables leading to the incidence of child labor or may refute some explanation or prediction of the association among variables. Furthermore, this study will investigate the existing child labor policies in Pakistan. That how existing policies are not enough to curb this issue and how can we link existing policies with incidence of child labor among afghan refugees, and the gap that need to be fulfilled in order to effectively address this phenomenon. Therefore, we will use explanatory research design for this study.

3.3 Data Collection Tools

Data collection is the mechanism through which the researcher collects the relevant information to find answer for the research problem, or to examine the hypothesis or theories and evaluate the results. In fact, there are two main sources of data collection including, the primary sources and secondary sources of data. And, the choice of selection one or both as source of data depends on the objectives of the study. Main while, in order to adequately address the problem of this study, the study has adopted primary’s sources of the data collection. Both in academics and research, primary source of data collection refers to the collection of information at first-hand and in its original form by the researcher. And , the primary data is collected through surveys , interviews, experiments, and books etc. (Bryman, 2006). However, we are using two tools of primary data sources such as survey (household survey) and semi-structured interviews from key informants.

3.3.1 Household Survey

This study has conduct household survey in order to peruse the objective of the study. Survey is actually used to collect information is a standardized form from large group of population. The two main techniques of conducting survey are questionnaires and structured interviews (Thompson, 2016). However, for this study, the researcher has collected information through questionnaire from Afghan Refugees about socioeconomic causes of child labor among Afghan refugees. And, about the refugee’s standards of living and their influx to Pakistan, and

future prospects. In fact, information collected from children's parents or household head of Afghan Refugees.

Moreover, this method of data collection is also used by Pakistan Bureau of Statistic (PBS) to measure the household socioeconomic status and labor force status. Most recently they are using the same method (household survey) to collect information about child labor in all provinces of Pakistan and still in process. Therefore, we also rely on household survey in order to collect information about socioeconomic factors of child labor among refugees through questionnaires. Furthermore, we borrow PBS standardized questionnaires and modified according to the requirement of the study. And, the researcher asked standardized questions from the respondents in order to address the first objective of the study. And, the household survey is conducted in May 10, 2021 to Jun 10, 2021.

3.3.2 Semi-Structured Interviews

Other than household survey the study has collected information through semi-structured interviews from key informants for the policy proposal. Interviews (Dunn,2005) are the interchange of conversation where the interviewer attempts to elicit information from the respondent. In fact, the semi-structured interview is type of interview in which the researcher does not follow an organized set of questions. Instead, the interviewer will ask open ended questions. And, it encourages the two-way communication in order to find answer to the problem. Therefore, the researcher conducted semi-structured interviews from the key informants such as Member of Baluchistan CNCRC, Member of Sind CNCRC, and Deputy Director NCCWD to collect information about existing child labor policies, hurdles and way forward.

3.4 Sampling Design and Selection of Sample Size

3.4.1 Sampling Design

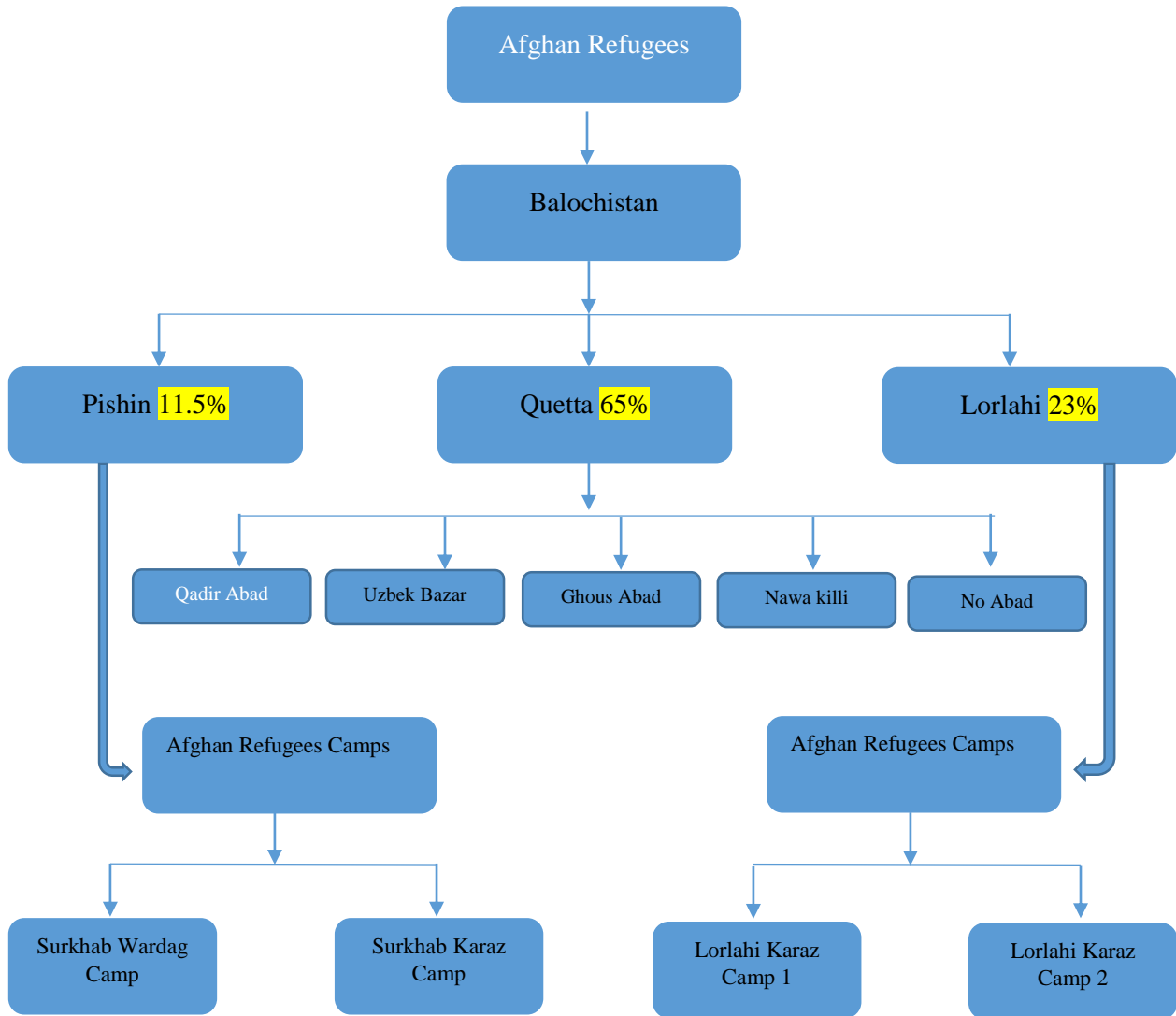
This study has make use of Convenience sampling method in order to collect data. Convenience sampling (which is also known as Accidental or Haphazard sampling) is type of nonrandom or nonprobability sampling where respondents of the targeted population fulfil some criteria, including easy accessibility, geographical proximity, present at given time or ready to participate are included for the purpose of study (Domye, 2007). In addition to, convenience

samples are also known as “accidental samples” because the researcher may simply select samples as they just happen to the researcher’s area of data collection (Etikan,2016).

3.4.2 Sample Size

The researcher personally conducted a household survey for Afghan refugees living in three major districts of Balochistan. The targeted sample size for household survey was approximate 300 (three hundred) household surveys from Afghanis living in the proximity of Quetta city, district Pishin and Loralahi. However, the size of sample very with the population of camps (Loralahi and Surkhab Afghan Refugees Camps) and the refugees living outside camps in Quetta city and their willingness to participate in data collection. Indeed, these study has randomly selected a total of 300 households, out of 300 households 281 household survey is included in the analysis. However, 65% of the household survey is conducted in Quetta city, approximately (140 household survey). And, about 12% of the respondents are randomly selected from Afghan Refugees Camps in district Loralahi, about 16 households has been included in the survey from each camp (Karaz camp 1 and Karaz camp 2). Further, 23% of the respondents are randomly selected from Surkhab Afghan Refugees camp, approximately 100 households are included in the survey.

FIGURE 2 SELECTION OF SAMPLE SIZE



3.5 Data Analysis Techniques

The collected data through household survey is first analyzed by using summary statistics of the model used for measurement of child labor in context of afghan refugees, which includes the percentage, frequencies, and the standard deviation, the minimum and maximum values. And, the descriptive statistics for the explanatory variables such Child Characteristics, Household Head factors, Household characteristics and welfare indicators, which includes the frequencies, and percentages for each variable. Additionally, the study has analyzed the Migration profile through summary statistics. Moreover, this study has empirically investigated the relationship between child labor among afghan refugees and each variable included in factor of child characteristics, household head characteristics, household characteristics and the social indicator graphically through bar graphs using Stata Software. And, finally, the study has applied logistic regression to find the probability of child labor among Afghan Refugees, given the explanatory variables. Further, the study has drawn the conclusion and policy proposal from the findings of the study.

3.5.1 Summary Statistics

The summary or descriptive statistics summarizes or describes the features of the data set. First technique used for the data analysis in this study is the summary or descriptive statistics. This includes the summary statistics of the model used for the measurement of child labor among afghan refugees, which explain the observations, mean, the standard deviation and the minimum and maximum value. Similarly, the descriptive analysis technique is adopted for the independent variables used in the study such as the child factors, household head factors, household factors and the social indicators. Additionally, the study has used the descriptive statistics for the migration profile. In fact, the summary statistics used in the study gives the key information which are important to understand.

3.5.2 Graphs

Along with the summary statistics this study has further analyzed the data through bar graphs and pie charts. The bar graphs used in the study shows the relationship between child labor and the factors of explanatory variables such as child characteristics, household head factors, household characteristics and the social or welfare indicators used in the study. In fact, these bar graphs used in the study indicates the percentage of child labor with respect to the explanatory variables. Additionally, the pie chart is used for the migration profile of Afghan refugees. Indeed,

pie chart is statistical graphic tool which divides the data in numerical portion that shows the distribution of the data.

3.5.3 Econometric Models

Econometric models are the statistical tools used in economics or econometrics. And the econometric models specify the relationship between variables under study. For this study we have estimated three different models for child labor among afghan refugees. The models estimated in the study are given as follows.

First, this study has estimated the relationship between child labor and the child, household head, and household characteristic. The outcome variable used in the first equation or model is “Child Labor” and the explanatory variables included in the model 1 includes the “Child, Household Head, and Household” factors. The functional forms of the equations estimated in the model 1 are as follows;

$$child\ labor = f(child, household\ head, household\ characteristics)..... (1)$$

Algebraically the relationship between child labor and the explanatory factors used in equation (1) can be written as follows;

$$y = \beta_o + \beta_i X_i + \mu_i \dots\dots (2)$$

Where y is the outcome variable used in model (1) X_i is the factor of explanatory variables such as child, household, household head characteristics. β_i is the parameter, U_s is the error term and y shows the outcome variable. The equation (2) can be rewrite as given;

$$y_o = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \mu_i \dots\dots (3)$$

The equation (3) can be written as given below

$$CL = \beta_o + \beta_1 CAG + \beta_2 CEDU + \beta_3 SEX + \beta_4 CETH + \beta_5 SIZ + \beta_6 LOC + \beta_7 INC + \beta_8 HOCU + \beta_9 LIT + \beta_{10} HAGE + \mu_i \dots\dots\dots (4)$$

In the equation (4), the symbol CL is the dependent variable “Child Labor”, are the is the β_o is the intercept and β_1 to β_{10} are the slope parameters. And μ_i is the error term. CAG is child age, $CEDU$ is child education, SEX is child sex, $CETH$ is child ethnicity, SIZ is household size, LOC is locale, INC is household monthly income, $HOCU$ household head occupation, LIT is

household head literacy and is *HAGE* household age. In fact, equation (4) is estimated in model using logistic regression because the outcome variable is binary.

In the second model the study has estimated the relationship between child labor and social indicators. Similarly, the outcome variable or dependent variable used in the model (2) is “Child Labor” and the explanatory variable is the factors of “social or welfare indicators”. The functional forms of the equations estimated in the model (2) are as follows;

$$child\ labour = f(social\ indicators)..... (5)$$

Algebraically the relationship between child labor and the explanatory factors used in equation (5) can be written as follows;

$$y_i = \beta_o + \beta_i X_i + \mu_i \quad \dots\dots (6)$$

Where y_i is the outcome variable, β_o is the intercept parameter, β_i is the slope parameters, X_i factors of social indicators and μ_i is the error term. The equation (6) can be rewrite as follows;

$$y_o = \beta_o + \beta^1 X^1 + \beta^2 X^2 + \beta^3 X^3 + \beta^4 X^4 + \beta^5 X^5 + \beta^6 X^6 + \beta^7 X^7 + \beta^8 X^8 + \beta^9 X^9 + \beta^{10} X^{10} + \beta^{11} X^{11} + \beta^{12} X^{12} + \beta^{13} X^{13} + \beta^{14} X^{14} + \beta^{15} X^{15} + \beta^{16} X^{16} + \mu_i \dots\dots(7)$$

The equation (7) can be written as given below;

$$CL = \beta_o + \beta^1 AVWTR + \beta^2 WTRTAP + \beta^3 SOWTR + \beta^4 DSWTR + \beta^5 TMCWTR + \beta^6 GAS + \beta^7 ELCT + \beta^8 PSCL + \beta^9 SPSCCL + \beta^{10} HLTU + \beta^{11} ACC + \beta^{12} NGO + \beta^{13} ROOM + \beta^{14} WRET + \beta^{15} LAND + \beta^{16} WSTW + \mu_i \dots\dots (8)$$

Where *CL* is the outcome variable “child labor” used in model (2). β_o is the intercept parameter, *AVWTR* is the variable “access to clean drinking water”, *WTRTAP* is the factor “no of hours the water is normally available in tap” , *SOWTR* is the variable “main source of drinking water”, *DSWTR* is the factor “how far or is the distance to main source of water”, *TMCWTR* is the variable “time consume for a round trip to pecth water”, *GAS* is the variable “gas connection”, *ELCT* is the factor “electricity”, *PSCL* is the factor “ availability of public school” , *SPSCCL* is the variable “availability of special school” , *HLTU* is the social indicator “basic health unit”, *ACC* is the social indicator “Afghan citizen card”, *NGO* is the factor “NGO’s presence”, *ROOM* is the social indicator “no of rooms”, *WRET* is the factor “willingness to return”, *LAND* is

the variable “land ownership”, $WSTW$ is the factor “why send to work”, μ_i is the error term, and β^1 to β^{16} are the slope parameters. In fact, equation (8) is estimated in the model (2) using logistic model, used in this study.

Finally, in the merged or model (3) the study has estimated the relationship between child labor and the explanatory variables such as the factors of children, the household head characteristics, the household characteristics and social indicators in a single model. Likewise, the outcome variable used in the model (3) is “child labor” and the independent variables are the child, household head, household and factors of social indicators. The functional forms of the equations estimated in the model (3) are as follows;

$$Child\ labor = f(Child, household\ head, household\ characteristics, social\ indicators) \quad (9)$$

Algebraically the relationship between child labor and the explanatory factors used in equation (9) can be written as follows;

$$y_i = \beta_o + \beta_i X_i + \mu_{i,\dots} \quad (10)$$

Where, y_i is the dependent variable “child labor”

X_i is the factor of explanatory variables used in model (3)

β_o is the intercept and β_i the slope parameters.

And, μ is the error term.

In fact, the equation (10) is estimated in the model (3), using logistic regression. Because the outcome variable used in the model is dictums or binary.

3.5.3.1 The logistic Model for Child labor

The logistic model used for child labor in this study is given as follows.

$$y_i = \varphi + \sum_{i=1}^{916} \varphi_i m_i + \varepsilon_i \quad y_i = (0,1) \dots (1)$$

The independent variables used in the study are represented by m_i and dependent variable is denoted by y_i . The parameters of the model are represented by φ_i and ε_i shows the error term of the model. As the dependent variable “Child Labor” is binary which takes the values “0” and “1”, the value “0” for child labor indicates that the child is not working as child labor and the value “1”

indicates that the child is working as child labor. And the explanatory variables used are also categorical and some are continuous therefore binary choice model is estimated. The reason behind logistic model is to identify the probability of child being engage in child labor given the explanatory variables. The general form if binary choice model or logistics model is shown in equation (2):

$$\rho_i = P(z_i = 1) = f(\varphi_0 + \varphi_1\alpha_{1i} + \varphi_2\alpha_{2i} + \varphi_3\alpha_{3i} + \dots + \varphi_\chi\alpha_{\chi i}) \dots (2)$$

Where,

$$i = 1, 2, 3, \dots, n$$

f = cumulative density function

φ_χ = parameters associated with xth explanatory variable

$\alpha_{\chi i}$ = xth explanatory variable for ith female

ρ_i = probability of being enrolled for ith female

z_i = Binary dependent variable for ith female

There are two commonly used binary choice models, binomial logistic and binomial probit models. The mathematical expression for logistic model and probit model are shown in equation (3) and equation (4) respectively:

$$\rho_i = \vartheta(\acute{\alpha}_i\varphi) = \frac{1}{1 + e^{-(\acute{\alpha}_i\varphi)}} \dots (3)$$

$$\rho_i = \omega(\acute{\alpha}_i\varphi) = \int_{-\infty}^{\acute{\alpha}_i\varphi} \frac{e^{(-\frac{t^2}{2})}}{2\pi} dt \dots (4)$$

$$\acute{\alpha}_i\varphi = \varphi_0 + \varphi_1\alpha_{1i} + \varphi_2\alpha_{2i} + \varphi_3\alpha_{3i} + \dots + \varphi_\chi\alpha_{\chi i}$$

The logistic cumulative distribution function is represented by $\vartheta(\acute{\alpha}_i\varphi)$ in equation (3) whereas the standard normal cumulative distribution function is represented by $\omega(\acute{\alpha}_i\varphi)$ in equation (4). The models have quantitative as well as categorical explanatory variables. For a continuous explanatory variable say α_j , it should hold following:

$$\frac{\partial p(z_i=1|\alpha_i)}{\partial \alpha_j} = \varphi_i \cdot f(\alpha_i \varphi) \dots\dots (5)$$

In above equation (5), marginal impact has been calculated by taking first derivative and $f(\alpha_i \varphi)$ represent density function corresponding to cumulative distribution function $\vartheta(\alpha_i \varphi)$ and $\omega(\alpha_i \varphi)$. The cumulative distribution function is a monotonic function starting that it increases in its entire range. So, the second term in equation (5) always remains positive due to chain rule of derivative. Consequently, whenever partial derivative is taken with respect to particular explanatory variable, equality between the signs of partial derivative and the parameter of the model appears. Furthermore, it is proved in equation (6) in case of logit model.

$$\frac{\partial p(z_i=1|\alpha_i)}{\partial \alpha_j} = \varphi_i (\vartheta(\alpha_i \varphi) \cdot (1 - \vartheta(\alpha_i \varphi))) = \varphi_j \cdot \rho_j \cdot (1 - \rho_i) \quad (6)$$

The Logistic cumulative distribution function is represented by $\vartheta(\alpha_i \varphi)$ in equation (6). As for as marginal impact of an interaction term is concerned, it is a matter of complexity. It is allowed to multiply to explanatory variables named as interaction term in applied econometrics. For instance, α_1 and α_2 are two variables in equation (7) and an additional variable named as interaction term has been created by multiplying both explanatory variables with each other in equation (7).

$$\rho_i = P(z_i = 1) = f(\varphi_o + \varphi_1 \alpha_{1i} + \varphi_2 \alpha_{2i}) \quad (7)$$

$$\rho_i = P(z_i = 1) = f(\varphi_o + \varphi_1 \alpha_{1i} + \varphi_2 \alpha_{2i} + \varphi_3 \alpha_{1i} \alpha_{2i}) \quad (8)$$

In order to find the marginal impact of α_1 and α_2 in equation (8) partial derivatives with respect to α_1 and α_2 are taken. Marginal impacts of α_1 and α_2 are shown below in equation (9) and (10), respectively.

$$\frac{\partial p(z_i=1|\alpha_i)}{\partial \alpha_1} = (\varphi_1 + \varphi_3 \alpha_{2i}) \cdot f(\alpha_i \varphi) \quad (9)$$

$$\frac{\partial p(z_i = 1|\alpha_i)}{\partial \alpha_2} = (\varphi_2 + \varphi_3 \alpha_{1i}) \cdot f(\alpha_i \varphi) \quad (10)$$

The standard normal and logistic distribution both are similar except the tails both have. Both models provide similar findings but if sample contains very small portion of one choice out the binary choices, results from logit and probit will not be similar (Boum, 2006). Logit model is

preferred over probit because odds ratios in logit model help to interpret the marginal effects. An odd ratio is defined as the ratio of two probabilities such as probability of favorable outcome (being enrolled in school) to the probability of unfavorable outcome (not being enrolled in school). The odd ratios for logit model are shown below in equation (11).

$$Odd = \frac{\rho_i}{1-\rho_i} = \frac{\left(\frac{1}{1+e^{-(\alpha_i\varphi)}}\right)}{\frac{e^{-(\alpha_i\varphi)}}{1+e^{-(\alpha_i\varphi)}}} = e^{(\alpha_i\varphi)} \quad (11)$$

The odd ratio's interpretation is provided by the exponential function. By holding other factors constant, odd ratio is expected to change by e^{φ_j} if α_j changes by one unit as it is shown in equation (12).

$$OR_j = \frac{\text{odds for } (\alpha_j+1)}{\text{odds for } \alpha_j} = \frac{e^{(\varphi_0+\varphi_1\alpha_{1i}+\varphi_2\alpha_{2i}+\dots+\varphi_j(\alpha_{ji}+1)+\dots+\varphi_\chi\alpha_{\chi i})}}{e^{(\varphi_0+\varphi_1\alpha_{1i}+\varphi_2\alpha_{2i}+\varphi_j\alpha_{3j}+\dots+\varphi_\chi\alpha_{\chi i})}} \quad (12)$$

To show the odd ratio for interaction term, equation (8) is again considered. The odd ratios for interaction term of α_1 and α_2 are shown below in equation (13) and (14).

$$OR_1 = \frac{\text{odds for } (\alpha_1+1)}{\text{odds for } \alpha_1} = e^{(\varphi_1+\varphi_3\alpha_{2i})} \quad (13)$$

$$OR_2 = \frac{\text{odds for } (\alpha_2+1)}{\text{odds for } \alpha_2} = e^{(\varphi_2+\varphi_3\alpha_{1i})} \quad (14)$$

3.6 Definition and Explanation of Variables

This section of the study defines and explain the variables used in the study. The dependent variable is "Child Labor" which is define as the children aged ranging from 5 to 14 years of age work for two or more than two hours per day. The dependent variable is binary therefore its takes the value "0" or "1". In fact, the binary value 0 indicates that the child is not participating in child labor and the binary value 1 shows that the child is engage in child labor. Additionally, the independent variables include the factor of child, household head, household characteristics and social welfare indicators. As shown in the table 3.1, the "0" indicates the base values and all other

categories of variables are tested against the reference or based values in the logistic regression model. The details of the variables are given in the table 1.

Table 1 Illustration of Variables Used in Analysis:	
Variables	Illustration
Dependent variable	Child labor (Children aged under 15 years) 1 if the child is working 0 if the child is not working
Explanatory Variables	
Child Characteristics	
Age of Children	1 if the child age is between 5-6 2 if the child age is between 7-8 3 if the child age is between 9-10 4 if the child age is between 11-12 5 if the child age is above 12 years
Child Sex	1 if the child is Male 0 otherwise
Child Education Level	0 if child have no formal education 1 if child have primary education 2 is child receive religious education 3 if child have higher education
Child Ethnicity	0 if the child ethnicity is Mughal 1 if the child ethnicity is Pusthun 2 if the child ethnicity is Baloch 3 if the child ethnicity is Tajik 4 if the child Ethnicity is Uzbek
Household Head Characteristics	
Household Head Occupation	0 if Household Head is not working 1 if household Head is working in Manufacture sector 2 if household Head is working in Agriculture Sector 3 if Household Head is working in Services Sector 4 if household Head is working in Construction
Household Head Literacy	0 if Household Head is Illiterate

	1 if Household Head is Literate
Household Age	Household Head in completed years
Household Characteristics	
Household Size	1 if Household size is Small 2 if Household Size is Medium 3 if household size is Large 4 if household size is very large
Locale (Districts)	0 if respondents are living in district Loralahi 1 if respondents are living in district Quetta 2 if respondents are living in District Pishin
Region	0 if Rural 1 if Urban
Monthly Income	1 if monthly Income is less than 15k 2 if Monthly income is between 15k-30k 3 if monthly income is between 30k-50k 4 if monthly income is between 50k-80k 5 if Monthly income is above 80 thousand
Welfare indicators	
Availability of Electricity	1 if Household have access to electricity 2 if household have no access to electricity
Gas connection	1 if Household have Gas Connection 2 if household have no gas connection
Afghan Citizen Card	1 if Household Members have Afghan citizen card 2 if Household Members have no Afghan citizen card
Access to Public School	1 if have access to Public School 2 if have no access to Public School
Access to Special School	0 if children have no access to Afghan Special School 1 if children have access to Afghan Special School (NGO operated) 2 if children have access to Afghan Special School (Private)
Access to Clean Drinking Water	0 if household have no access to Clean Drinking water 1 if household have access to Clean Drinking Water
Land Ownership	1 if household have Land Ownership in Pakistan 2 if household have No Land Ownership in Pakistan
Availability of Basic Health Unit	1 if Basic Health Unit is available in the region

	2 if Basic Health Unit is not available in the region
Is NGO operate in the Region	1 if NGO operates 2 otherwise
Time consume on round trip to fetch the drinking water	0 if water is inside home 1 if round tripe consumes 1-15 Minutes 2 if round tripe consumes 16-30 Minutes 3 if round tripe consumes 31-45 Minutes 4 if round tripe consumes 46-60 Minutes 5 if round tripe consume more than 60 Minutes
Main Source of Drinking water	0 if the main source of water is Piped water 1 if the main source of water is Hand Pump 2 if the main source of water is Motorized pumping/tube well 3 if the main source of water is open well 4 if the main source of water is Tanker/Truck/Water bearer 100 if the main source of water is Rahrhi
How far Source of Drinking water	0 if the water is Inside the home 1 if the distance to main source of water is 0- .5km 2 if the distance to main source of water is .5+ - 1km 3 if the distance to main source of water is 1+ -2km 4 if the distance to main source of water is 2+ - 5km 5 if the distance to main source of water is 5+ km
Availability of water in tab	0 if the water is available for 0-3 hours 1 if the water is available for 4-6 hours 2 if the water is available for above 6 hours
No of Rooms	0 if the number of rooms in home is 1-2 1 if the number of rooms in home is 3-4 2 if the number of rooms in home is 5-6 3 if the number of rooms in home is 7-8 4 if the number of rooms in home is above 8
why send to work	0 if parents consider Poverty as main reason of child work 1 if parents consider No future returns as reason of child work 2 if parents consider No access to school as reason of child work 3 if parents consider Culture as reason of child work

3.6.1 Rationales for the explanatory variables used in the study

There are four factors used for the estimation of child labor among afghan refugees. The factors include *child characteristics* such as *Age, Ethnicity, Education* and *Sex*. This study used the characteristics of the children because the phenomenon *Child Labor* is associated with these factors. And, many studies have included the child characteristics while examining the likelihood of child labor such as (Amin et al., 2004), (Mohamed Baqutayan et al., 2020), (Lodhi et al., 2011),

(Fahlevi, 2020) and many other studies has included child labor characteristics while investigating the incidence of child labor. Likewise, this study has included child labor of Afghan refugees of estimation of child labor among Afghan refugee. Moreover, this study expects high probability of child work with rise in child age, and expect low rate of child labor when the children have high level of education. And, the probability of child labor also very with *child ethnicity*. In fact, each ethnicity has unique culture which shape their way of life and perception towards education of child work. And, there are number of studies that explain the variation in child labor based on the ethnicity of the child labor such as (Zapata et al., 2011). Therefore, this study has included the variable child ethnicity to examine the likelihood of child labor with respect to child ethnicity.

Additionally, the factor *household head characteristics* includes household *Occupation, Literacy, and Age of household*. Likewise, child characteristics this study has included the household head characteristic because the household head factor has strong relationship with the persistence of child labor. In fact, the decision to send children for work or to enroll in school is determined by the parents and head of the household, which further depends on the household head education level, the occupation they engage in and the age of the head of house. Therefore, this study included household head characteristics in order to find the probability of child labor with regards to household head characteristics. Furthermore, the factor *household characteristic* includes *Household Size, Locale, Region (rural /urban) and Monthly Income* as shown in the table 3.1. household or family characteristics are very important while studding the phenomenon of child labor. In fact, we expect positive relationship between child labor and household size, as the number of people in the family increase the investment on child education decreases. And, expect negative trend with the variable monthly income moreover, the impact of local may be ambiguous.

The factor household characteristics are considered as key determinant of child labor in number of studies such as (Moehling, 2004), (Amin et al., 2004), (Ray, 2000), and (Kruse & Mahony, 2000). Therefore, this study has included Afghan refugee's household characteristics to examine the probability of child labor among Afghan refugees.

Finally the factor *social indicators or welfare indicators* includes the variables such as availability *electricity, gas connection, Afghan citizen card, access to public school, access to Afghan special school, access to clean drinking water, land ownership, availability of basic health unit, presence of NGO's, time consume to main source of water, main sources of water, distance to main source of water, availability of water in tap (number of hours), number of rooms in house and the parents or household head perception for child work* among afghan refugees. In fact, most of the variables used are not investigated yet but they are relevant in context of each society in general and refugees in particular. As most of the refugee living in Pakistan have no legal permission to get access to electricity or gas connection. This ban on use of basic needs of life compel the impoverished refugees to arrange through other means such as children. and, this become a duty of the children to bring wood for stove or cooking therefore most of the Afghan children are engage in collecting garbage (Tufail et al., 2004). And, the variable identity (Afghan citizen card) is also associated with child labor (Haider et al., 2016) as everywhere for the enrolment of children in public or private school demands the record of the child parent but in absence of identity they face difficulties or even impossible for the parents to enroll their children in schools. Same is the case with Afghan refugees who are not registered by UNHCR. This identity crisis further leads to child labor. and , sometime children simply engage in work because they have no access to school (may be far away from them) (Siddiqi & Patrinos, 1995) , (Betcherman et al., 2004). And, the variable access to special school is relevant in context of Afghan refugees because they are the refugees are allowed to get education in special schools run by the NGO's in Pakistan most of the Afghan special school operate under the mandate of UNHCR. Thus, the probability of child labor among Afghan refugees very with access to public and special school.

And, the Afghan refugee's children are mainly devoting most of the time for carrying water from main sources to home. Actually they have limited access to piped water at home. Thereby, it's important to investigate the incidence of child labor with regards to access to clean drinking water. the variable land ownership also indicates the living standards of people. Many studies have

included the variable “land ownership” as explanatory variable while measuring the likelihood of child labor (Basu & Tzannatos, 2003), (S. R. Bhalotra & Tzannatos, 2003). Therefore, it’s rational to include the variable land ownership in this study.

Additionally, this study has included the independent variables such as access to basic health unit, which shows the living standards, and presence of NGO’s as explanatory variable because it’s the mandate of the NGO’s to facilitate the refugees. We expect negative association between child labor among afghan refugees and presence of the NGO’s in the region. Although, it’s important to empirically investigate this assumption either the NGO’s are performing or not. Furthermore, variables such as main source of water, distance to main source of water, time consume to main source of water are included in this study because this study counts the house chores therefore its meaningful to check the probability of child labor with these variables as well. And, finally, the study included the causes of child work, that the parent or the head of household consider the dominants factor behind child labor among Afghan refugees.

3.7 Locale of the Study

This study covers three major districts of Balochistan where Afghan Refugees have taken refuge. These includes Distric Quetta, District Pishin and District Loralahi. In fact, Quetta is the capital of Balochistan. And, the refugees living in Quetta city are not considered as the residents in camp, rather they are the Afghan refugees living outside of the camps provided by the UNHCR. This study has targeted different area in Quetta where the Afghan Refugees are living. The area covered within Quetta Districts includes Qadir Abad where most of the Mughal, Baloch and Pasthun Refugees are living, Nawa Killi wher phusthus refugees are investigated, Uzbek Bazar where majority of Uzbeks live, Ghous Abad where Tajiks and Uzbeks are taking refuge and No Abad where majority of Uzbek community. Are living. Moreover, from District Loralahi this study has selected two camps of Afghan Refugees. The Loralahi camp is located in district Loralahi. And, it’s about 262 km away from Quetta city. It’s a camp that houses more than 9,000 people and has been open since 1979 (Aljazeera news). Most of the Afghan refugees living in loralahi camps are Pasthus. Moreover, this study has selected two refugee’s camps with in Loralahi refugee camps such as Zar Karaz camp 1 and Karaz camp 2.

And, from district Pishin the Surkhab afghan refugee’s camp is covered. The Surkhab afghan refugee’s cam located in district Pishin. And, it’s about 60 km away from Quetta city.

Moreover, this study has selected two camps with in Surkhab Refugees camps such as Surkhab Wrdag Camp and Surkhab Zar Karaz Camp. In both camps majority of Pusthun are living. And most of the population are engaged in agriculture sector.

FIGURE 3 MAP OF QUETTA CITY



Chapter 4

Descriptive Analysis

The data related to the study was collected, structured and analyze through scientific methodology. And, the findings of the study are presented and discussed in this chapter.

4.1 Descriptive Analysis

This study has included the descriptive analysis to achieve the objectives of the study along with to examine the demographic, socio-economic characteristics and Afghan Refugees Migration Profile of Afghan Refugees residing in Balochistan, Pakistan. Indeed, the descriptive analysis is the most widely used technique Nachmias and Nachmias (1992) To describe, categorize and summarize the data analytically in a comprehensive form, Percentages (or mean) and classification of data is the center of descriptive analysis.

4.2 Descriptive statistics of child labor Model

This section of the study comprises of summary or descriptive statistics of child labor among Afghan refugees which include the variables, number of observation, percentages, mean, standard deviation, the minimum and maximum values.

Table 2 Summary Statistics of Child Labor Model					
variables	observation	Mean /Percentage	Std.Dev	Mini	Maxi
Chl_work for others	916	1.9 / 11.8	0.323		
Hours work for others	916	0.621	1.843	0	12
Chl_work HH Chores	916	1.469 / 53.5	0.499		
HH_Chores work hours	916	1.30	1.388	0	8
Chl_work Family business	916	1.96/ 4.4	0.204		
Family business Working hours	916	0.14	0.715	0	6
Child Labor	916	.5283 / 52.8	0.499		

The table 2 shows the summary statistics of Child Labor model used to measure the incidence of child labor. According to this study “Child Labor” is define as a child aged ranging

from 5 to 14 work for two or more than two hours per day. In order to conceptualize child labor, the study used three measures. Such as, **Chl_work for others** whether the child work for someone else who is not member of household either paid or unpaid. **Chl_work HH Chores**, indicates child work or help with household such as shopping, collecting firewood, cleaning, fetching water etc. And, **Chl_work Family business**, shows any other household work on farm, business or selling goods in streets. Indeed, the first measure capture market child labor and the last two measures capture the domestic incidence of child labor among Afghan refugees.

As shown in the table on average 11.8% of Afghan children are working for someone else who are member of household. Moreover, on average children among afghan refugees work 0.62 hours per day for someone who are not member of household. With maximum working hours reported in survey is 12 hours per day. However, child work is dominant with in family. As shows in the table on average 53.5% of children aged ranging from 5-14 are engage in household chores. Similarly, Afghan children have devoted most of the time for household activities. In fact, on average Afghan children spend one and half (1.30) hours per day for household activities. And, the maximum number of hours the respondents cited is 8 hours per day for household chores. On the other hand, the percentage of children working with in household/ family business is very limited. The study reveals that on average only 4.4 % of Afghan children are participating in family business. Likewise, on average they devote only 0.14 hours per day for family business. The variation in participation in three measures is owing to the demographic characteristics and the situation Afghan refugees are facing. The Afghan children devote most of the time for household activities such as fetching water, cleaning, collecting firewood's because they have no access to such facilities. And, this become responsibility of a children to fulfil. The reason behind this are well explained in section of Social welfare indicators of Afghan refugees. Which show that 78% of Afghan refugees have no access to electricity,77% have no gas connection and 65% have no access to clean drinking water. And, the percentage of child labor participation in family business is low because most of Afghan refugees according to the survey are working as daily wager. In other words, they have limited self-established business.

In the last **Child Labor** in the table shows the total number and percentage of child labor who work two or more than two hours per day either domestic or participating in market for paid or unpaid activities. As shows in the table the total number of children aged between 5 and 14 is

916. Out of the total number of children approximately 53 per cent of children are working as child labor, according to the definition of child labor used for this study.

4.3 Descriptive statistics of child labor with respect to child characteristics

Table 3 Summary Statistics of Children		
Variables	observations	Mean or Percentage
Child Age	916	9.60
Between 5 -6	185	20
between 7-8	187	20.4
Between 9-10	174	19.0
Between 11-12	173	18.9
Above 12 years	196	21.4
Total	916	9.6
Sex	916	0.56
Male	513	56
Female	403	44
Child Education		
No Formal Education	480	52.6
Primary	240	26.2
Higher	168	18.3
Other	26	2.84
Ethnicity		
Pasthun	460	50.2
Baloch	107	11.7
Tajik	143	15.6
Mughal	80	8.7
Uzbek	126	13.8

The table 3 summarizes the incidence of child labor with respect to child characteristic. The factors investigated in the study includes for characteristics of children. such as child age, child sex, level of education and ethnicity. The determinant of child labor included in the study Child Age, indicates the age of children in years; the average age of children is 9.6. and the

minimum age of children is 5 years and maximum age is 14 years. In fact, we have divided child age in five categories because the motivation for household to send children to work may vary for older as compare to younger children. And, we expect the families more likely to send older children to work as compare to the younger. Similarly, as shown in the table 4.2 the children aged above 12 years are more likely to participate in child labor. In fact, according to the study 21.4% of children aged between 13- 14 are engage in child labor. And, 20% of children age ranging from 5 to 6 are engage in child labor.

Another determinant of child labor used in this study is child sex, indicates the incidence of child labor with respect to the gender; on average 56% of male (boys) are participating in child labor and 44% of female (girls) are working as child labor. According to Delap (2001, p. 11), "family decision- makers are reluctant to send girls out to work and they will only send to work when all other family members are working but they still need additional income. As this study is captures both domestic and market child labor, and girls are more likely to participate in household domestic activities. Therefore, the variation in child labor among afghan refugees with respect to sex is small.

Additionally, the determinant of child labor is child level of education. We have distinguished the level of education in four categories. As shown in the table no formal education indicates that children working or participating in child labor have "0" year of schooling. In fact, 52.6% of Afghan children with no formal education are working as child labor which is highest among four categories. And the incidence of child labor decreases with level of education. On average 26.2% with Primary and 18.3% with higher level of education are engage in child labor among afghan refugees. And, the other category indicates the religious education. Approximately 3% of children with religious education are participating in child labor. Indeed, the incidence of child labor among those children are lowest who have religious education. They may stay for in institution (Madaress).

Moreover, ethnicity is another determinant of child labor. This study examines five major ethnic groups among afghan refugees. These are Pusthuns, Baloch (pusthun-Baloch), Tajiks, Mughals and Uzbeks living in Balochistan. However, the incidence of child labor among Pushtun ethnicity is prominent. On average 50% of Afghan working children are Pusthuns. On the other hand, 8.7% of Mughal ethnicity are participating in child labor. Moreover, 11.7% of Baloch, 15.6%

of Tajik and 13.8% are Uzbeks working children. The variation may be due to the variation in sample size of each ethnic group.

4.4 Descriptive statistics of Household Characteristics

Table 4 Summary Statistics of Household Characteristics		
Variables	frequency	mean/ Percentage
Household Size	916	14
Small	154	16.8
Medium	393	42.9
Large	289	31.6
very large	80	8.7
Districts		
Lorlahi	102	11.4
Quetta	596	65.1
Pishin	218	23.8
Region		
U_R	916	
Urban	596	65.1
Rural	320	34.9
Monthly Income	914	35596
Less than 15k	247	27.0
Between 15k-30k	211	23.1
Between 30k-50k	260	28.5
Between 50k-80k	141	15.4
More than 80k	55	6.0

The table 4 summarize the household characteristics. The variable household size indicates the number of people in the household. The average household size is 14. We have distinguished household size in four categories. Such as small which consist of 8 members, Medium household comprises of 9-14 members with family, the large families indicate household size ranging from 15-23 and finally very large household indicates a household with more than 24 members. In fact, medium family /household size is dominant with approximately 43%. And, 8.7% are very large

family size used in this study. Moreover, according to the data 16.8% are small size and 31.6% are large family among afghan refugees.

Another factor included in this study is local which indicates the districts where Afghan Refugees are living. In fact, this study covers three districts of Balochistan. The districts include Quetta, District Pishin and District Loralahi. Indeed, 56% of Afghan refugees are living in District Quetta. 32% of refugees taken for this study are resident of District Pishin. And, 11.4% of Afghan refugees are living in district Loralahi.

This study further distinguishes the incidence of child labor with respect to region; which shows the number of people living in cities (urban areas) and rural areas. On average majority of Afghan refugees are living in urban area. As shown in the table 65% of refugees are settled in urban areas. And, approximately 35% of Afghan refugees are living in rural areas. In fact, rural areas show the number of refugee's population living with in Afghan refugee's camps.

Furthermore, the variable monthly income indicates total income household received per month; on average Afghan refugees according to the study received Rs 35596, but the income is not normally distributed among Afghan Refugees as reflected by the standard deviation in the table. For this study we have divided monthly income in five categories in order to capture the incidence of child labor among each group. As shown in the table 27% of Afghan refugees have monthly income less than Rs 15000 per month. 23% of household receive Rs. ranging from 15000 to 30000 per month. And, majority of the Afghan Refugees receive Rs ranging between 30000 - 50000 per month. 15% have monthly income between 50000-80000. And, only 6% of Afghan refugee's family income is higher than Rs 80000 per month.

4.5 Summary Statistics of Household Head Characteristics

Table 5 Summary Statistics of Household Head Characteristics		
Variables	Frequency	Mean / Percentage
Household Head Occupation	916	1.926
Unemployed	300	32.8
Manufacture	72	7.9
Agriculture	89	9.7
Services	306	33.4
Construction	149	16.3
household Head Literacy	916	.256
Literate	235	25.7
Illiterate	681	74.3
Household Head Age	916	50.4

The table 5 indicates the summary statistics of Afghan Refugees Household Head characteristics. This research has linked three characteristics of household head with child labor. The household head characteristics includes, Household Head Occupation, Literacy and Age of household head. The factor household head Occupation shows either household is unemployed or working in Manufacture, Agriculture, Services or Construction sectors of economy. As shown in the table approximately 33% of Afghan refugees household head are unemployed. And, majority 33.4% are working in services sector. In manufacture sector only 7.9% are engaged. Moreover, in Agriculture sector 9.7% and 16.3% of Afghan refugee's household are working in construction sector.

Another characteristic of household head included in the study is Household Head Literacy. Household head literacy indicated the education level of Afghan refugee's household head; on average 25.7% of household head among afghan refugees are literate and 74.3% are illiterate. In fact, literate indicate the number of people who can read and write. On the other hand, illiterate shows those household head who can't read and write. However, majority of Afghan Refugees household head are illiterate. Finally, the Household Head Age indicates the age of household head in years; on average the age of Afghan Refugees household head is 50 years.

4.6 Summary Statistics of Welfare Indicators

Table 6 Summary statistics of Welfare Indicators		
Variables	Frequency	Mean / Percentage
Availability of Electricity	916	32
Gas Connection	916	2.334 / 33.
Afghan Citizen Card	916	1.26 / 74
Access to Public School	916	1.89 / 11.4
Access to Special School		
NGO	534	58.30
Private	117	12.80
Access to Clean Drinking water	916	0.348
Land Ownership	916	1.670 / 33
Availability of Basic Health Unit	916	1.881 / 12
NGO operate	916	0.528
Time Consume round Trip Fitch water	832	3.18
within house (0)	25	3
1- 15 Minuit's	70	8.50
16-30 Minutes	150	18
31-45 Minutes	220	26.70
46-60 Minutes	202	24.50
60 + Minutes	156	19
Main Source of Drinking water		
Piped water	198	21.6
Hand Pump	65	7.1
Motorized pumping/tube well	38	4.2
open well	109	11.9
Tanker/Truck/Water bearer	88	9.61
Rahrhi	418	45.6
How far Source of Drinking water		
Inside the home	176	21.3
0- .5km	67	8.1
.5+ - 1km	202	24.4
1+ -2km	233	28.2
2+ - 5km	78	9.4
5+ km	71	8.59
Availability of water in tab		
0-3	275	30
4-6 hours	62	7

above 6 hours	579	63
No of Rooms		
1-2 rooms	208	23
3-4 rooms	430	47
5-6 rooms	187	20
7-8rooms	65	6
above 8 rooms	35	4
why send to work		
Poverty	548	60.6
No future returns	183	20.2
no access to school	139	15.4
Culture	34	3.8

The table 6 summarize the social indicators of afghan refugees living in Balochistan. This study has linked child labor with socioeconomic factor, in other words with quality of life. We have included social indicators because most of Afghan refugees have very low standards of living and indeed these are linked with the incidence of child labor among Afghan Refugees. As shown in the table, the study has included variable “Availability of Electricity” which indicate the household have access to electricity or not. However, only 32% of Afghan Refugees have access to electricity. And, majority of Afghans living in Pakistan have no access to electricity.

Another factor of social indicator included in the study is Gas connection. This shoes either the household have gas connection or not. No doubt, this variable has close relation with incidence of child labor. In fact, those families who have no access to gas connection use firewood for stove and this become responsibility of children to collect firewood same is the case among afghan refugees. Therefore, we have included this variable in the study. In fact, on average 33% of Afghan refugees have gas connection? But, majority of the refugees are deprived of this basic need.

Lack of identity have identity or possession of Afghan Citizen Card is another determinant of child labor used in this study. The variable actually indicates weather Afghan refugees living in Pakistan have (Majar Card) Afghan citizen card or not. In other words, are the Afghan Refugees are registered or non-registered. As shown in the table 74% of Afghan refugees reported that they have Afghan citizen card.

Moreover, as shown in the table 11.4% of Afghan children have access to public school. Majority of the children have no access to public school. This may be due to the establishment of special school for Afghan refugee's children. furthermore, this study used the variable 'access to Afghan Special School' which indicate either Afghan children have access to special school or not; on average 70 % of Afghan children have access to special school. And, the categories 'NGO' shows the percentage of Afghan children have access to special school run by the NGOs. And 'Private' indicates the percentage of Afghan children who have access to special school but they need to pay for it. In fact, the according to this study 58% of refugees cited that they have access to special school established and run by the NGOs and 12 % have reported that they have access to Afghan Special School which are privately established and privately operates.

Other important variable used in this study is access to clean drinking water. Which shows either Afghan refugees have access to clean drinking water or not. As shown in the table 35% of Afghan refugees have access to clean drinking water. But majority of the refugees under study have no access to clean drinking water. And, we have included the variable land ownership which has close link with child labor. In fact, land ownership indicates the position of land (house or other kind of land use for commercial activities) by Afghan refugees. On average 33% of respondents have reported that they have land ownership. Availability of basic health unit is another indicator of standard or living. This factor measures the availability of basic health unit within given region. However, according to this study only 12 % of Afghan refugees have access to basic health unit in their surroundings. But, reaming 88% of Afghan refugees under study are deprived of basic need of basic health units.

Non-Governmental Organizations (NGO, s) are the key stake holders of Afghan refugees and they have the mandate to facilitate the refugees. most importantly the UNHCR, therefore the study used NGO's presence to distinguish the incidence of child labor in the regions where the NGO's are active with area or household how are not facilitated by the non-governmental organization (NGO's). Indeed, 52% of Afghan refugees under study have reported that NGO's are operating in their respective regions.

Additionally, this study used the variable the time consume for a round trip to fetch the drinking water, which measures the time household need to devote for a round trip to source of drinking water. And, we have categorized in five categories. As shown in the table the household

who need not to consume time for water are only 3%. Actually they have water access within household. On the other hand, 26.7% of Afghan refugees under study reported that they need to spend 31-45 minutes for a round trip to fetch drinking water. Moreover, 8.5% consume 1-15 minutes, 18% consume 16-30 minutes, 24.5% consume 46-60 minutes and 19% consume more than one hour (60+ minutes) for a round trip to fetch the drinking water.

Moreover, the variable “Main Source of Drinking water” indicates the percentage of main source of water used by Afghan refugees in Baluchistan. As shown in the summary statistics table there are six main sources of water used by the refugees. on average 21.6% of Afghan refugees use piped water as major source of water, 7.1% have Hand Pump, 4.2% of refugees use tub well About 12 % used Open Well, 9.6% use Tanker and 45.6 % of the refugees use Rahri as main source of drinking water. In fact, the summary statistics indicates that majority of Afghan refugees main source of drinking water is “Rahri”.

Additionally, the study has included the factor “How Far source of drinking water”. This shows the distance of main source of drinking water from home for Afghan refugees. And, this study has distinguished the factor in six categories. In fact, the category “Inside the home” shows that household have water with in house and need not to cover any distance for water. As shown in the summary statistics 21.3% of afghan refugees as reported that they have water access within house. And, this is constant with variable “piped water “as main source of water. moreover, 8.1% of Afghan refugees reported that they need to cover 0-.5km, 24.4% covers .5-1km, 28.2% of refugees need to cover 1-2km, 9.4% cover 2-5km and about 9% of Afghan refugees need to cover more than 5km for main source of drinking water. Thus majority of Afghan refugees need to cover 1-2km for main source of drinking water.

Another variable relater to availability of water is “No of Water in Tap” measures the number of hours’ water is normally available in the tap. As shown the table 30% of Afghan refugees reported 0-3 hours, 7% reported 4-6 hours and 63% of Afghan refugees reported more than 6 hours. Similarly, the factor “No of Rooms” measures the number of rooms the household possess. In fact, the descriptive statistics indicates that on average 23% of Afghan refugees have 1-2 rooms in the home.47% in the survey reported 3-4 rooms, 20% of refugees reported 5-6 rooms, 6 % reported 7-8 rooms and 4% of Afghan refugees reported more than 8 rooms within house.

However, majority of Afghan refugees have 3-4 rooms with in house, which indicates the medium family size and consistent with the summary statistics of “household size”.

Finally, the summary statistics shows Afghan Refugees response to the question “Why you send children to work”. The responses recorded during the survey includes “Poverty”, “No Future Returns”, “Have no access to School” and “Cultural Factor”. In fact, the summary statistics shows that 60.6 percent of Afghan refugees send children to work instead of school owing to “Poverty”. Indeed, poverty is the dominate reason for sending children to work among afghan refugees. And, about 20 % of the refugees reported that they send children to work because education has “No Future Returns” for Afghan refugees. Moreover, 15.4% reported “unavailability of school” and about 4% perceive “Culture” as reason for sending children to work.

4.7 Summary Statistics with Regard to Migration

Table 7 summary statistics of Afghan Refugees Migration Profile		
Variables	Frequency	Mean / percentage
Year of Migration	277	1983
Between 1960-1975	3	3.2
between 1976-1980	138	49.3
between 1981-1985	80	28.6
between 1986-1990	7	2.5
Above 1990	46	16.4
Country of household head birth		
Pakistan	50	18.3
Afghanistan	224	81.8
Birth by Districts		
Quetta	24	49.0
Pishin	22	44.9
Lorlahi	3	6.1
Reason of Migration		
War	272	97.1
Lack of Safety (Afghanistan)	159	56.8
High Crime (Afghanistan)	45	16.1
Poverty	75	26.8
Protection of Modesty	124	44.3
Political Stability (Pakistan)	42	15.0
Safe (Pakistan)	89	31.8

Others	19	6.8
Willingness to return to Afghanistan		
Willing	33	3.6
willing with Peace in Afghanistan	266	29.0
Reasons for not returning		
War	36	4.0
Lack of Safety	410	45.3
Lack of services	127	14.0
we are Happy here	332	36.7

The above table 7 summarizes the variables used in the migration model. The first variable used for migration model is the country of birth of the head of household of Afghan Refugees. In fact, this measures the percentage of Afghan refugees who are either born in their country of origin (Afghanistan) or in country of destination (Pakistan). As shown in the table 18% of Afghan refugees cited Pakistan as their birth place. Approximately 82 % of Afghan refugees have reported Afghanistan as their birth place. Moreover, the study has further explored the districts in which Afghan Refugees household head born (the 18% who have reported Pakistan as birth place). Indeed, the second variable ‘birth by district’ designates the district in which Afghan refugee’s household are born. On average 49% of household have reported district Quetta as their birth place. 44% of Afghan refugee’s household head have cited district Pishin as their birth place. And, 6.8% have reported district Loralahi as their birth place.

In addition, this study covers the inflow of Afghan refugees to Pakistan. The variable ‘years of migration’ measures the years in which Afghan Refugees migrated to Pakistan. In fact, this study has categorized the years of migration in five categories in order to capture the intensity of migrants within given time period. As shown in the table only 3.2% of Afghan refugees migrated to Pakistan between 1960 -1975. The inflow of migrants augmented between years ranging from 1976-1980. 49% of Afghan refugees under study have reported 1976-1980 as years of their influx. During 1981-1985, 26% of Afghanis migrated to Pakistan. Though, the inflow of migrants was 2.5% during 1986-1990. But, the refugee’s influx according to this study augmented after 1990, with 16.4% of refugee’s influx.

Additionally, the variable ‘reasons of migration’ in the table indicates the reason behind Afghan refugee’s influx to Pakistan. In fact, there are many reasons for refugee’s inflow to

Pakistan (or departure from Afghanistan). However, the most prominent reason the Afghan refugees reported is 'War' in Afghanistan which compelled Afghani's to live their country of origin. As shown in the table 97% of the respondents have cited war as a reason of their inflow to Pakistan. And, about 57% of the respondents have stated that Afghanistan was not safe for them therefore they moved toward Pakistan. Moreover, 16% reported high crime rate (in Afghanistan), about 27% cited poverty, 44% of respondents reported 'protection of modesty', 15% of Afghan refugees (respondents) reported 'Political Stability (in Pakistan) and approximately 32% of respondents have stated that Pakistan was / is safe place for them therefore they migrated to Pakistan.

Furthermore, we have included the variable 'refugee's willingness to return to Afghanistan'; which indicates the willingness of Afghan refugees to return to their country of origin (Afghanistan). Either the refugees under study are willing to return or not. In fact, the findings of the study indicate that about 4% are willing to return to Afghanistan. And, 29% of the refugees associated their outflow to Afghanistan with condition of peace in Afghanistan. The rest 67% reported that they are not willing to live Pakistan at all.

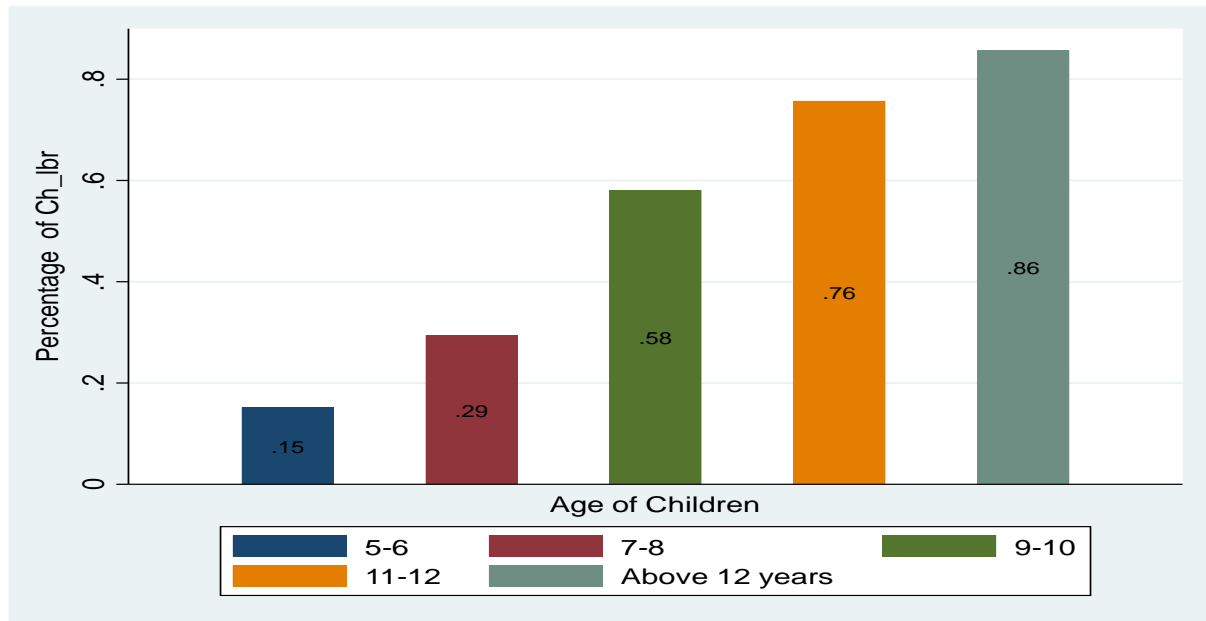
Finally, the migration model has explored the reasons for not returning to Afghanistan. The variable 'Reasons for not returning to Afghanistan' in the table explores the reasons the Afghan refugees have reported some barriers in way of their return to country of origin (Afghanistan). In fact, 4 % of the respondents are reluctant to return to Afghanistan owing to 'war' in Afghanistan. And, 45.3% of Afghani's (respondents) are not willing to return due to 'lack of Safety' in Afghanistan. 14% has stated 'lack of services' in Afghanistan as a barrier in their way to move to Afghanistan. Finally, about 37% of Afghani's reported that they are not willing to return to Afghanistan because they are 'happy' in Pakistan.

4.8 The Incidence of Child Labor with respect to socioeconomic factors

This section of the study presents the graphic relationship between child labor and the explanatory variables used in the study. In fact, this section shows the percentage of child labor with respect to the factors such as Child Characteristics, Household characteristics and Household Head characteristics.

4.8.1 Child Labor with regards to child age

FIGURE 4 CHILD LABOR WITH REGARDS TO CHILD AGE

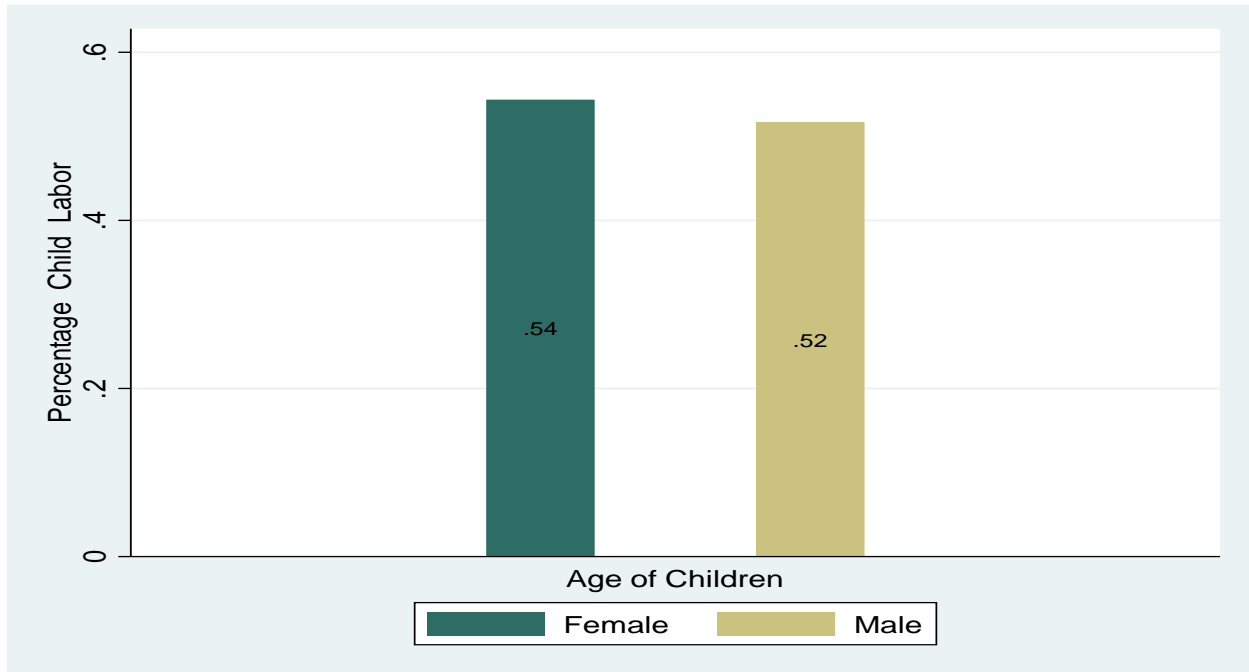


The fig 4 links the incidence of child labor among Afghan refugees with regards to children age. In fact, this study defines child labor as a children aged ranging from 5-14 work for two or more than two hours per day. Thus, as shown in the fig the percentage of child labor increases with rise in age of the children. In fact, 15% of the children aged ranging from 5-6 years are working as child labor. And, 86% of children are working as child labor who are above 12 years of age. All in all, there is positive relationship between child labor and age of the children.

4.8.2 Child Labor with respect to Child Sex

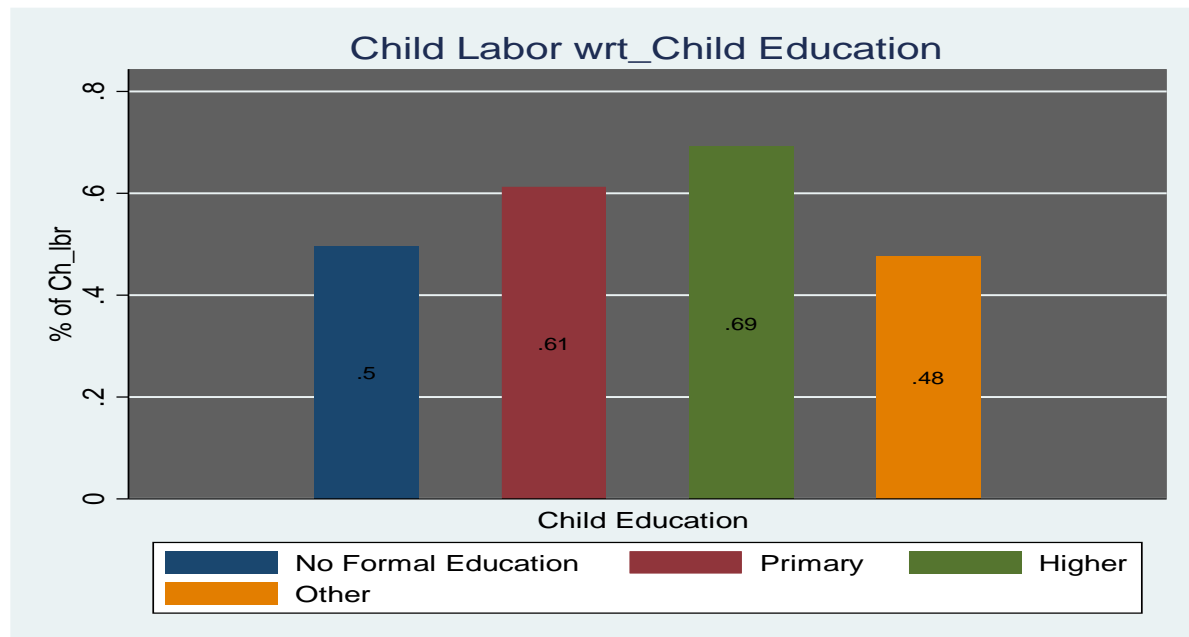
The graph 5 shows the percentage of child labor with respect to child sex. On the vertical axes we plotted the percentage of child labor and on the horizontal axes we plotted child sex. The result reveals that the incidence of child labor among females is 54 percent and 52 percent of male children are working as child labor among Afghan refugees. However, the prevalence of child labor among females are more than male children. This variation may be due to domestic work where females are more likely to participate in work. Indeed, this study has analyzed both market and domestic work among afghan refugee's children.

FIGURE 5 CHILD LABOR WITH REGARDS TO CHILD SEX



4.9.3 Child labor with respect to child education:

FIGURE 6 CHILD LABOR WITH REGARDS TO CHILD EDUCATION

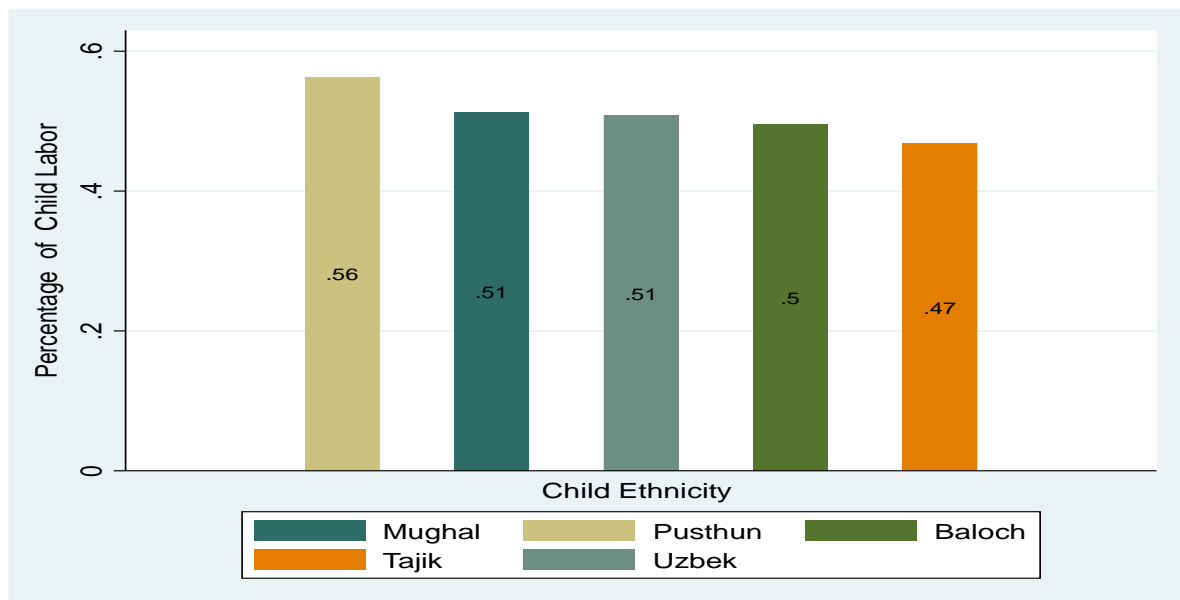


The figure 6 indicates that how the incidence of child labor very with level of education of the children. The variable is included in the study because child education has important role in determining the probability of child labor. And we expect negative association between the two

variables. Moreover, the study has distinguished categories of child education in four, such as no formal education, primary, higher and other. The last category used in the study “others” indicates that the child is getting Islamic education from religious institutions (Madares). However, the finding reveals that 50 % the children with no formal education are working as child labor. And, the child labor increase to 61% if children have primary education and the incidence of child labor augmented to 69% for the children who have higher education. Comparatively, the phenomenon of child labor is less (48%) among afghan refugee’s children who are getting Islamic education. The percentage of child labor increase with level of education because their age also increases which as positive relationship with child labor. And, the percentage of child labor among children engage in Islamic education is less because they may be residing within religious institutions (Deeni Maddares).

4.8.3 Child Labor with regards to child Ethnicity

FIGURE 7 CHILD LABOR WITH REGARDS TO CHILD ETHNICITY

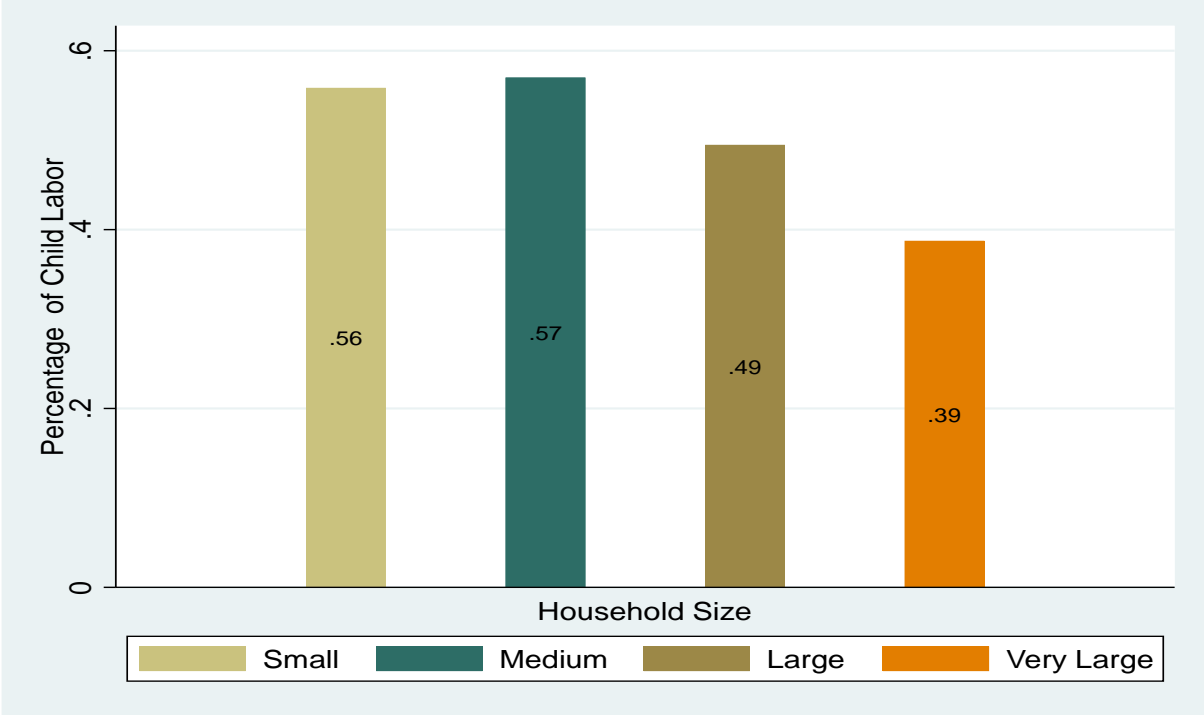


The Bar graph 7 shows the percentage of child labor with respect to child ethnicity. On the vertical axis the percentage of child labor is plotted. And, on the horizontal axis five ethnic groups of afghan refugees are plotted. In fact, this study covers five ethnic groups of Afghan Refugees living in three different districts of Balochistan. The ethnicities include Pushtuns, Baloch, Tajiks, Mughal and Uzbeks. On average the percentage of child labor among each ethnic group is 50 per

cent. However, the incidence of child labor among Pushtun ethnic group is dominant, with 56 per cent of children below 15 years of age are indulge in child labor. And, 47 per cent of Tajiks children are involved in child labor which is lowest among five ethnicities under study. Moreover, about 51% of Baloch, Uzbeks and Mughal children are working as child labor.

4.8.4 Child Labor with respect to household Size

FIGURE 8 CHILD LABOR WITH REGARDS TO HOUSEHOLD SIZE

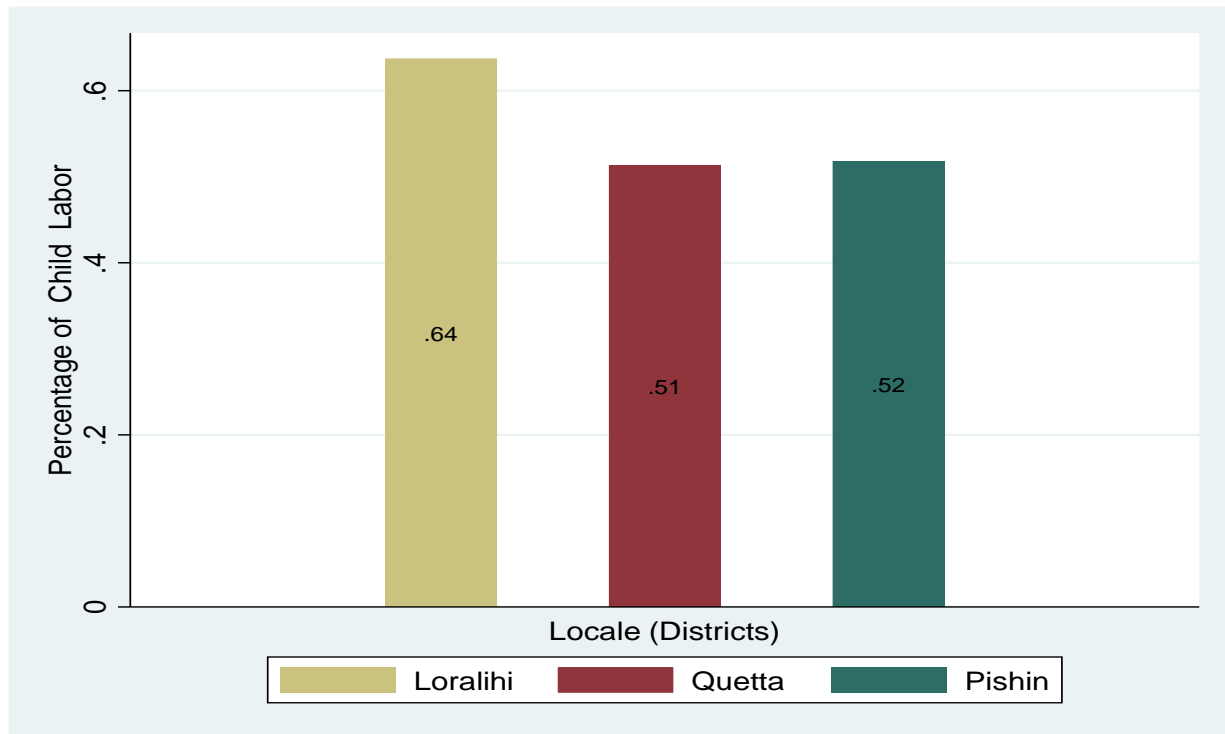


The bar graph 8 reveals that how the incidence of child labor very with size of family. This study divided household size in four categories such as small, medium, large and very large. The household comprises of 8 or less than eight members are is considered as small family. And, define the Medium family with household members between 9 and 14. Large household size consist of household members between 15 and 23. Finally, very large household or family size mean the household with 24 or more than 24 members in family. In fact, 57 per cent of children belonging to medium family are indulge in child labor, which is highest among five categories of household size. And, lowest among very large family size with 39 per cent of children under age of 15 are working as child labor. Moreover, 56 per cent children of small household size and 49 per cent children of large household size are engage in child labor. Overall, the percentage of child labor

decreases as the size of household increases from medium to large and from large to very large family size.

4.8.5 Child Labor with regards to Locale (Districts)

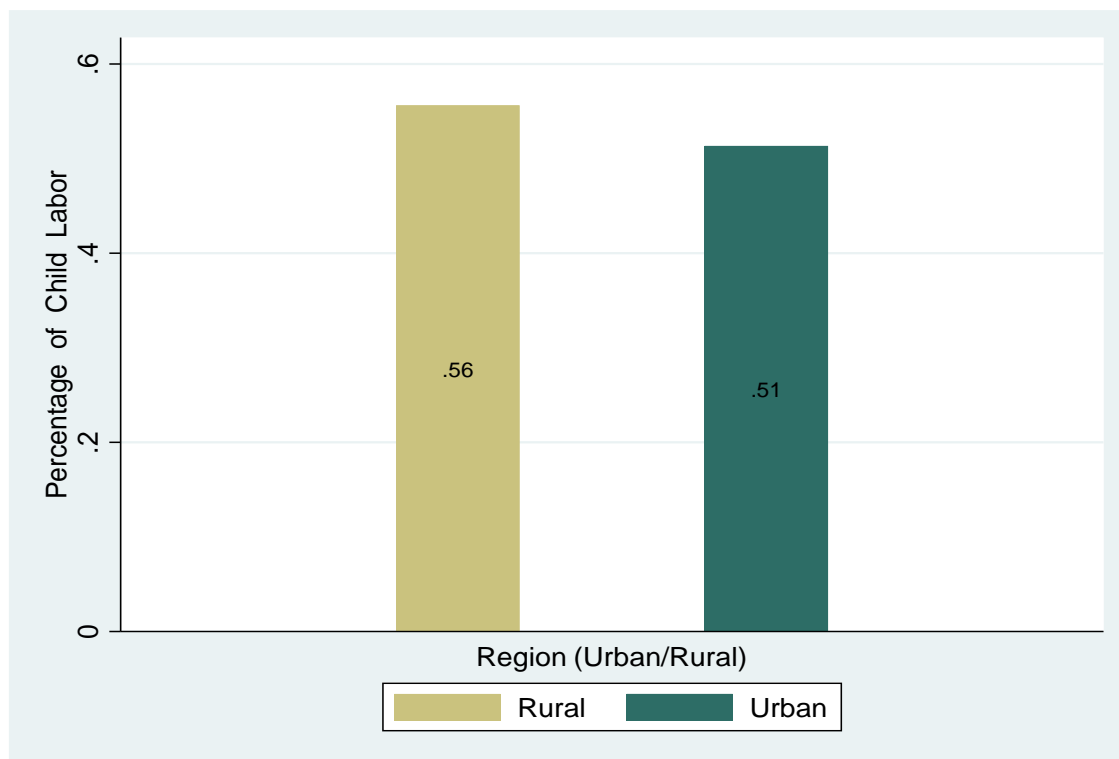
FIGURE 9 CHILD LABOR WITH RESPECT TO LOCALE



The above graph 9 shows the percentage of child labor with respect to locale. On the vertical axes we have percentage of child labor and on the horizontal axis we have locale. In fact, 51 per cent of under age (below 15 years) in district Quetta are engage in child labor. Similarly, 53 per cent of children in district Pishin are involved in child labor. Moreover, 64 per cent of children with age below 15 are participating as child labor in district lorlahi. In fact, the incidence of child labor is higher among the children belonging to Lorlahi district. On the other hand, the percentage of child labor in district Quetta and pishin are approximately same. This difference may be due to the variation in demographic variables.

4.8.6 Child labor with regards to Region (rural/urban)

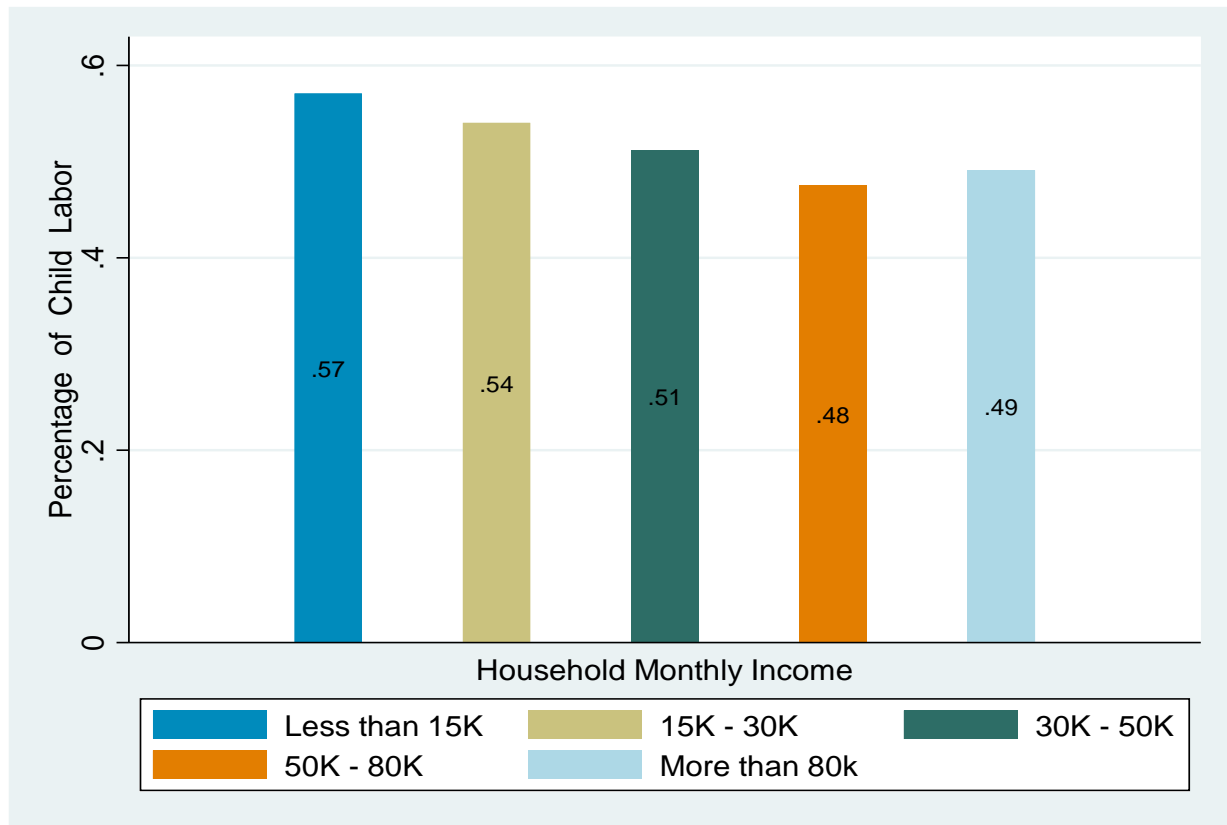
FIGURE 10 CHILD LABOR WITH REGARDS TO REGION



The bar graph 10 indicates the relationship between child labor and region among Afghan Refugees. This study covers both rural and urban area. In fact, the urban area include Quetta districts and rural areas include other two districts (Pishin and Lorlahi) under study. As shown in graph we have plotted the percentage of child labor on x-axis and the region on y-axis to capture the variation in child labor among afghan refugees. Indeed, the child labor highly prevails in rural area with 56 percent of children below 15 years of age in rural areas are working. On the other hand, 51 per cent of Afghan refugees' children living in urban area are participating in child labor.

4.8.7 Child Labor with respect to household level of income

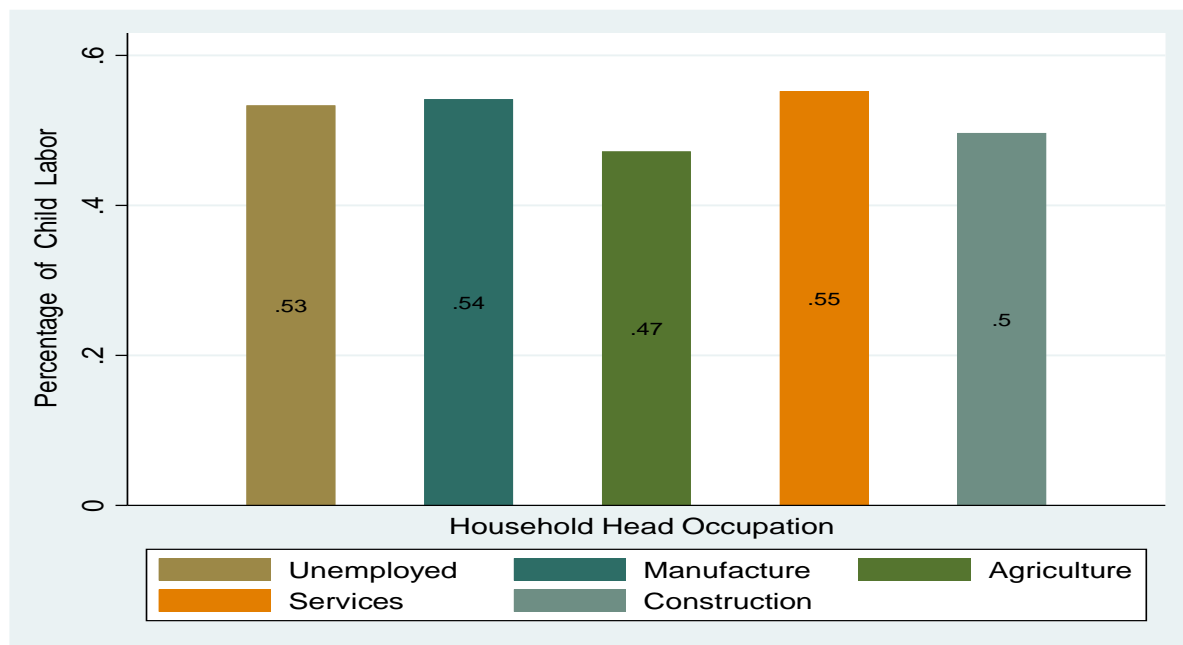
FIGURE 11 CHILD LABOR WITH RESPECT TO HOUSEHOLD MONTHLY INCOME



This graph 11 shows the relationship of child labor with monthly income of household. On the y-axis we have shown the percentage of child labor and on x-axis we have plotted monthly income of household. As shown in the graph child labor have inverse relation with level of household income. In fact, child decreases with rise in monthly income of household. Indeed, the graph shows that 57 per cent of children are working with household monthly income is less than fifteen thousand which is highest. This reflect that its poverty of household which compel to send their children to work. And, 48 per cent of children below 15 years of age are indulged in work which is the lowest. However, the graph indicates that as the monthly income of household cross 80000 the incidence of child labor increases with one percent. This may be the household have their own business and children among this group are engage in family business.

4.8.8 Child Labor with regards to Household Head Occupation

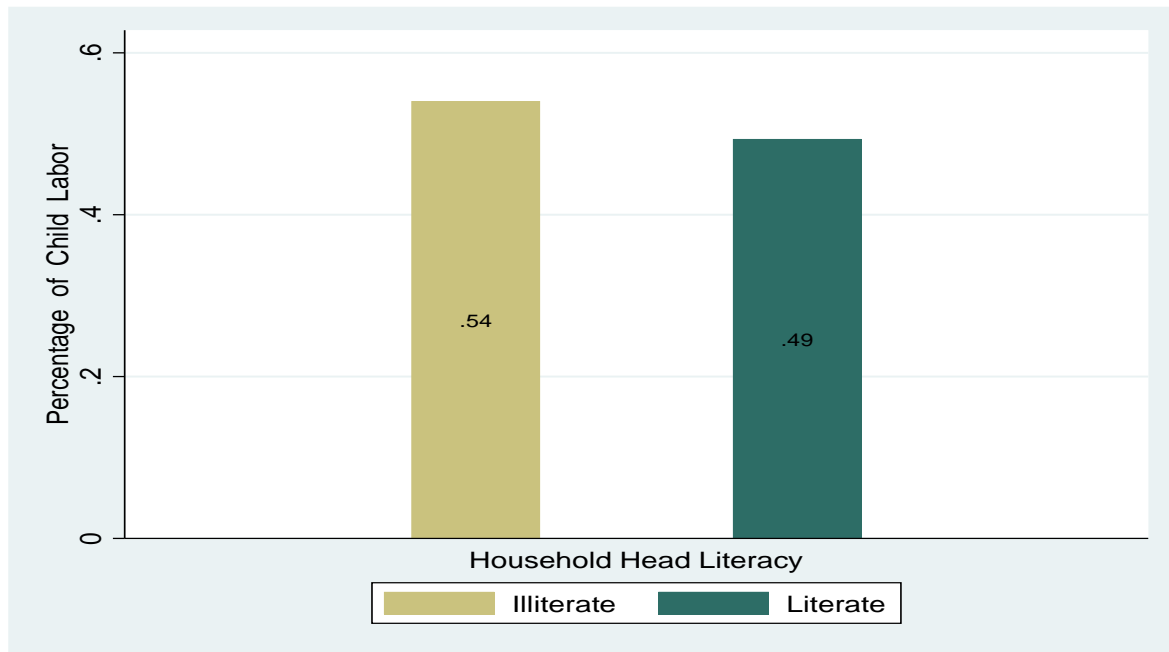
FIGURE 12 CHILD LABOR WITH RESPECT TO HEAD OCCUPATION



The bar graph 12 indicates the link between child labor and household head occupation among afghan refugees. On the vertical axis the study has plotted percentage or mean of child labor and on the horizontal axis the study has shown the household head occupation. As shown in the graph on average 47% of children are working as child labor when the household head is engage in agriculture sector, indeed lowest among the occupation categories. And, the incidence of child labor is highest when the household head is engage in services sector (55% of child labor). Moreover, on average 53% of children are working whose household head is unemployed. 54% of afghan refugee's children are working as child labor when the household head occupation is "Manufacture" and about 50% of children are engage in child labor when the household head is working in construction sector.

4.8.9 Child labor with respect to Household Head Occupation

FIGURE 13 CHILD LABOR WITH REGARDS TO HOUSEHOLD HEAD OCCUPATION



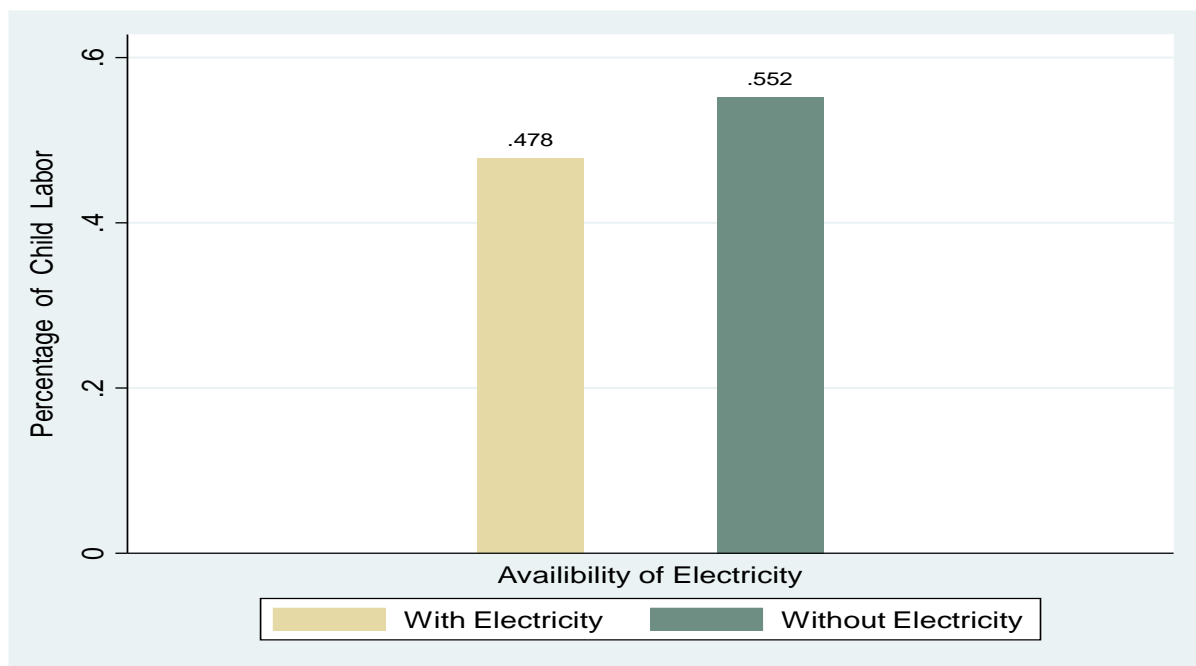
The bar graph 13 shows the percentage of child labor with respect to household head level of education. As majority of Afghans are uneducated therefore we have categorized them in two categories such as Literate and Illiterate. Those who have at least some education are considered as literate (who can read and write). On the other hand, those who have no formal education fall in category of illiterate (who have “0” year of schooling or who are unable to read and write). In fact, on the vertical axis we plotted the percentage of child labor and on the horizontal axis we plotted household level of education measured as literate or illiterate. The graph indicates that child labor among children whose household head are literate are less likely to be in child labor. And, the incidence of child labor is high if the head of household has no education or illiterate. In fact, 54 per cent of school age children (below 15) are indulge in child labor whose household head are illiterate. And, 49 per cent of children under age of fifteen are involved in child labor whose household head are literate. Although the literacy of household head has some impact on child labor but, very minor impact as suggested by the analysis.

4.9 Incidence of Child Labor among Afghan Refugees with regards to Standard of Life

This section of the study shows the percentage of child labor with respect to social indicators or the Afghan refugees' standard of living. The social indicators used in the study includes access to clean drinking water, availability of electricity, gas, access to public school, Afghan special school, main source of drinking water etc. the graphic relationship of child labor with regards to social indicators is given as follows.

4.9.1 Child Labor with respect to Availability of Electricity

FIGURE 14 CHILD LABOR WITH RESPECT TO ACCESS TO ELECTRICITY

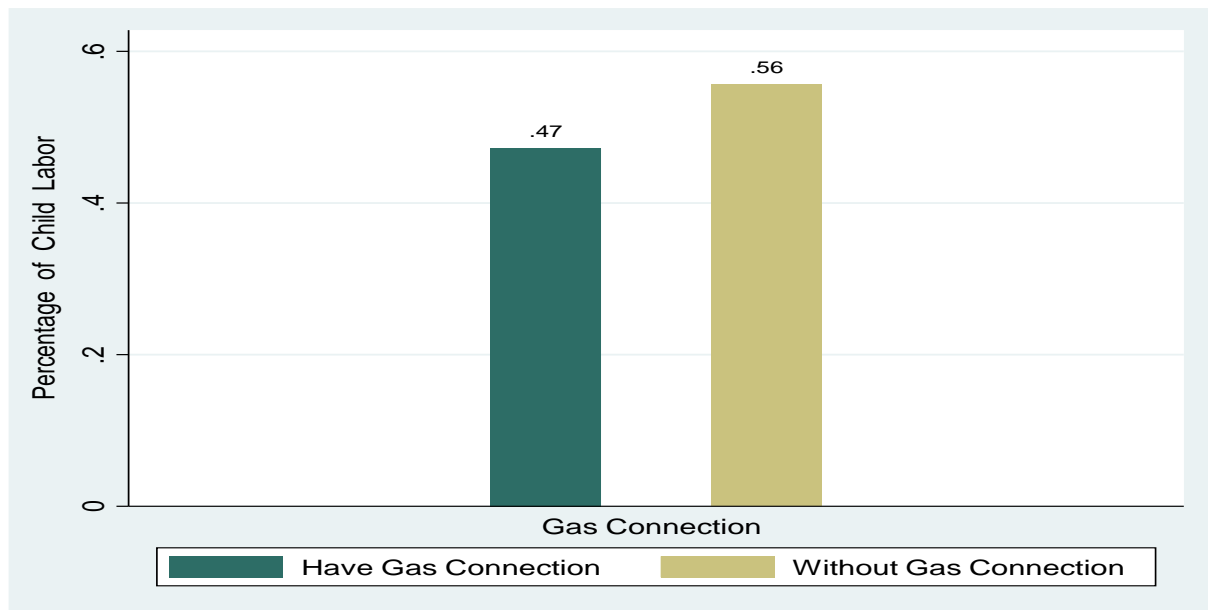


The bar graph 14 shows the relationship between child labor and availability of electricity in context of Afghan Refugees. As shown in the figure on the vertical axis the study has plotted the percentage of child labor and on the horizontal axis the child labor. In fact, the variable “access to Electricity is included in the study which measures the standard of life. And, we expect the negative association between child labor and availability of electricity among afghan refugees. Indeed, the result indicates that on average the percentage of children working as child labor is less when they have electricity connection as compare to those who have no access to electricity. On average 48% of Afghanis children are working as child labor who have access to electricity.

On the other hand, about 55% of the children are engaged in child labor who have no access to electricity.

4.9.2 Child Labor with respect to Gas Connection

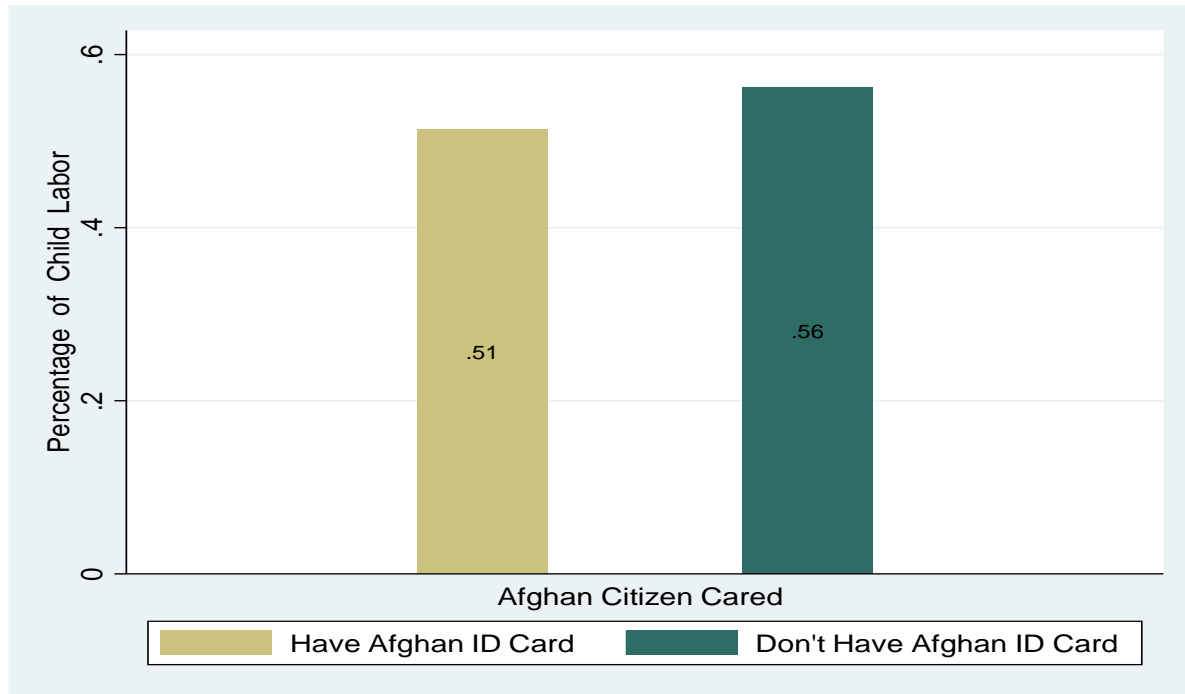
FIGURE 15 CHILD LABOR WITH REGARDS TO GAS CONNECTION



Similarly, Fig 15 indicates the link between child labor and the variable Gas connection used in the study. In fact, the findings show that on average the incidence of child labor among afghan refugees is more when they have no access to Gas connection as compare to the refugees who have Gas connection. In fact, the fig 4.2.2 shows that on average 47% of children are working as child labor among household with Gas availability. On the other hand, about 26% of children among household who have no Gas Connection are participating in child labor

4.9.4 Child Labor with regards to Afghan Citizen Cards

FIGURE 16 CHILD LABOR WITH RESPECT TO AFGHAN CITIZEN CARDS



The bar graph 16 shows the link between child labor and the household identity. As large number of Afghan refugees have no identity (have no major card) because they are not registered by the UNHCR or they crossed border illegally. Indeed, lack of identity have close link with child education as most of the schools or institution require some documentation. And, those with no identity of record have less probability to be a part of institution. Therefore, the child labor has some link with identity. As shown in the graph we have percentage of child labor on y-axis and child identity (reflected by possession of Afghan Card by the household) on the X-axis. The graph reveals that the children with no identity have more chance of being engage in child labor. In fact, 56 per cent school age children are participating in child labor with no identity. On the other hand, 51 per cent of children with possession of Afghan Card are engage in child labor.

4.9.5 Child Labor with respect to Access to Public School

FIGURE 17 CHILD LABOR WITH REGARDS TO ACCESS TO PUBLIC SCHOOL

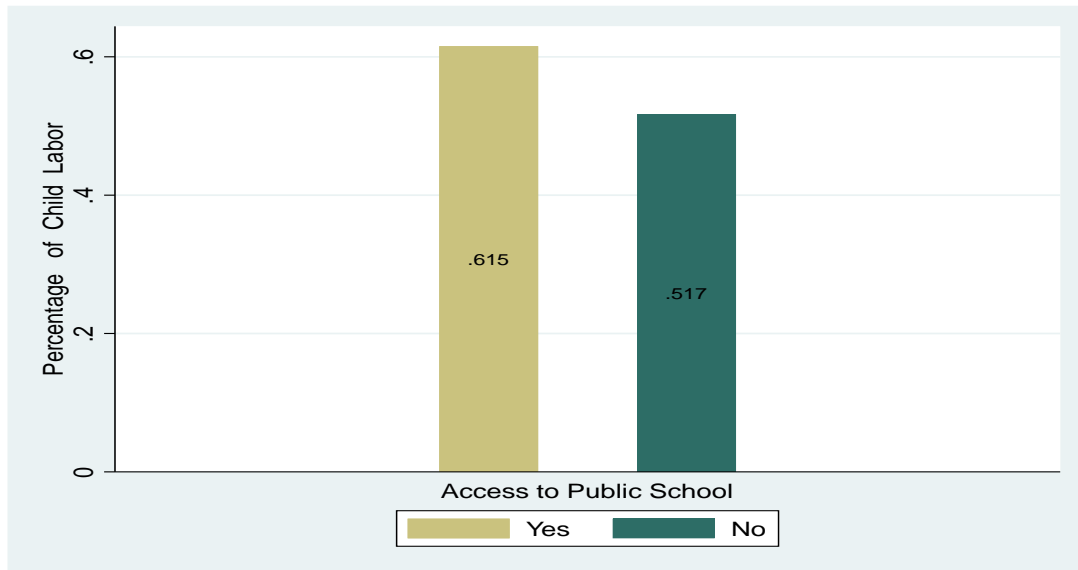
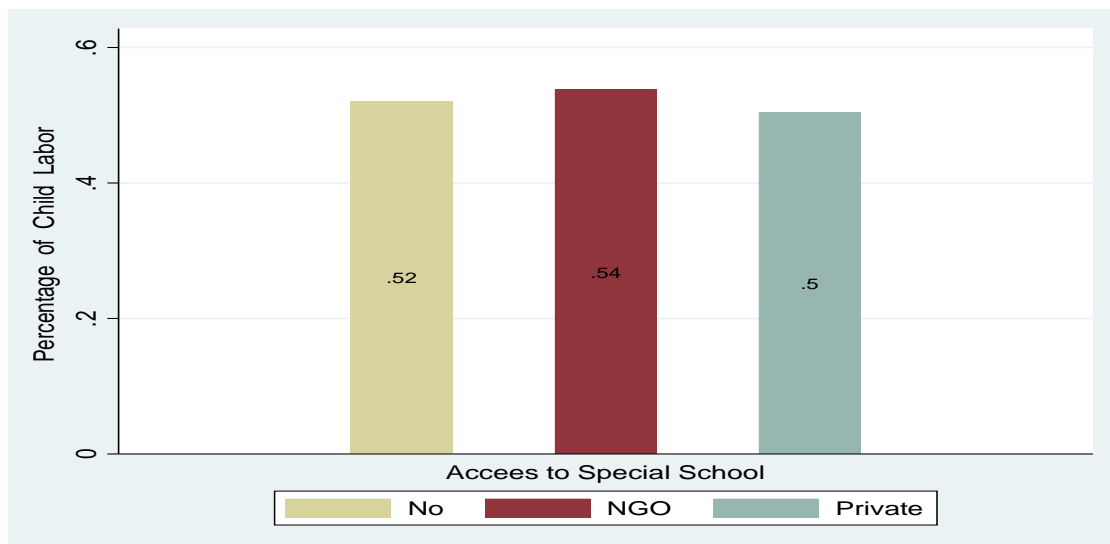


Fig 17 indicates the incidence of child labor among Afghan Refugees with respect to Child Access to Public School. As shown in the fig 4.2.4 on average about 62% of the children are working as child labor who have access to Public School. On the other hand, the percentage of child labor is less (About 52%) among the children who have no access to public school. This may be due to the sample size used in the study.

4.9.6 Child Labor with regards to Access to Special School

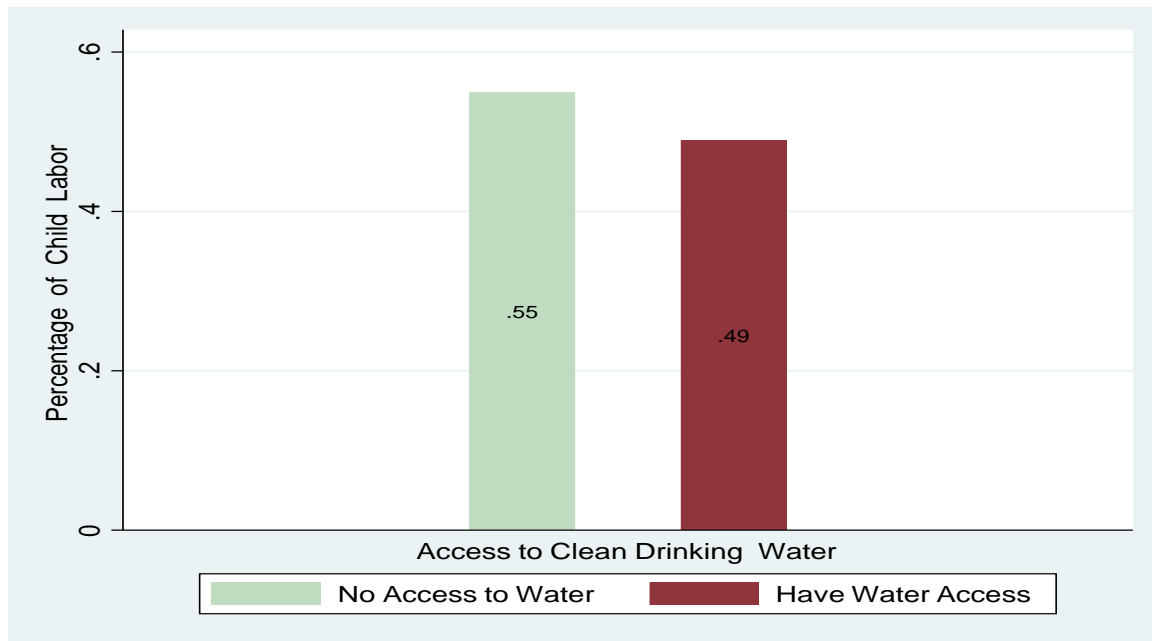
FIGURE 18 CHILD LABOR WITH RESPECT TO ACCESS TO SPECIAL SCHOOL



The Fig 18, shows the phenomenon of child labor with regards to access to Afghan Special School. According, to the survey, this study has found three responses from the respondents. Either they (Afghan Refugees) have no access to special school or they have access to special school run by the NGOs or privately operating in the region. As shown in the fig 4.2.5, on average 52% of the children are participating in child labor who have no access to special school. And, percentage of child labor who have access to special school run by the NGOs is 54%. Moreover, 50% of the children are participating in child labor who have access to Afghan Special School run by the private bodies.

4.9.7 Child Labor with respect to Access to Clean Drinking Water

FIGURE 19 CHILD LABOR WITH RESPECT TO ACCESS TO CLEAN DRINKING WATER



The fig 19, shows the association between child labor and availability of water among Afghan Refugees. we expect, negative relationship between child labor and availability of water in context of Afghan Refugees. Indeed, the study indicates that the incidence of child labor is negatively related with the availability of water. As shown in the fig 4.2.7, on average 49% of the children are participating in child labor who have water access. On the other hand, about 55% of Afghani Children are working who have no access to clean drinking water.

4.9.8 Child Labor with respect to Land Ownership

FIGURE 20 CHILD LABOR WITH RESPECT TO LAND OWNERSHIP

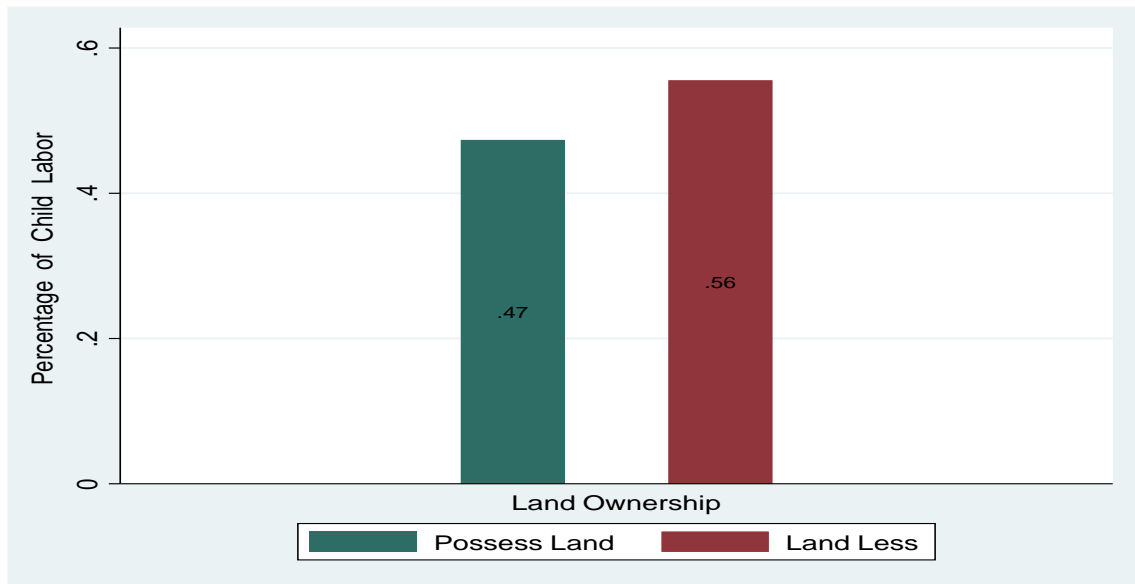
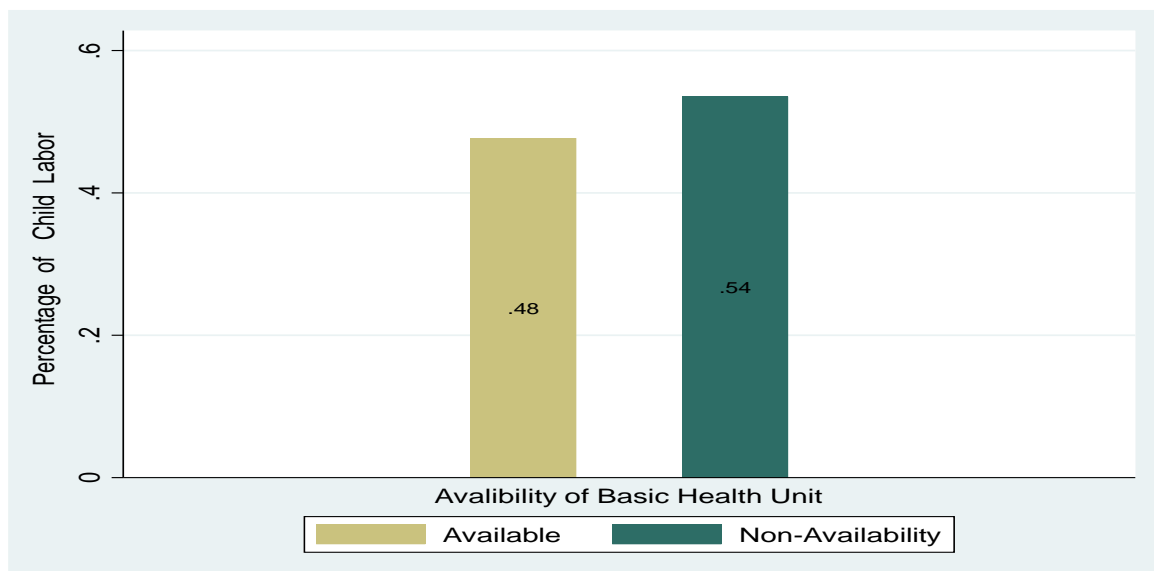


Figure 20, links the child labor with land ownership among afghan refugees. As shown in the figure the incidence of child labor is high among children who are landless (have no land ownership) and compared to the children who possess land. Indeed, the 47% of the children who possess land are participating in child labor. Comparatively, on average 56% of the children are working as child labor, who have no land ownership.

4.9.9 Child Labor with respect to Basic Health Unit

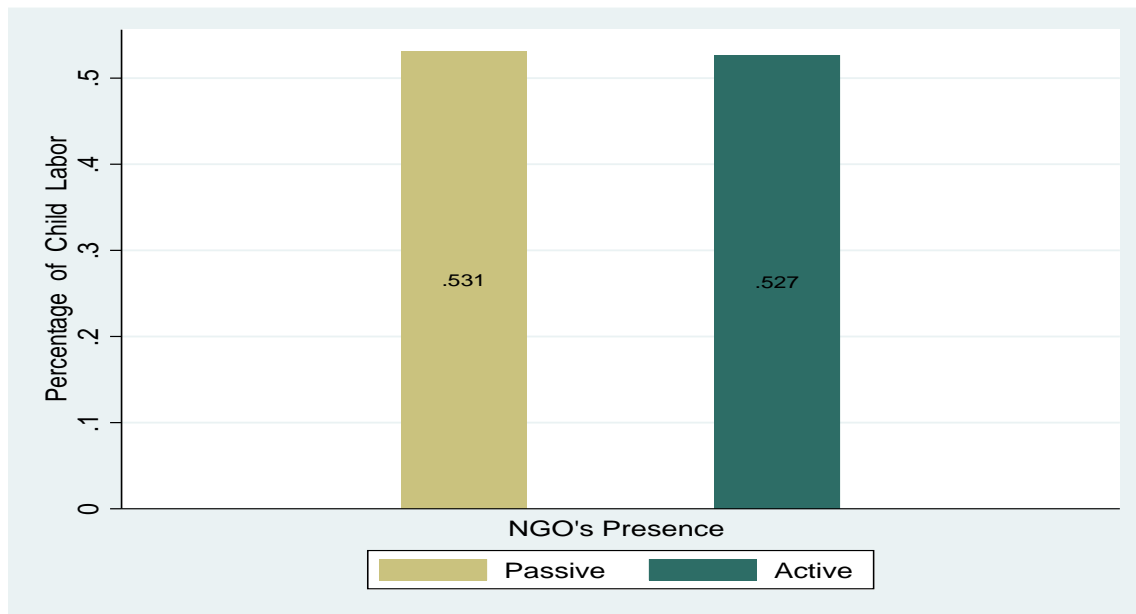
FIGURE 21 CHILD LABOR WITH RESPECT TO BASIC HEALTH UNIT



Moreover, figure 21 shows percentage of child labor with respect to availability of Basic Health unit among Afghan Refugees. The analysis indicates that child labor is comparatively less among the refugees who have access to basic health unit. In fact, on average 48% of the children are working who have access to basic Health unit. And, about 54% of the children are participating in child labor among refugees who have no access to basic health unit.

4.9.10 Child Labor with respect to NGO Presence

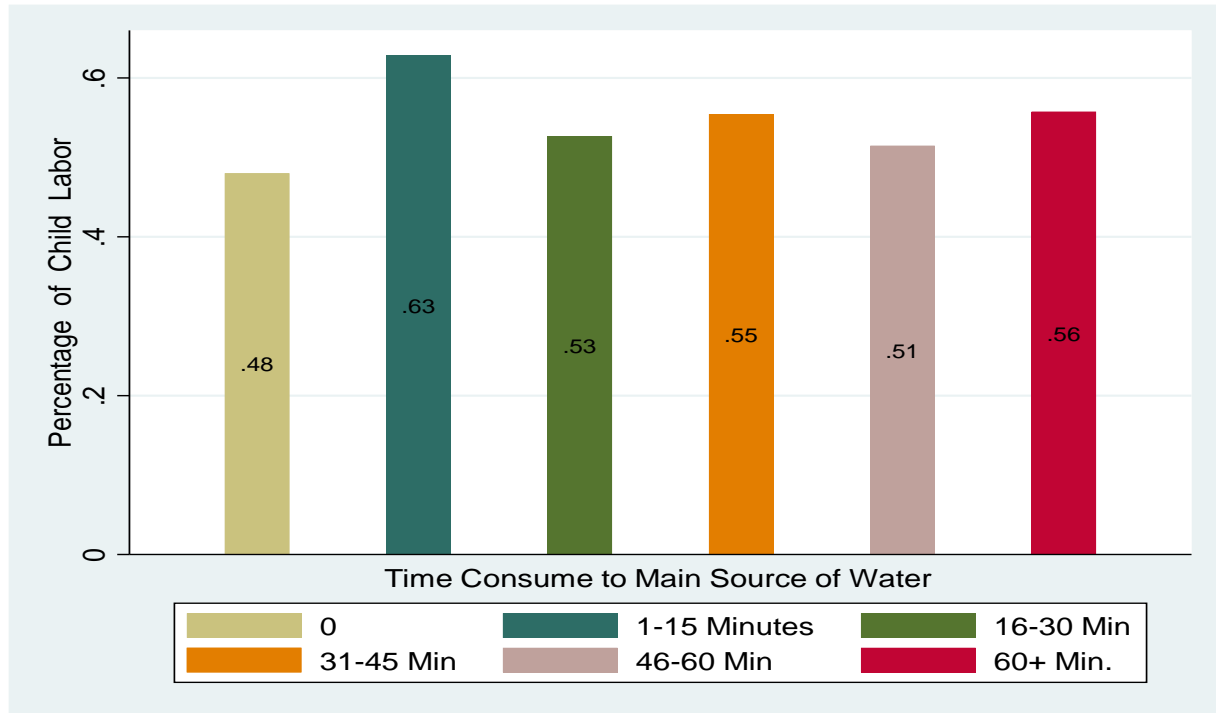
FIGURE 22 CHILD LABOR WITH RESPECT TO NGO PRESENCE



The fig 4.2.9, differentiate the percentage of child labor among Afghan Refugees in the regions where the NGOs are operating (Active), with the regions where the NGOs are passive. The findings indicate that on average the percentage of child labor is about 53% in the regions. However, there is only a difference of 1%. Thus, the difference in terms of average number of child labor with regards to the presence of the NGOs is negligible.

4.9.11 Child Labor with respect to Time Consume to Main Source of Drinking Water

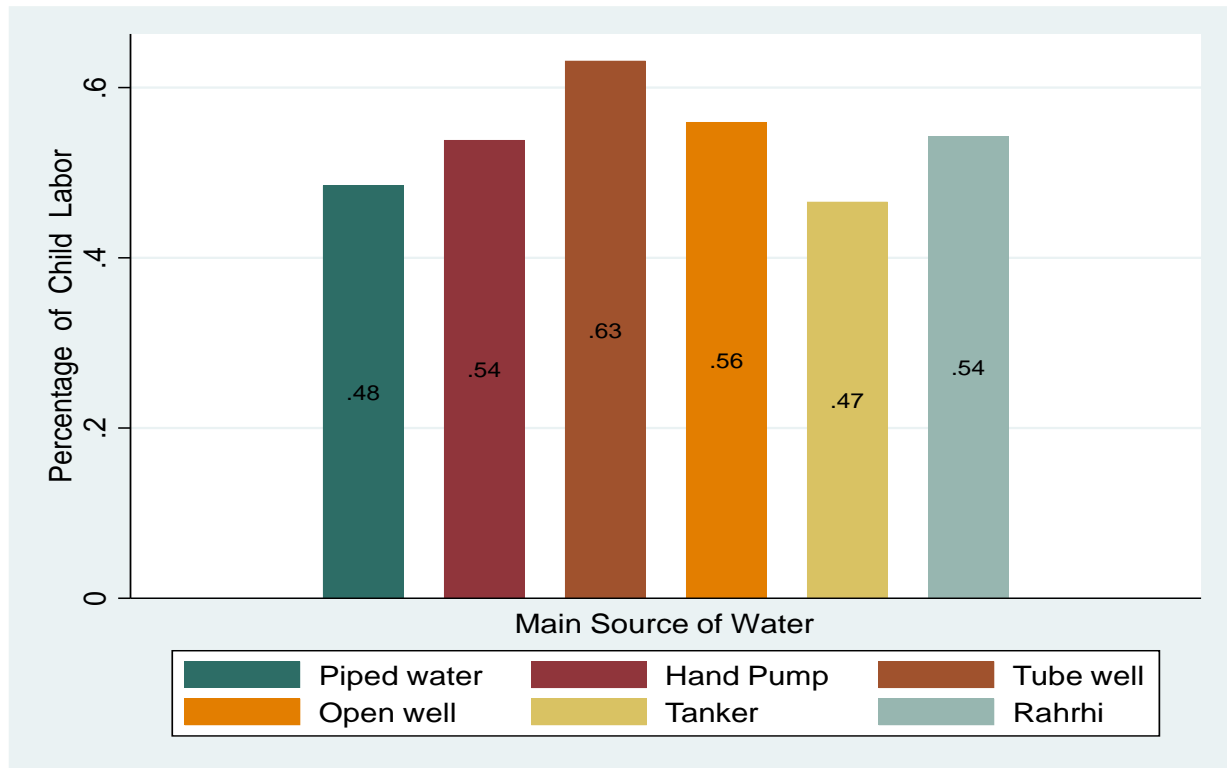
FIGURE 23 CHILD LABOR WITH RESPECT TO TIME CONSUME TO MAIN SOURCE OF DRINKING WATER



The bar graph 23 shows the relationship between child labor and the time consumed on a round trip to fetch the drinking water. On the vertical axis we have plotted the percentage of child labor and on the horizontal axis we have plotted the time consumed on a round trip to fetch the drinking water. We have divided the time Spain in six categories such zero if the household have piped water as their main source of drinking water, 1-15 minutes if they (household) spend 15 or less than 15 minutes for a round trip to fetch the drinking water. Similarly, 16-30 minutes, 31-45 minutes, 46-60 minutes and more than 60 minutes. Indeed, the analysis shows that the child labor is dominant among the household who need 1-15 minutes for a round trip to fetch drinking water. Where 63 per cent of children are indulged in child labor. And, 48 per cent of children are engage in child labor who water access with in the house

4.9.12 Child Labor with respect to Main Source of Drinking Water

FIGURE 24 CHILD LABOR WITH RESPECT TO MAIN SOURCE OF DRINKING WATER

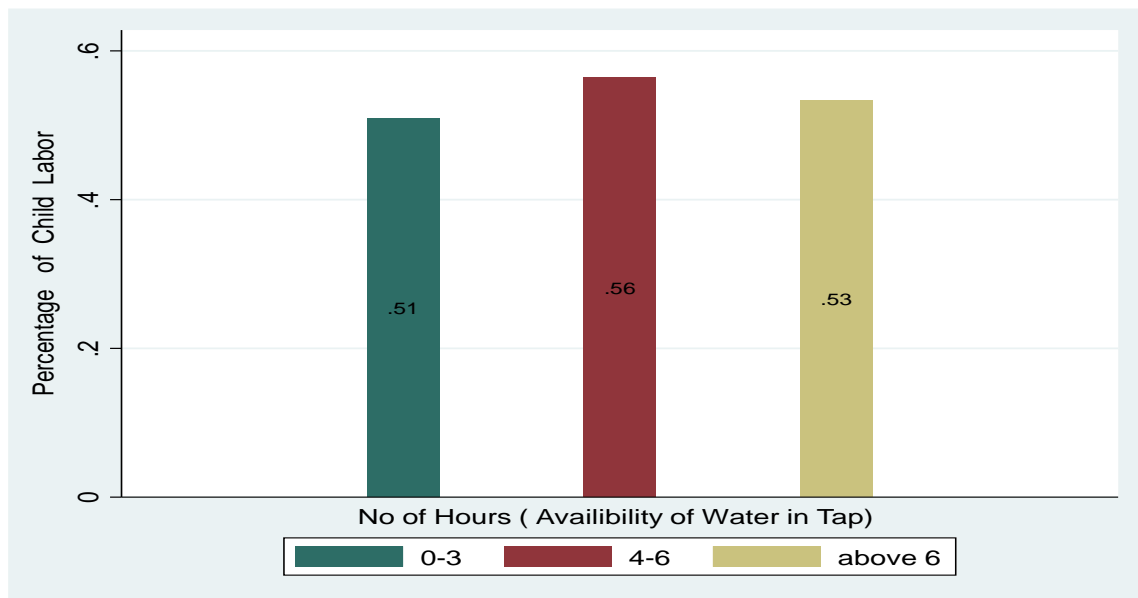


The graph 24 indicates the relationship between child labor and main sources of clean drinking water. The sources of water used by Afghan refugees include Piped water, Hand Pump, Motorized pumping or tub well, Open well, tanker and Hand Rahrhi from near open well, tub well or hand pump. On the y-axis of the graph we have shown percentage of child labor and on X-axis we have plotted main sources of clean drinking water. Based on this study 56 per cent of Afghan refugees have no access to clean drinking water. And, among most of the Afghan refugees it is their child's responsibility to fulfill the water need of household. Doing so, leads the children to spend more than two hours per day. And, the child labor is linked with sources of clean drinking water. Thus, as shown in the graph the percentage of child labor is lowest among those Afghan children whose household main source of drinking water is Tanker or Truck. In fact, 47 per cent of children are engaged in child labor who use tanker or truck as source of drinking water. The child labor among these households is low because children need not to spend time in meeting the household water requirements. And, the child labor is dominant for children whose main source of drinking water is

Tube well with 63 per cent of child labor. Because the children have to bring water from tubwell as well using hand rahri. All in all , above 50 per cent of the children are engaeg in child labor whoes main soucre of drinking water is Hand pump, Hand Rahri, open well or tub well. And around 47 per cent of child labor whoes main source of drinking water are piped or tanker.

4.9.13 Child Labor with respect to Availability of Water in Tap

FIGURE 25 CHILD LABOR WITH RESPECT AVAILABILITY OF WATER IN TAP



The Fig 25 revels the cross link between child labor among afghan refugees and the socioeconomic factor “No of hours the water is normally available in the tap”. As shown in the fig 4.2.12 we have plotted the percentage of child labor on vertical axis and the variable “Availability of water in tap” on the horizontal axes. Further, the study has distinguished this socioeconomic factor in three categories, such as availability of water in tap for 0-3 hours, 4-6 hours and above 6 hours. Indeed, the findings indicates that 51% of the children are engage in child labor whose household have water for 0-3 hours per day. And, about 56% of children are working as child labor whose household have water in tap for 4-6 hours. And, 53% of children are working among household who have water availability in table for more than 6 hours. This trend may be explain by the child duty, as most of the children among Afghan Refugees have to fulfil the household required water. And, the more hours suggest that the children are devoting more time to fetch drinking water for household use.

4.9.14 Child Labor with respect to No of Rooms

FIGURE 26 CHILD LABOR WITH RESPECT NO OF ROOMS

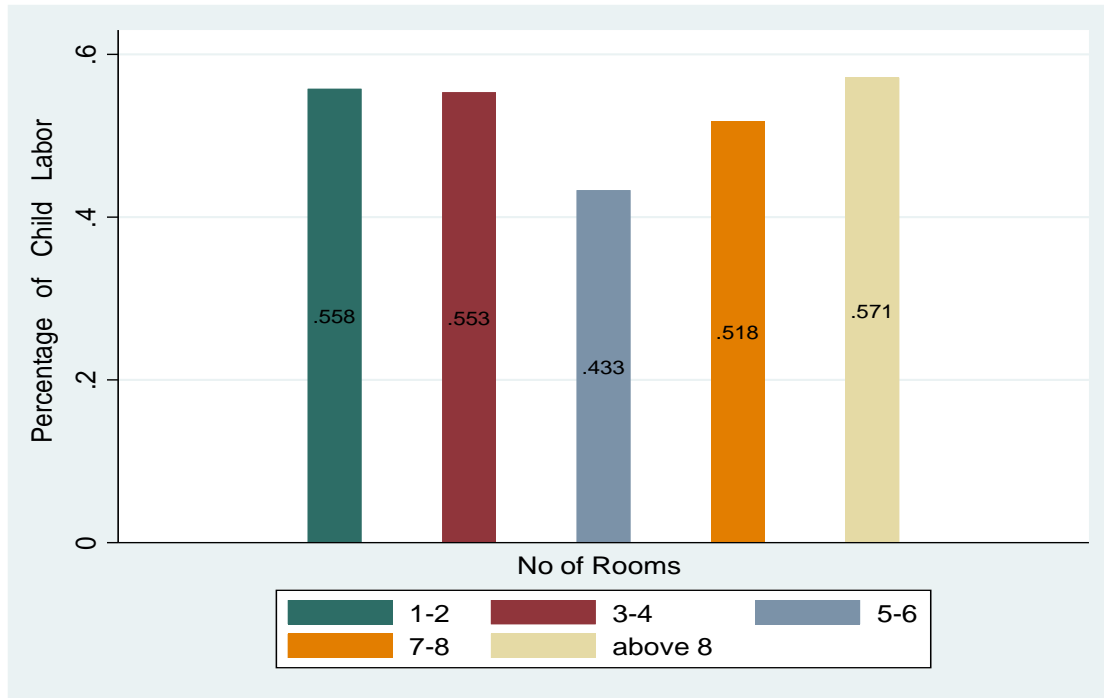
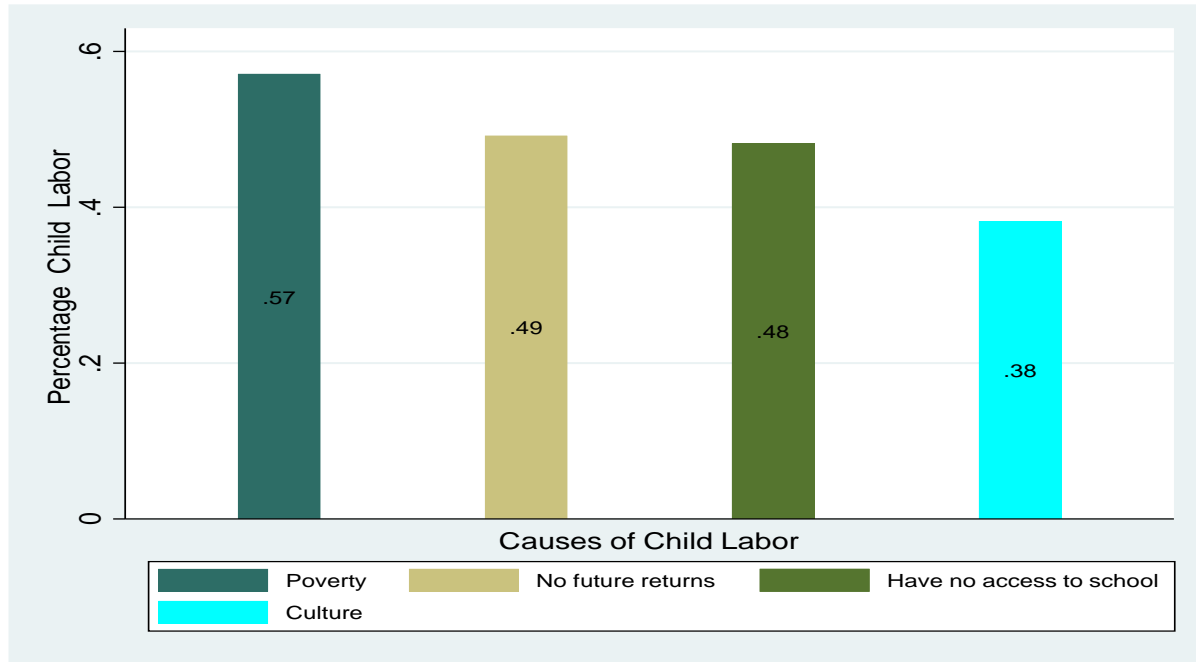


Figure 26 indicates the association between child labor and the socioeconomic variable “No of Rooms”. As shown in the figure on the vertical axis we have plotted the percentage of child labor and on the horizontal axis the study has plotted five categories of “No of Room”. Moreover, the cross analysis shows that on average 43% of the children are working among household who have 3-4 Rooms in the house. Indeed, the incidence of child labor is lowest among Afghan Refugees with 3-4 rooms in the house. On the other hand, on average more than 57 of the children are working as child labor who have more than 8 rooms in the home. And, on average 55. % of children are engaged in child labor among afghan refugees who have 1-2 Rooms and 3-4 Rooms in the house. And, 51% of the children are working among household who have 7-8 rooms in the house. In fact, the results are consistent with the findings of variable “Household Size” used in the study.

4.9.15 Child Labor with respect to Refugees Perception

FIGURE 27 CHILD LABOR WITH RESPECT REFUGEES PERCEPTION



Graph 27 reveals the percentage of child labor with respect to the causes reported during survey. In fact, the respondents have reported four main reasons of child labor. In other words, they have highlighted four reasons for not sending their children to school. The reason include poverty, no future returns, have no access to (public/ special) school. No doubt, majority of Afghan refugees are trip in poverty. Moreover, they have no future return from education because they have no access to formal sector for job. According to this study less than one percent of Afghan refugees have access to formal sector for job. Furthermore, 88 per cent of Afghan have no access to public school and more than 40 per cent of refugees have no access to special schools. As shown, in the bar graph we have shown the percentage of child labor on vertical (x-axis) and on the horizontal (y-axis) we have shown the main reasons of child labor. Indeed, the percentage of child labor is highest among those household who have reported poverty as main reason behind child labor. In fact, 57 per cent of school age children are among household who have reported poverty as poverty as dominant reason of child labor. And, 38 per cent of children are participating as child labor who have reported culture as primary reason of child labor. Moreover, around 48.5 per cent

of school age children are working as child labor in household who have cited no future returns and no availability of school. Indeed, all the four reason have primary role in determining child labor among Afghan refugees.

Chapter 5

Afghan Refugees Migration Profile

This chapter of the study has analyzed the Afghan Refugees Migration Profile. The main focus is on the demographic characteristic of Afghan Refugees under study, reasons behind their Influx to Pakistan and, the Refugees willingness of repatriation to Afghanistan. Moreover, this chapter defines the Migration, voluntary and involuntary Migration and theory of migration.

5.1 Migration

The word Migration is taken from the Latin word “migrata”; which mean to change one’s place of residence. And, migration is generally defined, as the temporary or permanent change in residence is a movement of people from one place (the place of origin) to some other place (place of destination) for better life such as better livelihood, more income, good food supply and additionally to get refugee from instability, conflict and natural disasters (Vargas-Lundius et.al. 2008). In fact, migration is generally defined in terms of distance, direction and time duration. According to the United Nations Multilingual Demographic Directory defines the word migration as “migration refers to geographical or spatial movement between two geographical units, this process involves a shift in residence from place of origin to the place of destination.

There are two forms of migration, the voluntary and involuntary or forced migration. The voluntary migration refers to the movement of people from one place (place of origin) to another (place of destination) by their will. On the other hand, forced migration refers to the migration when people move from their countries (place of origin) to escape from persecution, conflicts, repression, natural or men-made disasters, ecological degradation or other situation that endanger their lives and freedom or livelihood (Wickramasekera 2002; IOM: United Nations 2000). Similarly, the Afghan refugees migrated involuntary from Afghanistan to the neighboring countries to escape from war and ongoing conflicts in Afghanistan.

5.2 Stoffer’s Theory of Intervening Obstacles

There are number of migration theories. But, the Afghan Refugees forced migration is well reflected by the Stoffer’s theory of intervening obstacles. In fact, the Stoffer’s theory state that it’s the plus and, minus factors associated with the point of destination, intervening difficulties and migrant’s personal characteristics which determine to migrate. No doubt, each place has number of

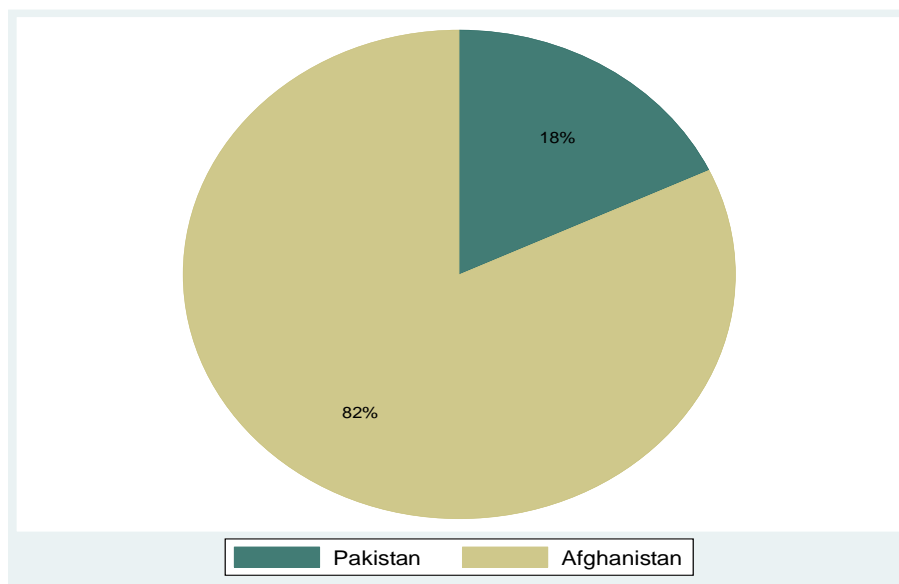
factors which attract people to move there (the plus factors), and each area has number of factors which compile the people to move from there (the negative factors). However, the different people have different response to these factors.

Furthermore, the theory suggests that migrants are positively selected if they chose the place of destination for the (+) factors. On the other hand, migrants are negatively selected if they respond to the negative (-) factors. In case of bimodal selection of the migrants the intensity of selection rises with the difficulty of intervening obstacles. The propensity to migrate will be higher at particular stage of life cycle. However, the migrants' personal characteristics will be on intermediate nature between the area of origin and destination (S.Sundari, 2007 "Migrant women and Urban Labor Market' book.).

While conceptualizing the Afghan Refugees migration from Afghanistan (place of origin) to Pakistan (place of destination), it's clear that the afghan refugees migrated due to the negative factor in the place of origin such as war, political instability, lack of security, high crime, poverty and insecurity of modesty in Afghanistan. And, responded to the plus (+) factors in Pakistan such as protection of life, protection of modesty, and, batter services in Pakistan, as majority of the respondents reported during survey. All in all, Afghan refugees responded to the negative (-) factors in Afghanistan, and, responded to the (+) positive factors in Pakistan.

5.3 Household Head's Country of Birth

FIGURE 28 HOUSEHOLD HEAD COUNTRY OF BIRTH



The figure 28 shows the percentage of household head birth place, weather their (Afghan Refugees Household Head) birth took place in Afghanistan (country of origin) or in Pakistan (country of destination). According to the survey 82 per cent of the respondents have reported that they were born in Afghanistan. And, approximately 18 per cent of Afghans living in Pakistan cited that they are born in Pakistan.

5.4 Household Head Birth in Pakistan by Districts

FIGURE 29 HOUSEHOLD BIRTH IN PAKISTAN BY DISTRICT

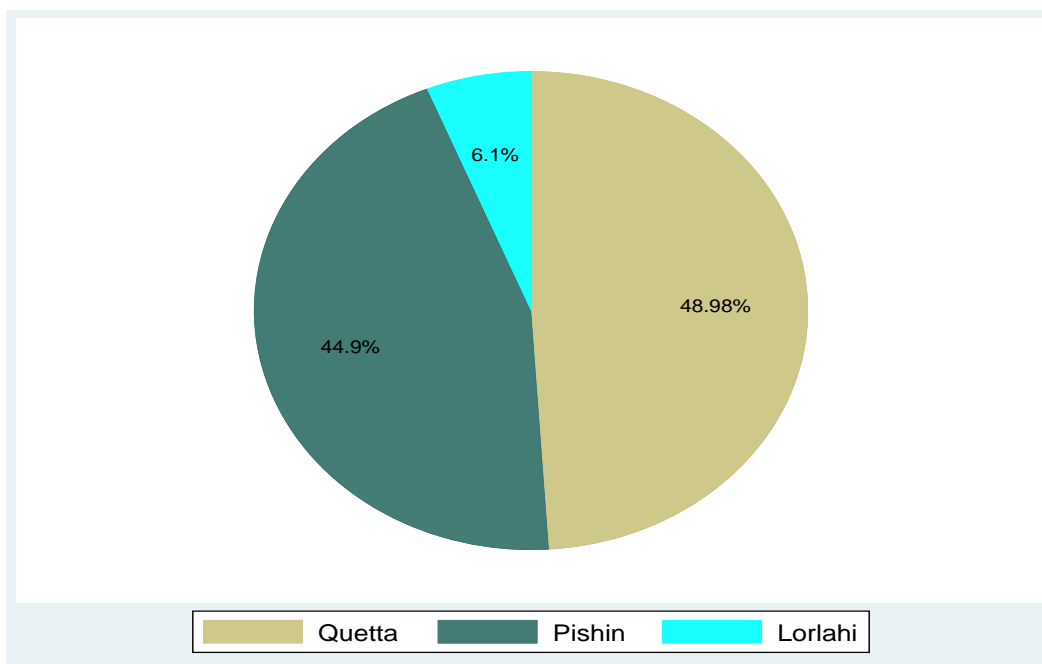


Figure 29 indicate the percentage of household head birth place by districts with in Pakistan. According to the survey 48.9 per cent of Afghans were born in district Quetta. And, 44.9 per cent of the respondents reported district Pishin as their birth place. Moreover, 6.12 per cent of Afghan Refugees cited district Loralahi as their birth place. The variation in percentages are owing to the sample size.

5.5 Refugees Years of Migration

FIGURE 30 REFUGEE YEAR OF MIGRATION

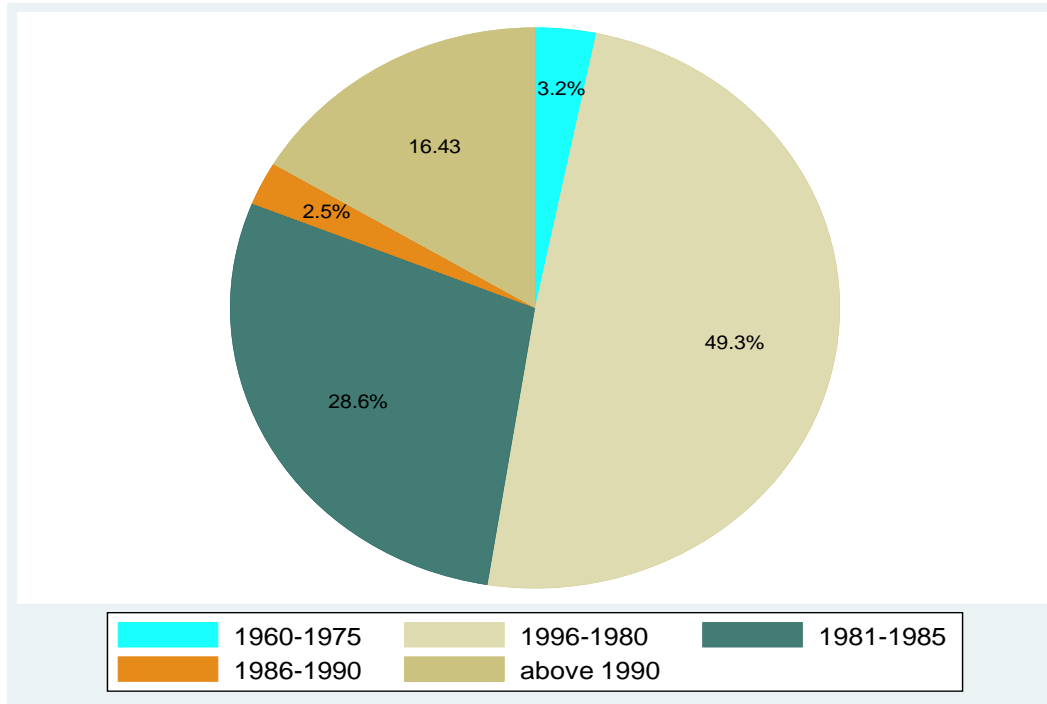
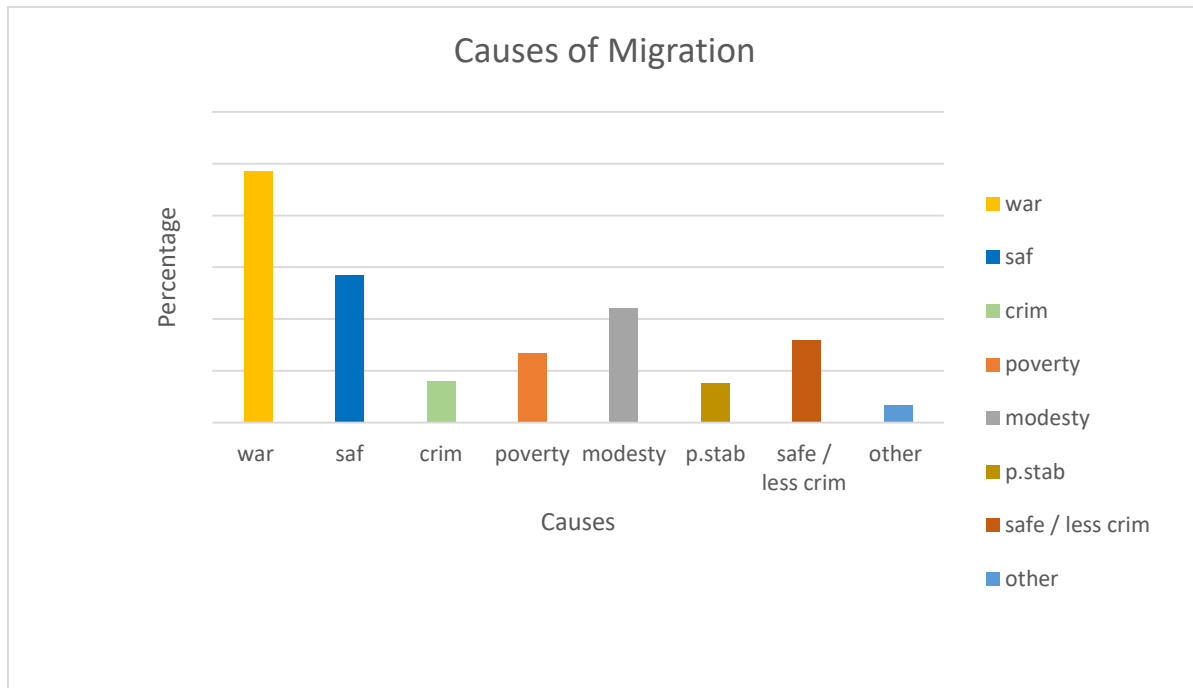


Figure 30 indicates the Afghan Refugees Years of Influx to Pakistan. According to survey the respondents have recorded 1960 as their first year of migration and 2020 as last year of migration. In fact, the study has categories the Afghan Refugees Years of migration in five groups such as, their influx between 1960 – 1975, between 1976-1980, between 1981 - 1985, between 1986 - 1990 and above 1990. In fact, the study reveals that almost half of the Afghan refugees migrated to Pakistan between 1976 -1980. And, this is the largest influx to Pakistan according to this study. Moreover, 28.6 percent of Afghan refugees migrated between 1981 and 1985. And, the remaining 31 percent of refugees migrated after 1986.

5.6 Major Reasons of Afghan Refugees Migration

FIGURE 31 MAJOR REASON OF AFGHAN REFUGEES MIGRATION



The first question that come to one's mind while studying refugees or internally displaced persons is that, why do individuals move from one place to another place? This section of the study briefly revives the reasons behind Afghan refugee's influx. In fact, this study relies on both push and Pull factors in order to explain the reason behind individual movement from one place (Afghanistan) to another place (Pakistan). Push factors include lack of services, lack of safety, high crime, crop failure, drought, poverty, war and protection of modesty. On the hand, the pull factors include higher employment opportunities, more wealth, batter services, good climate, less crime or safety, political stability and lower risk of natural disaster

However, the study shows that 97 per cent of the respondents have cited war in Afghanistan as major reason behind their influx. And, 57 per cent of the respondents have recorded lack of safety in Afghanistan as second major reason of migration. Moreover, the study shows protection of modesty is third major reason of Afghan refugees' migration.

FIGURE 32 CAUSES OF MIGRATION

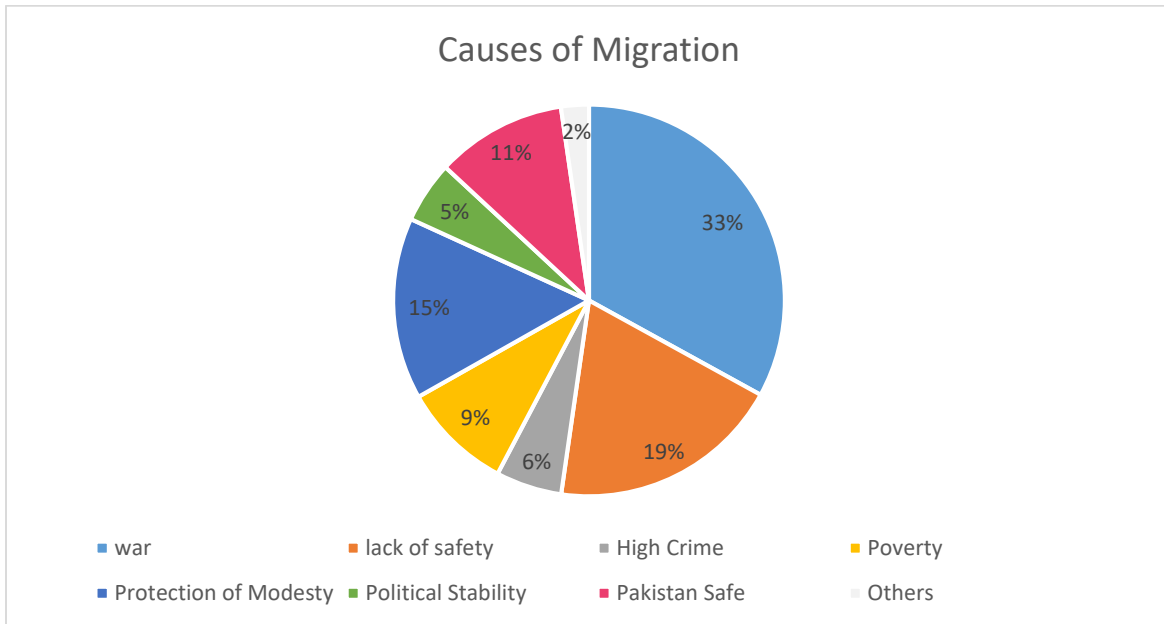


Figure 32 indicates that the primary reason behind Afghan refugee's migration is explained by the Push factors. The accumulative contribution of push factors is approximately 80%. However, the primary reason the refugees revealed is "War" which compels them to leave their country of origin and seek refuge in Pakistan. In fact, according to the survey 33 per cent of the respondents have cited war as major reason of migration. Followed by lack of safety with 19 per cent. Moreover, another important factor of refugee's migration is protection of modesty, as shown in the bar graph 15 per cent of Afghans cited that they migrated owing to the protection of modesty. Other factors include safety (in Pakistan), poverty, high crime in Afghanistan, political stability in Pakistan 11%, 9%, 6%, 5% respectively.

5.7 Refugees Willingness to Return to Afghanistan

FIGURE 33 REFUGEES WILLINGNESS TO RETURN TO AFGHANISTAN

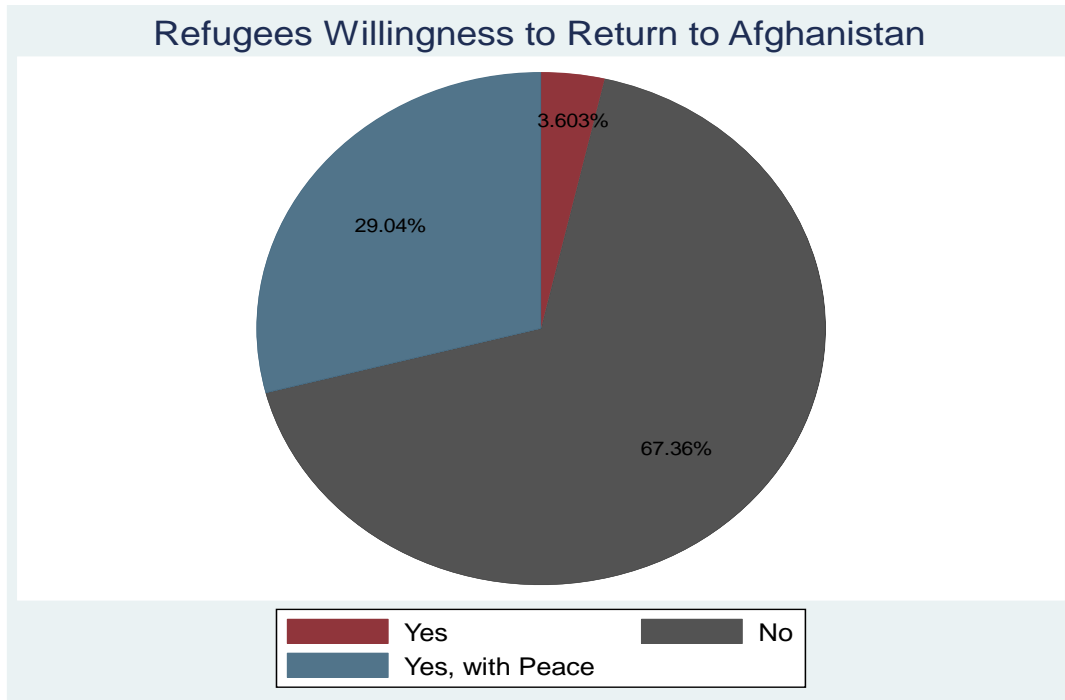


Figure 33 reveals the Afghan refugee's willingness to return to Afghanistan. However, majority of the respondents were not willing to go back to Afghanistan. In fact, more than 67 per cent of Afghan refugees cited that they are not willing to live country or move to Afghanistan. Although, there were some Afghans who intended to return to Afghanistan, but they were very less in number. In fact, only 3.4 per cent of Afghan Refugees cited to leave the country (Pakistan) and are willing to return to their country of origin (Afghanistan). Interestingly, there are Afghans who are willing to return to their country of origin but with condition of peace in the country (Afghanistan). Indeed, over 29 per cent of Afghans reported they are intended to return to their country if there is peace in Afghanistan.

5.8 Refugees primary reasons for not returning to Afghanistan

FIGURE 34 REFUGEES PRIMARY REASON FOR NOT RETURNING TO AFGHANISTAN

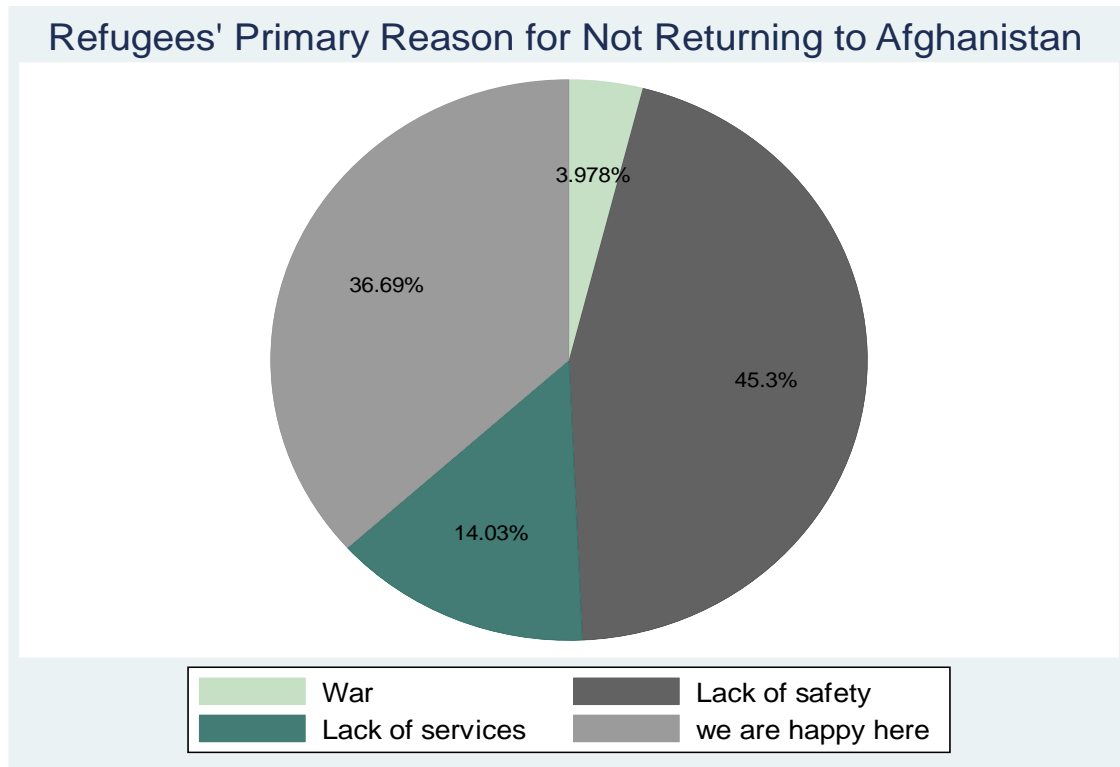
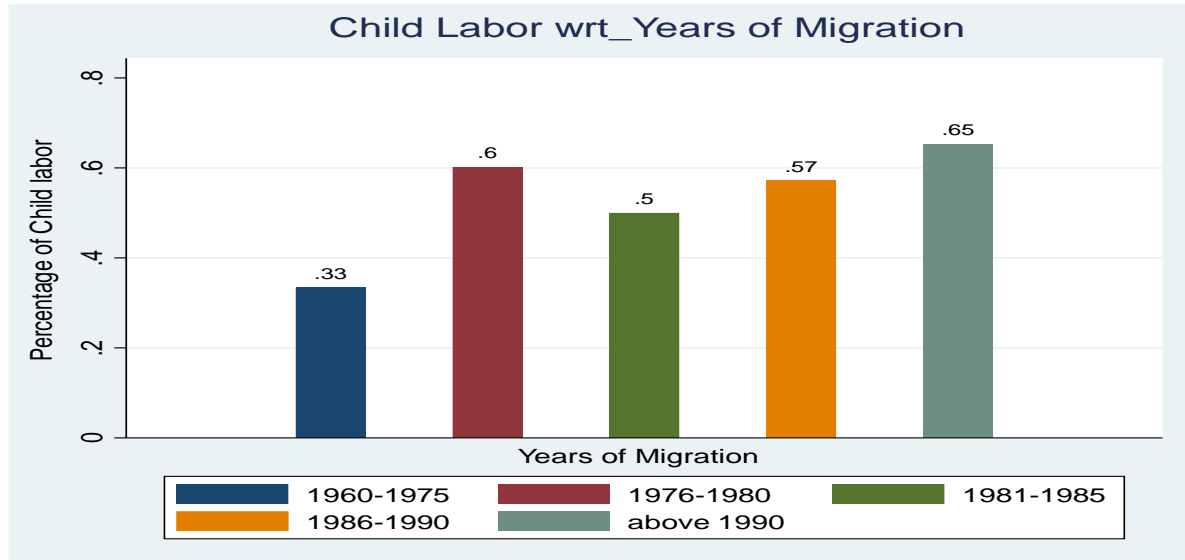


Figure 34 show the primary reason of Afghan refugees for not returning to Afghanistan. The most frequent reason they cited for not returning to Afghanistan was Lack of safety in Afghanistan. Indeed, according to the survey over 45 per cent of Afghan Refugees reported lack of safety as primary reason for not returning to Afghanistan or remaining in Pakistan. Other factors include lack of services (14%) and war in Afghanistan (approximately 4%). Moreover, over 36 per cent of Afghan Refugees cited they do not intend to return to Afghanistan because they are happy here (Pakistan).

5.9 Child Labor with regards to Refugees Years of Migration

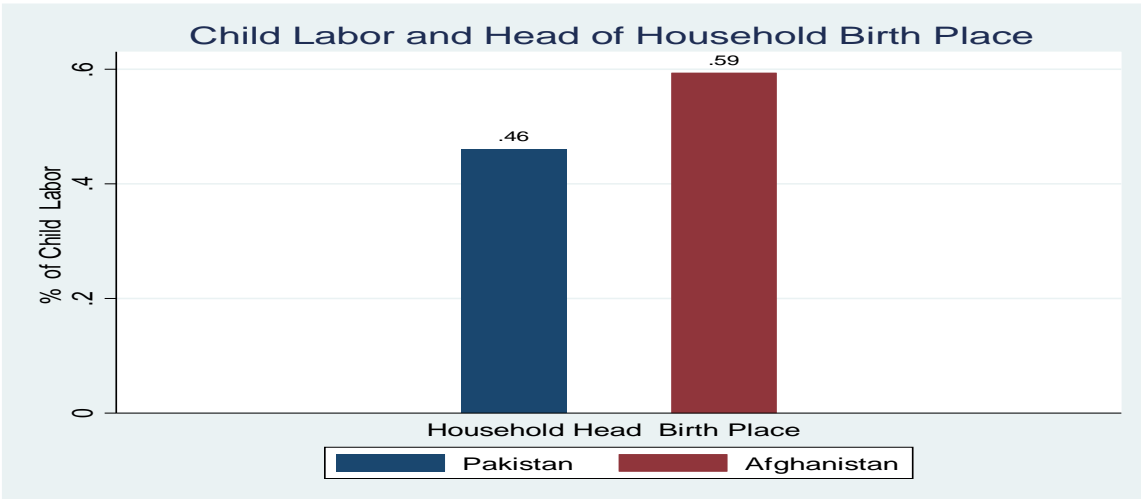
FIGURE 35 CHILD LABOR WITH REGARDS TO REFUGEES YEARS OF MIGRATION



This section of the study has linked child labor with refugee's years of migration. In fact, we expect low rate of child labor among refugees who came early as they may be steeled in Pakistan. And, except, high rate of child labor among those who migrated recently. Indeed, the study shows that the incidence lowest among refugees who migrated during 1960-1975, on average 33 per cent of children are engage in child labor who migrated during 1960-1975. on the other hand, 65 percent of children who migrated after 1990 are engage in child labor

5.10 Child Labor with respect to Household Birth place

FIGURE 36 CHILD LABOR WITH RESPECT TO HOUSEHOLD BIRTH PLACE



The Fig 36 reveals the incidence of child labor among afghan refugees with the household head birth place (Pakistan/Afghanistan). Moreover, the findings indicate that on average 46% of the children are engage in child labor whose household head birth took place in Afghanistan. And, the percentage of child labor among refugees whose household head birth took place in Afghanistan is 59%.

Chapter 6

Empirical Findings

This section of the study comprises of the empirical results carried out through logistic regression, where the dependent variable is Child labor and the explanatory variables include socioeconomic factors of child labor. The empirical results for the equations estimated are given as follow.

6.1 Logistic Regression of Equation one (Model 1)

The model one estimated in this study shows the empirical results of child labor with respect to child, household head and household characteristics

TABLE 8 LOGISTIC REGRESSION RESULTS OF EQUATION 1				
Model 1: Child Labor with respect to Child, Household and Household Head Characteristics				
Child Labor	Coefficient	Std.Err	Z	P> /z/
Child Age Cat				
7-8	0.971***	(0.273)	3.55	0.000
9-10	2.285***	(0.277)	8.25	0.000
11-12	3.256***	(0.301)	10.82	0.000
Above 12 Years	3.960***	(0.321)	12.35	0.000
Child Sex	-0.268	(0.173)	-1.55	0.120
Ethnicity				
Pusthun	0.173	(0.375)	0.46	0.644
Baloch	-0.253	(0.384)	-0.66	0.511
Tajik	-0.714*	(0.379)	-1.88	0.059
Uzbek	-0.192	(0.403)	-0.48	0.34
Child Education				
Primary	-0.0181	(0.216)	-0.08	0.934
Other	-0.202	(0.234)	-0.86	0.389
Higher	-0.734	(0.513)	-1.43	0.153
Household Size				
Medium	-0.262	(0.260)	-1.01	0.313
Large	-0.266	(0.314)	-0.85	0.397
Very large	-1.017**	(0.459)	-2.21	0.027
Locale				
Quetta	-0.708**	(0.355)	-1.99	0.046
Pishin	-0.787**	(0.313)	-2.51	0.012
Monthly Income				
Between 15k-30k	-0.213	(0.255)	-0.83	0.404
Between 30k-50k	-0.245	(0.272)	-0.90	0.367
Between 50k-80k	-0.114	(0.336)	-0.34	0.733
Above 80k	-0.344	(0.443)	-0.78	0.438
Household Head occ				
Manufacture	0.337	(0.408)	0.83	0.409
Agriculture	-0.934***	(0.346)	-2.70	0.007
Services	0.208	(0.255)	0.81	0.416
Construction	-0.427	(0.303)	-1.41	0.159
Head Literacy	-0.421*	(0.218)	-1.93	0.054
Head Age	0.00659	(0.00806)	0.82	0.414
Cons	-0.729	(0.649)	-1.12	0.261

The outcomes of logistic regression model in which dependent variable Child Labor has been shown in the Table 8. The table include the explanatory variables used in the study, the coefficients, standard error, z score and p-value. In fact, the defendant variable used in model is

child labor, which take the value 1 if child is working two or more than two hours per day. And, it takes the value 0 if the child is not working.

As shown in the table, the explanatory variable 'Child Age' of all categories have positive impact on child labor. In fact, the positive sign indicates that the probability of child labor increases with increase in age of the children. Indeed, the variable is significant at 1% of the confidence intervals. Moreover, the children with age of 7-8 are 0.97 times more likely to participate in child labor as compared to the children with age of 5-6 years (reference group), controlling for other factors. Likewise, as the age of children increase 9-10 years, the likelihood of child labor also increases. As shown in the table the children with age ranging from 9-10 years are 2.3 time more likely to engage in child labor. And, the children with 11-12 years of age are 3.3 time more likely to participate in child labor, controlling for other factors. And, children aged above 12 years (13-14 years) are 3.96 time more likely to work as child labor. To sum up, the probability child being engage in child labor is positively associated with child labor, and, the results are statistically significant at one percent of intervals. The findings are in line with the findings of (Lodhi et al., 2011) , (Grootaert, 1998). The probability of child labor with child age is increases because the capacity of child to perform work increase with age. However, the impacts of age are country specific (Grootaert, 1998) but, in context of Afghan refugees the probability of child work increases with the age of children , keeping other variables fixed.

On the other hand, according to this study the likelihood of child labor among Afghan Refugees decreases if the child is male as compared to female child. The negative sign with sex indicates that male children are less likely to engage in child labor. In fact, the coefficient -0.27 indicates that male (boys) are 0.27 times less likely to be in child labor as compared to girls, controlling for other variables. This is because we have included the household domestic work in child labor model, where the females are more likely to help with household chores. And, the results are consistent with the summary statistic which showed that about 54% of the children are working with in family such as, collecting firewood, fetching drinking water, cooking, or caring for children. However, the results are statistically not significant. Moreover, during the survey the respondents had reported that female (girls) are helping with female member in commercial activities as well such as handicrafts, waving or cutting dry fruits for the shopkeepers at home. Therefore, the probability of female girls in child work is high as compare to the boys. Similarly,

many studies have highlighted the gender discrimination (Canagarajah and Nielsen, 2001), (Lodhi et al., 2011) (Petraakis & Stamatakis, 2002). And (Zapata et al., 2011) revealed that female are more likely to participate in child labor as compare to the boys, while including the domestics work.

This study has included ethnicity of children as independent variable. The variable measures the probability of child labor with respect to the ethnicity of a children (Zapata et al., 2011). And, in this model, the reference group (or ethnicity of children) is Mughal ethnicity. As shown in the table, the positive sign of 'Pashtun' ethnicity indicates that Pashtun ethnic children are more likely to work as child labor as compared to the Mughal children (reference ethnicity). The coefficient 0.17 shows that Pashtun ethnic children are 0.17 times more likely to be in child labor as compared to the Mughal ethnic children, controlling for other variables. The high probability of child labor Among Pashtun ethnicity may be explained by the large sample size under study. But, the results are statistically not significant. And, the probability of Baloch children being engage in child labor is 0.25 times less than the Mughal ethnic children. Moreover, the negative coefficient of Tajiks Ethnic Children shows that, the children are less likely to child labor if a child is Tajik by ethnicity as compare to the reference ethnicity, controlling for other variables. Indeed, Tajik children are 0.71 times less likely to participate in child labor. And, this outcome is statistically significant at 10% of confidence intervals. Similarly, Uzbek children 0.19 times less likely to be in child labor as compared to the reference group. However, the results are not significant for Uzbeks children. (Zapata et al., 2011) has also investigated the persistence of child labor based on ethnicity and gender of the children. The study reveals that both the factors are important determinants of child labor or education.

Child level of education is another important determinant of child labor. We expect less chance of child labor if the children are engage in school as compared to those who have no schooling. Because they devote most of the time to education. As shown in the table, there are three categories against reference category. And, the reference category used in the model are the children who have no education at all. And, the category "other" indicates the religious education which represent either children are getting Islamic teachings in religious institutions (Deeni Madaress). In fact, the study included this category because many Afghan Refugees send their children to (Deeni Madaress) get Islamic teachings rather than (schools) traditional education. Thus it's important to capture the difference in likelihood of child labor among Afghan Refugees

for the children who are engage in traditional schooling and in religious institutions. No doubt, the logistic regression coefficient of all three categories are negative against the category of children who have no education. Indeed, the coefficient 0.018 in the table shows that likelihood of child labor is 0.018 times lower for the children who have primary education as compared to those who have no education, controlling for other variables. As child level of education increases the probability of child being working as child labor decreases. Further, the chance of child labor is 0.73 times lower if child have higher education as compare to those who have no education, *citrus paribus*. Additionally, the estimation indicates that the children with religious education are 0.20 times less likely to be in child labor as compared to the children with no education. However, the results of child education for all categories are insignificant.

The variables household size used in the model, measures the number of people in family. And, the study has distinguished household size in four categories. Such as Small household size, which consist of 8 or less than members in the family. Moreover, Medium household comprises of 9-14 members with family, the large families indicate household size ranging from 15-23 and finally very large household indicates a household with more than 24 members. In fact, the reference category used in the model is 'small household' in order to compare the probability of child labor among Afghan Refugees with respect to size of household. The negative signs of all three categories 'Medium', 'Large' and 'Very Large' indicates that the probability of child labor decreases with rise in family size. In fact, the coefficient for medium household 0.26 shows that the incidence of child labor is 0.26 times lower is the size of household is medium (consisting 9-14 members) as compared to small household (comprises of 8 or less than 8 members). But, the p-value is above 0.05 which shows that medium household have no significant impact on child labor Among Afghan refugees. Similarly, the children in large household size are 0.27 time less likely to work as child labor as compare to the children among small household, controlling for other variables. However, the p-value of large household size shown in the table reveals that large household size has no significant impact on child labor. On the other hand, very large family size has statistically significant impact on incidence of child labor among Afghan refugees. The odd value 1.02 shows that the probability of child labor among very large household is 1.02 times less than small household, controlling other variables. In fact , the findings are not consisting with most of the literature, thus the relationship between child labor and household size is context specific (Cochrane, 1990).

Another, variable used in the study “locale” shows the district where Afghan refugees are living. There are three districts under study. Namely the districts are Quetta, Pishin and Loralahi. The reference category used in the logistic regression is district loralahi. In fact, the estimation shows that local has significant impact on child labor among afghan refugees both for the district Quetta and Pishin. The negative sign indicates that the probability of child labor in district Quetta and Pishin is less as compare to the children living in district Loralahi. Indeed, the coefficient 0.708 indicates that the likelihood of child labor among Afghan refugees is 0.708 times less if the local of the refuges is district Quetta as compare to the reference category, keeping other factors constant. Similarly, the coefficient 0.787 reveals that the probability of child being engage in child labor is 0.787 times less if the children are living in district Pishin as compare to the children living in Loralahi, keeping other factors constant. And, variable for both district is statistically significant at 5% of confidence intervals. This variation in child labor probability may be explain through the impact of rural and urban factor. As the children living in district Quetta indicates the urban area and the refugees living in Pishin or Surkhab camps may be characterized as Simi-urban area. So based on this categorization of the districts the findings are consistent with the existing literature such as (Ray, 2000) , Ray found similar outcomes in context of Pakistan.

Against household monthly income we expect that higher the monthly income of household the lower will be chance of child labor. As shown in the table we have four categories of income against the reference category (less than 15000 per month). In fact, the negative sign of coefficient for all four categories indicates the higher the monthly income of household, the lower the probability of child being engage in child labor. (Edmonds & Pavcnik, 2005) also indicated declining trend in persistence of child labor with the respect to household income. Moreover, the coefficient 0.213 shows that the likelihood of child labor is 0.213 time less if the monthly income of the family is ranging from 15k-30k as compare to the household who receive less than 15k per month, controlling other factors. Moreover, the estimation shows the likelihood of child labor is 0.25 times lower if the family monthly income is between 30k-50k, probability of child being engage in child labor is 0.114 times less if the family income is between 50k-80k and the likelihood of child labor is 0.34 times less if the monthly income of household is above 80k as compared to the household with monthly income less than 15k, controlling other factors. However, the results reveals that income have no significant impact on child labor among afghan refugees.

This study has also included household head factors to explore their impact on the incidence of child labor among afghan refugees. As shown in the estimated model the variable household head occupation indicates the link between likelihood of child labor and occupation of household head. In fact, the positive sign of coefficient for household whose occupation is manufacture or working in services sector shows that there is more chance of child labor if the household is engage in manufacture or services sector. But, the finding for these occupation is insignificant. On the other hand, the negative sign for Agriculture and construction shows that there is less chance of child labor if the household head is either engage in Agriculture or construction as compare to the reference category. In fact, the chance of child labor is 0.93 time less if the household head occupation is agriculture, controlling other variables. Indeed, household head working in agriculture sector has statistically significant impact on child labor among afghan refugees. This is because most of the household head engage in agriculture sector in rural areas where the working sites are far away from camps they are living in, and children have no access to market to participate in child labor.

Furthermore, for the variable household head literacy we expect negative association with child labor. Because, the literate people know the importance of human capital therefore they tend to send their children to school rather than market for work. Similarly, the findings indicate that the likelihood of child labor is 0.42 times less if the household head is literate as compared to illiterate, controlling for other factors. Indeed, the p-value 0.054 shows that household head literacy has significant impact on child labor at 10% of confidence intervals. The findings of the this study are in line with the studies such as (Abu-Ghallow, 2012), (Kis-Katos & Sparrow, 2011) and (Lodhi et al., 2011), (Ray, 2000) in context of Pakistan also reveals negative impacts of household head education on the probability of child labor.

Finally, the estimation shows that household head Age has no significant impact on child labor. But, as shown in the table the positive sign indicates that older the head of household head, more the chance of child labor in context of Afghan refugees.

6.2 Logistic Regression of Equation Two (Model 2)

The equation two estimated in the study presents the empirical results of Child Labor among Afghan Refugees with respect to Social Indicators. The outcomes are given in table 9 as follows.

Table 9 logistic regression of model two				
Child Labor, with regards to social indicators: Model 2				
Child labor	Coefficients	Std.Err	Z	P>/z/
Access to Clean water	-0.111	(0.268)	-0.41	0.680
Availability of water in tap				
4-6 hours	-0.142	(0.380)	-0.37	0.710
Above 6 hours	-0.0610	(0.237)	-0.26	0.797
Main Source of Water				
Hand Pump	-0.389	(0.485)	-0.80	0.423
Tube well	0.343	(0.531)	0.65	0.519
Open well	0.0825	(0.354)	0.23	0.816
Tanker	-0.00686	(0.559)	-0.01	0.990
Rahri	-0.0291	(0.434)	-0.07	0.946
How far source of drinking water				
.0- .5 km	0.757*	(0.401)	1.89	0.059
.5+ - 1km	0.677*	(0.346)	1.96	0.050
1+ - 2km	0.144	(0.382)	0.38	0.706
2+ - 5km	0.423	(0.466)	0.91	0.364
5+ km	0.657	(0.560)	1.17	0.241
Time consume for round trip to source of water				
1-15 Minutes	0.242	(0.569)	0.42	0.671
16-30 Minutes	-0.262	(0.575)	-0.46	0.649
31-45 Minutes	-0.0876	(0.604)	-0.15	0.885
46-60 Minutes	-0.282	(0.613)	-0.46	0.645
60 + Minutes	-0.222	(0.648)	-0.34	0.732
Gas Connection	-0.137	(0.232)	0.59	0.555
Availability of Electricity	-0.209	(0.421)	-0.50	0.619
Access to Public School	-0.505*	(0.303)	-1.67	0.096
Availability of special School				
NGO	0.762***	(0.268)	2.85	0.004
Private	0.298	(0.286)	1.04	0.297
Basic Health Unit	-0.254	(0.321)	-0.79	0.429
Afghan Citizen Card	0.176	(0.199)	0.88	0.377
Land Ownership	-0.190	(0.265)	-0.72	0.473
NGO_Operate	-0.355	(0.229)	-1.55	0.121
No of Rooms				
3-4	0.00768	(0.201)	0.04	0.969
5-6	-0.596**	(0.254)	-2.35	0.019
7-8	-0.176	(0.400)	-0.44	0.660
Above 8	0.133	(0.548)	0.24	0.808
Willing to return to Afghanistan				
No	1.304**	(0.633)	2.06	0.039
With condition of peace	1.349**	(0.640)	2.11	0.035
Why send children for work				
No future returns	-0.371*	(0.214)	-1.73	0.083
Have no access to school	-0.153	(0.251)	-0.61	0.543
Culture	-0.649	(0.503)	-1.29	0.197
Cons	0.292	(1.347)	0.22	0.828

This study has included social indicators in order to fully examine the determinants of child labor among Afghan Refugees. social indicators included in the model as shown in the table are ‘access to clean drinking water’ ‘availability of water in tap’ , ‘main source of drinking water’, ‘distance from source of water’, ‘ time consume for a round trip to water’, ‘gas connection’, ‘availability of electricity’, ‘Access to Public school’, ‘access to Afghan Special school’, ‘ basic health unit’, ‘Afghan citizen card’, ‘land ownership’, ‘ presence of NGOs’ , ‘number of rooms’ ‘ willingness to return to Afghanistan’ and ‘ Major reasons for sending children to work’.

The findings of logistic regression show that the likelihood of child labor is 0.1 times less if the household have access to clean drinking water as compare to the household who have no access to water. But, the variable is not significant at any level. The inverse relationship between child labor and access to clean drinking water may be explain by the child time devoted to caring water from main sources of water. Thus, the chance of child labor is less if the household have access to water, moreover the findings are in line with the descriptive analysis of the study.

The variable included in the model ‘availability of water in tap’ shows that how the probability of child labor very with the number of hours’ water availability in the tap. The reference category used for the comparison in the model is availability of water for 0-3 hours per day. However, the coefficient 0.14 indicates that the chance of child labor is 0.14 times less if the household have water for 3-6 hours in tap as compare to the household who have water for 0-3 hours per day. Father, the estimation revels that the chance of child being engage in child labor is 0.1 times less if the water is available for more than 6 hours as compare to the reference category, controlling other factors. However, the p-values for both categories suggest that the variable ‘availability of water in tap’ has statistically no significant impact on child labor among afghan refugees.

Another factor included in the study is ‘main source of drinking water’. In fact, the estimation shows the probability of child being engage in child labor increases if the household main source of drinking water is Tub Well and Open Well against reference category. On the other hand, the negative sign of coefficient for Tanker, Hand Pump and Rahri suggests that the chance of child labor is low if the household’s main source of drinking water is Tanker, Hand Pump or Rahri as compare to the reference category, controlling for other factors. However, the estimation

shows that the variables have statistically no significant impact on child labor among Afghans. The high chance of child labor with respect to tub well or open well is due to the responsibility of the children to bring water from such source of water.

Furthermore, the variable used in the study “the time consume for a round trip to pitch water” shows the distance from home to source of drinking water. As the refugees have limited access to drinking water and most of the household use “Rahri” to bring water from tub well, open well or Hand pumps. Thus, we expect that the short the distance from main source of drinking water the more children would be engage in child labor, as most of the children perform this activity among Afghan refugees. on the other hand, more the distance of main source of drinking water, need more time for a round trip to source of drinking water, which the children can’t perform the job in such case therefore we expect less chance of child labor. Similarly, the findings of the study show that the probability of child being engage in child is 0.24 times higher if the household need to consume 1-15 minutes for a round trip to fetch drinking water as compare to the household how have water availability at home (need not to consume any time for fetching water). Contrary to, the finding given in the table indicates that the probability of child labor decreases with rise in time need to spent for a round trip to fetch drinking water. in fact, the coefficient 0.24 shows that the chance of child labor is 0.24 time less if the household need to consume 16-30 minutes for a round trip to source of water. and 0.087 indicates that the probability of child being work as child labor is 0.087 time less if the household need to devote 31-45 minutes for a round trip to source of drinking water. further, the estimation indicates the chance of child labor 0.28 time less if the household need to spent 46-60 minutes for a round trip to source of drinking water. And, the coefficient 0.22 shows that the likelihood of child labor among Afghan refugees is 0.22 times less if the household need to send more than 60 minutes for a round trip to source of drinking water as compared to the reference category. Because, when the household need to consume more time for a round trip to source of drinking water, this mean that household are either not sending children to fetch drinking water or they using tanker as main source of drinking water. However, the variable “time consume for round trip to fetch drinking water” is statistically not significant at any level.

Additionally, the variable used in the analysis “gas connection” measure Afghan Refugees Quality of Life. We expect that the incidence of child labor is less if the household have “gas

connection” because the children then need not to collect firewood for family. Likewise, the estimation shown in the table shows that the probability of child being engage in child labor is high if the household have no access to gas connection as compare to (reference category) the household with access to gas connection. In fact, the coefficient 0.137 indicates that the chance of child being engage in child labor is 0.137 time more if the household have no access to gas connection as compare to the reference group (who have access to gas connection), controlling other factors. But the p-value is above 0.05 which reveals that the variable “gas connection” has no significant impact on child labor among afghan refugees.

Similarly, the study included the variable “Electricity” as a social indicator which measure the refugee’s quality of life. As shown in the logistic regression model, the reference category is the number of household who have no access to electricity. For the variable “electricity” we expect less chance of child labor if the household have electricity, because this indicate the high quality of life and higher the quality of life is negatively associated with child labor. Likely, the negative sign of coefficient for the variable “electricity” indicates that the incidence of child labor is negatively related with availability of electricity. Indeed, the likelihood of child labor is 0.21 times less if the household have electricity connection as compare to the household without facility of electricity, controlling other variables. However, the p-value shows that the variable “electricity” have insignificant impact on child labor in context of Afghan refugees.

Most of the time household decide to send children to work instead to school because they have no access to school. Therefor this study has included the variable either Afghan refugees have access to public school or not. And, what are the repercussions in both the cases, we expect negative association between child labor and availability of public school for Afghan refugees. indeed, the regression analysis shows the there is less chance of child labor if they have access to public school as compared to those who have no access to public school. Moreover, the coefficient 0.51 indicates that the probability of child being engage in child labor is 0.51 times less if the children have access to public school as compared the children who have no access to public school, controlling for other variables. And, the p-value shown in the table revels that the social indicator “access to public school” has statistically significant impact on child labor at 10% of confidence intervals.

Based on the summary statistics of the study, majority of Afghan refugees have no access to public school. And, for the Afghans the UNHCR and other NGOs run Special (Afghani) Schools. Therefore, we have included the variable “Access to Special School” which indicate the number of people/ children who have access to Afghan special school. In fact, the study has distinguished the variable in three categories such “No access to special school” which is the reference category in this model. And, “access to special school” run by the NGO, s. furthermore, “access to special school” run by private bodies. In fact, the estimation indicates the positive relationship between child labor and availability of Special school in context of Afghan refugees. Indeed, the coefficient 0.72 suggest that the probability of child labor is 0.72 times higher if the child have access to Special school (run by NGOs). And, the variable is statistically significant at one percent. This is because, the NGOs school charge 50% of the fee from the students. Moreover, this may be due to the cultural factor. Or the special school may be of low quality and there would be no future return of education for Afghan children. In fact, this is statistically confirmed in the study that Parents send children to work because education has no future return for Afghan refugee’s children. No doubt, this study further explore that Afghan refugees have no access to own any official job. Moreover, according to the respondent’s remarks, “No matter what is the level of our education, we will have to work as daily wager”.

Additionally, the estimation shows that, availability of basic health unit has statistically no significant impact on child labor. And, the coefficient 0.176 for the variable “Afghan Citizen Card” indicates that the likelihood of child labor is 0.176 time higher if the household are not registered (have no Afghan Citizen Card) as compared to those who have Afghan citizen card. Because most of non-registered refugees have very low standards of living and they are deprived of major facilities enjoyed by registered refugees. However, the p-value shows that variable “Afghan Citizen Card” statistically insignificant impact on child labor among afghan refugees under study. Moreover this impact are also highlighted by in Haider et al, in Rawalpindi city (Haider et al., 2016). The factor “land ownership” shows the probability of child labor with respect to land ownership. In fact, the negative sign of coefficient 0.19 reveals that the probability of child labor is 0.19 time less if the household own land. But, the estimation shows that the variable is insignificant. Furthermore, the social indicator “NGO-Operate” is included in the model to distinguish between child labor in regains where the NGOs are active against the areas where the NGO are not operating. We have included the NGOs factor because it’s the mandate of NGOs to

provide education. In fact, the negative sign of coefficient 0.355 shows that the chance of child being engage in child labor 0.355 times less if the NGO is operating or active in the region as compared to the region where the NGOs are not operating. Although, the p-value above 0.05 which indicates that NGOs presence have insignificant impact on child labor among Afghan refugees.

Another socioeconomic indicator included in the model “No of Room” shows the number of rooms in house. The reference group is 1-2 rooms. In fact, the estimation shows the probability of child labor is high if household have 3-4 rooms as compare to 1-2 rooms. And, the chance of child labor is low the number of room in house is 5-6. Indeed, the coefficient 0.596 indicates that the likelihood of child labor is 0.596 time lower if the household have 5-6 rooms in house as compare to 1-2 rooms in house, controlling other variables. And, this category of room (5-6) has statistically significant impact on child labor among afghan refugees. Similarly, the estimation shows less chance of child labor if the housed has 6-7 rooms, and more chance of child labor if the household has more than 8 rooms as compare to the household with 1-2 rooms. However, the p-value suggest that these two categories are insignificant. And, the factor “willingness to return to Afghanistan” measure the Afghan refugee’s willingness to return to their country of origin. The reference category used in the logistic regression is the number of refugee who are willing to retune to Afghanistan against the refugees who not willing to return without peace in Afghanistan and those are unwilling to return at all. Indeed, the coefficient 1.304 for the Refugees who are unwilling to return to Afghanistan shows that the chance of child labor is 1.304 times higher than those who are willing to return to their country. And, the likelihood of child labor is 1.349 times more who are willing to return to Afghanistan with condition of peace (in Afghanistan) as compare to the refugees who are willing to return to their sate or origin. Furthermore, the estimation shows both the variables are statistically significant at 5% of interval.

Finally, the logistic regression model included the respondent’s response to the question “why are you sending children to work”? The reference category used in the analysis is “Poverty”. As shown in the table the sign of coefficient is negative for all three categories including “no future returns”, “have no access to school” and “culture” which shows that the likelihood of child labor is low if parents/ household head perceives no future return, no access to school or cultural barriers as compare to poverty. In other words, the probability of child labor is high if parents/ household head perceives poverty as main reason of child labor or sending children to work as compare to

other reasons of sending children to work, controlling other variables. Moreover, the coefficient 0.371 of “No future return” shows that the chance of child labor is 0.371 time less if parents / household head perceives “no future return” as reason of sending children to as compare to poverty. And, the p- value suggest that the factor “no future return” has statistically significant impact on child labor. Additionally, the coefficient 0.153 indicates 0.153 times less chance of child labor if Afghan refugees consider “no access to school” as reason of sending children to work and, 0.649 shows, that the likelihood of child being engage in child labor is 0.649 times lower if the Afghan refugees perceive “culture” as reason of sending children to work as compare to “poverty”. However, the results are statistically in significant for “no access to school” and “culture”.

6.3 Logistic Regression of Merged/ Equation Three (Model 3)

The equation three estimated in the study presents the empirical results of Child Labor among Afghan Refugees with respect to socioeconomic factors. In fact, the model 3 or equation three shows the probability of child labor with respect to the factors such as, Child, Household Head, Household and Social indicators used in one model. The outcomes of merge model used in the study are given as follows.

6.3.1 Empirical Analysis of Merged Equation for Child Characteristics

This section of the study shows the empirical analysis child labor with respect to child characteristics obtained by estimation of model 3. The child characteristics includes child age, sex, ethnicity and level of education. In fact, the outcomes indicate the likelihood of child labor among afghan refugees with respect to the child characteristics. The findings are given in the table 10.

Table 10 Combined Logistic Regression result of Child Characteristics				
Child Characteristics				
Child Labor	coefficient	Std.Err	Z	P>/z/
Child Age Cat				
7-8	1.172***	(0.312)	3.76	0.000
9-10	2.542***	(0.322)	7.90	0.000
11-12	3.804***	(0.365)	10.42	0.000
Above 12 Years	4.486***	(0.389)	11.53	0.000
Child Sex	-0.322	(0.204)	-1.58	0.115
Ethnicity				

Pusthun	0.142	(0.657)	0.22	0.828
Baloch	0.0948	(0.625)	0.15	0.879
Tajik	0.153	(0.646)	0.24	0.813
Uzbek	1.371*	(0.819)	1.67	0.094
Child Education				
Primary	-0.0396	(0.264)	-0.15	0.881
Other	-0.0367	(0.299)	-0.12	0.902
Higher	0.123	(0.724)	0.17	0.865

The table 10 indicates the results of child characteristics used in equation 3 (merged analysis of child labor). In fact, the study analyzed the merged analysis in order to distinguish the logistic regression used independently (equation 1 and 2). Indeed, the coefficient obtained from merged analysis shows that child Age has statistically significant impact on child labor and the findings are consistent with logistic regression used in model 1. Likewise, the coefficient shows that the probability of child being engage in work is high if the age of childe increases from 7-8, 9-10, 11-12 and above 12 years as compared to the children aged ranging from 5-6. Moreover, the findings are in line with existing literature (Lodhi et al., 2011) , (Grootaert, 1998) And, the determinant “Child Sex” in the table indicates the likelihood of child labor is 0.32 times less if the child is male (boy) as compare to female (girls) among afghan refugees, controlling other factors. As compared to the estimation of model 1, the probability of female (girls) being in child labor is more in merged analysis. But, the variable is insignificant in both models. The gender discrimination is steady with the outcomes of (Canagarajah and Nielsen, 2001), (Lodhi et al., 2011) (Petrakis & Stamatakis, 2002). And (Zapata et al., 2011).

Moreover, the estimation of combined logistic regression indicates that instead of “Tajik” community of Afghan refugees the “Uzbek” ethnicity has statistically significant impact on child labor. In fact, the positive sign for the variable “Pusthun”, “Baloch”, “Tajik” and “Uzbek” ethnicity shows that the chance of child labor is more if the child ethnicity is Pusthun, Baloch, Tajik or Uzbek as compare to the child with Mughal ethnicity. However, the phenomenon of child labor also depends on the culture or ethnicity of the children (Zapata et al., 2011). Furthermore, the results in the table “Child Education” suggest that the likelihood of child labor is less if the child have primary or religious education as compare to the children with no education. And, the estimation results are consistent with findings obtained from model 1 used in the study for Primary and other (religious education). But, the sign of coefficient is positive in this model for the children who have higher level of education in this equation, (negative in model 1). In fact, the coefficient

0.12 (Higher) suggests that the chance of child labor is 0.12 time higher if the child has higher level of education as compare to the children with no education in context of Afghan refugees. This may be explained by the Age factor as shown in the model.

6.3.2 Empirical Analysis of Merged Equation for Household Characteristics

This section of the study shows the empirical analysis child labor with respect to household characteristics obtained by estimation of model 3. The household characteristics includes the household size, locale, and monthly income. In fact, the outcomes indicate the probability of child labor among afghan refugees with respect to the household or family characteristics. The findings are given in the table 11 as follows.

Table 11 Combined Logistic Regression result of Household Characteristics				
Household Characteristics				
Child Labor	Coefficient	Std.Err	Z	P>/z/
Household Size				
Medium	0.0156	(0.331)	0.05	0.962
Large	-0.465	(0.415)	-1.12	0.262
Very large	-1.795**	(0.792)	-2.27	0.023
Locale				
Quetta	-0.188	(0.792)	-0.24	0.812
Pishin	-0.977	(0.708)	-1.38	0.168
Monthly Income				
Between 15k-30k	-0.102	(0.324)	-0.32	0.753
Between 30k-50k	0.00123	(0.364)	0.00	0.997
Between 50k-80k	0.745	(0.473)	1.57	0.115
Above 80k	0.634	(0.643)	0.99	0.324

The table 11 shows the results of household characteristics used in the combined analysis. As compare to the logistic regression results obtained from equation 1, the factor “household size” with medium category; the household with 9-14 members, have positive coefficient which indicates that the probability of child being engage in child labor is high if the household size is Medium as compared to Small household size. And, the results for “Large” and “Very Large” family size are consistent with the findings of Model 1. In both the Models used in this study indicates that, the likelihood of child labor is less if the size of family is “Large” or “Very Large” as compare to “Small” family size. And, the factor “Very Large” is statistically significant at 5 %

of confidence interval in both cases. However, the values of coefficient obtained from two models are different. And, the factor “Locale” shows the district where Afghan Refugees are living. The reference category is district Loralahi used in the model against district Quetta and Pishin. In fact, the estimation results obtained from equation is different from the estimation results observed in model 1. As shown in the table although the sign of coefficient is negative for both districts Quetta and Pishin which indicates the less chance of child labor among Afghan refugees if they are living in Quetta or Pishin as compare to the refugees living in district Loralahi. However, the results obtained from model 1 are statistically significant at 5% of confidence intervals, but the results obtained from equation 3 are statistically insignificant.

Additionally, the variable “Monthly Income” used in the combined analysis (model 3) shows that the likelihood of child labor is 0.1 times lower is the monthly income of household is between 15k -30k as compared to the refugees with monthly income less than 15k. And, the chance of child labor among Afghan Refugees is more if the household monthly income is between 30k-50k (0.001 times), if monthly income is between 51k-80k (0.745 times) and if the monthly income is above 80k (0.634 times) as compare to the household with less than 15k, controlling other factors. However, the findings of model 3 are inconsistent with the findings of model 1 for household who receive more that 30k per month. Because, the sign of coefficient for household with monthly income (30k-50k), (50k-80k) and (above 80k) in merged analysis is positive instead of negative as observed in model 1. However, income have no significant impact on child labor among afghan refugees as shown in both model 1 and model 3.

6.4 Empirical Analysis of Merged Equation for Household Head Characteristics

This section of the study shows the empirical analysis child labor with respect to household head characteristics obtained by estimation of model 3. The household head characteristics includes occupation, literacy and age. In fact, the outcomes indicate the likelihood of child labor among afghan refugees with respect to the household head characteristics. The findings are given in the table 12 as follows.

Table 12 Combined Logistic Regression result of Household Head Characteristics				
Household Head Characteristics				
Child Labor	Coefficient	Std.Err	z	P>/z/
Household Head Occupation				
Manufacture	0.0451	(0.533)	0.08	0.933
Agriculture	-1.076**	(0.463)	-2.32	0.020
Services	0.0742	(0.327)	0.23	0.820
Construction	-0.799**	(0.397)	-2.01	0.044
Head Literacy	-0.303	(0.288)	-1.05	0.292
Head Age	0.00653	(0.0108)	0.61	0.544

The table 12 shows the findings of household head factors used in the combined logistic regression. As shown in the table the chance of child labor among Afghan Refugees is explored with respect to household head occupation. In fact, the comparison is made against the household who are unemployed with the household head who are engage in Manufacture, Agriculture, Services and Construction. The coefficient 0.045 for occupation “Manufacture” indicates that the chance of child labor is 0.045 time higher if the occupation of household head is Manufacture as compared to reference category (Unemployed). And, the chance of child labor is 0.074 time more if the household is engage in services sector. However, the factor (Manufacture and Services) are statistically insignificant. Moreover, the finding of combined analysis for these two factors are consistent with estimation results obtained in model 1. Father the estimation shows that the likelihood of child labor among afghan refugees is 1.076 time less if the occupation of household is Agriculture. And, the chance of child being engage in child labor is 0.799 time lower is the household head is working in construction sector as compared to the reference category, controlling other variables. Indeed, the factor Agriculture and Construction has statistically significant impact on child labor at 5% interval. In comparison to the estimation observed from model one, the results of “Agriculture” are consistent with results of model one. But, the factor “construction” is insignificant in model 1.

Moreover, the variable “Head Literacy” included in the model shows the household head literacy. As shown in the table the coefficient 0.303 indicates that the likelihood of child labor is 0.303 time less if the head of household is literate as compare to illiterate head among afghan refugees, controlling other variables. and, the estimation obtained from merged logistic regression shows coefficient for the factor “Head Age” which indicates that the chance of child labor is 0.065

time high if the household age increases. However, both “Head Literacy” and “Head Age” are statistically insignificant. Further the findings are consistent with the estimation results obtained from model 1.

6.4.1 Empirical Analysis of Merged Equation for Social Indicators

This section of the study shows the empirical analysis child labor with regards to welfare or social indicators obtained by estimation of model 3. The social or welfare includes access to clean drinking water, no of hours the water is normally available in the tap, main source of water, destines from main source of water, the time consume for a round trip to pitch water, availability of gas, electricity, access to public school, access to Afghan special school, basic health unit, presence of NGO’s, Afghan citizen card and number of rooms in home. In fact, the outcomes indicate the likelihood of child labor among afghan refugees with respect to the social indicators or welfare indicators used in this study. The findings are given in the table 13 as follows.

Table 13 Combined Logistic Regression result of Social Indicators				
Social Indicators				
Child Labor	Coefficients	Std.Err	Z	P>/z/
Access to Clean water	0.0743	(0.377)	0.20	0.844
Availability of water in tap				
4-6 hours	-0.176	(0.516)	-0.34	0.732
Above 6 hours	0.0258	(0.405)	0.06	0.949
Main Source of Water				
Hand Pump	0.281	(0.919)	0.31	0.760
Tube well	0.771	(0.762)	1.01	0.311
Open well	0.756	(0.762)	0.99	0.322
Tanker	0.681	(0.853)	0.80	0.424
Rahri	-0.0329	(0.676)	-0.05	0.961
How far source of drinking water				
.0- .5 km	1.099**	(0.560)	1.96	0.050
.5+ - 1km	0.887*	(0.518)	1.71	0.87
1+ - 2km	0.00170	(0.537)	0.00	0.997
2+ - 5km	0.302	(0.636)	0.48	0.634
5+ km	0.538	(0.848)	0.64	0.525
Time consume for round trip to source of water				
1-15 Minutes	0.103	(0.893)	0.12	0.908
16-30 Minutes	0.0407	(0.923)	0.04	0.965
31-45 Minutes	-0.0905	(0.966)	0.09	0.925

46-60 Minutes	-0.259	(0.937)	0.28	0.782
60 + Minutes	-0.160	(0.984)	0.16	0.871
Gas Connection	-0.773**	(0.378)	2.04	0.041
Availability of Electricity	-0.410	(0.581)	-0.71	0.480
Access to Public School	-0.176	(0.473)	-0.37	0.710
Availability of special School				
NGO	1.257***	(0.413)	3.04	0.002
Private	0.117	(0.427)	0.27	0.784
Basic Health Unit	0.257	(0.441)	0.58	0.560
Afghan Citizen Card	-0.0670	(0.268)	-0.25	0.802
Land Ownership	-0.274	(0.364)	-0.75	0.451
NGO_Operate	-1.023***	(0.394)	-2.60	0.009
No of Rooms				
3-4	-0.0559	(0.287)	-0.19	0.845
5-6	-0.867**	(0.405)	-2.14	0.033
7-8	-0.927	(0.599)	-1.55	0.122
Above 8	1.441	(0.917)	1.57	0.116
Willingness to return to				
No	0.545	(0.854)	0.64	0.523
With condition of peace	0.638	(0.872)	0.73	0.464
Why send children for work				
No future returns	-0.533*	(0.282)	-1.89	0.059
Have no access to school	-0.334	(0.353)	-0.95	0.344
Culture	-1.566**	(0.727)	-2.15	0.031
Cons	-3.354	(2.447)	-1.37	0.171

The table 13 shows merger analysis of social indicators used in the study. In fact, the study analyzed merged model in order to compare the findings with model one and two. As shown in the table the coefficient 0.07 for variable “Access to clean drinking water” is inconsistent with the result obtained from equation 2 (model 2). Because the sign of coefficient in this model is positive instead of negative, the study found in model 2. However, the variable has insignificant impact on child labor based on estimation of both models. And, the factor “Availability of water in tap” shows the number of house water is normally available in tap. The reference category used in model 3 is availability of water for 0-3 hours. However, the coefficient 0.176 shows that the probability of child being engage in child labor is 0.176 times less if household have water availability is tap for 4-6 hours, and the chance of child labor is 0.03 times more if household have water in tap for more than 6 hours per day as compare to the reference category. But, the variable as a whole have no significant impact on child labor. Comparing with the estimation of model 2, the findings are consistent in term of significance level. But, for the sign for category “above 6” is positive instead of negative.

Further, the social factor “Main Source of Drinking Water” used in the logistic regression shows the main source of drinking water used by Afghan refugees. The reference category used in the model is “piped water” as main source of drinking water. and, the coefficients obtained from combined (model 3) shows the chance of child labor is 0.28 times, 0.771 times, 0.756 times 0.681 times higher if the main source of drinking water used by the household is Hand Pump, Tube Well, Open Well and Tanker respectively, as compared to Piped Water, controlling other variables. On the other hand, the likelihood of child labor among Afghan refugees is 0.0329 times less if the household main source of drinking water is “Rahri” as compared to the reference category. Although, the estimation indicates that the variable is statistically insignificant and consistent with estimation of model 2. But, the value of coefficient is different owing to the number of variables used in logistic regression. The sign of coefficient for factors “hand pump” and “tanker” is positive rather than negative which were observed from the results of model 2.

Additionally, the social factor used in the model “how far source of drinking water” the main source of drinking water distance from the home. The base category used in the merged analysis is “0 km” (the water are available with in house). Moreover, the finding shows that the probability of child being engage in child labor among afghan refugees is 1.09 times high if the main source of drinking water is 0- .5 km away from home as compared to the reference category, controlling other variables. Indeed, the p-values indicates the variable has statistically significant impact on child labor at 5% of confidence intervals. Similarly, the chance of child labor is 0.887* times more if the main source of drinking water is .5+ - 1km away from home as compared to the reference category. In fact, the estimation shows that the distance .5+ - 1km has statistically significant impact on child labor. And, the coefficient (0.00170) indicates the negligible impact on child labor among afghan refugees if the distance from main source of drinking water is 1+ - 2km away from home. Moreover, the coefficient obtained from combined model shows that the chance of child labor is 0.302 times and 0.538 time more if the main source of drinking water is 2+ - 5km and 5+ km respectively away from home, as compare to base category. However, the estimation show that these categories have no significant impact on child labor among afghan refugees. Moreover, the results obtained from merged model are consistent with the results observed in model 2.

Another social factor used in the merged logistic regression “Time consume for round trip to source of water” indicates the time household need to consume for a round trip to fetch drinking water. The reference category used in the merger model is “0 minutes” (water available inside the house). In fact, the coefficient shown in the table indicates that the chance of child labor among afghan refugees is 0.103 times and 0.0407 time more if the household need to consume 1-15 Minutes and 16-30 Minutes for a round trip to fetch drinking water respectively as compared to the reference category, controlling other variables. And, the chance of child labor is 0.0905 time, 0.259 times and -0.160 times less if the household need to spent 31-45 Minutes, 46-60 Minutes and 60 + Minutes respectively as compared to the reference category, controlling other variables. Moreover, the p-value indicates that the variable “Time consume for round trip to source of water” has statistically insignificant impact on child labor. The results are consistent with the estimation obtained in model two but the sign of coefficient are positive for some categories instead of negative.

Additionally, the variable used in the analysis “gas connection” measure Afghan Refugees Quality of Life. We expect that the incidence of child labor is less if the household have “gas connection” because the children then need not to collect firewood for family. Likewise, the estimation shown in the table shows that the probability of child being engage in child labor is high if the household have no access to gas connection as compare to (reference category) the household with access to gas connection. In fact, the coefficient 0.773 indicates that the chance of child being engage in child labor is 0.773 time more if the household have no access to gas connection as compare to the reference group (who have access to gas connection), controlling other factors. Indeed, the factor has significant impact on child labor. As compared to model 2, the sign of coefficient is same (positive) but variable was insignificant in model two used in the study.

Similarly, the study included the variable “Electricity” in the merged logistic regression as a social indicator which measure the refugee’s quality of life. As shown in the logistic regression model, the reference category is the number of household who have no access to electricity. For the variable “electricity” we expect less chance of child labor if the household have electricity, because this indicate the high quality of life and higher the quality of life is negatively associated with child labor. Likely, the negative sign of coefficient for the variable “electricity” indicates that the incidence of child labor is negatively related with availability of electricity. Indeed, the

likelihood of child labor is 0.41 times less if the household have electricity connection as compare to the household without facility of electricity, controlling other variables. However, the p-value shows that the variable “electricity” have insignificant impact on child labor in context of Afghan refugees. And, the findings are consistent with results obtained from model 2. And, the variable “Access to public School” shows the Afghan refugees’ access to public school. The reference category used in the model is the refugees who have no access to public school. The estimation indicates that the likelihood of child labor among afghan refugees is 0.176 times less if the refugees have access to public school as compared to the reference category, controlling other factors. However, the variable “public school” insignificant. Moreover, the findings are consistent with model 2 used in the study.

Additionally, the social indicator included in the merged logistic regression “Access to Special School” which indicate the number of people/ children who have access to Afghan special school. In fact, the study has distinguished the variable in three categories such “No access to special school” which is the reference category in this model. In fact, the estimation indicates the positive relationship between child labor and availability of Special school in context of Afghan refugees. Indeed, the coefficient 1.257 suggest that the probability of child labor is 1.25 times higher if the child have access to Special school (run by NGOs). And, the variable is statistically significant at one percent. This is because, the NGO, s school charge 50% of the fee from the students. Moreover, this may be due to the cultural factor. Or the special school may be of low quality and there would be no future return of education for Afghan children. In fact, this is statistically confirmed in the study that Parents send children to work because education has no future return for Afghan refugee’s children. No doubt, this study further explore that Afghan refugees have no access to own any official job. Moreover, according to the respondent’s remarks “No matter what is the level of our education, we will have to work as daily wager”. Indeed, the finding are consistent with model 2 used in the study. However, the values of coefficient very.

The variable “Access to Public Health” relates the incidence of child labor among Afghan refugees with access to public health unit. The reference category is the number of Afghan Refugees how have access to public health unit. Moreover, the coefficient 0.257 indicates that the chance of child labor is 0.257 times higher if the household have no access to public health unit as compare to the reference category. However, the p-values suggest the variable is statistically

insignificant. In model 2 used in the study the sign of variable is negative but the study found positive sign from combined model. And, the coefficient for variable “Afghan Citizen Card” indicates that the probability of child being engage in child labor is 0.0670 times less if the Afghan refugees have Afghan Citizen Cared as compared to the refugees who has no Afghan Card, controlling other variables. But, the variable is insignificant. Moreover, the impact if “Afghan Citizen Card” are consistent with the estimation found from model 2. On the other hand, the estimation indicates that the chance of child labor 0.274 times less if the household has no land ownership as compared to the refugees how have land ownership. In other words, the probability of child being engage in child labor increases if the household have land ownership. But, the p-values shown in the table suggest that the factor “land ownership” is insignificant. Moreover, the findings are consistent with regression 2.

Furthermore, the social indicator “NGO_Operate” is included in the model to distinguish between child labor in regains where the NGOs are active against the areas where the NGO are not operating. We have included the NGOs factor because it’s the mandate of NGOs to provide education. The reference category used in merged model is the areas where the NGO, s inactive or not operation. In fact, coefficient 1.023 shows that the chance of child being engage in child labor 1.023 times less if the NGO is operating or active in the region as compared to the region where the NGOs are not operating, controlling other variables. Indeed, the factor “NGO_Operates has statistically significant impact on child labor in context of Afghan refugees. And the variable used in model two was insignificant.

Another socioeconomic indicator included in the model “No of Room” shows the number of rooms in house. The reference group is 1-2 rooms. In fact, the estimation shows less chance of child labor if household have 3-4, 5-6 and 7-8 rooms as compare to the household with 1-2 rooms. And, the chance of child labor is more if the household has more than 8 room. Indeed, the coefficient 0.0559 indicates that the likelihood of child labor is 0.0559 times lower if the household have 3-4 rooms in house as compare to 1-2 rooms in house, controlling other variables. Further, the value -0.867 suggest that the likelihood of child labor is 0.867 times less if the household have 5-6 room in house as compared to the reference category. Similarly, and, this category of room (5-6) has statistically significant impact on child labor among afghan refugees. Similarly, the estimation shows 0.927 times less chance of child labor if the housed has 7-78 rooms. However,

there is (1.441 times) more chance of child labor if the household has more than 8 rooms as compare to the household with 1-2 rooms. Further, the estimation obtained from merged logistic regression shows that only the second category, household with 5-6 rooms has statistically significant impact on child labor. Moreover, the result is consistent with the findings shown in model two, but the sign of coefficient for category 3-4 is negative, which is positive in estimation of equation of the study.

And, the factor “willingness to return to Afghanistan” measure the Afghan refugee’s willingness to return to their country of origin. The reference category used in the logistic regression is the number of refugee who are willing to return to Afghanistan against the refugees who not willing to return without peace in Afghanistan and those are unwilling to return at all. Indeed, the coefficient 0.545 for the Refugees who are unwilling to return to Afghanistan shows that the chance of child labor is 0.545 times higher than those who are willing to return to their country. And, the likelihood of child labor is 0.638 times more who are willing to return to Afghanistan with condition of peace (in Afghanistan) as compare to the refugees who are willing to return to their sate or origin. However, the estimation shows the variable is insignificant. But, the variable is statistically significant at 5% of interval while using model 2.

Finally, the logistic regression model included the respondent’s response to the question “why are you sending children to work”? The reference category used in the analysis is “Poverty”. As shown in the table the sign of coefficient is negative for all three categories including “no future returns”, “have no access to school” and “culture” which shows that the likelihood of child labor is low if parents/ household head perceives no future return, no access to school or cultural barriers as compare to poverty. In other words, the probability of child labor is high if parents/ household head perceives poverty as main reason of child labor or sending children to work as compare to other reasons of sending children to work, controlling other variables. Moreover, the coefficient 0.533 of “No future return” shows that the chance of child labor is 0.533 time less if parents/household head perceives “no future return” as reason of sending children to as compare to poverty. And, the p- value suggest that the factor “no future return” has statistically significant impact on child labor among afghan refugees. Additionally, the coefficient 0.334 indicates 0.334 times less chance of child labor if Afghan refugees consider “no access to school” as reason of sending children to work. But this reason is insignificant. And, the coefficient 1.566 shows, that

the likelihood of child being engage in child labor is 1.566 times lower if the Afghan refugees perceive “culture” as reason of sending children to work as compare to “poverty”. Indeed, the results are significant for this factor at 5% of confidence intervals. However, in the model two only one factor is significant (No Future Returns).

CHAPTER 7

DISCUSSIONS, CONCLUSION AND POLICY PROPOSALS

7.1 Discussion and Conclusion

The four major factors of child labor (child, household head, household and social indicators) were examined in this study. The findings of the study indicate that majority (53%) of the Afghan Refugees children are working household chores activities due to low standards of living. And, about 12% of children work in market for earnings owing to poverty. The child characteristics shows that the incidence of child labor is positively associated with Child Age, in fact 86% of the children aged above 12 years (13-14) are participating in child labor. The participation of children in work on the basis of sex is negligible. And, the children with religious education are likely to be in child labor. Moreover, the child labor is more among Pashtun ethnic children (56%) and about 50% among other ethnicities. Additionally, the household factors included in the study reveals that the persistence of child labor is identical among children in small or medium household (56.6%) but, the incidence reduces as size of household increases large (49%) and very large household (39%) this may do the distribution of responsibilities. Further, the persistence of child labor is high in Lorlahi Refugees Camps as compared to district Quetta and district Pishin. The study further indicates that there is negative trend between child labor and Monthly income but, income has negligible impact on child labor in context of Afghan Refugees. And, the percentage of child labor is less if the household head is literate and engage in Agriculture sector (49% and 47% respectively).

The cross relationship between child labor and social indicators indicates that the percentage of child labor is less among refugees who have access to social indicators such as availability of electricity (47%), Gas connection (47%), Afghan Identity Card (51%) , access to clean drinking water (49%), land ownership (47%), Basic Health Unit (46%), availability of water inside the home 48% (0 km distance to main source of water), when the main source of water is piped water or tanker and when the refugees on average 5-6 rooms in the house.

Moreover, the study reveals that on average 18% of the refugees under the study are refugees by birth. And, majority of these refugees “by birth refugees” are residing in district Quetta (about 49%), followed by the district Pishin (about 45%). Further, the average year of Afghan refugee’s influx is 1983, and the largest inflow of Afghan refugees was between 1976 -1980 with 49% of Afghan refugees’ inflow to Pakistan. The major reasons behind their migration were “War” in Afghanistan (33%), lack of safety (19%), for the “protection of Modesty” (15%) and the refugees found Pakistan is safe place (11%). However, the study shows that currently majority of the Afghan refugees (67%) are not willing to repatriate, 20% of Afghan refugees are willing to return to Afghanistan with the condition of peace and about 4% are willing to return to their country of origin. The reasons to non-repatriation to their country of origin (Afghanistan) includes Lack of safety (45), lack of services (14%), 37% of the refugees reported that they are happy in Pakistan and about 4% stated war as major reason for not returning to Afghanistan.

Along with descriptive analysis and cross relationship between child labor and explanatory variables the study has measured the probability of child labor given the independent variables using logistic regression. In fact, the outcomes of the estimation of model one reveals that the child Age has significant impact on child labor. Moreover, the logistic regression shows that the probability of child labor is high if the working children is female but the factor sex has insignificant impact on child labor persistence. The chance of child labor is 0.7 times less if the child ethnicity is Tajik and the variable is statistically significant at 10% of confidence intervals. The probability of child labor among afghan refugee’s children is decreasing with child education but insignificant. Further, the household size has negative impact on child labor, in fact the category “very large” household size has statistically significant effect on child labor at 5% of intervals. The probability of child labor is decreases with level of household monthly income however the impact is insignificant. Additionally, the household head characteristics such as Occupation (Agriculture) and Literacy has statistically significant (negative) impact on persistence of child labor. the finding are in line with (Lodhi et al., 2011).However, the probability of child being engage in work among afghan refugees is increasing with the household head Age.

Child labor among Afghan refugees with respect to social indicators or model two estimated in this study reveals that the probability of child labor is less if the household have access to clean drinking water, basic health unit, availability of electricity, land ownership, presence of

NGO's in the region, availability of Gas coaction and possession of Afghan card but these factors are insignificant. And, the factors such as "main source of drinking water", "time consume to source of drinking water" and "availability of water in tap" are insignificant. And, the probability of child labor increase with the "distance to main source of water" and NGO's special school and they have significant impact on child labor. Further, the probability of child labor is less if the children have access to public school, when they have 5-6 rooms in the home and when the refugee's parents perceive "no future returns" as major reason of child work. Indeed, these factors are statistically significant. Finally, from finding of estimation of model two indicates the probability of child labor is high among refugees who not willing to return to Afghanistan.

Finally, this study has estimated the factors (child, household, household head and social factors) in one model (model 3) in order to compare the findings with the outcomes of model 1 and model 2. In fact, the findings obtained from the last estimation indicates that child age has significant impact on child labor. And, the probability of child labor is high if the ethnicity of the children is children is "Uzbek" and the factor is significant at 10% of intervals. Moreover, the "very large" household size has statistically negative impact on child labor. But, the variable "Locale" has insignificant impact on child labor according to this model. Further, the model suggests that household occupation "Agriculture" and "construction" has significant impact on child labor persistence. Indeed, the probability of child labor is less if the household head is engage in agriculture or construction sector. But, the household head "Literacy" in this model has insignificant impact on child labor. Further, the model shows that the probability of child labor increases with the "distance to main source of drinking water" and has significant impact on child labor. On the other hand, the chance of child labor is less if the household have "Gas Connection" and the variable is significant at 5% of intervals. However, the variable "Access to public school" is insignificant in this model. Likewise, the factor "NGO's Special School" has statistically positive impact on child labor. Moreover, the chance of child labor is less in the regions where "NGO Operates" and has significant impact on child labor among afghan refugees in third model. Compare to the outcomes of model 2, the variable "willingness to return" is insignificant. Like in model 2, the probability of child labor is less if the household have 5-6 rooms in the house. Finally, the estimation shows that the chance of child labor is less is the parents perceive "culture" and "no future returns" as major reasons of child work in context of Afghan refugees.

7.2 Policy Proposal

This section of the study comprises of the policy proposal or remedial measures for child labor among Afghan refugees based on the opinion of key informants and the findings of the study. Thus to root out the child labor among Afghan refugees the following measures should be taken

- I. As in Pakistan the child labor survey was conducted in 1996, and the Afghan refugees were excluded at that time as well. On wards we have no statistics on the persistence of child labor at national level. And, the policy makers can't formulate any effective policy until and unless they have data or base. Thus the very important step to overcome the phenomenon of child labor in Pakistan, the government should collect the data at least after every five years. Therefore, they should speed up the data collection process.
- II. The Afghan refugees were not included in the 1996 statistic of child labor. And, the data collection which is in process for child labor is also ignoring the child labor among afghan refugees. Indeed, the refugees should be included in the data, in order to develop the policies for them.
- III. As in west the institutions are strong, and the education is free there. Similarly, we need to strengthen the institutions in Pakistan. And, we need to provide some incentives to enroll the children in school.
- IV. It's the parent of the children who make decision of child labor supply, moreover, we need to support the parents or household financially instead of children (in Pakistan the NGO's are supporting children in form of technical education or training) thus, if the parents are supported financially they will not send children to work.
- V. Complete ban on child labor has more negative repercussions than the positive outcomes. As this act further push to the poverty trap. Therefore, instead of complete ban on child labor the government or key stake holders should introduce the poverty alleviation program.
- VI. The Afghan Refugees Identity in context of Pakistan is ambiguous. This identity crisis leaded the Afghan refugees to face many issues such as they find it difficult to get admission or get part in the government social net programs. Moreover, in presence of identity crisis, they become dependent on their families which are already on move, thus the government should reconsider the citizenship act of 1951 about the Afghan Identity. And, they should provide citizenship of Pakistan. Indeed, they deserve it.

- VII. In Pakistan the Minimum wage is not implemented or the minimum wage is less than the requirement to fulfil the needs of household. In the context of Afghan refugees, they even get less than minimum wage. Therefore, the government need to increase the minimum wage level and should implement the minimum wage in the market. This will make the household well off which in the tern results in less child labor supply.
- VIII. Pakistan in neither party to 1951 convention related to the status of refugees nor to its protocol of 1967. This leads to deprive the refugees from the rights provided by the UN Convention on the Rights of the child. Thus based on the huge population of the refugees in Pakistan the government should become a party to 1951 convention on the status of refugees.
- IX. Moreover, there is no official refugees law in Pakistan. This legal gape is important link with the persistence of child labor. Therefore, law makers should formulate the refugees law in Pakistan.
- X. The syllabus in the Afghan special school is different from the main stream syllabus, and non-recognized which also encourage the child labor among Afghan refugees. Thus, there should be the common syllabus as we follow in public schools.
- XI. The key stake holder of refugees in Pakistan should make the refugees aware of the importance of the education.so they will send children to school rather than to work. Indeed, education is the key to realization of those rights.
- XII. Based on the findings of the study, the probability of child labor among afghan refugees is less if they have access to clean drinking water, but majority of the refugees have no access to water. Thus, the government of NGO's working for Afghan refugees should provide water facility for the refugees.
- XIII. Moreover, among Afghan refugees it's the responsibility of the children to carry the water from the source of water available in the surroundings which lead to the incidence of child labor. Thus, instead of the water pumps provided in some camps the stake holders should provide water through pipe connection in order to overcome the incidence of child labor.
- XIV. Additionally, the persistence of child labor is high among refugees who have no access to electricity and gas connection. The policy proposal for these are to provide the gas and electricity to curb the child labor.

- XV. The NGO's operated school charges 50% of the fee from the children which discourage the parents to send their children to school. Therefore, the NGO's or Government should provide free education to these marginalized group.
- XVI. There is need of quality of education
- XVII. In some regions the refugees have access only for the Primary School, after completing the five years of education then they have no option to read or enroll in middle or high school. For that they need to travel some other areas, which discourage to peruse education. Thus, there should be high school for the refugees.
- XVIII. The probability of child labor is high among female children; thus special measures should be taken to overcome domestic child labor in context of afghan refugees.
- XIX. And, the refugee's children should have option to get admission in any educational institution in Pakistan.

References

- Abu-Ghallow, I. (2012). *Child Labor Supply in Palestine: Trends and Perspectives*. 14, 25.
- Amin, S., Quayes, M. S., & Rives, J. M. (2004). Poverty and other determinants of child labor in Bangladesh. *Southern Economic Journal*, 876–892.
- Avais, M. A., Wassan, A., & Erum, M. (2014). Socio-economic causes of child labor in carpet weaving industry: A case study of Union Council Ali Wahan. *Journal of Social Welfare and Human Rights*, 2(1), 251–264.
- Bar, T., & Basu, K. (2009). Children, education, labor, and land: In the long run and short run. *Journal of the European Economic Association*, 7(2–3), 487–497.
- Basu, K., & Tzannatos, Z. (2003). The global child labor problem: What do we know and what can we do? *The World Bank Economic Review*, 17(2), 147–173.
- Basu, K., & Van, P. H. (1998). The economics of child labor. *American Economic Review*, 412–427.
- Becker, G. S. (2009). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press.
- Betcherman, G., Fares, J., Luinstra, A., & Prouty, R. (2004). Child labor, education, and children's rights. *World Bank Social Protection Discussion Paper Series*, 412.
- Bhalotra, S., & Heady, C. (2003). Child farm labor: The wealth paradox. *The World Bank Economic Review*, 17(2), 197–227.
- Bhalotra, S. R., & Tzannatos, Z. (2003). *Child labor: What have we learnt?* World Bank, Social Protection.
- BLA. (1992). *Pakistan—Bonded Labour System (Abolition) Act, 1992 (Act No. III of 1992)*. https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=30017
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1), 97–113.
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Canagarajah and Nielsen. (2001). *Child Labor in Africa: A Comparative Study—Sudharshan Canagarajah, Helena Skyt Nielsen, 2001*. <https://journals.sagepub.com/doi/abs/10.1177/000271620157500105>
- Canagarajah, S., & Coulombe, H. (1997). Child labor and schooling in Ghana. Available at SSRN 620598.

- Cochrane, S. H. (1990). *Household Consequences of High Fertility in Pakistan*. World Bank Discussion Paper Series No. 111. ERIC.
- Dimova, R., Epstein, G. S., & Gang, I. N. (2015). Migration, transfers and child labor. *Review of Development Economics*, 19(3), 735–747.
- Edmonds, E. V., & Pavcnik, N. (2005). Child labor in the global economy. *Journal of Economic Perspectives*, 19(1), 199–220.
- Edmonston, B., & Passel, J. S. (1992). US immigration and ethnicity in the 21st century. *Population Today*, 20(10), 6–7.
- Elahi, S., & Khan, N. (2019). Diverse Perceptions of Term “Afghan” in the Poetry of Khushal Khan Khattak. *Pashto*, 48(657).
- Emerson, P. M., & Souza, A. P. (2003). Is there a child labor trap? Intergenerational persistence of child labor in Brazil. *Economic Development and Cultural Change*, 51(2), 375–398.
- Fahlevi, M. (2020). Economic Analysis of Child Labor Based Households. *Open Journal for Research in Economics*, 3(1), 21–32. <https://doi.org/10.32591/coas.ojre.0301.03021f>
- Ferris. (1987). *Ferris, E. 1987. Central american refugee new york—Google Search*.
- Fyfe, A. (1989). *Child labour*. Polity Press.
- Grootaert, C. (1998). *Child Labor in Côte D’Ivoire: Incidence and Determinants*. World Bank Publications.
- Habib, R. R., El-Harakeh, A., Ziadee, M., Abi Younes, E., & El Asmar, K. (2020). Social capital, social cohesion, and health of Syrian refugee working children living in informal tented settlements in Lebanon: A cross-sectional study. *PLoS Medicine*, 17(9), e1003283.
- Haider, S. I., Ali, M., & Bilal, M. (2016). Garbage Collection and Rag Picking: An Issue of Child Labor in Rawalpindi (An Anthropological Approach). *Global Regional Review*, 1(1), 193–204.
- Herath, G., & Sharma, K. (2007). *Child Labour in South Asia*. Ashgate Publishing, Ltd.
- Hiegemann, V. (2014). Repatriation of Afghan Refugees in Pakistan: Voluntary? *Oxford Monitor of Forced Migration*, 4(1), 1–4.
- ILO. (1996). *Child labour. Targeting the intolerable. Report 86 VI (1)*. http://www.ilo.org/global/publications/ilo-bookstore/order-online/books/WCMS_PUBL_9221103285_EN/lang--en/index.htm
- ILO. (2012, April 24). *ILO & UNHCR plan to address Decent Work Deficits of Afghan Refugee and Host Communities in Pakistan* [Press release]. https://www.ilo.org/islamabad/info/public/pr/WCMS_181454/lang--en/index.htm
- ILO. (2021). *What is child labour (IPEC)*. <https://www.ilo.org/ipec/facts/lang--en/index.htm>

- Jafarey, S., & Lahiri, S. (2005). Food for education versus school quality: A comparison of policy options to reduce child labour. *Canadian Journal of Economics/Revue Canadienne d'économique*, 38(2), 394–419.
- Joelle Saad-Lessler. (2016). Joelle Saad-Lessler. *UC Berkeley Labor Center*. <https://laborcenter.berkeley.edu/people/joelle-saad-lessler/>
- Kibreab, G. (1985). *African refugees: Reflections on the African refugee problem*. Africa World Press.
- Kis-Katos, K., & Sparrow, R. (2011). Child Labor and Trade Liberalization in Indonesia. *The Journal of Human Resources*, 46(4), 722–749.
- Kofol, C., & Naghsh Nejad, M. (2017). *Child Labor and the Arrival of Refugees: Evidence from Tanzania*.
- Kruse, D. L., & Mahony, D. (2000). Illegal child labor in the United States: Prevalence and characteristics. *ILR Review*, 54(1), 17–40.
- Kuépié, M. (2018). Is international migration always good for left behind households members? Evidence from children education in Cameroon. *International Migration*, 56(6), 120–135.
- Labour Force Survey 2014-15. (2014). *Labour Force Survey 2014-15 (Annual Report) | Pakistan Bureau of Statistics*. <https://www.pbs.gov.pk/content/labour-force-survey-2014-15-annual-report>
- Lodhi, A. S., Tsegai, D. W., & Gerber, N. (2011). Determinants of participation in child's education and alternative activities in Pakistan. *ZEF-Discussion Papers on Development Policy*, 159.
- Moehling, C. M. (2004). Family structure, school attendance, and child labor in the American South in 1900 and 1910. *Explorations in Economic History*, 41(1), 73–100.
- Mohamed Baqutayan, S., Mohammed Bagotayan, S., Hussin, H., Basin Anak Nyirob, B., & Ali Al Balushi, F. (2020). Is child labor an issue today? Factors and policy-related. *Journal of Social Sciences Research, The*, 6(9), 826–837.
- Moore, W. H., & Shellman, S. M. (2004). Fear of persecution: Forced migration, 1952-1995. *Journal of Conflict Resolution*, 48(5), 723–745.
- Nelson, E. A. S. (1996). *Sudden Infant Death Syndrome & Child Care Practices*. Department of Paediatrics, Chinese University of Hong Kong.
- Neumayer, E. (2005). Bogus refugees? The determinants of asylum migration to Western Europe. *International Studies Quarterly*, 49(3), 389–409.
- PAKISTAN. THE FACTORIES ACT, 1934. (1934). *PAKISTAN. THE FACTORIES ACT, 1934*. <https://www.ilo.org/dyn/natlex/docs/WEBTEXT/35384/64903/E97PAK01.htm>

- Pakistanis ILO, F. B. of S. M. of L. M. and O. (1996). *Pakistan: Summary results of child labour survey in Pakistan (1996)* [Report]. http://www.ilo.org/newdelhi/areasofwork/child-labour/publications/WCMS_436435/lang--en/index.htm
- PECA. (1991). *Pakistan. Employment of Children Act, 1991*. <https://www.ilo.org/dyn/natlex/docs/WEBTEXT/22707/64834/E91PAK01.htm>
- Petrakis, P. E., & Stamatakis, D. (2002). Growth and educational levels: A comparative analysis. *Economics of Education Review*, 21(5), 513–521.
- PSLM / HIES 2018-19. (2018). *PSLM / HIES 2018-19 (Provincial Level Survey) | Pakistan Bureau of Statistics*. <https://www.pbs.gov.pk/content/pslm-hies-2018-19-provincial-level-survey>
- Ranjan, P. (1999). An economic analysis of child labor. *Economics Letters*, 64(1), 99–105.
- Ray, R. (2000). Child labor, child schooling, and their interaction with adult labor: Empirical evidence for Peru and Pakistan. *The World Bank Economic Review*, 14(2), 347–367.
- Refugees, U. N. H. C. for. (2021). *What is a refugee?* UNHCR. <https://www.unhcr.org/what-is-a-refugee.html>
- Schmeidl, S. (1997). Exploring the causes of forced migration: A pooled time-series analysis, 1971-1990. *Social Science Quarterly*, 284–308.
- Sianesi, B., & Reenen, J. V. (2003). The returns to education: Macroeconomics. *Journal of Economic Surveys*, 17(2), 157–200.
- Siddiqi, F., & Patrinos, H. A. (1995). *Child labor: Issues, causes and interventions*. Education and Social Policy Department, Human Resources Development and
- Swinnerton, K. A., & Rogers, C. A. (1999). The economics of child labor: Comment. *American Economic Review*, 89(5), 1382–1385.
- Tanaka, R. (2003). Inequality as a determinant of child labor. *Economics Letters*, 80(1), 93–97.
- The News. (2017). *the mass forced return of afghan refugees—Google Search*.
- Togunde, D. R., & WEBER, E. (2007). PARENTS' VIEWS, CHILDREN'S VOICES: Intergenerational Analysis of Child Labor Persistence in Urban Nigeria. *International Journal of Sociology of the Family*, 285–301.
- Tufail, P., Feeny, T., & Wernham, M. (2004). *Street children and juvenile justice in Pakistan. London: AMAL Human Development Network and Consortium for Street Children*.
- Ul-Haq, J., Khanum, S., & Raza Cheema, A. (2020). The impact of trade liberalization on child labor in Pakistan. *International Review of Applied Economics*, 34(6), 769–784.

- UN 182. (2001). *Ratifications of ILO conventions: Ratifications for Pakistan*. https://www.ilo.org/dyn/normlex/en/f?p=1000:11200:0::NO:11200:P11200_COUNTRY_ID:103166
- UNHCR. (2021). 333000 Afghan refugees living in Balochistan: UNHCR. *Daily Balochistan Express*. <https://bexpress.com.pk/2021/06/333000-afghan-refugees-living-in-balochistan-unhcr/>
- Wilkerson, J. M., Iantaffi, A., Grey, J. A., Bockting, W. O., & Rosser, B. S. (2014). Recommendations for internet-based qualitative health research with hard-to-reach populations. *Qualitative Health Research*, 24(4), 561–574.
- Wood, W. B. (1994). Forced migration: Local conflicts and international dilemmas. *Annals of the Association of American Geographers*, 84(4), 607–634.
- Zapata, D., Contreras, D., & Kruger, D. (2011). Child labor and schooling in Bolivia: Who's falling behind? The roles of domestic work, gender, and ethnicity. *World Development*, 39(4), 588–599.
- Zolberg et al. (1989). Zolberg, A., A. Suhrke, and S. Aguayo. 1989. *Escape from Violence: Conflict and the Refugee Crisis in the Developing World*. New York: Oxford University P - Google Search.

Appendix

Appendix 1: Pictures captured During Survey































Model 1

```
. logistic Ch_lbr i.child_age_cat sex i.Ethnicity i.Child_Edu_Cat i.HH_Size i.Locale i.In_cat i.Occu_cat head_litreachy HH_age
```

```
> d_litreachy HH_age

Logistic regression                               Number of obs   =           914
                                                    LR chi2(27)      =           350.56
                                                    Prob > chi2      =           0.0000
Log likelihood = -456.88847                       Pseudo R2       =           0.2773
```

Ch_lbr	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]
child_age_cat					
7-8	2.640476	.7221168	3.55	0.000	1.544884 4.513034
9-10	9.825428	2.721046	8.25	0.000	5.709794 16.90762
11-12	25.94158	7.804156	10.82	0.000	14.38549 46.78088
Above 12 years	52.43354	16.81279	12.35	0.000	27.96867 98.29844
sex					
	.7648799	.131974	-1.55	0.120	.5454126 1.072658
Ethnicity					
Pusthun	1.189168	.4462337	0.46	0.644	.5699424 2.481164
Baloch	.776523	.2985667	-0.66	0.511	.365489 1.649812
Tajik	.4898277	.1854962	-1.88	0.059	.2331825 1.028941
Uzbek	.8255826	.3327469	-0.48	0.634	.3747037 1.819001
Child_Edu_Cat					
Primary	.9821087	.2125113	-0.08	0.934	.6426498 1.500876
Other	.8172437	.1913075	-0.86	0.389	.5165294 1.293029
Higher	.4801645	.2463365	-1.43	0.153	.1756719 1.312435
HH_Size					
Medium	.7691634	.2001491	-1.01	0.313	.4618722 1.280901
Large	.766334	.2408423	-0.85	0.397	.413908 1.418837
Very Large	.361809	.1661068	-2.21	0.027	.1471269 .8897472
Locale					
Quetta	.4924936	.1748728	-1.99	0.046	.2455608 .9877386
Pishin	.4553802	.142488	-2.51	0.012	.2466232 .8408418
In_cat					
2. Between 15K - 30K	.8081192	.2064697	-0.83	0.404	.4897771 1.333375
3. Between 30K - 50K	.7828342	.2126827	-0.90	0.367	.4596347 1.333297
4. Between 50K - 80K	.8918306	.2993906	-0.34	0.733	.4618821 1.722002
5. More than 80k	.7088113	.3142717	-0.78	0.438	.2972529 1.690188
Occu_cat					
Manufacture	1.400837	.5719592	0.83	0.409	.6292798 3.118399
Agriculture	.3929366	.136146	-2.70	0.007	.1992485 .7749073
Services	1.230655	.3139266	0.81	0.416	.7464563 2.028937
Construction	.6523504	.1978813	-1.41	0.159	.3599821 1.182173
head_litreachy					
HH_age	.6561307	.1432236	-1.93	0.054	.4277457 1.006457
_cons	1.006607	.0081167	0.82	0.414	.9908234 1.022642
	.482196	.3127459	-1.12	0.261	.1352526 1.719102

Coefficients of Model 1

v1	v2	Notes_Titles
		-1
VARIABLES	Ch_lbr	Standard errors in parentheses
		*** p<0.01, ** p<0.05, * p<0.1
2.child_age_cat	0.971***	
		-0.273
3.child_age_cat	2.285***	
		-0.277
4.child_age_cat	3.256***	
		-0.301
5.child_age_cat	3.960***	
		-0.321
sex		-0.268
		-0.173
1.Ethnicity		0.173
		-0.375
2.Ethnicity		-0.253
		-0.384
3.Ethnicity	-0.714*	
		-0.379
4.Ethnicity		-0.192
		-0.403
1.Child_Edu_Cat		-0.0181
		-0.216
2.Child_Edu_Cat		-0.202
		-0.234
3.Child_Edu_Cat		-0.734
		-0.513
2.HH_Size		-0.262
		-0.26
3.HH_Size		-0.266
		-0.314
4.HH_Size	-1.017**	
		-0.459
1.Locale	-0.708**	
		-0.355
2.Locale	-0.787**	
		-0.313
2.In_cat		-0.213
		-0.255

3.In_cat	-0.245
	-0.272
4.In_cat	-0.114
	-0.336
5.In_cat	-0.344
	-0.443
1.Occu_cat	0.337
	-0.408
2.Occu_cat	-0.934***
	-0.346
3.Occu_cat	0.208
	-0.255
4.Occu_cat	-0.427
	-0.303
head_litreacy	-0.421*
	-0.218
HH_age	0.00659
	-0.00806
Constant	-0.729
	-0.649
Observations	914

Model 2

Social indicators

```
. logit Ch_lbr i.av_water_tap i.room_cat i.Spc_Sch i.wnt_bak_afgh ngo_opr acc_pub_shl i.w_sndch_wrk sim_own_
> id lnd_owner bsic_hlt_unit avl_elect acc_cln_watr afgh_cc i.time_cons_trip_wtr i.h_far_wtr i.main_sourc_wt
> r gas_conect
```

```
Iteration 0: log likelihood = -555.49678
Iteration 1: log likelihood = -529.07088
Iteration 2: log likelihood = -528.9695
Iteration 3: log likelihood = -528.96949
```

```
Logistic regression      Number of obs      =      807
                        LR chi2(37)          =      53.05
                        Prob > chi2          =      0.0423
                        Pseudo R2           =      0.0478

Log likelihood = -528.96949
```

Ch_lbr	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
av_water_tap						
4-6	-.1415921	.3804343	-0.37	0.710	-.8872297	.6040455
above 6	-.0609922	.2370719	-0.26	0.797	-.5256446	.4036603
room_cat						
3-4	.0076789	.2005723	0.04	0.969	-.3854356	.4007934
5-6	-.5961165	.2539744	-2.35	0.019	-1.093897	-.0983358
7-8	-.1755375	.3996227	-0.44	0.660	-.9587836	.6077087
above 8	.1334707	.5478482	0.24	0.808	-.9402921	1.207233
Spc_Sch						
NGO	.7618415	.2675441	2.85	0.004	.2374647	1.286218
Private	.2982422	.2859168	1.04	0.297	-.2621444	.8586288
wnt_bak_afgh						
No	1.304065	.6329665	2.06	0.039	.0634732	2.544656
With condition of peace	1.348759	.6395115	2.11	0.035	.0953396	2.602179
ngo_opr	-.3551004	.2290254	-1.55	0.121	-.8039819	.093781
acc_pub_shl	-.505323	.3032936	-1.67	0.096	-1.099768	.0891215
w_sndch_wrk						
No future returns	-.370726	.2138285	-1.73	0.083	-.7898221	.0483701
Have no access to school	-.152824	.250939	-0.61	0.543	-.6446555	.3390074
Culture	-.6492892	.5034728	-1.29	0.197	-1.636078	.3374994
sim_own_id	.0941613	.1709277	0.55	0.582	-.2408508	.4291735
lnd_owner	-.1902342	.2649101	-0.72	0.473	-.7094485	.3289801
bsic_hlt_unit	-.2535486	.3208181	-0.79	0.429	-.8823406	.3752433
avl_elect	-.2092198	.4205647	-0.50	0.619	-1.033511	.6150719
acc_cln_watr	-.1106264	.2678925	-0.41	0.680	-.6356861	.4144332
afgh_cc	.1759937	.1991662	0.88	0.377	-.2143648	.5663522
time_cons_trip_wtr						
1. 1-15 Minutes	.2417489	.5693591	0.42	0.671	-.8741745	1.357672
2. 16-30 Min	-.2619475	.5751203	-0.46	0.649	-1.389162	.8652675
3. 31-45 Min	-.0876393	.6036224	-0.15	0.885	-1.270717	1.095439
4. 46-60 Min	-.2822097	.6127461	-0.46	0.645	-1.48317	.9187506
5. 60+ Min.	-.2221912	.6479006	-0.34	0.732	-1.492053	1.047671
h_far_wtr						
1. 0- .5km	.7566161	.4009578	1.89	0.059	-.0292466	1.542479
2. .5+ - 1km	.6774622	.3457391	1.96	0.050	-.0001738	1.355098
3. 1+ -2km	.1441175	.3821155	0.38	0.706	-.6048152	.8930501
4. 2+ - 5km	.4230222	.4662876	0.91	0.364	-.4908847	1.336929
5. 5+ km	.6571245	.5602274	1.17	0.241	-.4409011	1.75515
main_sourc_wtr						
2. Hand Pump	-.3885989	.4847043	-0.80	0.423	-1.338602	.5614041
3. Motorized pumping/tube well	.3428262	.5314339	0.65	0.519	-.6987652	1.384418
4. open well	.0824613	.3539786	0.23	0.816	-.611324	.7762467
9. Tanker/Truck/Water bearer	-.0068563	.5589763	-0.01	0.990	-1.10243	1.088717
100. Rahrhi	-.0290937	.4335248	-0.07	0.946	-.8787867	.8205992
gas_conect	.1368422	.2315436	0.59	0.555	-.316975	.5906594
_cons	.2923876	1.347189	0.22	0.828	-2.348054	2.932829

v1	v2	Notes_Titles
		-1
VARIABLES	Ch_lbr	Standard errors in parentheses
		*** p<0.01, ** p<0.05, * p<0.1
2.av_water_tap		-0.142
		-0.38
3.av_water_tap		-0.061
		-0.237
2.room_cat		0.00768
		-0.201
3.room_cat	-0.596**	
		-0.254
4.room_cat		-0.176
		-0.4
5.room_cat		0.133
		-0.548
1.Spc_Sch	0.762***	
		-0.268
2.Spc_Sch		0.298
		-0.286
2.wnt_bak_afgh	1.304**	
		-0.633
3.wnt_bak_afgh	1.349**	
		-0.64
ngo_opr		-0.355
		-0.229
acc_pub_shl	-0.505*	
		-0.303
2.w_sndch_wrk	-0.371*	
		-0.214
3.w_sndch_wrk		-0.153
		-0.251
4.w_sndch_wrk		-0.649
		-0.503
sim_own_id		0.0942
		-0.171
Ind_owner		-0.19
		-0.265
bsic_hlt_unit		-0.254
		-0.321
avl_elect		-0.209

	-0.421
acc_cln_watr	-0.111
	-0.268
afgh_cc	0.176
	-0.199
1.time_cons_trip_wtr	0.242
	-0.569
2.time_cons_trip_wtr	-0.262
	-0.575
3.time_cons_trip_wtr	-0.0876
	-0.604
4.time_cons_trip_wtr	-0.282
	-0.613
5.time_cons_trip_wtr	-0.222
	-0.648
1.h_far_wtr	0.757*
	-0.401
2.h_far_wtr	0.677*
	-0.346
3.h_far_wtr	0.144
	-0.382
4.h_far_wtr	0.423
	-0.466
5.h_far_wtr	0.657
	-0.56
2.main_sourc_wtr	-0.389
	-0.485
3.main_sourc_wtr	0.343
	-0.531
4.main_sourc_wtr	0.0825
	-0.354
9.main_sourc_wtr	-0.00686
	-0.559
100.main_sourc_wtr	-0.0291
	-0.434
gas_conect	0.137
	-0.232
Constant	0.292
	-1.347
Observations	807

Integrated Model

```

. logit Ch_lbr i.child_age_cat sex i.Ethnicity i.Child_Edu_Cat i.HH_Size i.Locale i.In_cat i.Occu_cat head_1
> itracey HH_age i.av_water_tap i.room_cat i.Spc_Sch i.wnt_bak_afgh ngo_opr acc_pub_shl i.w_sndch_wrk sim_ow
> n_id lnd_owner bsic_hlt_unit avl_elect acc_cln_watr afgh_cc i.time_cons_trip_wtr i.h_far_wtr i.main_sourc_
> wtr gas_connect

```

```

Iteration 0: log likelihood = -554.29524
Iteration 1: log likelihood = -361.58337
Iteration 2: log likelihood = -358.38882
Iteration 3: log likelihood = -358.36513
Iteration 4: log likelihood = -358.36513

```

Logistic regression Number of obs = 805
LR chi2 (64) = 391.86
Prob > chi2 = 0.000
Pseudo R2 = 0.3535

Log likelihood = -358.36513

Ch_lbr	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
child_age_cat					
7-8	1.171584	.3119849	3.76	0.000	.5601044 1.783063
9-10	2.542152	.321641	7.90	0.000	1.911747 3.172557
11-12	3.803544	.3649438	10.42	0.000	3.088268 4.518821
Above 12 years	4.486199	.3890642	11.53	0.000	3.723647 5.248751
sex	-.3216691	.2041285	-1.58	0.115	-.7217535 .0784154
Ethnicity					
Pusthun	.1423959	.6569907	0.22	0.828	-1.145282 1.430074
Baloch	.0948209	.6248993	0.15	0.879	-1.129959 1.319601
Tajik	.1525561	.6463269	0.24	0.813	-1.114221 1.419333
Uzbek	1.370847	.8185631	1.67	0.094	-.2335073 2.975201
Child_Edu_Cat					
Primary	-.039551	.2635741	-0.15	0.881	-.5561468 .4770447
Other	-.0367295	.2992932	-0.12	0.902	-.6233334 .5498745
Higher	.1232685	.7243207	0.17	0.865	-1.296374 1.542911
HH_Size					
Medium	-.0155525	.3305488	0.05	0.962	-.6323113 .6634164
Large	-.4654271	.414929	-1.12	0.262	-1.278673 .3478187
Very Large	-1.795122	.7919221	-2.27	0.023	-3.34726 .2429828
Locale					
Quetta	-.1880633	.7921697	-0.24	0.812	-1.740687 1.364561
Fishin	-.9774818	.708309	-1.38	0.168	-2.365742 .4107783
In_cat					
2. Between 15K - 30K	-.1022263	.3244264	-0.32	0.753	-.7381271 .5336011
3. Between 30K - 50K	.0012292	.3640782	0.00	0.997	-.712351 .7148094
4. Between 50K - 80K	.7450455	.4731467	1.57	0.115	-.1823049 1.672396
5. More than 80K	.6342472	.643328	0.99	0.324	-.6266525 1.895147
Occu_cat					
Manufacture	.0451319	.5331361	0.08	0.933	-.9997957 1.090006
Agriculture	-1.075636	.4632198	-2.32	0.020	-1.98353 .1677416
Services	.0741764	.3268304	0.23	0.820	-.5663995 .7147523
Construction	-.7985323	.3973991	-2.01	0.044	-1.57742 .0196444
head_litreacy					
HH_age	-.3027932	.2876021	-1.05	0.292	-.8664829 .2608966
HH_age	.0065256	.0107562	0.61	0.544	-.0145562 .0276074
av_water_tap					
4-6	-.1764409	.5159875	-0.34	0.732	-1.187758 .834876
above 6	.0257601	.4047413	0.06	0.949	-.7675184 .8190385
room_cat					
3-4	-.0558948	.2867149	-0.19	0.845	-.6178456 .5060561
5-6	-.866575	.4053093	-2.14	0.033	-1.660967 -.0721834
7-8	-.9274186	.5991614	-1.55	0.122	-2.101753 .2469162
above 8	1.440965	.9168607	1.57	0.116	-.356049 3.237979
Spc_Sch					
NGO	1.257325	.4130233	3.04	0.002	.4478144 2.066836
Private	.116973	.4272341	0.27	0.784	-.7203904 .9543365
wnt_bak_afgh					
No	.5454177	.8539649	0.64	0.523	-1.128323 2.219158
With condition of peace	.6377057	.8717491	0.73	0.464	-1.070891 2.346303
ngo_opr	-1.023483	.394059	-2.60	0.009	-1.795824 -.2511412
acc_pub_shl	-.1758349	.4726805	-0.37	0.710	-1.102272 .7506019
w_sndch_wrk					
No future returns	-.5326853	.2818502	-1.89	0.059	-1.085102 .0197309
Have no access to school	-.3336259	.3525093	-0.95	0.344	-1.024531 .3572796
Culture	-1.566126	.7268226	-2.15	0.031	-2.990672 -.1415801
sim_own_id	.1475299	.2463111	0.60	0.549	-.335231 .6302907
lnd_owner	-.2743131	.3637037	-0.75	0.451	-.9871592 .438533
bsic_hlt_unit	.2571467	.4413946	0.58	0.560	-.6079709 1.122264
avl_elect	-.4100279	.5809862	-0.71	0.480	-1.54874 .7286842
acc_cln_watr	.0743159	.3774269	0.20	0.844	-.6654273 .8140591
afgh_cc	-.0670241	.2677815	-0.25	0.802	-.5918662 .457818
time_cons_trip_wtr					
1. 1-15 Minutes	.1029287	.8925427	0.12	0.908	-1.646423 1.85228
2. 16-30 Min	.0407444	.9225272	0.04	0.965	-1.767376 1.848864
3. 31-45 Min	-.0904957	.9660024	-0.09	0.925	-1.983826 1.802834
4. 46-60 Min	-.2588177	.9368424	-0.28	0.782	-2.094995 1.57736
5. 60+ Min.	-.1599188	.9838655	-0.16	0.871	-2.08826 1.768422
h_far_wtr					
1. 0- .5km	1.098549	.5599715	1.96	0.050	.0010253 2.196073
2. .5+ = 1km	.8870583	.5179125	1.71	0.087	-.1280315 1.902148
3. 1+ = 2km	.0017014	.537357	0.00	0.997	-1.051499 1.054902
4. 2+ = 5km	.3024869	.6360446	0.48	0.634	-.9441377 1.549111
5. 5+ km	.5384309	.8477792	0.64	0.525	-1.123186 2.200048
main_sourc_wtr					
2. Hand Pump	.2810704	.9187977	0.31	0.760	-1.51974 2.081881
3. Motorized pumping/tube well	.7714068	.7615893	1.01	0.311	-.7212809 2.264094
4. open well	.7556587	.7623477	0.99	0.322	-.7385154 2.249833
9. Tanker/Truck/Water bearer	.6809885	.8525653	0.80	0.424	-.9900888 2.351986
100. Rahrhi	-.0329456	.6763733	-0.05	0.961	-1.358613 1.292722
gas_connect	.7729462	.3780943	2.04	0.041	.0318949 1.513998
_cons	-3.354295	2.447455	-1.37	0.171	-8.151219 1.442629

Or

v1	v2	Notes_Titles
		-1
VARIABLES	Ch_lbr	Standard errors in parentheses
		*** p<0.01, ** p<0.05, * p<0.1
2.child_age_cat	1.172***	
		-0.312
3.child_age_cat	2.542***	
		-0.322
4.child_age_cat	3.804***	
		-0.365
5.child_age_cat	4.486***	
		-0.389
sex		-0.322
		-0.204
1.Ethnicity		0.142
		-0.657
2.Ethnicity		0.0948
		-0.625
3.Ethnicity		0.153
		-0.646
4.Ethnicity	1.371*	
		-0.819
1.Child_Edu_Cat		-0.0396
		-0.264
2.Child_Edu_Cat		-0.0367
		-0.299
3.Child_Edu_Cat		0.123
		-0.724
2.HH_Size		0.0156
		-0.331
3.HH_Size		-0.465
		-0.415
4.HH_Size	-1.795**	
		-0.792
1.Locale		-0.188
		-0.792
2.Locale		-0.977
		-0.708
2.In_cat		-0.102
		-0.324
3.In_cat		0.00123

		-0.364
4.ln_cat		0.745
		-0.473
5.ln_cat		0.634
		-0.643
1.Occu_cat		0.0451
		-0.533
2.Occu_cat	-1.076**	
		-0.463
3.Occu_cat		0.0742
		-0.327
4.Occu_cat	-0.799**	
		-0.397
head_litreacy		-0.303
		-0.288
HH_age		0.00653
		-0.0108
2.av_water_tap		-0.176
		-0.516
3.av_water_tap		0.0258
		-0.405
2.room_cat		-0.0559
		-0.287
3.room_cat	-0.867**	
		-0.405
4.room_cat		-0.927
		-0.599
5.room_cat		1.441
		-0.917
1.Spc_Sch	1.257***	
		-0.413
2.Spc_Sch		0.117
		-0.427
2.wnt_bak_afgh		0.545
		-0.854
3.wnt_bak_afgh		0.638
		-0.872
ngo_opr	-1.023***	
		-0.394
acc_pub_shl		-0.176
		-0.473

2.w_sndch_wrk	-0.533*	
		-0.282
3.w_sndch_wrk		-0.334
		-0.353
4.w_sndch_wrk	-1.566**	
		-0.727
sim_own_id		0.148
		-0.246
Ind_owner		-0.274
		-0.364
bsic_hlt_unit		0.257
		-0.441
avl_elect		-0.41
		-0.581
acc_cln_watr		0.0743
		-0.377
afgh_cc		-0.067
		-0.268
1.time_cons_trip_wtr		0.103
		-0.893
2.time_cons_trip_wtr		0.0407
		-0.923
3.time_cons_trip_wtr		-0.0905
		-0.966
4.time_cons_trip_wtr		-0.259
		-0.937
5.time_cons_trip_wtr		-0.16
		-0.984
1.h_far_wtr	1.099**	
		-0.56
2.h_far_wtr	0.887*	
		-0.518
3.h_far_wtr		0.0017
		-0.537
4.h_far_wtr		0.302
		-0.636
5.h_far_wtr		0.538
		-0.848
2.main_sourc_wtr		0.281
		-0.919
3.main_sourc_wtr		0.771

	-0.762
4.main_sourc_wtr	0.756
	-0.762
9.main_sourc_wtr	0.681
	-0.853
100.main_sourc_wtr	-0.0329
	-0.676
gas_conect	0.773**
	-0.378
Constant	-3.354
	-2.447
Observations	805