



# **Tackling Malnutrition To Unlock Potential And Enhance Prosperity:**

Ethnographic Study of Food Insecure District Killasaifullah.



**ABDUL JAMEEL KAKAR**

**Quaid-i-Azam University  
Department of Anthropology  
Islamabad - Pakistan  
2015**



**Tackling malnutrition to unlock potential and enhance prosperity:**

Ethnographic Study of Food Insecure District Killasaifullah.



**ABDUL JAMEEL KAKAR**

Thesis submitted to the Department of Anthropology, Quaid-i-Azam University Islamabad, in partial fulfillment of the degree of Master of Philosophy in Anthropology.

Quaid-i-Azam University  
Department of Anthropology  
Islamabad - Pakistan  
2015



## Quaid-i-Azam University, Islamabad

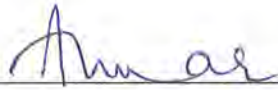
(Department of Anthropology)

### Final Approval of Thesis

This is to certify that we have read the thesis submitted by Mr. Abdul Jameel. It is our judgment that this thesis is of sufficient standard to warrant its acceptance by the Quaid-i-Azam University, Islamabad for the award of the Degree of "Master of Philosophy in Anthropology".

#### Committee:


1. Dr. Anwaar Mohyuddin  
Supervisor



2. Prof. Dr. Rasheed Khan  
External Examiner



3. Dr. Waheed Chaudhry  
In-charge Dept of Anthropology



## **Formal Declaration**

I hereby, declare that I have produced the present work by myself and without any aid other than those mentioned herein. Any ideas taken directly or indirectly from third party sources are indicated as such.

This work has not been published or submitted to any other examination board in the same or a similar form.

I am solely responsible for the content of this thesis and I own the sole copyrights of it.

Islamabad, 16 October 2015

Abdul Jameel Kakar

## ACKNOWLEDGEMENT

No man is an island in itself. He is, as a rule of nature, dependent on others and need their help. Being a Muslim we have staunch faith in God, and seek the help of the Almighty. From the very outset, I am rightly thankful to Allah. The omnipotent, for his benevolence throughout the life and helped me when I was in quagmire while completing this work. It was indeed He, who granted me the courage, fortitude and determination to face the harsh realities and challenges of life. I regard vigorous tribute to my parents' brothers, cousins and family members whose affection, consideration and prayers have always been a source of inspiration for me, not least, my father and mother who supported me morally, who loved me more than I deserved. Their prayers, love, guidance, support and strength have always been my greatest assets of life.

I am deeply indebted to my respected supervisor Dr. ANWAAR MOHYUDDIN for his wise and painstaking guidance during the fieldwork and thesis writing. My special thanks to Dr. Waheed Chaudry (Chairman) for his guidance, encouragement and advice which he provided me throughout the course of my study at Quaid-i-Azam University Islamabad. In the completion of my thesis work, at this moment of great happiness, I find no words to express my emotions and gratitude to all my teachers and friends who helped me in some way or the other to complete my work.

I am indebted greatly to my respected teachers Dr. Hafeez-ur-Rehman, Mr. Tariq Mahmood, Dr. Saadia Abid, Dr. Inam ullah Leghari, Mrs. Aneela Sultana, Dr. Rao Nadeem Alam, Mr. Muhammad Ilyas Bhatti, Mr. Ikram Badshah, Ms Irene Bregenzer and Mr. Waqas Saleem who helped me a lot in my course and thesis work.

I am also greatly indebted and have pleasure to register my thanks to the people of District Killasaifullah who always welcomed me and provided with best facilities and comforts. The people of the locale were also nice and cooperative for their help and cooperation during my research. My special thanks to Wali Muhammad and Ahmed khan for their unconditional support during my research and special thanks to Mr Zaman Khan Coordinator GSP/ISU, Dr Bashir kakar, Masood Ahmed, Syed Saifullah. I am also thankful to all my team members at Performance Management Cell planning & Development Department Quetta, who always support me directly and indirectly during my field.

Finally, I am thankful to all my classmates throughout my educational career.

JAMEEL KAKAR



**In The Name Of Allah,  
The Most Merciful, the Most Gracious.**



## ABSTRACT

The title of the research study was “Tackling malnutrition to unlock potential and enhance prosperity” and the research locale was Firozi Kahan district killasaifullah. Total population of the study area was 1350 and total number of households was 108. During my eight months anthropological field work I used qualitative research. Through qualitative research I found out valid data collection on malnutrition from the research locale. Additionally, it also supports me to understand research problems of malnutrition from the perspectives of the local population. Qualitative research was especially effective in obtaining culturally exact information about the values, opinions, behaviours, and social contexts of the target populations regarding malnutrition and nutritional knowledge. The qualitative research also provided complex textual descriptions of how people experience about malnourished children and how they treat with them.

During my research I used quota sampling to collect data about malnutrition. In quota sampling, I decided while designing the research study that how many people with knowledge of malnutrition and nutritional education to include as participants and target group of my sampling. Participants of quota sampling clearly defined such as parents, care givers of children, experienced people about malnutrition (doctors, LHVs, LHWs, LHSs, and CMWs etc.), traditional birth attendants, skilled birth attendants and elderly people who directly link with children. The criteria I chose the sampling participants allowed me to focus on their experience, know about malnutrition, or have insights into the nutritional awareness. Characteristics of quota sampling included age, place of residence, gender, class, profession, marital status, experience of malnutrition, nutritional status, etc.

Malnutrition was a widespread problem that affects people of the locale especially children and vulnerable women. It was planned to stress the importance of the enormous malnutrition problem which happens to a big issue and which the local community often do not distinguish due to lack of awareness. Some basic objectives of the research study were set to find out the main reasons of food insecurity, malnutrition, features manipulating the food consumption patterns, strategies available for preventing malnutrition and the importance of Child Feeding practices. Malnutrition was a severe and enormous problem in Balochistan especially in the study area. Malnutrition has very deleterious impacts not only on the individual but also on the family, health systems and total long term economy of the area.

Rigorous energies were required to control the negative effects of malnutrition and to save the lives of mothers and children.

Underprivileged infant breast-feeding practices have been recognized as one of the key causal features to malnutrition amongst infants. This evidently shows that the feeding practices at the household level are not very healthy and needs some optimistic eccentricity. Many of these cases become severe and complex due to postponements in case recognition and presentation at health centres or hospitals. Management of severe acute malnutrition has mostly been facility based, in paediatric wards and therapeutic feeding centres (TFCs). Suitable diet is very important in early childhood to certify healthy growth and appropriate organ development. Proper nutrition is also significant for healthy body structure and socio-economic development. Socio-economic development and human development necessitate well-fed peoples who can acquire pioneering abilities, think judgements and contribute to their societies. Nutrition has gradually been known as an elementary pillar for social and economic growth.

I used Explanatory Theory during my field research. The explanatory model expresses that how people of the society make logic of their disease and their illness and how they make practices of it. Explanatory models were frequently used to clarify how people observe their disease in terms of how it occurs, what reasons of this illness, how it affects the people of the local community and what will make them feel better. It is a technique used in both clinical settings and qualitative research as a way to attain individual explanations of a particular phenomenon. Through this model I as a researcher observed the local community health practices during my research. The elderly women expected some more good health practices from local Mullah or religious leader. Whenever children in their families felt sick they started traditional indigenous medication practices. Explanatory theory helped me during my research to describe reasons and factors influencing behaviour or a situation and to identify why malnutrition exists in the area, e.g. why malnutrition in children 6-59 and women exist.

## TABLE OF CONTENTS

	Page No
ABSTRACT.....	I
CONTENTS.....	III
LIST OF FIGURES.....	VI

<b><u>CHAPTER-1</u></b>	<b>INTRODUCTION.....1</b>	1
1.1	Problem.....	3
1.2	Statement of the problem.....	3
1.3	Objectives of the study.....	4
1.4	The Main Objectives.....	4
1.5	Significance of the study.....	4
1.6	Definition of Terms related to malnutrition .....	5
<b><u>CHAPTER-2</u></b>	<b>LITERATURE REVIEW.....8</b>	8
2.1	What I got from Literature Review.....	15
2.2	Theoretical Framework.....	16
2.3	Explanatory Theory used during my thesis.....	16
<b><u>CHAPTER-3</u></b>	<b>RESEARCH METHODOLOGY.....19</b>	19
3.1	Participant observation.....	19
3.2	Key informants.....	21
3.3	Sampling.....	21
3.4	Socio-economic census.....	22
3.5	Case Studies.....	22
3.6	Focus Group Discussion.....	23
3.7	In-depth interview.....	24
3.8	Information gathering and analysis.....	25
3.9	Profile of the research locale.....	25
3.9.1	Household characteristics.....	27
3.9.2	Social and financial position of the families.....	28
3.9.3	Food security of Households.....	29
3.9.4	Language Spoken in the Household.....	30
3.9.5	Ownership Status of the Households.....	30
3.9.6	Structure of the Households.....	30



3.9.7	Category of Fuel Using by Family Members.....	31
3.9.8	Source of Drinking Water.....	32
3.9.9	Water Purification Methods.....	32
3.9.10	Type of Toilet Facility.....	31
3.9.11	Hand washing Practice.....	33
3.9.12	Climate of the study area.....	33
3.9.13	Topography of the area.....	33
3.9.14	Social structure of the area.....	34
3.9.15	The Household system.....	34
3.9.16	The Marriage system.....	35
3.9.17	Traditions of Collaboration.....	35
3.9.18	Religious life.....	35
3.10	Mailmastia (Hospitality).....	36
3.11	Badal (Revenge).....	37
3.12	Nanawati (Refuge).....	38
3.13	Pardah (Seclusion).....	39
3.14	Path and Nang (Honor and courage).....	40

#### **CHAPTER-4      MALNUTRITION CAUSES AND INTERVENTIONS...41**

4.1	Causes of Malnutrition.....	41
4.1.1	Poverty in the study area.....	45
4.1.2	Deficiency of access to nourishment.....	46
4.1.3	Various diseases linked to malnutrition.....	47
4.1.4	Food shortages and food distribution.....	48
4.1.5	Scarcity of breastfeeding.....	50
4.1.6	Lack of security enforcement.....	50
4.1.7	Shortage of harmless drinking water.....	50
4.1.8	Drought in the study area.....	51
4.1.9	Deficiency of nutrients and balanced food.....	53
4.1.10	Dirty Environment of schools and homes.....	54
4.2	Case studies of malnourished children.....	57
4.2.1	Case study (Poverty).....	57
4.2.2	Case study (death of mother).....	57
4.2.3	Case study (death of father).....	58
4.2.4	Case study of malnourished child mother.....	59

<b><u>CHAPTER-5</u></b>	<b>FOOD INSECURITY AND FOOD CONSUMPTION.....</b>	<b>61</b>
5.1	Malnutrition among women.....	61
5.2	Lifetime risks for women.....	62
5.3	Care of Children and Mothers.....	62
5.4	Food insecurity Position.....	62
5.5	Access to health facilities.....	63
5.6	Malnutrition among Children.....	64
5.7	Unsafe drinking water and malnutrition.....	64
5.8	How to measure food security and nutrition.....	64
5.9	Nutrition of the children and women.....	65
5.10	Measuring the quantity of food.....	65
5.11	The food consumption score.....	66
5.11.1	Wheat, fruits and vegetables.....	66
5.11.2	Animal-derived food.....	67
5.11.3.	Market access and price trends.....	67
5.11.4.	Can households access the available food? .....	68
5.11.5.	Poverty hinders food access.....	68
5.11.6.	Food Utilization.....	70
5.11.7.	Access to Food.....	70
5.11.8.	Food sufficiency.....	71
5.11.9.	Social exclusion and lack of education.....	71
5.12	Shock related coping strategies.....	72
5.13	Stunting of malnutrition.....	74
5.14	Drought was a barrier to food access.....	74
<b><u>CHAPTER-6</u></b>	<b>THEORETICAL DISCOURSE .....</b>	<b>77</b>
<b><u>CHAPTER-7</u></b>	<b>CONCLUSION.....</b>	<b>79</b>
6.1.	Recommendations.....	83
	Glossary.....	87
	Various local sentences and their meanings.....	92
	Bibliography.....	94
	Socio-economic survey forms.....	98
	Malnutrition Questionnaire.....	104

## **List of Figures**

<b>Figure 1:</b> Researcher along with community members .....	20
<b>Figure 2:</b> The Province of Balochistan Map.....	25
<b>Figure 3:</b> Map of the district Killasaifullah.....	26
<b>Figure 4:</b> Residents try to keep themselves warm.....	28
<b>Figure 5:</b> Laborers in Apple orchard-sitting-around-the-fire.....	34
<b>Figure 6:</b> Reasons of malnourishment.....	42
<b>Figure 7:</b> A malnourished child admitted in DHQ.....	43
<b>Figure 8:</b> Child was weighed in order to identify Malnourishment.....	44
<b>Figure 9:</b> Poor condition of school in the study area.....	45
<b>Figure 10:</b> School age going girl feeding her egg-laying chickens.....	46
<b>Figure 11:</b> A child leg bones have not been properly mineralized.....	48
<b>Figure 12:</b> A local man harvesting wheat.....	49
<b>Figure 13:</b> Safe drinking water scarcity in the study area.....	51
<b>Figure 14:</b> Researcher along with respondents at apple orchard.....	52
<b>Figure 15:</b> People of the area digging out the trees.....	53
<b>Figure 16:</b> School children were studying in such a dirty environment.....	55
<b>Figure 17:</b> Health workers weighing the school going girl.....	56
<b>Figure 18:</b> At the time of first MUAC Palwasha was 10.7.....	59
<b>Figure 19:</b> Masooma before admission in hospital .....	59



## Abbreviations

• AIDS	Acquired Immune Deficiency Syndrome
• ANC	Antenatal care
• BCC	Behavior Change Communication
• BF	Breast Feeding
• BHU	Basic Health Unit
• BMI	Body Mass Index
• CBA	Child Bearing Age
• CBO	Community Base Organization
• CMAM	Community-based Management of Acute Malnutrition
• CMWs	Community Mid Wives
• DHO	District Health Officer
• DHQ	District Head Quarter
• EPI	Expanded Program for Immunization
• FGD	Focus Group Discussion
• GAM	Global Acute Malnutrition
• GAIN	Global Alliance for Improved Nutrition
• GoB	Government of Balochistan
• HEB	High Energy Biscuits
• HH	Household
• HIV	Human Immunodeficiency Virus
• HR	Human Resource
• IDA	Iron Deficiency Anemia
• IFA	Iron Folic Acid
• IPC	Inter Personal Communication
• IYCF	Infant and Young Child Feeding
• LBW	Low birth weight
• LHS	Lady Health Supervisor

• LHV	Lady Health Visitor
• LHW	Lady Health Worker
• MAM	Moderate Acute Malnutrition
• MDGs	Millennium Development Goals
• MI	Micronutrient Initiative
• MICS	Multiple Indicator Cluster Survey
• MOH	Ministry of Health
• MUAC	Mid-Upper Arm Circumference
• NGOs	Non-Governmental Organizations
• NNS	National Nutrition Survey
• OPD	Out Patient Department
• ORS	Oral rehydration salt
• ORS	Oral Rehydration Solution
• OTP	Outpatient Therapeutic Program
• PC1	Planning Commission-proPorma 1
• PLW	Pregnant and Lactating Women
• PMAP	Pashtoon khwa Milli Awami Party
• PPHI	Peoples Primary Healthcare Initiative
• PSDP	Public Sector Development Program
• RUFT	Ready-to-use therapeutic food
• SC	Stabilization Centre
• SAM	Severe Acute malnutrition
• TBA	Traditional Birth Attendant (Daai)
• TFC	Therapeutic feeding centres
• TORs	Terms of References
• TOT	Terms Of Trade
• TV	Television
• UC	Union Council
• UNICEF	United Nations Children's Fund

• UNOs	United Nations Organizations
• UPE	Universal primary education
• VAD	Vitamin A deficiency
• VAS	Vitamin A Supplementation
• WSB	Wheat Soya Blend
• WASH	Water, Sanitation and Hygiene
• WB	Wife's brother
• WFP	World Food Program
• WHO	World Health Organization



## 1. INTRODUCTION

From a broader viewpoint the nutritional status can be regarded as the result of the multi-layered relations between the foods we eat, our over state of health, culture, and economic, social, religious and political environment in which we live. (Muurling-Wilbrink, 2005).

Malnutrition is a very serious and massive problem in Baluchistan and inadequate baby nourishing practices have been documented as the main contributing features to malnutrition amongst young children. (National Nutrition Survey, 2011)

According to UNICEF and WHO "One in every 12 children born today dies before his or her fifth birthday". Malnutrition has very long-term damaging impacts on the family, health arrangements and overall long term economy of the Province Balochistan especially the study area. Comprehensive efforts are prerequisite by all the stakeholders to manage the negative effects of malnutrition and to save many lives. This research is one small stair in that direction and predicts the stipulation of Nutrition Service for Moderately & Severely Malnourished children.

Poverty, drought, illiterate parents, lack of awareness and deprived nourishing absorption are main reasons of great stages of humble new-born and poor child bodily progress and growth. Poor nourishment alarmed in late mental growth; long-standing harmful effects on baby mental growth.

Malnourishment was a thoughtful dilemma facing the residents of the study area District Killasaifullah. Enormous and huge problems of malnutrition needs collective efforts, mutual understanding among family members regarding feeding practices and behaviour change communication of the area. The government, civil society, religious leaders, NGOs and community elders at large need to mutual efforts in addressing this quandary. Cultural barriers, limited resources and lack of awareness are considered as main study limitations. Nutrition educations to be added in schools syllabus will be the keys to resolving malnutrition in the research area.

Undernourishment not only a boiling worldwide health problem; it also a hurdle to productivity, economic growth and poverty abolition of the area. It's expected that twenty two per cent of the comprehensive lumber of illness could be detached by eradicating malnourishment, comprising micronutrient scarcity. The UNs more than 185 members devoted to set comprehensive MDGs in 1990. These goals further implemented in 2000 by the UNs as per the MDGs Announcement. The 1st Millennium Development Goals

directly connected to eliminating malnutrition and food shortage but more of the Millennium Development Goals for example refining UPE; decreasing children death; progressing motherly health; and battling AIDS and HIV, malaria and further illnesses completely required virtuous nutritious position if they were to accomplished capably. (Project, 2005)

It was planned that there were dangerous spaces of time through which development could be attained and disappointment of maturing is mostly irreversible. (Barker & Clark, 1997)

Solid improvement in dealing with malnutrition will depend on action on many fronts, in a great multiplicity of national and local situations. Enhancements in income distribution and food distribution are of much significance. For the very poorest of the world's population, amplified food production and lower food prices alone will not be adequate to eradicate malnutrition. (Umberto Colombo, 1977)

(SAM) Severe acute malnutrition anticipated disturbing around twenty million kids below five years of age worldwide; in Pakistan near one million kids are affecting with severe acute malnutrition. With improved incidence and strength of natural disasters as well as financial suspicions, these statistics will probably increase. UNICEF in partnership with government and other stakeholders for instance. WFP, WHO and other development partners made momentous reserves in fifty five countries to scale up treatment of acutely malnourished children through CMAM. (United Nations Children's Fund (UNICEF), 2012)

Malnutrition well recognized obstacle to human prosperity and development. Occurrence of undernourishment in women and children remain high. Tirelessly great malnourishment pointers are accountable for concealed delay of Pakistan's progress. Malnutrition could lead to lack of education performance, little labour efficiency, poverty and accordingly affect the motherland's overall possible economic development. Malnutrition is an alarming issue and remains to be a life time difficulty if collective efforts are not taken actively. It specifies diet uncertainty at the community level as one of the main reason of malnutrition. The people who are diet uncertain were less well known, mostly because of hardships in crucial food insecurity and deficiency of dimension data. Beyond instantaneous reasons, social and economic features are the fundamental & significantly essential elements of malnutrition. It is known that the level of poverty in Pakistan carefully coincides with nourishment indicators.

The enhancement of the nutritious position of the population as an entire is consequently a socioeconomic traditional challenge in addition to a nutrition consciousness problem. The resolutions lay in an incorporated approach in health, agriculture food distribution and education sectors with instantaneous economic strategies for impartial income circulation.

## 1.1. Problem

The research study explains the results of investigative and evocative consequences and causes of malnutrition District Killasaifullah Province Balochistan. Malnutrition is a widespread problem that affects people of the locale especially children. The title of the research study is “Tackling malnutrition to unlock potential and enhance prosperity” is planned to stress the importance of the enormous malnutrition problem which happens to be an issue, which the local community often do not distinguish due to lack of awareness.

## 1.2. Statement of the Problem

Malnourishment remains to be a major health difficulty in Balochistan. Significantly high proportion 52% of kids less than five years (NNS 2011) suffers from long-lasting stunting. In Balochistan 25% of children are born with low birth weight. Forty per cent of kids below 5 year were suffering from “moderate to severe” malnourished conditions, while 16% of children are wasted. (NNS 2011).

The aim of this research was to discover the causes and consequences of malnutrition situation in kids under the age of five years. Generally there was a deficiency of awareness in the local community about their maternal health and child health. Killasaifullah was basically agrarian in nature and people of the study area still believe in indigenous treatment, *mulla ao taveez* (Islamic clerics or mosque leaders and Amulet) and graveyard especially on Friday.

Infant and young child feeding applies openly touch the nutritious position of kids bellow 24 months and effect complete kid existence. Refining child and young baby nourishing observes in the country for kids between 0 to 23 months of was serious to assuring them improved nourishment, development and health. (National Nutrition Survey, 2011)

Malnutrition is a hurdle to human development and is a key restraint in the development efforts and Balochistan being the most underdeveloped of four provinces of Pakistan logically carries a harsh health scenario and Killasafulah is a part of Balochistan. Malnourishment remains to be a major problem of health in Balochistan.

The whole purpose is to spot how the food is consumed, to know about the nutrition and food behaviour and to know about the reasons upsetting policymaking. These reasons indicate the connectivity concerning dietary intake, multiple diseases, health concerns, views regarding various diets, nutritional practices, consumption of the indigenous against introduced nourishments, and influences related to Malnutrition.

### **1.3. Research Aims and Questions**

The goal of the study was to increase responsiveness about the factors that lead to malnutrition among Children living in food insecure District Killasafulah and to collect available information about how to observe and treat it.

The researcher will formulate the following two (2) research questions to enable him to achieve this research aim.

- ✓ What are the causes of malnutrition among Children living in food insecure District Killasafulah?
- ✓ How can nutrition among Children living in food insecure District Killasafulah can improve and what are the cultural barriers of malnutrition among the people of research area?

### **1.4. The Main Objectives**

- To find out the main reasons of food insecurity & malnutrition.
- To find out features manipulating the food consumption patterns.
- To find out strategies available for preventing malnutrition.
- To find out the importance of Child Feeding.

### **1.5. Significance of the Study**

This study will be useful for further academic and anthropological research on nutritional education and malnutrition. The aim of the research is to enhance the nutritious position of male and female children under the age of five and as well as that of women of reproductive age. This study will be helpful for national and international donor organizations to eradicate extreme poverty and eliminate malnutrition. The study

will be considered as a guideline and tool of awareness raising, social mobilization process and advocacy through which malnutrition will eradicate. The study will also be useful for government, UN Organizations, stakeholders and policy makers to launch effective nutrition interventions in the study area. By improving the nutritional status and eradicating malnutrition of the research population, the study aims to contribute to human development in Balochistan by improving health outcomes. It is also an important aim of the study to tackle the widespread malnutrition and micronutrient deficiencies in food insecure District Killasaifullah, Balochistan. By reducing the burden of malnutrition the proposed study will contribute to appropriate large scale interventions.

The important thing is to comprehend the requirements and issues of the study area to deliver the long lasting and the best possible solutions. In Killasaifullah affording more education in the area of nourishment and wellbeing of the women, giving daily care, more job creation, and opportunities that lead to independence were the main needs of the study area. Realising these phases is essential for resolving malnutrition in the area of Killasaifullah. Malnourishment is a deep rooted problem that wants to be addressed. In accumulation to comprehend malnutrition, it is very important to create awareness among those who are malnourished.

## **1.6. Definition of Terms Related to Malnutrition**

**Nutrition:** Nutrition is the art that understands the interface of nutrients and other materials in diet.

**Nutrients:** Nutrients are the components in nourishments that an organism utilizes to grow and survive.

**Acute Malnutrition:** Acute malnutrition is the technique of increasing failure in which the weight of kids is below than usual for their height. Acute malnutrition is categorized into Moderate and Severe Acute Malnutrition.

**Anthropometrics:** Anthropometry is the study of the dimensions and abilities of the human body. In Nutrition, anthropometrics include the measurement of height, weight, MUAC and other parameters and their use in determining of nutritional status.

**Chronic Malnutrition:** Chronic Malnutrition is a method of growing failure through which the height of kids is shorter than usual for their age.

**Colostrum:** Colostrum is the first thick milk which comprises antibodies to safeguard the infants against sicknesses.

**Complementary Feeding:** While breastfeeding only is not sufficient to meet the nutritional supplies of new-borns, the exercise of giving other nourishments and liquids along with breast milk is called as complementary feeding.

**Exclusive Breastfeeding:** is known as new-born feeding only breast milk and no other supplementation of any kinds.

**Food Security:** Food security occurs when every person, every time, have economic and physical contact to adequate and nourishing diet that completes their nutritional requirements & nourishment favourites for healthy life.

**Health:** health is form of whole psychological, physical and social welfare and not only the absenteeism of illness.

**Hunger:** Troubled or painful feeling produced by a deficiency of nourishment or the recurrent and involuntary shortage of access to diet.

**Hygiene:** states to the set of practices supposed by a community to be associated with the preservation of health and healthy living. Good hygiene is associated with improved health and prevents the spread of infectious diseases.

**Malnutrition:** Malnutrition is a situation that grows when the body doesn't get the exact quantity of the adequate nutrients it requires to sustain healthy nerves and organs.

**Micronutrient Deficiencies:** Micronutrients are needed for life in miniscule amounts. These include some essential vitamins and minerals and consequences of their absence cause deficiencies.

**Micronutrients:** Are required in very minute amounts but perform very essential functions like blood and bone metabolism etc.

**Moderate Acute Malnutrition:** is a severe and life-threatening situation—characterized by severe wasting, or thinness—that results from illness, lack of proper diets, or other underlying causes.

**MUAC:** Mid-Upper Arm Circumference.

**Night blindness:** the powerlessness to see things at night. Vitamin A deficiency is the main underlying causes of night blindness.

**Nutrients:** Nourishment contains nutrients which, after getting broken down into smaller pieces and absorbed in the body, provide nourishment for our growth and development. Nutrients are categorized in to Macro and Micro nutrients.

**Over Nutrition:** It consequences from too much eating and no sufficient exercise or getting more vitamins and other nutritional substitutes.

**Predominant Breastfeeding:** it means that the new-born, s major source of diet has been breast milk.

**Under Nutrition:** It is usually recognized as malnutrition and contains an extensive display of things like intrauterine development restraint resultant in LBW, underweight, stunting, wasting, and micronutrient scarcities.

## 2. LITERATURE REVIEW

This chapter will present a review of existing literature on the subject. The literature review will link the purpose of the study to various theoretical perspectives and the current nature of variables related to the phenomenon. Malnutrition is insufficient ingestion of healthful diet and expenditure of a specific sort of nourishment element that has little or no nutritious importance. Undernourishment is the main problem of Nigerian child bearing women. Children and pregnant women are the most vulnerable and pregnant females required suitable nutritious food for the child to improve well if not, the result will lead to LBWs. (Jacinta A. Opara, 2011)

Children's nutritious position remains a consideration of their complete health system. When kids have a sufficient nutrition amount and not showing to recurrent sickness and also well cared.

Globally children die with malnourishment related issues and disease, properly arrangements for their survival could save them from life losing stages. Malnourished kids were more probably to die from communal infantile illnesses, and those who live, had periodic illnesses and undecided development. The MDGs goal was to decrease the partial quantity of those who directly affected from malnutrition and hunger between 1990 and 2015. Eradication of malnutrition, hunger and extreme poverty will also help in the objective to decrease juvenile death.

New evidence suggests that if the maternal food quality was value-added throughout child baring stage and pregnancy then she might have an advantageous influence on birth weight gaining. In India, the intake of diets rich in multi vitamins (vegetable, dairy, greeneries and fruit) throughout prenatal period and foliate levels in red blood cells to seven months of prenatal period were connected with the extent of the baby at birth, even if there were no relationship with the suitability of energy intake or proteins. (Maputo, July, 2010)

Majority of children under nutrition, delayed improvement to health-related Millennium Development goals targets. The increase of long-lasting illnesses driving families of extreme poverty, and the want for anticipation to address reasons outdoor the health area have required unbreakable expression at the causes for the past disasters and



encouraged a exploration for innovative methods to healthiness impartiality and overall fairness. (Hill, 2009)

The use of iodized salt popularity has seen in some countries of Asia and linked with a proliferation in birth weight and improved weight for children over age. (J.B Mason, 2002)

The greatest important common issues in numerous under developed countries as well as Pakistan are extensive children malnourishment, high infant death rate and high illiteracy. Malnutrition in children and women is the huge problem and also the fundamental danger aspect for disease and death. This kind of issues created deaths and long listing damage for children globally. (G. M. Arif, July 2012)

Malnourishment is the consequence of the total amount and kind of diet taken. Kids require staples, for instance rice, and as well as legumes, vegetables, meat and fish. Children bodies need adequate foods and proper diet. Collective efforts needed to distinct the effects of foods on children bodily growth and the role of different diet substances for children growth.

The research study shows that in what way food budgets on household level map into the nutritious position of minor kids. The emphasis on daily diet-budget, and not the entire budget, is a generalization, as we suppose diet to have a additional effect on children development. On the other hand, we understand that in specific health expenditure may also effect on kid development. But overall position of health budgeting, health policies implementation and health programs evaluation is very poor. This will enhance the quality of analysis, but only prejudice the results if health expenditure is connected with outgoings on specific diet substances when we control for the diet financial plan. This can be a difficult task for lavish nourishment in poor families and as rich families could have greater financial plan shares for mutually health expenditure and lavish food. But the limitations for both variables seem not to depend on whether we contain lavish food or not in the reversions. (Hatllebakk, 2012)

Nutritious position could be well-defined as the physical and mental situation of a person that consequences after the steadiness in the middle of micronutrient fulfilments and the capability of the human physique to practise these micronutrients. (Hill, 2009)

The resulting malnutrition, i.e. macro and micro nutrient deficiencies, is a consequence of insufficient quantities of properly nourishing diet, poor health and fundamental aspects like wellbeing of health, ill-health structure and the caring practices within the household and society. (WFP, 2006)

Malnutrition is a universal problem that affects myriads of people, especially children. In all over the world One hundred fifty million kids of pre-school stage were malnourished and two hundred million children have underdeveloped growth. In addition, one out of four children born in under developed states has intrauterine development delay and is at danger of psychological damage. (Brown, 2000)

Malnutrition is a universal problem, but affects the developing countries in Asia and Africa in particular. Less fortunate people are unable to secure food to provide them with necessary nutrients that enable them to meet daily dietary needs. This inability severely affects their physical, social and economic status. A clear and definite connection between nutritious position and the prevalence of ill health and disabilities in individuals. (OCHURUS, 2007)

In Pakistan, the most recent survey findings indicate that among the under -five children, 44% were stunted, 15% were wasted and 31.5% were underweight. (University, 2011)

The major nutritional problems in the country include low birth weight babies due to poor maternal nutrition, child malnutrition and anemia. Almost all the population groups are at risk of some or other form of malnutrition but children bellow 5 years age and child caring women are the most vulnerable. (Bhutta, 2002)

Under nutrition is the form that the human body not have adequate and sufficient kind of diet to fulfil its proteins, carbohydrates, energy, macronutrient, body fat and micronutrient desires. Kids could be malnourished if the children have right nourishment to fulfil their liveliness requests if that diet deficiencies necessary nutrients. Over nutrition is a situation where the body has in large amounts of diet, specially sugars and fats. (Hill, 2009)



Malnutrition as well as over nutrition is the type of malnutrition but their positions are diverse. In the study area only under nutrition existed due to poverty, lack of awareness of nutrients intake and women illiteracy.

In spite of speedy financial development and nationwide growth, various sections of the Malaysian people still undergo from malnourishment, mostly protein-energy malnourishment amongst kids. Though severe approaches of nutrient scarcity were exceptional, moderate malnutrition static extensive in vulnerable societies. (WL Cheah, 20 August 2009)

In less developed countries, at least four million kids under the age of 5 die each year as a result of under nutrition. Luckily, malnutrition is mainly escapable through established nourishment actions such as optimal and complementary feeding practices. (PROJECT, 2012)

In fact, enhanced nourishment could help in accomplishment the Millennium Development Goals by paying to the development of UPE universal primary education, decreasing kids' mortality, progressing mother, s health, decreasing the load of HIV/AIDS and other infective sicknesses and eliminating poverty and hunger.

Improvement of the nutritious position of the local community especially the children and vulnerable women is the major responsibilities of administration. It is very significant element to refine the public health and nutrition position and daily life of the vulnerable community. Any types of malnourishment not affect publics' health, social and economic position of the families but also affect the overall improvement of socio-political and socio-economic condition of the study area.

Humanitarians need to have sufficient nourishment to accomplish usual bodily development in kids and for a vigorous life style. Sufficient nutritious food is important and basic right of anyone in the society especially women and children who are vulnerable. If persons unsuccessful to consume adequate quantity and quality of nutritious food, they will easily suffer from extreme hunger and malnourishment. The key kinds of malnourishment seen in Nepal were lack of iodine illnesses, iron shortage anemia, protein-energy malnutrition and vitamin A scarcity.

The MDGs (Millennium Development Goals) targeted goals were not achieved but it was acknowledged that malnutrition as the main result of hunger and poverty.

With a sustained high occurrence and incidence of malnutrition on admission to hospitals and a nutrition care process which is far from being generally implemented, it would be expected that clinical outcome continues to be related to nutritional status on admission. (Jens Kondrup, 2009)

The cultural food is normally little in energy intake and great in micronutrient density, great in protein, little in sugars. (National Health and Medical Research Council, 2000)

Malnutrition stops kids, women & communities from accomplishing their full mental, physical and economic ability, thereby creating dependence and hindering development of the nation. The findings in several categories indicate that the root of malnutrition can be linked to poverty, which could be caused by unemployment, low educational levels or a combination of both.

The causes of malnutrition are intricate and multidimensional. Some argue that the key reasons of malnutrition in children and mortality in the developing world are either the complete no accessibility of nourishment or extreme food, which is the dearth of money to purchase adequate diet. (Dettwyler, 1994)

Good diet is very significant for good condition. Kids who were sound nourished throughout the 1st 2 years of children life. Through well feeding the children could probably stay in good physical shape for throughout their juvenile. Breast milk only is the perfect diet during the first 6 months of a baby's life. It comprises complete nutrients required for vigorous and strong mental and bodily development besides safe immune system that looks after in contrast to communal juvenile infections. (Ashworth, 2002)

Inappropriate infant nourishing practices, in adding to diarrheal infection, are important causes of malnutrition. UNICEF and WHO endorsed that *all children must be completely breastfed from birth to six months of age*. So therefore, babies must be nourished only through breast feeding throughout the 1st six months. In the study area Killasaifullah, the women were using liquids for new born children of six month of age, such as hot water, sugar water, black tea, *ghotti* (indigenous treatment through liquid) and juice. This exercise has harmful consequence on nutritious position of the infants.

The literature on nutritional status of children substantiated that malnutrition in juvenile might have permanent long-standing sound effects on the overall health position and as well as on education and labour market based achievement. The confrontational special effects seem to be stronger for persons who visible to malnutrition during first two years of life showed that malnutrition in kids in 1<sup>st</sup> twenty four months of life is related with concentrated adult tallness, greater blood glucose concentration, greater than before blood density, damaging fat profile, deficit in mental expertise and an augmented chance of psychological infection. (Rana Ejaz Ali Khan, 2013)

Similar to other most important health problems, malnourishment is a predominant issue in the South Asia countries. Undernourished females and kids were bringing into being in India, Pakistan and Bangladesh. South Asian countries considered globally the most horrible and vulnerable for malnourished children and women. These countries presents the negative impact of malnutrition on overall socio economic conditions and what has been called an “Asian Enigma” as a result of greater number of LBW, poor hygienic situations, not up to scratch breastfeeding practices, weaning practices and the deprived position of females especially mothers. (ROSA, 1997)

Malnourishment is globally well known health issue in the country and shows considerable title role in Pakistan high children sickness and death rates. Because of its association with infections, malnourishment in the country presently threatens motherly and children existence, particularly in vulnerable and undeveloped regions. Though, there are tangible resolutions, which depend on social, political and economic development and feasible designed interventions. (Prentice, 2008)

Malnourished vulnerable women and children considered very large number in South Asia particularly in Pakistan and India. Approximately 1/3 of children consider malnourished and more than half of females of reproductive stage weigh up low than forty five Kilograms. (Quibria, 2000)

This fact is understood that undernourished females have a higher danger of giving birth to little birth weight babies. Babies born with LBWs at a complex danger of illness and death in the neonatal period or later infancy, particularly in underdeveloped regions. (Sohely Yasmin, 2001)

Stunting is considered as a dependable sign of development delay in underdeveloped countries. The rates of stunting in the country come from 47% in 1980 to 33% in 2000. (Mercedes de Onis, 2000)

The point is expected to the most significant aspects related to minor occurrence of stunting and the accessibility of high-energy nutrients, womanly literateness and gross national product. Targeted tasks connected to the features still thoughtful in the country and mainly affect kids, young females. (Edward A. Frongillo, 1997)

The nationwide study characterized financial position on the origin of substantial wealth and services possessed by the households. On the other hand, it used diverse standards for rural and urban families. Therefore, the country's rural and urban alteration might be partly clarified by the comparatively developed level of education amongst the rural and urban residents along with their physical approach to basic health facilities. (WHO, 1998)

Development uncertain related to sequences of incidences a kid suffers, as well as recurrent diseases, insufficient need to eat, inadequate diet consumption and deprived normal care. Numerous of these kids pass away earlier their 1st anniversary and those who live suffer long-standing significances for instance pathetic physique and dared psychological capability. (DEVELOPMENT, 1999)

National Nutrition Survey (NNS) conducted in 1985 further discovered that 49% of kids were undernourished and 11% were harshly undernourished. The 2001 to 2002 NN survey also disclosed a dreadful malnourishment position in the country. It was the 1st interval a National Nutrition Survey emphasized the correct level and drain of macronutrient and malnourishment in Pakistan. (University, 2011)

Deprived quantity and quality of balancing nourishments and insufficient caring applies were the main causes for initial stage of infantile development delay. (M.S.Durkin, 1998)

According to the 2011 National Nutrition Survey, Pakistan is facing a silent crisis of malnutrition that is amongst the worst and has not improved for decades. (National Nutrition Survey, 2011)

The causes of malnutrition are multi-dimensional, with household access to food, sanitation and safe water, and poor young child feeding practices among the major factors jeopardizing progress towards nutrition security in Pakistan. An association between malnutrition and maternal illiteracy was also documented in the NNS 2011.

The word malnourishments basically mean “depraved nutrition.” Malnourishment could mention to the diverse situations of insufficient diet besides excessively, the incorrect kinds of nourishment, or the body's reaction to an extensive variety of diseases that consequence in mal-concentration of micronutrients and the incapability to use nourishment correctly to keep up health. Clinically, malnourishment is considered by insufficient and excess consumption of energy, protein and micronutrients for example vitamins and the recurrent illnesses and infections as a result. Individuals become undernourished if they are powerless to completely make use of the diet they eat. (Christine Aguiar, April, 2007)

## **2.1 What I Got from Literature Review**

Malnourishment is a thoughtful dilemma facing the people of African countries, Sub-Saharan countries, India, Pakistan and third world countries. Malnutrition is also a neglected and human fatal disease not only existed in Pakistan but also in under developed countries. It was found out through literature review that the affected people of malnutrition could not well aware of malnutrition especially in under developed countries. I studied that how families’ diet finances chart into nutritious position of little kids. The emphasis on the diet-budget, and not the whole budget, is a overview, such as we suppose nourishment to have direct influence on kid growing.

Due to lack of awareness the illiterate women always use liquids for new born children of six months of age. And these liquids include hot water, sugar water, black tea, indigenous treatment through liquid and even juice. This exercise has harmful consequence on nutritious position of the infants. Through literature findings it was highlighted that malnutrition was the cause of poverty, maternal illiteracy, lack of awareness, inadequate of proper diet and joint family system same. The greatest momentous communal issues in numerous underdeveloped countries comprising Pakistan are extensive kid malnourishment, high child death and high illiteracy. Children’s nutritious position is a consideration of their complete health system. When children have access to a sufficient

nutrition supply, are not showing to repeated sickness, and are well cared for, they reach their growth potential and are considered well fed.

Evidence from literature suggests that if the mother's diet quality is improved during pregnancy, she might have a beneficial effect on her child birth weight. In India, the consumption of foods rich in micronutrients (dairy, vegetable, green leaves and fruit) during pregnancy also considered neglected. Malnutrition is characterized by inadequate or excess intake of protein, energy, and micronutrients such as vitamins, and the frequent infections and disorders that result. People are malnourished if they are unable to fully utilize the food they eat because of such things like diarrhoea or other illnesses.

## **2.2. Theoretical Framework**

### **Explanatory Theory**

Kleinman Arthur was born on March 11, 1941 and he was an American psychologist and anthropologist. He is well known for his efforts on mental illness in Chinese culture. He done his graduate from Medical and University of Stanford and master's degree in social anthropology and then he qualified in psychiatry from Massachusetts Hospital. Kleinman was significant character in numerous areas, comprising cultural psychiatry, medical anthropology, global health, social medicine and medical humanities.

Explanatory theory defines the causes why a problem and an issue exist in the society. This theory helps the searchers of various aspects that subsidize to an issue for example shortage of concerned education, self-efficacy, social support, or resources could be changed. Patterns of explanatory theory comprise the Health Belief Model, the Theory of Planned Behavior, and the Precaution Adoption Process Model. (Croyle, 2005)

Arthur Kleinman's theory of explanatory models suggests that persons and groups can have much unlike concepts of health and disease.

## **2.3. Explanatory Theory Used During my Thesis**

I used Explanatory Theory in my field research and my topic was "tackling malnutrition to unlock potential and enhance prosperity: Ethnographic study of food insecure district killasaifullah. Because an explanatory model expresses that how people

of the society make logic of their disease and their illness and how they make practices of it. Explanatory models were frequently used to clarify in what way persons observe the disease in terms of how it occurs, what reasons of this illness, how it affects the people of the local community and what things make them feel improved. This is a technique used in both clinical settings and qualitative research as a method to attain separate clarifications of a specific occurrence. In later, explanatory models permit investigators to gather word-based information.

Through this model as a researcher I observed the local community health practices during my research. The elderly women expected some more good health practices from local Mullah or religious leader. Whenever children in their families felt sick they started traditional indigenous medication practices or the children took to the local Mullah. The people of the study area did not believe on food insecurity and malnutrition, because they always believe over fate and spirituality.

Explanatory theory helped me during my research to describe reasons and factors influencing behaviour or a situation and to identify why malnutrition exists in the area, e.g. why malnutrition in children 6-59 and women exist. It also helped to safeguard that all related aspects recognized, for instance the subjective, ecological, communal and social factors of the obstacle. This helps me for various reasons that subsidise to an issue for instance, deficiency of required facts, social provision, or resources, and can be changed. I also examined the local community health practices, health facility concept, indigenous medication practices and the concept of mullah through this theory. The people of the area always expressed that their children were normal not malnourished and it was their fate if they were so.

Explanatory models provoked over and done with a series of exact open-ended questions. The first model was devised by Arthur Kleinman, and contains eight questions described. Kleinman came with these questions in an effort to differentiate in the middle of illness and infection, and to link the break amongst medical information and constructions of clinical realism. (Kleinman, 1976)

This method was a method that might be used unaccompanied in qualitative exploration, or with other methods for example case studies, respondent's interviews, participant observations, focus groups discussions or pile sorting, amongst others.

Arthur Kleinman wrote: "Eliciting the patient's (explanatory) model gives the physician knowledge of the beliefs the patient holds about his illness, the personal and social meaning he attaches to his disorder, his expectations about what will happen to him and what the doctor will do, and his own therapeutic goals. Comparison of patient model with the doctor's model enables the clinician to identify major discrepancies that may cause problems for clinical management. Such comparisons also help the clinician know which aspects of his explanatory model need clearer exposition to patients (and families), and what sort of patient education is most appropriate. And they clarify conflicts not related to different levels of knowledge but different values and interests. Part of the clinical process involves negotiations between these explanatory models, once they have been made explicit." (p. 256)

Explanatory theory wasn't analytical method. In the situations of medical research explanatory models convey investigators with an impression of how long suffering understanding and interpret their situations. This technique leases clinicians progress the value of carefulness. This kind of tool can also help the investigators and to recognize their topics and this can also benefit in the proposal of suitable rehabilitations or interferences, or clarify why certain people discard medicine.

This theory defines the causes why an issue or illness occurs such as malnutrition. This theory can guide the researcher that what are the main causes of the existing problem and disease. It also helps the searcher for reasons that contribute to a problem such as lack of awareness, deficiency of required education, communal maintenance and financial capitals. Patterns of explanatory theory comprise the Health Belief Model, the Theory of Planned Behaviour, and the Precaution Adoption Process Model.

### **3. RESEARCH METHODOLOGY**

Research Methodology is very significant aspect of any research. My research was impossible without research methods. I used some research tools regarding malnutrition and its causes. Research methods are source of getting valid and empirical data. It has two main proportions:

- Quantitative research
- Qualitative research

Research methods shape that which kind of research tools should be used in the data collection process. Every anthropologist can be dependent on the concept of the fieldwork and situations in the research and use several techniques for Qualitative and Quantitative facts gathering. A brief account of different anthropological tools and techniques for collecting information that I used during the course of my research and was gather my data by using anthropological methods are as follows.

#### **3.1. Participant Observation**

The research method participant observation, which used in informal setting, is a significant technique in anthropology. This technique gave me a chance to collect qualitative data of descriptive nature of the research locale. This technique helped me in participation of local people everyday life activity such as birth ceremony, death ceremony, marriage, various traditions and customs etc. This method helped me a lot in making interview questions, rapport establishment and collection of data and as well as to assess and analyse the information collected from other techniques. I used this method in my field research to know the causes and further interventions of malnutrition. It also supported me to gather native's overview and appraise data collected by other methods. I observed their housing patterns, dress patterns, various ceremonies and local treatment of malnourished children. During my field work in the locale I collected some unique information from the community members regarding malnutrition treatment and other health practices.

Setting up of a better understanding with the local people was my 1st duty and as well as has a main significance for an upright research. The rapport building assisted me during my fieldwork to travel easily amongst the local community and to gather the

essential data regarding malnutrition. Inaugurating better understanding was, however, right challenging assignment but at the same time so essential to collect effective information. Subsequently when commencing required data in the field, I recognized a better understanding with the people of my research locale through my hosts and long residence in the research locale. Due to this I recognized better relationship with local community and have to clarify the people's fears regarding my individuality and the purpose of my field work and research. Establishment of a good rapport supported me to gather trustworthy and essential information freely. For better relationships and report with local people, I unlocked clear, apparent, approachable, forthcoming and welcoming to entire my key respondents as well as community members.

**Figure 1:** *Researcher along with community members discussing malnutrition issues.*



Participant observation supported me in establishment of rapport with the local community and members of the area to gather data related to my topic malnutrition. Creation of a good rapport with local people was my major job as it has a main significance for a better research. It supported me to move easily to the local community to collect the necessary data regarding malnutrition and food insecurity. Establishment of good understanding with local community was very hard task but it was very important to get effective information.

Before going to the field, I established a rapport with the native people, community elders and religious leaders. Due to this, I established upright rapport with local community and also to clarify their suspicions of my individuality and the nature of

my field research. Establishment of a good rapport absolutely supported me to get essential and reliable information effortlessly.

### 3.2. Key Informants

After participant observation in my research locale I selected thirteen key informants. They were well observant of the society and its traditions they were corporeal and they also shared required information willingly up to their experiences. With close coordination and report with local people, I was so clear to my research goals, research ethics and so kindly to all my locale members as well as my key informants. My selection criteria for key informants were based on their extensive knowledge about malnutrition and familiarity with local culture. Key informants helped me in getting reliable data regarding malnutrition and nutritional knowledge. Four key informants were female and nine key informants were male. All my respondents were very kind and task oriented especially related to my topic. Four key informants were high qualified and experienced towards malnutrition and nutritional education.

The key informants' selection was based upon their consistency, availability and their own recognition in the local culture and local community, so therefore I chose key informants carefully. Keeping in mind that not every statement of the key informant should be considered at face value. In this regard I adopted the strategy of cross checking the statements provided by him about the events. I clarified the goals and objectives of my thesis to the key informants and they supported me a lot to get valid and reliable data. Key informants were very honest, sincere and truthful. The selection criteria was very simple firstly meetings with community elders and secondly discussion with the district health officer and other concern health staff than the key informants selected.

### 3.3. Sampling

The third research method is sampling and it is one of the most significant techniques of information gathering. A sample is "a selection hopefully representative, of the total population or universe that one desire to study". (Bailey 1978, p 437)

Sampling is a small part of a large population, which we want to study. I also used the Haphazard sampling or convenience sampling method. According to **H.Russell**

**Bernard**, *“Haphazard or convenience sampling is useful for explicably research; to get a feel for, what is going on out there”*. (Bernard: 1994:p.96)

And after accomplishing standard facts of the local culture and local people, I selected sampling for comprehensive information gathering from the fieldwork area. I nominated people in my sample from all the social groups and classes of people, so random sampling was done and 49 households were selected for census survey. The samples which were signifying total the three socio-economic positions of the area, 15 households had high economic position, 14 households had middle economic position and others belonged to inferior position. The selected method supported at my research locale to emphasis on native people sample size for the data collection. Due to this research tool I got relevant information regarding malnutrition and nutritious knowledge.

Individual data are about attributes of individuals in a population. Each person has an age, for example; each person has an income; and each person has preferences for things like characteristics of a mate. If the idea is to estimate the average age, or income, or preference in a population—that is, to estimate some population parameters—then a scientifically drawn, unbiased sample is a must. (Bernard, 2006, p. 146)

### **3.4. Socio-Economic Census**

I used socio-economic survey of the selected area and selected households of the research site during my fieldwork. It is the practice through which the numerical details gathered regarding the communal, financial and demographics features of the research locale. For establishing base line study, survey forms were arranged for the record of the locale families. The survey regarding age, gender, social group, Religious conviction, budget, profession, marital position, educational status, skills, income, property holding, live stocks and forms of agriculture. It provided me basic guidelines about food security and poverty. According to **Pelto** “The Field worker should try to make an enculturation of family units and their membership near the beginning of the field work”.

I visited every house in the locale and filled up the forms also rechecked with the help of key informants.

### **3.5. Case Studies**

Identification of case studies was very useful and four case studies of malnourished children were collected during my research. The purpose of case studies

collection was to know home based and health facility based treatment of malnourished children and explanatory analysis of malnourished children.

### **3.6. Focus Group Discussion**

Four focus group discussions at community level were conducted in the study area. In these focus group discussions my key informants along with community elders, religious leaders, parents and teachers were participated. People of the area were also focused on the importance of food security, agricultural based economy and negative results of five years long drought. Parents were focusing on health facility functionality and educational institutions strengthening. It was very important to know that what the particular community think about malnutrition and nutritional education. Overall four FGDs were conducted in the research locale in order to gather the perceptions of the women of child bearing age, parents and the whole community. Eight to twelve Participants were identified and discussion was held on the themes of mothers' nutrition and care, IYCF practices, food consumption and security, sanitation and wellbeing facilities, fitness seeking behavior and information education and communication.

Each Focus group discussion was very productive and fruitful regarding maternal and child health. Four focus group discussions conducted for the purpose to gather required data from a group of people especially parents, care givers of children and community elders. Focus group discussions provided me with very useful information about malnutrition and its direct impact on socioeconomic development.

The best way to become a successful moderator is through experience and practice. If possible, try to sit in on a focus group run by an experienced moderator. Once you have done this, hold your own pilot focus group, either with friends or actual research participants. You might find it useful to visually record this focus group so that you can assess your body language, see how you deal with awkward situations, analyse how you ask questions, and so on. (Dawson, 2007, p.80)

These deliberations were significant in the logic that evidence about the causes of malnutrition collected from the people from every sphere of life in the research locale. For this purpose a small group of the community members selected in order to generate discussion of certain topics to get collective opinion or shared views of the villagers during a formal interview. A person becomes conscious, but during such kind of

discussion people express their views more freely since no one is being focused. Four FGDs with 46 participants were conducted at various phases.

### 3.7. In-depth Interview

Detailed interviews were established by means of questionnaire guideline on the bases of in-depth-interview. It was a qualitative research method that contains conducting rigorous separate interviews with respondents to discover their viewpoints on causes of malnutrition, food insecurity and cultural barriers related to child caring. For example, Questions were asked from the participants about their personal understandings and potentials related to the food insecurity.

A structured questionnaire was developed and data were collected from the community on malnutrition and food insecurity. The questionnaire was assessed and comprehensive questions were added in the Questionnaire. Input in the tools including the methodology was given by all the respondents. The questionnaire comprised of the following parts:

1. Household / Demographic Information: Totals family members registered through the people age, educational status, profession, matrimonial position and gender. Socio economic data, nutrition services provided in the collected data along with health and hygiene practices were recorded.
2. Knowledge Attitude and Practices Regarding Micronutrients: the respondents about micronutrients (vitamin-A, iron and iodine) were documented.
3. Feeding Practices of Infants /Young Kids (0-23 months): Standard IYCF information was used to gather data on date of birth, breastfeeding initiation, complementary feeding, and childhood illnesses.
4. 24-Hours Dietary Recall for Household, food Quantity and Diversity: Information on 24-hour dietary recall to assess the dietary intake and food practices to determine eating habits and patterns and variety of foods consumed by the households were also assessed.
5. Food Security: Poverty assessment and information on food security was also conducted.

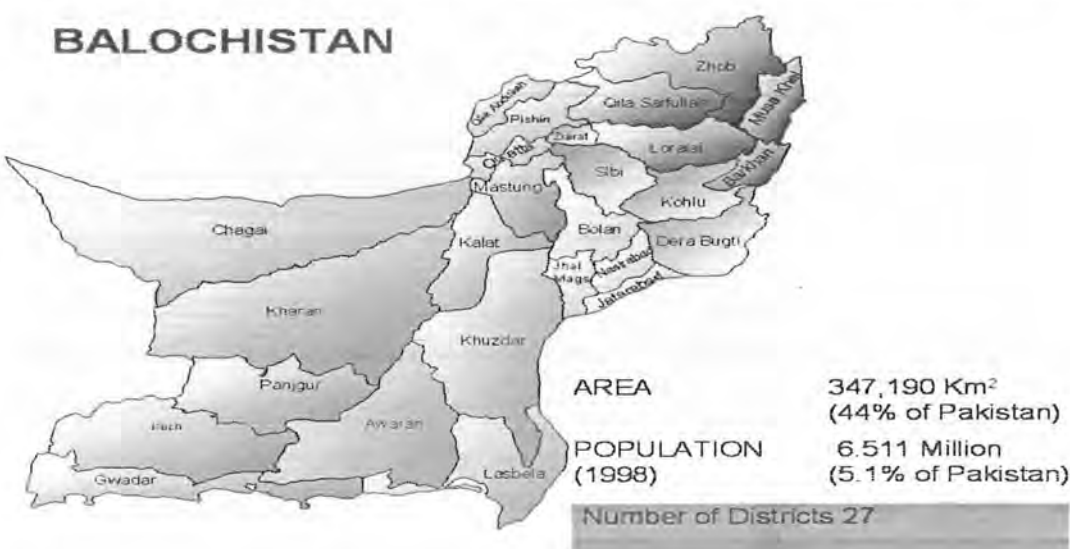
### 3.8. Information Gathering and Analysis

The numerical and textual information gathered and scrutinized accurately. Collected data from the interview guide contains of the maternal explanation and description of their own cultural practices regarding childbirth, causes of home based delivery, delivery through unskilled birth attendant and inaccessibility towards health facilities and professional birth attendants. Rough notes, daily diary and tape recorders were used to create transcriptions into the native language of the people. Pashto was their native language and 99% were Pashto speakers. The key informants study the records numerous times with the purpose of to increase good thoughtfulness of the situation, and formerly coding, classifying groupings and most important themes.

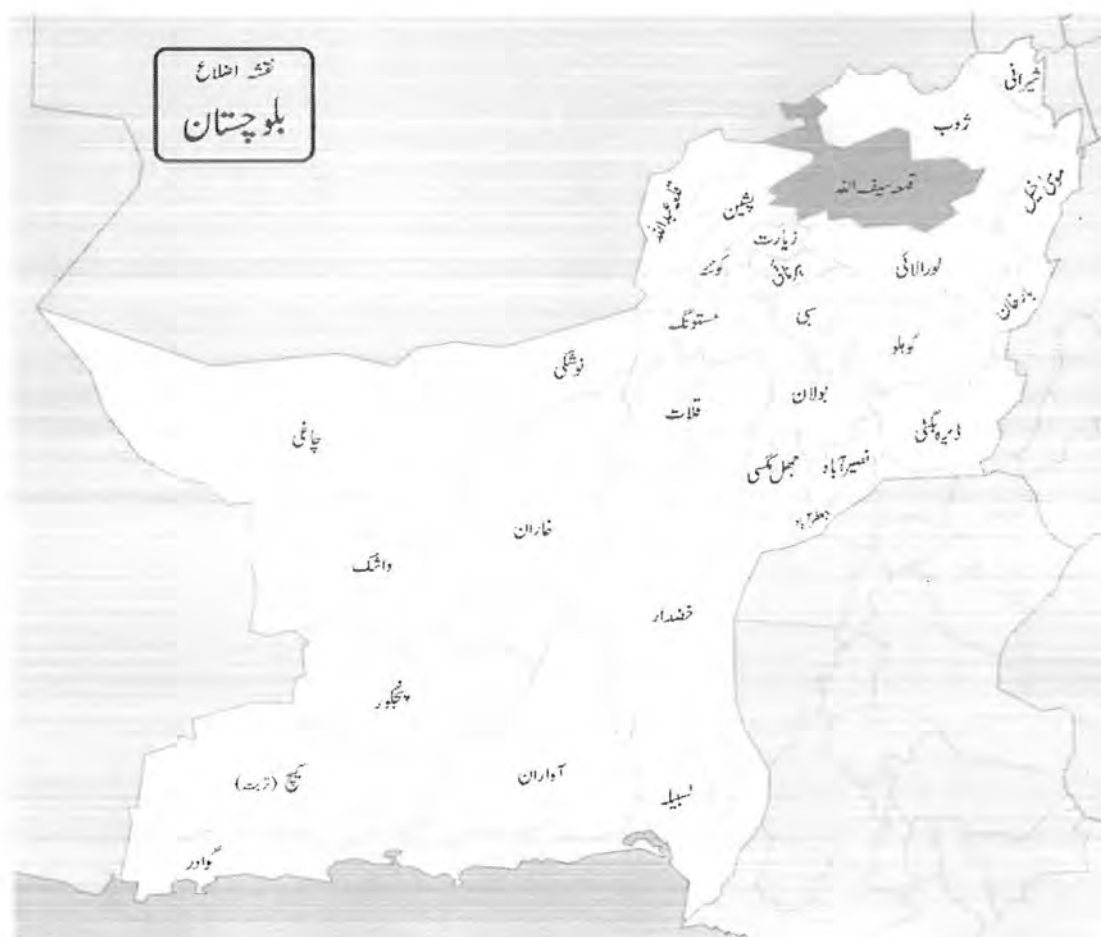
### 3.9. Profile of the Research Locale

District Killa Saifullah considers one and only of the significant cities of the province where malnutrition existed. And District Killasaifullah has agricultural based economy. The inhabitants of the district were mainly Pashtoon and they were 90% agriculturalists and because of this the district has countless importance and well known for its agricultural crops. Killa Saifullah notified as a district on 14 December 1988 and before this notification the district was the part of Fort Sandaman and recognized as Zhob.

**Figure 2:** The Province of Balochistan Map. **Source:** Government of Balochistan Website



Health facilities in killa Saifullah are inadequate and generally of poor quality, primarily because of untrained and insufficient number of medical and paramedical staff, inoperative units and dispensaries and the tendency to focus on curative rather than preventive healthcare. In case of women, cultural norms make the situation even worse. As women are mostly restricted to their homes, they are unable to access facilities located at a distance. Also, they are only allowed to be treated by women at women only facilities. In the health sector, the focus will have to be on improving service levels through preventive medicine, increasing maternal and infant health coverage, controlling communicable diseases and increasing access to trained male and female medical and paramedical staff. Equally important is the need to coordinate with the provincial health department, federal government and foreign assisted projects working in the district.



Source: Government of Balochistan Website

*I selected this area for the following reasons.*

- I am familiar with the local culture, language (Pashto) and have the field experience of malnutrition.
- District Killasaifullah is known by UN as food insecure district it is just because of inadequate access to nutrient foods.
- People of the study area were living in poverty condition and malnutrition cases were existing.

Kakar were the major ethnic group in the study area. This was mainly Pashtoon populated area. Each community has recognized and notified headman, known as: "*the Killi Malik*" (village headman). And the election process of a Malik, the foremost basis is inheritance. The holding of influence developed by the Malik, though, be influenced by on outside sustenance for instance that of the administration instead of the community elders by themselves. People and minor clusters favour to have straight links with the management instead of attitude their Malik in several tasks.

Research study was conducted at District Killasaifullah Quantitative data was obtained through questionnaires and contained information about the household, child and maternal health, infant and young child feeding practices, antenatal care practices, household food consumption and food security situation.

### **3.9.1. Household Characteristics**

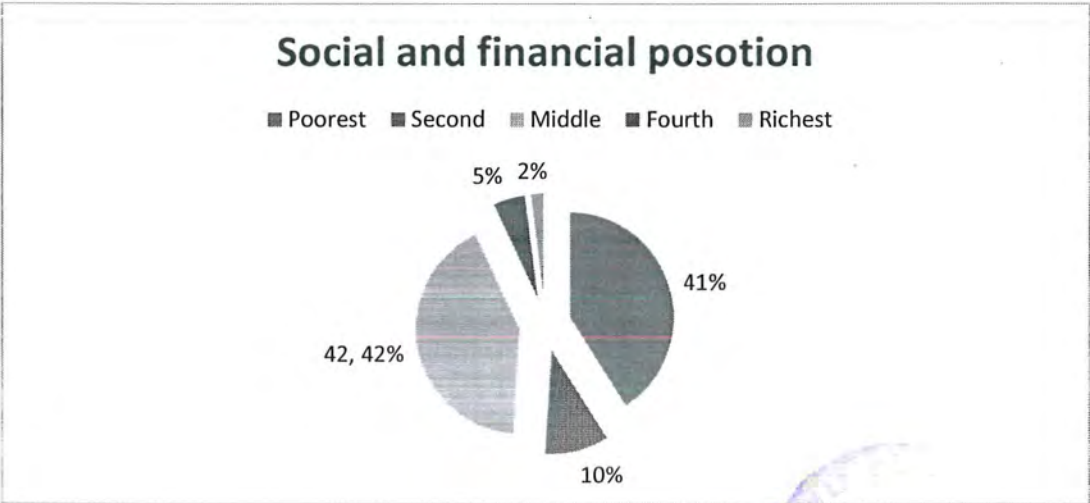
Overall 55 families involved in the census process and data was collected on the age, education and occupation of household heads and mothers, household composition, socioeconomic status, sanitation facilities and health and hygiene practices of the members. In the study area of Balochistan, majority of the household heads were males. The percentage of households with female head was 5%. The illiteracy rate of households' heads was worse in the study area where a large majority of 76% heads were illiterate while 15% received education between 6-10 years and 9% received 11-14 years education. In Killa Saifullah, majority (25%) was indulged in business, 20% were farmers, 18% were laborers while 11.5% household heads were unemployed. In the area it was indicated that 97% mothers were housewives by occupation. But 88% mothers were illiterate and 5% mothers who got education from class 1-5.

**Figure 4:** Residents try to keep themselves warm after a rainfall in the study area.



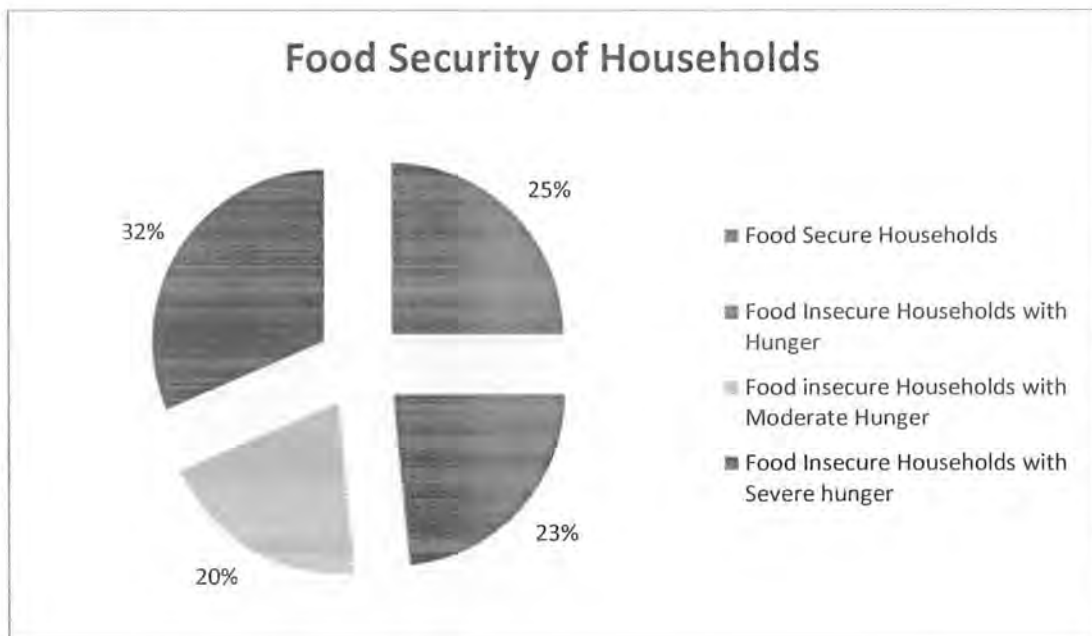
**3.9.2. Social and Financial Position of the Families**

The families were divided into five categories according to their socioeconomic status. According to the data, the worst situation was in the study area where 41% of the population belonged to poorest class. And 2% of the population belonged to the richest class.



### 3.9.3. Food Security of Households

Food insecurity was predominant in the study area of Balochistan. On the whole, only 25% households were food secure, 23.5% households were nourishment unconfident deprived of hunger, 20% were diet unconfident with reasonable malnutrition while 31.5% households were nourishment unconfident with plain hunger. The comparison of NNS 2011 figures with present study revealed that food security situation has worsened in Balochistan province. The percentage of food secure households had dropped from 36.5% to 25%. The gloomiest situation came in to picture upon the comparison of households where severe hunger; according to NNS 2011, the percentage of such households was 11.5% while the present study shows that this percentage has almost tripled in Balochistan province as 31.5% households are now facing severe hunger.



### 3.9.4. Language Spoken in the Households

Active communication is the significant to success for any nutritional program and that is not possible without providing the public service messages and reaching the far-off populations in their local language. Pushto was the widely spoken language of the area and Pashto was spoken at 100% households of the area.

### 3.9.5. Ownership Status of the Households

The ownership status of the households indicates that families of the study area were residing in their own houses. This is probably due to the fact that the population was residing in rural areas where people normally have their own land as compared to urban areas where buying land or house is very expensive for majority of the population. 96% people of the area were living in their own houses.

### 3.9.6. Structure of the Households

The structure of house is a direct indicator of the socio-economic status of the household. Structure is normally identified by three parameters: kind of walls, kind of roof and kind of floor.

**Walls:** The data on the type of walls indicated that in majority of the households, walls were constructed of mud/stone. In the area mud/stones were used for the construction of walls in 98% houses.

**Roof:** The data revealed that the most widely used material used for construction of roof was wood in almost all households of the area. The area-wise distribution revealed that the roof of 90% households was constructed of wood and 10% households were constructed RCC/lanter and concrete.

**Floor:** In majority of the households floor was made of mud in 93% households while other 7% households floor were constructed with concrete which was the second preferred material for construction. The structure of household indicates the low socio-economic status of majority of the households covered in the study area as their walls and floor were made of mud while roof was built with wood. Majority of the families were using two rooms for sleeping which indicates the sharing of one room by several (4-6) persons of the household.

### 3.9.7. Category of Fuel Using by Family Members

Type of fuel used in the households of the area for cooking not only gives an idea about the socio-economic status but also points towards the difficulty faced by women for cooking separately time-and again for their younger children. The facts disclose that in

the study area, firewood was the major kind of Fuel used for food preparation followed by the combination of firewood with animal dung and other bushes.

Majority of the households were using firewood alone or in combination with animal dung, as fuel for cooking food. The third major fuel was electric heater and other bushes t. The area-wise data shows that firewood with or without animal dung was the main fuel source of 79% households.

### **3.9.8. Source of Drinking Water**

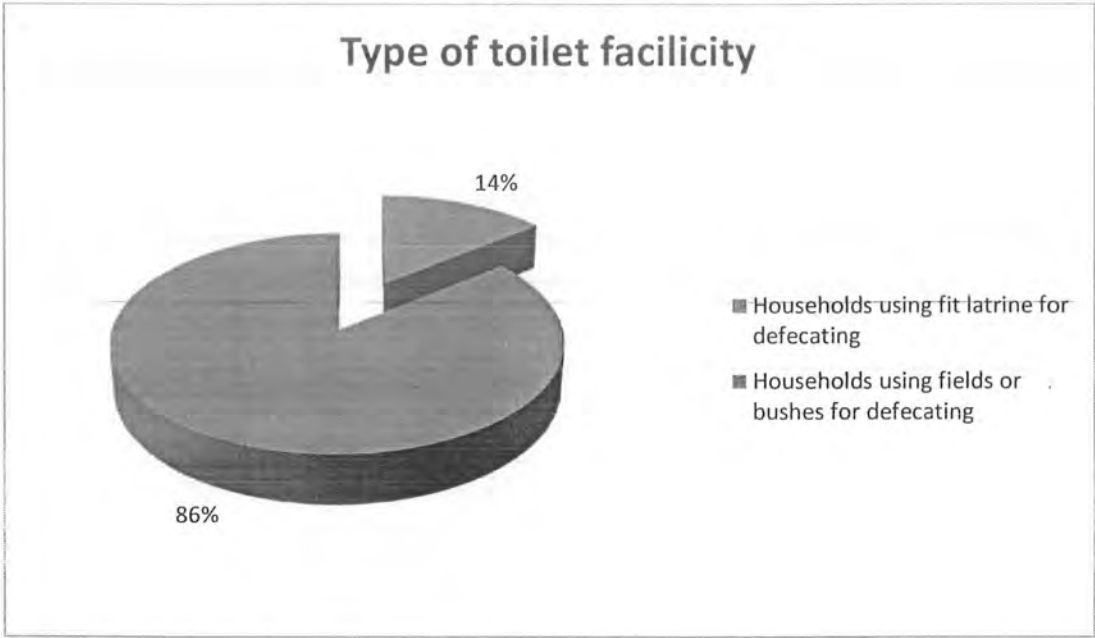
Malnutrition is a main health problem and clean drinking water supply, sanitation, and hygiene were significant for stopping malnourishment. Malnourishment and insufficient liquid quantity and hygiene were connected to poverty. Safe drinking water is a requirement for prevention of water-borne diseases especially diarrhea, so data was collected on the main basis of drinking water of the households. In the study area of Balochistan, the common modes of obtaining drinking water included tube well/bore well (66%), unprotected spring (21%), and piped water (13%). Majority of the households have no water on their premises and have to travel distances to fetch water. This usually is the responsibility of women or children of the household

### **3.9.9. Water Purification Methods**

Purification of water prevents a number of illnesses; however, the trend of water purification was not common in the study area of Balochistan. In the area only 14% of the households treated water before drinking and their major choice for purification was staining through a cloth to get rid of impurities. And 17% households were purifying water by staining or letting it stand and 5% were using the recommended method of boiling.

### **3.9.10. Type of Toilet Facility**

The collected data reveals that pit latrine and open fields/bushes were the common types of toilets being used by the households. In the study area 14% households were defecating in pit latrine while 86% had to use open fields or bushes.



**3.9.11. Hand Washing Practice**

Hand washing after defecation, particularly with soap, is necessary for getting rid of disease causing pathogens. However, the use of soap was inadequate in most of the households of the study area. In the study area the situation was even worse. The practice of hand washing with soap was as low as 6% in the area. In the area 10.5% respondents reported the use of only water for hand washing after defecation. The percentage of respondents using nothing for hand washing after defecation was 83.5% in the study area.



### 3.9.12. Climate

The climate of the locale could be positioned in “warm summer and cool winter” temperature area. The summer was very hot with unkind hotness reaching from 21°C to 32°C. The month of June was the warmest month when uncaring concentrated hotness surpass 32°C but don’t increase overhead 38°C, though, the mean temperature, even in the warmest days, leftovers less than 32°C. The wintertime was very cool and extensive than summer.

### 3.9.13. Topography of the Area

Geographically the study locale is mountainous area with varying elevation above sea level. The larger quantity of area was shielded with mounts and rocks. Ferozi Kan is 2,170 meter above sea level. The *pakha-spina*, is a rich white loam and *daabarilana* was an mediocre stony soil covering shingle and was brought into being in the study area. It does not normally give crop yields without fertilizer.

### 3.9.14. Social Structure of the Area

The society of the area was tribal and established upon the affinity arrangement. When the religious leaders *Mulla*, *Khans* and *Mallaks* had countless effect on the population of the area but with the passageway of time this impact has reduced increasingly because of political awareness. The research locale was said to be the structure of Pashtun, consequently the mainstream of the general public appeals their normative building from the Afghan lineage. Though education activities spreading out and mass media revelation has presented some modifications in the community, the mainstream of the people was still succeeding period’s ancient customs.

**Figure 5:** *Labourers in Apple orchard sitting around the fire after doing their work*



### **3.9.15. The Household System**

Extended and joint households were communal in the study area. Male brothers live below one home even after their weddings. The carefulness of respectable aged parentages was measured the responsibility of the youngsters and alive self-possessed in a large household was measured worthy from financial besides a self-justifying perspective. Though, little nuclear families were set up in the research locale. But the mutual exercise was of monogamy in the area. The families were patriarchal in the area. In joint family system maternal and child health was not considered properly even their diets were also inadequate on daily bases. Nuclear family members were healthy, happy, economically strong and independent decision makers. Family was the main unit to socialize and educate the children. It was also considered that children were more vulnerable in joint family system as compare to nuclear family system.

### **3.9.16. The Marriage System, Poverty and Malnutrition**

Each member of the community was measured to become married when he signs the adolescence line but this idea occasionally becomes a long listing problem not only

for women but also for their children. Because if a malnourished girl gets marry then her children may also become malnourished. Those women who got marry at early stage could not care and feed children properly. Poverty also affects the process of marriage directly because if someone does not have *vulvar* money. People of the study area sometime delayed their marriages due to poverty. If the family members arrange marriage money in poor households than the children and vulnerable women could not get proper and nutritious diet. Marriage in joint family system also impact on children and women health, economic growth and physical growth.

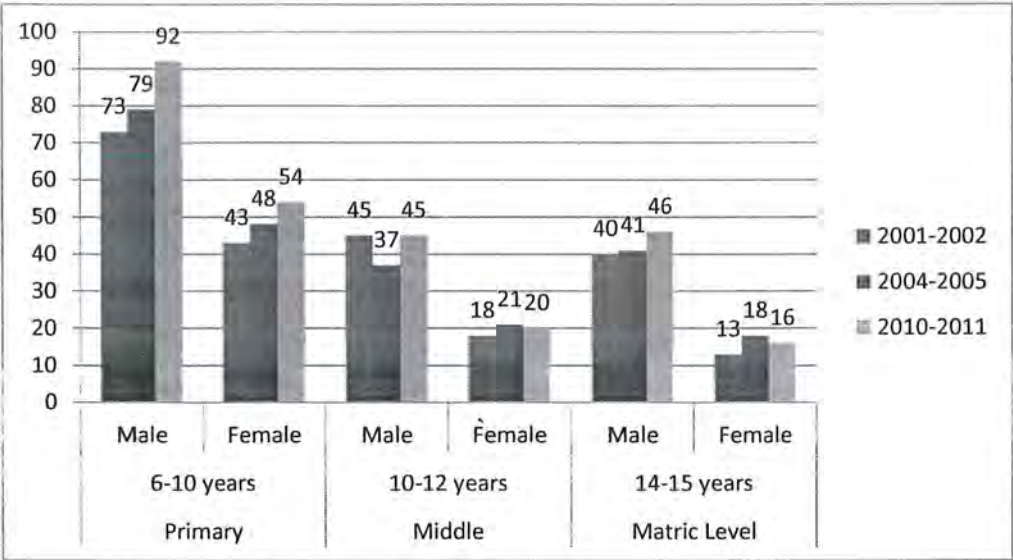
### **3.9.17. Traditions of Collaboration**

Collaboration has been a distinguishing of cultures like that of study area. As per the community of the study area it was mainly agriculture based society and penetrating relations were initiated amongst the persons.

### **3.9.18. Religious Life**

The people were trustworthy for presenting their everyday prayers and adherence of fast throughout the holy month of Raamzan. In the study area every small community has a local masjid in which a “*Mullah*” or “*Pesh-Imam*” front-runners the day-to-day religious activities and communicates spiritual teaching to the villagers. The “*Mullah*” was assisted with freely food items and the religious leader also obtains “*Zakat*” and charities from the villagers and community members. Charities giving and “*Zakat*” was communal and “*Haj*” was accomplishing by the male members. Charities were particularly resorted throughout harsh conditions and a diet was also assisted to the deprived.

Gender Equity Trends in School Enrollment in Balochistan



Data Source: PSLM 01/02, 04/05 and 10/11

3.10. Mailmastia (Hospitality)

Every man in the hospitable is respected. Every one, therefore, tries to how himself as “*Mailmapal*” hospitable or “*Sakhi*” (generous). There are many myths and legends about the generosity and hospitality of the families. Whoever left their wives and gave-up their homes for their guests. But God blessed these people with better than they had previously; they very sadly express their feelings for those persons, who according to them no longer exist in the society. Their “*Kasay*” (cooking pots) according to them were always full for guests.

Hospitality is thus, used as a validation for greatness in the present, and those families who consider themselves as “*Syal*” to each other and wish respect must continue to offer hospitality. Malik of the Valley, therefore always give a big share to the Molvi of the area, Taliban (the religious students), “*Faqir*” (beggars) and passengers. Most of the villagers have cows, or goats who give milk, cheese or ghee to have nots.

Those who serve more guests are considered as “*Naik Bakhta*” (lucky). Whenever a guest comes he/she is requested to stay for more and more days. A guest is never asked about the purpose of the visit until he is given or served food. It is shame for any person if a guest goes from house without taking food.

If someone has a demand from the host he refuses to take food until the host accepts the demand. When the guest reaches the host's home all the male members of the family comes out of their house in his respect and then all of them sit with him in "*Baitak*". A chicken or in some cases a sheep is slaughtered in his respect. After the food is cooked and served, now the guest is asked again and again and encouraged to eat more food. Although the more the guest eats, the less remains for the host and his family. After the meal black tea is presented with sweets.

At last the guest is given the best bed at night for sleeping though the people are very poor to afford more guests. But if a "*Mailma*" (guest) is taken by another one to his own house from the initial host, this is considered as insult for the host and this insult can cause feud between the two hosts. There is no other idea behind the sincere generosity and hospitality is to avoid "*Paighor*" (shame) and become equal or superior to the other members of the society. They always compare their hospitality and generosity with one another.

### 3.11. Badal (Revenge)

Revenge is one of the basic codes of Kakars life. One who fails to take Revenge is considered as non Pashtoon as he has not competed his rival which means he has not done "*Syalī*". And it shows his inferiority to his rival and he therefore is neglected by all the members of society and considered as "*Nasyal*".

He faces "*Paighor*" (shame) of the society. This "*Paighor*" compels him not to let any person injure him, harm him, hate him or meet in a hostile manner. He should respond in the same manner. No one in the society is considered as above revenge. The punishment of state even cannot spare the guilty from revenge.

I would draw a comprehensive picture of Kakars, who being Pashtoons, and having segmentary lineage system are forced by circumstances to endless relations of opposition, contempt and hostility. At this point I would like to say that each society has its own code of life, which are the basic principles of the social organization of the concerned society. Every member of the society was, therefore expected to follow some social rules and avoid others.

Kakars have their own code of life called "*Pashtoonwali*", and every member of the society who wants to live as an equal member of the society must follow this code of life. Man who does not act upon these focal rules has, in local thought, no right to call himself a Pashtoon.

The important points of "Pashtoonwali" are *Mailmastia* (hospitality), *Nanawati* (refuge), *Badal* (Revenge), *Wafa* (Loyalty), *Path Nang* (honor, courage) and *Purdah* (Seclusion).

If the quality is left alone he only is responsible for the case but if he is sided and favored by his agnatic relatives, as it is mostly seen, then the whole group or segment is responsible for the guilt and the revenge may be taken by any one of the segment.

*There are two ways, which can save the guilty from revenge:*

If a Jirga sits and solves the matter by making the person agree on taking money, arms and sometimes girls from his enemy, as remedy for the damage as these things are related to shame so his revenge is compensated there and is given an apology. The guilt himself goes to the house of his enemy and asks for apology. Thus he shows his weakness, which makes him unequal to his enemy and becomes "*Nasyal*" this is called "*Nanawati*" which means weak and it is not right to do Syali with Nasyal.

### **3.12. Nanawati (Refuge)**

"Nanawati" (giving refuge) is the compliment of the hospitality. Every person giving refuge to someone tries to fulfill his "syali" in this context so that he may become equal to other ones in the society failing to give protection to his "Nanawati" can harm his power and honor before the society. In "*Nanawati*" the idea is also linked to the guest – host relationship, but here the host is not just provider but also a protector. The guest is not only given food and house but also a safety for his enemy. Nanawatai is given to any person regardless of his tribe, religion and language. The honor of the guest (Nanawatai) becomes the honour of the host. The guest therefore is protected from any kind of harm, injury, murder or insult. One can also become Nanawati even in the house of his enemy and seeks apology in this case. The host is obliged to give him apology in very serious matters like murder or tor. Even women of the murderer or Tor <sup>1</sup>go as Nanawatai to the house of their enemy and beg for apology. A request from a woman would be extremely dishonorable "*Baighairatai*" and "*Nasyali*" to ignore.

### **3.13. Pardah (Seclusion)**

*Pardah* (wearing of veil) is observed in the area strictly. There were assured communal endorsements and the female have to conceal their faces with "*chadar*". Talking to strangers and smiling to them is not considered good. They weren't allowed to travel willingly in the public places without male members. Even the female could, not

---

<sup>1</sup> When a person is found guilty of illegal relations he is called "Tor" which means black in Pashto.

permitted to work and take part along with the male members of the society in various ceremonies of the valley. The women of the valley did not take part in men oriented activities such as funeral ceremonies, death ceremonies and other gatherings.

Seclusion of women is a matter of pride and honor. It is close to every one's heart. One who fails to protect or cover his women is considered as *Baighairat* (without honor). Women weren't permitted to perform their activities outdoor the compound. The women were measured as the part of house, which should not be separated from it. It was well known saying in the community:

*"The Shazay zai lakor di la gor"*

(The place of woman is either home or grave)

She goes outside home on special occasions like attending a marriage party or going to a doctor (if the case is serious), she cannot go to a doctor without a male. The HB, HF or WB<sup>2</sup> will go with her but husband cannot go with his wife. He even cannot speak to his wife in the presence of other family members until they grow old. Husband and wife cannot call each by their names. The terms of reference and address for wife are either "*Kor wala*" (of the home) or "*kushniyano more*" (the mother of children) while husband is termed as "*kushniyano plar*" (the father of children). There these terms cannot be used in the presence of others. As they try to avoid each other in the presence of others so that the seclusion may not be effected. A woman if found speaking or revealing her face to an outsider is liable to be harshly beaten by her husband.

Woman is kept sub-ordinate. She even cannot go out on the above-mentioned special occasion without the permission of male. If she is labeled as guilty of "*Tor*". She must be killed by her relative because according to them it damages their honor if she is left alive, and people might give them "*Paighor*" at public places. Thus, who has kept more restrictions on his females in the matter of *Pardah* is more respected. They therefore try to do it more than one another.

### **3.14. Path and Nang (Honor and Courage)**

The two principles of Kakars life was completed on the basis of *Syali*. Those who were not courageous or were not able to protect his honor in relation to other do not have the right to call him Pashtoon. Everyone in the society was expected to protect his honor and to show courage i.e. not to bear insult in any form like abuse, speaking against him in

---

<sup>2</sup> HB stands for husband's brother; HF stands for husband's father and WB for wife's brother.

his absence. They even cannot bear the straight looking of person with whom he has not a good relation. The person who has courage is called "*Nangyalai*" and without courage is called "*Baynanga*". Nangyalai must be able to protect his honor it means he must also "*Pathman*". Who can protect honor."Baypatha" cannot be "Nangyalai", when he is "Nangyalai" he is also honorable. Nang and Path are therefore the two important pillars of code of life and every one must follow it if Kakar has to become the "Syal" of others.

## 4. MALNUTRITION CAUSES AND ITS INTERVENTIONS

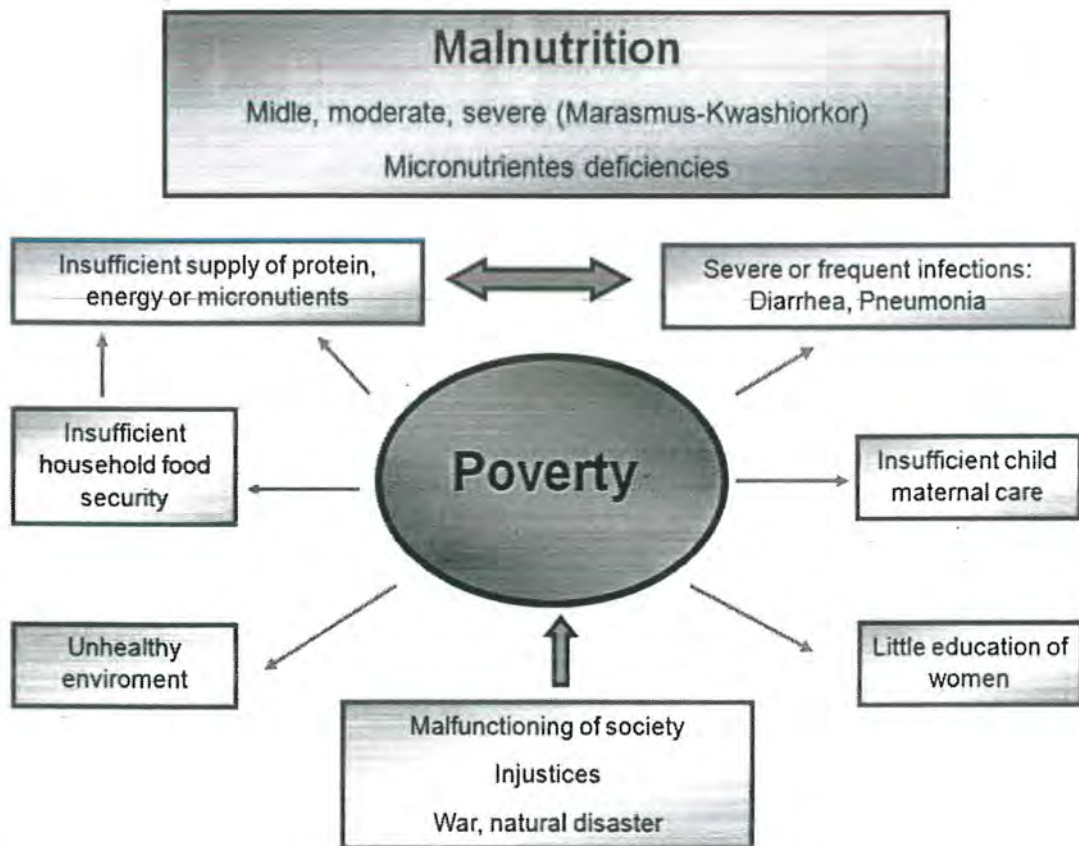
The most food insecure and malnourished tends to be poor rural households that have been impacted by repeated natural disasters like drought, man made disaster and ongoing conflict. Wage labourers, the uneducated and socially excluded are most likely to be trapped in poverty and therefore most vulnerable. Overall, households in the study area were seemed to be nourishment insecure than other parts of the district Killasaifullah.

District Killasaifullah has been blighted by a string of natural disasters, it was hit by flooding in 2012 but it was also drought prone. A high percentage of households of the study area rely on agriculture. Yet more than 60% of the area did not produce enough food to meet demand. The area was extremely poor and 35% of households were in the poorest quintile. Very high percentage of uneducated women, very low childhood immunization rates, sanitation and drinking water very poor were the major alarming threats. A third of households had trouble meeting food needs in the previous month. Markets were not well integrated and acute malnutrition was also high.

### 4.1. Causes of Malnutrition

Malnutrition is a severe and enormous problem in Balochistan especially in the study area. Malnutrition has very negative impacts not only on the individual but also on the family, health systems and total long term economy of the area. Rigorous energies are required to control the negative effects of malnutrition and to save the lives of mothers and children. Malnutrition is a significant indicator of child health.

Poor child nourishing exercises were documented and the main contributing aspects to malnutrition among young infants. This evidently shows that the feeding practices at the household level are not very healthy and needs some optimistic eccentricity. Levels of acute malnutrition (wasting and/or oedema) in children under five are very high. Many of these cases become severe and complex due to postponements in case recognition and presentation at health centres or hospitals. Management of severe acute malnutrition has mostly been facility based, in paediatric wards and therapeutic feeding centres (TFCs).



**Figure 6:** *Reasons of malnourishment.*

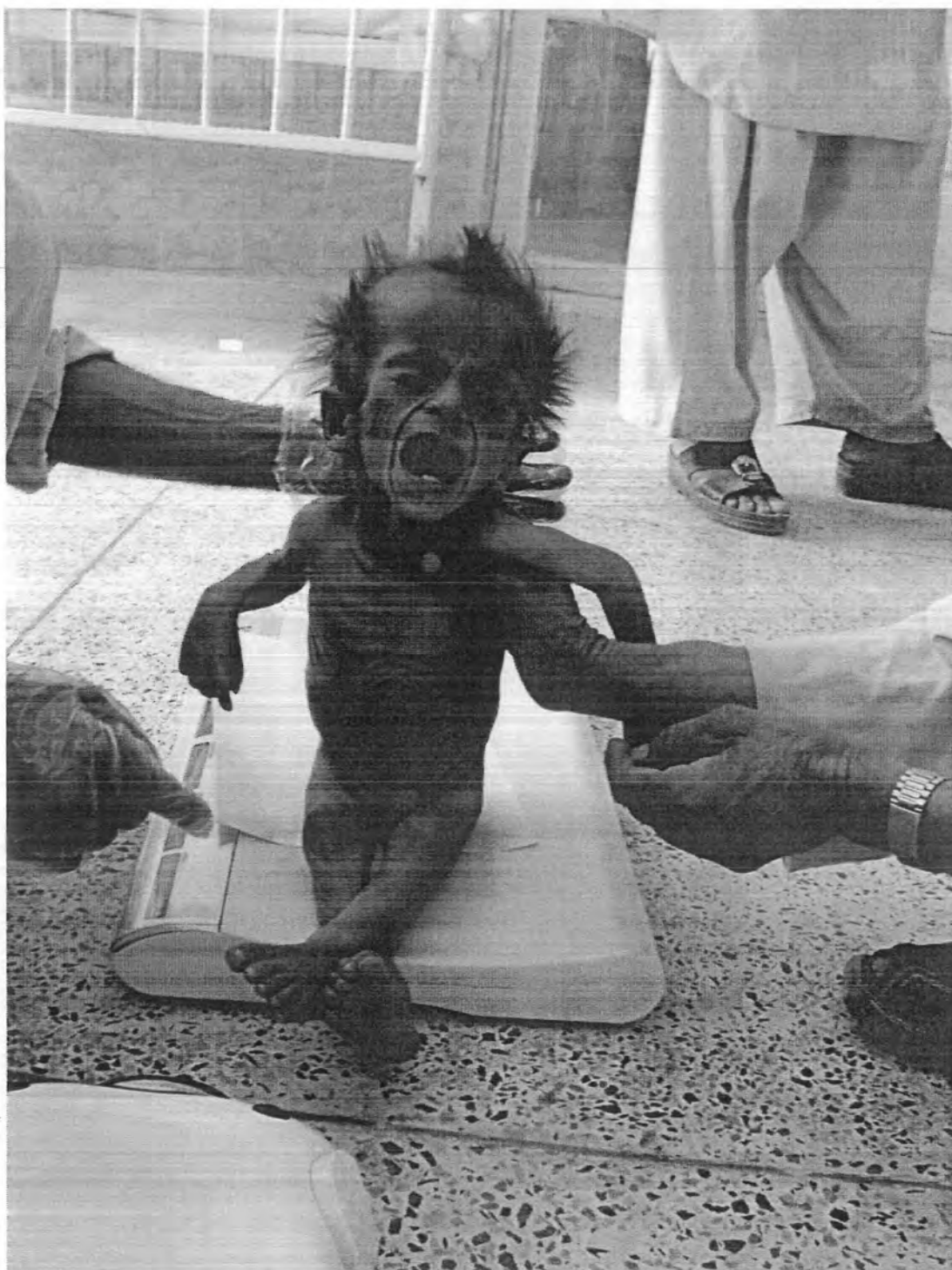
Hospitals, TFC services and RHCs have very partial attention. This means the vast majority of acutely malnourished children do not access care and treatment. Dr Bashir kakar who was paediatrician said that *malnutrition is an extremely compound problem connected to social, cultural and economic aspects and therefore needs a comprehensive cohesive public health approach to address it.* Lady Health Workers, religious leaders and community volunteers mobilize the community members and recognize, prevent and manage malnutrition so it will be prime contribution.





**Figure 7:** *A malnourished child admitted in District Headquarter Hospital Killasaifullah*

The instant causes of under nutrition are insufficient dietary intake and disease. According to WHO that “many aspects in addition to nutrient intake or consumption of special foods are significant for nutritional status”. For example, health care and hygiene, good caring practices, clean drinking water, maternal education, family nourishment safety and economic development were completely significant for good diet.



**Figure 8:** *Child was weighed in order to identify malnourishment.*

Malnutrition happens when an individual cannot take sufficient nutrients from food. This causes loss to the vigorous organs and functions of the body. Dearth of food was the most cause of malnutrition in the area. Malnutrition cases were found in the study area and it

was assessed that what are the causes of malnutrition? Malnutrition causes are as bellow in the area.

#### 4.1.1. Poverty in the Study Area

Poverty was the direct cause of malnutrition in the area. During the last five years people of the study area effected by extreme poverty and hunger. Poverty not only principal to malnourishment but also extremely effects the accessibility of tolerable quantities of nourishing diet for the greatest helpless people of the area particularly women and children. People of the area were too poor to purchase nutritious food for vulnerable such as women and children. High prices of food and daily use commodities produce food insecurity in the area while food insecurity was the main indicators of malnutrition. One respondent said that *"I am very poor, I have six sons and seven daughters and my monthly salary is 11,000"*. Aslam khan was the daily wager and said that *"I cannot purchase enough food for my family due to expensiveness and poverty"*. According to Health experts that Congestion, particularly during top seasons of malnutrition, complicated cases due to delays in seeking care, and limited capacity and lack of suitable protocols have resulted in high mortality rates.



**Figure 9:** *Poor condition of school in the study area with no basic facilities*

#### 4.1.2. Deficiency of Access to Nourishment

Maximum main diet and nourishment crises cannot happen because of a deficiency of food in the study area. Residents of the area were too deprived to gain sufficient diet. Lack of approachability to nourishment in the study area, hard access to bazaars because of scarcity of transport, and inadequate economic properties were all features causative to the food insecurity. People of the area were very hospitable and peace loving but due to poverty they were in great hardship.

Five year long drought destroyed their economy especially apple and apricot orchards and other agriculture fields. Proper food is very significant in early childhood to verify healthy development and suitable organ growth. Suitable nourishment is also important for robust immune system and nervous and mental growth. Financial growth and human development require well-fed peoples who can obtain pioneering abilities, think judgmentally and contribute to their communities. Nutrition has progressively been recognized as a fundamental pillar for economic and social development. Malnutrition remains to be a prime public health hardship in the area.



**Figure 10:** *School age going girl feeding her egg-laying chickens but what about school?*

#### 4.1.3. Various Diseases Linked to Malnutrition

Some infections and illnesses, for instance measles, diarrhoea and tuberculosis, were related to malnutrition. An adolescent infected with such illnesses is more close to malnutrition than a well-nourished child. So safeguarding healthy nourishment is a significant aspect of various illnesses resistor and treatment. People of the area were not as conscious as needed for children illness.

People treated their children through indigenous medication and *Mullahs*. Because of, insufficient diet eating in the study area malnutrition is exceptional, however it could happen if a kid is ignored or living in poverty. Various children became undernourished because they avoid eating due to issues with their body image. Some children were malnourished because they hurt from under nutrition and their food did not deal with sufficient protein and calories for body development.

School children have inordinate probable contribution for cumulative the awareness about wellbeing and nourishment amongst the household participants. Malnutrition in children could lead to a danger of lifetime sicknesses in forthcoming and also instant dangers of ill health and death. Due to drought, poverty and lack of health and nutritious awareness the study area is facing the problem of malnutrition.

The elementary issue is about how to decrease the household food insecurity. Extra possessions ought to make accessible for defensive healthcare features. Courage of kid vaccination has to improved, and the facility of harmless drinking might be given great importance. Malnutrition became a threatening disease of the study area which not only impacts on mother and child health but also the whole socio economic system. Malnutrition is also the product, of low income or poverty which bounds the capacity of people to purchase adequate food.

Mother's education has a constructive and momentous effect on children's nutritional status, but father's education is not important. Mother's education benefits to know how to succeed nutrition and disease most efficiently, and increases the awareness of suitable sanitary behaviour. Education also affects other socioeconomic appearances such as the age at which women marry the number of children they have, and their status within the community. Education lets women to process information from electronic media and print media more professionally and to recognize improved quality health care.



**Figure 11:** *A child leg bones have not been properly mineralized due to lack of vitamin D*

#### **4.1.4. Food Shortages, Food Prices and Food Distribution**

Food shortages in the study area were mostly caused by a lack of employment, lack of resources utilization, lack of households' commodities arrangement and lack of awareness. Food shortages were momentous cause of malnutrition in the area. Women and children were most vulnerable and negligible in diet dissemination.

It was caustic that about 79% of malnourished children living in the area that really harvest diet excesses. It was also observed that malnutrition cases created because of food prices expensiveness and with food distribution problems. It is understood that poor diet is a major health risk not only in the study but also in all over the district. Research survey shows that people with lower revenues expend a higher proportion of that income on nourishment by comparison with higher income households.

Household debt is another proxy indicator of economic access to food. According to the household survey 37.8% of respondents reported having taken on debt in the past year. The largest proportion of borrowers was found in the study area. The proportion of

borrowers' decreases as household income rises, while 43.3% of the respondents from the poorest quintile reported taking loans in the last year. For both men and women a respondent during focus group discussion that household food needs is the number one reason for taking a loan. Households also took loans to cover medical expenses and buy agricultural inputs.



**Figure 12:** *A local man harvesting wheat as community basic needs.*



#### **4.1.5. Scarcity of Breast Feeding**

Scarcity of breastfeeding practices was the main cause of malnutrition in children in the study area. Zarlaja bibi said that bottle feeding is better for my child because I didn't have enough food to eat. The people assumed that cow and goat milk was better for their children than breast milk. Bottle Washing practices were rare and care givers of children used unhygienic bottles.

#### **4.1.6. Lack of Security Enforcement**

Lack of security enforcement has a direct influence on food security and very tough to access to enough food. Due to security concern in the province local fruits access to the market was in great hardship. Frequently powered to escape by means of violence intensifies; individuals expatriate by battle misplace admittance to businesses and farms. Nourishment foods to suppliers might be close off, and numerous people reliant on them could be incapable to gain adequate diet.

#### **4.1.7. Shortage of Harmless Drinking Water**

Water is equivalent with lifetime. In the research locale deficiency of clean drinking water, unsafe sanitation, and poor hygiene exercises increased helplessness and alarming situation because these were direct causes of acute malnutrition. Even animal and family members were living in the same room called *Khuna*.



**Figure 13:** *Safe drinking water scarcity in the study area due to five year long drought*

#### **4.1.8. Drought in the Study Area**

In five years, the natural disaster such as drought related to weather variation has enlarged extensively. Infrastructure hurt and demolished; sicknesses spread rapidly especially malnutrition; people can no cultivate crops or raise livestock easily. The present five year long drought situation has changed the beauty and food security of the study area.

The existing drought came because of climatic variations; burden on water resources because animal, human being and plants include vegetation needs water. The study area was dry as the quantity of rain fall and snow fall considered less. The general public of the area hurt for the reason that of drought or the man-made disaster brought.

The nonappearance of preparation for drought danger decrease or alternative established sustenance sanctions deficiency of wellbeing of the district, provincial and

federal governments. It seems that the government functionaries are not interested to give full-fledged long term support to get red off from drought.



**Figure 14:** *Researcher along with respondents at apple orchard in the study area.*

The five year long drought destroys not only agriculture, livestock and natural beauty of the area but also the whole socio economic system. This drought also effect on the health of the people openly and indirectly. The poverty and poor health condition of the people especially the children and women also surprised the native inhabitants.

Majority of general public became outside emigrant due to scarcity of water. The people of the area were also dependent on agriculture and livestock. Because the study area has agriculture based economy and 92% people belonged to agriculture directly or indirectly.

Provincial Nutrition Cell with financial support of UNICEF lunched a sub project with the name of C.M.A.M in fifteen U.Cs of Killasaifullah. Last year with the corporation of the W.F.P the scheme delivered diet backing to the helpless families



particularly to develop the nutritious position of moderately undernourished mothers and kids over lady health worker program.



**Figure 15:** *People of the area digging out the trees dried due to drought.*

The project objective was to stabilize and improve the nutritional status of malnourished pregnant and lactating women and children (6-59 months) in drought-affected area of District Killasaifullah. The project was facilitating Pregnant and Lactating Women (P.L.W), Moderate Acute Malnourished (M.A.M) children and Sever Acute Malnourished (S.A.M) children. The High Energy Biscuits (H.E.B) provided for the siblings of the S.A.M children. The P.L.Ws provided oil after every two month and Wheat Soya Blend W.S.B on monthly basis. The M.A.M. children were being distributed H.E.B and Supplementary Plumpy nut after every fifteen day.

#### **4.1.9. Deficiency of Nutrients and Balanced Food**

Deficiency of nutritious diet and balanced food are accountable to a great amount for malnourishment in kids. In the study area due to poverty, there is a great food insecurity and lake of awareness regarding food consumption. Because of cultural barriers

people of the area were very conscious over food eating and child caring. Consumption of indigestive and damaging food was one of the key reasons of malnourishment.

Kids belonging to the rich households do have expensive diet items but in general these food items were indigestive and dangerous. Intake of such type of food items often leads to lack of hunger and hence sometimes the children fall victim to malnutrition. Unequal intake of diet was one of the key reasons leading to undernourishment.

The timings for breakfast, lunch and dinner must more or less be fixed but in the study area there was no specific timing and arrangements. Indiscipline in this matter was very bad and very harmful for women and children. This bad habit of taking irregular meals causes indigestion and finally results in malnutrition.

#### **4.1.10. Dirty Environment of Schools and Homes**

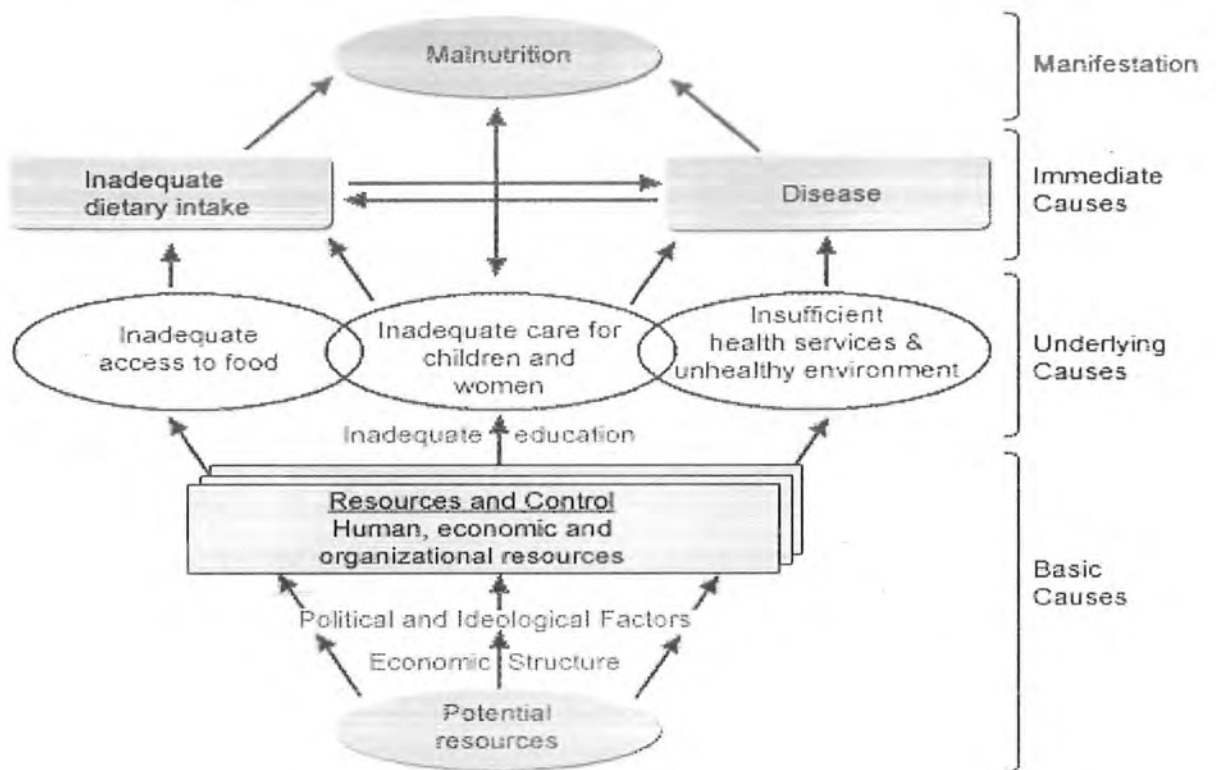
Unclean environment of homes and schools also causes malnourishment in the study area. Homes and schools environment becomes dirty because of deficiency of cleanliness and lack of greenery, non-availability of playground, dirty lanes, which hamper right nutrition of children.

The children working in chromite mines and they face the kind of dirty, unhygienic and unhealthy environment, which is hard to imagine. Hence child labor must also be completely banned so as to avoid the children from such filthy environment. The kids were being infected from the various diseases were neither capable to have balanced food nor their bodily functions take place properly resulting in malnutrition.



**Figure 16:** *School children were studying in such a dirty environment.*

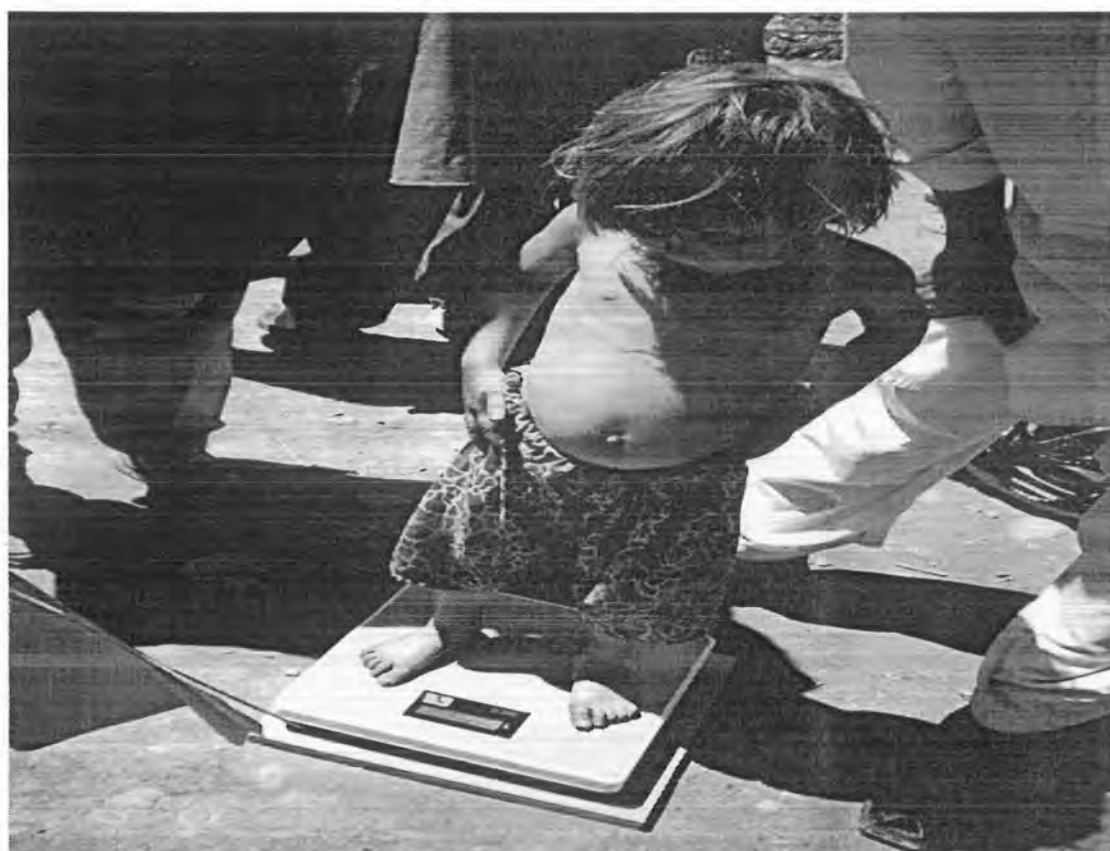
## Conceptual Framework of Malnutrition



Source: Food security website

As per this conceptual framework, established by UNICEF, malnutrition happens when nutritional consumption is inadequate and healthiness is substandard. These were the two straight causes of malnutrition. The lack of proper attention in societies and families is the 3rd essential component of fundamental reasons of malnourishment.

Lastly, the above framework recognises that environmental resources, human resources, financial systems and political and ideological issues were elementary roots that subsidize to malnutrition. Reasons of malnutrition for child and mother were observable at different stages in the study area. These causes were immediate causes at individual level and underlying causes at household and community level.



**Figure 17:** *Health workers weighing the school going girl at research locale*

Causes of malnutrition for both mother and child are visible at different levels, including immediate causes at individual level and underlying causes at household and community level as shown on the conceptual framework. As Chronic Malnutrition results from deficiency growth between conception and the first two years of age, Chronic Malnutrition causes analysis should consider the mother's nutrition status prior and

during pregnancy and during the first two years of age. At immediate level, malnutrition can be caused by inadequate ingestion of food or occurrence of infections.

## **4.2. Case Studies of Malnourished Children**

I selected case studies during my research related to malnutrition. It was the most important component of malnutrition to collect data of case studies. Through case studies, malnourished children's families' financial status of the families, family size and complete bio data assessed. Four collected case studies also differentiate educated and illiterate mothers approach towards children caring and treating. These case studies were of those children who were malnourished and their age was less than six years.

### **4.2.1. Case Study (Poverty and Lack of Awareness)**

Rozeena age was two years and she was the youngest of the four children. She belongs to Kakar Mehterzai caste and she lives in a very poor condition. Her family was living in below poverty line. She was suffering from loose stools and vomiting. She had experienced recurrent episode of diarrhoea in past one year. She born at home with low birth weight, *Ghutti (local medicine and practices)* was given at the time of birth.

She was taken exclusive breast feeding for four months. Her sisters were also suffering from loose stools, worms in stools, vomiting and were under nourished for their age. Her mother Gul Pari was 24 years and she was illiterate. She was married eight years back to 35 years old illiterate male. Her husband was a daily wager in a chromite mine. Gul Pari and her husband Karam Khan have four daughters out of which two were under five year of age.

She delivered four girl children in a hope of male child. She adopted no family planning method due to fear of its complications and restriction from parent in law side. Eldest daughter takes care of younger siblings'. There was no functional government health facility in study area. Gul Pari had sought treatment for her children from religious leaders (*Mulla*) and unqualified private practitioner. She was able to provide food to their daughters once a day only due to poverty.

### **4.2.2. Case Study (Death of Mother)**

Zareen khan was a three years old and his father was a Mullah in a local mosque. When he born three years ago his mother Bibi Sameena died on his delivery. His mother

got religious education in a girl's madrasah. Zareen khan has two brothers and one sister Jamal khan, Salar khan and Gulmakai respectively.

Zareen khan father Muhammad Anwar was a Hafeez ul Quran and got schooling till class 5<sup>th</sup> in a boy primary school. Due to poverty Muhammad Anwar was unable to get education anymore and later he took part in a local madrasah. After the death of Zareen,s mother he was cared by his mother's mother.

He did not get adequate care in the house and he was feeding with black tea, boiled water and sometime cow milk. He was malnourished due to improper diet and lake of nutritious food. When his father got second marriage and did not give time to Zareen khan and his siblings for their health and education care. Zareen khan was not even treated in hospital and health care centre but he always took to a mullah and graveyard.

#### **4.2.3. Case Study (Death of Father)**

Palwasha bibi and Masooma bibi were two malnourished daughters of Naqeebullah who was 30 years old and he died in a land dispute. He has five kids' four daughters and one son. One of his daughters was born after his death. Naqeebullah was living in a joint family system and was jobless. Palwasha and Masooma were treated through indigenous medication and their grandmother was the only decision maker and decision breaker related to household activities.

When both sisters brought to basic health unit, LHV referred them to hospital. When Doctor checked them they both were malnourished. At the time of first MUAC Palwasha was 10.7 and Masooma was 10.0. The Doctor advised that they should refer to DHQ hospital urgently. Plumpy Nut was given to both of the sisters and they were gaining their weight gradually.

At the time of discharge Palwasha MUAC was 11.7 and Masooma MUAC was 11.8. It was amazing that they gained their weight in one month just because of Plumpy Nut. Plumpy Nut may be referred to in scientific literature as a ready-to-use therapeutic food (RUTF) but people of the area did not accept it because they predicted that it control our population growth.



**Figure 18:** *At the time of first MUAC Palwasha was 10.7 and at the time of discharge she was 11.7*



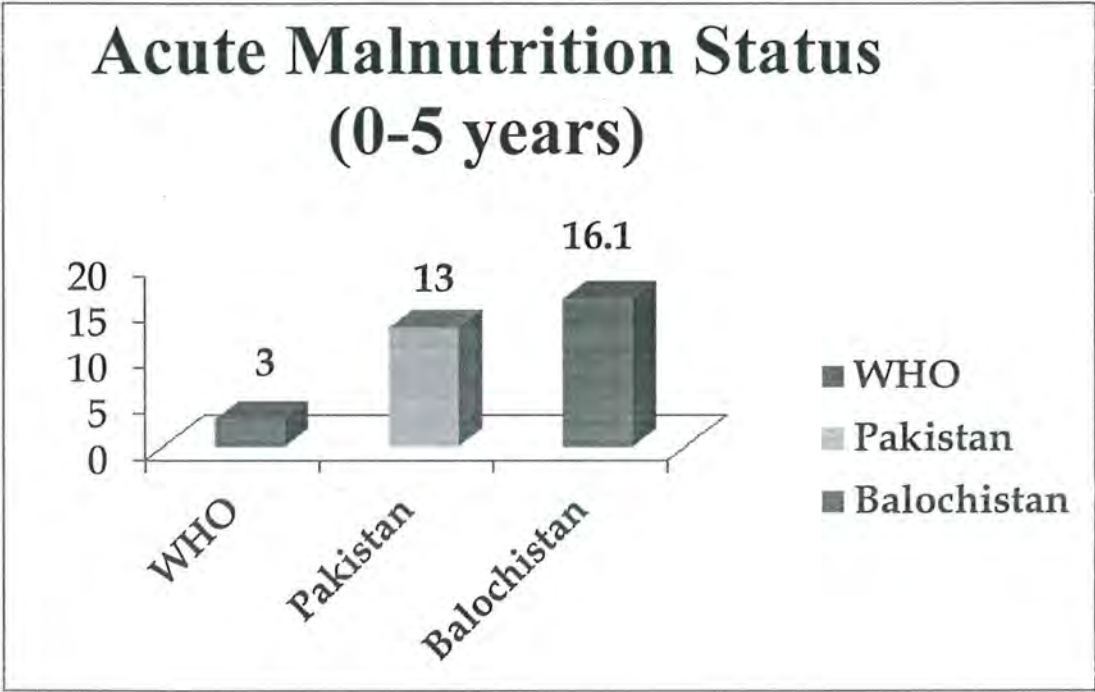
**Figure 19:** *Masooma before admission in hospital Masooma at the time of discharge*

#### **4.2.4. Case Study of Malnourished Child's Mother**

Rukhsana Bibi was 39 years old and has five sons and four daughters. She was a resident of village Ferozi Kan in Killasaifullah district. She has spent most of her life in extreme poverty and without access to elementary resources important for a healthy life. She has malnourished daughter and without easy access to health facility and proper

nourishment her daughter died. Rukhsana said that when I got married, we had no concept of prevention through immunization or even consulting the doctor for our illnesses due to cultural barriers.

A dai (traditional birth attendant) was the doctor and our guide to all maternal and infant health related problems she expressed. If a new-born died, the local community would accept it as fate, not knowing that they could have saved a life with taking a preventive action. They didn't know the importance of routine immunization, both for women and children.



Source: National Nutrition Survey 2011



## **5. FOOD INSECURITY AND FOOD CONSUMPTION**

Long-term achievement in refining nutrition needs addressing the aspects that permit malnutrition to persist. Primary aspects comprise the kindness, financial, cultural, social and religious support of women and children. The support should be in the shape of financial assets, agriculture, access to health facilities, water and sanitation facilities. Food security and food consumption patterns of the study area will be discussed in this chapter. Food insecurity and malnutrition linked with each other if someone's food security he/she will prevent from malnutrition. The study area has agriculture based economy but the five year long drought affected the whole economic system. Ensuring good nutritional attention is everyone's task at any level.

### **5.1. Malnutrition among Women**

Maternal mortality rates were a big issue and have stayed almost unchanged in much of the province especially the study area. Maternal and child health neglected in the area and they were considered as vulnerable. According to research findings that maternal nutrition was a significant area for the prevention of under nutrition in infants.

Women were particularly vulnerable to under nutrition from a physiological point of view due to their increased nutrient requirements for menstruation, pregnancy, childbirth and lactation.

Half of mothers were married before the age of 18 in the study area because of poverty and female illiteracy. Pregnancy for these adolescent mothers occurs while they were still growing themselves; which leads to negative consequences for their own nutritional status, compromises the birth weight of their infant. Early marriages of girls before the age of 18 can lead to complications during childbirth.

Generally underweight, stunting, anaemia and vitamin A deficiency rates were extremely high in women of reproductive age; prevalent iodine deficiency also creates considerable problems both for the mother and for the healthy development of her infant.

## 5.2 Lifetime Risks for Women

Through their lives many women experience biological and social stresses such as the following that increase the risk of malnutrition.

- Food insecurity
- Inadequate diet
- Chronic energy deficiency
- Protein deficiency
- Micronutrient deficiency
- Anemia
- Recurrent infections
- Multiple pregnancies
- Frequent parasites
- Poor health cares
- Heavy workloads
- Gender inequalities

When a Woman is malnourished, the next generation may suffer from malnutrition and poor health. So therefore, women health conditions and adequate nutritious diet are the most important aspects to prevent new generation from malnutrition.

## 5.3. Care of Children and Mothers

Mothers provided with information and supports were powerful advocates for the health and nutrition of their children. In the area women lack of information about appropriate care and feeding practices of their children leads them to malnutrition. Women must be supported financially, physically and socially by community and family members. Their support will create fruitful, healthy, productive and nutritious nation.

## 5.4. Food Insecurity Position

The enormous malnutrition cases existed in low income and food insecure households. Low income revenue generators frequently dearth the cultivated land or resources they want to grow enough or the right kind of food. The local community have traditional food may be popular but have nutrients deficiency. Nourishments like milk, eggs, fruits, and vegetables were important for nutrition and nutritious growth but too

expensive for needy and poor households. All these aspects subsidize to how well young children are fed.

## Absorption/utilization Indicators

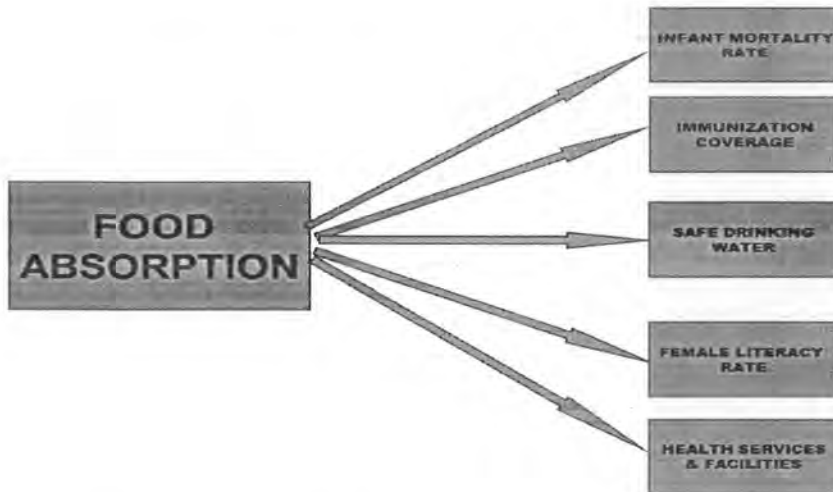


Figure: World Food Program Website

### 5.5. Access to Health Facilities

Most of the patients especially women and children lost their lives before reaching to health facility because of lack of transportation and lack of basic facilities. Sometimes health facilities situated very far and people were unable to reach rapidly. Infectious diseases and malnutrition could be saved if mothers had access to basic health unites or other health facilities urgently.

Qualified health care providers can frequently check a nutritional status of women and children and awareness should be given to them. Key messages of IYCF, mother and child health, hand wash, good hygienic condition and nutritious food for children should be displayed at every health facility. Children's health and nutritional status can be monitored and appropriate advice and care can be provided to treat infectious diseases such as diarrhoea.

## **5.6. Malnutrition among Children**

It was known that pulses were serious for the growth of children and boys were more frequently undernourished, because boys were likely to eat other nutrients than breast milk. Moreover, I found that girls were more likely malnourished if they have many older brothers and it was found that women empowerment improves child nutrition.

Malnutrition was still a major problem in the study area. In the study area the prevalence of GAM was 20.8% and prevalence of SAM was 7%. Overall, the situation was 'critical' regarding the prevalence of acute malnutrition among children. Stunting rates were very high in the area and 46.4% were suffering from this chronic form of malnutrition.

The situation was 'critical' regarding the prevalence of stunting according to the WHO standards in all the districts of Balochistan except Killasaifullah. Data on underweight prevalence revealed that 46% in the study locale were underweight so the situation was 'critical' in the area.

## **5.7 Unsafe Drinking Water, Poor Sanitation and Malnutrition**

Insufficient access to safe and improved sources of drinking water is a major limitation to food security and nutrition. The inability to access safe drinking water leaves households vulnerable and susceptible to waterborne diseases that can be severely detrimental to the overall health of individuals and their food utilization capability.

Piped water, public tap, tube well/bore hole, treatment plant, protected well/spring, hand pump, bottled water, tanks/bladders, and tanker water were considered safe sources of water. Unsafe sources were identified as rivers, unprotected wells/springs, canals and rainwater.

## **5.8 How to Measure Food Security and Nutrition**

Food security defines a situation in which all people at all times have physical and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.

Food security depends upon three main factors:

- Availability of food
- Access to food

- **Utilization of food**

The most diet uncertain and malnourished tends to be poor rural households that have been impacted by repeated natural disasters (drought) or ongoing conflict. Wage labourers, the uneducated and socially excluded were most likely to be trapped in poverty and therefore most vulnerable.

## **5.9 Nutrition of the Children and Women**

The NNS also showed that 61.9% of under-fives suffer from iron deficiency anaemia, making it the most prevalent micronutrient deficiency at the national level (severe deficiency 5.0% and moderate deficiency 56.9%). The second most prevalent micronutrient deficiency was recorded for Vitamin A (54.0%) followed by Vitamin D (40.0%) and Zinc (39.0%)<sup>9</sup>. The survey however identifies gains in universal salt iodization (69%) and iodine sufficiency.

The causes of malnutrition were multi-dimensional, with household access to food, sanitation and safe water, and poor young child feeding practices among the major factors jeopardizing progress towards nutrition security in the study area. An association between malnutrition and maternal illiteracy was also documented.

## **5.10. Measuring the Quantity of Food consumed by Households**

The amount of calories required for an individual depends on a number of factors including activity levels, the living environment and also individual biological needs. In line with recommendations by WHO and the Committee on International Nutrition, WFP and UNHCR use 2,100 kcals/person/day as the initial energy requirement for designing food aid rations in emergencies.

This figure uses the weighted average requirements for each age-sex group and takes pregnant and lactating women into consideration, but it is not specific to any age or gender group. FAO's recommended minimum dietary energy requirement (MDER) is 1,740 Kcals per person per day. The analysis in this report is based on data collected during the household survey in which households reported quantities of food consumed during the period of one week. It does therefore not reflect average consumption for the year and consumption patterns may be subject to seasonal change.

Households consuming a non-diversified, unbalanced and unhealthy diet can be classified as food insecure. Hungry people spend a larger share, if not all, of their food budget on macronutrient dense staples, such as rice and wheat, which provide cheap and accessible sources of calories. They don't consume micronutrient and protein dense foods.

Therefore the less varied the food intake by members of a household, the more likely they are to be food insecure. Households that over a seven day period consumed foods from four or fewer food groups out of eight are classified as having low dietary diversity. In addition, protein deficiency is computed from the protein content of amount of food items consumed.

This combine's food diversity, food frequency (the number of days each food group is consumed) weighted by the relative nutritional importance of different food groups. Cereals, tubers and root crops are assigned a weighting of 2; pulses a weighting of 3; vegetables, fruit 1; meat, eggs, fish and dairy 4; sugar, oils, fats and butter 0.5. The food consumption score uses standardized thresholds that subsequently divide households into three groups: poor food consumption, borderline food consumption and acceptable food consumption.

## **5.11. The Food Consumption Score**

As explained above, the food consumption score combines food diversity and food frequency (the number of days each food group is consumed) weighted by the relative nutritional importance of different food groups. Only 26.6% of the households were found to have adequate food consumption, while 4.8% have poor consumption. More than two-third (68.6%) of the households were found to be with borderline consumption.

### **5.11.1. Wheat, Fruits and Vegetables**

Wheat was the key staple nourishment in the study area and was considered a major success story for the local community. To a great extent the study area food security rests on its wheat production. And more than half of the required carbohydrates and proteins in an average the area diet.

Even though wheat production is considered adequate for the current consumption levels of the population, it may not meet the growing demand of the

increasing population, particularly to meet the increased consumption needs associated with economic growth. In the last year wheat and wheat flour prices reached a record high. Several factors have influenced these increases: wheat support prices high fuel prices affecting transportation costs, energy shortages and overall macro-economic trends.

If production fails to grow enough to meet demand the area will increase its dependency on imports and be at the mercy of global food price variations. Although maize was less important than wheat and rice as a food commodity in the area. Potatoes are of particular importance in terms of daily dietary intake. Fruits and vegetables have particular significance for both the domestic as well as export markets.

#### **5.11.2. Animal-Derived Food**

The local community was particularly reliant on livestock for their livelihoods. Poultry, meat, fisheries and milk are a valuable source of protein and micronutrients essential for human dietary needs. During disasters and economic shocks, rural communities tend to sell off their productive assets including livestock, a move that further undermines their livelihoods and resilience to coping with shocks.

The poultry subsector contributes about 11% to the livestock sector output. Fish considered nutrient-rich food by the local community but the same time blaming the poverty. Animal-based food production was sourced mainly from the mountainous belts of the area due to the availability of pasturelands. However, the rangelands of the district were overgrazed and hence meat and milk production were declining.

#### **5.11.3. Market Access and Price Trends**

Households were dependent on markets for selling and purchasing food, livestock, agricultural inputs, labour and other essential non-food items and the prices they pay for commodities was governed by their purchasing capacity and supply. The survey revealed that on average, the area households spend 60% of their monthly cash expenditure on food, illustrating the important role of markets in food security. By and large, availability of food in markets does not seem to be a problem for people with adequate purchasing capacity.

More than half (55.4%) of households thought sufficient quantities of food were always available in the nearest market while 23.8% said it was mostly available and

only 7.3% though that food was mostly 'not available', or not available in adequate quantities. Households are in a much better position to achieve food security if markets are well functioning and able to facilitate stable access to available food.

However, while food may be, by and large, available and markets relatively well integrated the price of food has steadily increased. The food security of poorer households, which already spend a higher percentage of their earnings on food, is hit hardest by rising prices. The casual wage labour rate has not kept up with the price increase in cereals, particularly in the last year.

#### **5.11.4. Can Households Access the Available Food?**

As per the district food availability, food was not as much sufficient as required. Although crops failing to meet their full potential. However, for a range of inter dependent reasons many families cannot access the food that the area was producing.

This was because many communities, households and individuals do not have the economic and physical wherewithal that allows them to produce and/or purchase adequate amount and worth of diet for a nourishing food. If domestically-produced food was not accessible and affordable outside of certain socio-economic parameters, then it will not ensure a population's food security.

Using the secondary data collected from the district a composite indicator using the following components was used to provide a summarized narrative of access to food: percentage of households with kacha (mud) houses; transport/vehicles per population; terms of trade (food prices vs. labour wage rates) and cash crop net income per capita. As the census showed that food access was extremely poor in most of the households.

#### **5.11.5. Poverty Hinders Food Access**

Some of the possible implications of economic shocks on food security are: reduced import capacity, withdrawal of input subsidies and production incentives, reduced public sector investment in agriculture, health, drinking water and sanitation; breakdown of water, sanitation, healthcare and education systems; and reduced purchasing power. At a micro level, economic crises in the form of loss of livelihood opportunities or a failed harvest reduce purchasing power, increase indebtedness and compel families to rely on low quality, low quantity and less nutritious food.

Poverty is often the root cause of food insecurity because poor households lack the resources required to access enough nutritious food to live a healthy active life. Poor households were unable to invest in the inputs required to boost their own yields. Poor farmers have to sell any surplus soon after harvest to earn income and repay debts, at once exposing themselves to fluctuating market prices as well as not being able to benefit from selling when prices rise.

The extreme poor have no financial buffer to protect them from shocks such as natural disaster, accident or illness of a household member or poor harvests/crop failure. In addition to the income poverty, the ability of farmers to produce food in adequate amounts and sufficient variety depends to a large extent on their access to sufficient and fertile land. A significant proportion of rural households do not own land, even though agriculture is their main livelihood.

It was clear that people with lower incomes spend a higher percentage of that income on food by comparison with higher income households. As explained above poor households – and those that spend a higher proportion of their monthly expenditure on food - were particularly vulnerable to food price inflation which was the number one shock experienced by households. Inflation has significant and far-reaching economic consequences. Inflation in food and fuel prices badly damages the purchasing power of poor.

Households with the poorest consumption patterns tend to eat almost no fruit and meat and nutrient-rich foods such as pulses only occasionally. Households with borderline consumption eat fruit and meat on average one day a week, and households with acceptable food consumption eat meat and fruit approximately 2.5 days per week. Households with borderline food consumption (68.6%) are vulnerable to slipping in to the poor food consumption group if their situation were to deteriorate. By the same token there is an opportunity to raise their level to adequate consumption with the right set of interventions.

Food consumption patterns are somewhat better in urban areas than rural areas. For example 2.9% of urban households have poor food consumption versus 5.9% in rural

areas. Similarly the proportion of households with acceptable food consumption is higher in urban areas (33.5%) than rural (22.7%).

Among those who had problems fulfilling their food needs, the most common coping strategy was to shift to less desirable or less expensive food, (81% of households), followed by limiting portion size at meals (59.3%), borrowing money (42.4%), restricting consumption by adults to provide food to small children (28.3%) and skipping meals (31.8%). Some 24.2% reported that women were consuming less to feed children or male members a very significant expression of intra-household discrepancy in food access.

Families were vulnerable to food insecurity and under-nutrition use a variety of negative coping mechanisms when confronted with a shock including limiting the intake of food, eating less nutritious/less desirable food, borrowing money/taking on debt, and in the most severe cases, selling productive assets to be able to feed their families, further decreasing resilience to future shocks.

#### **5.11.6. Food Utilization**

The assessment points were used in analyzing relative food utilization (absorption) situation by the area were as immunization (children completely immunized). All the points mentioned in access to food, were integrated using the principal component analysis for determining the weight, which was then applied to compute the overall access situation.

Trade was defined as the ability to buy a quantity of all food items on one day wage of unskilled labour in a particular study area. For this purpose, prices of all food items were collected from the area along with prevailing daily wage of unskilled labour. Prices of all food items were computed using weight of percentage usage of a particular commodity in a specific area.

#### **5.11.7. Access to Food**

District wise relative situation on access to food was calculated considering housing (percentage of *Kacha* house), roads per 10,000 population, transport vehicles per 10,000 populations, terms of trade (ToT) all food prices versus labour wage rates, and income from cash crops. For the cash crops, the net return for each crop was calculated by using the cost of production and market prices established.

It was evident that rather than the macro level food availability, the problem of household food security and nutrition in the area was related to poor economic access and utilization situation. Further aggravated by shocks such as that from natural disaster like drought. Thus a sound food security and nutrition policy which can bring different sectors together for improving the situation and an effective implementation mechanism is the need of the hour.

#### **5.11.8. Food sufficiency**

The food surplus or deficit situation of district for each food category was then calculated based on net available quantity versus estimated quantity consumed by the population using average per capita consumption level as per HIES.

Overall food availability was analyzed based on the net kcal production and kcal consumption from all food items. Standard kcal conversion factors used for Pakistan were applied to individual food items to compute the caloric figures.

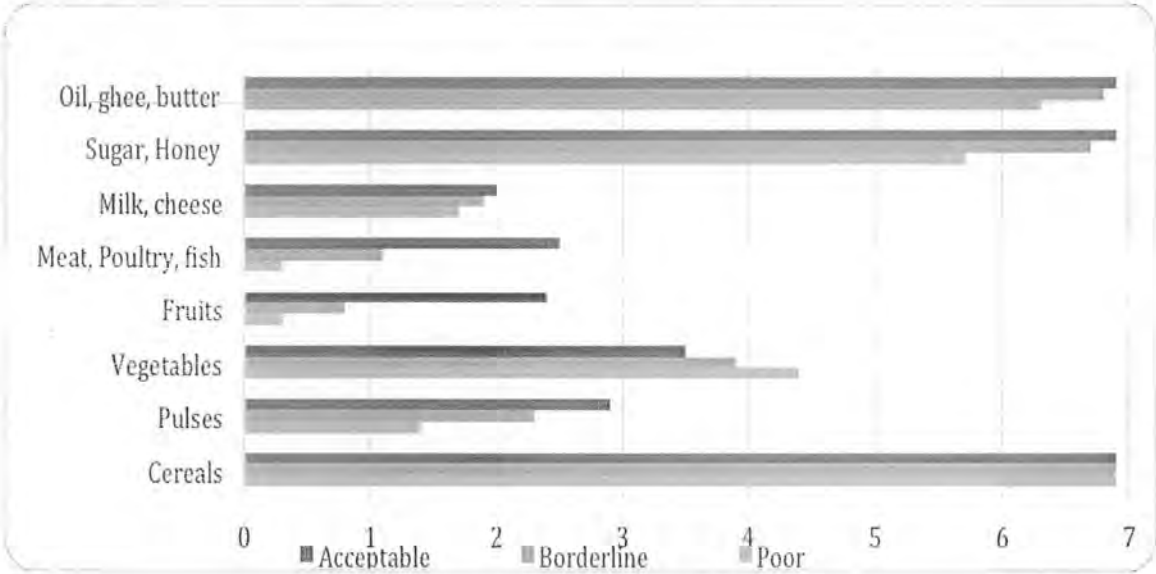
Thus comparing the total production of kcal per person per day with the kcal consumption requirement, districts were grouped into different categories of overall food sufficiency, considering all food including crop bases, animal and sea food. Net availability of food for consumption is derived from total production of each item less the loss or wastage between production sites to household basket

#### **5.11.9. Social Exclusion and Lack of Education**

Social exclusion factors prevent communities and families from accessing income opportunities, social services and participating in political and social exclusion. Social exclusions are embedded in societal taboos and stigmas. These include discrimination of access to food resources (which may include food at the household level), gender discrimination in distribution and access to resources, exclusion of physically and mentally challenged people both at the household as well as in mainstream developmental systems, religious discrimination and intolerance.

The marginalized and excluded segments of society cannot claim access to education, health, food and livelihood opportunities. This deprivation further adds to their exclusion and they are further marginalized.

Number of day's food groups eaten in the past seven days by food consumption groups



### 5.12 Shock Related Coping Strategies

Some 41% of households across district Killasaifullah reported that they had been affected by a shock such as a natural disaster, price hike, and insecurity, death of bread winner or crime. The proportion having experienced a shock was considerably higher in the study area.

It shows the main shock pinpointed by households was price inflation followed by drought and insecurity. For households in the study area, price hike was relatively more prominent than other shocks. Drought was also the most prominent shock perceived by households. Poorer households in particular are adversely affected by such shocks.

Households affected by shocks, particularly those from the poor and vulnerable sections of society have difficulty recovering a degree of normalcy in its aftermath unless appropriate measures are actively taken to recover and enhance their livelihood and food security. This has important national policy implications for addressing such vulnerable households.

About one in four households (28%) reported that they had problems meeting basic food needs in the month before the research. Families vulnerable to food insecurity and under-nutrition use a variety of negative coping mechanisms when confronted with a shock including limiting the intake of food, eating less nutritious/less desirable food, borrowing money/taking on debt, and in the most severe cases, selling productive assets to be able to feed their families, further decreasing resilience to future shocks.

Among those who had problems fulfilling their food needs, the most common coping strategy was to shift to less desirable or less expensive food, (81% of households), followed by limiting portion size at meals (59.3%), borrowing money (42.4%), restricting consumption by adults to provide food to small children (28.3%) and skipping meals (31.8%). Some 24.2% reported that women were consuming less to feed children or male members - a very significant expression of intra-household discrepancy in food access.

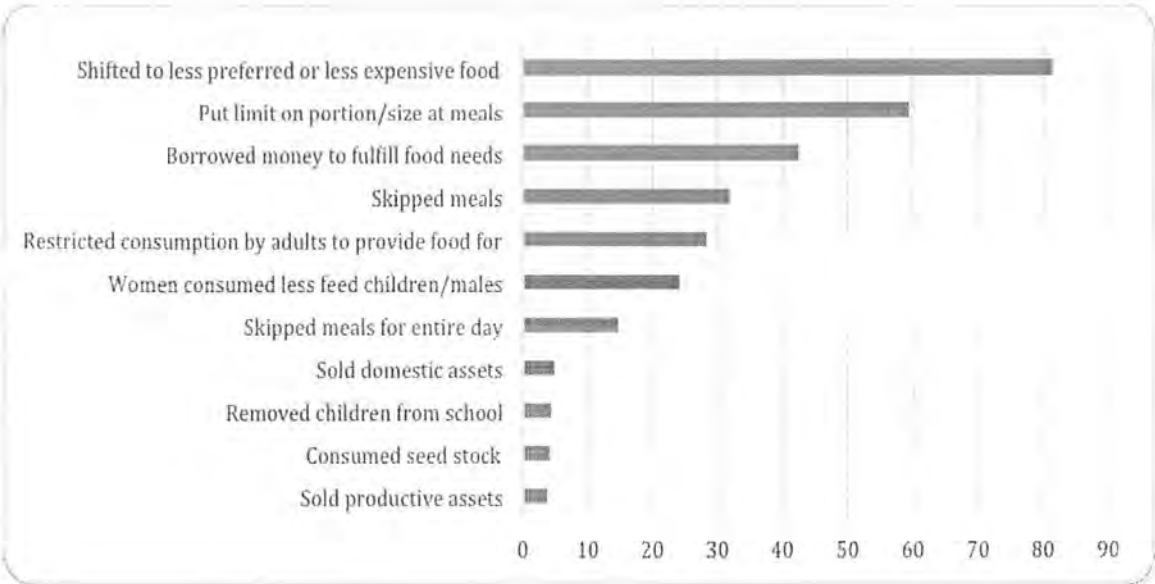
For over more than six decades, agricultural policies in Balochistan have been centered on enhancing agricultural production at the provincial level. The notable growth in agricultural production over the years has been a product of increased cultivable area and input intensification, coupled with farm mechanization.

Growing food insecurity worldwide – taken as evidence that production self-sufficiency is not, in and of itself, the solution for meeting the demand of a growing population – has led to a rethinking of agricultural development and food security paradigms.

This paradigm shift brought food security back into focus and with it a rethinking of government policies and a re-prioritization of the right to food. More is needed to create better access to food, to implement food safety measures and to create sustainability in supply alongside better equality of consumption.

Around 5% of households resorted to even more severe and corrosive coping strategies such as consuming seed stocks reserved for the next planting season, selling domestic or productive assets, and removing children from school.

Household coping strategies when confronted with food shortages (percentage of households)



### 5.13 Stunting of Malnutrition

According to Dr Bashir Kakar paediatrician and Nutritionist said that Stunting, or height too low for age, is a strong indicator of chronic food insecurity. Its consequences are grave and important to understand: it delays normal growth, increases the risk of death due to ordinary child illnesses and increases the risk of chronic diseases later in life.

Malnutrition perpetuates poverty with its adverse effects on survival, productivity and education. However, stunting is preventable. He further stated that children become stunted very early in life, normally before they turn two years old so there is a small window of opportunity for timely preventive measures between conception and a child’s second birthday.

The MUAC assessment result of the survey of households indicated that 13.6% of children have a MUAC of less than 12.5 cm, indicating that they suffer from acute malnutrition. According to WHO recommendations acute malnutrition rates of 10-14% are considered ‘serious’ and above 15% critical.

Prevalence of malnutrition in pregnant and lactating women was also assessed in the household survey by UNICEF and measurement of MUAC of 40 PLWs. Using the recommended threshold of 21cm, 8.3% of the PLWs were at risk of malnutrition, indicating that the risk of malnutrition in pregnant and lactating women was less serious than in children under five.

#### **5.14. Drought was a Barrier to Food Access**

The prevailing drought in the study area has caused poverty and displacement of people from their homes. The research found that physical access to markets by both traders and consumers was inhibited by poverty and drought. People of the surveyed households pointed to high food prices as the main challenges they faced in the previous year.

Households reported spending a higher percentage of their income on food. The drought hit food availability and access to sufficient food because many farmers fled affected areas. The impact of global climate change in district cannot be overlooked. Rainfall and flooding patterns will have short and long-term implications for food security and warrant necessary climate change adaptation and mitigation strategies.

Other constraints that limit productivity include a lack of agricultural innovation and limited policy support, which hinder access to improved technologies and agricultural credit. Post-harvest losses and inefficient and inadequate value chain management further undermine food production.

Domestic food production relies on a vibrant agriculture sector. Agriculture contributes some 21% towards GDP and employs 45% of the country's labour force. But the sector faces a number of challenges which constrain its efficiency and reliability and have a straight influence on food availability and diet safety throughout the study area.

A host of structural issues as well as erratic rainfall patterns, droughts and floods result in irregular yields and production fluctuations from year to year and prevent the sector from realizing its full productive potential.

The impact on women was particularly severe. Most women pursued purdah in its strictest sense, limiting movement outside of the home. Instability restricted their mobility even further making it more difficult for them to seek healthcare services and for girls to attend schools. In fact morbidity rates were unusually high in drought affected areas, often facilities were physically unavailable, health staffs were unable to make it to work and medical supplies were scarce.

Drought also reduced women's income earning opportunities e.g., poultry keeping dropped and agriculture based opportunities not available. Many women destroyed their only source of income from poultry and agriculture and it directly effects on the quality of household diets. Breastfeeding patterns changed.

Many women claim they stopped lactating because of poor dietary habits. Many reported not to be initiating breastfeeding directly after birth or to start introducing weaning foods earlier than usual.

Malnutrition, particularly acute malnutrition or wasting, was particularly sensitive to the onset of drought. Drought can disrupt water and sanitation facilities thereby increasing risk of illness/disease through water- borne vectors, which has profound implications on morbidity and nutrition outcomes.

## 6. THEORETICAL DISCOURSE

Operative community health, management of fatal disease, good health practices and health promotion are the main features to improve public health and reduce illness risks. And this kind of awareness components help people to maintain and improve their health especially malnutrition and its direct impact on overall socio economic development of the area.

Numerous people in public health and medicine fields cannot understand the possible role that anthropology could play in this regard. It is also clear that medical anthropology could contribute a lot to improve public health through social mobilization decisions.

Explanatory theory supported me in my research objectives and data collection about malnutrition. This theory also helped me during my research to describe basic reasons and factors influencing behaviour or a situation and to identify why malnutrition exists in the area.

Why malnutrition in children 6-59 months and women exist because of poverty or lack of awareness or both of them? It also helped to ensure that all relevant factors are identified, such as the personal factors, environmental factors, social factors and behavioural factors of the problem of malnutrition.

Explanatory theory guides me for factors that contribute to a problem of malnutrition such as lack of awareness, poverty, illiterate mothers, inadequate diet and joint family system. I also examined the local community health practices, health facilities approach, indigenous medication practices and the concept of religious leaders through this theory.

The people of the area were always expressed that their children were normal not malnourished and it was their fate if they were so. Anthropologists have been interested in medical practices for many years to find out the causes of the diseases and to improve the public health. The people of the area can improve their health conditions through awareness campaign and behaviour change communication. Malnutrition was the huge problematic disease in the study area which impact on the people lives.

Explanatory theory helped me during the various stages like research planning, research implementation and research collected data evaluation. The interventions of malnutrition that were most likely to succeed were based on a clear understanding of this theory. Theories of health behaviour can play a critical role in all health issues like explanatory theory in poverty and malnutrition.

The selected theory also pursuit my research objectives for answering to Why? What? and How? People were understanding about malnutrition and were not following public health and medical advice. And why the people were not caring for themselves in healthy ways and for their malnourished children.

What the theorist discussed in the theory regarding human approach towards illnesses and what they understand about the diseases. Same was the case in my data collection process that when I collected data from the local community over their approach towards malnutrition, food security and poverty.

The theorist identified reasons and causes of the illness and the factors towards its solutions. I also identified the causes and reasons of malnutrition, poverty and food accessibility and the solutions. The local community have deprived themselves of the accessible foods resources. The contributing factors in maternal malnutrition include the poor educational status, high number of pregnancies, inadequate antenatal knowledge & facilities, poor sanitation facilities and hygiene practices.

Malnutrition was prevalent amongst youngsters and women of child bearing age in the study area. The food consumption was not adequate and the diet was deficient in nutrients and calories. The mothers' knowledge regarding micronutrients was inadequate. The contributing factors in maternal malnutrition include the poor educational status, high number of pregnancies, inadequate antenatal knowledge and facilities and poor sanitation facilities and hygiene practices.

The incidence of malnutrition was high among children as indicated by rates of stunting and underweight coupled with anaemia. IYCF practices were not appropriate in the area just because of lack of awareness, poverty, joint family system and mother illiteracy. The initiation and continuation of breastfeeding was common; whoever, when complementary foods were introduced, poor hygiene practices frequently results in diarrhoea.

Most of the children between 6-59 months of age neither meet the criterion of minimal meal frequency nor of dietary diversity. Food security situation indicates worst situation in the study area and roughly one fourth of the households were food secure. It is recommended that appropriate interventions may be implemented to reduce maternal and child malnutrition. Collaborative efforts were required to combat food insecurity. Favorable rainfall has been a key factor contributing to better crop-based food production.

Households with the poorest consumption patterns tend to eat almost no fruit and meat and nutrient-rich foods such as pulses only occasionally. Households with borderline consumption eat fruit and meat on average one day a week, and households with acceptable food consumption eat meat and fruit approximately 2.5 days per week.

Families' food consumption was vulnerable to slipping in to the poor food consumption group if their situation were to deteriorate. By the same token there is an opportunity to raise their level to adequate consumption with the right set of interventions.

Poorer households in particular were adversely affected by such shocks. Survey indicates that drought affected population and populations temporarily displaced due to drought, were far worse off in terms of overall food insecurity.

Households affected by shocks, particularly those from the poor and vulnerable sections of society have difficulty recovering a degree of normalcy in its aftermath unless appropriate measures are actively taken to recover and enhance their livelihood and food security. This kind of studies is so important implications for addressing such vulnerable households.

The above discussion about explanatory theory and this discussion supported the concept of the theory. This theory accepted because the main theme of the theory was to know the causes, reasons and solutions of the disease but same was the case about my research because research theme was to find out the causes, reasons and solutions of malnutrition, poverty and food insecurity. According to the theorist that what the affected people understand about the disease, what the people believe about treatment and how the people resolve their problem.

## 7. CONCLUSION

The information showed earlier specifies that while strengthened accomplishment in every concerned sector will reduce malnutrition. No sector only can diminish malnutrition. Poverty, lack of awareness and coupled with illiteracy were the key factors in annoying malnutrition. In light of the thesis findings it is concluded that malnutrition is widespread in children and women of child bearing age in the study area. The food consumption was inadequate and the diet was scarce in nutrients and calories.

Malnutrition was a multidimensional issue in the study area. And the nutritious position of women and children depends mainly on nourishment, health and medicinal carefulness. The key trials in nutrition and health in the study area were poverty, family nourishment insecurity, infectious diseases and shortage of nutrition awareness. It was identified that the children of educated mothers were in good health than the children of uneducated mothers.

The research study has also originated that the part of women's education in progressing the health of children was more prominent in poor households than in non-poor households. The current examination has also determined that poverty has unpleasantly prejudiced the nutritional position of children. The elementary problem was how to decrease family food insecurity.

The deprived families may be protected from the increase in amounts, frequently in basic foods. The coalition government of the province must strengthen on-going nutrition programmes of micronutrient deficiencies. Give fully administrative and security support to Nutrition programmes to eliminate malnutrition in the area. People of the area did not use Plumpy nut and plumpy doz for malnourished children because they assumed that these were harmful for children health and have family planning supplements.

LHWs programme was stair in the exact way to endorse the preventive health abilities and LHWs can deliver all basic health care facilities to their own communities. Coverage of full child immunisation may also be improved, and the provision of safe drinking water should be given priority.

Insufficient access to safe and improved sources of drinking water was a major limitation to food security and nutrition. The inability to access safe drinking water

leaves households vulnerable and susceptible to waterborne diseases that can be severely detrimental to the overall health of individuals and their food utilization capability.

For the purpose of this research, piped water, public tap, tube well/bore hole, treatment plant, protected well/spring, hand pump, bottled water, tanks/bladders, and tanker water are considered safe sources of water. Unsafe sources were identified as rivers, unprotected wells/springs, canals and rainwater. Based on this categorization, the household census estimated that 80% of households have access to safe sources, leaving 20% of households without access.

Some mentioned indicators illustrate the complexity of measuring food security outcomes. In order to better understand and analyse the food security situation all these indicators are cross linked to present a comprehensive picture at country level. Some strong nutritional indicator for chronic food insecurity as insufficient calorie intake over a long period translates into reduced child growth.

Underweight or low weight-for-age is similarly defined and reflects both chronic and acute malnutrition. Wasting is based on standardized weight-for-height. Children falling below the -2 standard deviation are suffering from acute malnutrition which indicates immediate shortages in food or health care.

In addition the Mid-Upper Arm Circumference (MUAC) assessment of 43 children between 6- 59 months old was included in the household questionnaire of the survey to provide some indication of the acute malnutrition situation.

They have deprived themselves of the accessible foods resources. The contributing factors in maternal malnutrition include the poor educational status, high number of pregnancies, inadequate antenatal knowledge & facilities, poor sanitation facilities and hygiene practices. Malnutrition was prevalent amongst youngsters and women of child bearing age in the study area.

The food consumption was not adequate and the diet was deficient in nutrients and calories. The mothers' knowledge regarding micronutrients was inadequate. The contributing factors in maternal malnutrition include the poor educational status, high number of pregnancies, inadequate antenatal knowledge and facilities and poor sanitation facilities and hygiene practices.

The incidence of malnutrition was high among children as indicated by rates of stunting and underweight coupled with anaemia. IYCF practices were not appropriate in

the area just because of lack of awareness, poverty, joint family system and mother illiteracy. The initiation and continuation of breastfeeding was common; however, when complementary foods were introduced, poor hygiene practices frequently results in diarrhoea.

Most of the children between 6-59 months of age neither meet the criterion of minimal meal frequency nor of dietary diversity. Food security situation indicates worst situation in the study area and roughly one fourth of the households were food secure. It is recommended that appropriate interventions may be implemented to reduce maternal and child malnutrition. Collaborative efforts were required to combat food insecurity. Favorable rainfall has been a key factor contributing to better crop-based food production.

Households with the poorest consumption patterns tend to eat almost no fruit and meat and nutrient-rich foods such as pulses only occasionally. Households with borderline consumption eat fruit and meat on average one day a week, and households with acceptable food consumption eat meat and fruit approximately 2.5 days per week.

Families' food consumption was vulnerable to slipping in to the poor food consumption group if their situation were to deteriorate. By the same token there is an opportunity to raise their level to adequate consumption with the right set of interventions.

Poorer households in particular were adversely affected by such shocks. Survey indicates that drought affected population and populations temporarily displaced due to drought, were far worse off in terms of overall food insecurity.

Households affected by shocks, particularly those from the poor and vulnerable sections of society have difficulty recovering a degree of normalcy in its aftermath unless appropriate measures are actively taken to recover and enhance their livelihood and food security. This kind of studies is so important implications for addressing such vulnerable households.

## 6.1. Recommendations

The recommendations are organized by sector wise to eliminate malnutrition and improper feeding practices. Major efforts should be made to fortify food, particularly wheat, and to develop a mechanism to make fortified nutritious food more widely available. The mothers' awareness regarding micronutrients was not adequate; along with their misunderstandings about foods.

Given the high variability in food security situation across time and space, it is important to have a systematic food security monitoring system to provide an evidence base for policy and programmes. State of food security reports should be produced at least after every four years to provide a baseline and input to the subsequent five year development plans prepared by Government of Balochistan. These can also be used to see the progress made in the past years, and can be part of national surveys.

### 1. Water, Sanitation and Hygiene

- Provision of water testing kits at the tehsil level required by the local community and WASH problems precipitating malnutrition. WASH efforts should be targeted to poor and marginalized people of the area, with distinct care given to hygiene counseling, soap provision and the provision of hygienic sanitary facilities which were particularly lacking in Balochistan.

### 2. Food Security

- Higher premiums both on diversity of production, taking full advantage of the province's extensive livestock production, and on reducing food insecurity among presently food insecure households; increased extension service provision to women producers helping to maximize their time efficiency and reduce energy expenditure. Given low dietary diversity in Balochistan, these steps were particularly important.
- Improved targeting of service delivery to vulnerable food insecure households.
- Compulsory micronutrient fortification of edible oil and wheat to address native micronutrient deficits, with vigorous social sector participation, including the expansion of regulatory monitoring systems to ensure sustainability.

### **3. Utilization of Health Services.**

- Better coverage of micronutrient supplementation with exceptional care to present scarcities in the study area, i.e. zinc to kids for treatment of diarrhea, increased coverage of salt iodization, vitamin A supplementation and multi-micronutrient powders for young children and iron/folate supplementation for women., Improved vitamin A supplementation for children is particularly critical.
- Increased LHW coverage, or alternate modes of community outreach (e.g. NGO contracts) in the area with particularly low coverage.
- Prioritized trainings for health care providers and Lady Health workers in emergency nutrition and nutritional service delivery at the community and facility level.
- Improved analysis and enhanced management of SAM, particularly at the level community.
- Given the particularly little occurrence of exclusive breastfeeding of nutritional variety for children in Balochistan. And IYCF counseling of mothers and pregnant women at the community and facility level is very important.
- Integration of nutrition into medical curricula in the province.
- Extraordinary class broadcasting of significant nourishment messages via media and also cell phones, as part of a behavior change strategy that includes interpersonal communication (e.g. through LHWs and NGOs).

### **4. Education**

- Given that Balochistan has the lowest level of maternal education in the country, and given serious interest in nutrition by the education sector in the province, priority should to be given to improved school enrollment especially for female.
- Relatedly, the provision of nutrition teaching aids and the promotion of nutrition as part of life skills education for adolescent girls could have a significant effect on pregnancy outcomes and on young child nutritional status in the next generation.

- Simultaneous inclusion of nutrition in pre-, primary, middle and high school curricula, increased support for school nutrition programs, teacher sensitization and training, and involvement of students and teachers in an annual National Nutrition Day
- Deworming for pre- and primary school children

##### **5. Poverty Alleviation and Social Protection**

- Considering the major role of BISP in the province, the introduction of malnutrition risk factors in the targeting mechanisms for cash transfers giving highest priority to mothers with children under the age of two<sup>3</sup>.
  - Given the considerable interest in social protection activity in the province, pilot testing of vouchers for the purchase of items of particular needed by households in efforts to prevent malnutrition, e.g. soap, micronutrient powders, particular non-perishable food commodities.
  - Improved birth registration in the province to enable better targeting of social protection schemes.
  - Expansion and improved targeting of social protection programs (and linking of their databases) with sustained consumption of social defense platform for nutrition message dissemination.
  - Inclusion of social protection in provincial disaster risk reduction strategy.
6. There was need to improve care and IYCF practices by educating mothers about minimal meal frequency and dietary diversity.
  7. Improve the basic health care services for prevention, diagnosis and treatment of common illnesses prevailing in the communities.
  8. Though the role of LHVs in disseminating information is evident, more efforts were required to provide information to mothers regarding antenatal care and child spacing.
  9. Nutrition services may be provided in the deprived and neglected areas.

---

<sup>3</sup> This will be facilitated by nutrient-based food consumption analysis in the province to determine allocations capable of meeting nutritional needs.

10. Access to sanitation and safe drinking water facilities should be provided to the people of the study area.
11. Messages should be developed and conveyed on urgent basis about the importance of hand washing with soap after defecation and before feeding infants and young children.
12. Behaviour change communication should target the mothers and key decision makers about IYCF practices.
13. There was necessity to develop awareness sessions and mothers counselling so as to educate mothers on various aspects of health and nutrition keeping in view their low literacy rate.
14. Since consumption of vegetables was poor in the area; therefore, the households be encouraged to have kitchen gardens.
15. There was a dire need of developing Provincial Nutrition and Food Policies so as to discourse the grave questions of food insecurity in the study area.

## Glossary (local terms and their meanings)

Akoo Bakoo	Folk game played by little girls
Ashar	Village aid program on the basis of mutual cooperation
Atan	Pashto traditional dance
Awal Manae	Beginning of autumn
Azaan	Call to prayers or profession of faith
Badal	Revenge
Baighairat	Shameless, coward
Beopari	Apple contractors
Chargul	Small nose rings
Da khra khoona	Animal house
Dal	Pulses
Da seheil starga	Local name for a star
Dodi	Bread
Draina	Third day of the death
Faqir	Beggars
Gatay	Game played by little girls with stones
Ghairath	Shame or courage
Gharry partakawal	Raising of uvula
Ghaysh	Wrestling
Ghotti	Local indigenous medicine for child
Ghulail	Catapult (used by children for shooting stones)
Goodee	Leather bags using for water

Gully Danda	Game played with two wooden sticks
Gur	Dried solid sugarcane juice
Hakeem	An unqualified local doctor
Haveli	Within four walls
Hujra	Guest room or room for family bachelors
Iskhat	Alms are distributed among the poor people
Itbar	Trust or expectation
Izzat	Honor
Jirgah	Local meeting, council of the elders
Jorr yey	Are you alright?
Kacha	Not solid, made with mud
Kam	Clan or tribes, it also means nation
Karez	Under ground water channel.
Kasay	Cooking pots
Kashar	Younger
Khairat	Charity
Khusay or lingot	Folk game played by one leg
Khushala yey	Are you happy?
Killi Malak	Village headman
Kor or kahol	House, family
Kowzda	Betrothal
Krasta	Local carpet
Kushniyano more	The mother of children

Kushniyano plar	The father of children
Lado	Means a doll but People of the area perform this ritual for rain
Lamoonz	Prayer
Landhi	Dry meat of sheep, eaten in winter
Lashkar	An armed party which goes out for warlike purposes
Levies	Tribal police
Lungi or Patkai	A kind of Turban using by male
Madrassa	Religious school
Mailma	Guest
Mailmastia	Hospitality
Makh katal	Showing bride's face
Maraqqa	Boy's parent first talk to the girl's parent about marrying their daughter, with their son.
Mullah	Religious leader or teacher
Naik Bakhta	Lucky
Nanawatai	Refuge
Nang	Courage, honor
Natkai	Large nose rings
Nasyal	Non equal or one who fails to compete
Naway Jorra	Special bridal dress
Nazar	Evil eye
Nazar Matawal	Removing effects of the evil eye
Nikah	Wedlock

Nishana weeshtal	Target shooting
Paghor	Shame
Paizwan	Suspended below the nostril edge
Pardah	Seclusion or wearing of veil
Parooni	Scarfs
Partug	Trousers
Pashto	Pashto is the language of pathans and here it means a 90ashtoons way of life
Pashtoonwali	Basic code of 90ashtoons life i.e.hospitality,refuge,vengeance etc
Path	Honor
Pat Potany	Hide and Seek
Pawanda	Afghan nomads
Phara	An instrument for cleaning snow from roofs
Qamees	Shirt
Roshandan	Small window near the roof for light and ventilation
Rukhsati	Farewell
Salweshti	40 <sup>th</sup> day of the death
Sar kharawal	Head shaving
Spailanay	Wild rue using for malignant eye
Spina chila	White forty days
Spinshirak	Means beggar or to beg but People of the area perform this ritual for rain
Soonat	Circumcision of a male child

Soorgi	Game played with stones
Soorh Manae	Cold autumn
Stapoo	A kind of local game played by little girls
Syal	Equal to competitor
Syali	Equality or cognitive orientation of people to be so as others are
Takkrra yey	Are you hale and hearty?
Taliban	Religious students
Taweez	A paper written with the holy verses/ Amulets
Teek	Jewellery worn on the forehead
Tobhay Westal	Supplicating God for rain
Tor	Literally it means black but it is used for guilty
Torachila	Black forty days
Turbur	Patrilineal cousin
Turburwali	Agnatic rivalry
Wadah	Marriage
Walwar	Bride, s price or head money
Weer	Sorrow
Wra	Marriage party or procession
Zairay	Good news
Zikar	Religious meditation

### Various Local Sentences and Their Meanings:

1. Daa khodai paa haman.

Meaning: into the safeguard of Allah

2. Daa raanz raanzur raghaishee, Daa stargoo raanzur na raghaishee.

Meaning: An ill individual might improve from disease however illness Begun by a wicked eye can't be preserved.

3. Har Kala Rasha.

Meaning: May you always come

4. Har kala ossev.

Meaning: May you always abide

5. Ka Khair Wee.

Meaning: If all goes well

6. Allah pak dee maal sa.

Meaning: May Allah be with you

7. Khudai de obakhshi.

Meaning: May God forgives him

8. Kishnyan lovan Jurr dee.

Meaning: Are your house elders and Youngers healthy and vigorous?

9. Ma khwara shev.

Meaning: May you not be poor

10. Omar de ziyate-she Os moo yadaawalay.

Meaning: You have a permanency; we were just talking about you

11. Paa khair osseey.

Meaning: Might you alive in harmony

12. Pa khair raghley.

Meaning: Welcome

13. Paa Kaor keev Khairiyat dee.

Meaning: Is everybody fine at family?

14. Paa makhaa di shaa.

Meaning: you may reach to your journey's end carefully.

15. Starrey ma sey.

Meaning: May you not be tired?

16. The Shazay zai lakor di la gor.

Meaning: The place of woman is either home or grave.

## Bibliography

1. Aguiar, C., Rosenfeld, J., Stevens, B., Thanasombat, S. & Masud, H., (2007). An Analysis of Malnutrition Programming and Policies in Peru. *International Economic Development Program*, 3-66.
2. Arif, G. Nazir, S. Satti, M. & Farooq, S (2012). *Child Malnutrition in Pakistan: Trends and Determinants*. Islamabad: Pakistan Institute of Development Economics, 10-16.
3. Ashworth, A. (2002). *Feeding young children Footsteps*: A quarterly newsletter linking development workers around the world.
4. Barker, D. & Fall, C. (1993). *Fetal and infant origins of cardiovascular disease*. Archives of Disease in Childhood, 68 (2), 797-799.
5. Bernard, H. R. (2006). *Research methods in anthropology: Qualitative and Quantitative approaches* (4<sup>th</sup> ed.). Lanham: Altamira press.
6. Bhutta, Z. A. (2002). *The enigma of maternal and childhood malnutrition in Pakistan: can we break the vicious cycle?* Pakistan: Journal of College of Physicians and Surgeons.
7. Brown, P. (2000). Coordinated Global Action Could End Malnutrition in Young Children. *British Medical Journal*, v320 i7238 p. 825-826.
8. Cheah, W., Manan, A., Hussain, Z. & Chang, C. (2009). Development of a questionnaire for the study of malnutrition among children in rural Kelantan, Malaysia. *Rural and Remote Health*, 2-9.
9. Croyle, R. T. (2005). *Theory at a Glance: A Guide for Health Promotion practice* (Second Edition). United States: National Institutes of Health.
10. Dawson, D. C. (2007). *A practical guide to Research Methods* (3<sup>rd</sup> ed). Begbroke, Oxford : United Press.
11. Dettwyler, K. A. (1994). *Dancing Skeletons, life and death in West Africa*. Africa: Waveland press.
12. Durkin, M., Hasan, Z. & Hasan, K., (1998). Prevalence and Correlates of Mental Retardation among Children in Karachi, Pakistan. *American Journal of Epidemiology*, 147 (3), 281-288.



13. Edward, A. & Frongillo, M. d. (1997). Socioeconomic and Demographic Factors are Associated with Worldwide Patterns of Stunting and Wasting of Children. *American Society for Nutritional Services*.
14. Hatlebakk, M. (2012). *Malnutrition in South-Asia Poverty, diet or lack of female empowerment?* Bergen, Norway: Chr. Michelsen Institute (CMI).
15. Infant and Young Child Nutrition [IYCN]. (2012). *Our global efforts to prevent malnutrition during the first 1,000 days 2012*. [Final Report], Washington, DC.
16. Jacinta A. & Opara, H. E. (2011). Malnutrition During Pregnancy among Child Bearing Mothers in Mbaitolu of South-Eastern Nigeria. *Advances in Biological Research. Vol. 111-115* (1992-0067.), 113-114. Retrieved from [http://www.idosi.org/abr/5\(2\)/8.pdf](http://www.idosi.org/abr/5(2)/8.pdf)
17. Jens, J. M. (2009). The Magnitude of the Problem of Malnutrition in Europe. *Nutrition Unit, Rigshospitalet and Department of Human Nutrition Denmark*, 8.
18. Khan, A. R. & Raza., M. A. (2013). Child malnutrition in developing economies: a case study of Bangladesh. *Springer Science+Business Media Dordrecht*, 48: 1389-1408.
19. Kleinman, A., Eisenberg, L. & Good, G. (1976). Culture, illness and care: Clinical lessons from anthropologic and cross-cultural research. *Annals of Internal Medicine*, 88 (2).
20. Margriet, G. & Wilbrink, M. (2005). *The silent emergency: you are what you eat. The perception of Tampuan mothers about a Healthy well-nourished body in Relationship to their daily food patterns and food habits* (Unpublished M.sc Thesis). University, van Amsterdam, Cambodia.
21. Mason, J., Deitchler, M., Gilman, A., Gillenwater, K. & Shuib, M. (2002). Iodine fortification is related to increased weight-for-age and birth weight in children in Asia. *Food and Nutrition Bulletin*, 23, 292-308.
22. Mason, J., Hunt, J., Parker, D. & Jonsson, U. (1999). Investing in Child Nutrition in Asia. *Asian Development Bank*, 17 (1,2), pp,1-32.

23. Mercedes, O., Edward, A., Frongillo, S., & Blossner, M. (2000). Is malnutrition declining? An analysis of changes in levels of child malnutrition since 1980. *Bulletin of the World Health Organization*, 78 (10), 1222-1233.
24. National Directorate of Public Health [NDPH]. (2010). *Annual Review 2010: Multi sectorial Action plan for the reduction of chronic undernutrition in Mozambique 2010*: Department of Nutrition, Republic of Mozambique.
25. National Health and Medical Research Council [NHMRC]. (2000). *Annual Review 2000: Nutrition in Aboriginal and Torres Strait Islander Peoples*. Commonwealth: Australia.
26. Ochurus, P. (2007). *Causes of Malnutrition among Children 1–5 Years In Informal Settlements, Windhoek, Namibia*: University of Namibia.
27. Planning and Development Division. (2011). *National Nutrition Survey 2011*. Planning Commission, Pakistan: Aga Khan University.
28. Prentice, A. M., Gershwin, M. E., Schaible, U. E., Keusch, G. T., Victora, C. G. & Gordon, J. I. (2008). New challenges in studying nutrition-disease interactions in the developing world. *The Journal of Clinical Investigation*, 118 (4), 1322-1329.
29. Pridmore, P., & Hill, R.C. (2009). Addressing the underlying and basic causes of child undernutrition in developing countries: what works and why? Department of Education, University of London.
30. Rosa, U. (1997). *Malnutrition in South Asia: A regional profile*. Kathmandu: UNICEF Regional Office for South Asia.
31. Umberto, D. G. (1977). *Reducing Malnutrition in Developing Countries: Increasing Rice Production in South and in Southeast Asia 1977*. The Triangle Commission: A Private North-American-European-Japanese Initiative on Matters of Common Concern. New York.
32. United Nations Children's Fund (UNICEF). (2013). *Evaluation Of Community Management Of Acute Malnutrition (CMAM): Pakistan Country Case study*. New York: Evaluation Office.
33. United Nations Development Programme [UNDP]. (2005). *Investing in Development: A practical plan to achieve the Millennium Development Goals 2005*. Report of MDGs, New York: Retrieved from

<http://www.unmillenniumproject.org/reports/index.htm>

34. World Food Program[WFP]. *Global Nutrition Strategy 2006: Acute Malnutrition in Protracted Refugee Situations: A Global Strategy* UNHCR/WFP. Allison Oman: UNHCR missions.
35. World Health Organization [WHO]. (1999). *A critical link Interventions for physical growth and psychological development 1999*. [Annual Review] Switzerland: Retrieved from [http://www.who.int/maternal\\_child\\_adolescent/documents/chs\\_cah\\_99\\_3/en/](http://www.who.int/maternal_child_adolescent/documents/chs_cah_99_3/en/)
36. World Health Organization [WHO]. (1998). *Complementary feeding of young children in developing countries: a review of current*. Geneva: World Health Organization.
37. Yasmin, S., Osrin, D., Paul, E., & Costello, A. (2001). Neonatal mortality of low-birth-weight infants in Bangladesh. *Bulletin of the World Health Organization*, 79 (7), 608-614.

LIST OF ANNEXES

Annex A:

SOCIO-ECONOMIC SYRVEY FORM

SERIAL NO \_\_\_\_\_

NAME OF LOCALE \_\_\_\_\_

S. No.	Name	Sex	Age	Religion		Caste	Occupation	Relation To the house hold.	Place of birth	Remarks
				Main	Sect					
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										

Annex B:

SOCIO-ECONOMIC SYRVEY FORM

SERIAL NO \_\_\_\_\_

NAME OF LOCALE \_\_\_\_\_

APPENDIX-3

S. No	H. No	Total No. of Children		Education		Qualific ation	Income				Economics Assets					Remar ks
		Male	Female	Religi ous	Formal		Daily	Per Mon	Per Sea	Per Ann	Hotel	Shop	Veh	Job	Agri	
1																
2																
3																
4																
5																
6																
7																

Annex C:

SOCIO-ECONOMIC SYRVEY FORM

SERIAL NO \_\_\_\_\_NAME OF LOCALE \_\_\_\_\_

S.N o.	H.N o.	Place of Work				Live Stock									Remark s
		Loca l	Nearby Town	Abroa d	Other	Cow	Sheep	Came l	Ox	Mules	Horse	Goa t	Donkey	Other	
1															
2															
3															
4															
5															
6															
7															
8															

Annex D:

SOCIO-ECONOMIC SYRVEY FORM

SERIAL NO \_\_\_\_\_

NAME OF LOCALE \_\_\_\_\_

S. No .	H.N o.	Source of Income						Source of Information			
		Agr.	Live stock	Business	Govt. Servant	Private Servant	Business	News Paper	Radio	TV	Any other
1											
2											
3											
4											
5											
6											
7											
8											

Annex E:

SOCIO-ECONOMIC SYRVEY FORM

SERIAL NO \_\_\_\_\_NAME OF LOCALE \_\_\_\_\_

S. No.	H. No.	Family System			Settlement Pattern			Education		Crops				Remarks
		Nuclear	Join t	Externa l Joint	Kacha	Pak a	Other	Literate	Illiterate	Maize	Potato	Wheat	Any others	
1														
2														
3														
4														
5														
6														
7														
8														

Annex F:

SOCIO-ECONOMIC SYRVEY FORM

SERIAL NO \_\_\_\_\_

NAME OF LOCALE \_\_\_\_\_

S. No	Usage of land.				Usage of animal.			Usage of wood			Remarks
	Cultivatio n	Forest	Constructio n	Any other	Domestic	Commercia l	Any other	Domesti c	Commercia l	Any other	
1											
2											
3											
4											
5											
6											
7											
8											
9											

Annex G:

Tackling Malnutrition to Unlock Potential and Enhance Prosperity:  
Ethnographic Study of Food Insecure District Killasaifullah.

Section 1: Background Information

- 1. Child Name.....
- 2. Date of birth/age (month).....
- 3. Sex of the child (Boy-1 and Girl-2).....
- 4. Birth weight.....
- 5. Birthplace (at home-1 and at hospital-2).....

Household Questionnaire about food insecurity and malnutrition

Section 2: Information on Socio Economic Status

S.N O	Questions	Responses and Codes
1	Type of family	Nuclear 1
		Joint 2
2	Monthly income of the household (Rupees)	Low ≤ 5000 1
		Middle 5001 – 25000 2
		High > 25000 3
3	Structure of the house (Observation): A. Walls	Mud / stones 1
		Bricks / blocks 2
		Wood / bamboo 3
		Cemented 4

			Other (specify) 5			
	<b>B. Roof</b>		Straw / thatch 1			
			Wood 2			
			Concrete 3			
			RCC / lanter 4			
			Other (specify) 5			
	<b>C. Floor</b>		Mud 1			
			Bricks 2			
			Cemented 3			
			Marble / tiles 4			
Other (specify) 5						
<b>4</b>	<b>Number of rooms in the house used for sleeping.</b>		<div style="display: flex; gap: 10px;"> <input style="width: 50px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 50px; height: 20px; border: 1px solid black;" type="text"/> </div>			
<b>5</b>	<b>Type of fuel/energy used for cooking in the household.</b>		Firewood 1 Animal dung 2 Kerosene oil 3 Natural gas 4 Electricity 5 Other (specify) 6			
<b>6</b>	<b>How many items of following does the home possess? If none, write 0.</b>					
	<b>Asset</b>	<b>No</b>	<b>Asset</b>	<b>No</b>	<b>Asset</b>	<b>No</b>
	<b>Buffalos and cows</b>		<b>Sewing machine</b>		<b>Computer</b>	
	<b>Sheep and goats</b>		<b>Washing machine</b>		<b>Bicycles</b>	
	<b>Horses and donkeys</b>		<b>Refrigerator</b>		<b>Motorcycles</b>	
	<b>Land line telephone</b>		<b>Electric fans</b>		<b>Car / taxi / jeep</b>	
	<b>Mobile phone</b>		<b>Air cooler</b>		<b>Other vehicle</b>	
	<b>Furniture</b>		<b>Air conditioner</b>		<b>Land area (acre)*</b>	

	Microwave oven		Television		Geyser	
--	----------------	--	------------	--	--------	--

**Section 3: Infant and Young Child Feeding Practices (0-23 months)**

S. No	Questions	Responses and Codes
1	Screening of children for MUAC	Yes
		No
		Don't know
2	After delivery when did mother first put the child to the breast?	Between 1 to 5 hour 1
		Between 6 to 23 hours 2
		More than 24 hours 3
3	Did you give colostrum to your child?	Yes
		No
		Not sure
4	Is child still being breastfed?	Yes
		No
		Not sure
5	Immediately after birth what was the first thing given to the child?	Honey 01
		Glucose water 02
		Plain water 03
		Breast milk 04
		Formula milk 05
		Packet / fresh milk 06

		Tea (Black/ green/ milk 07
		Goti 08
		Others (specify) 09
6	How old was the child when other milk /drinks including water were introduced, in addition to mother's milk?	Months <input type="text"/> <input type="text"/>
		Days <input type="text"/> <input type="text"/>
7	What was the mode of feeding milk to the child?	Bottle with nipple 1
		Cup / glass 2
		Spoon 3
		Other (specify) 6
8	At what age child was given liquids (water, tea, etc.) other than breast milk?	Days <input type="text"/> <input type="text"/>
		Months <input type="text"/> <input type="text"/>
9	At what age the child was given first semisolid / solid food?	Days <input type="text"/> <input type="text"/>
		Months <input type="text"/> <input type="text"/>
10	Can your child drink milk from a bottle?	Yes
		No
		Don't know

#### 4: Health and Hygiene Practices


1	What is the source of drinking water for your family members?	Unprotected well
		Protected well
		Piped water

		Public tap
		Tube well / bore hole
		Protected spring
		Unprotected spring
		Rain water collection
		Other (specify)
2	<b>Do you gratified with the supply water?</b>	Yes
		No
		Partly
		Not sure
3	<b>What is the purpose you are not gratified with the supply water?</b>	Water not enough
		Long queue
		Distance is very far
		Supply is not regular
		Taste is very bad
		Warm Water
		Quality is bad
		Have to pay
		Any Other
		Not sure
4	<b>Do you treat / purify the water for drinking purpose</b>	Yes 1
		No 2

		Don't know 3
5	If Yes, what method is used to treat the water for making it safer?	Boiling
		Chlorination
		Staining through cloth
		filter Water
		Let the water stand and settle
		Other
		Not sure
		Flush and piped system
6	What kind of toilet facility does this household use?	Flush to septic system
		Pour-flush to pit
		VIP/simple pit latrine with floor/slab 04
		Composting/dry latrine 05
		Flush or pour-flush elsewhere 06
		Pit latrine without floor
		Service latrine 08
		Hanging toilet/latrine? 09
		Trench or ditch 10
		Kenarab or traditional latrine 11
		Deran12

		No facility, field, bush, plastic bag 13
		Number <input type="text"/>
7	How many members of the households share this toilet?	Yes 1
8	Are there any <3 years old children in your household? (If 'No' skip Q7)	No 2
		Through latrine
9	Last time when your <3 years old baby passed stool, how did you dispose it off?	Put into latrine
		Buried
		Thrown garbage
		Put/rinsed into drain or ditch
		Left in open
		Other
		Don't know
		Only water 01
10	How do you clean your hands after defecation?	Soap and water 02
		Other (specify) 3
		Don't wash 4
		Yes 1
11	Observe if soap is available at the hand washing place	No 2
		Place not accessible for observation 3

## 5: Knowledge Attitude and Practices Regarding Micronutrients

1	Have you heard of Vitamin A?	Yes 1
		No 2
2	In your opinion, which foods contain Vitamin A?	Liver
		Meat product
		Egg yolk
		Carrots
		Green leafy vegetables
		Fruits
		Dairy products
		Others
		Not sure
3	What health problems may occur due to Vitamin A deficiency?  	Night blindness 01
		Dry and scaly skin 02
		Growth retardation 03
		Vulnerability to infections 04
		Abortions 05
		Still births 06
		Others (specify) 07
		Don't know 08
4	Have you ever heard of Iron in food or Iron	Yes 1

	supplement?	No 2
5	In your opinion what foods are rich in Iron?	Red meat (beef, mutton)
		Chicken
		Liver
		Dairy products
		Egg yolk
		Green leafy vegetables
		Others
		Not sure
6	Due to Iron deficiency, what health problems may occur?	Anemia 01
		Chicken 02
		Growth retardation 03
		Breathlessness 04
		Lethargy 05

		Vulnerability to infections 06
		Others (specify) 07
		Don't know 08
7	Have you ever heard about Iodine in food / salt?	Yes 1
		No 2
8	In your opinion what are the foods that are rich in Iodine?	Fish 01
		Meat 02
		Liver 03
		Dairy products 04
		Vegetables 05
		Iodized salt 06
		Others (specify) 07
		Don't know 08
9	Due to Iodine deficiency, what health problems may occur?	Goiter
		Cretinism
		Brain damage
		Impaired growth
		Abortions
		Still births
		Others
		Not sure
10	Is iodized salt being used in your household?	Yes 01

		No 02
11	If iodized salt is not used, ask reasons for not using it.	Expensive 01
		Not available 02
		Bad taste 03
		Family planning (taboo) 04
		Ill effects on health 05
		Others (specify) 07
		Don't know 08
12	At what age the child was given liquids (water, tea etc.) other than breast milk?	Days <input type="text"/> <input type="text"/>
		Months <input type="text"/> <input type="text"/>
13	Immediately after birth what was the first thing given to the child?	Honey 01
		Glucose water 02
		Plain water 03
		Family planning (taboo) 04
		Breast milk 05
		Packet / fresh milk 06
		Tea 07
14	In the past [1 month], do you understand that your home would not have sufficient diet?	Yes 01
		No 02
		Sometimes 03
15	Are micronutrients important?	Yes 01
		No 02

		Sometimes 03
16	What are the effects of malnutrition?	
17	Are micronutrients important?	Yes 01
		No 02
		Sometimes 03