

POVERTY AND ENVIRONMENT OF SWABI TEHSIL



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POVERTY AND ENVIRONMENT OF SWABI TEHSIL

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Submitted in partial fulfillment of the requirements for the Master of
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Dated

In the name of



ALLAH

You shall be questioned by him for (the use of) your eyes, ears and minds, each of these.

(AL-QURAN 17; 36)



In the name of Allah, The Most Merciful and Beneficent.

DEDICATION

This thesis is dedicated to my loving Mother, Wife, Lovely Son, Sisters, especially my Late Father and beloved Teachers. Who really encourage me and supported me in every field of life.

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FINAL APPROVAL

It is certified that The MS thesis title Poverty and Environment of Swabi Tehsil by Mr. Muhammad Shahab 68-FBAS/MSES/F09 student of International Islamic University, Islamabad is approved for the M.S Degree in Environmental science.

COMMITTEE

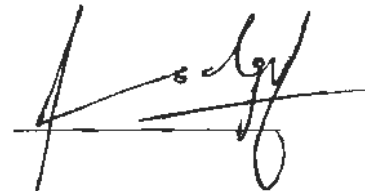
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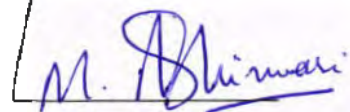
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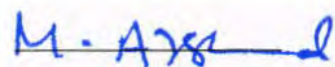
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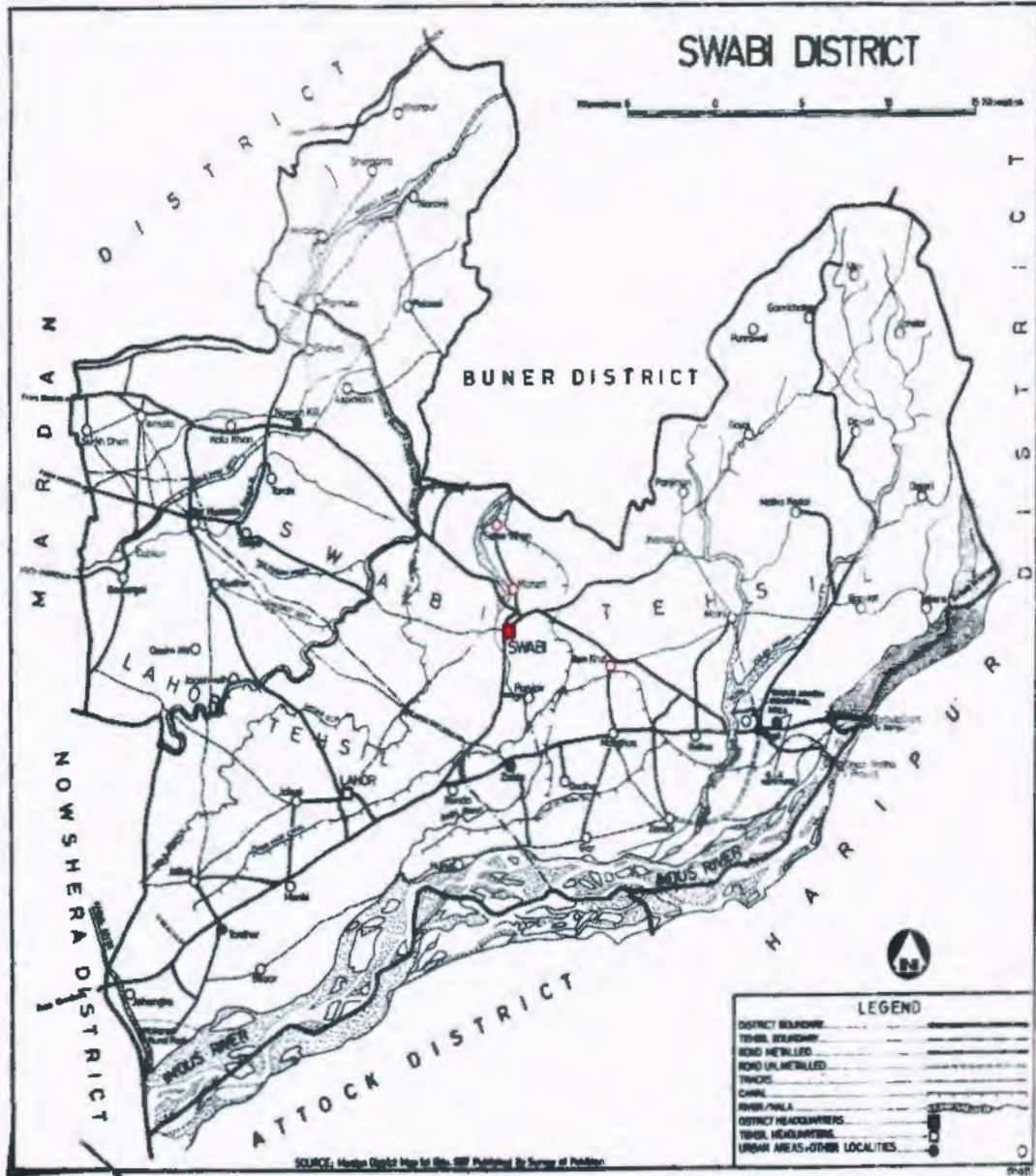
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ABBREVIATIONS:

DHQH	District Head Quarter Hospital
DES	Department of Environmental Science
DR	Doctor
DF	Degree of Freedom
ETC	Etcetera
FBAS	Dean Faculty of Basic and Applied Sciences
GIK	Ghulam Ishaq Khan
IIUI	International Islamic University Islamabad
KPK	Khyber Pukhtonkhwa
M	Meter
MM	Millimeter
MR	Mister
N	Number
NRM	Natural Resource Management
PIDE	Pakistan Institute of Development Economics
RS	Rupees
SIG	Significant
T.V	Television
US	United State
UN	United Nations
US \$	United State Dollar



Abstract

The word "Poverty" and "Poor" came from Latin Pauper "poor", which originally came from Pau- and root of Pario, i.e. "giving birth to not much" and referred to unproductive farmland or livestock. Poverty and environment is a vast subject which is need a lot of attention poverty is minimize by proper utilizes of environmental resources and environmental protection is takes place due to poverty minimizing. This thesis analyzes the interrelationships between poverty and the environment in Tehsil Swabi identifying the major factors underlying environmental degradation, it traces why and how this degradation is causes by poverty. Governmental and community-initiated attempts at environmental protection and also examined the view that due to poverty and the meeting of subsistence needs the poor use natural resources more intensively and hence cause them to degrade. Other factors contributing to environmental degradation, impacts on live stock, effects on income and impacts on health which is compounded by poor management, corruption etc. It needs proper management so that poor spend their lives comfortably along with environmental protection.

CHAPTER - I

INTRODUCTON

The word "poverty" and "poor" came from Latin word Pauper mean poor which originally came from Pau and Pario e.g; "giving birth to not much" and referred to non productive farmland or livestock.

Poverty is the conditions of lacking full economic access to essential human needs such as food, shelter, health, education and pure water for drinking. Poverty is the major problem of the world. Currently this has been estimated that over one third of the population of Pakistan is living under poverty line. It is mainly higher in rural areas of Pakistan like the selected research area as compared to urban areas due to lack of basic amenities, where people are in a state of deficit with regards to basic facilities of life as health, education, housing, sanitary, human rights and income. (Bhutto and Bazmi, 2007)

The word environment comes from the French verb environ, to surround, and means surroundings. It includes all the conditions, circumstances and impacts surrounding and organisms. Environment is taken to means all those which are physical and chemical, organic and non-organic components of the air, soil, and water. Environment is the aggregation of external conditions that influence the life of an individual or population, specially the life of beings, environment ultimately determines the quality and survival of life.

1.1 Environment

Environment is the combination of the following components;

- Soil or lithosphere environment
- Water or aquatic or hydrosphere environment
- Air or atmosphere environment
- Fauna
- Flora

When these components of the environments are disturbed the damage occur to become pollution like soil pollution, water pollution, air pollution as well as noise pollution and ecosystem is disturbed so damaging of ecology takes place. Environmental pollution creates a lot of problems like health, sanitation, pure drinking water, fresh air and toxic soil which creates automatically poverty. These problems are takes place due to interfering of human beings and the result is poverty and it's a common sense phenomenon that a person die from poverty how who save environment so it is very much needed to eradicate the poverty first of all. For example if we manage solid waste properly so the protection of environment occur the health problem and soil and water protection is also takes place and earning of money too. Another way of environmental protection is to stop deforestation and give protection to forest, fuel wood and timber which can leads to poverty eradication.

TYPES OF POVERTY

Poverty may be:

(a) Absolute poverty (b) Relative poverty

1.2.1 Absolute Poverty

It refers to a condition which is consistent over time and between countries. An example of an absolute dimension would be the percentage of the population eating less food than is required to sustain the human body (about 2000-2500 calories/day for an adult men) economic view of poverty may focus on object needs, typically including the requirements of daily life, such as food, clothes, houses, pure water for drinking. Poverty in this sense may be understood as a condition, in which a person or a community is poor of the basic needs for a minimum standard of well-being and life, particularly as a persistent lack of wealth and income inequality. The term “absolute poverty” is sometimes called as extreme poverty.

Absolute poverty is defined by the UN as “severe deficiency of basic human needs. It depends not only on income, but also depends upon access to services” someone poor of two or more of the following is said to be in absolute poverty. (Andaleeb and Farida, 2008)

- Food
- Shelter
- Safe drinking water & Health
- Education
- Sanitation facilities
- Access to benefits

1.2.2 Relative Poverty

It views poverty as socially defined and dependent on social context. Income inequality is a relative measure of poverty. Relative poverty measurements include comparing the total assets of the poorest 1/3 of population with the total assets of the richest one percent of the population.

There are several different measurements of income inequality. The World Bank defines extreme economic poverty reduce from 28 % in 1990 to 21 % in 2001.

The 2007 World Bank report "Global Economic Prospects" predicts that in 2030 the number living on less than the equivalent of \$1 a day will fall by half, to about 550 million. The Africa in 2030 will be larger ratio of the poorest people of the world. (Andaleeb and Farida, 2008)

1.3 Linkages of Poverty and Environment

Inspite of environmental degradation we are still left with a number of plants, trees or shrubs either naturally grown or cultivated. Each plants gives us many wealth such as food, medicine, fibers, fodders or manures, even many industrial raw materials. But we don't utilize those wealth from plants. But as day pass by use of synthetic materials became more common ensuring environmental degradation and ensuring no fuel society for our descendents. Not that we do not neglect the plant kingdom totally. We use upto a limited extent like food, Fuel wood, timber etc, but in the process we also try to destroy plant kingdom. (Gosh, 1993)

The association between poverty and environment are discussed bellow with their impacts on each other;

1.4 Impacts of Environment on Poverty

Intensive farming often leads to fall down of soil fertility and decreased agricultural production and increased poverty. Deforestation as exemplified by the widespread rural poverty is an attributed to non-sustainable tree harvesting. Natural factors include climate change or environmental changes as such. The climate also limits what crops and farm animals may be used on similarly fertile lands. Presence or absence of natural features helping or limiting

communication, such as mountains, deserts, rivers or coastline. Geographic factors, for example access to fertile land, fresh water, minerals, energy, and other natural resources.

1.5 Impacts of Poverty on Environment

Environmental problems are not new but the accelerating pace and changing the character of human impact on environment is alarming. However there are some priority areas that affect the sustainable development. They are;

- Population growth
- Conservation of resources
- Nutrients
- Water logging and salinity
- Deforestation
- Public participation
- Transformation of agriculture, and
- Poverty

1.5.1 Poverty

The most disturbing problem of today is Poverty both in human and economic sense, alienation and imbalanced eco development including human ecology. The developing countries in general are imitating the developed countries and in such a process instead of reducing the impact of such a problems to any considerable extent have added some non-existing component to them.

This statement stands confirmed that we are poor because we are actually and really poor.

Eradication of poverty demands equitable distribution of resources both at global and national levels. For this purpose the developing countries have to relies on aid less and do the best that

can accelerate economic and social development as well as save their environment on their own. This is only possible when they cooperate with each other more and more and get the best out of their human and material resources.

The question arises that the developing countries can compel the industrial states to advance loans for their developmental as well as environmental purposes. It seems self-explanatory because the developing countries have no means of forcing the industrial states to make larger contribution of environment related development, they may not mean much to developing countries. They may pay more for environment and less for other development.

The only solution seems to be that we should relies on our own limited resources and curtail non developmental expenditure to the best possible extent. We should also put a limit to our luxurious living. If we are unable to do so, we must await dark future not only for ourselves but also for the coming generation too. (Aminullah, 1992)

1.6 Environmental Inequality

To observe or claim an environmental inequality is to point out that an aspect of the environment is distributed unevenly amongst different social groups differentiated by social class, ethnicity, gender, age, location, etc.

Environmental inequality refers to the unequal distribution of environmental risks and hazards and access to environmental goods and services.

1.6.1 The Rise of Environmental Inequalities

The rise of environmental inequalities as contemporary ecological crises, the threat to social justice posed by environmental inequalities rises.

The unequal distribution of environmental quality between individuals and groups (defined in racial,

ethnic and social terms), whether negatively (exposure to environmental nuisances, risk and hazard) or positively access to environmental amenities: fuel poverty can be understood as the result of unequal social access to the natural amenity.

The unequal effect of environmental policies, i.e. the unequal distribution not of environmental good or bad, but of the income and social effect among individuals and groups of environmental public policy, for instance regulatory or tax policies related to gas emissions. The unequal access to environmental policy-making, i.e. the unequal involvement and empowerment of individuals and groups in decisions regarding their immediate environment. Impact inequalities the unequal environmental impact of different individuals and social groups related to their income and/or lifestyles.

1.6.2 Effects of Environment Inequality on Livestock

The life of respondents depends on the livestock that use to produce food and energy. But the current trajectory of usage is deeply disturbing due to environment inequality. That it is possible to combine high average incomes with sustainable livestock use. Poor families live alongside their livestock in filthy environment which is the signs of wealth and progress, 41% of people of the study areas having cow, 24% are goats, 23% are buffalo, and 10% having sheep in their houses.

1.7 Income Inequalities Affect Environmental Degradation

Greater inequality increases the rate of environmental time preference for both poor and rich. In fact, when inequality increases, the poor tend to overexploit natural capital, because they perceive it as the only resource they have and the only source of income that can help them secure their survival. This leads rich people to prefer a policy that consists in exploiting the environment and investing the returns abroad rather than investing in the protection of local

natural resources. Therefore, an increase in inequality induces both rich and poor to degrade more their own environment. People cut the hills with cutter to collect the stone for construction which earn money which is a threat to environment in my research area Kala village. The rich people are done that process on poor people both are involved in the environmental degradation.

Greater inequality, rich people are likely to have large political power and can heavily influence decisions on environmentally damaging projects. Such decisions are based on the competition between those who benefit from the environmentally degrading action and those who bear the costs of it. Rich people are generally the winners, while poor people tend to be the losers of the investments that have an ecological impact.

Natural resources are the fundamental wealth on which life depends. The current trajectory of environmental degradation is a threat to all human prosperity, but the impact of degradation falls hardest on poor villages and people, in two ways:

1.7.1 Poor People Depend Most on Natural Resources for their Livelihoods.

People of the research area facing hunger live in rural areas. They depend mostly on farming, also on fishing, and forests for their livelihoods, often surviving on marginal lands that are most prone to flooding and drought. Food producers, in particular, tend to depend on marginal land and rain-fed agriculture, and so are among the most affected by environmental degradation such as water stress and declining soil fertility.

1.7.2 Resource Degradation Exacerbates Social Conflict over Resource Use.

Poor rural communities often lack secure right of access to and use of the arable land, water, forests, and fishing grounds that they rely upon for their livelihoods. In the face of rising pressure

on environmental resources, such as growing water stress, deforestation, and declining soil fertility, low-income communities often lose control over and access to those resources.

1.8 Effects of Income Inequality on Health

Income may be an important determinant of population health, it allows them to buy better nutrition or medical care or reduces their stress. Respondents of my research areas in different villages taking fruits eating per week and monthly income that the eating rate of fruits is increasing from the increasing of monthly income of the respondents so the health status is good of high income areas and bad of low income areas its due to income inequality. If the relationship between an individual income level and its health status is taken, an extra unit of income will have the same effect on health regardless of whether it goes to the rich or to the poor.

There is no hospital and dispensary in the villages of Saleem Khan, Mian Dheri and Kala so, their people face a lot of difficulties. Only one dispensary is working in health sector in the village Baam Khel where no ladies Doctor and no proper treatments are present where use animal medicine to human beings. The district head quarter hospital Swabi is located in main city ada which is not working very well.

The mechanism here, very basically, is a political one. When you're poor, your focus is not on the complex issues of the environment or health and how the environment affects your economic future. You're focused on survival. You're focused on income and economic growth. There is a two-way relationship between environment and inequality. So while environmental degradation contributes to inequality, inequality can also contribute to environmental degradation and affects on health occur.

The respondents of my research areas in different villages having 69% respondent shows exercise which are careful in their health and 51% response are come in nil categories which are not careful in health. In this case taking a unit of income from the rich and giving it to the poor will lower health status among the rich and raise it among the poor by exactly equal amounts, leaving the global health unchanged. The reality is that standard economic predict that the health gains from an extra unit of income should diminish as income rises, in other words, health should be a concave function of income. That is, a transfer of a unit of income from the rich to the poor might improve aggregate population's health status. The effect of economic inequality is likely to depend to some extent on the geographic proximity of the rich to the poor. The chronic stress provoked by this comparison may lower resistance to some diseases and cause premature death. If individuals evaluate their well-being by comparing themselves to others with more income than themselves, increases in economic inequality will engender low control, insecurity, and loss of self esteem. Income inequality may worsen population health is psychosocially. Inequality can impact health through social comparisons by reducing social capital, trust and efficacy. Income inequality worsens health because a low ranking produces negative emotions such as shame and distrust that lead to worse health via neuro-endocrine mechanisms and stress-induced behaviors such as smoking, excessive drinking, taking dangerous drugs, and other risky activities. Respondents of my research areas in different villages having 58% of respondents eating Naswar which is a big bad habit in Patans Pakhthuns. 13% respondents show Smoking, 9% eating Toffees, while 40 of respondent show no addiction. It's all are due to inequality environment.

1.9 Income Inequality Correlated with Social Problems

Income inequality has been extensively correlated with health and social problems, life expectancy, obesity, mental health, drug use, educational performance, teenage births and

violence. Environmental degradation appears to be another side effect of economic inequality and analyses show there is a negative correlation between income inequality and environmental sustainability the higher the income inequality the worse the environmental indicators such as waste production, meat and water consumption, and biodiversity loss.

OBJECTIVES

1. To review poverty in Swabi
2. To assess environment

CHAPTER- II

GENERAL DESCRIPTION OF THE STUDY AREA

2.1 Introduction:

Swabi district was created on 1st July 1988, prior it has the tehsil of Mardan district since its creation in 1937. Before it, it was the tehsil of Peshawar. Today Swabi district has four subdivisions namely Swabi, Chota Lahore, Razar and Topi.

(Population Census Organization Peshawar, 1998)

2.2 Location

The study area lies between 33°-55' and 34°-23' north latitudes and 72° -13' and 72° -49' east longitudes. (District Census Report of Swabi,1998)

2.3 Area

The total area of district Swabi is 1,543 sq km and total area of Swabi tehsil is 881 sq km. (District Census Report of Swabi, 1998)

2.4 Soil Texture

The arable soil of Swabi district has developed either from river alluvium or loess plains. Texture of river alluvium ranges from sandy loam to loamy sand, loam approaching clay loam. The soil of loess plains in texture from silt loam to silty clay loam or silty clay.

2.5 Geology

Rock of the study area represented by chlorite, quartz, mica schist, graphitic schist, marble, quartzite, and soil is a variable composite of clay, silt, sand and gravel materials found in the areas. The hills of the study area mainly consist of igneous and sedimentary rocks. The hills of Maneri are very much famous for marble and the hills of Kala are mainly slates which is economically very important where the poor people extracted these slates and earn money to survive.

2.6 Mining

The project area is enriched in natural resources. Sand stone marble and gravels are available in large quantity. These resources are managed properly by using natural resource management (NRM) and give these resources to the industries by which government earning a lot of money. Thus the people of the area get services and will be increasing their economy. The lime stone and slates are the general area of income. The lime stone is used for crusher and construction of roads, where the sand stone and slates are used for home. Mining activities have badly eroded the hills of the study area that not only affect the aesthetic value of the area but also degrade the flora and fauna of the project area.

2.7 Climate

The study area has extreme climate. The climate of the study area is sub-tropical and semi-arid. Dry air flows from the North during winter, spring and fall. During the Summers Southerly maritime air causes South West summer monsoon, resulting in increased rain fall and humidity. (Pakistan Meteorological Department Peshawar, 2003)

2.8 Temperature, Rainfall and Relative Humidity

The summer season is extremely hot. A steep rise of temperature is observed from May to June. Even July August and September recorded high temperature. The temperature rises to its maximum in the month of June, due to intensive cultivation and being a hilly area. A rapid fall of temperature is recorded from October onward. The coldest month is January.

The maximum rainfall is received in July, during which the weather become hot and humid. The relative humidity is quit high throughout the year while the maximum humidity has been recorded in December and January. There is no Metrological station in the District Swabi. The climatic condition has been studied with the help of data available at Pakistan Meteorological Department Peshawar. The mean maximum temperature, precipitation and relative humidity recorded at Risalpure station is given in the following table.

(Pakistan Meteorological Department Peshawar, 2003)

Table 1: Month wise mean Temperature, Precipitation and Relative Humidity, 2003:

Month	Maximum temperature(C ⁰)	Minimum temperature(C ⁰)	Rainfall (mm)	Relative Humidity (%)	
January	18.6	2.1	28.0	93	48
February	18.9	5.2	173.0	86	48
March	23.7	10.7	91.0	84	51
April	30.6	15.9	67.0	72	47
May	35.1	18.9	20.0	56	31
June	41.1	24.6	6.0	64	28
July	36.8	24.8	180.0	72	54
August	35.3	24.5	123.0	73	55
September	34.2	22.9	42.0	75	54
October	31.0	13.7	16.0	84	49
November	24.6	6.7	12.0	90	51
December	19.9	2.7	51.0	93	53

Source: (Pakistan Meteorological Department Peshawar, 2003)

2.9 Hydrology

The river Indus rises from the north-east mountains of Gadoon area flowing with the eastern and southern boundary of Swabi and entering to the districts of the Nowshera and Attock at Kund.

All villages are good irrigation system and in main Swabi the irrigation department is present

which is fulfill the requirement of all villages. The tube well in the BaamKhel village which could not fulfill the requirement of water. The area is mainly barani (rain fed) which is not suitable for agricultural activities.

2.10 Agriculture Crops

All villages are depends upon mostly on agriculture. Maize, wheat and tobacco and sugar cane are the major crops production which is economically very much important.

2.11 Health

There is no hospital and dispensary in the villages of Saleem Khan, Mian Dheri and Kala so, their people face a lot of difficulties. Only one dispensary is working in health sector in the village Baam Khel where no ladies Doctor and no proper treatments are present where use animal medicine to human beings. The district head quarter hospital (DHQH) Swabi is located in main city ada. Which is now shifted into Sha Mansoor Town name Bacha Khan Medical Complex. (Field survey)

2.12 Forest

The ratio of Forest in the area is negligible however, many kind of vegetation i.e. shrubs, herbs and tree are present. Many herbs and shrubs are used in medicine.

2.13 Communication

There is a chain of Metalled roads in the area small roads/link roads are spread throughout the area. The roads are linked from markets to field plays an important role in the development of agriculture and reduced poverty which is very important for stability in environments.

Swabi Maneri villages are good communicated road on which buildings, shops and markets are

present. Where Kala and Bamkhel also good roads just Saleem Khan is of very bad communication. So it is observed that the main roads are much far away kindly government should provide the better transport facilities to them. (Field survey)

2.14 Education

University of Swabi is a very important step to the promotion of education in the area. Another important institute is also present in area which is Ghulam Ishaq Khan Institute of engineering and technology (GIK) Topi.

The Swabi Maneri and Bamkhel Villages has many public sectors and private sector school and colleges. The Saleem Khan has low literacy rate about 10% and most of the people are uneducated. In short, the ratio of female education is very low. (Field survey)

2.15 Tourism

Swabi is very famous for the love story of Yusuf Khan and Sherbano. Their tombs are present in the village of Shera Ghund on the top of Karamar Mountain. Which is a historical site for the visitors.

Kund Park which lies on the banks of the Rivers Indus and Kabal, is located in Swabi. Which is an economically and tourist attraction site in the study area. Tordher is also very important place in the area where a famous tomb of Gul Lala is present which is a Holly buzarg. It has a population of nearly 50,000 people. There are 18 primary schools and three high schools.

Tarbela Dam is also a picnic site in the area, which is present in the Topi Tehsil of District Swabi. Mahaban Hills in Gadoon has a scenic beauty like Swat and other hilly areas like PirGalai resort, which is 6,000 feet (1,800 m) above sea level. From here you can see easily Mansehra, Buner and Kaghan hills.

CHAPTER – III

LITERATURE REVIEW

The assumption of poverty as a major cause of environmental degradation. Examining five environmentally harmful natural resource management practices in the hillsides, it shows that the immediate agents of environmental degradation are the nonpoor farmers, not the poorest. It argues that to analyze the causal links between poverty and environment, a distinction between poverty as a state of deprivation and poverty as a relational phenomenon is necessary. Finally, it warns that the often strategic reference to poverty as the major cause of environmental degradation made by non poor and poor farmers may lead to negative environmental impacts. (Ravnborg, 2003)

The link between poverty and environment is often mentioned in the "sustainable development" debate, but is seldom systematically explored (Lele, 1991). The literature that treats the link usually focuses on the "vicious circle" between poverty and degradation; the circle is Malthusian in inspiration, where farmers, pushed by population increase and poverty, extend cropping onto fragile marginal lands, degrading them. The latter reduces yields which further impoverishes farmers (Dasgupta and Maler, 1994; Pearce and Warford, 1993; Mink, 1993). The implication of the focus on the vicious circle of poverty and degradation is that poverty alleviation will necessarily reduce degradation of the environment, and its inverse, that arresting and reversing environmental decline will help the poor (Leonard, 1989; Cleaver and Schreiber, 1994).

In the poor and other income groups are equally resource dependent and also show that resource degradation is associated with poverty. Our historical and institutional analyses provide alternative explanations for resource degradation. Selective and rotating ownership patterns, starting with the 17th century, provided limited incentive for resource conservation. (Khan et al. 2009)

Fometer and vermaat reveal that the community forestry does have the potential to contribute positively to the improvement of livelihoods environment and poverty reduction. (Fometer and Vermaat, 2002)

World Bank defines poverty means hunger, lack of access to medical facilities and poor access to basic services such as electricity and water supply and access to well environment. The minimum level is called poverty line. Poverty line vary in time and place, every country uses line which are appropriate to its level of developments, social norms and values. When estimating poverty worldwide, the same reference poverty line has to be used and expressed in a common unite across countries, therefore the purpose of global aggregation and comparison, the World Bank uses reference line set at US \$ 1 and US \$ 2 per day in 1993. (World Bank, 2001)

He reveal that to increased foreign trade and large term capital flow, affects the lives of rural poor in developing countries (their capacity is works, consumers, recipients of public services or used common property resources) globalization can not only caused many hardship for rural poor but it can also open some opportunities, which some countries can utilized and other do not largely depending on their domestic, political and economic institutions. (Bardhan, 2006)

He stated with a critical international perspective on water and poverty which represent environment and poverty in US. It shows that the US declining rule in international water during the late twenty century. (Wescoat , 2007)

He reveals in his research paper that economist at the World Bank, easterly observed how resources and advice provided by the bank failed to improve the lives of the poor and poor countries like Pakistan, easterly considers different explanations for the development failures. He places the blame for persistence of poverty in poor countries like Pakistan on government and political elites. (Hillman, 2002)

The paper reveals that the policy on decentralization forest management in Nepal, informed by experiences from the middle hills. Effective and equitable user groups in the Terai. The case study evidence from west-central Terai suggests that the combination of high forest value and weak institutional control mechanisms create opportunities for local people. To siphon off substantial shares of the benefits generated by valuable local forests. (Iversen et al. 2006)

He reveals about the world foremost capture fishery and aquaculture producer. It is also home to the majority of the world fisheries and marine fleet. This radical identifies the socio economic importance of fisheries in the region in term of its contribution to primary export domestic protein consumption, employment and poverty alleviation. (Thrope, 2006)

These both are stated that qualitative analysis of the poverty and environmental degradation in Pakistan indicates that the poor are the most vulnerable to ecological degradation and yet, the absence of basic subsistence makes them predator of natural resources thereby further

exacerbating their vulnerability. They argue that the poverty-environment degradation link reflects unavoidable responses. (Khan and Naqvi , 2000)

Point out that forest management in Pakistan has led to the divergence of individual versus social objectives with regard to the use of forest resources. The most important factor in this development is commercial timber extraction in which influential extractors collude with forest department officials. Co-opting officials has become easier as stagnant salaries have led to increased corruption. Forest fines and penalties have also become meaningless, as they have not kept pace with rising timber and fuel wood prices. Attempts to right price/tax the use of environmental resources is politically challenging as vested interests resist policy reform threatening their economic profits. They also indicate that the lack of clearly defined resource rights exacerbates the impact of perverse incentives. (Khan and Pervaiz, 2001)

Points to various institutional failures that have led to forest degradation in Swat, Pakistan over the years. These include departmental malpractice, opaque resource rights, and judicial tardiness. He describes the tension between customary and statutory law and the progressive deterioration in conflict resolution mechanisms over time. He concludes that extended legal, judicial and governance lapses have been the key factors in forest degradation. (Sultan , 2005)

CHAPTER – IV

METHODOLOGY

This research study has been conducted according to a proper methodology .The following steps are included.

4.1 MEETING

First meeting was held with the respected sir, Dr. Safiruddin, Assistant Professor Department of Environmental Sciences IIUI at that time now a day Registrar of Pakistan Institute of Development Economics (PIDE), Quaid-e- Azam University Campus Islamabad. He assigned me a topic Poverty and Environment of Swabi Tehsil along with their best supervision from their experiences they provide me some related information about the research topic through the meeting I got useful information and guidance about the research topic.

4.2 LITERATURE REVIEW

Relevant literatures regarding the poverty and environment have been studied for this purpose. I have visited various libraries including department of Geography and also Library the University of Peshawar, department of Environmental Sciences University of Peshawar department of Sociology and also Library University of Peshawar and central library of International Islamic University Islamabad. The digital labs and library of International Islamic University Islamabad have also been used for the relevant information of my research thesis.

4.3 QUESTIONNAIRE DEVELOPMENT

A questionnaire has been developed for the collection of primary data from the study area. The questionnaires have been designed for respondent of the study areas based on objectives of the

study.

4.4 INTERVIEWS

During collection of data, we meet with individuals or in groups of people who are experts and especially in the relevant field area. I have visited to all those villages which are my selected research areas. Those people asked me about the way of their life style, facilities, health, water and sanitation, income, houses, professions, eat and drinking pattern and waste collection methods which is discussed in next chapter. They also shared the vast knowledge about the poverty and environment.

4.5 ANALYSIS OF DATA

Analysis of the data collected through the literature reviews, questionnaires and interviews were further analyzed to draw out conclusion about the poverty and environment of Swabi tehsil.

4.6 REPORTING WRITING

After data analysis a draft report prepared and shared with supervisor to get his comments about the report. The report was prepared after the incorporation of the comments and suggestions.

CHAPTER -V

DATA TABULATION AND DISCUSSION

In this chapter data was analyzed and discussed which is collected by the Field Survey.

Table 2 : Showing Tenure of Houses of the Respondents.

Respondent s	Frequency	% age
Rented	18	15
Own	101	84.16667
Other	1	0.833333
Total	120	100

Source: field survey

Discussion

The above table indicates the tenure of houses in the targeted areas which shows that the majority of the respondents are living in their own houses (84.16667%), while 15% have rented accommodation, where only one respondent (0.833333%) is living with other condition. Assumption significant if < 0.05 , than both have significant relationship otherwise no relationship so table 5 show that the assumption significant is < 0.05 , so its relationship is present.

Figure 1:

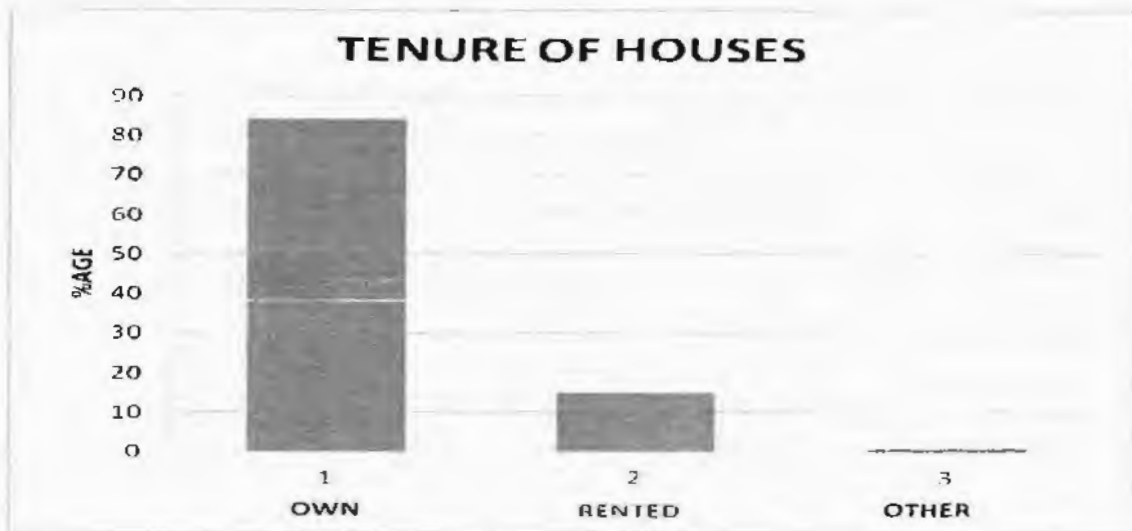


Table 3: Case Processing Summary Monthly Income * Tenure of Houses

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Income * Tenure of Houses	120	100.0%	0	.0%	120	100.0%

Table 4: Monthly Income * Tenure of Houses Cross tabulation

			Tenure of Houses		Total
			Own	Rent	
Monthly Income	Rs. 0 - 5,000	Count	35	13	48
		Expected Count	40.8	7.2	48.0
	Rs. 5,001 - 10,000	Count	21	4	25
		Expected Count	21.2	3.8	25.0
	Rs. 10,001 - 15,000	Count	19	0	19
		Expected Count	16.2	2.8	19.0
	Rs. 15,001 - 20,000	Count	17	1	18
		Expected Count	15.3	2.7	18.0
	More Than Rs. 20,000	Count	10	0	10
		Expected Count	8.5	1.5	10.0
Total		Count	102	18	120
		Expected Count	102.0	18.0	120.0

Table 5: Chi-Square Tests Monthly Income * Tenure of Houses

	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	11.893 ^a	4	.018
N of Valid Cases	120		

Table 6: Showing Monthly Incomes of the Households.

Income (Rupees)	Frequency	% age
0-5000	35	33.65385
5000-10000	21	20.19231
10000-15000	19	18.26923
15000-20000	17	16.34615
20000+	12	11.53846
Total	104	100

Source: field survey

Discussion

The above table shows that most of the people having monthly income 0-5000 rupees i.e. 33.65385%, 20.19231% have 5000-10000 rupees, 18.26923% have 10000-15000, 16.34615%

have 15000-20000, and 11.53846% have above 20000 rupees incomes per month. Table 9 shows that the assumption significant is < 0.05 , so its relationship is present.

Figure 2:

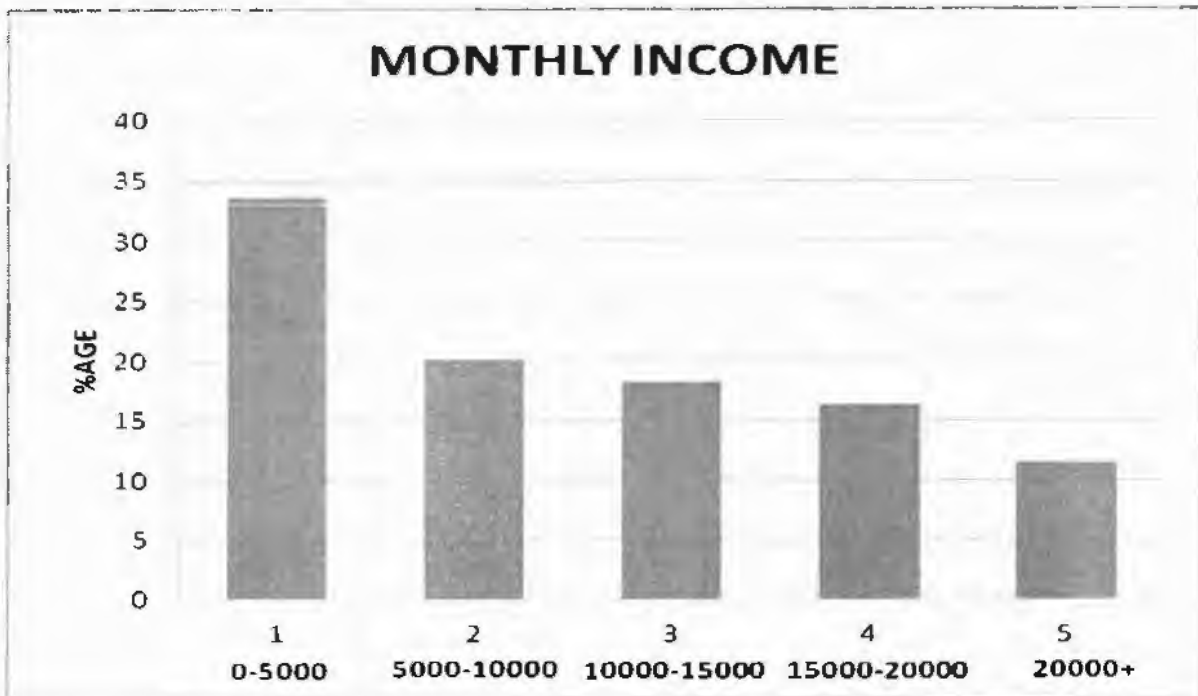


Table 7: Case Processing Summary of Monthly Income * Exercise

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Income * Exercise	120	100.0%	0	.0%	120	100.0%

Table 8: Monthly Income * Exercise Cross tabulation

			Exercise		Total
			No	yes	
Monthly Income	Rs. 0 - 5,000	Count	35	13	48
		Expected Count	26.4	21.6	48.0
	Rs. 5,001 - 10,000	Count	14	11	25
		Expected Count	13.8	11.2	25.0
	Rs. 10,001 - 15,000	Count	7	12	19
		Expected Count	10.4	8.6	19.0
	Rs. 15,001 - 20,000	Count	6	12	18
		Expected Count	9.9	8.1	18.0
	More Than Rs. 20,000	Count	4	6	10
		Expected Count	5.5	4.5	10.0
Total		Count	66	54	120
		Expected Count	66.0	54.0	120.0

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Table 9: Chi-Square Tests of Exercise

	Value	df	Assumption.Sig. (2-sided)
Pearson Chi-Square	13.090 ^a	4	.011
N of Valid Cases	120		

Table 10: Showing Types of Livestock of the Respondents.

livestock	Frequency	% age
Goat	19	24.67532
Sheep	8	10.38961
Cow	32	41.55844
Buffalo	18	23.37662
Total	77	100

Source: field survey

Discussion

41% of people of the study areas having cow, 24% are goats, 23% are buffalo, and 10% having sheep in their houses.

Figure 3:

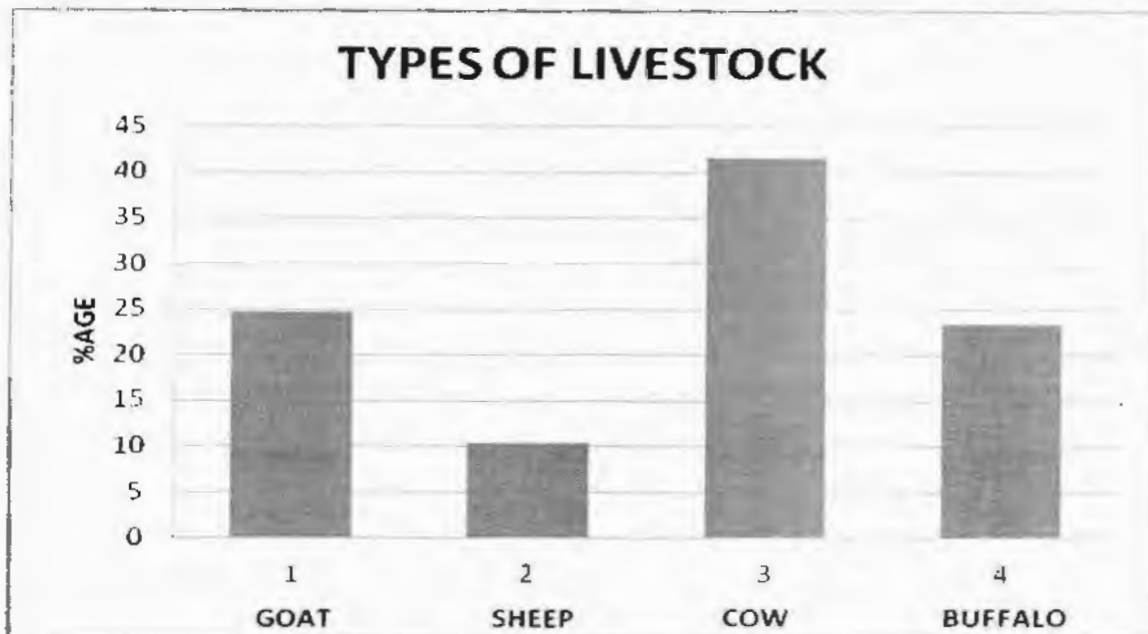


Table 11: Showing Facilities of the Households.

Facilities	Frequency	% age
kitchen	97	21.08696
Wash room	89	19.34783
Toilet	56	12.17391
Gas	19	4.130435
Electricity	114	24.78261
Water	85	18.47826
Total	460	100

Source: field survey

Discussion

Facilities in the houses of the respondent in the study area having 24% Electricity, 21% kitchen, 19%Wash room, 18% Water, 12% toilets, and just 4% gas is available. .Table 14 show that the assumption significant is < 0.05 , so its relationship is present.

Figure 4:

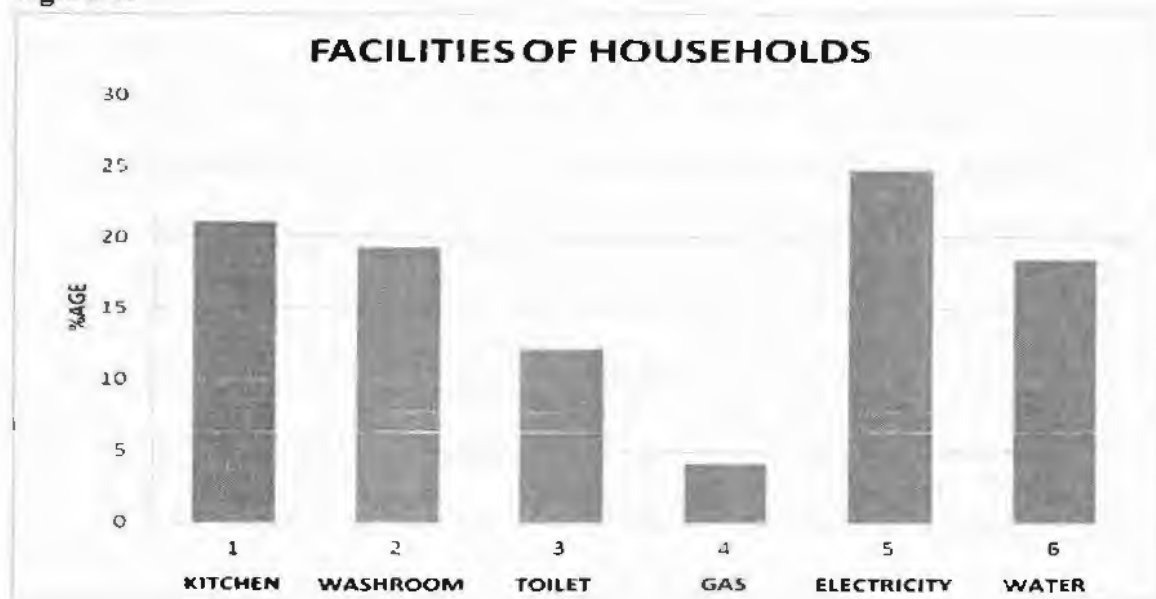


Table 12: Case Processing Summary of Facilities of Houses * Types of Livestock

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Facilities of Houses *	120	100.0%	0	.0%	120	100.0%
Types of Livestock						

Table 13: Facilities of Houses * Types of Livestock Cross tabulation

			Types of Livestock										Total
			All	All with	Buffalo	Cow	Cow & Buffalo	Cow & Goat	Goat	Nil	Sheep	Sheep &	
Facilities of Houses	All	Count	0	0	1	1	0	1	0	13	1	0	17
		Expected Count	.3	.1	1.4	3.5	.7	.1	.8	9.5	.1	.3	17.0
	All with	Count	2	1	8	18	5	0	3	26	0	0	63
		Expected Count	1.0	.5	5.2	13.1	2.6	.5	3.2	35.2	.5	1.0	63.0
	Electricity	Count	0	0	0	0	0	0	0	4	0	0	4
		Expected Count	.1	.0	.3	.8	.2	.0	.2	2.2	.0	.1	4.0
	Nil	Count	0	0	0	0	0	0	0	1	0	0	1
		Expected Count	.0	.0	.1	.2	.0	.0	.0	.6	.0	.0	1.0
	Water &	Count	0	0	0	0	0	0	0	1	0	0	1
		Expected Count	.0	.0	.1	.2	.0	.0	.0	.6	.0	.0	1.0
	Water+ Electricity	Count	0	0	1	3	0	0	2	16	0	1	23
		Expected Count	.4	.2	1.9	4.8	1.0	.2	1.2	12.8	.2	.4	23.0
	kitchen	Count	0	0	0	0	0	0	0	0	0	1	1
		Expected Count	.0	.0	.1	.2	.0	.0	.0	.6	.0	.0	1.0
	kitchen	Count	0	0	0	3	0	0	1	6	0	0	10
		Expected Count	.2	.1	.8	2.1	.4	.1	.5	5.6	.1	.2	10.0
	Total	Count	2	1	10	25	5	1	6	67	1	2	120
		Expected Count	2.0	1.0	10.0	25.0	5.0	1.0	6.0	67.0	1.0	2.0	120.0

Table 14: Chi-Square Tests of Facilities of Houses * Types of Livestock

	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	99.037 ^a	63	.003
N of Valid Cases	120		

Table 15: Showing Expensive Items of the Households.

Items	Frequency	% age
Fridge	67	18.4573
Washing machine	50	13.7741
T.V	50	13.7741
Motor cycle	45	12.39669
Bicycle	70	19.28375
Sewing machine	32	8.815427
Iron	47	12.94766
Car/Tractor	2	0.550964
Total	363	100

Source: field survey

Discussion:

Expensive items in the houses of respondents in the study area are Fridge (18%), Washing machine (13%), T.V (13%), Motor cycle (12%), Bicycle (19%), Sewing machine (8%), Iron (12%), and Car/Tractor (0.55%).

Figure 5:

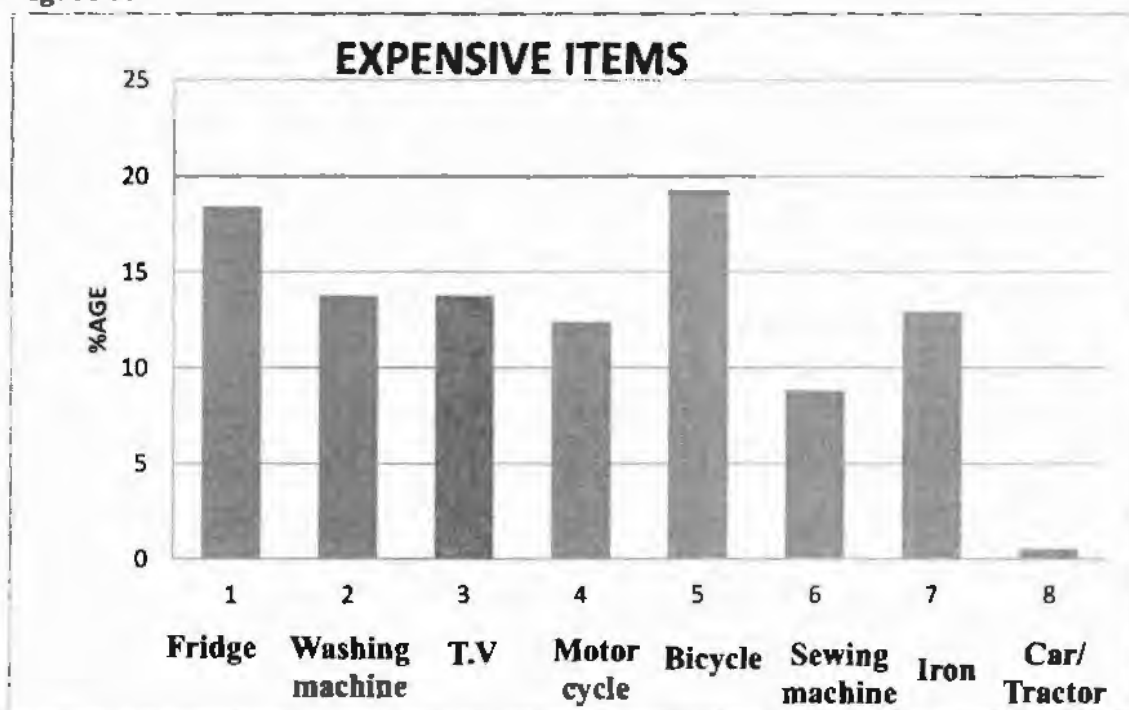


Table 16: Showing the Marital Status of the Respondents of the Selected Areas

Status	Frequency	% age
Married	95	79.16667
Unmarried	25	20.83333
Total	120	100

Source: field survey

Discussion:

The above data shows that most of the people are married in the areas due to early engagement which is 79.16%, while just 20.83% are unmarried. Assumption significant if < 0.05 , than monthly income and marital status have significant relationship, otherwise no relationship found. Its means that it have no relationship because it > 0.05 .

Figure 6:

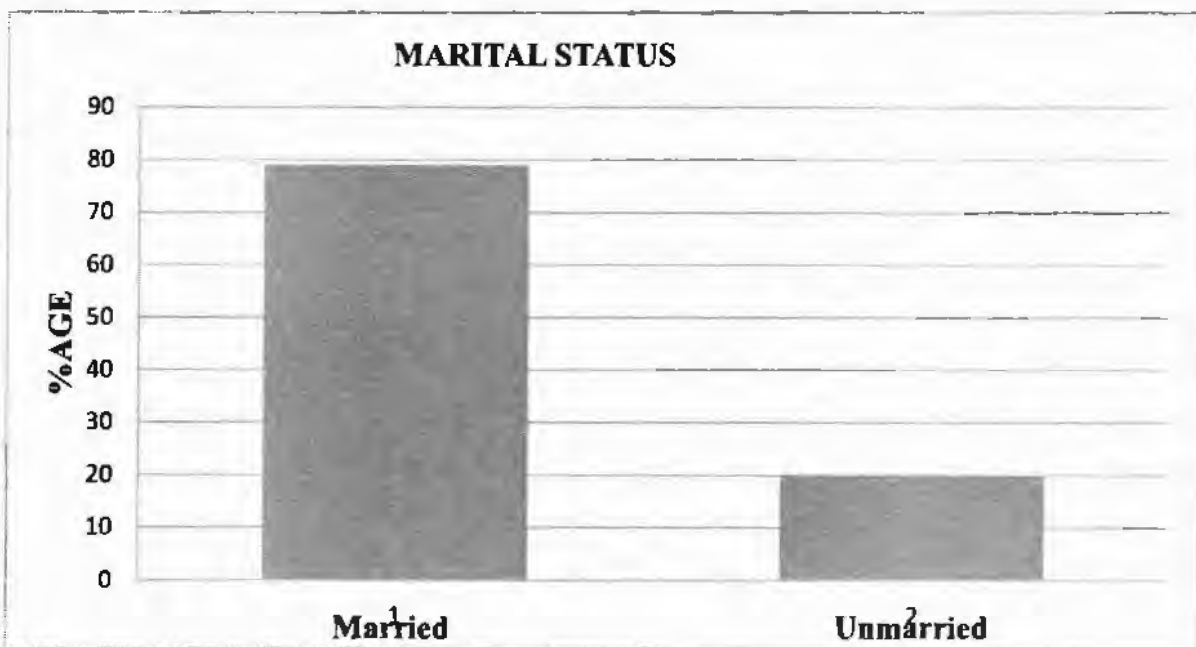


Table 17: Case Processing Summary Monthly Income and Marital status

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Income * Marital Status	120	100.0%	0	.0%	120	100.0%

Table 18: Monthly Income * Marital Status Crosstabulation

			Marital Status		Total
			Married	Unmarried	
Monthly Income	Rs. 0 - 5,000	Count	40	8	48
		Expected Count	39.2	8.8	48.0
	Rs. 5,001 - 10,000	Count	21	4	25
		Expected Count	20.4	4.6	25.0
	Rs. 10,001 - 15,000	Count	13	6	19
		Expected Count	15.5	3.5	19.0
	Rs. 15,001 - 20,000	Count	16	2	18
		Expected Count	14.7	3.3	18.0
	More Than Rs. 20,000	Count	8	2	10
		Expected Count	8.2	1.8	10.0
Total		Count	98	22	120
		Expected Count	98.0	22.0	120.0

Table 19: Chi-Square Tests of Marital Status

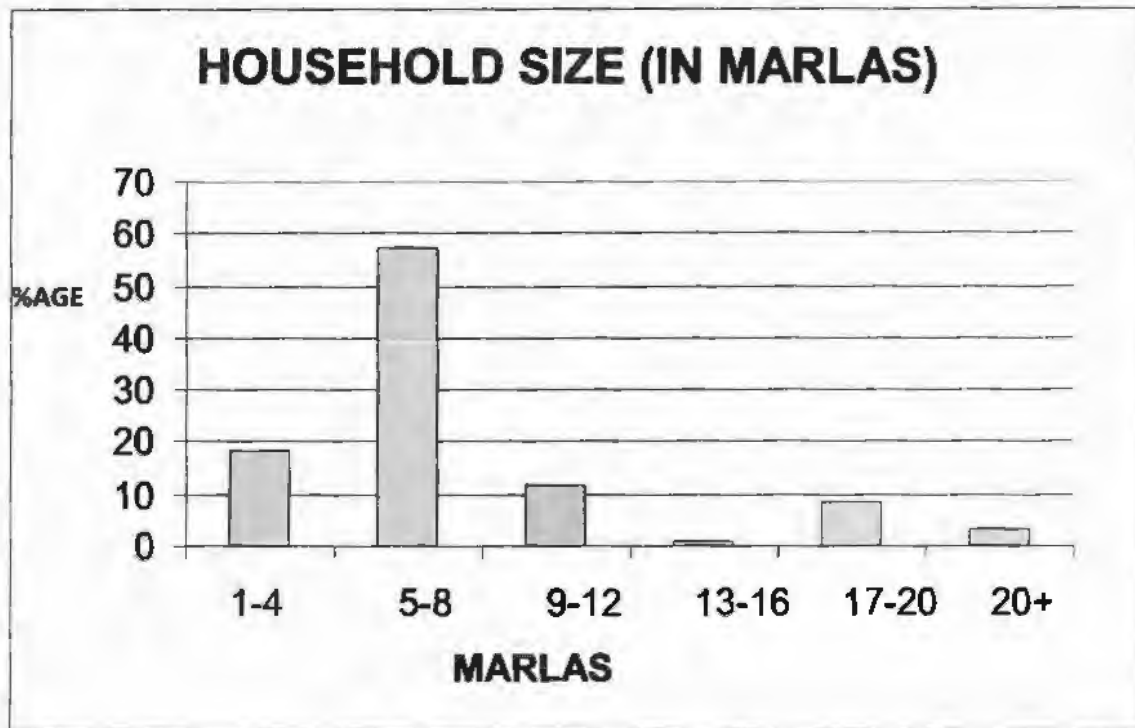
	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	3.052 ^a	4	.549
N of Valid Cases	120		

Table 20: Showing Household Size in (Marlas)

Size	Frequency	% age
1-4	22	18.33333
5-8	69	57.5
9-12	14	11.66667
13-16	01	0.833333
17-20	10	8.333333
20+	04	3.333333
Total	120	100

Source: Field Survey

Figure 7:



Discussion:

The table 20 shows that 18.33% of the respondents have the household size from 1-4, 57.5% are 5-8, 11.66% are 9-12, 0.833% are 15-16, 8.33% are 17-20 and 3.33% have the household size of above 20. Its assumption significant is < 0.05 , so it have significant relationship. It shows from the chi-square tests of household size in marlas and monthly income that the marlas rate of houses is increasing from the increasing of monthly income and decreases from decreases of income of the respondents.

Table 21: Case Processing Summary of Household Size in Marlas *

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Household Size in Marlas * Monthly Income	120	100.0%	0	.0%	120	100.0%

Table 22: Household Size in Marlas * Monthly Income Cross tabulation

			Monthly Income					Total
			Rs. 0 - 5,000	Rs. 5,001 - 10,000	Rs. 10,001 - 15,000	Rs. 15,001 - 20,000	More Than Rs. 20,000	
Household Size in Marlas	1 - 4 Marlas	Count	15	5	4	0	0	24
		Expected Count	9.6	5.0	3.8	3.6	2.0	24.0
	5 - 8 Marlas	Count	25	13	10	15	5	68
		Expected Count	27.2	14.2	10.8	10.2	5.7	68.0
	9 - 12 Marlas	Count	6	4	3	1	0	14
		Expected Count	5.6	2.9	2.2	2.1	1.2	14.0
	13 - 16 Marlas	Count	1	0	0	0	0	1
		Expected Count	.4	.2	.2	.2	.1	1.0
	17 - 20 Marlas	Count	1	1	2	2	4	10
		Expected Count	4.0	2.1	1.6	1.5	.8	10.0
	More than 20 Marlas	Count	0	2	0	0	1	3
		Expected Count	1.2	.6	.5	.4	.2	3.0
	Total	Count	48	25	19	18	10	120

Table 23: Chi-Square Tests of Household Size in Marlas

	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	37.788 ^a	20	.009
N of Valid Cases	120		

Table 24: Showing Tea Timing per Day

Tea Time	Frequency	% age
Once	18	15
Twice	47	39.16667
Three	39	32.5
Four	05	4.166667
More than four	11	9.1666667
Total	120	100

Source: Field Survey

Discussion:

The table 24 shows that 11% have making tea in their houses more than four time per day, 5% four times, 39% three times, 47% two times, and 18% just one time in a day which are poor.

Table 25 shows that the assumption significant is < 0.05 , so its relationship is present. It shows from the chi-square tests of Teatime/day and monthly income that the drinking rate of tea is increasing from the increasing of monthly income and decreases from decreases of income of the respondents

Figure 8:

TEA TIMING/DAY

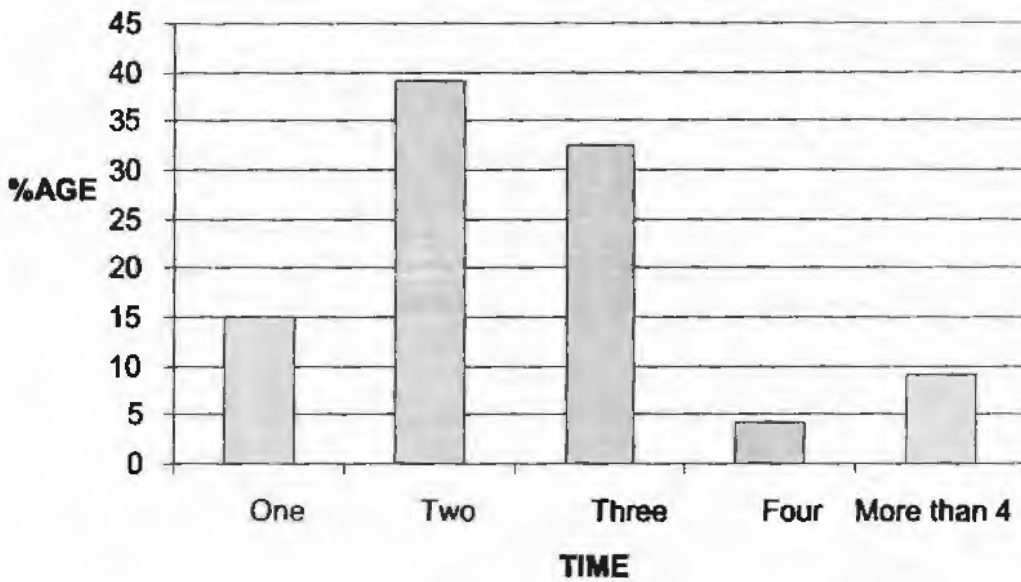


Table 25: Case Processing Summary of Teatime/day

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Income *	120	100.0%	0	.0%	120	100.0%
Teatime/day						

Table 26: Monthly Income * Teatime/day Cross tabulation

			Teatime/day							Total	
			1	2	3	4	5	6	Many Time		Some Tim
Monthly Income	Rs. 0 - 5,000	Count	16	24	6	0	0	0	1	1	48
		Expected Count	7.2	18.0	16.0	2.8	.4	.4	2.8	.4	48.0
	Rs. 5,001 - 10,000	Count	0	9	14	0	0	0	2	0	25
		Expected Count	3.8	9.4	8.3	1.5	.2	.2	1.5	.2	25.0
	Rs. 10,001 - 15,000	Count	1	6	9	2	0	1	0	0	19
		Expected Count	2.8	7.1	6.3	1.1	.2	.2	1.1	.2	19.0
	Rs. 15,001 - 20,000	Count	1	2	8	5	1	0	1	0	18
		Expected Count	2.7	6.8	6.0	1.0	.2	.2	1.0	.2	18.0
	More Than Rs. 20,000	Count	0	4	3	0	0	0	3	0	10
		Expected Count	1.5	3.8	3.3	.6	.1	.1	.6	.1	10.0
Total		Count	18	45	40	7	1	1	7	1	120
		Expected Count	18.0	45.0	40.0	7.0	1.0	1.0	7.0	1.0	120.0

Table 27: Chi-Square Tests Teatime/day

	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	81.137 ^a	28	.000
N of Valid Cases	120		

Table 28: Showing fruit eating/ week

Fruit Time	Frequency	% age
Some time	13	10.83333
According to time table	04	3.33333
Daily	05	4.16667
Once	18	15
Twice	28	23.33333
Three	24	20
Four	04	3.33333
Five	02	1.66667
Six	01	0.83333
Nil	21	17.5
Total	120	100

Source: Field Survey

Discussion:

The table 28 shows that in the study area 1 % respondents eat fruit in a week six times, 2% five, 4% four time, 24% three times, 28% two times, 18% daily, 4% according to time table, and 13% some time while 21% have come in nil categories which are very poor. Table 31 show that the assumption significant is < 0.05 , so its relationship is present. It shows from the chi-square tests

of fruit eating/week and monthly income that the eating rate of fruit is increasing from the increasing of monthly income of the respondents.

Figure 9:

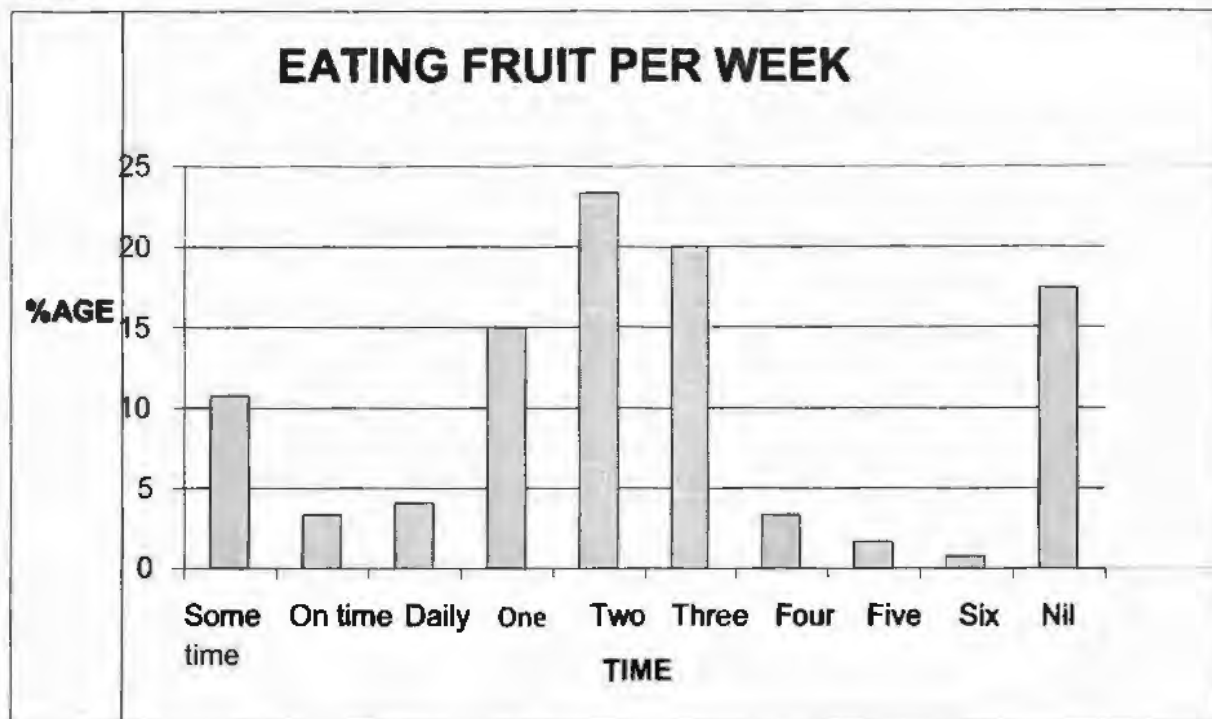


Table 29: Case Processing Summary of Fruit eating/week

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Fruit eating/week * Monthly Income	120	100.0%	0	.0%	120	100.0%

Table 30: Fruit eating/week * Monthly Income Crosstabulation

			Monthly Income					Total
			Rs. 0 - 5,000	Rs. 5,001 - 10,000	Rs. 10,001 - 15,000	Rs. 15,001 - 20,000	More Than Rs. 20,000	
Fruit eating/week		Count	1	0	0	0	0	1
		Expected Count	.4	.2	.2	.2	.1	1.0
	1	Count	8	5	1	0	0	14
		Expected Count	5.6	2.9	2.2	2.1	1.2	14.0
	2	Count	6	8	11	5	2	32
		Expected Count	12.8	6.7	5.1	4.8	2.7	32.0
	3	Count	2	1	3	9	4	19
		Expected Count	7.6	4.0	3.0	2.8	1.6	19.0
	4	Count	0	1	1	1	1	4
		Expected Count	1.6	.8	.6	.6	.3	4.0
	5	Count	0	1	1	0	0	2
		Expected Count	.8	.4	.3	.3	.2	2.0
	6	Count	1	0	0	0	0	1
		Expected Count	.4	.2	.2	.2	.1	1.0
	Daily	Count	1	0	0	1	1	3
		Expected Count	1.2	.6	.5	.4	.2	3.0
	Nil	Count	23	3	0	1	1	28
		Expected Count	11.2	5.8	4.4	4.2	2.3	28.0
	Some Tim	Count	6	6	2	1	1	16
		Expected Count	6.4	3.3	2.5	2.4	1.3	16.0
Total	Count	48	25	19	18	10	120	
	Expected Count	48.0	25.0	19.0	18.0	10.0	120.0	

Table 31: Chi-Square Tests of Fruit eating/week

	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	79.422 ^a	36	.000
N of Valid Cases	120		

Table 32: Showing Bad Addiction Items Using the Respondents

Bad Addiction Items	Frequency	% age
Naswar	58	48.33333
Smoking	13	10.83333
Toffee	9	7.5
Nil	40	33.33333
Total	120	100

Source: Field Survey

Discussion:

The table 32 shows that 58% of respondents eating Naswar which is a big bad habit in Patans Pakhthuns.13% respondents show Smoking, 9% eating Toffees, while 40% of respondent show no addiction. No relationship so table 35 show that the assumption significant is > 0.05 , so it have no relationship occur.

Figure 10

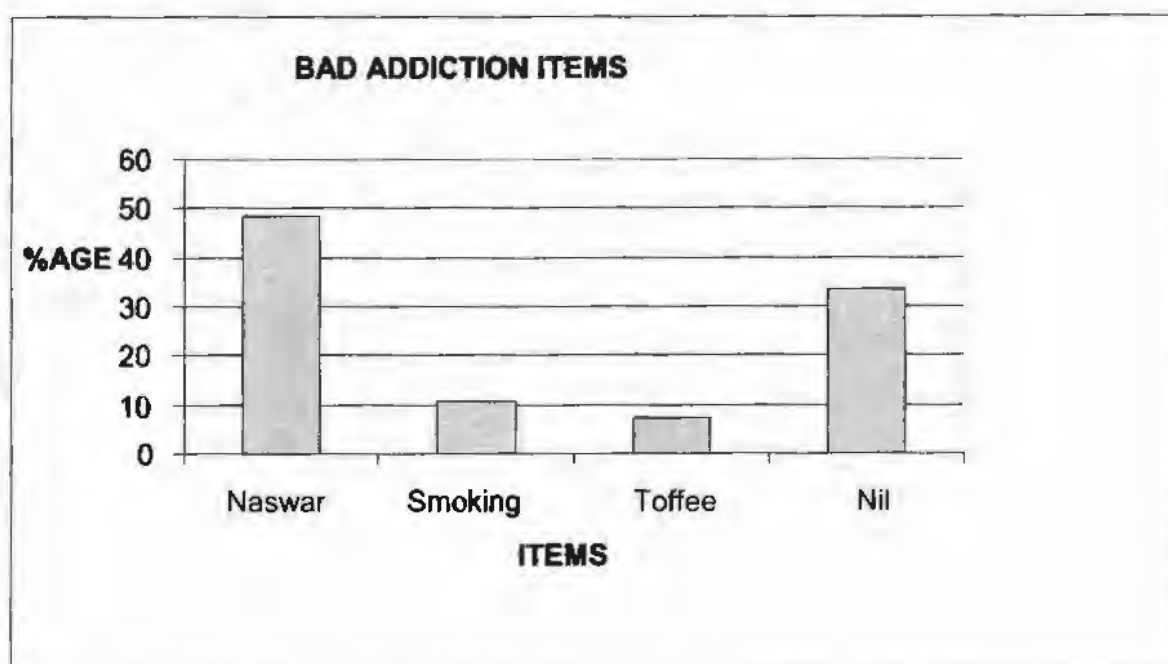


Table 33: Case Processing Summary of Bad Addiction

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Bad Addiction * Exercise	120	100.0%	0	.0%	120	100.0%

Table 34: Bad Addiction * Exercise Cross tabulation

			Exercise		Total
			No	yes	
Bad Addiction	Naswar	Count	36	22	58
		Expected Count	31.9	26.1	58.0
	Nil	Count	22	19	41
		Expected Count	22.6	18.4	41.0
	Toffee	Count	4	2	6
		Expected Count	3.3	2.7	6.0
	smoking	Count	4	11	15
		Expected Count	8.2	6.8	15.0
Total		Count	66	54	120
		Expected Count	66.0	54.0	120.0

Table 35: Chi-Square Tests of Bad Addiction

	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	6.396 ^a	3	.094
N of Valid Cases	120		

Table 36: Showing Exercise of the Respondents

Response	Frequency	% age
Yes	69	57.5
No	51	42.5
Total	120	100

Source: Field Survey

Discussion:

The table shows that 69% respondent shows exercise which are careful in their health and 51% response are come in nil categories which are not careful in health.

Figure 11:

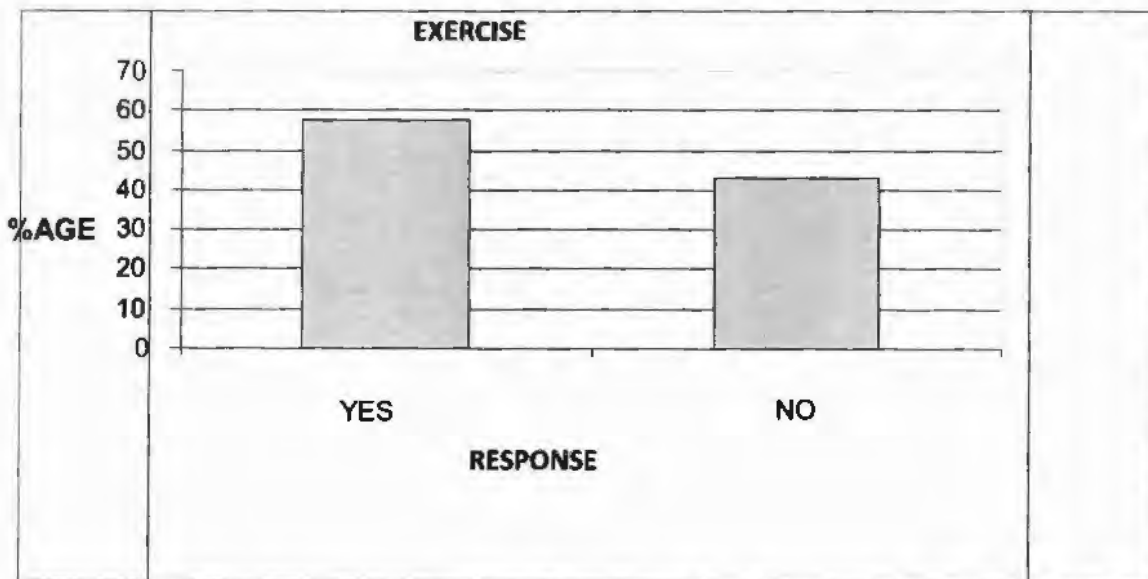


Table 37: Showing Waste Collection Places of the Respondents.

Waste collection places	Frequency	% age
At Place	21	
Into Fields	60	
Near Hills	6	
Near Stream	4	
No Proper Place	29	
Total	120	100

Source: Field Survey

Discussion:

With increase in human population and activities of men are producing more complex waste that creates many imbalances in the environment. The table shows that 60% using the waste in fields as fertilizer and 6 % and 4 % collects near the hills and stream respectively which is a threats to environment and 29 % having no proper places for collection of waste. 21% having proper collection places for waste collection. . No relationship so table 35 shows that the assumption significant is > 0.05 , so it have no relationship.

Figure 12:

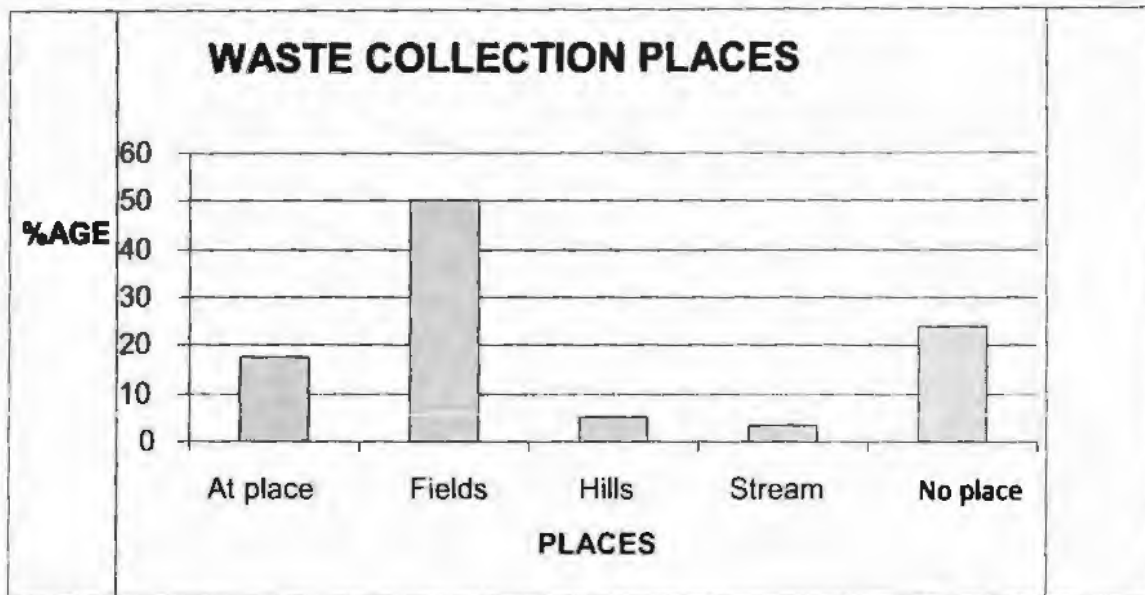


Table 38: Case Processing Summary* of Waste Collection places

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Income * Waste Collection places	120	100.0%	0	.0%	120	100.0%

Table 39: Monthly Income * Waste Collection places Crosstabulation

		Waste Collection places						Total	
		Into Fie	Near Hil	Nea r Str	No Prope	at waste	yes		
Mo nthly Income	Rs. 0 - 5,000	Count	27	3	2	14	2	0	48
		Expected Count	26.8	2.4	1.6	10.0	6.4	.8	48.0
e	Rs. 5,001 - 10,000	Count	14	2	1	4	4	0	25
		Expected Count	14.0	1.2	.8	5.2	3.3	.4	25.0
	Rs. 10,001 - 15,000	Count	12	1	1	3	2	0	19
		Expected Count	10.6	1.0	.6	4.0	2.5	.3	19.0
	Rs. 15,001 - 20,000	Count	8	0	0	3	6	1	18
		Expected Count	10.0	.9	.6	3.8	2.4	.3	18.0

Table 40: Chi-Square Tests* Waste Collection places

	Value	df	Assumption. Sig. (2-sided)
Pearson Chi-Square	23.078 ^a	20	.285
N of Valid Cases	120		

CHAPTER- VII

CONCLUSION

It is concluded that the Poverty is one of the major problems in the world. Currently over one third of the population of Pakistan is living under poverty line. it is mainly higher in rural areas of Pakistan like my selected research areas as compared to urban areas due to lack of basic amenities, where people are in a state of deprivation with regard to income, clothing, housing, health care, education, sanitary facilities and human rights.

Poverty in Pakistan is a growing concern. Although the middle class has grown in Pakistan, nearly one quarter of the population is classified poor as of October 2006. Khyber Pukhtonkhwa (KPK) is the poorest province of Pakistan. Poverty headcount in 1998-99 for Khyber Pukhtonkhwa (KPK) is 43% as compared to 33% for Pakistan. In an estimate of Poverty in Tehsil Swabi 33.6 % that their monthly income is from 0-5000 rupees.

It is also concluded that the interrelationships between poverty and the environment in Tehsil Swabi identifying the major factors underlying environmental degradation, it traces why and how this degradation is caused by poverty. Governmental and community-initiated attempts at environmental protection and also examined the view that due to poverty and the meeting of subsistence needs the poor use natural resources more intensively and hence cause them to degrade. Other factors contributing to environmental degradation which is compounded by poor management, corruption etc. So it improved the status of environmental condition and decrease poverty status and also increases natural resources in the area. It is concluded that when poverty increases environmental degradation will be increased and all included factors will be affected.

It is also concluded from the villages of different study areas that the sanitation problems are present in the some areas which is a threat to environment. Pure drinking water is another main problem which is the lack of filtration plants for water purification in the whole Tehsil of Swabi. Environmental degradation contributes to inequality, inequality can also contribute to environmental degradation and affects on health occur. Which is a threat to health of beings and contributing to poverty. But the people of some area are using some precaution to utilize the danger like pure eating and drinking, living in happy and healthy environment etc. It is the responsibilities of government to give some funds and solve their problems. So if various departments and local people are play their role in the control of the problems.

Tough the people of area are poor in some study areas but the cleanliness quality are very much high in them they disposes their solid waste and garbage in proper places and utilizes it as fertilizer and save the money wastage in the high prizes of fertilizer and get profits from which increase their economy.

It is concluded that the awareness is very much needed in the areas about the bad addiction because the smoking and naswar are common in the areas which is danger for health, wealth and environment. If these activities will stopped in this area will become a model of protected areas.

PICTURES



Solid waste and garbage near pond in Kala village



Solid waste in range land in Mian Dheri



Animal dung (manure) in the fields in Kala village



Solid waste near road side in Bamkhel village



The two poor persons cut the hill with cutter to collect the stone for construction which earn money which is a threat to environment in Kala village.



A generator is used for cutting of hills which cause pollution and global warming which is a threat to environment in Kala village.

REFERENCES

- Adhikari, B., 2005. *Poverty, property rights and collective action: understanding the distributive aspects of common property resource management*. *Environment and Development Economics* 10 (1), 7–31.
- Narain, U., Gupta, S., Van de Veld, K., 2008. Poverty and resource dependence in rural India. *Ecological Economics* 66 (1), 161–176.
- Agudelo, C., Rivera, B., Tapasco, J., Estrada, R., 2003. *Designing policies to reduce rural poverty and environmental degradation in a hillside zone of the Colombian Andes*. *World Development* 31 (11), 1921–1931. Institute of Social Studies: Working Paper, vol. 437. Sustainable Development Policy Institute and Institute of Social Studies, The Hague.
- Aminullah., (1992) "*Pakistan Academy for Rural Development Peshawar*".
- Andaleeb, T., Farida, N., (2008) "*Socio-Economic Effects of Poverty (A Case Study of Gharibabad, Union Council Shaheen Town, District Peshawar)*" Department of Geography Urban and Regional Planning, University of Peshawar, pp.13-15.
- Bhutto, A.W., Bazmi, A., (2007) "*Sustainable agriculture and eradication of rural poverty in Pakistan*", *NATURAL RESOURCE FORUM*, vol.31, pp.253-262.
- Bardhn, P., (2006) "*Globalization and rural poverty*", *WORLD DEVELOPMENT*, vol.34.N.8, pp.1393-1404.
- Cavendish, W., 2000. *Empirical regularities in the poverty–environment relationship of rural households: evidence from Zimbabwe*. *World Development* 28 (11), 1979–2003. *World Development* 31 (11), 1933–1946.

- Cleaver, K. M. and G. A. Schreiber, *"Reversing the spiral: The population, agriculture, and environment nexus in Sub-Saharan Africa"* (Washington, DC: The World Bank, 1994).
- Dasgupta, S., Deichmann, U., Meisner, C., Wheeler, D., 2005. *Where is the poverty–environment nexus, evidence from Cambodia, Lao PDR and Vietnam*. *World Development* 33 (4), 617–638. *analysis. Land Economics* 68 (3), 249–262.
- Dasgupta, P. and K. G. Maler, *"Poverty, institutions, and the environmental-resource base,"* World Bank Environmental Paper, No. 9 (Washington, DC: The World Bank, 1994).
- Fometer, T., Vermaat, J., (2002) *"Community forestry and poverty. Rural development forestry network"*, OVERSEAS DEVELOPMENT INSTITUTE, UK, vol. 25, 1-8.
- Gosh G.K *"Environmental and Development"* 2vols, p 136, Lake Town, Block-B, Calcutta 700 089, 15th August, 1993.
- Hillman, A.L., (2002) *"The World Bank and the persistence of poverty in poor countries"*, EUROPEAN JOURNAL OF POLITICAL ECONOMY, vol.18, pp 783-795.
- Iversen, V., Chhetry, B., Francis, P., Gurung, M., Kafle,G., Pain, A., Seeley, J., (2006) *"High value forests hidden economies and elite capture: evidence from forest user groups in Nepal Terai"*, ECOLOGICAL ECONOMIC, vol. 58, pp. 93-107.
- James, L., Wescoat, Jr., 2007. *"Water and Poverty in the United State"*, GEOFORUM, vol.38, pp. 783-795.
- Khan, S.R., Naqvi, 2000. *The environment-poverty nexus:an institutional analysis*. Sustainable Development Policy Institute of Social Studies, Islamabad.

- Khan, S.R., Pervaiz, A.N., 2001. *The integration of economics into Pakistan's biodiversity action plan — a case study*. Sustainable Development Policy Institute: Working Paper Series, vol. 65. Sustainable Development Policy Institute and Institute of Social Studies, Islamabad.
- Lele, S. M., "Sustainable development; A critical review," *World Development*, Vol. 19, No. 6 (1991).
- Leonard, H. J., "Environment and the poor: development strategies for a common agenda," in H. J. Leonard et al., *Environment and the poor: development strategies for a common agenda*, U.S.-Third World Policy Perspectives, No. 11 (Washington, DC: Overseas Development Council, 1989).
- Mink, S. D., "Poverty, population, and the environment," World Bank Discussion Paper, No. 189 Washington, DC: The World Bank, 1993.
- Pearce, D. W. and J. J. Warford, *World without end: Economics, environment, and sustainable Development* (New York: Oxford University Press, 1993).
- Ravnborg, M. H., 2003. *Poverty and environmental degradation in the Nicaraguan Hillsides*. World Development 31 (11), 1933-1940. Danish Institute for International Studies, Copenhagen, Denmark.
- Sultan-i-Rome, 2005. *Forestry in the Princely State of Swat and Kalam (North West Pakistan): A Historical Perspective on Norms and Practices*. In Individual Project Working Paper, vol. 6. Swat, Pakistan.
- Shyamsundar, P., 2008. *Decentralization, devolution and collective action — a review of Government of Pakistan, 2008. Economic Survey 2007–08. Economic Advisor's Wing,*

Ministry of Finance, Islamabad. Development and Governance in the Age of Extremes. In SDPI/SAMA, Karachi.

Throp, A., (2006) "*Asian development and poverty reduction strategies; integrating fisheries into the development discourse*", FOOD POLICY, vol., pp.385-400.

World Bank., (2001) "*World development report assessment 2000-01*", Oxford University Press.

QUESTIONNAIRE

(ENVIRONMENT & POVERTY)

No. _____
Date _____
Locality _____

Respondent Name: _____

Age _____ years Sex: _____ ID _____

1. Education _____
2. Occupation? _____
3. Guardian of the Home?
4. About home?
 - a) Own
 - b) On rent
 - c) Any other
5. If on rent than how much? _____
6. How many room in your home? _____
7. Total area of your home? _____
8. Are the following facilities in your bome?
 - a) Washroom
 - b) Toilet
 - c) Kitchen
 - d) Electricity
 - e) Gas
 - f) Water
 - g) Any other _____
9. Are the following things in your home?
 - a) Fridge
 - b) washing machine
 - c) T.V
 - d) dash
 - e) Tab recorder
 - f) Motor Cycle
 - g) Bicycle
 - h) Any other _____
10. Number and types of livestock you own?

22. What benefits you are getting from it?

- a) _____ b) _____
c) _____ d) _____

23. Are you know which kinds of disease spreading from water?

- a) _____ b) _____
c) _____ d) _____

24. Where you collected the waste material/solid waste/garbage of your home?

- a) _____ b) _____

25. How you thrown it? _____

26. Any exercise?

- a) Yes b) No

27. Are you careful in eating?

- a) Yes b) No

28. Are you careful in eating of your family?

- a) Yes b) No

29. How you careful in your bealth and cleanliness?

30. Are the following uses in your home?

- a) Smoking b) hocking
c) Naswar d) Toffee
e) Any other

31. Any spiritual/religious treatment?

- a) Yes b) No

32. If yes, than for which type of disease? _____

33. Which work done union council/union councilor in your village?

- a) _____ b) _____
c) _____ d) _____

34. Important problems about the health in your village?

- a) _____ b) _____

35. How these problems can be solved in your opinion?

- a) _____ b) _____
c) _____ d) _____

36. About the Guardian?

37. How much long you work?

38. Which work done before this?

39. Why leave the work?

40. If change the profession, why?

41. What is the economic situation of your parents?

- a) Well b) Bad
c) Normal

42. How different your economic situation from the parents?

- a) Well b) Bad
c) Same d) Normal

43. How different the economic situation of your brother and sisters from you?

- a) Well b) Bad
c) Same d) Normal

44. About marriage?

45. What is your age during marriage? _____

46. How arrange your marriage?

- a) Arrange marriage b) Love marriage
c) Both

47. Where done the marriage?

- a) Family b) brotherhood
c) Own d) not own

48. How many times eat in week?

- a) Fish b) Meat
c) Egg d) Vegetable
e) Milk f) buttermilk
g) Any other

49. How many times tea is make in a day? _____

50. Launch?

51. Dinner?

52. What you eat between launch and dinner?

53. How many times you eat the fruits in week?

54. Monthly income Rs. _____ (From all sources)

