

**Changing Trends of Rural Development in Pakistan
(A Case Study of Village Chinji, District Chakwal)**



Thesis submitted in partial fulfillment for the award of Doctor of
Philosophy Degree in Anthropology

By

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Quaid-i-Azam University
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DECLARATION

I hereby declare that this thesis is the result of my individual research and that it has not been submitted concurrently to any other university or any other degree.

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TABLE OF CONTENTS

Acknowledgements	I
List of Tables	IX
List of Figures	XI
Abstract	XV
1 INTRODUCTION	1
1.1 RURAL SECTOR	2
1.2 STATEMENT OF THE PROBLEM.....	4
1.3 SIGNIFICANCE OF THE STUDY	6
1.4 OBJECTIVES OF STUDY	9
1.5 HYPOTHESIS OF STUDY.....	9
1.6 RESEARCH METHODOLOGY.....	10
1.6.1 Locale of Study.....	10
1.6.2 Criteria used for the Selection of Locale	11
1.6.3 Sampling	11
1.6.4 Data Collection Tools and Techniques.....	13
1.6.5 Participant Observation	14
1.6.6 Socio-economic Census Survey	15
1.6.7 In-depth Interview and Interview Schedule	15
1.6.8 Key Informant	16
1.6.9 Case Study Method.....	17
1.6.10 Sequence of Data Collection	17
1.6.11 Data Analysis.....	19
1.6.12 Selection of Base Year	19
1.6.13 Poverty Measuring Criteria	20

1.6.14	Indicators of Change.....	20
1.6.15	Research Questions	21
1.6.16	Secondary Data Sources	22
1.6.17	Organization of the Thesis.....	22
2	THEORETICAL AND CONCEPTUAL FRAMEWORK	25
2.1	THEORETICAL FRAMEWORK.....	25
2.2	CONCEPTS	37
2.2.1	Defining Development	37
2.2.2	Defining Rural Development	38
2.2.3	Differentiating Between Agriculture and Rural Development.....	41
2.2.4	Poverty and Rural Development	42
2.2.5	Modernization and Rural Development	44
2.2.6	Factors of Modernization	46
2.2.7	Social Organizations and Rural Development	47
2.2.8	Social Change and Rural Development.....	48
2.2.9	Institutions and Development.....	50
2.2.10	Human Skill Development	52
2.2.11	Gender Role in Rural Development	54
2.2.12	Operational Definition of Rural Development.....	55
2.3	RURAL DEVELOPMENT APPROACHES	57
2.3.1	Top-Down and Bottom-up Approaches	59
2.3.2	Participatory Rural Development Approach	60
2.4	THE GENESIS OF THE NEW PROGRAMS.....	62
2.5	REVIEW OF CONTEMPORARY RURAL DEVELOPMENT PROGRAMS.....	63
3	THE CHARACTERISTICS OF VILLAGE AND RESPONDENTS	72
3.1	VILLAGE PROFILE.....	72

3.1.1 Topography.....	73
3.1.2 Agro-ecology of the Village	74
3.1.3 Cropping Pattern.....	75
3.1.4 Crop Production Systems	76
3.1.5 Animal Husbandry.....	77
3.1.6 Milk Production and Consumption Trend.....	78
3.1.7 Gender role in Livestock production.....	79
3.1.8 Ethnicity	81
3.1.9 Dress Pattern.....	83
3.1.10 Food Habits	84
3.1.11 Village dwellings	85
3.1.12 Population.....	88
3.1.13 Tribes	89
3.1.14 Economy	90
3.1.15 Poverty profile of the village	91
3.1.16 Employment	92
3.1.17 Tenants	94
3.1.17.1 Tenancy.....	96
3.1.17.2 Owner.....	96
3.1.18 Marriage, Birth and Death Rituals.....	96
3.1.19 Rural Sports	98
3.2 RESPONDENTS PROFILE	100
3.2.1 Education of the Respondents	100
3.2.2 Family Structure and Composition.....	101
3.2.3 Income Sources	103
3.2.4 Average farm size	104

3.2.5	Overtime Changes in Farm size	105
4	OVERVIEW OF RURAL DEVELOPMENT IN PAKISTAN	107
4.1	PRE-INDEPENDENCE RURAL DEVELOPMENT IN THE SUB-CONTINENT.....	107
4.2	POST- INDEPENDENCE HISTORY OF RURAL DEVELOPMENT IN PAKISTAN	108
4.2.1	Village Agricultural and Industrial Development Program (V-AID 1952-61).....	111
4.2.2	Basic Democracies System (BDS 1959-70).....	112
4.2.3	Rural Works Program (RWP 1963-71)	113
4.2.4	Integrated Rural Development Program (IRDP 1972-80).....	114
4.2.5	Rural Development through Local Councils 1979-85.....	115
4.2.6	Prime Minister’s Five Point Program (1985-88).....	116
4.2.7	Tameer-e-Watan Program (1990-93)	117
4.2.8	Peoples Works Program (1993-96)	118
4.2.9	Social Action Program (SAP 1993-96).....	118
4.2.10	Commodity Specific Development Efforts	119
4.2.11	Conclusion.....	119
4.3	OVERVIEW OF AGRICULTURE DEVELOPMENT IN PAKISTAN	121
4.3.1	Changes in Land Composition and Ownership	122
4.3.2	Developments in crop sector	122
4.3.3	Land and water development.....	125
4.3.4	Potential of Agriculture Development in Pakistan.....	126
4.3.4.1	Expansion in Agricultural Land	128
4.3.4.2	Increase in per acre Yield.....	128
4.3.4.3	Increase in Land use Intensity.....	128
4.3.4.4	Promotion of Agro-based Industries	129
4.4	CONCLUSION	129

5	RURAL DEVELOPMENT IN EXERCISE	131
5.1.1	Local Bodies System	133
5.1.1.1	Brief Introduction of Basic Democracy System (1959)	133
5.1.1.2	Brief introduction of Local Self Government (1979)	135
5.1.1.3	Brief introduction of District Government System (2001)	137
5.1.1.4	Interventions Introduced Through the Local Bodies System	139
5.1.1.5	Farmers' Response Regarding Local Bodies System	140
5.1.2	Role of Government Departments in the Village Development	145
5.1.2.1	Local perception regarding government agencies	147
5.1.3	Role of Non-Governmental Institutions in the Village Development	150
5.1.3.1	Local Perception about Non-governmental Organizations	153
5.2	OVERTIME CHANGE IN THE CIVIC FACILITIES	156
5.2.1	Rural Roads	156
5.2.2	Electricity	157
5.2.3	Telephone	158
5.2.4	Water Supply	159
5.3	RURAL DEVELOPMENT AND TRENDS OF EDUCATION	160
5.3.1	Education and Use of Improved Farm Technologies	168
5.4	RURAL DEVELOPMENT AND HEALTHCARE FACILITIES	170
5.4.1	Conventional Health Treatment Methods	172
5.4.2	Overtime Trend of Diseases	175
5.4.3	Overtime Change in Average Age	177
5.4.4	Vaccine Awareness	179
5.5	TRANSFORMATION OF SOCIAL AND POLITICAL STRUCTURE.....	181
5.5.1	Social Structure	181

5.5.2 Political Structure	191
5.6 OVERTIME CHANGES IN RURAL ECONOMY	197
5.6.1 Crop Diversification	198
5.6.2 Overtime Change in Cropping Intensity.....	201
5.6.3 Improvement in Farm Traction Power and Irrigation Sources.....	203
5.6.4 Availability of Irrigation Facilities	206
5.6.5 Improvement in Farm Transportation	208
5.6.6 Improvement in the use of Farm Implements.....	210
5.6.7 Improvement in Credit Sources	214
5.6.8 Improved Seed use Trend	217
5.6.9 Fertilizer Application Trends	219
5.6.10 Pesticides Application Trends	221
5.6.11 Productivity Trends of Major Crops.....	222
5.6.12 Minor Crops Productivity Trends.....	225
5.7 LIVESTOCK PRODUCTIVITY TRENDS.....	228
5.7.1 Improvement in Livestock Productivity.....	234
5.7.2 Improvements in Fodder Chopping.....	235
6 SUMMARY	238
7 CONCLUSION	248
GLOSSARY	259
BIBLIOGRAPHY	261

LIST OF TABLES

Table 1. Sample size by age groups	12
Table 2. Sample distribution by Household Categories.....	13
Table 3. Poverty interpretation of the respective communities	20
Table 4. Poverty comparison by urban and rural areas of Pakistan (%)	43
Table 5. Average number of Animals at sample farmer's farms	78
Table 6. Average milk production, consumption and sale.....	79
Table 7. Population by sex and average household size of district Chakwal	89
Table 8. Sample farmers' perceptions regarding change in employment status....	93
Table 9. Farmer's perceptions change in labor and off-farm activities	94
Table 10. Comparison of tenancy status in the village <i>Chinji</i>	96
Table 11. Respondent's distribution by Age Groups	100
Table 12. Education wise distribution of farmers	101
Table 13. Sample farmers family composition	102
Table 14. Overtime change in family structure of the village	103
Table 15. Average farm size and irrigated area in Village Chinji	105
Table 16. Sample farmers perceived changes in farm size of the village	106
Table 17. Farmers ranking of their satisfaction from the Local Govt. System....	145
Table 18. Farmers' ranking about the satisfaction level by the Govt. institutions	150
Table 19. Farmers perceptions about the working of non-Govt. organizations...	155
Table 20. Overtime comparison of civic facilities	160
Table 21. Literacy ratio by gender in the selected district and village	162
Table 22. Sample farmers distribution according to their educational status	163
Table 23. Sample farmers perceptions about change in education trend.....	164
Table 24. Overtime change in educational status of the village	164

Table 25. Views regarding the importance of education by gender	165
Table 26. Advantages of female education.....	168
Table 27. Use of technologies by farmers.....	170
Table 28. Overtime improvements in health facilities in <i>Chinji</i>	171
Table 29. Sample farmers sources of healthcare in the village <i>Chinji</i>	172
Table 30. Sample farmers source of treatment by Occupation (Nos)	173
Table 31. Common diseases and their intensity in the village.....	174
Table 32. Severity of the diseases	175
Table 33. Use of medicines.....	176
Table 34. Sample farmers views about vaccine awareness	180
Table 35. Farmers ranking about satisfaction from the Govt. institutions.....	181
Table 36. Overtime changes in the social structure of the village	189
Table 37. Overtime sociopolitical changes in village <i>Chinji</i>	196
Table 38. Changed cropping pattern and area allocation trends (% Area)	199
Table 39. Sample Farmers distribution about the use of irrigation sources.....	208
Table 40. Sample farmers' views about the change in farm transportation.....	210
Table 41. Status of sample farmers by ownership of farm implements.....	213
Table 42. Sample farmers distribution by credit sources.....	216
Table 43. Overtime changes in the productivity of major crops.....	225
Table 44. Overtime changes in the productivity of minor crops	227
Table 45. Perceptions about the change in livestock population	230
Table 46. Overtime changes in livestock composition	230
Table 47. Overtime changes in the objectives of livestock raising.....	233
Table 48. Farmers perceptions regarding the increase in livestock productivity	235
Table 49. Overtime changes in fodder chopping sources	237

LIST OF FIGURES

Figure 1. Map of Tehsil Talagang.....	73
Figure 2. View of Village Chinji	74
Figure 3. Storage of Rain Water in the Village	75
Figure 4. Farmers Responses	78
Figure 5. Traditional grazing practice.....	80
Figure 6. Community Responses Regarding the Animal Grazing Practices	81
Figure 7. Traditional dress of the people	84
Figure 8. Housing pattern of <i>Chinji</i> village	87
Figure 9. Housing Status in the Selected Village	87
Figure 10. Comparison of traditional and modern houses at Chinji.....	88
Figure 11. Traditional Houses at farms.....	88
Figure 12. Sample Distribution by Poverty Status.....	91
Figure 13. Prevailing Tenancy Status in the Village	95
Figure 14. Farmers Income Source	104
Figure 15. Local Government model Implemented under Ayub Khan Regime ..	135
Figure 16. . Local Government Model Implemented under General Zia's Regime	137
Figure 17. District Government Model Implemented Under General Musharaf's regime.....	139
Figure 18. ABAD Developmental Activities	147
Figure 19. NRSP's developmental work in Chinji	151
Figure 20. NRSP & ABAD Joint projects in Chinji	152
Figure 21. Modern transportation at <i>Chinji</i>	157
Figure 22. NGO supported water supply scheme	159
Figure 23. Educational facilities in <i>Chinji</i>	161

Figure 24. Basic Health Unit at <i>Chinji</i>	171
Figure 25. Perceptions Regarding over time.....	177
Figure 26. Change in Infant Mortality	179
Figure 27. Pattern of the Sample Farmers	200
Figure 28. Land Allocation Pattern.....	201
Figure 29. Cropping Intensity in Sample Farms	203
Figure 30. Irrigated Cropping Intensity in Sample Farms	203
Figure 31. Overtime Changes in Traction Power	206
Figure 32. Groundnut threshing fan.....	211
Figure 33. Overtime Change in the use of Farm Implements	213
Figure 34. Credit Usage in the Selected Village	216
Figure 35. Status of Improved Seed Use	218
Figure 36. Change in Seed Rates	219
Figure 37. Traditional Fertilizer (FYM)	220
Figure 38. Fertilizer Application Trend in Selected Village.....	221
Figure 39. Pesticides Use Trend	222
Figure 40. Traditional livestock production system	228

ABBREVIATIONS

ADB	Asian Development Bank
ABAD	Agency for Barani Area Development
AJK	Azad Jammu & Kashmir
AKRSP	Agha Khan Rural Support Program
BRAC	Bangladesh Rural Advancement Committee
BVDP	Barani Village Development Project
CDG	Community Development Groups
CSU	Colorado State University
EAN	Economic Analysis Network
FAO	Food and Agricultural Organization
FATA	Federally Administered Tribal Area
FEA	Female Extension Agent
GDP	Gross Domestic Product
GNP	Gross National Product
ha.	Hectare
ICARDA	International Center for Arid and Dry land Agriculture
IDA	International Development Agency
ILO	International Labor Organization
NARC	National Agricultural Research Centre
NWFP	North West Frontier Province
PAF	Poverty Alleviation Fund
PARC	Pakistan Agricultural Research Council
PRSP	Punjab Rural Support Program

PWD	Public Works Department
SFDP	Small Farmer Development Program
SMS	Subject Matter Specialists
UNDP	United Nations Development Program
USAID	United States Agency for International Development
VDC	Village Development Committee
WCD	Women Community Development (groups)
WTO	World Trade Organization

ABSTRACT

Current study is based on empirical evidences collected from the rainfed tract of Pakistan's Punjab. It deals intensively with the current status of rural development activities and the processes adopted to modernize the rain-fed agriculture. The changes in the management of village level development activities through the active participation of the respective communities were examined on the basis of a village level survey conducted in Chakwal District of Northern Punjab. The village *Chinji* is such a village where in the past, many of the rural development projects have been implemented by different development organizations.

The prime aim of this study was to trace the pattern of changes in farming practices, agricultural productivity, socio-political conditions and civic facilities improved under different rural development programs over a specified period of time. During empirical research, several influencing as well as determining factors considered due to their vital importance in shaping the attitudes of rural masses and behavior towards rural development and its dimensions. In this connection, the institutional, socio-political and cultural factors are considered influencing the context of rural development programs that determine the structure and efficiency of developmental efforts. The socio-economic regulatory patterns such as family, caste and '*biraderi*' as primary social units are playing a dominant role in determining the direction and extent of developmental activities. In addition, the physical and the social environment surrounding the village *Chinji* have a great impact in shaping the collective actions for the management of rural development programs.

The empirical results indicate the importance of agricultural development activities and the processes adopted for their efficient management. The effective developmental process in comparison to other production resources has greater potential to increase agricultural production. The importance of such organizational arrangements is equally valid for the improved management of other developmental activities. Furthermore, rural development activities with socio-political as well as technical dimensions demand a better coordination among the social, political and technical aspects that can be well realized by the establishing local level developmental organizations.

The existing social structure of the rural Punjab some time not coincides with the prevailing rural developmental models. In the light of empirical findings, it can be concluded that participatory planning and integration of ultimate beneficiaries in the management and operation of the rural development activities are extremely important. In this regard, the existing socio-economic system mainly comprised of traditional regulatory patterns like caste, *biraderi*, power, influence, etc., must be paid special attention as the participatory activities related to rural uplift are mainly regulated by these social institutions.

1 INTRODUCTION

The term rural development generally refers to social and economic development of the rural communities. This development mainly depends on the effective planning and implementation of rural development programs. As a result of the last 30 years' development efforts, considerable socioeconomic and sociopolitical changes have taken place in the rural areas of Pakistan. The impacts of these changes are multidimensional and people had come across all the positive and negative aspects of these changes. The present topic was specifically selected to understand previous rural development efforts, the resultant change and also to highlight the process of change at micro level.

Traditionally, anthropologists' main interest remains on the rural regions and they were pre-occupied with the description and analysis of the rural communities (Hobbel, 1966; Kroeber, 1948; Birket, 1965; Beathe, 1964). The conventional subjects of anthropological studies were hunting, food gathering and the wide continental natural and tropical forests. Anthropologists had studied agricultural societies and pastoral communities (Berdichevsky, 1979). A number of anthropologists like Tylor (1893), Lowie (1920), Boas (1943), Schmidt and Kopper (1924), Forde (1937), Dittmer (1960), Biasutti (1959) worked on rural communities in different parts of the world. During the colonial era, the role of anthropologists was further recognized and anthropological knowledge was used for the effective execution of the rural development projects¹. Gradually, the role of anthropological information was expanded with the anthropologists' focus on socio-economic development and in understanding the processes of social change (Hopkins, 1969). Almost all previous anthropological studies were conducted in the villages, towns or ethnic settlements just to understand the interrelationship and dynamics of social and economic institutions (Pritchards, 1940).

In view of anthropologists, societies are not static; they gradually improve and develop. Hence, with the evolution of mankind, societies and their structures are

¹ Shamsul Bahrudin, The development of underdeveloped Malysian Peasantry. Journal of contemporary Asia, Vol.9, No. 4 Nottingham, The Russel Press, 1979, pp 434-454.

changing continuously. In explaining the dynamics of social change, Montesquieu described three stages of human civilizations (Hunting or Savagery, Herding or Barbarism and Civilization) and each stage was distinguished by technological development and its relationship with the means of subsistence. Further inquiries of Tylor (1871) and Morgan (1877) had also supported the above argument of Montesquieu and explained that over the years societies developed but their pace of development varied due to ineffectiveness of the local institutions and leadership. Similarly, Bronislaw Malinowski (1935) had also studied rural communities and provided evidence regarding the role and importance of institutions in the socio-economic development of the societies. His explanation and view point was recognized by contemporary anthropologists like Mcgee and Warms (2000). The study in hand also intends to explore the role of institution and individuals in the development of village *Chinji*. Moreover an effort has been made to measure the change over a period of thirty years. This means the difference between traditional ways of the older generation and the younger segment of society and their thought process as related to the present times, and what are the factors that have influenced or accelerated this change are attempted to capture.

1.1 Rural Sector

The importance of Pakistan's rural sector is evident from the fact that it is the mainstay for food security and earns about 50 percent of foreign exchange, employed 42% labor force, provides raw material for industries and serve as the main market for a large proportion of industrial products (GOP, 2007). Out of the total geographical area of Pakistan, about 62% consists of rural landscape. The share of rural population is 67% living in about 50,000 villages scattered countrywide (GOP, 2005). The rural Pakistan may legitimately be termed as the backbone of the national economy.

In Pakistan, rural development has always been the priority of the government that is reflected from the policies and actions of development in the fields of community mobilization, infrastructure development, microfinance lending & savings, agricultural programs, health and education programs. Moreover, provision of clean-water supplies, sanitation facilities in remote communities and housing is also

covered under rural development programs. Interestingly, it is evident from the development history of Pakistan that in almost all previous rural development programs agriculture development was used as strategic intervention.

In Pakistan, majority of rural population consists of small farmers. The man and land ratio is unfavorable, i.e. 93% farmers having less than 12.5 acres and out of them 60% have less than 3 acres of land (Altaf, 2006). There is considerable evidence for the marginalization of small farmers, most disadvantaged in terms of access to services, education, health and also worst served by infrastructure of various types. Moreover, rural people in many settings are most likely to be amongst those who do not seem to benefit from the Millennium Development Goals (GOP, 2005).

Problems of rural development in general and agriculture in particular can be placed at the top of the burning issues of Pakistan (Mirza, 2006). These issues are not only disturbing the rural economy but also posing serious threats to food security of the country. Being an agricultural country, Pakistan is facing technological and institutional problems that have direct impact on the rural population as well as on the rural economy. Therefore, to tackle these issues, policymakers and researchers need to regularly monitor changes in rural settings and concentrate upon its development.

In the past, many rural development programs have been launched by governmental and non-governmental organizations aiming at modernization of agricultural sector, enhancement of quality of life, and empowerment of rural communities. A few target oriented programs were also put into action to disseminate modern agricultural technologies; but few of them achieved their desired targets, while majority of the actions were failed. The underlying reasons commonly quoted as the ineffective processes, approaches and implementation mechanisms adopted. Political interference and professional expertise of the implementers were other bottlenecks of the previous projects (Pirzada, 1999; Altaf, 2006; Memon, 2001). The causes mentioned above are quite understandable in Pakistani perspective because as such problems are often interrelated and overlapping. Therefore,

development professionals and planners need to understand the dynamics of rural issues and adopt appropriate policies free from political interference.

In the countries like Pakistan where majority of rural masses belong to poor economic classes, policy makers and planners should take into consideration the genuine interests of these marginalized segments of society. The inclusion of small farmers' interests in the rural development projects has special significance because due to less exposure, no effective voice in electronic and print media, rural poor always resist against all types of changes and seek to maintain status quo (Rutledge, 1997; Jameson, 1991).

There is dearth of anthropological information pertaining to the topic under discussion particularly for South Asia. But there seems to be a serious lacuna in research in Pakistan, therefore, more works needs to be done as new ideas remain to be developed. Moreover, contemporary literature on rural development is only explaining macro level issues of rural change and ignoring the micro level issues. Hence, the topic selected for this study was important to understand the role and effectiveness of previous rural development programs at micro level. The overall focus of this study was to highlight the changes in agriculture, socio-political system and infrastructure of the selected village. This study also explains the patterns of change in rural settings in the light of rural development efforts made by the governmental and non-governmental organizations. However, the cultural changes appear as subsidiary only where it is necessary to highlight the changes in agriculture and its allied sectors. These all aspects were examined on the basis of an empirical data collected from the selected locale.

1.2 Statement of the Problem

As a result of the last 30 years' development efforts, considerable social, cultural, economic, political and institutional changes have taken place in rural areas. The impact of these changes was multidimensional and people had come across all the positive and negative aspects of these changes. The directions or pattern of these changes are yet not clear. Consequently, many present and past rural development programs had not been planned in right direction. This situation had also increased knowledge, skill and technological gap in the country. Over the years, these

weaknesses had made agriculture and its allied sectors inefficient and uneconomical. So, to address these issues detailed micro level studies and analysis of rural issues at grassroots level is extremely important. Hence, the study in hand is an effort to analyze issues of rural economy, technological changes and factors of these changes.

Pakistan is an agricultural country. Majority of its population (67%) depends directly or indirectly on agriculture for their livelihoods. Over the years, squeezed natural resources, traditional knowledge, skills and increased input costs has made farmers' life worse than before. The government and non-government organizations/institutions have launched various rural as well as agricultural development programs to facilitate the farming communities in all over the country. But performance of most of these programs was not satisfactory and their ineffectiveness has further broadened the gap between haves and haves-not in rural areas of Pakistan (Hussain, 2000).

Furthermore, in 1980's, mechanization and use of improved technologies were expanded in Pakistan and this technological influx has completely changed the farming and its allied businesses. But as majority of the farmers in Pakistan are small land holders, therefore, they are unable to adopt improved technologies. The major reasons behind this observable fact were poor financial conditions, illiteracy and lack of knowledge about the use of improved technologies. Moreover, these weaknesses had also created hurdles in organizing the agriculture sector on scientific lines. In view of this situation, it is important for Pakistan to prioritize its future rural development programs and strategies on the basis of empirical evidences produced through various socio-economic and development studies.

Various contemporary studies confirmed that rural poverty is increasing in Pakistan, (ADB, 2007; Panhwar, 2005; Malik, 2005). Moreover, poverty and agriculture has a very strong relationship (Hashmi, 2008; Anwar, 2004). Therefore, whatever happens to the agriculture sector that affects rural population positively or negatively? The syndrome of rural poverty is also affecting the social web and livelihood sources of the rural communities. Hence, identification of real causes of rural poverty and understanding of their possible solutions are important to reduce

this menace. The question how to tackle the micro-level rural poverty is important and hopefully it will be answered in the discourse of present study.

Presently, educated and skilled human resource is considered as important factors of economic development. The countries having skilled manpower have comparative advantage over other countries. In addition to this, countries' human capital development is also highlighted as a precondition for attaining progress in the development of a knowledge-based society (Haq 2002; Schultz 1993; Mayer, 2000; Shanker and Shah, 2001; Conner and Lunati, 1999). Unfortunately, Pakistan also has serious weaknesses in human resource development because there is no institutional network available for up gradation of traditional skills of the rural communities on regular basis. The existing institutions are incapable in discharging their professional duties. The present study also aims to analyze the current education and skill levels of the studied community. This research work will add to existing understandings about the kind of interventions required to improve the skills and knowledge of the rural communities of Pakistan.

1.3 Significance of the Study

The research study in hand aimed to explore the "Changing Trends of Rural Development in Pakistan" at micro level. Although previously lot of macro level studies on the issue of rural development has been carried out in Pakistan but there is dearth of micro-level studies in the country. Basically, this type of information is necessary for the formulation of people centered and forward looking development policies and strategies. The research that was carried out in village *Chinji* has relevance and significance.

Despite having enough natural and human resources, rural economy of Pakistan lags behind compared to other countries having similar conditions. The question arises, why such a set of supportive factors did not provide optimum level of agricultural productivity? In view of this question findings of present study are important to identify evidences and issues associated with agriculture as well as its sub-sectors. Definitely, results of the study will suggest way forward for the betterment of rural economy.

After a long period of stagnation in agriculture, the second half of the 1970s has brought many technological changes and that has improved farm efficiency and productivity in Pakistan. The main beneficiaries of this technological shift were large farmers because they had access and linkages with information sources, access to the inputs and credit sources. The commercial and capitalistic farmers used most of their income on tube wells, tractors and, whenever possible purchased more land. The improved economic situation of landlords had also strengthened their traditional power structure. With their political influence, they succeeded in ensuring the continuation of landlord-biased agricultural policies and development projects. The research aims at investigating this problem at micro-level and to document that how this phenomenon affected socio-political system and socio-economic conditions of the masses.

The rural development institutions and farming communities are continuously buffeted by technological changes and new knowledge. These changes are interactive and dynamic which needs immediate shift in development policies and strategies. However, formulation of effective and practicable policies requires documentation of overtime changes. But in Pakistan, this kind of information is seriously lacking and development plans are mostly developed on the basis of information generated through macro level studies. Resultantly, policies and development plans fail to achieve their desired targets. The results of this study will be helpful in fulfilling the information gap and devising farmers centered policies.

Over the years, poor market infrastructure and imperfections had seriously affected the small farmers in Pakistan. Moreover, difficulties in getting water, fertilizer, and agricultural credit etc. had reduced investment in agriculture sector. Due to high risk in agriculture, majority of the farmers are compelled to opt subsistence farming. Along with these problems, increasing trend of input costs had also disappointed the farming communities. There is no dynamic services sector that could reach to these small cultivators and effectively address their problems. In relation to this situation, detailed analysis of the above mentioned problems has special significance.

Mechanization has brought many changes in farming as well as in the social web of the rural society. The land owners and tenants relation was seriously disturbed. They both considered traditional *batai* system as an expensive system. Most of the large farmers have replaced their labor force with machines. Resultantly, large number of tenants has been displaced and became casual laborers. This change has increased frustration and unrest among poor segments of the society. The traditional bondage of *kammis* to their cultivators is no longer functioning. More demand for technical skill with increased number of workshops has opened up as an alternative livelihood earning sources. The social services connected with *kammis* have diminished too. The analysis of existing tenancy status would surely help in understanding the unrest and worries of labor class and also consequences of this change on poor segments of the society.

Overall, new farm technologies have mainly benefited the large land holders and upper classes in Pakistan. Actually, the institutional structures and mechanisms developed under previous rural development programs was only suited to large farmers. The issues of small farmers and non farming communities were not addressed in the previous programs. The incentive given to large farmers had created further imbalances in the society. The larger farmers were developing more and more, while small farmer's conditions remained more or less stagnant. In relation to this, present study is important because it attempted to explore and highlight the institutional problems and their consequences at grass root level.

The compatibility between local culture and modern technologies has significant impact on their adoption. The current study intends to find out the influence of cultural factors/values/norms on the adoption of improved technologies. This information would provide a clear picture that how cultural factors affect adoption of improved technologies and what types of strategies are required to use these factors positively. The study would also provide an avenue to the future researchers who might desire to play their role in meaningful contribution in academic spheres of the anthropological knowledge.

The overall aim of present study is to highlight the overtime changes in agriculture, infrastructure, socio-political and socio-economic spheres at micro level. It is also

anticipated that the findings of this study will benefit policy makers, planners, rural development professionals and international development agencies. The document shall not only highlighting achievements of previous rural development projects, but also indicate shortfalls in design and implementation of development programs. Moreover, under this study, an effort was made to synthesize the process and its outcome in terms of improving agricultural productivity and profitability in rainfed areas.

1.4 Objectives of Study

There are various aspects of rural life that could be observed and interpreted but the research study carried out in village *Chinji* was mainly confined to explore the changes occurred in the rural economy over the last 30 years. Therefore, the impact of modernization on the transformation of traditional agriculture, health, education and socio-political system was also the intention of this study. The factors that motivate the farmers to adopt modern agricultural techniques have also been examined. However, the specific objectives of the study were:

- To review and analyze the rural development approaches applied to bring economic and physical changes in the selected village;
- To find out the native perspective on the role of governmental and non-governmental initiatives in the development of rural economy;
- To analyze the changes in rural infrastructure and social amenities;
- To see the impact of development actions for agricultural productivity and socio-economic conditions of the community.

1.5 Hypothesis of Study

The research hypotheses were devised on the basis of detailed review of literature and consultation with the rural development experts. Moreover, being a social scientist, the researcher has participated in many rural development activities and that experience was also used in the formulation of study hypothesis. The hypotheses of present study are given below:

- Democratically elected leadership perform better than the traditional power holders;
- For rural development activities bottom up approaches are more effective and efficient as compared to the top down approaches;
- A relatively heterogeneous and competitive environment facilitates the developmental activities.

1.6 Research Methodology

For this study, various anthropological research techniques have been applied. The field work for this study was started in 2009 and completed in 2010 --- almost for a period of one year to gather in-depth data from the target village community. The gathered information was pertained to ethnographic data, whereby a holistic approach has been applied to cover all aspects of a village life as well as the information on beliefs and practices of the villagers from development perspectives and the notion of change in a rural society of Pakistan.

1.6.1 Locale of Study

The locale of the study in hand is village *Chinji* situated on the main highway from Talagang to Khushab District, but it falls under the territorial boundaries of District Chakwal. This locale is representative of a typical village in the Potohwar. It is a barani (rain-fed) area and has agriculture as a basic means of livelihood for the inhabitants of this area. At the same time the area has a certain level of male out-migration.

The village *Chinji*, was composed of around 2,200 households and consisted of seven Dhokes (hamlets or small village), each one representing different ethnic group. The caste composition of this village mainly consists of Bhatii, Malik and Awan biraderies. All these ethnic groups have their own brotherhood through genealogical links of kinship of their common ancestors. The main casts/biraderies of the village were traditionally agriculturists but due to overtime change in the distribution of land, people are now diversifying to newer professions like government and private jobs as well as businesses, etc.

1.6.2 Criteria used for the Selection of Locale

Mainly this study was conducted to see the overtime changes and factors of these changes. Hence to achieve the study objectives a specific locale was required where previously some major development projects have been launched and implemented. So for this purpose author has arranged series of consultative meetings with the concerned departments and organizations. Finally, the village *Chinji* was selected after the consultation meeting with National Rural Support Program (NRSP), Agency for Barani Area Development (ABAD), District livestock Office and Agriculture Extension Department. More specifically, the village *Chinji* was selected due to following reasons;

- Tangible impacts of past developmental interventions were quite visible. The village was more progressive in terms of productivity, use of machinery, involvement of land owners and landless families in agricultural activities.
- The village was relatively bigger than other villages of the area and had more recognizable visibility of among rich, middle and poor classes;
- National Rural Support Program (NRSP) and Agency for Barani Area Development (ABAD) were working since long in the village; therefore, the selected village was more attractive for this research study.

1.6.3 Sampling

The method of sampling being a useful tool provide opportunities for the researcher to explore more and more information within short and limited time without spending huge amount of resources. Basically the sampling for interviews was primarily dependent upon the objectives of the study as well as the availability and willingness of the respondents. In relation to the sample size, Goode and Hatt (1981) described sampling as “a smaller representation of the larger whole”.

In present study, purposive sampling technique was used to collect socio-economic census survey and in-depth interviews of the respondents. Therefore, keeping in view the required information, only male members aged above 50 years were selected as respondents of the study. The underlying reason was that they are much

better in recalling the previous project/schemes launched in the area, types of interventions introduced for the development and anthropological impacts caused by them. They are also considered better interpreter of how the overtime changes were taken place in the developmental attitudes and behaviors of the community.

The sample size of the study was decided on the basis of total population of the villagers aged above 50 years. Initially, a total of 150 farmers were interviewed but after completing the survey, information of 14 farmers was rejected due to poor quality of the data in terms of un-answered questions and quarries. Finally, a representative sample consisting of 136 farmers was selected for detailed analysis. The distribution of the sample by age groups is given in below:

Table 1. Sample size by age groups

Age group	Frequency	Percentage
50-55	53	38.97%
55 to 60	38	27.94%
60 to 65	30	22.06%
65 & above	15	11.03%
Total	136	100.00%

Source: Field Data

The sample was further bifurcated and selected from all castes and economic classes of the village. The main purpose of their inclusion was to cover all segments of the society. The distribution of sample farmers by their economic position is given in Table 2. The data clearly reflects higher participation of middle and poor groups of farmers in the study which was logical because village population mainly consisted of these two classes.

Table 2. Sample distribution by Household Categories

Category	Frequency	Percentage
Rich	21	15.44%
Middle	57	41.91%
Poor	45	33.08%
Very Poor	13	9.56%
Total	136	100.00%

Source: Field Data

The sample for case studies was selected from 136 selected respondents. Mainly elder people have been selected for case studies. Overall, 21 case studies have been conducted on different aspects of rural life and history overtime changes. These case studies also helped researcher in understanding norms, value, culture and social system of the society under consideration.

1.6.4 Data Collection Tools and Techniques

All natural or social sciences are characterized by the application of various methods or tools of research. The methodology is the combination of tools and techniques used for data collection. Similarly, anthropological fieldwork depends on various research techniques that have been used by the researcher to collect reliable data. These techniques also help researcher in establishing friendly relations with the people of an un-known society.

The anthropological field worker, therefore must have a number of different research tools in his or her tool kit, unlike the situation in laboratory sciences, research tools in anthropology involves relatively little in the way of hardware and gadgetry but require great sensitivity and self-awareness on the part of investigator.

(Pelto and Pelto 1970)

Various researchers have conducted on the issues of rural social changes and they have used different methodological procedures to achieve their objectives (Horwitz and Painter, 1986; Shaikh et al. 2007; Etienne, 1995). These methods include

participant observation, case studies, statistical analysis, key informant surveys, focus group discussion, census and statistical records from different institutions, diaries, notes, newspaper articles and mimeographed reports. Actually, collection of true information mainly depends upon proper use of these techniques. Therefore, to avoid methodological mistake, the researcher was in close contact with his research supervisor for seeking guidance and sharing the methodological issues. As fieldwork of the present study involved various stages of research hence following research techniques have been applied to collect the required information:

1.6.5 Participant Observation

The method of participant observation is the basic technique that was used by the researchers during the research work. Actually, this technique differentiates anthropology from other disciplines and gives anthropology a peculiar place in social sciences. The anthropological field worker totally immerses himself in the culture of an un-known society where he undertakes researcher work; he lives with the people in their lifestyles in the locale for bridging the gaps and building the friendly relations in order to make the people mentally prepared to help the researcher for a noble cause².

Participant observation is the foundation of cultural anthropology. It includes getting close to the people and making them feels comfortable enough with you so that one can observe and recode information about their lives. Bernard (1994)

The important technique of participant observation was adopted by the researcher to achieve best results for his research³. Amazingly by using this method great response was received from the people and they helped the researcher by providing

² British anthropologists, concerned with analyzing how societies held together in the present (synchronic analysis, rather than diachronic or historical analysis) emphasizing long-term (one to several years) fieldwork.

³ Bronislaw Malinowski, was an eminent social anthropologist. He has great influences on British social anthropology. He made use of the time by undertaking far more intensive fieldwork than had been done by *British* anthropologists, and his classic ethnography

hidden information which they never shared with any outsiders. During the stay in the *Chinji* village, researcher also got an opportunity to attend their social gatherings and listen their arguments and counter arguments related to the research topic. This opportunity helped researcher to collect lot of in-depth data and insight into the issues under consideration.

This technique proved to be most useful as sharing in the daily routine of host family from dawn to dusk enhanced researcher understanding of the community being studied. The researchers daily contacted the members of the local population facilitated our interaction in the community and one became so to say an 'observer as participant' in the community. Moreover, I also participated in most of their rituals and ceremonies taken place during the period of his study. The idea was to achieve a better level of acceptance within the community, as well as collect useful first hand data which would otherwise not have been possible.

1.6.6 Socio-economic Census Survey

The socio-economic census survey was conducted to collect the basic household statistics of the respondents. Overall, 136 households were interviewed on the aspects of family size, marital status, age, sex, literacy level, skills acquired, occupation, ethnic groups, religion, income, economic assets, migration, settlement patterns, area of the house, family type, water supply, fuel used, nature of disease, mode of treatment, nature of irrigation, land holdings, cultivation patterns, livestock etc. This process of getting basic information about the community also provided an opportunity to get acquainted with the people of the area. This survey had facilitated the second phase of data collection consisted of in-depth interviews, and also helped in selecting the respondents for in-depth interviews.

1.6.7 In-depth Interview and Interview Schedule

The interview method is one of the essential components of the anthropological research; hence it was widely used during the research work. Numerous interviews were conducted and people were given an opportunity to explain village development history, their cultural heritage, difficulties and most importantly their traditions.

Two separate sets of questionnaires were prepared (open ended and close ended) and used to gather the respondents information. These interview schedules were used for both farming and non-farming households. The questions were formulated to elicit responses related to the system of arid agriculture, impact of technological innovations, sources of financing agricultural expenditure and household income, modernization and agricultural development, male-out migration, use of remittances, poverty, modernization process, change in health, education and political consciousness⁴. As already mentioned, the respondents selected for interviews were senior members of the village because they were in a better position to talk about the element of change over a period of time.

1.6.8 Key Informant

Another important technique of eliciting qualitative data was having resource persons within the community who can provide not only valuable information but also helped in removing obstacles and hindrances whenever they occurred. These peoples have enough knowledge about their society, its culture and traditions; they are also respected and acknowledged by the local people because of their social and cultural influences. They know ups and downs, strengths and weaknesses of their respective community. Furthermore, they have direct interaction with the people and having more awareness than a common person. The researcher was lucky enough to have a dynamic team of key informants with him that guided and helped him from day first by leaving aside their own activities and spared their valuable time for him. The researcher confesses that without the help of the key informants, he could not undertake his research with success.

⁴ The both British and American anthropologists including Gillian and Karen HO had provided an alternative explanation and linked financial issues with the economic and political theories. Moreover, Social anthropology is distinguished from subjects such as economics or political science by its holistic range and the attention it gives to the comparative diversity of societies and cultures across the world. Many social anthropologists use quantitative methods, too, particularly those whose research touches on topics such as local economies, societal development, and demography.

The selected key informant had not only provided the valuable information but also helped him in removing obstacles and hindrances whenever they occurred. For this purpose, various people in the community acted as resource persons. Overall 5 key informants having enough information on the different aspects of the village life have been selected. Notables among them were an ex-headmaster of the school, a member of union council, Mirasi, one Union Council Nazim and one Biradri head. They were always available throughout the study period to answer any queries or fill-in the gaps in information. The lower cast member called as “Mirasi” an elder member of the village had a deep cultural insight about the local way of life, and researcher learned a lot from him during the course of this study.

1.6.9 Case Study Method

The case study method is important to conduct research work in remote areas and collect data of his choice. As this study was also conduct in a far flung area of Potohwar region therefore case study method was also used to verify the field observations and made the results more reliable and authentic. Overall, twenty six individuals have been selected for detailed studies on different aspects of rural life, agriculture and overtime changes. All aspects of life were covered starting from initial stage to the present situation. The information generated through case studies had provided detailed background that otherwise was not possible to gather.

1.6.10 Sequence of Data Collection

The techniques for the collection of quantitative as well as qualitative data were determined on the basis of research topic and objectives already outlined for the study. According to objectives of the study, it was important to observe changes in rural economy on one hand, and to interview people with the help of structured questionnaires on the other hand. In order to become familiar with the subject, the initial stage of investigation was devoted to hear and see and to observe the given facts (Kuhnen, 1968). This principle was followed by the researcher throughout the research study period. While collecting the empirical data behavior of the local community was closely observed. The data were mainly collected during 2010 and verified again in 2012. The following methodological sequences were observed for data collection:

- The importance of participant observation and its usefulness has also been explained by Herbon (1988) and Johoda et al (1953). The technique was used to observe the behavior, social functions and economic changes directly. For the purpose, it was necessary to stay in the locale of study for a certain period of time with the local people in the same manner. To fulfill the requirement, the researcher stayed in the village *Chinji* throughout the field work. Some of the residents helped him win trust of the local inhabitants and to establish links with farming community to understand the role of previous rural development programs and their impact on the social and economic aspects of rural life.
- The use of census survey was very useful for the collection of general information (Khan 2010; Chaudhry, 1996). Therefore, in the start of the research work a census survey was conducted. Almost all necessary information related to the study was collected like social, cultural, political, agricultural, household structure and other basic information. This information was later on used for the in-depth investigation related to rural development activities.
- Both quantitative and qualitative information was important to see the overtime changes in the village. Therefore, after the census survey, quantitative information about the changes at farm, household and village infrastructure were collected through a structured questionnaire.
- On the basis of preliminary information, the key informants were identified because the role of key informants was necessary to get things explained in a more elaborative and intensive way. The key informants were the known personalities having experience of the area and the community. They were the members of the Union Council Chinji, caste and 'biraderi' heads, faction leaders, Mirasi (a low cast member who keeps the history of the villagers), the staff of the National Rural Support Program who were the source for providing useful information by explaining and interpreting the social, cultural, economic and political activities of the people.
- In addition to interviews, a daily diary was also maintained to record additional data gathered during informal discussions and personal observation. To collect first-hand details, the researcher stayed in the selected village that helped in

getting ample information about the functioning of regulatory patterns of social interactions at the village and farm levels.

- Many aspects of village life that could not be expressed in words were captured pictorially. Therefore pictures of the places, fields, hospitals, schools, roads houses and livestock were taken and pasted in the relevant section of the thesis.

1.6.11 Data Analysis

The methods of empirical and ethnological field research (quantitative and qualitative) were applied and connected with calculation methods of social sciences. As encoded questionnaire was used during the field work, the information acquired through structured questionnaire was codified, edited and analyzed by using SPSS (Statistical Package for Social Sciences) software. For the interpretation of statistical results, additional material from secondary sources such as census reports, publications, research reports, unpublished studies, statistical reports, etc. was also consulted.

1.6.12 Selection of Base Year

The studies of change are of two types i.e. diachronic and synchronic⁵. The synchronic analysis of the society has also some criticisms. The opponents of this analysis argued that due to scientific and technological advancements societies are not static or traditional (Singh, 1982). Therefore, the idea of traditional village or society has now become a myth. Due to this reason, it is difficult to collect the true information. So keeping in view the argument of reliability of information, the researcher had used the diachronic procedure and tried to see change with regard to past that was used as point of reference for studying the present. The year 1980 was decided as base year on the basis of major changes taken place in the village.

⁵ In the diachronic studies, change is analyzed between two-time dimensions and the results are compared to describe the change. While synchronic studies of change are conducted in single time dimension and a common way of looking modernization by comparing the findings of two villages, one representing traditional and the other modern.

1.6.13 Poverty Measuring Criteria

There are various poverty ranking criteria developed by different organizations and institutions. Most of them are based on income and nutrition of the people. But for this study local definition of poverty was formulated and farmers were asked to define the term poverty according to their own understanding. The purpose of this exercise was to observe the impact of development actions on rural poverty. Their own devised criterion was preferred just to avoid conceptual ambiguities. The farmer's perceived definition of poverty is given below:

Table 3. Poverty interpretation of the respective communities

Criterion	Rich	Middel	Poor	Very Poor
Land holding	150 kanals of land	100 kanals of land	10-20 kanals of land	No land
Livestock	3-Large animals & 25 small animals	2-Large animals & 10-15 small animals	1-5 small animals	1-2 small animals
Off-farm	1-2 employed or business holders	1 Employed or business holder	None	None

Large Animal: (Cow and Buffalo)

Source: Filed data

1.6.14 Indicators of Change

The organizations and professionals have already formed various development indicators Esman and Uphoff (1974) & APDAC (1976.). Their designed indicators have commonalities with little variations with the research study undertaken by the researcher. So, keeping in view the nature and objectives of the study, the following indicators have been used and explored for the present study.

- Changes in the use of agricultural technologies;
- Changes in farm productivity, reflected in per hectare yield over a period of time;

- Changes in socio-cultural and political structure of the society;
- Changes in socio-economic conditions of local people on the basis of agricultural achievements.

1.6.15 Research Questions

The significance of right and relevant question is well recognized in anthropological research. The rightly articulated and targeted questions make the research more authentic and reliable whereas, poorly constructed questions presented misleading and distorted results. So, in view of the importance of relevant questions, following basic research questions were inquired during the survey. Moreover, these questions were repeated and asked through different methods just to clarify and synchronize the collected information. The main research questions asked during the study were:

- a. Which organizations are working for the betterment of this village?
- b. What types of development interventions have been introduced during the last 30 Years?
- c. What types of actions have been taken for the effectiveness developmental activities?
- d. How you perceive bottom-up and top-down approaches?
- e. How you perceived traditional and democratic leadership of the village?
- f. Please explain poverty status of the village and overtime diversification of income sources?
- g. What types of changes you have observed in farming since last 30 years?
- h. What types of changes you have observed in livestock sector since last 30 years?
- i. Who developed irrigation facility in your village?
- j. What is the impact of mechanization on farming and non- farming families?

- k. How much change you observed in per hectare yield of major and minor crops?
- l. How micro-credit intervention facilitated farming communities of your village?
- m. How community organizations network facilitated the resource poor farmers?
- n. How rural development interventions benefited the female activities?
- o. How traditional labor force affected by overtime changes emerged in the agriculture sector?

1.6.16 Secondary Data Sources

Beside the major anthropological research tools and techniques, various secondary sources such as the government's documents, books, magazines, internet, newspapers and various study reports of different NGOs had been collected and used to explain the development history of the village and overtime changes in the society. However, to clarify some historical issues, officials of NGOs and government institutions have been also interviewed.

1.6.17 Organization of the Thesis

The research study had many dimensions and each dimension was important to be explored. Therefore, each and every aspect related to the study was discussed in a logical sequence with the people. The thesis has been divided into 6 chapters with the following sequence:

Chapter No.1: This chapter consists of brief introduction of the research topic; the importance of the topic in Pakistan's context was explained followed by statement of the problem, significance of research on the topic, objectives of the study, hypothesis and finally organization of the thesis. The chapter also contained information on research methodology followed and tools used to compile both qualitative and quantitative information. The selection of locale, poverty ranking

criterion and indicators of change were used to measure the pattern of change in the selected village.

Chapter No.2: This chapter contains the theoretical framework, concepts and approaches related to the topic applied during the research study. The theories of functionalism and structural functionalism, cultural materialism and economic anthropology were discussed and their importance was highlighted. Moreover, the concepts related to rural development were also included.

Chapter No. 3: This chapter introduces area profile in detail and explained the situation of the village, while the respondents profile, socio-economic conditions of the village and respondents characteristic have also been discussed in detail.

Chapter No. 4: This chapter is designed to highlight the concept of rural development generally understood in Pakistan, followed by pre- and post-independence history of rural development in the sub-continent and Pakistan. The relevance of agriculture development with the concept of rural development was differentiated in the chapter by adding a comparative study of agriculture with the rest of the areas and the rural life was also explained.

Chapter No.5: This chapter discusses the findings of the study by dividing it into 6 sections. Each section explains overtime trends of development and implementation. The following aspects of rural development have been analyzed and discussed in the chapter:

- Change agents in the village *Chinji*;
- Rural development and trends of education;
- Rural development and status of health facilities;
- Civic amenities (transportation, roads, electrification and water supply etc.)
- Transformation of social and political structure of the village;
- Agriculture

Chapter No.6: This chapter synthesizes the discussion of previous chapters in a summarized form. Basically this was a crux of the study based upon the empirical evidences. In this chapter some conclusions are also drawn on the basis of empirical results generated from the information collected from the local community members of the village *Chinji* and highlighted the relevance of concepts and approaches used for rural development with the analysis of the study in theoretical framework.

2 THEORETICAL AND CONCEPTUAL FRAMEWORK

Basically, a theoretical framework of an academic research study defines the scope of the study and limitations of the researched topic are described. It also helps in developing relationship between those factors that have direct and indirect relevance with the research problem. In other words, theoretical framework guides in probing and measuring the statistical relationship which is necessary to explain the research results in a scientific manners. Hence, keeping in view the importance of theoretical framework, contents of the following theories were found relevant to the present study. In this chapter, definitions, concepts, theories related to rural development and its various dimensions are described in detail. The underlying objective is to build a theoretical foundation for the study in hand.

2.1 Theoretical Framework

The understanding of change is important to know that how and why social, economic and political systems get changed overtime. These questions can only be answered by understanding the real process of change in political systems, democratization, development and economic growth. Moreover, successful utilization of natural and human resources depends upon a stable and fairly flexible economic and political systems, and also a social system compatible with growth and development. Overall change is a highly complex process. It involves many factors such as demography, technology, availability of resources, politics, economic and the interaction of these factors. Some aspects of change are seen as systematic and predictable and other are regarded as random or coincidental. The process of social, political and economic change can be best understood by combining systematic and coincidental factors of change. As the main focus of current study is to see the status of overtime changes occurred in a marginalized society, therefore, before starting the field work both systematic and random factors of development were carefully differentiated before starting this study.

The question that how coincidental and systematic factors influenced the change is important to explain the role of differnt institutions in the process of village

development. The importance of non-systematic factors in development was highlighted and well documented by many social scientists like Hibbs and Olson (2004); Weber, in Collins (1986); Marx, in Giddens (1971); Chirot (2000); Castells (1996); and Bendix (1984). Overall, their explanations reveal that development path does not necessarily follow a single pattern. The specific forms of institutions and the relation between socio-cultural characteristic and modernization may not be the same for different societies.

For instance, in the Western Societies, modernization or change was accompanied by expansion of social mobilization in education, urbanization, political, economic and cultural spheres. But contrary to this, modernization of Asian and Latin American countries has negative correlation between socio-demographic factors and institutional capacity for sustained growth. The best example of this change or modernization was Russia because it developed through a more centralized system including both political and economic systems. Similarly Japan developed by incorporating its traditional sphere into its modern framework than did western nations.

On the other hand, systematic approach is considered as an alternative of non-systematic or coincidental approach. This approach was mainly propagated by Marx Giddens (1971); Eisenstadt (1973); and North (1996). Each one of them had their own description of modernization or social change. Explaining the change Marx described dynamics of profit based capitalist system operating through commodity production. In view of Marx, capitalism is an inherently unstable system built upon antagonism that can only be resolved through changes which eventually undermining it (Giddens, 1971). Similarly, Eisenstadt (1973) used a comparative approach to lay out the conditions of social change and development. He described that

Modernization requires the development of a base level of a certain factors like social mobilization, structural differentiation, development of free resources, diversity of social organizations, and the development of regulative and allocative mechanism in the economic, political and other institutional spheres. He further argued

that achieving a certain level in these factors is necessary for the development of modernity but it is not sufficient condition alone to guarantee the continuation of modernity or development.

Eisenstadt (1973)

According to him sustainable development requires to develop an institutional framework capable of continuous absorption of social change. In explaining the real change, North (1996) stressed on the study of political, social and economic changes. Particularly he considered institutions as the carrier of the process of economic change. In his view, political and social institutions are the actors that introduce new technologies when they perceive that they can improve their competitive position by adopting such innovations. By arguing further he stated that institution and organizations are the product of their society, therefore, behavior of these institutions and organizations are mainly formed by social institutions of the society.

Keeping in view the relevance and importance of non-systematic and systematic factors of social, economic and political changes, the parameters of both (non-systematic and systematic) factors have been included in the study by Murdock (1961).

The factors like geography of locale, external events, availability of technologies, human development factors, social institution, production systems, development of natural resources, specialization and diversity of social organizations have been utilized to see their role in social and economic development of the studied village.

Murdock (1961)

Benedict (1961) stated that

Change process is a complex process. It cannot be reconstructed logically and by deduction. The habits of any particular culture are deeply ingrained and are not easily changed. The simple things or

ideas may not be invented or adopted even when there is a great need for it, and very complex things or ideas may be developed in simple societies. Benedict (1961)

Furthermore, Murdock (1961) argued that

Any event which produces change is a historical event and it occurs at a certain time and place. In his view the process of change has certain stages: first stage --- there may be an innovation; second stage --- is its social acceptance, selective elimination of innovations and finally integration of any new innovation in the existing system. Similarly arguing on the change process. Murdock (1961)

Both Murdock (1961) and Benedict (1961) tried to explain the dynamics and importance of the process of social change. Their arguments regarding the importance and documentation of change process were logical to explain the development path of the village. Overall, it appeared that approaches adopted by Murdock will be a way out to study the selected village. Hence the process of over time change in the selected village was specifically explored and documented by them.

As this study was conducted in a rural society, therefore understanding of rural culture and societal norms were extremely important to characterize the studied village. In rural culture, the role of social institutions like cast and *biraderi* has special significance in terms of political and developmental activities; therefore, in the present study researcher has used these concepts to explain the rural social dynamics.

The information related to the casts/*biraderi* (genealogical links of kinship through a common ancestor) has great importance because rural societies are mainly regulated on the basis of caste and *biraderi* systems. Moreover, study of hierarchical structure of the society, distribution of power, status and role differentiation was looked into. The marketing of agricultural commodities and effects of services such as education and health were measured. In an anthropological study, it is important to explore relationships between these units and related communities.

The approach used by Ferdinand Tönnies of the *Geineinschaff* and *Gemeinschaft* (1887) has been useful. A *Geineinschaff* organisation is more goal oriented, is more instrumental, efficient whereas the *Geineinschaff* organisation occurs when agriculture is considered more of a way of life and gives high priority to communication and sentiments whereas age and sex are linked to status, roles, rank and power. Mostly changes originate from the communities like *Gemeinschaft* that thrive on tradition and distrust innovation to societies where change in agriculture has taken place due to knowledge producing and distributing centres that encourage credit facilities, plant and animal stock breeding, etc.

The linear stages of growth model is an economic model. It was stressed by the Marshall Plan which was used to revitalize Europe's economy after World War-II. This model assumes that economic growth can only be achieved by industrialization. Growth can be restricted by local institutions and social attitudes, especially when these aspects influence the savings and investments. The constraints impeding economic growth are thus considered by this model to be internal to society. According to this model massive injection of capital and the interventions by the public sector would lead to industrialization and economic development of a developing nation.

The Rostow's stages of growth model are the most well-known example in linear stages of growth models. He has identified five stages of economic development in his theory of change. According to him, initial stage in development process is traditional one and at this stage societies have not much economic development. In the second stage, there is change in ideas towards economic progress. The third stage is an important one because it brings a dramatic increase in the rate of investment, where not only per capita income rises but also there are drastic changes in the methods of production. This stage is crucial because it lifts the economy from its traditional position to a more productive position. The fourth stage is where there is self-sustained economic growth and the last stage is where economic growth continues despite a high rate of consumption.

The Rostow's idea of development stages was looking quite logical in Pakistan's context. The already published literature on rural development in Pakistan also

supports his point of view; therefore, during this research work information on the process of village development was traced and described in the thesis. The Rostow model also has some flaws, of which the most serious ones are: a) The model assumes that development can be achieved through a basic sequence of stages which are the same for all countries, an evolutionary assumption while revolutionary changes are also possible; b) The model measures development solely by means of the increase of GDP per capita; c) The model focuses on characteristics of development, but does not identify the causal factors which lead to occur the development. As such, it neglects the social structures that have to be presented to foster development.

Economic modernization theories such as Rostow's stages model have been heavily inspired by the Harrod Domer Model which explains in a mathematical way the growth rate of a country in terms of the savings rate and the productivity of capital. Heavy state involvement has often been considered necessary for successful development in economic modernization theory. The researchers like Paul Rosenstein (1943), Rangar Nurkse and Kurt Mandelbaum (1945) argued that a big push model in infrastructure investment and planning is necessary for stimulating the industrialization. Another influential theory of modernization is the dual sector model by Arthur Lewis (1954). In his model, Lewis explained how the traditional stagnant rural sector is gradually replaced by a growing modern and dynamic manufacturing and service economy.

The idea of modernization theory was derived from the principles of progress, which states that people can develop and change their society themselves. This theory also states that technological advancements and economic changes can lead to changes in moral and cultural values. Scientists from various disciplines have contributed to modernization theory but initially this theory was originated from the work of Marquis de Condorcet. Modernization theory is mainly used to analyze the processes of modernization in the societies. The theory looks at which aspects of countries are beneficial and which constitute obstacles for economic development.

The idea is that development assistance targeted at those particular aspects can lead to modernization of 'traditional' or 'backward' societies. Explaining the

modernization process, Emile Durkheim stressed the interdependence of institutions in a society and the way in which they interact with cultural and social unity. His work *Division of Labor in Society* was very impressive. It described how social order is maintained in the society and ways in which primitive societies can make the transition to more advanced societies. The other proponents and contributors of modernization theory are David Apter who did research on the political systems and history of democracy; Seymour Martin argued that economic development also leads to social changes which tend to lead to democracy. Similarly, Talcot Parson used his pattern variables to compare backwardness to modernity.

The modernization theory was criticized due to its basic ingredients. The critics of this theory were of the view that Modernization theory observes traditions and pre-existing institutions of primitive societies as obstacles to modern economic growth. Modernization which is forced from outside upon a society might induce retaliation, violence and radical change, but according to modernization theorists it is generally a minor side effect. Critics point to traditional societies being destroyed and slipping away to a modern form of poverty without ever gaining the promised advantages of modernization.

Structuralism is another development theory which focuses on structural aspects of the economic growth of developing countries. The unit of analysis is the transformation of a country's economy from, mainly subsistence agriculture to a modern, urbanized manufacturing and services sectors oriented economy. Policy prescriptions suggested by structuralist theorists include major government interventions in the economy to fuel the industrial sector, known as import substitution industrialization.

This structural transformation of the developing country is pursued in order to create an economy which eventually enjoys self-sustained growth. This can only be reached by ending the reliance of the underdeveloped country on exports of primary goods (agricultural and mining products), and pursuing inward-oriented development by shielding the domestic economy from that of the developed economies. Trade with advanced economies is minimized by imposing different kinds of trade barriers and an overvaluation of the domestic exchange rate; in this

way the production of domestic substitutes of formerly imported industrial products is encouraged.

As a result, import substitution industries get flourished. The logic of the strategy rests on the infant industry, which states that young industries initially do not have the economies of scale and experience to be able to compete with foreign competitors and thus need to be protected until they are able to compete in the free market. Generally, structuralists argue that third world countries can develop through state actions. The roots of structuralism lie in South America, and particularly Chile. In 1950, Raul Prebisch went to Chile to become the first Director of the Economic Commission for Latin America (ECLA). In Chile, he cooperated with Celso Furtado, Anibal Pinto and Dudley Seers, all of them became strong advocator of structuralists' theories.

Dependency theory is essentially a follow up to structuralist thinking, and shares many of its core ideas. Whereas structuralists did not consider that development would be possible at all unless a strategy of delinking was pursued. Dependency thinking could allow development through external links with the developed parts of the globe. However, this kind of development is considered as "dependent development", i.e., it lacks domestic dynamics in the developing country's development process and thus remains highly vulnerable to the economic vagaries of the world market. Dependency thinking starts from the notion that resources flow from the 'periphery' of poor and underdeveloped states to a 'core' of wealthy countries, which leads to accumulation of wealth in the rich states/regions at the expense of the poor states/regions. Contrary to modernization theory, dependency theory states that not all society's progress through similar stages of development. Primitive states have unique features, structures and institutions of their own and are the weaker with regards to the world market economy, while the developed nations have never been in this follower position in the past. Dependency theorists argue that underdeveloped countries remain economically vulnerable unless they reduce their connectedness to the world market.

Dependency theory states that poor nations provide natural resources and cheap labor for developed nations, without which the developed nations could not enjoy

high living standards. Also, the developed nations will try to maintain this status and try to counter all the attempts of the developing nations to reduce the influences of developed nations. This means that poverty of developing nations is not the result of the disintegration of these countries in the world, but because of the way in which they are integrated into this system.

In addition to its structuralist roots, dependency theory has much overlap with NEO-Maxism and World System Theory, which is also reflected in the work of Immanuel Wallerstein, a famous dependency theorist. Wallerstein rejects the notion of a Third World, claiming that there is only one world which is connected by economic relations (World System Theory). He argues that this system inherently leads to a division of the world in core, semi-periphery and periphery. One of the results of expansion of the world-system is the commoditization of things, like natural resources, labor and human relationship.

The content of another theory that helped to conduct this research was the structural functionalism. The theory of structural functionalism is mainly based on the work of eminent anthropologists like Talcot Parson, Robert Merton Malinowski, Durkheim, Merton and Spencer (Allan, 2006). Among these researchers, Parson was interested in studying the structural components of society or social systems and in doing so he was not simply a structuralist but also a functionalist. Thus, he has described a number of functional prerequisites of a social system. According to him social systems should be structured, should have support from other systems, should meet needs of its members, should have participation from its members, and finally social system requires a language in order to survive. In principle, Parson's main interest was the system as a whole rather than the actors in the system, how system control actors of the system, not how the actors creates and maintain the system. Furthermore, Parson also believed that there are four functional imperatives that are necessary for all systems i.e. AGIL where A denotes Adaptation, Goal Attainment (G), Integration (I) and Latency or pattern maintenance (L). According to him, a system should perform these four functions for its survival or success. In his analysis, Parson was interested in structural components. Parson was criticized for his static orientation that he devoted more and more attention to change. In fact, he has focused on the evolution of societies.

However, most of his work on social change tended to be highly static and structured.

Although Merton was a student of Parson and both were associated with structural functionalism, even though there are conceptual differences between them. Actually Parson advocated the creation of grand theories while Merton favored more limited middle range theories. Furthermore, Merton was more favorable toward Marxian theories than was Parson. In addition to this, Merton also criticized three basic postulates of functional analysis that have been developed by Malinowski and Radcliffe Brown. Their first postulate was functional unity of society. It means that social system of society must show a high level of integration. Merton viewed it differently and stated that it may be true for small and primitive societies, but these generalizations cannot be extended to large, more complex societies. The functionalists' second postulate was universal functionalism. It showed that all standardized social and cultural forms and structures have positive functions. Merton argued that this contradicts what we observe in the real world. It is clear that not every structure, custom, idea belief and so forth has positive relationships. The third postulate was indispensability. This postulate led to the idea that all structures and functions are functionally necessary for the society. Merton was of the view that we must admit that there are various structural and functional alternatives to be found within society. Accepting Merton's arguments, Gans (1972), highlighted that Merton's classification was very useful for performing structural functional analysis.

Describing anthropological dimensions of functional analysis, Bronislaw Malinowski (1922) A.R. Radcliffe Brown (1949), Kuper 1997 and Afxencious 1990, argued that each society have some basic needs like food, shelter, recreation and healthcare, etc. Actually these needs are termed as natural inbuilt desires by functionalists and economists (Kuper, 1997; Afxencious, 1990). Adding further Truu (1990) pointed out that each system of the society has its own subsystems which are working in their boundaries and contents, therefore, to understand society as a whole one must study subsystems because these are the main pillars which actually maintain the social web of the society.

Similarly Murphy (2000) believed to study society as whole not in parts. Some members of functionalist's school of thought also stress on the importance and study of social institutions. In fact study of social institutions is essential to explain the mechanism that governs the societies (Mcgee and Warms, 2000). Supporting this argument Kirsten (1983) concluded that institutions must synchronize their working in accordance with the requirements of their beneficiaries, so that they can continue as fundamental part for the maintenance of social system. While studying the societies, some anthropologists were of the view that one must see how cultural institution maintains equilibrium and cohesion in the society. Basically they were interested in studying the underlying structure of the social system (Chopra, 2005; Mcgee and Warms, 2000).

Factually, it was true that the theory of functionalism remained unchallenged and dominant theory from 1930 to 1960s. While in the late 1960s, criticism on this theory was increased and ultimately became more prevalent than praised. One major criticism on the theory was that structural functionalism does not deal adequately with history; it is inherently a historical theory. Secondly, various anthropologists (Abrhamson, 1978; Cohen 1978; Mills 1959; Turner and Maryanski 1979) argued that structural functionalism was unable to deal with the process of social change. Similarly, third criticism on structural functionalism was that this theory is not able to deal with conflicts of the society (Abrhamson, 1978; Cohen, 1968; Gouldner, 1970; Horwitz, 1962; Mills, 1959; Turner and Maryanski, 1979).

In spite of criticism on the theory of structural functionalism, this theory has great relevance with this study. Therefore, to understand the rural community, its systems, subsystems and process of social, economic and technological changes, researcher has used some aspects of structural functionalism as a research tool.

The appropriate arguments of the supporters of cultural materialism have forced the researchers to examine different forms of production and social classes living in specific conditions. This theory has its own limitations. It does not study the economic modes of production in materialistic sense, and valued farmers families or household as unit of production, reproduction and social relations (Bernstein 1981). The social relations of production include relations between various units of

production, various classes and relations of processes of social reproduction in a sense that no household can satisfy the conditions of its own reproduction.

The change in economic status of a household changed farmers economic behavior like abrupt changes in economic status, change in family types from joint to nuclear family system, etc. (Chaudhary, 1982). Usually economists did not consider relevance of social factors in their research studies, while for materialists, these factors are very important in studying the change and impact evaluations of technologies (Lefebvre, 1999). The individual's economic behavior is also influenced by the modernity coupled with the capitalist's spirit to strive for the materialistic gains. Harris (1997) pointed out that to understand any culture, understanding about the local production systems is essential. In validating Harris point of view, Marx described that production system has basic role in social evolution and influencing the ideological levels of the society (Mcgee and Warm, 2000). Accepting the Harris views, the researcher has included those parameters that were necessary for the understanding of local production systems.

Generally, in rural Pakistan, people's economic behavior shaped up on the basis of various motivational factors. Almost all social and cultural events like marriages, religious ceremonies and funerals take place with money along with other household expenditures, but it doesn't mean that people's behavior remain materialist during these social events. Actually people exchange gifts by following the principle of reciprocity. This gift exchange practices was common in Pakistan and also in most of other countries. In relation to gift exchange practice, Malinowski ethnographic account of "Kula Exchange in Melanesian society" is very popular in which the local gift exchange systems of transactions and the real barter system was described (Khan, 2010; Carrier, 2005). It is believed that economic activities are determined on the basis of farmer's interest by valuing their cultural norms, traditions and values (Jutting and Carrier, 2005). Likewise Morrison (2005) has also pointed out cultural practices, traditions, norms and values as important parameter to understand the dynamics of development. The above contents of the theory of cultural materialism have been incorporated to have a broader understanding of influencing factors before starting the research work. However, some relevant concepts need a detailed discussion, as given below.

2.2 Concepts

The concept of rural development has many dimensions and can be elaborated in different perspectives. These differences in concept have further expanded boundaries the scope of rural development studies. Over the years, new concepts have also emerged and included in the rural development theories. So, having lot diversity in concepts and perspectives it is important to make clarity among various dimensions of the rural development that a researcher is going to interpret with his study. Hence, along with the theoretical framework, conceptual framework is also imperative to sketch out the scope and limits of an academic study. In this context, following concepts were found important for devising the research design of the study.

2.2.1 Defining Development

The concept of development has direct relevance with present study. Therefore before going into details, this is imperative to understand different aspects of development and logic behind their differences. For this purpose, the researcher has reviewed a variety of literature on development and found that the term 'development' for a long time remained mired in the host of ideological overtones. In 1949 President Truman of the USA referred it as a "greater production" through a wider and more vigorous application of modern scientific and technical knowledge as the key to prosperity and peace in the third world (Melkote, 1991).

Later on Deutsch (1961), Hibbs (1973), Levy (1966), Olson (1963), and Parsons (1960) had considered development as a "process of improving the capability of institutions and value systems to meet the increasing demands of a social, cultural, political and economic character". Hence "development' in its real sense is the progress of human welfare and civilization, while, Behran and Srinivasan (1995) perceived the term development as "participatory process of social change intended to bring social and material advancement through gaining control over their environment".

While, over the years, concept of development was redefined in more simplistic manners and the word development was explained in terms of the questions such as

what has been happening to poverty? What has been happening to unemployment? What has been happening to social and economic inequalities? If the answer is of decline from high levels, then beyond doubt this has been a period of development for the country concerned (Echeverria, 1997; Musu and Lines, 1995;; Kuznets, 1955; Sen, 1981; Seers, 1979). Goulet (1967), a political economist, viewed development in human perspectives. According to him development is “Freeing men from nature’s servitude, from economic backwardness and oppressive technological institutions and from unjust class structures. It was also seen as a linear and deterministic process involving the modernization of traditional, unscientific cultures (Melkote, 1991; Grossman and Helpman, 1994; Romer, 1990). In 1998, Oakley conceived development as a process that creates conditions for poor people to have greater access to natural resources and influence over poverty reduction strategy. An eminent group of development professionals like Klaren and Bossert (1986) and Robert Ackoff (1971) described development as a process of learning not of production, but learning how to use oneself and one’s environment to better meet one’s needs and those of others.

The development has its own significance but after 1970s, another term sustainable development became very popular. This new dimension of development can be defined in several ways but in terms of human needs, the definition given by William and Millington (2004) seems more pertinent. Sustainable development means development that meets the needs of the present without compromising the ability of future generations to meet their own needs and intends to anthropocentric approach to view development (Reader, 2006). A similar definition was also given by FAO (1988) and had described it as the management and conservation of natural resource base and the orientation of technological and institutional change in such a manner to ensure the attainment and continued satisfaction of human needs for present and future generations.

2.2.2 Defining Rural Development

The concept of rural development is difficult to understand until and unless the term rural has a clear distinction because over the years, it was perceived differently by experts of different disciplines. The term "rural" was first used by sociologists in

1920. The concept of “rural” varies from region to region and discipline. Therefore it is difficult to define it uniformly. Generally, the term “rural” is used as a term opposite to “urban”, based on social, economical, and natural conditions. Some experts define this term on the basis of infrastructure and density of population. However, it was also perceived in terms of area and business associated to that area. Moreover, there is a traditional assumption that tends to go along with the word "Rural", for instance, it is a common belief that farming is a mainstay of most rural economies (Keller, 2007; Pirzada, 1999; GOP, 2005; Memon et al., 2001; JICA, 2008).

While differentiating rural from urban areas, Strutz (1994) stressed on the qualitative characteristics regarding production and social system, functions and structures of the rural area that must be paid due attention. Therefore, a rural area includes the regions with village settlement as well as small-town settlements with a village or village like environment having agro based activities.

Pakistan is largely an agricultural country and majority of its population lives in rural areas. The economy of rural areas is mainly based on crop and livestock farming. Therefore, the definitions described by Strutz (1994), JICA (2008), Keller (2007), Pirzada (1999), and Memon et al. (2001) are quite close to the Pakistani form of 'rural' and further our target village *Chinji* has the similar characteristics and represents a true picture of the definition. After comprehensive review and detailed discussions with the development experts, the meaning of word rural was clarified and that helped the researcher understand the notion of rural development in its true sense.

The concept of rural development has many dimensions and it could be studied from various perspectives and within the framework of various set of assumptions AIOU (2001). The international institutions and experts like SARDF (1997), World Bank (1975), JICA (2008), Frawley (2008), and Copp (1972) viewed rural development as a “strategy aiming at improvement of economic and social living conditions focusing on a specific group of rural poor that assists the poorest group living in rural areas to benefit from the developmental activities”. According to Ensminger (1972), Groenveld (1978), Lawania (1992), "Rural Development seeks

to involve a process of transformation from traditionally oriented rural culture towards an acceptance and reliance on science and technology".

In sixties and early seventies, there was consensus among the development professionals that intensive industrialization is the main development path. In this context, it seemed natural to define rural development as precisely leading into that path: The scholar like Jasma et al (1981) describe rural development in terms of overall improvement in the economic and social well-being of rural communities and in the physical and institutional environment in which they live. A wide-ranging definition of rural development was also explained by Chamber (1983), Buller and Wright (1990). According to them, rural development is a strategy to enable a specific group of people, rural women and men, to gain for their families beyond their own needs. They stressed mainly on the development of poor segments of the rural societies. From all the above mentioned definitions, it can be concluded that rural development is matter of socio-economic uplift of rural communities.

As rural development has been viewed in different ways, therefore, Anker (1973), & Haque (1977) have defined the rural development as strategies, policies and programs for the overall development of rural areas and the promotion of activities in the areas like agriculture, forestry, fishing, rural crafts and industries, and the building of social and economic infrastructure. The modernization approach to rural development equates rural development with agricultural development. This approach ensures prosperous life for their children when agricultural productivity increases. World Bank (1975) and Mosher (1969) also recognized interdependence of agricultural growth and rural growth.

The increased welfare of rural people depends on achieving agricultural growth. Rannan and weitz (1979) consider rural development as a process leading to the improvement in agricultural productivity, rural incomes, welfare in terms of nutrition, health, education and other factors of a satisfactory life such as security and equity. Accordingly, Pakistan is one of the true examples of modernization approach because almost all development projects undertaken previously were of agricultural based used as a tool for overall development. This approach has not achieved its targets as defined by its proponents as the beneficiaries were the major

land owner families while rest of the community was deprived from the fruits of development.

The notion of modernization approach has been rejected by Misra and Bhooshan (1981), Friedman and Lindbrom (1978), Sonyal (1994). They were of the view that "Green Revolution in developing countries did not improve the living conditions of the rural poor". They further argued that this failure was due to non pursuance of other factors like land reforms, rural industrialization and other institutional reforms. Similarly Friedman and Lindbrom (1978), Sonyal (1994) argued that until and unless the six basic elements of development are incorporated, the prosperity of the rural masses will remain questionable. The elements like, labor intensive agricultural development, employment generating, minor public works, small scale labor intensive, light industry establishment in and around farms, local self help and participation in decision making, development of an urban hierarchy supporting rural development and finally self-supporting appropriate institutional arrangement for multi-sectoral project coordination have been suggested to be incorporated to make the rural development projects more effective and sustainable.

Usually, in Pakistan and other developing countries agriculture development is used as a tool for rural development, therefore, conceptual problem exist between rural and agricultural development⁶. Mostly these concepts are perceived wrongly and used as substitute to each other. Therefore, it was important for the researcher to clarify the concepts and make the distinction clear between rural and agricultural development. On the basis of this, it was tried to make conceptual clarity between these two domains of development in the subsequent part.

2.2.3 Differentiating Between Agriculture and Rural Development

After conceptualizing rural development, it seems important to define its all associated concepts clearly and precisely. Unfortunately, in Pakistan, agriculture and rural development are interchangeably used and people are confused in this respect. Nationally and internationally, a number of experts have tried to make clear

⁶ Guy Hunter, 1965. *Modernising Peasant Societies: A comparative study in Asia and Africa*. London Oxford University Press 1969, p. 25

distinction between these two concepts. According to them, agricultural development mainly aims at increasing the production of agricultural products such as crops, livestock, fish and poultry etc. The human beings, land and capital are simply regarded as means of production of goods and services, while the rural development mainly targets people and the institutions. It also includes agricultural development activities. However, agricultural development is one of the means of economic revitalization for active farmers and targeted rural villages (Niki, 2002; Singh, 1986; Binswanger, 2004; Datt, 1998; Diao, 2005; Ellis, 2004).

Lacroix (1985) has explained differences between agriculture and rural development quite differently. In his view,

Agricultural development tries to raise agricultural productivity and is more of a technical nature – it is similar to other efforts to develop physical capital as a means of economic growth. The rural development, though, by definition is more benefiting, primarily for the poor. Therefore, the fundamental distinction between pure agricultural and rural development is the emphasis on capital development for the former, and human capital development for the latter.

Lacroix (1985)

2.2.4 Poverty and Rural Development

Geographically, poverty ridden communities are mainly located in rural areas (Belsky and Karaska, 1987). It is also true in case of Pakistan because rural poverty is significantly higher than urban poverty (World Bank, 2006; Cheema, 2007; GOP, 2006; Fantasy, 2008; PES, 2009). The rural society in Pakistan is predominantly based on agriculture production but failure of land reforms has deprived large segment of rural population from the agricultural land. Therefore, the poverty has been increased in the rural areas in Pakistan (Khan, 2010).

Moreover, agriculture sector is uncertain and highly vulnerable to risks. Whatever happens to agriculture, it directly or indirectly affects the rural communities. Therefore, since the creation of Pakistan, various poverty reduction plans and strategies were undertaken by the institutions of rural development. The economic

growth was considered as the key to poverty reduction, whereas, in 1970's attention shifted to the direct provision of health, nutrition and educational services. It was argued that improvement in health, education and nutrition for the poor was important not only in their own right but also to promote growth in income generally. However, at the end of 1970s, satisfaction of basic needs became an increasing concern of the planners by realizing that the economic growth is not a sufficient measure to success of the development.

Moreover, investment in the human resources had also helped increase the income reducing the poverty. In 1980s, attention was paid to the problem of adjustment and constraints on public expenditure and improvement in the condition of poor, while in 1990's more emphasis was laid on to frame a policy that could be more effective for reducing the extent of poverty and explore prospects for poor on sustainable basis (Larik, 1998; Haq, 2001). By implementing such efficient and effective poverty reduction strategies, rural poverty was not reduced. Rather, the proportion of population living below the poverty line has further increased (Khan, 2010). Consequently, poor segments of the society migrated from rural to urban areas in search of their livelihoods. According to Khan (2001), rural development has been used as a catchword and wrongly regarded as panacea for the menace of poverty in Pakistan. The status of rural and urban poverty is given below:

Table 4. Poverty comparison by urban and rural areas of Pakistan (%)

Year	Urban	Rural	Pakistan
1998-1999	20.29	34.7	30.6
2000-2001	22.7	39.3	34.5
2004-2005	14.19	28.1	23.9
2005-2006	13.1	27.0	22.3
2010-2011	22.4	16.6	20.7

Source: Field Data

Contrary to the above argument, there are people who believe that in Pakistan rural poverty can only be eradicated by accelerating agricultural activities. According to them, majority of farmers are uneducated and giving them relevant education will bring attitudinal change towards adopting improved farm technologies (Smesler, 1971; (Barel et al., 1987; Lefebvre, 1999). Poverty can also be eradicated if the large section of the rural population is motivated to become agriculturists with the availability of resources, knowledge and the market acceptability for the sale of farm outputs (Bendavid-Val, 1987). Supporting this argument Chaudhary (2004) pointed out that analysis of poverty has shown that the incidence of poverty is relatively higher among non-agriculturists vis-à-vis agriculturists in the rural areas and it is true even in rural areas of USA. The rapid rural industrialization was also suggested as poverty reduction solution (Khan, 2010).

Personally, the researcher agrees with the argument that accelerated agriculture and agro-based industrialization in rural areas have enough potential to reduce poverty in irrigated areas of Pakistan. While in the areas where farming is based on rain water, poverty may not be reduced to the extent of irrigated areas. As village *Chinji* is located in the rain-fed areas, majority of the people are resource poor and are unable to meet their household needs from crops therefore they have used livestock especially the small ruminants as an effective poverty reduction tool. The use of improved farm production technologies have been extensively promoted in previous rural development projects for poverty reduction and modernizing the rural economy.

The term “modernization” was also interpreted in many ways, therefore, it is necessary to understand the meanings and complexities of the word modernization. The detailed description of this term is given in subsequent section.

2.2.5 Modernization and Rural Development

Modernization is thought to be a change in traditional way of doing the things to more innovative and productive manners, and mostly defined in terms of economic development (Chatto, 1971). Economic development broadly refers to distinct and interrelated processes. In terms of technology, it means changes from traditional technologies to scientific technologies. In agriculture it refers to a shift in farming

from subsistence to commercial production and in ecology it specifies movement of population from farm and village to urban centres (Smelser, 1966). The use of modern means of production like mechanization of production process and development of industry is also considered as economic development. A society in economic terms thus is modernized if it is highly industrialized and traditionally based on subsistence agriculture (Singh, 1982) According to Dube (1967), techno-economic changes necessarily induce some changes in the socio-political order.

Accordingly, situation in Pakistan was analyzed and found that the mechanization and diversification of agriculture has improved their farm productivity and socio-economic conditions. The improvement in economic conditions has upgraded their social status and now people seem more cognizant about education, development as well as their leadership. The concept of modernization can be classified into three categories; (i) studies on the formation of concept and theory, (ii) on individual modernization, and (iii) studies on social modernization. The study of first category is mostly quantitative in nature and seeks to measure the individual modernity, while the study of other two categories are qualitative and contrary to the former conducted at macro and micro levels. The macro studies are conducted at bigger level whereas micro studies to analyze modernization in limited area that might be village, group of villages or a small region (Singh, 1982). These micro studies can be conducted under various themes like change, leadership, social interaction and economic development. The focus of the research study undertaken in a rural village was to observe and document the economic development in a specific time period and in a specific place. Therefore, the study was of micro level.

The modernization has also been conceived as a process that denotes transition of society from one level or form (considered as lower, traditional, pre-industrial and underdeveloped) to another level or form (considered as higher/better than the preceding ones, modern, industrial, developed etc) (Lerner 1968; Rostow 1960; Eisenstadt, 1966). Some scholars conceptualized modernization on the basis of changes emerged in the social structure (Parson, 1960), in social mobility (Lerner, 1958), social justice and economic prosperity etc. (Sharma, 1978), or nature and degree of adoption of modern technology (Levy, 1966). As one of the objectives of current study was to analyze the socio-cultural changes, the above arguments have

validated the importance of objective set forth by the researcher for the research study. The empirical findings will verify these domains of modernizations whether the arguments were true in case of the selected rural community or not. The modernization was conceptualized by the researcher as it has been described by Chatto (1971); and Smelser (1966). The reason to agree with their point of view was compatibility of their descriptions with the study objectives.

2.2.6 Factors of Modernization

The effectiveness and performance of economic and non-economic factors of development largely depends upon technical, managerial, professional skills and a congenial social environment both inside and outside the place of production. The economic factors like investment, resource allocation, economic growth etc. are directly related to non-economic factors like population growth, urbanization rate, socialization of youth, development of rational attitude, mass media exposure and organizations of technical and professional education (Singh, 1982; Maning, 1968, 1986; Hoselitz, 1968; Hoselitz, 1968; Myrdal, 1968; Gore, 1971; Inkeles, 1966; Ishrat Hussain, 2005; Topel, 1998; Conner, 1999).

The changes in different components of social and economic institutions (social systems, political structure and agriculture, etc.) can be induced by improved educational system as it has been considered as a powerful agent of social transformation (Adamu, 1994; Singh, 1982; Durkheim, 1938; Fagerlined, 1982; Adams, 1977). The scholars like Karabel (1977) and Paulston (1976) also considered education as an important change agent but they were of the view that to avoid the general problem of relationship between education and social change, educational system must be transformed and brought into harmony with a new institutional framework. The Schultz (1964) was in favor of farmers' education, who believed that by improving farmers professional skills, rural economy will grow faster. Resultantly, the socio-economic conditions will improve. In the light of above discussion, education, technical skills, scientific knowledge and technical advancement have also been given priority by the researcher to include in the research study.

2.2.7 Social Organizations and Rural Development

The notion of caste and *biraderi* is important in social relationship which is tied in terms of brotherhood or biraderi system (the patrilineal social relationship) in the rural Punjab (Alvi, 2001). The anthropological studies related to development attracted the researcher to observe the societal practices of decision making and factors that influence the local people decisions. In this context, caste and *biraderi* system played a very vital role in rural Pakistan. *Biraderi* can be defined as a rigid social system in which a social hierarchy is maintained generations after generations (Ahmad, 2002). Almost all decisions related to village's development are made in consultation with caste and *biraderi* heads. The mobilization of local community members in line with caste and *biraderi* is much easier as compared to a heterogeneous society (Kalshoven, 1989). Our entire society is divided in caste, creeds and biraderi system having a visible status gap between people belonging to high and low castes. Those who are from low castes are called as "*Kammis*", i.e. poor workers).

In rural Pakistan, indigenous organizations played a strong role in the operation of rural development projects. Actually, their common interests, needs, attitudes and behavior of the people pave the way for the development of active and effective rural organizations. The previous experience has confirmed that the core groups of the village social organization are '*biraderis*' which have very tight structures. Mostly members of a *biraderi* facilitate their group associates and also lead to serious competition and strife between groups (Merrey, 1986). In rural Pakistan, *biraderi* is an endogamous group of individuals who are related to each other through blood or marriage (Mirza, 1975). The villages having few '*biraderis*' usually proved to be more effective, influence and productive in terms of socioeconomic development. Whereas, various empirical studies conducted by Merrey (1983, 1986), Mirza (1975, 1992), Lowdermilk (1978), Bottrall (1981), and Uphoff (1986) had confirmed serious difficulties in establishing group responsibilities in a more stratified and less cohesive communities. Hence, observing a strong role of caste and *biraderi* in making decisions this concept was thoroughly studied and discussed in the subsequent sections.

As prime focus of this study was to highlight the overtime changes and patterns of these changes, therefore, to clearly understand overtime changes it was necessary to explore visible and invisible impacts of previous development projects. So in relation to this, the concept of change has special significance for this study. Moreover, the question how it was perceived by the researcher is summarized as under:

2.2.8 Social Change and Rural Development

The social change is an ever-present phenomenon. In broader sense, it means change in social relations. In order to give a more restricted meaning, it has been defined as a change of social structure (Iqbal, 1993; Yousaf, 2006). Usually this term is used within sociology and applies to modifications in social relationships or culture (the term 'culture change' is used within anthropology). Since the society and culture are interdependent, therefore, 'socio-cultural change' is a more acceptable term. The study of socio-cultural change is the systematic study of variation in social and cultural systems. While studying the socio-cultural changes Preston (2000) and Sanderson (1942) have highlighted rate of change, the processes of change, and the directions of change as an important parameters. Indeed, the study of social change constitutes the main object in the sociological theory and inquiry of Marx, Weber, and Durkheim. For Marx, the analysis of social change is present in an evolutionary model that contends that human history has seen a succession of models of production such as tribal, ancient, feudal, and capitalistic and that the present capitalist mode of production is bound to be superseded by the socialist mode of production. Likewise, Sahibzada (1964) mentioned that social and economic changes are distinguishable from one another but at the same time inextricably intermingled. These can be conceptually grasped but cannot be factually separated because any change in the economic field has repercussions in the social setup and vice versa. While explaining the process of change, Barhoun (1984) described that the process of change requires motivation and willingness on the part of individuals and societies regardless of their internal ideological and socio-economic differences. The 20th century dichotomous approach to modernization was greatly influenced by the 19th century evolutionary theory of social change. The dichotomous theory conceptualizes the transformation of

societies in terms of bipolar transition (Lerner, 1958; Balck, 1966; Eisenstadt, 1966). The pioneers of sociology - August Comte, Herbert Spencer and Karl Marx - offered an evolutionary explanation of social change. They sought a universal trend in the development of society that passed through a series of evolutionary stages in which successive stage showed a marked complexity, a higher level of technology and social differentiation as compared to the preceding ones leading finally to the growth of a complex modern or changed society. The evolutionary model was carried further by Emil Durkheim and Max Weber. The Durkheim being a critic of positive evolutionary theory implicitly utilized evolutionary theme while he made distinction between mechanical and organic division of labor. Similarly, describing “low level change”, Zaltman, Duncan and Hobelk (1973) have generated two broad theories of change.

These categories are those that see change as an internal process originating from the organization, and explaining the change as externally motivated with a large input from social conditions. Within this broad categorization, Zaltman, Florio and Sikorski (1977) have further generated sub-categories of theories which they described in terms of specific models. The model suggests two basic stages in change: initial sub-stages are knowledge-awareness, attitude formation and decision, while implementation goes through initial implementation and continued-sustained implementation. Significant changes have also been explained as “those changes which are so regular in their recurrence that they are a major component of predictable order and scarcely to be regarded as change in the sense of altered roles, rules or condition of action (Rehana, 2006; Moore, 1963).

The studies of socio-economic change are incomplete without knowing the conditions that bring changes. Actually, any change in a society is a result of various factors and effective institution is one of them. Therefore, in any anthropological study type of institutions and role of these institutions is important in describing the real trends of rural development. The subsequent section is explaining the different dimensions of institutions and their role in development.

2.2.9 Institutions and Development

The importance of institutions in development has always been emphasized and discussed at national and international levels Nabli et al. (1989). Moreover, there is a consensus over the understanding of local institutions and their role in the effectiveness and management of development programs. The concept of institution was defined by different scholars and they have highlighted diverse dimensions of institutions. Describing importance of the institutions Uphoff (1986) pointed out the study of behavioral aspects on an institution.

Whereas other scholars like Ruttan and Hayami (1984) have stressed on the evaluation of the rules perspective as being more crucial while pleading for the behavioral aspect. Uphoff (1986) defines institutions as complexes of norms of behavior that persist over time by serving collectively valued purposes. Ruttan and Hayami (1984), on the other hand stressed that institutions are the rules of a society or of organizations that facilitate coordination among people. Likewise, Manig (1991) arrived in a conclusion that institutions are the stable regulatory and organizational principles and rules which govern interaction process between the people themselves.

Furthermore, institutions being collective conventions and rules provided a surety for the continuous flow of social interactions Bromley (1982). Therefore, they guarantee the stability of the system (Manig, 1991). Discussing the institutional environment, North (1971) has classified the institutions into “basic institutional environment” and “secondary institutional arrangements”. Along with others, the former classification deals with the set of decisions, rules and property rights whereas the latter covers the specific forms and distinctions of the arrangements. Within the same context, Fichter (1968) denotes these classifications as ‘main’ (Haupt) and ‘by’ (Neben) institutions whereas Gafgen (1983) labels them as primary and secondary institutions. Following Fichter (1968) and Waschkuhn (1987), Loffler (1992) has listed the following characteristics of an institution:

- goal oriented;
- coordinated;

- regulated;
- allocated to the values, and marked by certain inertia.

The values and norms practiced by a society are reflected from its institutions. Deviation from such regulatory mechanisms is rewarded with positive and negative consequences. In the agrarian societies like Pakistan institutions are based on customary rules and moral principles instead of formal rules and regulations. Similarly, Hayami and Kikuchi (1981) considered the basic institutional environment of village communities consists mainly of traditional customs and moral principles. For the implementation of these institutions, no formal arrangements are required. Rather they are enforced through social interactions. In the present study structure, roles and functions of these institutions have been analyzed that would definitely help in understanding the overtime changes in the local institutions.

The social scientists and academicians have always accepted and documented the role of institutions in development process. The institutions always try to promote cohesiveness among the stakeholders. But when institutions collapse or failed to manage the society then it hampers the process of growth, cause poverty and increase conflicts in the society (Easterly, 2006). Mainly social institutions are governed with normative social rules that govern the society, enforce rules and regulations either through law or social control.

When the terms institution and organization are used in the day-to-day business, hardly any difference is distinguished between the two that causes a great confusion, or correctly phrased leads to mistakes. It should be made clear that institution and organization are two independent concepts, but having interdependent relationship (Ben-Porath, 1980). In simple words, institutions are the norms, values and principles which define the organization whereas organizations itself operationalize the institutions (Bromley, 1982). The internal and external interactions of the organization are controlled and regulated by institutionalized behavior, interaction patterns and general regulatory principles of the society (Manig, 1991). Similarly, to remove this misconception, Fleetwood (2005) has also made a clear distinction

between institution and organization. According to him institutions are not organizations because institutions are classes of an organization.

The effective functioning of the institutions and organizations are important for the socio-economic development of society. Therefore, an in-depth discussion is required to explore institutions role in skill development as well as in the improvement rural economy. For this purpose, subsequent section is dedicated to explain and highlight the concept of skill development.

2.2.10 Human Skill Development

The use of new tools and techniques has now become important to sustain and improve the socio-economic conditions of the rural areas. The training and skill development about the use of improved and innovative technologies has played a vital role in economic development of the masses (Mustafa, 2005). Although, almost all state of the art technologies are used in Pakistan but due to lack of various policy and non-policy supports and social concerns, many of them are not practiced by the villagers in rural areas. This weakness of the society is not only limiting productivity gains but also disturbing overall economy of the country. The importance of new skills has been further highlighted by Drucker (1989). He pointed out that the social centre of gravity has now shifted to the knowledgeable workers and almost all developed countries are becoming knowledge societies.

Now it is an established fact that human capital development is a precondition for attaining progress and developing a knowledge-based society capable of improving the wellbeing of its people. Augmenting this fact Marshall (1995) documented and concluded that although nature is subject to diminishing returns but man is subject to increasing returns (cited by Meier, 1995). The renowned Agricultural Economist Schultz also emphasized investment on the development of human capital specifically the in rural areas. He was of the view that the decisive factor of production to develop the poor people is not the space, energy, crop and land but the decisive factor is the improvement of human resources. Similarly, John Naisbitt and Patricia Aburdene (2000), Toffler (1990) had also pointed out that new technologies have empowered the individuals, now "mind workers" are called individual entrepreneurs.

The economists like Robert Reich (1992) and from ILO (1998) were of the view that economies are no longer local or even national in their scope, these are truly global. Therefore, money, jobs and technology can move freely anywhere and can be used for the greatest advantage. Supporting Reich's argument and the importance of skilled resources, Mayer (2000) and Shanker (2001), have highlighted that globalization is a premium for the skills and skill resources rather than the traditional resource base.

The study conducted by Sanjay Lall (2004) and ILO (1998) in Pakistan had indicated that main drivers of competitiveness are like trained human resource, technological use, technology transfer and supporting institutions are far away from encouraging level. Therefore, Pakistan should invest on its human resources and allied institutions.

In order to analyze the skilled resources and contribution of different organizations the study in hand has an opportunity to see these concepts at micro-level. The analysis of empirical data will clearly depict the knowledge level of the society and its effects on rural economy. Hence, in this context, the selected village for this study was more appropriate because various organizations have imparted much training in the village.

In rural areas, both male and female are performing agricultural activities and generally their activities are divided on the basis of time involved, capacity of the individuals and social customs⁷. But it is unfortunate that both male and female are still using traditional knowledge and skills. This situation needs further analysis to identify the real causes of this knowledge gap and skill at grass root level. Therefore, the concept of gender and its role in farming are very much relevant with the study. The concept of gender has been discussed by various scholars and for analysis purpose they have given various direction of this concept. The importance of gender and its role is discussed in following section.

⁷ For instance, cotton picking and picking of some vegetables is solely female activity while functions like ploughing, watering the fields etc. are carried out by males.

2.2.11 Gender Role in Rural Development

In rural Pakistan, the role of both men and women is very contributory and productive in crop and livestock production activities. Up till now lot of research work has been conducted on gender role in agriculture and rural development. Almost all of these studies have shown significant role of women in the development of rural economy. Quantifying the women participation Freedman and Wai (1988) have reported that 90 percent women participate in agriculture and similar findings were also earlier reported by Bahar (1987). By segregating women and men activities Ahmed et al. (1988) showed that men's participation is dominant in heavy (or muscle power needed) and mechanized farm operations while the women participation is significantly higher in post harvest activities. He has identified and documented five broad categories of economic activities related to rural women in Pakistan i.e. (i) Household work; (ii) Family farming; (iii) Family non-farming or household related (sewing, hand-knitting); (iv) Non-agriculture work outside home (teaching, service); and, (v) Agricultural work outside the family (hired by others for weeding, harvesting and post-harvest operations). In his analysis women's activities were further grouped into three categories, i.e. (a) crop activities; (b) animal husbandry; and (c) other professional and technical works. Similarly, Jaim and Rehman (1988) have identified five out of twenty-two operations as critical components of the crop production cycle and in these critical components female participation was about 50 percent.

Before 1990, women's issues in Pakistan were neither recognized nor given importance at any level. But with the passage of time, importance of gender role in managing rural sector was realized by the policy makers and gender mainstreaming (particularly women participation) is categorically addressed in all development programs and policies. Resultantly, women active participation in the development process was pursued by the authorities of skill development centers. They have upgraded their income generation capacity by cloth sewing, embroidery and small business enterprises; imparting home health care trainings, skills that cover all the essential interventions; imparted literacy program and primary education for young girls; and developing social participatory and leadership skills to enhance the women's pro-active role in the community development. Evaluating these training

programs Rehana (2006) concluded that women's training programs have produced more encouraging results and females are productively contributing in uplifting their respective families.

The development economists and anthropologists like Edholm, Harris and Young viewed the concept of social reproduction (social and economic aspects) extremely important in describing the gender role that often renewed over time. Furthermore, McSweeney (1979) has also highlighted following areas as important for gender studies:

1. Reproductive activities, (Generational reproduction and Daily reproduction)
2. Productive activities (crop cultivation, animal husbandry, food processing)
3. Leisure activities (meals, personal hygiene, social obligation)

The economic aspect of women is also important for the study of gender stated by Benria (1981). King and Evenson (1983), Manser and Brown (1980) were of the view that household work has also an opportunity cost in terms of the market wage. This opportunity cost/income often exceeds the cash income obtained from outside work. The idea of comparative advantage in the household welfare is another dimension of gender studies. It means that individual household members are specialized in those tasks at which they are relatively more efficient as compared to other members (Gronau, 1973;(Low, 1986).

The above mentioned analytical parameters and dimensions are important to highlight gender issues in comprehensive manners. Without understanding gender role in the society it will be difficult to know women's benefits as an outcome of the developmental efforts previously made. Furthermore, the gender aspects have direct relevance with the economic uplift of the rural masses. Therefore, the researcher had included information related to women specific developments.

2.2.12 Operational Definition of Rural Development

The rural development is not a static phenomenon. It can be changed according to the development priorities of the countries and organizations. Therefore, different experts have defined the term rural development according to their respective

regional contexts. Likewise, some organizations like FAO, UNDP, World Bank etc. viewed rural development according to their own development goals/agenda and priorities. In Pakistan, various donors' financed rural development programs were undertaken by national and international organizations and they have defined rural development in term of their set targets. Thus, there is no common definition of rural development in Pakistan. Hence, on the basis of previous definitions a working definition to fulfill the academic requirement was developed by the researcher. The operational definition devised for this specific study was as under:

"Rural Development is aimed at improvement in the living standards of the rural masses by enhancing their abilities for the efficient management of available resources".

The concepts used to explain the study objectives were focused on the following notions:

Changing Trend

The term "changing trend" was taken as direction of change or pattern of change.

Rural Development

Rural development was viewed as improvement of living standards of the rural masses by enhancing their abilities through resource management.

Economic Development

The concept of "economic development" was looked as the process of change from subsistence farming to commercial farming.

Change

Change was in terms of social, economic and political developments in the village.

Gender

The term gender denotes both male and female population of the village.

Modernization

The word modernization was taken as relationship between economic development and social change.

While explaining the change in rural economy, information about the approaches used for rural development is important to document the processes adopted to bring change in the society. Primarily following approaches have been used in Pakistan.

2.3 Rural Development Approaches

Various rural development projects have been developed and implemented in different parts of the world. The experience of previously launched rural development programs had shown diversity in their results. The main reasons of this mixture in results were the approaches that had been utilized to execute the project activities. Like other countries of the world, Pakistan had also experienced most of these approaches and found variation in their effectiveness. Hence, before discussing the performance of rural development programs it seems appropriate to first review the approaches that have been utilized in Pakistan. These may be categorized as follows:

- (a) paternalistic
- (b) technocratic
- (c) welfarist
- (d) radical/activist

The *paternalistic* approach is the one which characterized many rural development efforts in the pre-independence era. The approach represents an attitude which is sometimes carried over even in the most advanced rural development programmes. It was inherent to a considerable extent in the Community Development Programmes that were introduced in India and Pakistan in the 1950s and are discussed below. Their main *modus operandi* was to induct a Government functionary in the village who would act as a “guide, philosopher and friend” of the villagers and was expected to familiarize them with modern and scientific ideas about agricultural and rural development with the presumption that whatever, if anything, they knew about farming practices was outmoded and needed to be discarded.

The *technocratic* approach is associated with those programmes which promoted the spread of the Green Revolution in the 1960s that are now seeking to introduce biotechnology and information technology in agriculture. The main aim of such programmes is to increase the output of agriculture, often without much concern for institutional, distributional or environmental side effects. However, in recent years the latter set of concerns are coming increasingly important and are beginning to receive greater attention thus engendering a more holistic approach. The Integrated Rural Development Programmes (IRDPs) adopted in many South Asian countries during 1960s and 1970s can be regarded as technocratic approaches, although some approaches like the Comilla Rural Development Programme had many innovative elements.

The *welfarist* approach has always been a significant influence in the architecture and implementation of rural development programmes but has become more prominent in recent times because of the emphasis on the poverty alleviation objective. Ever since the beginning, the trend is to give increasing attention to the equity aspects of public expenditure programmes, including those for rural development. In rural development programmes this concession was made by changing their orientation initially towards “progressive” or middle farmers. More recently, such programmes have included limited land or tenancy reforms, in view of the fact that the growth-oriented strategies of the 1960s were unable to have a significant trickle-down effect increasing the access of the poor to public services, especially microcredit delivery to the poor.

The main objective of the *radical/activist* approach is to achieve rapid social change and to redistribute political power from the landed and rich class to the small farmers/landless people who constitute majority of the rural poor. This approach aimed at redistribution of wealth (mainly through radical land reforms) and income (through reduction in inequality) in the country or a region. It also relies on faster growth through the increased intensity and efficiency of labour. This approach was based on two decades long development experience in China. On the other hand, the Republic of Korea and Taiwan Province of China adopted radical land reforms, despite their aversion to socialism. In general, the South Asian countries did not adopt this approach, although in some, especially India and Sri Lanka, land reforms

were miserably failed. The radical rural development programmes aimed to directly challenging the traditional rural social order, rather than circumventing it.

2.3.1 Top-Down and Bottom-up Approaches

Pakistan has a long history of rural development. Over the years, various national and international organizations had implemented a number of rural development projects in the country. Among these projects most of them were planned and implemented by national and provincial government institutions. Therefore, it was quite understandable that why in the past organizations have used top-down approach as a routine activity. However, in early 1990s, lot of debates on the effectiveness of top-down and bottom-up approaches had been started in Pakistan as well as in the world. Consequently, some national and international NGO's had incorporated bottom-up approaches in their development agendas.

The South Asia has experienced numerous rural development policies and strategies even before the partition of sub-continent. In addition to these policies, the Christian missionaries, R.N. Tegore, Gandhi, F.L. Brayne and various Royal commissions on improving the agriculture, irrigation, physical and socio-economic facilities have been constituted. It is important to mention that almost in all these policies and commissions top-down approach was adopted (Siddique, 1980; Darling, 1934). Actually, this approach was used to minimize the difficulties in coordination at national level and international level. However, it is also well documented that it needs special care because it may duplicate the functions undertaken by different institutions (Sagardoy, 1986; Gebauer, 1980). The experience of top-down approach in Pakistan was not productive because most of the officials employed for the implementation of rural development activities had no or causal relations with rural masses. Even majority of them don't know the social norms, values, and culture of the rural communities. They only valued the political relations and families of large land holders. Resultantly, this approach was failed to benefit the rural communities and utilize local knowledge.

Due to bad performance and ineffectiveness of this approach, lot of criticism was faced by the supporters of top-down approach. In the same period, development professionals had seriously felt the need for farmers' participation in the planning

and implementation phases. Similarly literature published during 1990's has also propagated participatory approaches Hussain (2000), Gurung (1998), Rocheleau (1991). Moreover, researchers and development agencies had accepted participatory approaches and started involvement of local communities in problem identification and decision-making processes. Other development professionals like Argyle (1958), Lewin (1939), Dustin and Davis (1967), Smith (1967), Haythron (1956), FAO (2003), Riddell & Robinson (1995), ADB (2007) and Mullah (1997) have also viewed bottom up approaches as an effective mechanism of development and disseminating improved knowledge at the grassroots level.

Since the last decade, importance of community participation has been greatly advocated by development professionals across the regions. Therefore, understanding of various descriptions of participatory approaches has great significance in terms of synthesizing the performance of the development approaches. Therefore, under subsequent section of this chapter the term "Participation" and its role in development activities has been reviewed in detail.

2.3.2 Participatory Rural Development Approach

Community participation has many dimensions and each dimension has its own modalities and mechanisms. Basically, the term participation is still an open concept and unspecified (Muller, 1996; Bungicourt, 1982). The experts of different disciplines have defined it according to their own understanding and requirements. It was explained by agricultural economists in terms of benefits sharing while the political scientists focused on votes and decision-making. Whereas, sociologists conceptualized participation as a regular interaction of social groups and societies (Muller, 1980:1). The experts like Nurul-Haq (1977), Mcpherson and McGarry (1990) had further elaborated the word participation and they think it to "take part" or to have a share in a common activity by taking part in decision-making as well as in the implementation process and in sharing the accomplishment. Participation, in its narrower terms is also seen as the involvement of individuals in decision-making and in the implementation process through resource contribution as well as in the process of effectuation (Muthaba, 19870). After thoroughly reviewing and analyzing the relevant literature, Cohen and Uphoff (1977) have arrived at a more

cohesive and embracing definition. They were of the view that participation means people's involvement in decision-making processes about what and how it would be done; their involvement in implementation and decisions making; by contributing various resources and cooperation to the specific organizations or activities; sharing of benefits and development efforts to evaluate such programs. The issue of beneficiaries' participation has always been the part of the debates concerning development projects and got a steady momentum as it became the part of the official rhetoric (Finsterbusch, 1987). Moreover, many organizations and institutions considered active participation and cooperation of individuals as success of a development project (ADB, 1973).

The community participation may be divided into two forms: organized and spontaneous (Kalshoven, 1989; Uphoff et al. 1979). The concept of organized participation was generated by the forces outside the local community while spontaneous participation is the outcome of the community members' self-initiatives to fulfill certain social and economic needs. The organized participation is mostly named as top-down approach while, on the other hand, spontaneous participation is regarded as bottom-up approach where community members participate at all levels to perform all relevant activities (Tapay, 1989; Chambers, 1980; IDS Workshop, 1989; Chambers, 1989; Ullrich et al., 1991).

There is also an argument against the participation mechanism. Some of the researchers and scientists are of the view that over participation and irrelevant participation can cause some disadvantages to the development efforts. Therefore, the assumption that participation is always beneficial is not true. The expert like Huntington (1968) considers it as a danger to economic stability and growth. Although use of local power and social organization can easily mobilize peoples participation but at the same time upper strata can exploit local participate for their interests (Finsterbusch, 1987; Kuhnen, 1968).

2.4 The Genesis of the New Programs

In the wake of the disenchantment, there was a question for alternative paradigms of rural development in Pakistan. It was becoming obvious that in order to make these project really effective, development organizations had to find out what the needs of the rural poor were in different localities. This could not be done by the officials sitting in the federal or provincial capitals and making occasional tours of selected rural areas and having pre-orchestrated meetings with villagers, which were often dominated by local influentials who claimed to represent the whole community. Actually, it requires a high degree of commitment to understand the problems and identify the needs of the people of a particular area, not to mobilize them around a particular problem. Fortunately, there is no dearth of devoted people, mainly from the educated middle classes, to come forward and live with and learn from the rural poor and give them hope for improving their lot. Indeed, they often joined hands with them in their struggles against the local and foreign rulers and powerful economic interests, such as landlords, intermediaries and money lenders. The nationalist leaders had also began their careers by spending a considerable part of their lives for doing social work in rural areas and in organizing the rural poor.

Luckily, some highly motivated individuals are still believed in the vision of their national leaders to build a prosperous and equitable society, chose to join the civil service, which gave them a chance to serve the people. However, many of them were disappointed by the snatch and grab politics which betrayed the pledges of the founding fathers of their nations. Some of them later spearheaded the newly emerging NGO movements which took up the cause of the poor and deprived segments of the masses.

Many new initiatives in the post-1980 period were undertaken by similar individuals or groups who perceived the opportunity of mobilizing the poor and marginal households to engage in programmes largely through their own efforts, with the catalytic help of well-conceived and persistent efforts of outsiders --- whether individual experts or social mobilizers, government agencies, universities, NGOs or donor agencies. Generally, these programmes were started on a relatively modest scale in a small locality or village (as pilot project), but were later upscaled

to cover larger geographical units, often to the entire country and in some cases were replicated in other countries, with help and assistance from the originating unit.

2.5 Review of Contemporary Rural Development Programs

Over the years, a number of rural development programs have been implemented across the countries and regions. Among these programs, some contemporary programs have been reviewed by the researcher just to see their development priorities, implementation mechanisms and performances. In relation to this, following National and International rural development programs were reviewed and discussed.

The Ireland Department of Agriculture and Rural Development (DARD) has responsibility to formulate new rural development programs for the country. The main objective of its previous rural development programs was to meet the needs of people who live and work in rural areas. So keeping in view the needs of rural communities and previous projects, DARD has finalized following rural development programs for the period of 2014 – 2020.

- knowledge transfer and innovation in agriculture, forestry and rural areas, which is described as a cross-cutting or horizontal priority;
- farm competitiveness and risk management;
- food chain organization;
- restoring and enhancing ecosystems;
- promoting resource efficiency;
- social inclusion, poverty reduction and rural economic development.

The priority areas selected by Ireland Department of Agriculture and Rural Development are mainly dependent on agriculture sector. Their strategy was quite similar to most of the Western and Asian countries because almost all of these countries are using agriculture as a strategic tool to improve physical, economic and

social conditions of the rural areas. The performance audit of Ireland Rural Development Programs has shown mixed results. In some cases, project interventions has performed well and improved human and natural resource base of the country. However, in those areas where DARD program was not so successful had some specific reasons. Among these reasons, poor infrastructure, planning and implementation factors have been highlighted as main causes of failure.

The European Agricultural Fund for Rural Development (EAFRD) contributed to the Europe by promoting sustainable rural development throughout the European Union in a complementary manner to other instruments like common agricultural policy, to cohesion policy and to the common fisheries policy. It shall contribute to build a more resilient and innovative Union of agricultural sector. In Europe, Rural Development contributed to the competitiveness of agriculture, the sustainable management of natural resources and climate action and the balanced territorial development of rural areas.

The European strategy 2020 had laid broad objectives of rural development on the basis of following six EU-wide priorities :

- fostering knowledge transfer and innovations in agriculture, forestry and rural areas;
- enhancing competitiveness of all types of agriculture and enhancing farm viability;
- promoting food chain organization and risk management in agriculture;
- restoring, preserving and enhancing ecosystems dependent on agriculture and forestry;
- promoting resource efficiency and supporting the shift towards a low-carbon and climate-resilient economy in the agriculture, food and forestry sectors; and,
- promoting social inclusion, poverty reduction and economic development in rural areas.

The Ireland Rural Development Program 2007-2013 is also based on the EU framework for rural development and on the National Rural Development Strategy formulated in line with that framework. It forms part of the National Development

Plan and takes an account of the Agri- vision 2015 Action Plan. The program for Ireland sets out three main priorities: i) improving the competitiveness of the agriculture sector through support for structural change; ii) improving the environment and the countryside by support for land management; and, iii) improving the quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies.

The first two priorities are directed primarily for the agricultural sector. Their competitiveness and environmental focus reflects the multifunctional nature of the sector. The main focus of these two measures is based upon the vision of “an industry attaining optimal levels of efficiency, competitiveness and responsiveness to the market while also respecting and enhancing the physical environment”. The third priority of the program relating to quality of life and diversification in rural areas is relevant to all rural dwellers, including farmers, particularly in view of the growth in part-time farming. In this part of the program actions are centered on the development of rural enterprises, tourism, village enhancement and environmental initiatives implemented through local action groups using the Leaders approach.

Likewise, Mark Goldenberg (2008) had reviewed rural and regional development policies and programs implemented by Government of Canada, Quebec, British Columbia, European Union, United Kingdom, Scotland, Denmark, Iceland, Norway and United States in Alaska, Oregon and Wisconsin States. Over the years, these governments have introduced a variety of policies and measures to support community economic development, the social economy, and social entrepreneurship. These include: a) supporting community economic development and social economy organizations and initiatives for “community capacity building”; b) strengthening financial capital through access to loans and supporting alternative financial institutions; and, c) investing in the acquisition of skills and knowledge and supporting sustainable resource management.

After thoroughly reviewing program of each country he reached at the conclusion that most of these countries have used quite similar policies and programs for rural uplift. Therefore their approaches and policies can be seen as falling into several broad categories like: i) traditional approaches, using primarily economic

instruments; ii) innovation and technology development; iii) community economic development and the social economy; and, iv) community development and capacity building.

While, after thorough review of rural and regional development programs, policies and instruments in Canada and other countries Mark Goldenberg had suggested following key learning's:

- Traditional approaches and instruments such as regional development programs and support for economic development, job creation and enterprise development are insufficient for meeting the challenges of regional, rural and community development today.
- The policies, approaches and initiatives must involve local communities and help in creating and building local assets and resources. In this context, strategic investments in people, communities, local asset building, and technology – can make a difference.
- A range of policy instruments and measures are needed like financial assistance for development projects, seed money, support for innovation and technology, support for community development and capacity building, resources for consultation, planning & community empowerment and involvement, and expert and technical assistance;
- For the strategic planning, involvement of local communities and their active consultation is critical. Moreover, in the planning process effective governance also matters. The effective governance means to involve people, non-profit organizations, educationists and other stakeholders in planning, networking, delivery systems, monitoring, accountability and evaluation processes.
- Finally, conclusion of the report stated that rural and regional development policies are continuing to evolve to reflect changing economic, social and demographic realities. To address these realities, in recent years, various countries have introduced different policy instruments. This report also

suggested more analytical work that could include more detailed examination of the characteristics and success factors associated with different policy approaches, as well as key issues and challenges in their implementation, and more in-depth analysis of specific initiatives and innovations.

An EU-funded programme for Support to Rural Development (SRDP) was launched in Fayoum, Egypt. The SRDP aimed at contributing to the Ministry of Agriculture's commitments towards a comprehensive National Strategy for Rural Development that includes an incentive-based approach to address the needs of small farmers, while making best use of natural resources. The overall budget for the SRDP pilot was €10 million, fully funded by the EU through the European Neighborhood and Partnership Instrument (ENPI). Seven grant recipients worked hand-in-hand with local agriculture directorates, local authorities and communities for a 24-month period, in order to examine the means by which small farmers and their communities can adopt innovative agriculture practices and a more efficient management of local resources.

The Agha Khan Rural Support Program (AKRSP) is a leading organization working for the betterment of rural masses in Pakistan. The overall goal of the organization is to improve the socio-economic conditions of the people of northern Pakistan by supporting:

- Institutional Development
- Participatory Infrastructure Development (Roads, Irrigation Projects and Microhydel, etc.)
- Natural Resource Management
- Women's Development
- Rural Financial Intermediation
- Enterprise Development

The AKRSP approach of working in partnership with communities has made remarkable changes in the lives of the 1.3 million villagers in Chitral and Gilgit-Baltistan region of Pakistan. Most of these beneficiaries are widely dispersed across a region covering almost 90,000 square kilometres --- an area larger than Ireland. Among many notable achievements were like, significant increase in incomes, the construction of hundreds of bridges, irrigation channels and other small infrastructure projects, the planting of over 30 million trees and reclamation of over 90,000 hectares of degraded land, the mobilization of over 4,500 community organizations and the creation of savings groups.

Perhaps the most impressive achievement has been its pioneering community-based, participatory approach to development. For over 25 years, AKRSP has successfully demonstrated participatory approaches to planning and implementation of micro-level development in rural areas, including the mobilization of rural savings and provision of micro-credit; the application of cost-effective methods for building rural infrastructure; natural resource development; institution and capacity building; and successful partnership models for public-private sector initiatives.

The Indra Awaas Yojna (IAY) is a Government of India's social welfare programme to provide housing for the rural poor in India. The differentiation is made between rural poor and urban poor for a separate set of schemes operated for the urban poor (like the Basic Services for Urban Poor). It is one of the major flagship programs of the Rural Development Ministry to construct houses for BPL population in the villages. Under the scheme, financial assistance worth Rs.70000/- in plain areas and Rs.75000/- in difficult areas (high land area) is provided for construction of houses. The houses are allotted in the name of the woman or jointly between husband and wife. The construction of the houses is the sole responsibility of the beneficiary and engagement of contractors is strictly prohibited. Sanitary latrine and smokeless *chullah* or oven are required to be constructed along with each IAY house for which additional financial assistance is provided from Total Sanitation Campaign and Rajiv Gandhi Grameen Vidyutikaran Yojna respectively. This scheme, operating since 1985, provides subsidies and cash-assistance to people in villages to construct their houses, themselves.

Members of Parliament Local Area Development Scheme (MPLADS) is another scheme formulated by Government of India on 23 December 1993 that provides that each member of parliament of India has the choice to suggest to the Head of the District works to the tune of Rs.5 crore per year, to be taken up in his/her constituency. Initially, this scheme was administered by Ministry of Rural Development. Later, in October 1994, Ministry of Statistics and Programme Implementation (MOSPI) has been looking into its working. Elected Members of Rajya Sabha representing the whole of the State as they do, may select works for implementation in one or more district(s) as they may choose. Nominated Members of the Lok Sabha and Rajya Sabha may also select works for implementation in one or more districts, anywhere in the country. The allocation per MP per year stands increased to Rs.2 crores from the year 1998-1999 which has been further enhanced to Rs 5 crores from the year 2011. It also allows MPs to spend up to 10 lacs in any other constituency in India.

Similarly, the Kasturba Gandhi Balika Vidyalaya (KGBV) was another development scheme introduced by the Government of India in August 2004. It is then integrated in the Sarva Shiksha Abhiyanprogram (SSA), to provide educational facilities for girls belonging to Scheduled Castes, Scheduled Tribes, Other Backward Classes, minority communities and families below the poverty line in Educationally Backward Blocks. The overall objective of KGBV is to ensure access and quality education to the girls of disadvantaged groups of society by setting up residential schools with boarding facilities at elementary level.

The Pradhan Mantri Adarsh Gram Yojna (PMAGY) is recently launched rural development programme by the Central Government in India during 2009-10. It is for the development of villages having a higher ratio (over 50%) of people belonging to the scheduled castes through convergence of central and state schemes and allocating financial funding on a per village basis. The plan of this program was considered ambitious as it aimed to bring a number of development programs to the villages. Some of these programs are Bharat Nirman, Pradhan Mantri Gram Sadak Yojna (PMGSY) for rural roads, water supply, housing, electrification and other big-ticket schemes like Sarva Shiksha Abhiyan, Mahatma Gandhi National Rural Employment Guarantee Act, and sanitation. This program was implemented in

around 44,000 villages which had a scheduled castes population above 50% and so qualified for PMAGY.

Nwachukwu, Ifeanyi N. and Ezeh, Chima I. (2007) have conducted an impact study in which he stated that Rural development is a veritable tool for fighting poverty and achieving economic prosperity at the grassroots level. The concept of rural development embraced by most countries connotes a process through which rural poverty is alleviated by sustained increases in the productivity and incomes of low-income workers and households.

The major thrust of this study was to examine the impact of selected rural development programmes in Ikwuano Local Government Area of Abia State, Nigeria. The results showed that the rural development programmes which had poverty alleviation objectives impacted significantly on productivity and farm income. Awareness was perceptibly high while participation was more in Agricultural Development Programme (ADP), with an overwhelmingly percentage representation of about 79 percent, than in others. Programme planners and implementers are, therefore, urged to intensify awareness creation among rural dwellers and adopt the use of Community Driven Development approach (CDD) in the execution of rural development projects with poverty alleviation thrust. The government at all levels was advised to adopt price support policy that raises income of producers.

Similarly, Musa Nafinji Yusuf, rural development has been inextricably tied to agricultural development in Nigeria. A cursory examination of trends in Nigeria's agricultural and rural development efforts beginning from pre-independence to date depicts a very close relationship between the two. It should be pointed out here that in spite of their close relationship, agricultural and rural development are by no means synonymous, given that agricultural production is not the only possible activity undertaken by people living in rural areas of Nigeria.

Between 1987- 2004 other agricultural and rural development programs were established by successive governments in Nigeria. They include but not limited to the following: Better Life for Rural Women (1987), Nigerian Agricultural Insurance Scheme-NAIS (1987), National Agricultural Extension Research Liaison

Service-NAERLS (Reconstituted in 1987 with a national mandate), Rural Banking Program- Peoples' Bank of Nigeria-PBN (1989) and Community Banks (1990); while the PBN is defunct, some Community Banks are still functional. Others were: Family Support Program-FSP (1994), Family Economic Advancement Program-FEAP (1995-1999 and scrapped in 2000), Small and Medium Industries Development Agency-SMIDA (2000), Nigerian Agricultural, Cooperative and Rural Development Bank-NACRDB (2000), now Agricultural Bank of Nigeria-ABN, National Fadama Development Project-NFDP (1992) project which is being implemented in phases, National Special Program on Food Security-NSPFS (2003) and the National Economic Empowerment and Development Strategy-Needs (2004).

In spite of all the agricultural and rural development efforts enumerated above, the realization of their goals has consistently been plagued by a plethora of constraints. For example, health, education, and agricultural projects were implemented separately, and often times without completing a given project before embarking on another project.

3 THE CHARACTERISTICS OF VILLAGE AND RESPONDENTS

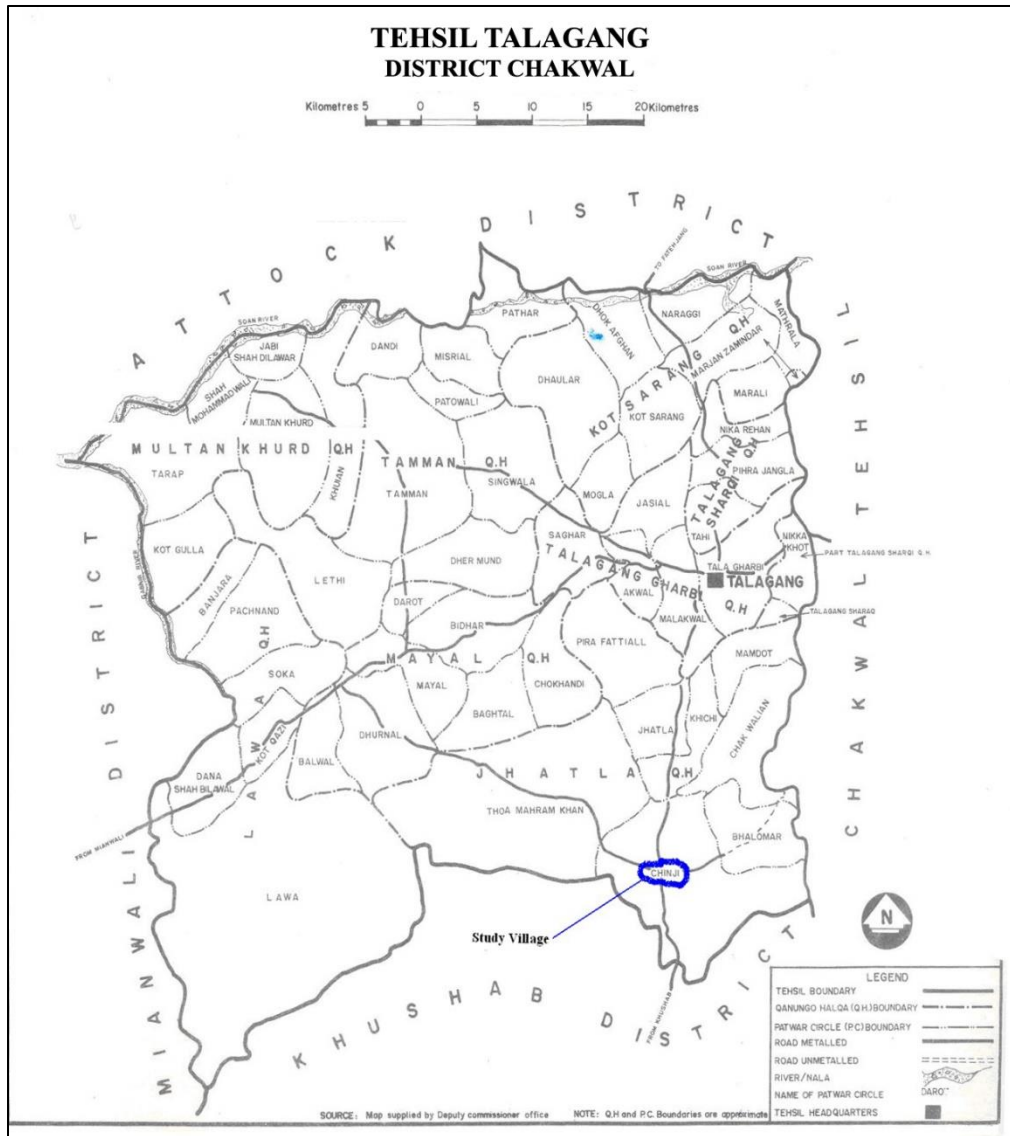
3.1 Village Profile

This chapter portrays the overall picture of the studied village and also describes profile of the selected respondents. More specifically, this chapter contains the information related village infrastructure, socio-economic conditions of the area, lifestyle of the people, their living conditions, cultural norms, livelihood patterns, marriage and death customs/rituals, ethnic distribution and their role in the development of the village

The study village has administrative integration with Tehsil Talgang of district Chakwal. Its geographical presence was close to the Potohwar Plateau and salt range. Basically, District Chakwal is a rainfed district and its terrain was mainly sub-mountainous covered with thick forests in the South-West and even plains interspaced with dry rocky patches in the North-East DCR, (1998).

The studied village *Chinji* was an old inhabitation established during British rule. Initially, this village was build at a higher elevation due to fear of armed attacks from the enemy tribes. However, with the passage of time their conflicts were resolved and some families shifted from high altitudes to plain areas to make their livelihoods through agriculture and trade. The name of village has a specific background and is based on a local dialect. Explaining this terminology an elder member of the village having age around 65 years pointed out that near to our village there is a rock-strewn range that looks like a ship which they locally call as "*Chinji*". Therefore, due to resemblance of that rock with ship people had started calling this place as Chinji. The rock is quite visible in the background of Picture 1 below. The name of the village is still popular and well known in the neighboring areas.

Figure 1. Map of Tehsil Talagang



Source: District Census Report 1998

3.1.1 Topography

Topographically studied village was situated in the salt range and its physical features were quite similar to the region. The area was consisting of softly undulating plains with patches of rocky ranges known in the local dialect as *Khundar*. The plain areas were cultivated and a considerable area was also covered with scrub forests.

The village *Chinji* was located in the sub-tropical regions and its climate was classic. Winter temperature normally ranges between 4 to 25°C and summer

temperature rises up to 48°C. The village was of low rainfall region having an average rainfall less than 500 mm (DCR, 1998).

Figure 2. View of Village Chinji



Source: Photo by Researcher

3.1.2 Agro-ecology of the Village

The rainfed *Potohwar* was stratified into three zones. In the low rainfall zone, there was less than 500 mm rainfall, the medium zone was received annual rainfall between 500 to 750 mm. Whereas high rainfall areas of this region usually received more than 750 mm rainfall annually. The area comprises of wide plateau, lying at 300-400 m having sub-mountainous belt in the northeast and west and ridges and narrow intervening valleys. The plateau has undulating topography with isolated parts that were subjected to water erosion. The soil of the area has developed from a wide range of parent material, while some of the agricultural land has developed in a transported material such as loess, piedmont, alluvium and river alluvium (Beg, 1985).

The water resources were available in the village *Chinji*. A number of dug wells, small dams and *nallahs* were crossing the village. The flow of water in the *nallahs* increased during the rainy season. The construction of small dams and tube wells in the area has promoted agricultural activities in the village. Over the last 30 years, lot of dug wells has been constructed by the Agency for Barani Area Development (ABAD) under participatory development approach. The drinking water facility was also developed and provided to almost all households of the village.

Figure 3. Storage of Rain Water in the Village



Source: Photo by Researcher

3.1.3 Cropping Pattern

Since the establishment of the village *Chinji*, farmers cultivated crops only for the survival of their families. Initially, mono cropping system was observed; farmers only planted wheat crop in winter season. The cultivation of wheat crop was important for human and animal population of the village. Therefore, almost all farmers preferred to grow wheat crop in their fields. The increased social and economic pressures have forced the farming community to diversify their cropping patterns. For this change, progressive farmers, NGO's, and Department of Agriculture had played a very pivotal role in the area. They introduced new farm technologies and provided training opportunities to the farmers. In addition to this, Department of Agriculture has also introduced groundnut as cash crop in the village. In view of the farmers, initially they hesitated to adopt groundnut crop but after continuous and consolidated efforts of NGO's and government institutions farmers were convinced to cultivation groundnut as a cash crop. The adoption and cultivation of groundnut crop improved farmers' socio-economic conditions significantly. During 1980s, Agency for *Barani*⁸ Area Development (ABAD) has introduced irrigation schemes and constructed small dams and wells in the village.

⁸ Barani Area; mean the area irrigated by rainfed only

As a result of these efforts, cultivation of vegetable and other important cash crops was also started in the village. A 65 years old farmer told that “rainfed agriculture is predominant in our village. Traditionally, farmers only cultivated wheat crop for food security concerns and to conserve rainwater and soil moisture. Wheat is their staple food and wheat straws are used as livestock feed. The productivity of wheat mainly depends upon the conservation of soil moisture. In the traditionally crop production system, we cultivate wheat crop on half of our land and rest of the land was kept as fallow to conserve rainwater and moisture for the next season. However, with the introduction of groundnut in mid 1970s we and other villagers changed from mono cropping to double cropping system. Gradually, this system was popularized and now almost all farmers have adopted groundnut based farming system in the village. Explaining further, he was of the view that before the introduction of groundnut crop, people were generally poor but with the cultivation of groundnut our socioeconomic conditions improved considerably”.

3.1.4 Crop Production Systems

Mainly, two major cropping seasons prevail in the village. One correspond to summer and monsoon (June to September) called *Kharif*, while the other was *Rabi* or winter (October-May). During both the cropping seasons, different varieties of crops were grown according to weather conditions. Wheat was the major *Rabi* crop and some farmers intercropped wheat with mustard. Other crops grown during *Rabi* season included canola and fodders. These were mainly cultivated on *lepara* lands. Whereas, in *kharif* season, farmers prefer to cultivate groundnut, maize and sorghum crops because of their demand as a fodder and cash crop in addition to legumes like moongbean and mash. The proportion of area under cultivation was dependent upon the availability of moisture and timely rainfall.

The village has two types of land called *lepara and mera*. The *lepara* fields were close to the village and receive farm yard manure (FYM) regularly, while *mera* fields were located away from the village and do not receive farmyard manure

(FYM) and chemical fertilizers on regular basis⁹. Wheat was the staple food crop commonly grown on both *lepara and mera* lands in the village, but maize was mainly grown on *lepara* lands while pulses, groundnuts and sorghum/millet crops were cultivated on *mera lands*¹⁰. Mustard and maize crops were cultivated in rainfall seasons and groundnut, sorghum/millet and *rabi* pulses were grown even in less moisture conditions.

3.1.5 Animal Husbandry

Livestock is an integral part of their farming system. Almost all household keeps animals to meet their daily dietary needs. The empirical results clearly indicated that in the studied village 89.32% households keeps milking animals for their bread and butter needs. The households who have no livestock were mainly belonged to non-farming families. In village *Chinji*, people preferred to have animals because culturally it is a sign of higher status, respect and prestige. Moreover, socially and culturally rural masses believe that "*Dood and Poot*"¹¹ (Milk and Sons) were the blessings of God and the families having both of them were considered as the luckiest family. Above all, in the rainfed areas livestock also serves as a security against risks of crop failure (Khan, 1999).

The families having livestock were further asked by the researcher to explain the types of animals they keep. The cow and goat was their preferred and most prevalent animals in the village. The sample farmers average herd size was 1.7 cows and 3.56 goats as indicated in the Table-5. The strength of buffaloes, donkeys and sheep was relatively less because rearing of these animals was quite expensive. Therefore,

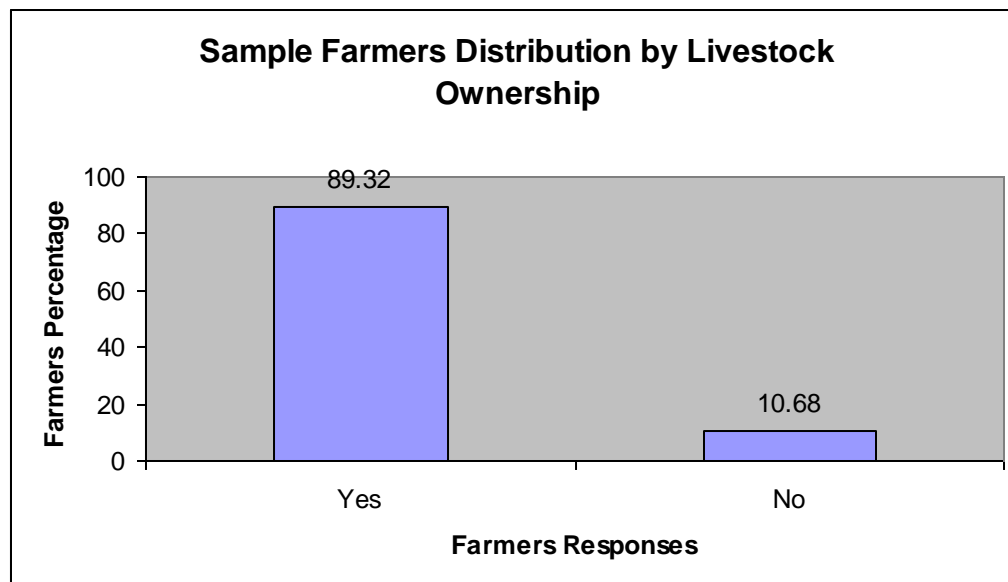
⁹ Sheikh et al (1988) has also found that ninety five percent of *lepara* fields received FYM on an annual basis compared to 22 percent of *mera* fields

¹⁰ Khan et al. (1999) Pointed out that the farmers adopted very pertinent strategies in allocating land according to the fertility and moisture requirements of the individuals

¹¹ The terms *Dood* and *Poot* used in local Punjabi Dialect. It means, the families having milk and sons are most privileged families. Socially these families are considered respectable.

financially strong families always prefer keeping cows and buffaloes, while others resort to raising small ruminants to meet their day-to-day domestic needs.

Figure 4. Farmers Responses



Source: Field Data

Table 5. Average number of Animals at sample farmer's farms

Sr. No	Type of Animals	No of Animals
1	Cows	1.7
2	Buffaloes	0.89
3	Sheep	0.23
4	Goat	3.56
5	Donkeys	0.64

Source: Field Data

3.1.6 Milk Production and Consumption Trend

In village *Chinji*, milk and milk products were commonly used in daily diet. The per household consumption of milk and its byproducts mainly depend upon the type of animals and financial resources of the families. The information related to milk productivity of animals shows that on an average milk production of one large and

one small animal was 8.61 liters per day. The share of large animals was 94.31% and remaining 5.69% was of small ruminants.

The consumption of milk and milk products was increased overtime. The analysis of milk consumption shows that on an average, 5.13 liter milk was consumed by a family having one or two large animals. In the past sale of milk and milk products were not common due to some social and cultural issues, but gradually economic problems has forced the farming families to start sale of milk in the village. Among the sample farmers only 15.44% respondents reported selling the milk and their average quantity sold was 3.48 litres per day. In view of the farmers, the quantity of milk sold varied due the variations in milk productivity between summer and winter seasons. In the high yielding months (winter season), both consumption and sale of milk and milk products increased. In summer, milk yield generally reduces due to shortage of green fodder in the area. The information related to milk production and consumption is given in Table-6.

Table 6. Average milk production, consumption and sale

Milk Information	Milk Quantities
Avg. Milk Production by large Ruminants (liter/day)	8.12
Avg. Milk Production by Small Ruminants (liter/day)	0.50
Total Milk Produced (liter/day)	8.61
Avg. Milk Consumed at Home (liter/day)	5.13
Average Milk Sold (liter/day)	3.48
Farmers Sold Milk (%)	15.44

Source: Field Data

3.1.7 Gender role in Livestock production

Role of rural women in agriculture is well defined and recognized in Pakistan. There is a clear distinction between male and female specific farming activities. The gender role and participation has direct link with the financial position of the

households¹². Both the male and female members from rich families do not participate in farming activities. Rather they employ laborer on permanent and temporary bases for carrying out various farming operation and the landlords only supervise their laborers and perform marketing activities. Sometimes, rich families hire whole family of landless households (*kammies*) as permanent hired laborer. The male members of these hired families perform agricultural and other outdoor activities whereas their females work in the houses of landlord as maids. But contrary to this members of poor and middle class families actively participate in agriculture and livestock related activities. Their roles and responsibilities are well defined and they perform their duties accordingly.

The farmers of the village prefer to have animals because of limited opportunities in crop sector. The availability of rangelands and pasture areas has created conducive environment for livestock production and management. Due to the scarcity of fodder and forage resources, grazing of animal was very common. The grazing activity was mainly performed by male members and they grazed their animal's from morning to till evening. The life of the grazers was very pathetic and miserable because they spent maximum time away from their villages. They do not have time even for socialization and recreational activities.

Figure 5. Traditional grazing practice

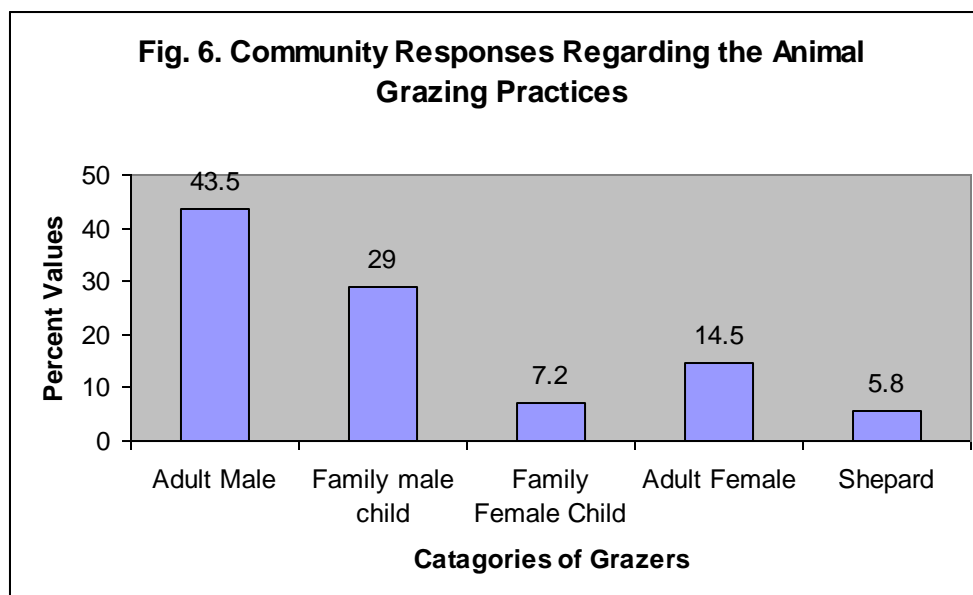


Source: Photo by Researcher

¹² Mirlum Sharma, Cast, Class and Gender Production and Reproduction in North India. The Journal of Peasant Studies, Vol. 12, No. 4, London. Franl Cass and Co. July 1985, pp 57-88

In the studied village, grazing activity was mainly supervised by family members and it is also evident from the empirical findings. In view of the 43.50% respondent's animal grazing was performed by adult male members of the family, while 29% children were also performing grazing activity. Although females' contribution in livestock management was very high but in grazing their share was only 14.5% and they only grazed animals within the village boundary. The detailed information related to grazing practices is given in Fig-3. In view of the respondents, sometimes grazing of animals creates serious conflicts between the family members over the grazing responsibilities. Similarly free grazing sometime leads to serious community conflicts due to crop damages.

Figure 6. Community Responses Regarding the Animal Grazing Practices



Source: Field Data

3.1.8 Ethnicity

There were many ethnic communities living in the village under study which can be sub-divided into farming and non-farming casts using land as a dividing line between them. Basically, owning of land was the source of power and prestige in the village. People having big share of land were considered more respectable, influential and trust worthy. They were enjoying the leadership status in the

village¹³. The common agricultural castes of the village were *Bhatti (Rajput)*, *Awan* and *Maliks*. Only these castes possessed relatively higher status in the village, rest all castes considered as inferior to them. Almost all decisions regarding the development of village were undertaken with their consent and active participation. The non-agricultural communities belonging to the village have to respect their decisions because they were socially and economically dependent on them.

The non-farming communities mainly belonged to the castes like *Lohar* (Blacksmith), *Tarkhan* (Carpenter), *Mochi* (Cobbler), *Nae* (Barber), *Mirasi* (Traditional messenger & family history maintainers), *Pawali or Jolaha* (Cloth weavers), *Sunaar* (Goldsmith), *Kumhar* (Pottery makers), *Darzi* (Tailor), *Dhobi* (Clothes washing/cleaning) and *Qasai* (Butchers)¹⁴. The casts and professions of landless families were closely associated. Culturally, it was understood that the persons belonging to *Lohar* and *Tarkhan* castes will work as Blacksmith and Carpenter. Moreover, landless families of the village also worked as labor in their fields and at their houses. Over the years, a change was observed in the relationship of land owner, laborers and service providers.

Explaining this change, a member belonging to non-farming family told that “ in the past they used to work on kind payment system; we offer services to land owners and in reciprocity they provided us food and shelter. Overall, he viewed this system was an exploitative and also as a source of discrimination in the society. Sharing his story regarding change in the traditional barter system, he told that in 1983 my landlord died and his land was distributed among his family members. All his sons received small pieces of land and at that time it was difficult for them to survive their families. So, due to economic pressure, they were unable to hire my

¹³ Alvi (2001) the notion of caste is very important in the net work of social relationship which is tied in terms of brotherhood or *biradri* in the rural Punjab.

¹⁴ Immediate after World War-II, Socio-cultural anthropology as comprised by the fields of ethnography and ethnology diverged into an American school of cultural Anthropology. During this time, Gluckman was also involved in a dispute with American anthropologist Pal Bohannan's ethnographic methodology within the anthropological study of law. He believed that **indigenous terms** used in ethnographic data should be translated into Anglo-American legal terms for the benefit of the reader.

services on permanent basis. They started to engage us as daily paid laborers or as casual laborers. Actually, this change in relation has seriously threatened our livelihood sources and forced us to explore other sources of income. It had also reduced non-farming families' dependency on the land owners and made them independent in their decisions. Although, initially traditional arrangement of payment was replaced due to economic factors, but later on social mobility, availability of better means of communication, education and media exposure had significantly contributed in the promotion of this change".

3.1.9 Dress Pattern

The *Chinji* was a true picture of Punjabi village. The local people respected their cultural norms, values and traditions. They reflect their association and sentiments through observing set norms and values of their society. Their intactness with their culture was very strong and it was mainly due to their belief system which they inherited from their elders. Respecting their cultural values, youth and middle aged people wore *shalwar* and *kameez* (traditional shirt and trouser) whereas elder members of the village commonly used *kameez* and *tahband* with *Pagri* (Turban). The women folk also used their traditional dresses consisting of *shalwar* and *kameez* with *Duppatta or Shawls* (head scarf) on their heads to cover the upper portion of their body.

The people of *Chinji* were religious minded and practicing Muslims. So at the time of religious occasions and festivals, they wore traditional dresses just to continue the traditions which they have inherited from their forefathers. By observing these traditions, they feel satisfaction and honor as well as custodian of their forefathers' traditions. The rich and middle class families have their specific tailors for stitching of their traditional dresses. The family members serving out of the village usually come back to their native town to celebrate religious occasions like *Eid-ul-Fiter*, *Eid-ul-Azha* and marriage ceremonies of their loved ones and on these events they also preferred to use traditional dresses. The traditional dresses of youth and elders are visible in Picture 4. Although the people of *Chinji* still love their traditions but education, urban exposure and electronic media had to some extent changed their life style and even thinking patterns.

Figure 7. Traditional dress of the people



Source: Photo by Researcher

3.1.10 Food Habits

In rural Punjab, people commonly use wheat as staple food. Similarly, people of *Chinji* also prefer homemade wheat and maize bread with *salan* prepared with vegetables or pulses. The use of meat (mutton, beef and chicken) was more common in rich families but rare in poor families. Due to poor financial conditions they used meat at religious occasions, marriages and other festivals. The use of milk and milk products like *desi ghee*, butter and *lassi* was very popular. Almost every household keeps two to three animals only for milk purposes. The people of *Chinji* take food thrice a day, in the breakfast, lunch and at the dinner. The detail of their three meals is discussed in the following sections.

A typical village breakfast called *Nashta* consisted of paratha with tea or *lassi*. Some of them took a slice or loaf of bread or roti with *salan* or *omelette* while some of them used baked goods like *bakarkhani* or *rusks* with tea. During some special occasions, people also had breakfast of *halwa poori* and *boiled eggs* with tea.

A typical *Chinji* lunch consisted of *Daal* (pulses), *vegetable*, *meat curry* along with homemade *bread* or *rice*. Bread such as *roti* or *naan* were usually served for dinner but some people liked to eat *rice* along with spicy *salan*. Popular lunch dishes included *aloo gosht* (meat and potato with curry) or any vegetable with mutton.

Chicken dishes like chicken *karahi* and chicken *qorma* were also popular among the wealthy people. The roadside food stalls often sell just *tandoori roti*, or *masala* (spicy) *salans* with handmade *chapatis* and *tandoori naan*. People living near the dams and streams also eat *fish* cooked by different methods.

Dinner was considered the main meal of the day as the whole family gathers around *daster khawan* (dining table). Food prepared by the house wives was mostly liked by the whole family such as *Salans* of vegetable mixed with *meat* or *beef*, *chicken curry*, *daal* served with *roti* or *naan*. The poor segment of society usually takes *roti* with *daal* or vegetable in dinner.

3.1.11 Village dwellings

The housing patterns of the village had passed through various stages; traditionally the *kacha* houses were made with earth and wood. But gradually trend of traditional housing reduced and people started to construct *pacca* houses by using bricks and cement to shelter their families and livestock from rain and weather extremes. But in the hottest areas, people still preferred to construct *kacha* houses (earth made houses) as earth is bad conductor of heat and *katcha* houses saved them from severe hot and cold weathers.

As village *Chinji* was located in the warm region of the province where summer temperature rise up to 48°C and rainfall was very often, therefore, the construction of mud houses was very popular. But over the years, availability of money and electricity has changed their traditional housing pattern and people started construction of *pacca* houses in the village.

Explaining changes in the housing patterns, a respondent having his own land said “construction of *pacca* houses in *Chinji* started in mid 1980’s and I myself made a *pacca* house on my own land. Initially, this trend was started by the rich families having enough financial resources. These rich families constructed large and spacious houses that attracted rest of the community members. Latter, induction of groundnut crop in their farming system and off-farm employment opportunities improved our economic conditions and we started construction of *pacca* houses in the village”.

The households owned by the poor families were virtually not developed and lacked most of the basic facilities like availability of toilets, proper boundary walls and formal kitchens. They used open spaces or fields for these basic requirements. The empirical data also shows that presently 8.38% poor families were residing in *katcha houses*. While, land owners constructed large houses for their families and provided almost all basic facilities in their houses. Even they constructed sheltered accommodation for their livestock¹⁵.

A separate meeting hall was the traditional requirement of the land owner's houses that was called *Baithak or Dera*. Describing the change in housing patterns, a 55 years old member of the village having 47 *kanals* of agricultural land explained that;

“We are living in this village since last 70 years. Initially, a few families belonging to same clan (*Bhatti*) shifted from District Hafizabad to this village. We purchased small pieces of land and most of us had constructed our houses in the farms. Our houses were made of earth and had no basic facilities like boundary walls, kitchen and toilets. Both male and females used to use open field as toilets and their timings were fixed (before sunrise and after sunset). This problematic situation continued upto the 1980s. However, in mid eighties some male members of our families went to the Middle East countries for employment. They worked hard there and remittances received from them have improved our living conditions. Then we changed our housing patterns and almost all basic facilities are available in our newly constructed houses”. The detail of housing patterns has been given in the below:

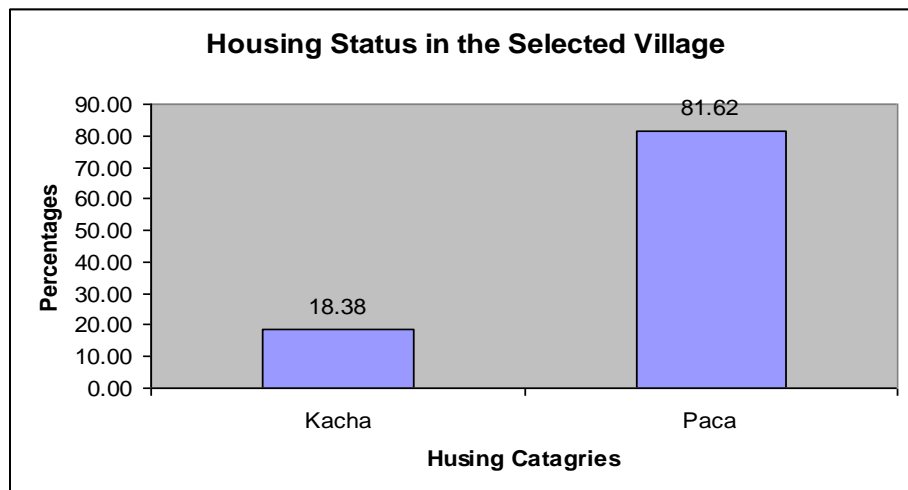
¹⁵ Chaudhary (2004) described that some time economic status of the household also determines the type of houses and area where houses located.

Figure 8. Housing pattern of *Chinji* village



Source: Photo by Researcher

Figure 9. Housing Status in the Selected Village



Source: Field Data

Figure 10. Comparison of traditional and modern houses at Chinji



Source: Photo by Researcher

Figure 11. Traditional Houses at farms



Source: Photo by Researcher

3.1.12 Population

In anthropological studies, population is considered as an important parameter to examine the impact of development initiatives on the selected community. Therefore, keeping in view the significance of the population parameter, the data related to village population was collected and analyzed. According to the District Census Report (1998), total population of *Chakwal* district was 1,083,725 as enumerated in March 1998 with an inter-census increase of 39.7 %. The average annual growth rate was 2.0 percent during 1998. Among the tehsils of district Chakwal, *Talagang* was the second most populated one. Its total population was

3,80,421 persons as shown in the Table- 5. The rural urban distribution of the population shows that 67.7 % residents lived in the rural areas and average family size of the area was 5.7 persons (DCR, 1998).

The total population of the selected village was about 6,604 persons residing in 1,194 houses (DCR, 1998). The gender wise segregated data shows that in the studied village female population was relatively higher than the male population. Likewise proportion of youth was significantly higher than the old age population. The average family size of the village was 5.91 and it was quite comparable with district data.

Table 7. Population by sex and average household size of district Chakwal

Admin. Unit	Both Sexes	Male	Female	Avg HH Size
Chakwal District	1,083,725	518, 249	565, 476	5.7
Chakwal Tehsil	598, 048	286.266	311,782	5.7
Choa Saidan Shah Tehsil	51,740	51,740	53,516	5.7
Talagang Tehsil	380,421	180,242	200,178	5.8
Village Population	6604	3031	3573	5.91

Source: District Census Report (1998)

3.1.13 Tribes

The village *Chinji* was an old establishment existed before the partition of the sub-continent. The races of the village mainly belonged to three major tribes like *Bhatti* (Rajput), *Awan*, and *Malik* and they possessed major share of agricultural land. The members belonging to these tribes proudly associated their tribe name with their own name like Malik Arshad, Babar Awan and Younas Batti, etc. By putting their tribe name first they felt proud and tried to show their identity with a respected tribe. By character these casts were known as brave casts and each one of them had their heroes and stories. The elders of the tribe maintained and extended their heroic stories to the younger generation. The members belonging to *Mirasi* families

(history maintainers) has specialty in maintaining stories of their elders and for this work they were heavily paid by the members of each tribe. The casts or tribes like *Lohar* (Blacksmith), *Mochi* (Cobbler), *Nai* (Barber), *Mirasi* (Family history maintainers), *Pawali* (Cloth weavers), *Sunar* (Goldsmith), *Kumhar* (Pottery makers), *Qasai* (Butchers) were culturally considered as Kamies (workers) of main tribes.

3.1.14 Economy

The village economy was mainly based on agriculture. People only cultivated land to meet their household needs. Financially people were poor and even unable to purchase essential farm inputs and implements. Traditionally, they followed mono (single crop) cropping system due to non availability of improved moisture conservation techniques. While during 1970's agriculture department introduced groundnut as cash crop and also encouraged farmers to construct dug wells to irrigate their lands. Gradually, these two interventions have benefited the farming communities and raised their income level. In the village, both male and females members were involved in agriculture and they jointly worked hard to meet their family needs. Moreover, male member's involvement in off-farm activities was also common in the village. Mostly they served in armed forces, government offices and private organizations and supported their families. So, in the absence of male members, female members looked the farm and livestock related activities. The increasing trend of population had seriously affected the economic base of the village¹⁶. The natural resources of the village were squeezing rapidly due to over and excessive usages. This situation has disturbed household economy and also created unrest among the rural youth. The change in population immediately needs new development initiatives and off-farm employment opportunities in the village. These new initiatives are important to save the people from violence and criminal activities. The poverty and human needs actually influence the youth to demonstrate

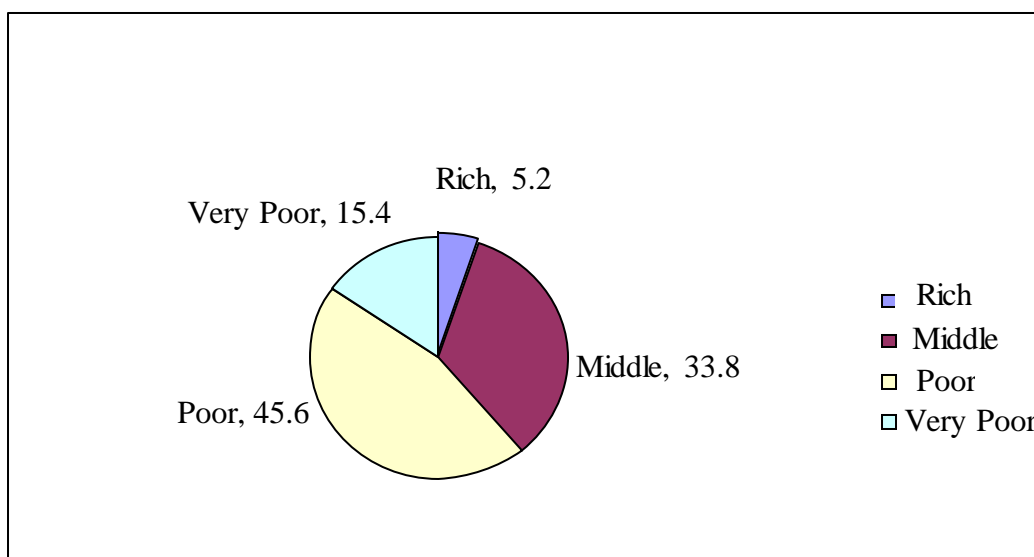
¹⁶ Guy Hunter, 1969. *Modernising Peasant Societies: A comparative study in Asia and Africa*. London Oxford University Press 1969, p. 25

their abilities in criminal activities by joining criminal syndicates or terrorist groups to fulfill their growing financial needs.

3.1.15 Poverty profile of the village

The concept of rural development and poverty has very close relationship. Generally rural development programs were initiated to improve the social and economic conditions of the people. The term poverty has not a common definition, it varies area to area and region to region. Therefore to understand the term poverty at micro level the local community was asked to define poverty according to their criteria. The poverty criterion defined by the farmers was based on the social and economic factors like size of land holding, off-farm income and the size of livestock were highlighted as their yardstick to measure poverty. The information regarding the poverty profile shows that only 5 percent households were rich and 33.80 percent were middle class, and remaining 45.60 percent and 15.40 percent were poor and very poor households, respectively. The status of poverty in village *Chinji* is also highlighted below:

Figure 12. Sample Distribution by Poverty Status



Source: Field Data

To understand the poverty status in terms of income, the farmers were further asked to specify the income level that makes the distinction among rich, middle, poor and very poor households. The income wise grouping of the gathered data shows that

the households having an average annual income of Rs. 5 lacs (US\$ 5618) were considered as rich and their proportion in the village was about 7 percent. The families earning annual income upto Rs. 2.5 lacs (US\$ 2808) were considered as middle class and their representation in the village was 40 percent. The average annual income of poor household was reported Rs. 90 thousands (US\$ 1011) and majority of the village households belonged to this class. The rest 12 percent households were very poor.

3.1.16 Employment

Employment is an important parameter to measure poverty and prosperity of the local communities. Comparatively in Pakistan off-farm employment opportunities in rural areas are less than the urban areas. So for employment purposes people mostly migrate from rural to urban areas. Moreover, employment opportunities in rainfed areas are also less as compared to the irrigated area. It was only due to limited industrial base of the rainfed region. The analysis of employment data reveals that in 1980's, 69.23% farmers performed farming on fulltime basis and rest 8.56, 6.00 and 2.34 percent worked as part time farmers, involved in off-farm activities and had gone abroad, respectively. While around 14% were reported as unemployed. However this situation was drastically changed in 2010. The share of fulltime farmers significantly reduced and the share of part time farmers was increased up to 36.33%. Similarly off-farm employment proportion was also increased in the studied village. Explaining this change Mr. Ahsan said "In 1980 we have 21 acres of land and we all four brothers worked together on our land. Relatively we were well off at that time and had almost all basic facilities in our home. But after our marriages, our father had distributed land amongst us. I got 5 acre of land which was insufficient to generate livelihood for my family. My brothers were facing similar economic problems. Then we all four brothers decided to start off-farm activities. In this way our family transformed from fulltime farming to part-time farming family". The trend of migration to other countries is considerably reduced in the village.

It is mainly due to strict immigration and employment policies of the Gulf countries. In their new policies they preferred skilled manpower but people of our village did

not possess skills needed for these countries. The empirical data also shows reduction in overseas employment. However, people still tried to go abroad but less employment opportunities forced them to work in the country. Presently, both educated and uneducated people preferred government jobs or seeking off-farm employment. They usually go to Islamabad, Rawalpindi, Karachi, Faisalabad and Lahore for this purpose. Regarding employment and household income, there was a general consensus among the community members that despite majority of the family members were doing jobs but they were unable to earn income sufficient to meet basic needs of their families. Their argument was further explored with some sample respondents to understand the real situation. Responding to this question they were of the view that in past village life was very simple. There was no electricity, gas, pacca houses, transport and educational facilities in the village. Social bindings were very strong, rich families used to help the poor families. But overtime this trend has been changed and now people are hesitating to help poor segments of the society.

Table 8. Sample farmers' perceptions regarding change in employment status

Employment Status	1980	2010	% Change
	Percent Farmers		
Full Time Farming	69.23	30.34	- 56.18
Part time Farming	8.56	36.33	324.41
Off-farm	6.00	25.07	317.83
Abroad	2.34	1.26	- 46.15
Unemployed	13.87	7.00	-49. 53

Source: Field Data

The pattern of skilled and unskilled laborer was also analyzed to see the quality of human resources developed during the last three decades in the village. The empirical results of the study indicated that overtime the proportion of unskilled labor is reduced to 34.54% whereas the ratio of skilled laborers was gone up significantly i.e., 134.25% which is a very positive development in the village

Table 9. Farmer's perceptions change in labor and off-farm activities

Type of work	Year-1980 (%)	Year-2010 (%)	Percentage
Unskilled Laborers	62.13	40.67	-34.54
Skilled laborers	8.35	19.56	134.25
Govt. Employee	24.13	30.43	26.11
Small Business	5.39	9.34	73.28
Total	100.00	100.00	

Source: Field Data

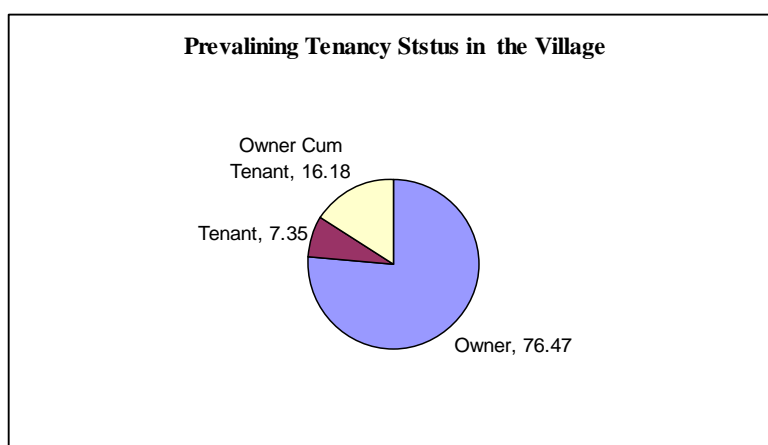
Actually, mechanization of agriculture sector has paved the way for this positive change. Due to this mechanization, the labor force employed in agriculture became redundant and survival of these families was difficult; they could not rely on farming sector. This economic pressure forced the poor segments to search other employment opportunities. As a result, local labor moved to urban centers where they have got opportunities of off-farm employment, technical trainings and new skills and they contributed back to their native villages in terms of sending remittances.

3.1.17 Tenants

Tenants are the people who do not have land and worked as share cropper. They offer their services as tenants to the land owners on certain terms and conditions. The term of tenancy varies from area to area but commonly owners share his farm produce with tenants according to agreed terms. The tenancy status of a village is an important indicator that could be used as a yardstick to measure the class structure of the village¹⁷. Therefore, to make a comparative analysis of the prevailing classes of the community, data related to tenancy status was collected and presented in figure.

¹⁷ Nandita Singh, Land tenure principal and development aspirations: An insight into Indian Tribal situation. Man in India Vol. 79, 1999, pp. 123-46

Figure 13. Prevailing Tenancy Status in the Village



Source: Field Data

The empirical data regarding the tenancy status revealed that in studied village 76.47% farmers were owner operators, 7.35% were tenants, while 16.18% were owner-cum-tenant. Over the years, the status of owner operators slightly reduced and the phenomenon of owner-cum tenant increased in the village. The term owner-cum-tenant pertains to a household when it also cultivates rented/shared land in addition to his own land. The tenancy status of the village was quite logical because considerable inheritance based division of land had taken place over the past three decades. This division of land also increased land fragmentation and converted the economical land holdings into uneconomical sizes of land holdings. The share received by each family member was insufficient to meet their household needs therefore small and landless farmers having their own land also worked as tenants on others land.

Explaining this situation, one of the respondents belonging to *Bhatti* caste shared his views as “In rural culture, owning agricultural land is considered to be very prestigious and the landed families are called as “*Zamindar*”. Moreover, the land owners usually enjoy higher social status and respect in the society. The families having large piece of agricultural land are influential families and they engage tenants on their farms by renting out some parcels of their lands. Customarily, tenants were not allowed to make decisions regarding farming activities. Socially, members of main castes like *Bhatti*, *Awan* and *Malik* generally avoid working as tenants even if they are poor because it is a matter of their prestige and honor.

Therefore, they prefer to leave their native villages for off-farm jobs in the nearby cities”.

During the last 30 years, various rural development programs have been initiated in the village. But these efforts have mainly benefited the large land owners whereas tenants, small holder and landless families were deprived of these programs¹⁸. So keeping in view the problems of these deprived families, NGO’s and government institutions have started pro-poor development schemes like micro-credit, input loans and imparted training to improve their skills. The overtime changes in social setup have made the tenants, landless, share cropper and poor farmers able to come out of poverty cycle. The empirical facts related to tenancy status of the village *Chanji* are given in Table.

Table 10. Comparison of tenancy status in the village *Chanji*

3.1.17.1	Tenancy	1980 (% Farmers)	2010 (% Farmers)	% Change
3.1.17.2	Owner	88.97 (121)	76.47 (104)	-14.05
	Tenant	0.00	7.35 (10)	7.35
	Owner-cum-Tenant	11.03 (15)	16.18 (22)	46.19
	Total	100.00 (136)	100.00 (136)	

Source: Field Data

3.1.18 Marriage, Birth and Death Rituals

Generally, traditional rural societies maintain their social order by strictly observing cultural norms and values. The events like births, deaths and marriages have great importance in villagers’ life because on such events people mostly ignore their

¹⁸ Nigar Ahmad, Change in Agrarian Structure in Pakistan. The Journal of Social Studies, 1979, No. 4, pp. 25-45

conflicts by participating in their joys and sorrows¹⁹. In this way, basically they show their solidarity with the visited families who are mostly their close relatives or close friends. Furthermore, on death events, neighboring families and closest relatives feel moral obligation to provide food to the aggrieved families and their guests for at least three days. This custom of hospitality still prevails in the studied village. The philosophy of this cultural practice is to provide moral and financial support to the aggrieved families. Even after the burial of dead body, people of the neighboring villages both male and females pay visits to grieved families, offer “*Dua*” (Prayer) for the departed soul²⁰.

The society under study was basically traditional in nature. Therefore, local people strictly observe societal customs, norms and values. They are committed to perform their social obligations on the events of marriages, deaths, childbirth, etc. At the time of births and marriages they congratulate the respective families and also exchange gifts and donate money called in the local dialect as "*Wartan Banji*". Customarily, in these events, respective families invite their friends and relatives through a special messenger called "*Nai*" (traditional barber), and host lunch or dinner in their honor. In reciprocity, every participating person presents gifts and money according to his financial status to show loyalty and intimacy to the host family. The gift exchange was a strong cultural norm observed in the rural Punjab. As members of the kin group or friends, gifts were exchanged by presentation and counter presentations, in local dialect called "*Vartan Bhanji*" because this concept was based on the principal of reciprocity (Alavi, 1992). The phenomenon of gift exchange and its impact in terms of solidarity and cohesiveness has also been highlighted by Durkheim, Malinowski, and Mauss.

In the village, there was a common belief that no matter if you did not like to participate in the events like marriage and birth ceremonies of friends, relatives or other members of the society but must visit them and console at bad times like severe sickness, loss of livestock, accident, deaths, etc. It was a healthy tradition

¹⁹ A.R. Radcliffe Brown also published a seminal work in 1922 entitled simply the Anadman Island. His work paid close attention to the meaning and purpose of rituals and myths

²⁰ Victor Turner, *The Ritual Process: Structure and Anti-Structure*, 1969.

followed in the village *Chinji* because such events provided opportunity to come close to one another, resolve differences and grievances and disputes. Many mediators (big land lords, social leaders, tribe heads etc.) also played significant role in bringing two parties close to one another and removed grievances. Sometimes such events also provides opportunity to select mates to arrange marriages.

Describing the cultural rituals, an elder member of the village explained that “we are four brothers and I am second one in my family. We all brothers and sisters are married and live separately. After the death of my father, there were serious disputes among my brothers and, we were divided into two groups. The social relations among our families were completely cut off and even our children were not allowed to meet their cousins. This situation lasted for more than 5 years. During that period one of my nephews died. At that time my family and I had visited my brother house to condole the aggrieved family. The main reason of this visit was to respect our social and cultural norms. It was a socio-cultural pressure that we were unable to avoid participating in the death rituals of my real brother’s family. Further, he told that this visit has significantly contributed in lessening our family rifts and decreasing our mutual conflicts. Ultimately with the help of some elders in the family, we were able to resolve our differences and conflicts and our relations were restored like before”.

3.1.19 Rural Sports

In rural settings, sports activities are important to engage and direct youth in a positive direction. Sports and cultural activities also create solidarity and cohesion among the society. It connects and establishes links between neighboring villages by participating in seasonal games and tournaments. During the field work, it was observed that people of *Chinji* loved sports and cultural activities. Traditionally, there were annual festivals in the area and during these festivals various sports and cultural events were organized and teams of neighboring villages participated in these events. The village elders provided patronage and financial support to players of their village. They always buck up their youth to play and win the sports events.

Culturally, when they competed and won the games they considered it a matter of pride and honor for them, and celebrated it at village level.

Among the rural sports, volley ball, football, hockey and *Kabaddi* (a kind of wrestling), oxen race, cocks and dogs fights are their famous sports activities. Although majority of the people belong to poor class but even then they spend lot of money on the most expensive sports like animal races, dog and birds fights. They look after their sports animals and birds just like their own kids. Over the years, transformation in rural sports was also reported by the villagers. According to them, new generation is no more interested in these traditional games. Rather the youth started loving to play cricket and indoor games. Previously, elders of the village disliked cricket but with the passage of time they have accepted it and they have allowed their children to play cricket. Now, cricket is the most popular game and almost all young people of the village had interest in it. Overall, transformation in sports has influence on other games of the village like *kabaddi, animal race, etc.*

As per traditional thinking, the rural women were not encouraged to participate in any sports activities. The women folk were totally ignored and even women were not allowed to see the sports festivals because there was no separate space for female audience. They only participated in household and farm related activities. It was mainly due to dominance of male mentality and cultural norms. Culturally, the role designated to women was discriminatory because they did not allow women to participate in the outdoor activities. However, with the passage of time, increased education and media exposure changed traditional thinking patterns of the society and now women can watch sports activities on television and the young girls having age between 18-25 years played different games at school and college levels.

In the previous rural development programs, government focus was mainly only on the economic aspects of the rural life. They have never included recreational and sports activities in their priority list. Resultantly, sports activities were ignored and this weakness restricted development and grooming of both male and female population of the village.

3.2 Respondents Profile

The objective of the current research study was to explore the trends of overtime changes in social, economic, political and cultural spheres of the village life. Therefore, to see the overtime changes, farmers having 50 years age were included in the sample survey. The main reason of their selection was to collect the historical information that might not be possible from the younger population of the village. The information collected from the respondents was also shared with the younger population just to get their views and re-confirm the collected information. The distribution of respondents by their age groups is given in Table 11. The age wise analysis reflected more participation of the farmers having age group 50-55 in overall sample size. Similarly, the respondents belonging to the 55-60 years age bracket constituted 27.94% of the total sample. The proportion of sample farmer aged 60-65 years and beyond, their share in total sample was 22.06% and 11.03%, respectively. The proportion of above 65 years people in sample size was kept intentionally less because of their ignorance from the new developments.

Table 11. Respondent's distribution by Age Groups

Age group	Frequency	Percentage
50-55	53	38.97
55.1 to 60	38	27.94
60.1 to 65	30	22.06
65.1 & above	15	11.03
Total	136	100.00%

Source: Field Data

3.2.1 Education of the Respondents

The biasness in the selection of respondents creates problems in highlighting the diversity of views. Therefore, sample respondents of this study size were selected with utmost care, and finally 136 respondents were selected from both literate and illiterate population. The sample farmers were further divided on the basis of their education. The proportion of illiterate respondents was only 14.7%. The inclusion

of their view points was important to anticipate how they perceive overtime changes and their impact on the society. The farmers having education up to primary and middle levels were 37.5% and 25.74%, respectively. The strength of these two groups was more than half of the total sample size. The share of farmers having education up to *matriculation and above* was 15.44% and 6.62% as shown in Table-8. Overall education level of the sample farmers was low because the respondents selected for this study were above 50 years and in the past, trend and facilities of education was not common in the village.

Table 12. Education wise distribution of farmers

Sr. No	Education Level	% of Respondents
1	Illiterate	14.7 (20)
2	Up to Primary	37.5 (51)
3	Up to Middle	25.74 (35)
4	Up to <i>Matric</i>	15.44 (21)
5	<i>Above Matric</i>	6.62 (09)
6	Total	100.00 (136)

Source: Field Data

3.2.2 Family Structure and Composition

In view of the sample farmers, overtime changes in social, economic and technical fields had altered the conventional family system of the society. In the past, most of the families used to prefer living under joint family system. In this system, all earning family members shared their economic resources and jointly managed the household needs. Unfortunately, shrinking of resources and increased family size had disturbed the joint family system in the village also. Adding further, some senior respondents stated that breaking of joint family system has made the society more vulnerable to food insecurity risks and poverty. In the studied village, the pattern of single family system commonly emerged in 1990 and then gradually it was extended throughout the village. During the field work, it was noticed that usually elder and uneducated people criticized and were against the single family.

Actually single family system was against their beliefs, traditions, societal norms and values; therefore, they were against single family system. Moreover, they also believed that this system has weakened the family institution. Overall, they were agreed that due to single family system household size was reduced in the village.

While viewing the past and present trends of family composition, the descriptive analysis of family composition was also conducted. This analysis has significance in term of verifying the qualitative data. The results revealed that the average household size in jointly living families was 10.34 persons, compared to 5.91 under single family system. The average number of adult males in single and joint family systems was 2.36 and 3.19, respectively. The adult female strength in single family system was 1.25 and 2.46 in joint families Table 13. The children population was quite similar in both joint and single family systems. On an average, single families of the village had 2.29 children and joint families had 4.69 children per family.

Table 13. Sample farmers family composition

Family composition	Single	Joint
Avg. family size	5.91	10.34
Adult Male	2.36	3.19
Adult Female	1.25	2.46
Children	2.29	4.69

Source: Field Data

The findings of present study reveal that in 1980's majority 77.21% families used to live under a joint family system which is now fallen to 43.38% (Table-13)

During the last 30 years joint family system was deteriorated up to 43.81percent. The type of families who had accepted this change was mainly the poor and lower middle classes of the village. While in their view trend of joint family system still existed in the higher and upper middle classes of the village. Actually these families having enough economic resources and political powers prefer to live in a joint

family system. Culturally, living in a joint family system reflected unity and power of a family which is necessary to maintain their power structure.

Table 14. Overtime change in family structure of the village

Family Systems	1980	2010	% Change
Joint Family System	77.21 (105)	43.38 (59)	- 43.81
Single Family System	22.79 (31)	56.62 (77)	148.39
Total	100 (136)	100(136)	100%

Source: Field Data

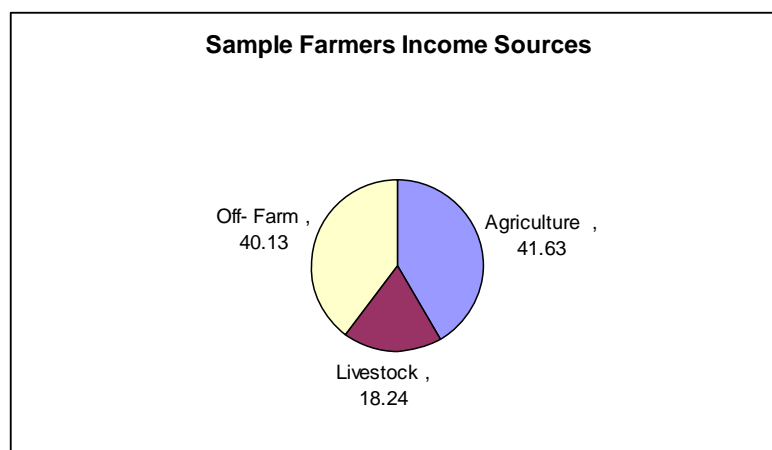
3.2.3 Income Sources

The income sources of the local people have expanded and improved over the years. In the past, agriculture and livestock were their main sources of income. Almost all farmers used to grow wheat in winter while during summer season they generally kept their land fallow for restoring its fertility and to conserve soil moisture for the next winter crop. The limited agricultural opportunities and squeezed natural resources had forced the people to diversify their income sources. The government and non-government organizations working for the betterment of the people have facilitated the local communities and provided improved agricultural inputs, high yielding varieties, skills and micro-credit for the new businesses. The data related to changes in income sources was collected and analyzed.

Due to the joint efforts of the local people and various organizations, their income sources were diversified as shown in Fig-6. Presently, 40.13% households earned their income from off-farm sources like shop keeping, labor work and private and government jobs. A quite similar proportion of farmers (41.63%) highlighted agriculture as their major source of income. Comparatively, a small ratio of farmers 18.24% indicated livestock farming as their only sources of income. The pattern of responses regarding the income sources varied --- the households having irrigation

facility have relatively higher income from agriculture while the farmers, having easy access to grazing lands and enough fodder/forage reported livestock farming as their major source of income. The people of village *Chinji* still believe that rural entrepreneurship has immense potential to improve income and employment opportunities.

Figure 14. Farmers Income Source



Source: Field Data

3.2.4 Average farm size

Farm size is an important indicator which is used to measure the socio-economic status of the farming communities. In the societies, like village *Chinji*, almost every aspect of life like social, cultural, political and economic relates to size of the land. Since, land is considered as source of power, therefore, large farmers enjoy higher social status and prestige. Hence, to maintain their control and authority in the society, members of landlord families intentionally create an environment that protects their political and economic interests. Furthermore, they also establish their relations with the government officials to maintain their authority in the village through offering costly gifts to them. The empirical result shows that sample farmers farm size in study village was ranged between 8 to 187 *kanals*, with average as 27 *kanals*. The farmers having irrigation facilities cultivated an average 7.58 *kanals* (Table-15). Extending discussion on farm size, farmers were asked how much land required for survival. Responding to the question, majority of them had pointed out 50 to 75 *kanals* of land for the survival of an average family.

Table 15. Average farm size and irrigated area in Village Chinji

Land Ownership Status	Frequency	Average	Std. Deviation
Averages own land (<i>Kanals</i>)	136	27.81	26.48
Avg. ownership of <i>barani</i> Land	136	25.68	24.88
Average Irrigated Land	31	7.58	5.61

Source: Field Data

3.2.5 Overtime Changes in Farm size

In view of the farmers, overtime changes in land holding have contributed both positively and negatively in the village. The farmers who brought more land under cultivation, their farm productivity and income were improved significantly. According to farmer's estimates, small farmers get 15 to 20 % less production as compared to the big farmers.

The local members further told that increase in population and limited land has undermined the land development efforts which are also evident from the findings of this study. It shows that during last 30 years, the strength of the small farms (having less than 2 hectares of land) has increased in the village whereas population of medium and large farms was decreased over the years. Commenting, on the main reason of decrease in farm size, majority of them had pointed Islamic law of inheritance as an important factor of this change.

There was consensus among the farmers that change in farm size had badly affected the health, education and even family structure of the village. The joint family system was converted into nuclear family system and consequently family institution was gradually deteriorated in the village.

The overtime changes in farm size have also positively contributed. The distribution of land has converted big land holding into small fragments. This phenomenon has convinced manufacturers and professionals for the development of small scale technologies. As a result small tractors, new crops like groundnut, vegetables fodder

and high yielding varieties have been introduced to sustain the small farmers in the farming business. The selection and production of agricultural crops mainly depends upon the size of land holding. Therefore, government has taken initiatives for land development in the village. For this purpose, government has provided agricultural machinery, technical support and credit facility to the farmers under different development schemes.

Table 16. Sample farmers perceived changes in farm size of the village

Farm Size	1980 (% Farms)	2010 % Farms	% Change
< 2 Hectors	33.09 (45)	52.94 (72)	60.00
2.1 to 5 Hectors	47.79 (65)	37.5 (51)	- 21.54
5.1 & above	19.12 (26)	9.56 (13)	- 50.00
Total	100.00 (136)	100.00 (136)	

Source: Field Data

Pakistan has a long history of rural development. Since its inception, various rural development programs have been initiated to improve rural economy and socio-economic conditions of the rural masses. The present study was designed to see the impact of these development programs on a specific community. Therefore, the subsequent chapter was specifically designed to review and discuss the performance of previously launched rural development programs in the country.

4 OVERVIEW OF RURAL DEVELOPMENT IN PAKISTAN

In Pakistan, 67% of the country population lives in rural areas and earn their livelihood from agriculture and its sub-sectors. Agriculture is also considered as backbone of national economy. Therefore, development of rural economy was the prime focus of almost all rural development programs in Pakistan. Moreover, national and international donors also focus on agriculture sector to improve socioeconomic and physical conditions of the rural areas. The purpose of this study was to trace the overtime changes induced by various rural development programs in Pakistan. In such kinds of studies, it is important to explore the type of activities and interventions being introduced to bring the desired changes in a specific locality or region. Actually, the background knowledge and information about the previous development efforts facilitates the researcher in organizing the parameters and limitations of the study. The subsequent section, describes the historical background of rural development programs launched in pre and post independence eras.

4.1 Pre-Independence Rural Development in the Sub-Continent

Since the British rule, the Indo-Pak sub-continent was significantly dependent upon agriculture and the role of rural poor, small farmers, landless laborers and village artisans were marginal class of rural society. Further the occurrence of food shortages and famines greatly destabilized the agriculture and disrupted the village life and the rural economy (Islam and Anjum, 2006). In the sub-continent, Christian missionaries were the pioneers (1901-1909) for initiating the village uplift activities in this region of the world. The basic aims of their programs were to improve life of the people in a Western and religious style. The Gosaba and Clerkabad areas in the canal colonies were the first two Christian villages where each village was provided a Church, a school for boys and girls and a dispensary. It is evident from the history that the British government started its activities to change the cultural heritage of Punjab with both destructive and constructive elements. It replaced the traditional *punchayat* system with the Church driven with new elite system to govern the people according to the wishes of the government. Rabinder Nath Tegore

was among those who gave an indigenous system of rural leadership by following the footsteps of Patrick Geddes and Elmhirst of Great Britain. He setup an institute of rural reconstruction at Sriniketa in Birbhum district, West Bengal in 1922 with the help of Mr. Elmhirst (Tegore and Bharati, 1943). The F.L. Brayne formulated a program of rural development and made the first comprehensive experiment in Gurgaon, a district in former Punjab where he remained as the Deputy Commissioner from 1920 to 1928. He started a *Dehat Sudhar* Programme by using a top down approach of rural development. This program was mainly designed for the large farmers who could pay for a Persian wheel a sum of Rs.200 and for an iron plough for Rs. 32.00 to increase farm production. The program was criticized by the local leaders as it was preaching non-participatory system to function under the orders of the Deputy Commissioner alone. This could not prove an effective system because after three year's work, only few Persian wheels and some manure pits were sustained (Darling 1934). Gandhi also disagreed with the non-participatory approach used to implement the Dehat Sudhar Program and a new program namely "Gram Sevak" (local village workers) was brought in place in 1928 and developed a participatory approach for rural development (Kumarappa, 1952) but with the beginning of political unrest in the sub-continent, rural development efforts were slackened and came to an end even before the partition in 1947 (Islam and Anjum, 2006; Singh, 1982; Epestei, 1979; Etienne, 1995).

4.2 Post- Independence History of Rural Development in Pakistan

After independence in 1947, the state appeared on world map as West and East Pakistan. In December 1971, the eastern wing of the state fell down and a new state namely Bangladesh came into existence. After 1971, West Pakistan (now called Pakistan) remained as an independent state consisting of a federal capital area Islamabad and four provinces with three federally administrated areas. The provinces are Punjab, Sindh, Khyber Pakhtoonkhawah and Baluchistan. The province of Punjab is most populated while Baluchistan is the largest province of Pakistan in terms of its geographical area. In Pakistan, there are about 49,000 villages grouped administratively into (4100) union councils (AIOU, 2001; GOP, 2005).

The importance of the rural sector of Pakistan in the national economy is evident from the fact that agriculture sector is the backbone of the state. The rural sector is not only fulfilling the food requirements of the country, but also contributing nearly 25% to the state GDP, earns about 50% of foreign exchange and recruits about 42% labor force (GOP 2009; SAARC 2005).

Soon after its inception, numerous rural and agricultural development programs were launched to improve the rural well being. Under most of the development projects, the autocratic development models were adopted with minor changes. The intentions and objectives of each program was different (Malik, 1990; Chaudhry, 2002). Most of these programs were initiated with the financial assistance and guidance of international donors.

As the nature of rural development is interdisciplinary and multi-sectoral, therefore, it represents various sectors such as production, infrastructure and social sector etc. It implies political, physical and economic betterment of people and greater social transformation (Jagirdar, 2005; Hobbs, 1980). The participation of people in rural development process helps in planning and implementation of the policies and programs. Supported with decentralization, better enforcement of land allocation, access to credit and other inputs provide rural people with better economic prospects, improvement in the provision of public goods, health care, education, drinking water, energy supply, sanitation and housing coupled with attitudinal changes. Rural development, hence, is one of the dominant means to improve socioeconomic conditions and reduce rural poverty (Mirza, 2006; Burki, 2001; Singh, 2001).

Conventionally, rural development objectives were to achieve the required goals through a centralized approach (called directive approach) where planning for change and betterment for rural communities comes from the state (top-down approach) that (Long and Winder, 1981) was criticized. The argument was that this approach is not conducive for local level development because under this approach objectives and means of implementation are decided by the government agencies

which may not suit to the target community. Similarly, Batten in 1974 explained that objectives of rural development programs through top-down approach could

not be materialized. The consecutive failure of development projects then led to emergence of non-directive approach where local participation is key element of for rural development and participatory action.

Since the inception of Pakistan, various rural development programs have been and for the execution of these programs different following development approaches were utilized. In 1960's efforts were focused on "growth-first" models. As a result of this approach economy of the country achieved reasonable growth but its benefits did not trickled-down at the grass root level. Therefore, rural population was trapped in poverty, unemployment and social & economic inequalities increased. Realizing the problems of previous approach, again in 1970's need based approach were used to achieve "re-distribution with growth". It was integrated with rural development programs to reduce rising inequalities and rural poverty. By further extending development efforts, in 1980's, government of Pakistan has implemented a structural adjustment programs without a human face and that had created socio-economic problems for the rural poor. Overall development efforts being initiated these two decades have laid foundation for the peoples' participation and an integrated approach to the rural development (Khan, 2010).

Realizing the importance of rural sector, the government of Pakistan had made a strategy to improve its very much depressed economy and backward social-cum-public services. For this purpose government policy approaches and aims were changed. The main focus of rural development policies was on the improvement of socio-economic conditions and improving the living conditions of rural masses (GOP, 2005; Islam, 2006;, AIOU, 2001). In the growth oriented development strategy mainly following areas were covered:

- Improvements in the rural infrastructure;
- provision of social amenities;
- executing such productive projects that satisfy the needs of the rural masses;
- To combat unemployment and under-employment by multiplying opportunities for productive work.

Various targeted development schemes were initiated by the successive governments but all these were failed to achieve desired objectives due to their

political motives. The successive military governments have focused on the establishment of basic democracies system in the country. The prime intentions behind their development efforts were to get public support. They want to develop their own vote bank and political allies by creating a democratic institution at the grass root level. Whereas, contrary to military governments, political governments focus was on the sectoral development. Actually they want to gain political benefits from these projects. Therefore, in both military and democratic regimes almost all rural development programs were launched with different intentions and unanimous implementation strategy was not adopted by these governments. The development programs and strategies adopted by the political and military governments in Pakistan have been explained in the following sections.

4.2.1 Village Agricultural and Industrial Development Program (V-AID 1952-61)

In the initial years of independence, there was a political polarization among different splinter groups of Pakistan Muslim League. Most of the politicians spent their time and energies on political matters instead of concentrating on programs concerning economic development in the country. Resultantly, the V-AID program was conceived in a political vacuum. The village agricultural and industrial development program was Pakistan's first formal attempt towards rural development that was launched in 1952 with tremendous hopes and enthusiasm (Mullah, 1997). The basic concept of this program was to provide technical and financial assistance from the government for more effective tapping available skills, manpower and financial resources at the village's level. It was the first comprehensive multi-sectoral and multi-purpose program aimed at bringing a synthesis of rural development efforts at local level creating self-help and self-initiative. The objectives of this program was to increase income of the rural people, raising the agricultural production, establishment of rural small scale industries and to provide social and physical infrastructure (Chaudhry, 2002; Malik, 1990). In the process of development programs, participatory methods were used include village councils, youth clubs, cooperative and social centers for involving the local population to participate in decision making for the development projects (Waseem, 1982; Muhammad, 1994). Overall this program has partially achieved its objectives

(Burki, 1969). The program also suffered due serious limitations and weaknesses, first was the adhoc nature of the village aid organizations that adversely affected the morale of personal working in the organizations and also its inter-departmental relationships (Muhammad, 1994); Waseem, 1982; Mullard, 1987). Secondly, it was assumed and overestimated, Thirdly, the village level workers were not properly trained (Chaudry, 2002; Malik, 1990). Fourthly the village AID organizations claimed in the course of time for all credit in the context of work done. There was also an active support of other developmental agencies that was not possible without the active support of other developmental agencies. Fifthly, the program lacked proper monitoring and evaluation system. And lastly, the village councils were not broad-based in terms of community participation. The program was ultimately wrapped up in 1962 (Chaudhry, 2002; Malik, 1990; Shahidullah, 2002; Islam, 2006).

4.2.2 Basic Democracies System (BDS 1959-70)

The Basic Democracies System was started during General Ayub Khan's regime in 1959. The main objective of this program was to provide an opportunity to the local communities to join hands in the developmental efforts of the government (Chaudhry, 2002; Mullah, 1997; Mullard, 1987). The basic democracies system was also laden with political dimension and intended to procreate political leadership at grassroots level.

The functional mechanism evolved under the basic democracies system was a four-tiered organizational system established in Pakistan, namely Union Council (rural), Town Committee (urban), Tehsil Council, District Council and Divisional Council. The basic democracies system presented an institutional framework for involving the people in social, economic and political developments. The system was relatively more integrated and comprehensive than the previous system. It also bridged the gap between bureaucracy and village representatives by providing a working relationship for sharing information and experiences on local problems to seek their solutions. The program enhanced the role of rural leadership at the national level through political motivations, but very soon this system has encountered problems, like: i) lack of sympathies of the political parties at the

national level because of its electoral college role; (ii) structural contradictions based on rigid hierarchical structure system that could not meaningfully involve the rural masses in the planning and implementation of the projects (Mullah, 1997; Waseem, 1982; Chaudhry, 2002; Malik, 1990). Moreover corruption and allocation of funds for political bribery weakened the confidence of the rural masses and the system gradually lost support of the society and it was ultimately rolled back by the Government of Pakistan in 1970 (GOP, 1971).

4.2.3 Rural Works Program (RWP 1963-71)

The Rural Works Program was launched in 1963 with the objective to develop rural physical infrastructure, provide gainful employment in labor intensive and productive projects and induce full use of local resources. Actually, this program was developed on the basis of the encouraging results of a pilot project undertaken by the Academy for Rural Development at Camilla, Bangladesh (Waseem, 1982; Malik, 1990). The Rural Works Program attempted to involve the local communities in the planning and implementation of development plans for promoting the people's confidence in managing their own resources (Islam, 2006; Mullard, 1987). In the beginning, this Program was linked with the Basic Democracies System but afterwards it was re-named as Peoples Works Program and extended to the urban areas with more or less similar objectives.

In the late 1970, it was again re-named as Rural Works Program and fund were provided the union and district councils levels for rural development purposes. After two years of its operation, Rural Works Program was made an integral part of the third five-year plan (1965-70) that remained in operation for more than two decades and showed its existence during the past three political regimes. During the Basic Democracies System, the program suffered from a number of limitations and weaknesses. The program could not meaningfully involve the rural communities at planning and implementation stages (AIOU, 2001). The program also suffered due to irregularities in the selection of projects, poor formulation and workmanship, delay in release of funds, more reliance on contractors rather than on the project committee, use of capital intensive inputs instead of labor intensive and lack of repair and maintenance of the completed development projects (Burki, 1969).

Because of its poor and corruption oriented mechanism, the program was ultimately abolished in 1972.

4.2.4 Integrated Rural Development Program (IRDP 1972-80)

After the separation of East Pakistan in 1971, the Prime Minister of Pakistan Mr. Zulfikar Ali Bhutto had promised to provide three basic necessities of life to the rural and urban poor classes. Mr. Bhutto adopted dynamic strategies to diversify the economy, build up a public sector mechanism and promoted a fair deal with the industrial workers, small farmers and expanded the social services in the rural areas to improve the socio-economic conditions of the poor classes. His government launched an Integrated Rural Development Program in 1972 with the prime intention to get popular support from the rural areas and immediately started two main programs namely:

1. Land reforms;
2. Integrated Rural Development Program (Waseem, 1982) and (Muhammad, 1994).

The Integrated Rural Development Program was aimed at the administrative decentralization of all services & facilities through the combined efforts of the private and public sectors for the socio-economic uplift of the poor sections of the rural society, particularly the small and medium size farmers. The prime thrust of the program was to increase the productivity by providing technical guidance, credit facilities, provision of inputs, availability of agriculture machinery on hiring basis, storage and marketing facilities, etc., based on sound physical, organizational and institutional infrastructure by intensification, diversification and commercialization of agriculture sector (Mullard, 1987; Malik, 1990). The Integrated Rural Development Program was at its infant stage when it got entangled and stifled by conceptual ambiguity and covered only a limited geographical area. Two model/pilot projects, Daudzai and Shadab were undertaken in NWFP (KPK) and Punjab, respectively that demonstrated encouraging results and were followed in varying degrees by other provinces and regions. It was a comprehensive multicultural program based on decentralization of administration and a synergetic combination of all development inputs at the local level. The Integrated Rural

Development Program experienced a number of problems during the implementation process as well. Firstly, the program was suffered from delays in financial commitments which disturbed the phase wise implementation of the program. Secondly, most of the departments have not deputed their officials to the Integrated Rural Development Program's actions. Thirdly, the local government institutions were not established during the tenure of the program. In short, the Integrated Rural Development Program could not succeed in providing the required inventory of project personnel that distorted effective implementation of the program (Islam, 2006; Chaudhry, 2002). Due to the problems of rigidity and one sided bureaucratic mindset, the Integrated Rural Development Program was ended in 1977 (Malik, 2002).

4.2.5 Rural Development through Local Councils 1979-85

The former Prime Minister Zulfikar Ali Bhutto initiated many projects and programs for the uplift of poor communities. Due to development programs and policy interventions, he was much popular among the rural and urban poor. His political philosophy and programs were appreciated by the deprived classes of the country. The military ruler General Zia-ul-Haq was well aware of Mr. Bhutto's popularity and political wisdom to attract the rural poor classes. After taking over the power, he acted in the same way to gain sympathy of his masses. Therefore, he tried to integrate the rural development activities with the local government system which was a virtual extension of Basic Democracies System. Moreover, he tried to consolidate the economy and gained confidence and cooperation of private sector by a policy of denationalization of certain industries that were nationalized in Bhutto's regime (AIOU, 2001). Thus in the fifth five-year plan (1978-83), the task of rural development was mainly entrusted to the local councils. Integrated Rural Development Program and Rural Works Programs were merged to Rural Development with the following objectives:

- To integrate meaningfully rural development with the national socio-economic development efforts;
- To reduce the burden of under employment;

- To increase the density and intensity of services provided for agricultural and other rural activities;
- To improve the rural infrastructure;
- To make a beginning towards providing social amenities to the target groups;
- To create an institutional framework for ensuring community participation in the implementation of rural development programs (Siddique, 1980).

In 1979, separate local government institutions were established for the urban and rural areas throughout the country. The local councils were assigned wide ranging functions of public works, public health, education, agricultural development and economic welfare, drainage, livestock, dairy development, and public safety. As the program was to be referred to the sixth five year plan, the rural development strategy was made on the efforts of the rural local councils during the period from 1973 to 1983. The local bodies could not assume their developmental responsibilities before the middle of the fifth five year plan. The experience of rural development through local councils was quite encouraging in terms of popular participation in planning and implementation of the projects at the local level. The process has encouraged the emergence of local leadership that facilitated the process of two-way communication between the bureaucracy and the rural people. In general, the program achieved a fair degree of success during the past five years while some areas needed improvements: such as, (i) decentralization of services and facilities offered by the government agencies; (ii) to make the activities of the union councils and district councils to properly coordinate with the nation building agencies; and, (iii) there was a need to build the capacity of local councils, particularly union councils (Syed, 1991).

4.2.6 Prime Minister's Five Point Program (1985-88)

Although this program was launched by a civilian Prime Minister, Mr. Muhammad Khan Junejo with a behind-the-screen control of the military regime of General Zia-ul-Haq. The civilian government headed by Mr. Muhammad Khan Junejo was the so called civilian face of the military rule but was permitted to function within the framework of the amended 1973 constitution. The civilian government reinforced

the process of rural development by providing more resources for expansion of programs for education, land improvement, healthcare and rural infrastructure improvement. The Prime Minister's Five Point Program was initiated in 1985 with the specific objectives to promote welfare and prosperity in the less developed areas of Pakistan. The tenure of the civilian government was too short that was wrapped up in 1988. In this way, the Prime Minister's Five Point Program came to an end without achieving its goals. After the assassination of General Zia-ul-Haq, Pakistan People's Party took over the government as a result of general elections and introduced a new version of People's Works Program in the country.

4.2.7 Tameer-e-Watan Program (1990-93)

During the People's Party regime, there was a strong political rivalry between Prime Minister Benazir Bhutto and Chief Minister of Punjab Mr. Nawaz Sharif. The federal government had not allowed the Provincial Government of Punjab to launch any development programs without its consultation. Consequently, the federal government not provided appropriate funds to the Government of Punjab for development activities in the province. After the dismissal of an elected government on the allegations of corruption and mismanagement headed by the popular figure Benazir Bhutto in 1990, the rural development administration and organization was re-modified in Punjab on resumption of charge as Prime Minister by Mr. Muhammad Nawaz Sharif (1990-1993). The Muslim League (N) Government replaced the People's Works program with Tameer-e-Watan program that basically continued the elements of the previous system under a new name and with a biased attitude towards different segments of beneficiaries. The program was again funded from government's own resources and implemented under the supervision of federal government through local government system (now based on nomination) and by the Members National Assembly and Members Provincial Assembly who were elected under the flagship of the Muslim League (N). The 'District Development Committees' comprising of local MPs were re-established that worked as the parallel organizations of 'Local Councils'. During the Nawaz Sharif's tenure, the road network in rural and urban areas of the Punjab was well developed while throughout his regime, his government's concentration was on the establishment of infrastructural facilities. The time period of this program was also too short but it

led to some significant changes in the rural areas. This program was wrapped up by the successive government of Pakistan Peoples Party again headed by Benazir Bhutto.

4.2.8 Peoples Works Program (1993-96)

Prime Minister Benazir Bhutto, during her 2nd term (1993-96) revitalized the People's program. The already existing Tameer-e-Watan program was replaced with the People's program which was basically the continuation of previous system under a new name. Moreover, the community uplift program also remained intact. Again, sponsors and beneficiaries were changed but the basic political structure of the program remained the same. The Peoples Program remained in operation from December 1993 – 96. The basic concept and approach of this program was the participation of elected representatives of the people at national level for identifying the development schemes in their respective constituencies on the basis of assessment of development needs of the area. The program concentrated on the provision of basic amenities such as drinking water, sanitation, education, health and supply of natural gas.

4.2.9 Social Action Program (SAP 1993-96)

In order to improve the social indicators, Government of Pakistan designed a comprehensive approach for social development under the Social Action Program (SAP). It was formally undertaken from 1993 with the assistance of donors for three years. Later on this program was incorporated in the Eighth Five Year's Plan (1993-98). The social action program covered elementary education, primary healthcare, population welfare, rural water supply and sanitation. The main strategy of SAP was to improve the coverage, quality and effectiveness of service delivery. Realizing the importance of social development, SAP was further extended to the year 2000. The SAP was evaluated and found successful in achieving its set targets. After completion of SAP (1993-96), the Government of Pakistan further extended this program for five and half years (1997-2002). The objectives of SAP-II were;

- Improving services design with focus on consolidation and quality of services delivery unlike the expansion of service points during SAP phase-I;
- Institutional strengthening through technical assistance and training for upgrading planning, implementation and monitoring capacity of executing agencies;
- Involving NGOs, private sector and communities in social sector services delivery.

4.2.10 Commodity Specific Development Efforts

Beside the special rural development programs, the sectoral department undertook a number of developmental activities by organizing special projects. In the late 50s, the department organized crash program like the “Grow More Food Campaign” which was followed in the 1960s by the accelerated agricultural development program incorporating the high yielding varieties of food grains, cash crops, fodder and fruits. The inputs were subsidized and promoted through package supply and subsidizing prices of produce. These measures supported processes of “Green Revolution”. Nevertheless, the continuation of the efforts in 1970s changed the major problem of food shortage into food autarky. The situation deteriorated again in 1984 and 1985 as a consequence of drought but efforts were continued in other aspects particularly during the 1970s and early 1980s in the sectors of poultry development which helped reducing the nutrition gap, breeding of livestock for milk, meat and so on. The above efforts along with the specific rural development programs contributed significantly for improving the quality of rural life.

4.2.11 Conclusion

Since the inception of Pakistan, rural development has great importance because about 65% population of Pakistan is living in rural areas. Therefore, almost all political and military rulers had focused on the development of rural areas, besides having their own interests. Even then, they had implemented various rural development programs and initiated some separate sectoral development projects in the country. There is a clear distinction in their development strategies. The

military rulers had always focused on the establishment of local democratic institutions because through these institutions they could get political legitimacy and support at the grassroots level. Contrary to the military governments, civilian governments' focus was on rural works programs. Both national and provincial governments had launched various Prime Minister and Chief Minister's development programs. Usually, these programs were conceived and implemented at federal and provincial levels. Therefore mainly top down and bureaucratic approaches were used.

The evaluation reports of the programs and projects clearly indicated that the development initiatives had not produced desired results and exhausted lot of financial resources. The reasons of ineffectiveness of these programs were diverse in nature that was reported in the literature such as:

- Top down development approaches;
- Poor project formulation and workmanship;
- Delay in release of funds;
- More reliance on contractors;
- Institutional conflicts;
- Bureaucratic mindset;
- Short duration of programs;
- Political rivalry

Comparatively the approach or strategy used by military governments was successful and contributed in the development of rural areas by using local bodies system as a tool for development which is quite participatory in nature. Moreover, development activities were planned and implemented at grassroots level. Overall, rural infrastructure in Pakistan was established through the local bodies systems.

Agriculture development was an integral part of almost all previously launched rural development programs. In all these programs, agriculture was used as strategic interventions to improve the socio-economic conditions of the rural masses. Therefore, before proceeding further, review of agriculture sector in development seems important to have a comprehensive picture of the rural development efforts in Pakistan. A brief overview of agriculture sector has been added in the following section:

4.3 Overview of Agriculture Development in Pakistan

Pakistan's agricultural sector consists of farming and its allied sub-sectors like livestock, fisheries and poultry etc. The agriculture is also a mainstay of the country and it contributes towards employment and fulfillment of social and economic needs of the rural population constituting 67.5% of the total population (PES, 2009). Whatever happens to agriculture is bound to affect economic growth and welfare of the rural masses (Pasha, 2002; Ravallion, 2007). The agricultural economy can broadly be classified in two groups --- the farming itself and the agribusiness. The farming in Pakistan is largely practiced in private sector while the agribusiness is both public and private enterprise consisting of collection, storage, manufacturing and distribution of farm and forest products and inputs that together with coordinated activities are termed as the food and fiber system (Walter, 1981).

Pakistan's agriculture has made a long and difficult journey. In the beginning, this sector was not considered as important when compared to industrialization. Therefore, in the early years of Pakistan, growth rate of agricultural sector was considerably low (GOP, 1988). The prominence of agricultural sector in the economy of Pakistan can be viewed in three ways. Firstly, the sector provides food to the consumers and fiber to domestic industry. Secondly, it is a major source of foreign exchange earnings; and thirdly, it provides a market for industrial production. (GOP, 2000; Yousaf, 2006; Bashir, 2005)

A major part of the rural economy depends on farming and the collection, storage, processing, distribution of agricultural commodities as well as wages paid by

farming and agribusiness to the households. The well being of the largely economy depends on the production, processing and distribution of major products such as cotton, wheat, edible oil, sugar, milk and meat. In the long run, agricultural economy has been producing an increasingly marketable surplus that was supporting to sustain the economic growth and transition to a more market oriented economy (Walter, 1981; Akhtar, 2000; PES, (2009). The thagriculture sector of Pakistan has observed following changes.

4.3.1 Changes in Land Composition and Ownership

The composition of farm land has been changing since the inception of Pakistan. The people migrated from India have been allocated agricultural lands on the basis of soil fertility and water availability. The people having large land holdings in India were mostly given less land holdings. This situation has changed the ownership status and also distributed the agricultural land into small fragments. Moreover, due to Islamic law of inheritance farms lands are continuously dividing (Horowitz, 1986). As a result of this permanent distribution number of small farms has increased from 3.8 million in 1970-71 to 6.21 million in 1997-98 and around 85% of total farms were less than 5 hectares.

(Punjab Development Statistics)

The changes in number of farms and farm sizes had forced the farming communities as well as the government agencies to make new arrangements to sustain small and medium land holders in the farming business. In this context, during the last 30 years, following initiatives were taken to facilitate the agricultural communities.

4.3.2 Developments in crop sector

In the initial years of Pakistan, the agricultural sector was discriminated and the development efforts were directed entirely towards industry. This neglect, along with the increasing problem of poverty, land degradation, non-availability of improved inputs and water logging and salinity began to take a toll on agricultural production. The yields per acre of almost all crops were comparatively low in

Pakistan. The severe drought of 1952 had further aggravated the situation and damaged the agriculture sector. At that time, neglect of agriculture became apparent, and therefore, in the first Five Years Plan (1955-60) attention was diverted towards the agrarian economy although it was not sufficient to have any significant effect on the declining performance of the sector. The average annual growth rate of the sector was only 2.1 percent.

The situation changed dramatically during the next two plan periods when agriculture sector grew at the rate of 3.8 percent in the second plan (1960-65) and 6.3 percent in the third plan (1965-70). The overall growth in the production of major crops was 4.7 percent and 4.8 percent in minor crops. During the third plan, major crops grew at the rate of 9.1 percent and minor crops at 3.8 percent (Maan and Mailk, 1996). The progress during this plan period was the rapid adoption of new technology, introduction of bio-chemical technology, high yielding varieties coupled with increased availability of inputs and more appropriate price policies.

In the adhoc plan period (1970-78), the growth rate declined sharply to 1.7 percent due to multifarious problems particularly war with India in 1971 as well as flood and droughts. This period was however well known for re-organizing the institutional framework with equitable distribution of income as the major goal. Despite the reforms and programs, the agricultural sector displayed relatively a low growth rate of 1.7 percent while the major crops grown at the rate of 0.9 percent and minor crops at 4.6 percent.

In the Fifth Plan (1978-83), government again emphasized on the agriculture sector to reduce the dependency on increasing imports of food commodities but to concentrate to export the agricultural products. Fruits, vegetables, livestock and fisheries were also given priority to capture export markets. Special emphasis was given to less- developed and barani areas to increase the productivity level of small and low-income farmers. During the fifth plan, agricultural sector grew at the rate of 4.5 percent per annum. The supply inputs was improved particularly the water, fertilizer and seeds with favorable weather conditions that contributed towards the increasing growth.

In 1980, a national agricultural policy was announced and that policy has specifically emphasized on input and output prices. Fertilizer prices were reduced, pesticide subsidy was eliminated and water charges were raised. The office of the Agricultural Prices Commission was setup in 1981 to recommend such support prices that would safeguard the interest of the farmers against undue fall in price in the post harvest period, stabilize the prices and raise the production of crops through price intervention, particularly the crops either exported or imported.

After the completion of Fifth Plan, Sixth Plan 1983-88 was announced. The proposed growth rate of this plan was 6.1 percent per annum. The plan's focus was on the improvement of supply of inputs and mechanization. Despite institutional changes, structural adjustments, propagations and effective use of inputs, irrigation water and mechanization, the growth rate of sixth plan was below the targeted figures while the growth rate was registered only 3.9 percent per annum. The performance of small farmers was least satisfactory as no package was given to this category of producers, while major policies were tilted towards large farmers.

In the seventh plan 1988-93, major emphasis was on the self-sufficiency in basic food items and improvement in productivity through efficient use of inputs and credit facilities. The farmers were provided with remunerative support prices and research & extension services were strengthened. A new agricultural policy was announced in May, 1991 with basic thrust on deregulation of the sector for establishing a macro level policy climate conducive for agricultural growth and to free the system from bureaucratic constraints. The main interventions of the new policy included initiation of productivity enhancement program, relief package in repayment of outstanding loans, reduction in import duties on agricultural implements including tractor and liberal credit policy. During the seventh plan, poor progress was due to low investment in agriculture sector, meager availability of credit, lack of "crash" programs and inadequate arrangements to line up inputs.

It is evident from the above discussion that prime focus of almost all development efforts in the past was on rural economy because the improvements in agriculture sector were important as 67% rural population was earning their livelihoods directly or indirectly from this sector. Moreover, urban industry is also based on agricultural

products and due to this reason agriculture in Pakistan is multidimensional and multi sectoral.

4.3.3 Land and water development

In Pakistan, land and water are precious resources and important for the development of agriculture sector while the available cultivated land is insufficient to meet future food and fiber requirements of the country. Moreover, in the recent past, use of agricultural lands for non-agricultural purposes such as industrialization and urbanization has increased manifold. This situation has required improving per acre productivity and cropping intensity. The improvement in agricultural productivity is crucially dependent on the rational use of land, land improvement, supply of water, efficient use of water and by using improved agronomic practices. Keeping in view the importance of land and water, past and present governments have made lot of efforts to improve the natural and physical resources of the country. An overview of previous efforts is discussed in the forthcoming part of this section.

Over the years, the land and water resources have played a major role in the rural economy. At the time of independence irrigation system was based on canal system as there were no water storage dams. The total cultivable command area was 11 million hectares, of which 2.4 million hectares was fed from weirs and barrages and cultivated only in kharif season. The average withdrawal of canals from the Indus River in 1947 was about 64 million acre feet. During the period of negotiation of Indus water treaty, Pakistan constructed three barrages on Indus River, Kotri (1956), Taunsa (1958) and Guddu (1962). Under this Indo-Pak water treaty, several water projects were initiated in the country such as Mangla and Tarbela reservoirs, five barrages, eight interlink canals, one siphon and remolding of existing barrages and canals. The current irrigation system of Pakistan mainly consists of three storage reservoirs, 16 barrages, 12 inter-river link canals, 2 siphons and 43 main canals (NESPAK & PIC, 1990). The total length of the canals is about 35,000 miles with 88,600 outlets. The length of watercourses is about one million miles (Bandaragod and Saeed-ur-Rehman, 1995). The total water availability in 1991-92 was estimated

to 122.1 MAF while surface water was contributing approximately two-thirds and ground water one-third (EIU, 1992).

In the last 30 years, for the large scale development, the groundwater through tubewells was used. In the beginning, the tube well scheme was started in the public sector in some of the canal command areas. In 1960, Salinity Control And Reclamation Project (SCARP) was undertaken by the public sector in the large command areas where tube wells were installed throughout the country. The ground water was added to the canals to increase the flow equitably. Up to June 1986, 15,227 tube wells were installed under SCARP project. The strength of private tube wells was also increased over the years and at present 242,160 private tube wells are available in the country. The majority of the tubewells were in Punjab only (Bhatti, 1984; Badrudin, 1990).

In 1955, government of Pakistan has made some structural changes to improve the irrigation system. The Department of Irrigation, Communications and Works were established to deal with the matters relating to water exclusively (Michel, 1967). It was unfortunate that just after their establishment; the departments became a rolling stone between the authorities of federal and the provincial governments. Another problematic hurdle appeared in the form of Soil Reclamation Board established in 1957, as a sub-division of the Department of Irrigation. The establishment of the Water and Power Development Authority (WAPDA) in 1958, proved to be the strongest blow to the Irrigation Department (ID). The WAPDA's charter identified its role to investigation, planning and execution of schemes in the field of irrigation, water supply, drainage and the prevention of water logging and reclamation of waterlogged and saline soils etc. Other major changes brought about were the promulgation of land reforms, the consolidation of holdings and the constitution of food and agricultural commission. These institutional changes played a major role in accelerating the pace of agriculture.

4.3.4 Potential of Agriculture Development in Pakistan

The importance of agriculture in developing countries is mostly realized due to its absorbing capacity for manpower and as a main livelihood source. The rapid increase in population generally in the developing countries demands an efficient

use of agricultural resources. In such a situation, there is a need of farmers' institutions to represent their interests in the changing environment of agriculture. The agricultural community has become a shuttle cock in the hands of strong economic and political circles. The constantly increasing needs for agricultural products demands a change in agricultural policies which must favor and protect the farmers' interests but this would not happen automatically. The farmers have to unite themselves in organizations, associations or unions so that their needs could be effectively addressed and their interests are duly considered in the economic and political circles.

In Pakistan, agriculture has still pivotal position in improving the national economy and reducing rural poverty. Unfortunately, this sector confronts many problems mostly created by the market functionaries and lose control of the government for implementation of agricultural policies has also affected productivity of some important crops and disrupted the interests of farming community. The present farming situation requires drastic and rapid changes in the policies, plans and their implementation procedures. This is possible if Pakistan reviews its national priorities and organizes rural communities in effective manners.

In the past, failure of approaches applied for the development of agriculture sector in Pakistan is partly attributed to institutional barriers both at the macro and micro levels. At the macro level, the system is facing a centralized bureaucratic system and at the micro level, agriculture is confronting with problems like shortage of inputs, improved farm machinery, distribution of agricultural land among family members due to Islamic law of inheritance, a set of rural norms, traditions, social stratifications based on social regulatory patterns such as caste, 'biraderi', faction, sect, outdated agricultural practices, etc. The prevailing socio-cultural, ecological, political, technological and economic environment is hardly favorable for the development and promotion of agriculture. These factors to the extent of their relevance for the present study are dealt with in detail. The agricultural production can theoretically be increased by adopting following possibilities or a combination of these (Schrevel, 1989; Chaudhry, 1985).

4.3.4.1 Expansion in Agricultural Land

The total geographical area of Pakistan is 79.61 million hectares and out of this, share of cultivated land is 21.17 million hectares (PES, 2007-08). Still Pakistan has enough land to be made available for agriculture. Although the opening up of new fertile land is a long term and difficult process but even then it is necessary for Pakistan to opt for this possibility. The land which is not under irrigation can be developed as irrigated land. Moreover conversion of infertile land into fertile land is also important for Pakistan.

4.3.4.2 Increase in per acre Yield

The second possibility mentioned above shows some potential for its practice. Although the yields of several crops cultivated in Pakistan are lower than the countries having similar soil and climatic conditions and other agricultural resource bases. A major part of the cultivated area is sown with old varieties as new high yielding varieties are either unavailable or the farmers are skeptical whether or not to cultivate them. Moreover, the necessary inputs required for the high yielding varieties are not available at the right time or are too costly for the small landholders. The introduction of new varieties and crop management techniques has ample scope to improve per acre yield of major and minor crops in Pakistan.

4.3.4.3 Increase in Land use Intensity

The agriculture production can be raised by properly utilizing the available natural and human resources Chaudhry (1985). The existing level of land use intensity and natural resources are not enough to meet the future requirements of the country. The prevailing conditions are characterized by the non-availability or insufficient provision of high yielding seeds, chemical fertilizers, insecticides and pesticides. Moreover, their unequal provision to farmers belonging to different socio-economic strata and production regions is making the case more complicated. The agriculture related services provided by national agencies (agriculture, irrigation, banks, etc.) are substandard and of low performance. However, the intensification of land and water use can promise the greatest chance of success (Waheed, 1996).

4.3.4.4 Promotion of Agro-based Industries

Being an agricultural country, there is an enormous scope for the development of agribusiness and agro-industries in Pakistan. Presently, agriculture and agribusiness products account for 80 percent of the country's total export earnings. This sector also supplies raw materials to local industry (Akhtar, 2000). The agro-based sector has great potential of improving productivity by generating employment, particularly in the rural areas and creating a viable export base through development of forward and backward linkages with farm production system. However, this sector faced serious physical, policy and financial constraints which ultimately restricting and limiting the performance of agro-based industries. Therefore, provision of infrastructure, power, gas, water, communication and roads are necessary to achieve higher growth (GOP, 2005).

4.4 Conclusion

Pakistan is largely an agricultural country and major share of its population 67 % lived in rural areas. Their livelihood directly or indirectly depends on agriculture and its sub-sectors. Overall rural economy of Pakistan contributes 25% in GDP. It is also a main source of foreign exchange earnings. In the initial years of independence, agriculture sector was ignored but later on in 1960 importance of agriculture was realized by the policy makers. Resultantly, a positive shift in the rural economy as well as in the agro based industries was observed in Pakistan. During that period government of Pakistan has taken various measures to save the agriculture sector. Most importantly, the government of Pakistan has included agriculture sector in the first two five year plans (1960-65 & 1965-70). Due to continuous efforts of the government, productivity of both major and minor crops was grown at the rate of 4.7 percent and 4.8 percent respectively. Improved farm technologies, chemical fertilizers and high yielding varieties of seeds were the main factors that had benefited the farming communities.

Again attributed to ad-hoc planning approach followed in 1970-78, agricultural productivity decreased due to widespread and continuous drought situation in Pakistan. Keeping in view the problems of rural economy, government again emphasized on the development of agriculture sector and stressed on the promotion

of fruits, vegetables, livestock and fisheries and sub-sectors of agriculture. Moreover, government has also started development of underdeveloped and rain fed areas. Along with the development efforts it was also decided to maintain the prices of agricultural commodities and for this purpose, Agricultural Prices Commission was established at federal level. Subsequently, in the sixth five year plan (1983-88) government decided to provide inputs and tractors to improve the agricultural practices but these interventions have mainly benefited the large farmers. Keeping in view the issues of agriculture sector, government strategy was changed during seventh five year plan (1988-93). In this plan, farmers were given agricultural credit and improved inputs as major interventions.

Almost in all previous rural development programs, promotion of agriculture was given high priority and also use as strategic tool to improve socioeconomic conditions of the rural communities. Although some programs have partially achieved their targets but majority of them failed in producing desired results. The ineffectiveness of these programs has reasons like use of top-down approaches, bureaucratic attitude, financial and administrative problems, undesired project activities and political interference. These weaknesses of the programs had broadened the knowledge and skill gap in the country. Hence, as a result of this gap, agricultural productivity was stagnated at a certain level and farmers were unable to harvest maximum benefits from the farming sector. Having such circumstances, still there is a consensus among the stakeholders that rural as well as urban development has direct link with rural economy so government should focus on agriculture development. In relation to this, following areas for rural as well as agriculture development of the country seems important and needs immediate attention of the concerned departments:

- Expansion in agriculture land;
- Increase in per acre yield;
- Increase in land use intensity;
- Promotion of agro-based industry

5 RURAL DEVELOPMENT IN EXERCISE

Before explaining the results of this empirical study, it was necessary to describe that how the concept of rural development was taken and implemented in Pakistan. In the past, various national and international organizations have initiated rural development programs and each of them had viewed rural development according to their own objectives. Therefore, the concept of rural development has no specific definition in Pakistan. Whereas, most of the national and international organizations have conceived rural development as an improvements in rural electrification, water supply, basic health facilities, roads and training of farmers in managing their resources in an efficient manners²¹.

After having a thorough review of national and international descriptions of the rural development a brief and synthesized operational definition was devised to fulfill the academic requirements of the study. The following definition was devised and used for evaluation purposes:

"Rural Development is aimed at improvement in the living standards of the rural masses by enhancing their abilities for the efficient management of available resources".

Keeping in view the above definition, following areas were considered as important to explain the overtime changes and direction of these changes:

1. Rural Development Institutions
 - Education
 - Health
 - Civic Amenities (transportation, rural roads, electrification and water supply etc.)

²¹ Jasma et al, 1981 had described rural development in terms of overall improvement in the economic and social well-being of rural communities and in the physical and institutional environment in which they live. Similarly JICA (2008), SARDF (1997), World Bank (1975) and Frawley (2008) viewed rural development as a strategy aiming at the improvement of economic, social and physical living conditions.

- Transformation of social and political structure of the village
- Rural economy

Over the years, studied village has experienced various socio-political and socio-economic changes. The impact of these changes was multidimensional and significant. Basically, overtime developments have transformed the rural economy and traditional thinking patterns of the people. Now people have started using improved farming technologies and to some extent they were also enjoying the basic civic facilities in the village. Regarding these changes, local people appreciated the role of various stakeholders and viewed contribution of following institutions as important in the village development.

1. Local Bodies System

- Basic Democracies System
- Local Self Government System
- District Government System

2. Provincial and Federal Government Institutions

3. Non-Governmental Organizations

The efforts of rural development have taken place during both civilian and military governments. These governments have evolved various institutions to improve social, economic and physical conditions of the rural masses²². Overtime each of these institutions have played their role and worked as a change agent in the country. In some areas their contribution was highly appreciated but their overall performance was not up to the mark. In relation to their performance, views of local people on the contribution of participating institution and their effectiveness was analyzed and discussed in the following section.

²² Ensminger (1972), Groenveld (1978) and Lawania (1992) viewed rural development as a process of transformation from traditionally oriented rural culture towards an acceptance and reliance on science and technology.

5.1.1 Local Bodies System

Pakistan has a long history of military governments and their involvement in the political centers. Almost all military rulers have established local bodies systems and they have used these local institutions for political power, public legitimacy, development motives and finally to prolong their illegitimate governments. In fact, local bodies system was established during General Ayub Khan's era and ended after General Musharaf's regime. Before going in detail, it is necessary to highlight the structural and functional mechanisms of different versions of local bodies systems introduced in Pakistan.

The institution of local government is defined as a public organization authorized to decide and administer a limited range of public policies within a relatively small territory which is sub-division of a regional or national government (Sills, 1968). Normally, local governments have general jurisdictions and not confined to the performance of one specific function. Indirectly, these governments and all administrative or even legislative bodies are supposed to supplement the work of central government (Quddus, 1981). More specifically, the term local government is used to signify the government at the level of villages, towns, cities and districts.

During the last decades, Pakistan has experienced three local government systems. The main purpose of all these systems was to get public legitimacy, initiate development activities and provide civic facilities. A brief introduction of the previously implemented local government systems in Pakistan is given in the following section:

5.1.1.1 Brief Introduction of Basic Democracy System (1959)

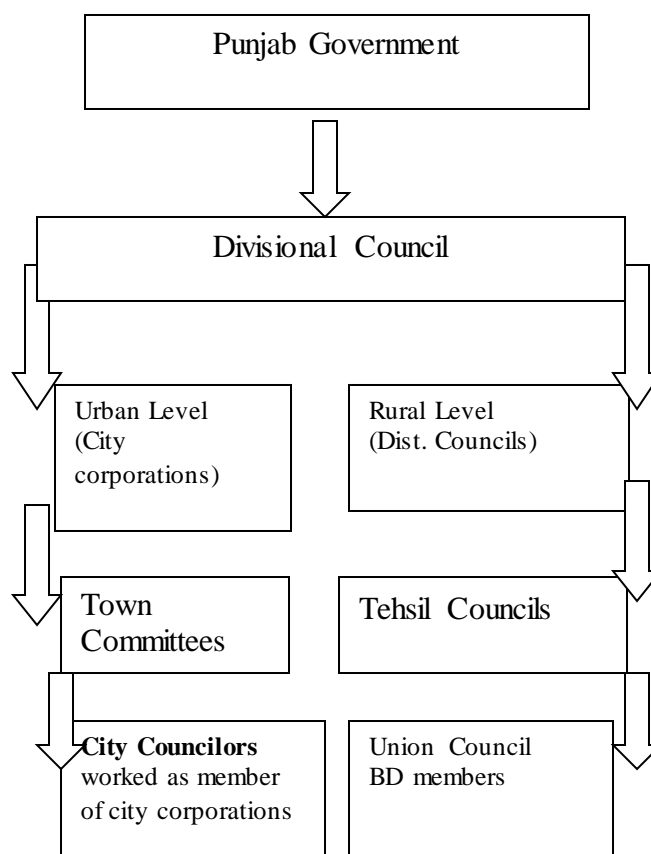
The Basic Democracy System started during General Muhammad Ayub Khan's regime in 1959. The basic intention behind this program was to intact the political forces with the military government. Therefore, this program was designed to involve local people in political activities and socioeconomic developments (Chaudry, 2002; Waseem, 1982). So in the basic democracy system rural masses provided an opportunity to join hands with the developmental efforts of the government departments (Mullah, 1997).

Under the basic democracies system four-tier hierarchical system was established in Pakistan such as Union Council (rural), Town Committee (urban), Tehsil Council, District Council and Divisional Council. The basic democracies system presented an institutional framework for involving the people in social, economic and political developments. The system bridged the gap between bureaucracy and village representatives by providing a working relationship for the exchange of information about problems and their solutions. This program has enhanced and encouraged the role of rural leadership at local as well as national level. This system had faced problem of ownership from the main political parties and also suffered due to rigid hierarchical structure that could not meaningfully involve the rural masses. Moreover, resistance against decentralization and serious corruption issues were also associated with this system (Waseem, 1982; Alvi, 1980; Malik, 1990). The functional model of basic democracies system is discussed in the following paragraphs:

Although the basic democracy system (BDS) could not produce desired results, even then it has brought some basic changes in the political structure of the country. In the pre Ayub era, political leadership mainly emerged from the urban centers and rural population was represented by the landlords, most of them lived in big cities and visit their native villages on need basis and their farming was mainly cared by their accountant's locally called *munshies*. They used the support of the rural masses without having their words for their political motives. Basically, rural masses were unaware of their potentialities to bring changes in the socio-political system. In such a situation, basic democracies system has opened new vistas of political recruitment from the rural areas. The political awareness at grassroots level nurtured local and national level leadership in Pakistan. According to Prof. L.F. Rushbrooke, in the Basic Democracies elections held during 1959-60, majority of the elected members were from the agriculturist's class²³. The hierarchy system of the basic democracies system introduced by General Muhammad Ayub Khan is explained in fig. 15.

²³ L.F. Rushbrooke Williams, "Basic Democracies as institute of Local Government in Pakistan-II" Journal of Local Administration Overseas (London) Vol. 1, No, 4, (October 1962)

Figure 15. Local Government model Implemented under Ayub Khan Regime



Source: Field Data

5.1.1.2 Brief introduction of Local Self Government (1979)

After dismissal of the civilian government of Mr. Zulfikar Ali Bhutto, General Muhammad Zia-ul-Haq was in need of legitimacy and public support. Therefore, again basic democracy system was used as a strategic tool by his government to become popular among the masses. For this purpose, General Zia's advisors have introduced a changed version of Basic Democracy System in Pakistan. The functional model introduced for basic democracy system during General Zia's regime was based on the following three tier systems:

- Union Council
- Markaz Council
- Zila (District) Council

Union Councils comprised of villages excluding their urban and cantonment areas. The members of the Union Councils were elected on the basis of population. The Union Councils also contained one seat for peasant's representative and one for the woman elected by the members of the Union Council under the Punjab Local Government Ordinance 1979²⁴.

The Markaz Council was not a recognized tier of local government because it was not covered by the Punjab Local Government Ordinance 1979. The Markaz Council was established by the administrative order of the government of the Punjab, while it was not a functional tier. The Markaz Council was responsible for coordination between Union and District Councils and to perform as a liaison agency between Union Council and the government departments. The Markaz Council comprised of 50 to 60 villages where all Chairmen of Union Councils and members of Zila Council were the members of Markaz Councils. The project managers were the government officials performing their duties as secretary of Markaz council besides their routine duties.

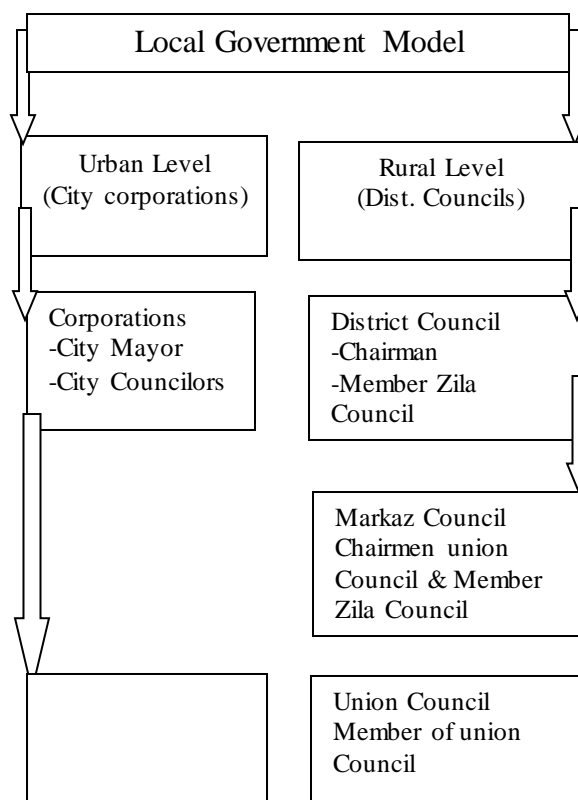
Zila/District Council was the part of a revenue district excluding its urban and cantonment areas. A constituency of Zila Council was based on 50,000 population with a marginal adjustments of 10,000 on either side. Zila Council had five peasant members, one woman and one seat was also reserved for workers (Rizvi, 1980).

Union Councils and District Councils were functional institutions while Markaz Council was functioning as coordinating unit. It was responsible to coordinate between Union Councils and District Council. Moreover, it was also responsible for liaison between various government departments and the Union Council. The

²⁴ Bokhari , A.S. (1980) "Institution of Local Self Government " A department necessity. Local Government and Rural Development Review 11(1): 9.

functional model implemented during General Muhammad Zia-ul-Haq's regime is presented in Figure.

Figure 16. . Local Government Model Implemented under General Zia's Regime



Source: Field Data

5.1.1.3 Brief introduction of District Government System (2001)

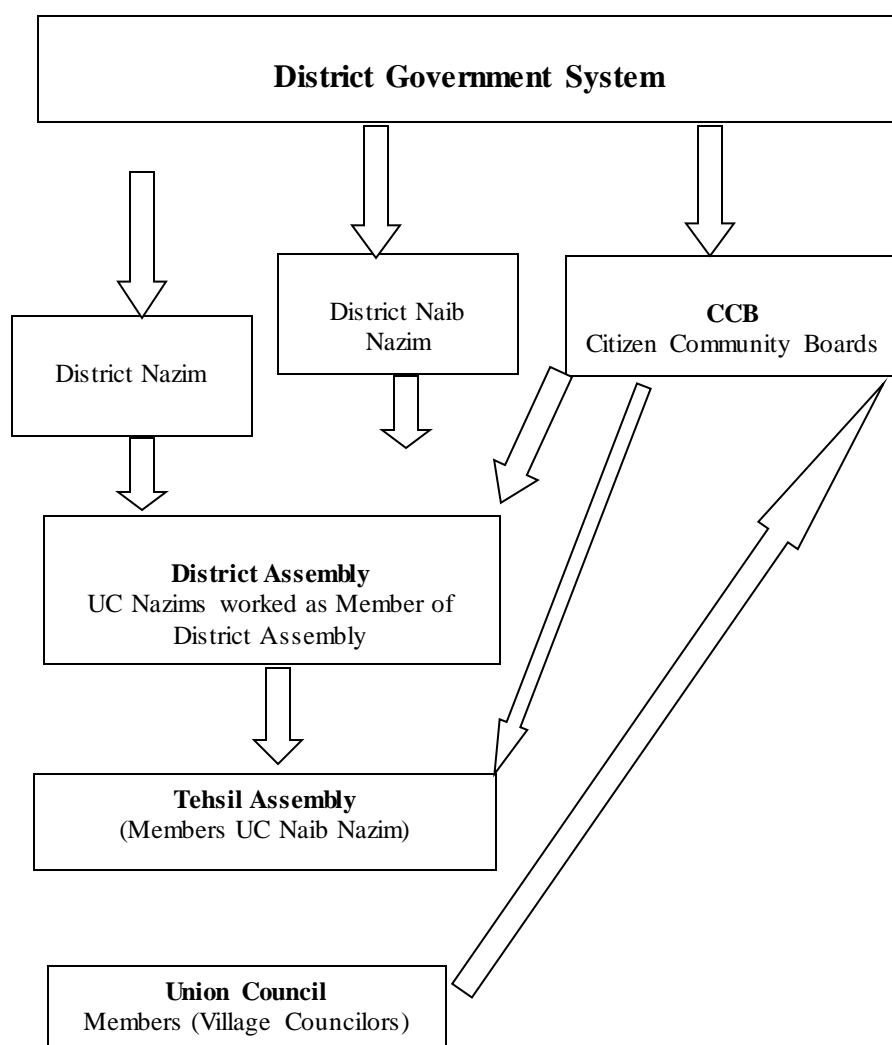
In 1999, once again a civilian government was toppled by a military general Pervaiz Musharaf. The constitution of Pakistan was suspended and the elected Prime Minister Mian Muhammad Nawaz Sharif was taken into custody by enforcing a military rule in the country. Like his predecessors, the military ruler constituted the "National Reconstruction Bureau (NRB)" to initiate new reforms in the government structure. The National Reconstruction Bureau prepared a devolution plan that was implemented through the "Local Government Ordinance, 2001". The objective of the devolution plan was to solve the problems of most of the people at the district

level (Govt., 2002). The new concept of governance supported broad based decentralized and homogeneous local organizations at the village level. Almost all the existing departments of public health, water, sanitation, agriculture and livestock departments were devolved to the local government. Citizen Community Board (CCB) was created to involve proactive people to contribute in the development activities at the local level (Govt. 2002). The CCB mechanism was used to streamline the development activities with the broad based participation of the people at the grassroot level. The new local government system introduced by another military regime was functional at three levels:

1. District Government
2. Tehsil/Town Councils
3. Union Councils

The local government at each administrative level consisted of an elected Nazim and Naib Nazim. Each of them had independent offices and responsibilities to perform under the local government system. The functional model introduced for operation of the system has been explained in Figure-17.

Figure 17. District Government Model Implemented Under General Musharaf's regime



5.1.1.4 Interventions Introduced Through the Local Bodies System

Basically the District Government System was introduced to involve the local communities at the stage of project planning, identification and implementation with focus on resolving local developmental issues at the local level. For this, budgetary allocations were made for development purposes²⁵. The elected members

²⁵ Asian Development Bank (1973) has emphasized the active participation of local people to make the development projects successful.

have to prepare development schemes in consultation with people to pass on to the concerned quarters for approval and allocation of funds to carry out the public interest projects. As basic idea behind the introduction of district government system was to create a political stronghold for the military regime. Therefore, they have initiated and completed various development projects and earned good name for the military government. Similarly, elected members of village *Chinji* had also contributed and completed various development projects and benefited the local community. Mainly they focused on the development of basic facilities such as:

1. Farm to market roads
2. Village infrastructure
3. Drinking water
4. Electricity
5. Health
6. Education

5.1.1.5 Farmers' Response Regarding Local Bodies System

It is important to mention that strategies and approaches of almost all of the local government systems were same and overlapping. Under such situation, it is difficult for general public to differentiate and compare the performances of local bodies systems. Therefore, to minimize these ambiguities researcher has included following parameters to understand that how local people perceived different dimensions of local government systems by various regimes. The intensive discussions sessions were organized and local people views regarding the performance of local bodies system were collected through case studies, group discussions and structured interviews. Initially, farmers have showed shyness and hesitation to participate and share their point of view. Hence to remove their shyness, respondents were taken into confidence by assuring that these discussions were purely for academic purpose not for any other use. The parameters used to evaluate the local bodies systems are as under;

- Concept of Local Government System
- Local leadership identification and promotion process
- Selection process of development schemes

- Quality of work
- Benefits to the local community

Overall, both farming and non-farming respondents have shown positive responses regarding the local bodies systems. Their positive response was quite understandable because traditionally they were hostage of different political parties. They depended on members of national and provincial assemblies even for small scale schemes like pavement of streets, drinking water and sanitation, etc. The MNAs and MPAs belonging to different parties had their own development priorities and they safeguarded their political interests. Usually, the villages having fewer votes bank in their favor got less attention, therefore, deprived of from the development work. In relation to this, village *Chinji* was lucky because of higher number of voter's population. Being a larger village of the area, people have more political awareness and able to gain due political support in their favor for various development activities.

The people insight and understanding about the concept of three local government systems was examined by asking simple questions. The answer given by the farmers were ranked in three categories: (i) excellent (ii) satisfactory and (iii) unsatisfactory. The analysis of collected data reveals that majority of respondents 75.74% have considered local bodies system as an excellent system for village development, 16.91% regarded it as satisfactory and only 7.35% respondents thought it as ineffective and un-satisfactory systems. In other words, about 92% respondents have shown some degree of satisfaction and agreed to the concept and philosophy of the local government systems.

Though the strength of unsatisfactory responses was insignificant but the researcher had made efforts to explore the reasons of their dissatisfaction. Actually these reasons are necessary to explore the weaknesses of these systems. So, explaining the reasons of their dissatisfaction, they were of the view that the existing political system only benefited rich and upper middle classes of the village. Adding further, they told that participation of poor people in the election process is still not possible and they cannot openly support their favorite candidates. Highlighting the problem of poor classes a member of the village said, "Traditionally cast and *biraderi* system

was very strong in the village. The poor people like us have no chance to effectively participate and play any role in village politics. Generally, political parties prefer contacting the dominant *biraderies* of the village. Actually, through local bodies' election main political parties tried to strengthen their vote bank at the grass root level by selecting influential and powerful candidates. Unfolding the conventional practices, he told that at the time of election candidates of major political parties contacted the *biraderi* heads and large *zamindar* families (landlords) for seeking their support in the election. So, these influential families used their social influences to convince their *biraderi* members, poor households and non-farming families have to vote in favor of their supported candidates. Sometimes they openly forced poor households and *biraderi* members to obey their decisions. Hence, due to their dependency on these influential families poor households respect their decision and they have no choice except voting in favor of their nominated candidates rather than practicing their own choice. In case of disobedience or violation of their decisions they tried to punish the respective families --- the risk they usually did not want to take. This fear actually forced us to obey the traditional pattern of political system. Similarly members of main political parties look after the political interest of village leader and support them in the local bodies' elections. So in this situation, it is very difficult for the poor families to contest the elections. Further comparing the past and present situations, he was of the view that now situation was relatively conducive due to openness of media, education and socioeconomic conditions of the general public".

In reply to the question that "does the existing election process facilitates and promote genuine leadership in the village", 48.53 percent respondents showed their dissatisfaction over the election process. On exploring the reasons, it was found that the role of main political parties in the local bodies' election was not positive, not promoting local leadership; it rather restricted the emergence of new democratic leaders. Actually main parties favored rich families of the village and supported them in the local bodies' elections. In relation to this, the respondents belonging to lower middle and poor classes were of the view that their financial status and class systems do not allow to participate in the election process.

A person named Mr. Khushi Muhammad belonging to the lower middle class farming family said: "I am a graduate from Punjab University Lahore. During my university times, I have taken part in the student politics and got sufficient political exposure. When I completed my education, I decided to go back to village for some time. After some time my parents advised me to start any small business in the village. So, on their advice I started my own business here. While at the same time I have also started social work in the village. Being a social worker, I helped many families in resolving their issues and they openly admitted my role and efforts in the public gatherings. My continuous efforts have made me able to get local people confidence and trust. Later on for the betterment of the village I decided to take part in the local bodies election held during general Zia-ul-Haq regime. I discussed my intentions with my friends and well wishers in the village. But my friends have advised me not to contest local bodies election, just because of my low social status in the village. This attitude seriously shocked me because even those persons who appreciated my services were not willing to support my candidature ship. In fact, they wanted to support their *biraderi* members irrespective of their education, exposure and recognition of my abilities to perform development work. After explaining his bitter story, he said, I am optimistic and hopeful that one day the socio-political system would change and persons like me will be able to participate in the democratic process".

Having so many problems in the election process, a considerable number of farmers 33.82% and 17.65 % have ranked local bodies system as satisfactory and excellent. Their positivism about the local bodies system was very logical and understandable. They viewed this system important for the local level development and emergence of democratic leadership. The supporter of this argument belonged to major castes and *biraderies* of the village. The caste/*biraderi* based analysis of the information is clearly indicating a strong class conflict in the village. The traditional leaders of society want to continue their hegemony and strong role in the society. But contrary to them common people want change in the socio-political system. Mostly they demonstrate their power by establishing pressure groups to fulfill their demands.

The community responses regarding participation in the election process and execution of development schemes was collected and analyzed. The empirical

findings indicated that 49.26 percent respondents were not satisfied over the selection processes of development schemes. They explained that the local leaders and influential people had their own priorities and they act accordingly. Generally, they preferred to include their allies in the development process by ignoring others that was an act of misconduct according to the charter of the local government who provide the mechanism of masses participation in the development activities. Suggesting for the improvement of local participation and making their participation more meaningful they said that it should be according to the provisions of local government charter. As a response to the question of quality of development work, 15.44 and 44.85 percent respondents appreciated the quality of work by ranking as excellent and satisfactory, respectively. While a noticeable share of respondents 39.71% have shown their dissatisfaction and considered quality of work as unsatisfactory. The farmers having unsatisfactory responses have shown their concerns and blamed local government officials and contractors who compromised on the quality of work just for the sake of their illegal motives and bribery. They also highlighted imperfect participation of the local people in the planning and implementation stages as factors of low quality work.

Finally, the farmers were asked about the system of local government in relation to this results indicated that 80.15 and 15.44 viewed this system as excellent and satisfactory. It shows that overall more than 95% farmers were in favor of this local government system. Even facing some procedural problems they wanted to continue local government system for local area development. Although few farmers 4.41% had shown their dissatisfaction over the system but they were also hopeful for the evolution of a changed local government system. The detailed analysis of farmer's views is presented in Table-17.

Table 17. Farmers ranking of their satisfaction from the Local Govt. System

Sr. no	Evaluation Parameters	Sample	Farmers Responses (%)		
			Excellent	Satisfactory	Unsatisfactory
1	What is your opinion about the concept of Local Govt. System (LGS)	136	75.74 (103)	16.91 (23)	7.35 (10)
2	How you perceived Election Process of LGS	136	17.65 (24)	33.82 (46)	48.53 (66)
3	How you rate process of selecting development schemes under LGS	136	23.53 (32)	27.21 (37)	49.26 (67)
4	How you perceived Quality of work done under LGS	136	15.44 (21)	44.85 (61)	39.71 (54)
5	Farmers satisfaction with Local Govt. system and want to continue or not	136	80.15 (109)	15.44 (21)	4.41 (06)

Source: Field Data

5.1.2 Role of Government Departments in the Village Development

In public sector development, role and importance of government institutions is well recognized and documented. In relation to this, author has also explored and documented role and performance of government institutions in the development of village *Chinji*. In view of the respondents, various government organizations and institutions have contributed over the years²⁶. While, prioritize and intentions of

²⁶ Murdock (1961) argued that any event which produces change is a historical event and it occurs at a certain time and place.

these institutions were not common, they worked and planned activities according to the mandate of their organizations/institutions. The role of following government institutions/organizations have been highlighted as important by the respondents.

- ABAD (Agency for Barani Area Development);
- Agriculture Research and Extension Department;
- Education Department;
- Health Department;
- WAPDA (Water and Power Development Authority);
- PPAF (Pakistan Poverty Alleviation Fund).

Among the above listed government departments, Agency for Barani Area Development (ABAD) was especially evolved for the development of barani tract of the Punjab. This rainfed tract is spread over 13 districts and district Chakwal was one of them²⁷ where this research study was undertaken by the researcher in one of its village *Chinji*. Mainly ABAD was working on the issues of land management, development of water resources and human resource development. Since its inception this agency worked in close collaboration with provincial and federal departments and non-governmental organizations. While over the years, the government institutions like agriculture, livestock, education, health, PPAF and WAPDA had implemented various development schemes in the village. Mainly these institutions/organizations have introduced following programs:

(A) Social Sector Development initiatives:

- Basic health unit;
- Local road network;
- Establishment and up-gradation of boys and girls schools;
- Provision of telephone facility

²⁷ Malinowski (1939) pointed out that the importance of institutions. He was of the view that institutions are established to satisfy the basic human needs.

Figure 18. ABAD Developmental Activities



Source: Photo by Researcher

(B) Development initiatives for uplift of village economy

- Water channels;
- Crop diversification and improved practices;
- Improved animal breeds;
- Poultry development schemes

5.1.2.1 Local perception regarding government agencies

Since 1980, various government institutions were established to facilitate the rural masses. The performance of these institutions always remained under criticism. The question how these organizations have performed in the studied village was inquired to verify the stigma associated with the government institutions. The farmers' perception regarding the effectiveness of government institutions was collected and analyzed. In addition, to analyze the farmers' satisfaction level a list of most common institutions was prepared by involving the local people. The respondent's satisfaction level was analyzed on the basis of six important parameters that have direct relevance with the objectives of this study.

The first evaluation parameter was service delivery mechanism of the government institutions. Explaining their views majority of the farmers 63% has showed their

dissatisfaction from the service delivery mechanism of the government institutions. The sample farmers were further probed to know the reasons of their dissatisfaction. In this context, most of them had pointed out long distances of government offices from the studied village. By further justifying their view point, they have narrated examples of livestock and agricultural offices which were far away from their village. According to them it was difficult to bring sick animals to the veterinary hospitals or the dispensary due to non-availability of transport and long distances. Similarly, government appointed agricultural officers was also faced transport problems, therefore, it was not possible for them to visit and provide advisory services to the farming communities on regular basis. The question about the quality of services was also asked from the sample farmers. Again 58% respondents have showed their reservations about the quality of services. They preferred to use private healthcare services for human as well as animal treatments.

The views of the respondents about the selection of village development schemes were also analyzed. In general, findings of this analysis have shown a split response of the farmers. Around 47.06% respondents showed their dissatisfaction from the selection process of development schemes. When they were asked about the reasons of their dissatisfaction they reported undue involvement of political leaders and large landholders as major reasons of their dissatisfaction. Whereas, a considerable number of farmers (38.97%) also appreciated the project selection criterion used by the government institutions. In Pakistan, generally government sponsored projects are criticized due to their poor performance. The fourth evaluation parameter was the quality of work completed by the government institutions. The farmers' perceptions on these criteria were collected and quality of work undertaken in the village was discussed with the sample farmers. About, 52.21 percent farmers had validated the general perceptions of the people and questioned the quality of work. Responding further to this question they highlighted negative role of the officials of concerned departments and bad intentions of the contractors.

Every society has some basic needs and government institutions are responsible to provide these facilities to every member at nearest point or at door step. Similarly, over the years various government institutions were established and they were providing services to local communities of the area. During the field survey, role of

government institutions in satisfying the basic needs of the rural masses was explored. Explaining their view point, majority of the farmers indicated positive response regarding the provision of health and educational facilities. The basic facilities like health center and schools were available in the village. The people of surrounding villages also availed these facilities. The users of health and education facilities belonged to all income groups and genders. While contrary to health and education facilities, people had shown serious reservations about the provision of food and shelter. Moreover, a 51 years old respondent belonging to poor class told that how educational facility had improved social status of his family. He said, my family consists of 7 members and he holds only 27 kanals of agricultural land which is insufficient to meet my family requirements. In this situation I decided to work in the nearest town to increase my household income. The off-farm income has enabled me to educate my children. Fortunately, in our village Government of Punjab established a primary school and after 10 years which was upgraded as high school. This educational facility provided me an opportunity to enroll my children in the school. Luckily my all children are intelligent and they have passed all school examinations in good grades. After completing higher secondary school examination my elder son got commission in Pakistan Army. After getting commission in the army, my other children got chance to avail armed forces educational and health facilities. Due to his job our financial position relatively improved and then I decided to provide good educational facilities to my rest children. Resultantly, my all children successfully completed their education in good grades. After completing education my all children were offered good jobs in Islamabad. Adding further he told that presently my family is happily residing in the village, also enjoying respect and higher social status in the society. At the end, he appreciated the Government of Punjab for providing educational facilities in the village”.

Table 18. Farmers' ranking about the satisfaction level by the Govt. institutions

Sr. no	Evaluation Parameters	Total Sample	Farmers Responses (%)		
			Excellent	Satisfactory	Unsatisfactory
1	Satisfaction from Services delivery mechanism	136	8.09 (11)	28.68 (39)	63.24 (86)
2	Satisfaction from quality of Services provided by Govt. Institutions	136	6.62 (09)	35.29 (48)	58.09 (79)
3	Satisfaction from Selection process of development schemes	136	13.97 (19)	38.97 (53)	47.06 (64)
4	Satisfaction from Quality of work	136	19.12 (26)	28.68 (39)	52.21 (71)
5	Effectiveness of Govt. institutions in economic Development	136	22.79 (31)	46.32 (63)	30.88 (42)
6	Govt. Institutions role in provision of basic needs (education, health, shelter, food)	136	10.29 (14)	65.44 (89)	24.26 (33)

Source: Field Data

5.1.3 Role of Non-Governmental Institutions in the Village Development

In the recent past, role of Non-Governmental Organizations (NGOs) and *Anjamaan-Imdad-Bahmi* (local self help organization) has significantly increased in Pakistan. The main reason behind this phenomenon was support of national and international donor agencies. Among these NGOs, few of them have proper infrastructure and really contributing in improving the socioeconomic conditions of the country. Similarly, in the studied village National Rural Support Program and some local

self-help organizations were actively working for development of the village. The main objectives of these NGO's were to enable the rural communities to plan, implement and manage developmental activities and program by themselves²⁸. Overall, role of these non-governmental organizations in improving the village infrastructure and agriculture was excellent and visible in picture-19.

Figure 19. NRSP's developmental work in Chinji



Source: Photo by Researcher

Social mobilization was used as a strategic tool to bring the people together on new terms for a common purpose. The National Rural Support Program (NRSP) has its infrastructure and working in the village since 1990. The NRSP has established male and female community organizations (COs) in the village. Since its establishment, NRSP is continuously providing financial and technological support to their community organizations. The services of these male and female organizations are used to implement the development projects in the village.

²⁸ Clammer (1987) pointed out that prosper and easy life is an objective of successful society, the socioeconomic development directed to same goal.

Figure 20. NRSP & ABAD Joint projects in Chinji



Source: Photo by Researcher

In studied village, NRSP was also collaborating with the Agency for Barni Area Development (ABAD) and Pakistan Poverty Alleviation Fund (PPAF) for the implementation of their development projects. Since the last decade, NRSP has implemented various development projects in a participatory manner and most of these projects were planned and implemented by the local communities²⁹. In view of the farmers, use of participatory approach had also resolved the sustainability related issue³⁰ of respective CO's. Similarly, International Center for Arid and Dry land Agriculture (ICARDA) had implemented a women development project in collaboration with NRSP. Being a largest organization, NRSP was also acting as a launching pad for other development organizations. NRSP provides his community network for the initiation of agriculture and rural development activities. Since his establishment in the area, NRSP has contributed in the following areas:

(a) Social sector development initiatives

- Social mobilization;
- Drinking water schemes;

²⁹ Silitoe P. (2000) and Gurang (1998) pointed out that development agencies are accepting and promoting consultation and close link with the targeted beneficiaries.

³⁰ William & Millington (2004), Reader (2006), sustainable development mean development that meets the need of the present without compromising the future needs and intend the anthropocentric (human-centered) approach to view development

- Sanitation facilities;
 - Provision of micro-credit
- (b) Initiative for the improvement of rural economy
- Improved varieties and crop management techniques;
 - Dug- wells;
 - Water channels;
 - Livestock management;
 - Trainings on improved professional skill

Almost all these projects have contributed in the village development but their level of contribution was not same. Among these projects, contribution of some projects has been lauded by the respondents and other projects were found ineffective in terms of their performance. The views of respondents about the contribution and performance of non-governmental organizations were collected and discussed in the subsequent section.

5.1.3.1 Local Perception about Non-governmental Organizations

The role of Non-Governmental Organizations in the overall development of the village *Chinji* was comparatively less than the other development organizations. This statement was true because of the limitations of NGO's. These organizations only worked with their registered members; therefore, the scale of their activities was limited in the village. Moreover, these organizations have their own working style and procedures for the selection and implementation of development schemes. The farmers views regarding the performance and effectiveness of non-government organizations were collected and analyzed. The results are given in Table-18.

The community showed mix feelings about the performance of non-governmental organizations. The variation in their views was quite understandable because NGOs have very limited scope and operate with small budgetary schemes. Therefore, the impact of the schemes remained limited. But as compared to the NGOs, the government institutions have more budget and responsible to serve each member of the society. Regarding the performance of NGOs, a respondent belonging to a poor household said “ I am a married man having 7 children. My agricultural land is uncultivable and to fulfill my family needs, I have rented in 21 kanal of land for

cultivation purposes. The rented land was insufficient to feed my family. Due to this situation I was worried that how I could survive with my family. I started to think about any other business but it required money. In our area loans are mainly provided through commercial banks which requires some valid guaranties and I was unable to avail this facility also. Luckily at that time, an NGO was working in our village and my friend advised me to go and get their membership. I joined their CO and from that forum I applied for credit and got loan of rupees 150,000 and I opened a small general store. Subsequently, I also rented some agricultural land and started working on both rented land and the general store. Extending his comments he told that due to credit facility of non-governmental organizations we succeeded to improve our income level. Presently we are happy and living in a relatively better condition”.

The results reflected that majority of the sample farmers 55.88% and 37.5% have appreciated operational procedures of the non-governmental organizations and viewed their procedure as satisfactory and excellent. In their views NGOs’ procedures are relatively easy, informal and also free of official formalities. The information related to the working of local level community organizations reflected that a large majority of the respondents 75.74% have shown their satisfaction while about 11% ranked their working as excellent. Only few of them 13.24 percent respondent have shown their dissatisfaction from working of village level CO’s Table-19. The reasons of their dissatisfaction was also explored and found that they perceived these NGO’s as a vested interest groups which worked only for their own interests.

The information related to the selection process of development schemes and quality of work completed by these non-governmental organizations was collected and analyzed. Majority of the farmers 81.62% appreciated the selection process of development schemes and ranked this process as excellent. Similarly 72.06 and 19.89 percent sample respondents considered quality of work as satisfactory and excellent. Basically, their perceptions regarding the selection process and quality of work was understandable because the NGO’s working in the village were using participatory approach and in the participatory approach CO members themselves selected and monitor the development schemes.

Whereas, the communities having working experience with NGO's have shown positive response regarding the role of non-governmental organizations. The findings of this study also verifying general perceptions of people. The results indicated that among the sample farmers 86% ranked contribution of NGO's as satisfactory and 9.56 % viewed it as excellent. Although these organizations worked since long in the village but even then share of non-governmental organizations in overall development of the village was low. It was mainly because of their limitation that they can only work with the CO members not to other members of the village. The involvement of local communities in the development activities had improved quality of work. The NRSP was performing the role of a catalyst and was getting benefits in terms of good repute and financial inputs.

Table 19. Farmers perceptions about the working of non-Govt. organizations

Sr. no	Evaluation Parameters	Total Sample	Farmers Responses (%)		
			Excellent	Satisfactory	Unsatisfactory
1	How you rate the procedures of non-Govt. org. working in your village	136	37.5 (51)	55.88 (76)	6.62 (9)
2	How you rate working of village based CO's & self help organizations	136	11.03 (15)	75.74 (103)	13.24 (18)
3	How you rate the selection process of development schemes	136	81.62 (111)	18.38 (25)	0.00 (0)
4	Satisfaction from the Quality of work	136	19.85 (27)	72.06 (98)	8.09 (11)
5	Satisfaction from the NGO's role in the village development	136	9.56 (13)	86.03 (117)	4.41 (6)

Source: Field Data

5.2 Overtime Change in the Civic Facilities

Various socioeconomic factors determine the quality of life. Mainly it includes access to basic and civic facilities like electricity, health education, *pacca* houses (cemented house), potable water, sanitation and transportation etc. While, in evaluating the development studies these parameters are important to highlight the socioeconomic changes emerged in a society. As focus of this study is to see overtime changes in a specific place, therefore, researcher has included these parameters in the study. The subsequent section of this study was allocated to discuss historical developments of civic facilities.

5.2.1 Rural Roads

Rural roads enable people to have access to social and economic services. It helps in improving the farming and non-farm activities. Also the connectivity of rural and farm to market roads with the urban centers made the rural life easy and comfortable. In relation to this studied village was lucky because it has a well-connected road network that facilitates its people to utilize urban based facilities. In view of the farmers, this road network has facilitated them a lot and helped local people in improving the socio-economic conditions, quality of life and social mobility.

Explaining the story of rural road network a respondent said, “ Our village is located on Talagang-Sargodha road. So from the very beginning we have no problem to visit main towns of Talagang and Khushab. But it was very difficult to move toward the interior areas. Commonly we used to travel by donkeys, horses and on foot. Explaining the overtime developments in the rural road network he stated that in early eighties, the Government of Punjab started work on the development of rural roads and that Government scheme had benefited our village and a road on which you came here was constructed. Due to this road people were very happy and they started using motor vehicles. However, after about 3 to 3.5 years, this road was badly damaged due to heavy rains and became dangerous to travel. The uneven topography has made it more unsafe and so many time vehicles and donkey carts fell down in the surrounding fields. However, on the pressure of people this road was again constructed in 1995 by the Government. Adding further, he told that due

to this road local level motor transport system started in the area. Stating the benefits, he referred social mobility and easy to commodity markets as an important advantages of local road network. Finally, he was of the view that for the purpose of rural development intervention of road network is extremely important to improve the rural economy and socioeconomic conditions of the rural communities”.

Figure 21. Modern transportation at *Chinji*



Source: Photo by Researcher

5.2.2 Electricity

In the village *Chinji*, process of electrification was started even before 1980. Initially this facility was given to some influential families but later on extended to 90% percent households in the village. Moreover, electricity was also provided to the farms for agricultural purposes. In view of the respondents, provision of electricity had great impact on the social, economic and even cultural aspects of the village life. The analysis of empirical data indicated that presently 65% households have electric appliances like televisions, refrigerators, ceiling fans, air conditioners, washing machines, kitchen tools etc. Among electronic times, the use of TV was most common among all classes of the village. The use of domestic appliances (refrigerators, washing machines, grinders etc.) was also increased rapidly. The introduction of electronic media had raised awareness and inspired youth to their life styles. There was a general consensus among the farmers that provision of

electricity has made their life easy and comfortable. It has benefited both male and female population. It saved their time and energies. Explaining the impact of electrification, a village respondent named Mr. Mohammad Khan said, "I have 11 small and large animals and 160 kanals of agricultural land. Out of his 160 kanal of land I cultivate only 16 kanals to meet the food and fodder requirements of my family. On an average, I spend 4 to 5 hours daily to manage the livestock activities. The fodder cutting and chopping activities take my maximum time and energy. Describing the benefits of electricity, he told that due to availability of electricity in the village I started use of motorized fodder chopper which saved my time and energy. Now I used my maximum time for the management of other farm related activities".

5.2.3 Telephone

Weak research extension linkage and poor information system have been identified as the most important source of growth in farm productivity (Kumar and Rosegrant, 1994; Evenson et al., 1999). The access to information can possibly enable to improve income and farm productivity (Mithal and Kumar, 2000). Moreover, information based decision making in agriculture is described as the next great evolution in agriculture. Unfortunately, these parameters of growth are weak in Pakistan. The present telecommunication facility has potential to provide solution to the existing information asymmetry in various lagging sectors like agriculture, marketing and trade.

In view of the importance of improved information sources the availability of telephone facility was explored in the village. It was found that majority of sample farmers (89%) were presently using both landline and cell phone facilities, which were available in the village. Explaining further, it came out that up to 1980, there was no mobile phone facility in the village. Only 3-4 influential families were availing the telephone facility in the village, while rest of the community was either dependent on them or was utilizing the postal services for communication purposes. During 1990, the use of cell phone started in the village and it was gradually spread to lower income classes. Presently, more than 70 percent household have personal telephones and cellular phones in the village. This was a major change and this

change had saved their time, money and increased their access to different information sources.

5.2.4 Water Supply

People use water every day to meet their domestic, agricultural and recreational needs. Hence, accesses to public water sources that are safe and reliable are crucial for the health and prosperity of a society. Being an important indicator of development, the overtime improvement in water supply situation was discussed with the participants and synthesized. The analysis of empirical data clearly indicated significant improvement in the provision of safe drinking water in the studied village. Presently clean drinking water facility was available to more than 90% households in the village. While in 1980 safe drinking water was available to only 25% families. The overtime development in water supply was mainly arranged by the institutions of local government and national rural support program (NRSP). Indicating the traditional water sources they pointed out that wells and ponds as major sources of drinking water. The water from these sources was contaminated and unhygienic. The permanent use of this contaminated water caused severe health problems in the village. Therefore, realizing the importance of safe drinking water, local councils and non-government organizations had supported water supply schemes on top priority basis. The availability of water at household level benefited the whole community in general and women in particular because traditionally water collection activity was mainly performed by female members and for that they spent 2 to 3 hours daily.

Figure 22. NGO supported water supply scheme



Source: Photo by Researcher

Table 20. Overtime comparison of civic facilities

Types of Civic Facilities	1980	2010
(Average %)		
Households availed Electricity	25	90
Telephone (Average %)		
Households availed Telephone facility	2	70
PTCL Landline	2	30
Cell Phone	0	70
Water Supply (Average %)		
Availability of water supply	0	85

Source: Field Data

As a whole, there was a general consensus among the people that during the last thirty years, lot of developments had taken place in the village. The researcher had personally observed presence and use of these facilities. Moreover, impact of these facilities on the socioeconomic development of the people was very significant and visible³¹.

5.3 Rural Development and Trends of Education

Education plays an important role when it comes to defining a society. One of the basic traits of a society that defines other institutions like justice, food and other basic necessities are now dependent on education. An educated society looks for using available resources in a sustainable manner and without compromising over the rights of using the same resources by future generations. The way people are

³¹ The importance of non-systematic factors in development was highlighted and well documented by many social scientists like Hibbs and Olson (2004); Weber, in Collins (1986); Marx, in Giddens (1971); Chirot (2000); Castells (1996); and Bendix (1984). Overall, their explanations reveal that development path does not necessarily follow a single pattern.

using their resources, sustainability is the only choice for a society to stand long and prosperous.

Education is also considered as an important element for bringing attitudinal changes in a society. Actually education affects thoughts and actions of the people. The regulation of behavior is an integral part of schooling which facilitates the phenomenon of social control and also regulates the new changes. Moreover, school and colleges inculcate new values among boys and girls, widen their viewpoint and prepare them for different jobs. So, keeping in view the importance of education in societal development, over time improvements in educational facilities were explored and analyzed. In view of the respondents, village *Chinji* has made tremendous progress in the field of education in the past two decades. At present, this village has good educational infrastructure for both girls and boys. The local peoples' attitude towards education has considerably changed. Now majority of the villagers encourage their children's for education. Actually provision of educational facilities at local level, past examples of how village poor came out of poverty using education as development instrument and the need of education in seeking jobs in non-farm sectors outside village had convinced the local community about the role of education in diversifying household earnings in addition to agricultural income³²

Figure 23. Educational facilities in *Chinji*



Source: Photo by Researcher

³² Poles Alejandro 1973. Factoral Structure of Modernity: Empirical Replications and Critique. *American Journal of Sociology*. Vol. 79. No. 1. Chicago: University of Chicago Press. pp. 15-44,

The local level educational facilities were reasonably good and available to all segments of society (poor, middle class and rich). There was no gender discrimination in education; both male and female populations have equal educational opportunities in the village. Comparing the past and present situation of education, most of the respondents were of the view that in the past female education was considered as unimportant and people were reluctant to educate their daughters. Now all families irrespective to their income group, caste and creed, they prefer to educate their girls. The existing trend of education has positive signs for the transformation of society from traditional to modern one³³. Over the years, students' enrollment has significantly increased as reflected in Table-21. It is evident from the data that in village *Chinji* male and female literacy ratio was 59.97 and 40.77%, respectively --- which is very encouraging in a traditional rural society.

Table 21. Literacy ratio by gender in the selected district and village

Area	Both Sexes	Male	Female
All Areas	56.7	73.4	42.2
Urban	70.7	79.3	61.8
Rural	54.8	72.5	39.6
Selected village	36.21	59.97	40.77

Source; Field Data

In the present study sample size was taken from both literate and illiterate population of the village and then analyzed their views. In our sample, only 14.7% respondent farmers were illiterate. The proportion of farmers having education up to primary and middle level of schooling was 37.5 and 25.74 percent. They

³³ Shipman (1971) proved that education can provide the discipline needed in adopting the new ways of life. In advanced technological society when rapid changes are organized through investment in innovation, education prepares people to tolerate and accept change.

collectively constitute more than half of the total sample size. The numerical strength of these two groups in total sample was relatively higher due to involvement of elder members in the study. The participation of farmers having education up to matriculation level and above was 15.44% and 6.62% as shown in the Table-22. The distribution of sample farmers by their education status also reflects researcher's intentions to involve and incorporate view point of all segment of the society.

Table 22. Sample farmers distribution according to their educational status

Sr. No	Education Level	Respondents	Percentage
1	Illiterate	20	14.7
2	Up to Primary	51	37.5
3	Up to Middle	35	25.74
4	Up to Matric	21	15.44
5	Above Matric	09	6.62
6	Total	136	100.00

Source: Field Data

Education is one of the basic necessities of the modern societies. Today education is considered as power to rule as no nation can grow better and prosperous without educated manpower. Moreover, role of education in socioeconomic development of the society is now an established fact. Therefore, considering education as an important indicator of development this parameter was included in the study. In relation to this, overtime development in the field of education was explored during the survey. Overall, majority of the respondents (73.67%) were of the view that over the year's education level of the village has tremendously improved. However, a notable population of the respondents 26.33% reflected no change in the educational status of the village Table-23. During staying in the village, researcher had also personally observed the positive impacts of education on their daily life in terms of changes in their life style, income, housing and off-farm activities.

Table 23. Sample farmers perceptions about change in education trend

Sr. No.	Trend of Education	% respondents
1	Increased	73.67
2	Decreased	0.00
3	No change	26.33
4	Total	100.00

Source: Field Data

In evaluating the educational status of the village information related to the enrollment of students between two points of time was collected and analyzed. The detailed analysis of overtime changes in the level of education is presented in Table-24. It shows that in 1980 only 30% of children population was enrolled in the school but after the continuous efforts of the government and non-governmental organizations, this enrollment ratio has gone up to 80%. The estimated overtime change was about 166.67%, which was quite encouraging in terms of development. Similarly, the rate of enrollment at primary, secondary, higher secondary, graduate and post graduate level was also increased in the village.

Table 24. Overtime change in educational status of the village

Status of education	1980	2010	% Change
	Percentage		
Enrollment status	30	80	166.67
Primary	25	70	180.00
Secondary	20	60	200.00
Higher Secondary	15	50	233.00
Graduate	8	30	275.00
Post Graduate	4	20	400.00

Source: Field Data

The overtime gender specific data on education reflected that out of 136 respondents, 93 were in favor of education but only for the male members of their families and remaining 43 were not in favor of education. The respondents having negative responses were probed for underlying reasons for not favoring education for males. It revealed that most of them have highlighted poverty and joblessness as critical factors. However, in 2010 respondent's attitude towards the male education was considerably changed and as 121 respondents out of 136 have shown favorable attitude regarding the male education.

In view of the farmers, previously female education was discouraged in the village but due to scarcity of natural resources, availability of educational facilities at local level, penetration of electronic media and urban exposure had changed local people attitude towards both male and female education. Presently, majority of them (63%) considered female education as an important element for the societal development. Opposite to the past now, they now preferred to educate their children and they also used political pressure for securing employment of their female family members.

Table 25. Views regarding the importance of education by gender

Sr. No.	Education level	Number of respondents	
		1980	2010
1	Male Important	93	121
	Not Important	43	15
2	Total	136	136
3	Female Important	33	87
	Not Important	103	49
4	Total	136	136

Source: Field Data

Extending discussion on education, sample farmers were further asked about the advantages of female education. Responding to the question whether they think that female education is important for the development of future generations?', out of

136 farmers, 31, 89 and 16 respondents strongly agreed, agreed and disagreed respectively. Overall, 88% farmers were in favor of female education that shows bright future of female population of the village. Similarly, farmers were asked ‘whether female education is important for the livelihood improvement or not?’, again majority of the respondents positively responded.

The case study of Ahmad Bhatti is important to explain the local people perceptions about the advantages of female education.

Stating the benefits of education, he told “My family is conservative in nature and we are not allowed to provide professional education to our female family members. They are allowed only religious education. Traditionally, our culture restricts women education, employment and movement out of the village. Moreover, use of women income in the household is a social taboo for her father, brother and husband. This cultural norm is commonly supported by the village elders and religious leaders. Although personally, I wanted to educate my children but due to social pressure it was difficult for me to enroll my daughters in the college.

At that time one of my cousins was living in Rawalpindi enrolled his daughters in colleges. Whenever, his family visited my home my daughter felt shyness to meet her cousins just due to lack of education. This situation is very painful for me because I wanted to see my children confident and educated. Adding further he stated that luckily Government of Punjab established a girls’ school in our village and then I got a chance to enroll my daughters in the school. I availed that chance even having pressure from my family members. Now both my daughters are educated. They got education up to matriculation level and among two daughters one is working as school teacher and earning respectable income for her family. My second daughter was married in a well off family just due to her education”.

Although majority of the farmers were in favor of female education but still a considerable population has showed their disagreement and not ready to educate their girls. Furthermore, respondents’ views regarding the social status of educated female were discussed and in their view, relatively educated females have higher social status as compared to the uneducated females in the families. In the changing

socioeconomic environment and social pressure, now families preferred to have educated girls for their sons. This trend has increased pressure on the families to educate their female family members.

In rural areas, female attitudes were very strict and usually performed household activities according to the pattern of their parents. Due to the behavioral rigidity, sometimes the families faced a lot of problems. The role of education on the attitude and behavior of female was discussed with the sample farmers. Regarding this question, most of the respondents were viewing female education as positive factors. They pointed out that education had changed thinking and behavior patterns of new generation. The social dealing of educated females is much better than the uneducated females. Anyhow a reasonable number of farmers about 40% had shown their disagreement with the hypothesis that education changes female attitude and behaviors and they performed their activities better than the uneducated females. Arguing on their view point, most of them considered training of child at home important in shaping up their attitudes and training from parents makes them flexible and well behaved.

In reply to the question regarding role of educated female in decision making, again majority of the respondent 65% had shown their disagreement and argued that in our rural culture the decisions were made by the male members of the families. Among the disagreed farmers, some respondents told that they involved their females in decision making but it depended upon the kind of matter under consideration, i.e. if the matter is related to the domestic affairs like marriages, education and family disputes then they involved their females and jointly decided; in matters like farming, sale of output, etc. they rarely took their females on board while deciding.

Table 26. Advantages of female education

Advantages	Strongly Agree	Agree	Disagree	Total
Educated Female better for the development of future generation	31	89	16	136
Female education is necessary to improve the livelihood of the household	7	67	62	136
Educated females have better social status in the society	23	59	54	136
Educated females are more flexible than the uneducated	19	45	72	136
Educated female are good decision makers than the uneducated male	4	43	89	136

Source: Field Data

5.3.1 Education and Use of Improved Farm Technologies

The role and impact of education on the use of improved farm technologies was discussed and assessed during the field work. The information was collected by dividing the sample farmers into two groups such as educated and uneducated. In relation to this, empirical data presented in the Table-25 clearly indicating the role of education in the use of improved farm technologies. Among our sample respondents, majority of the educated farmers (76.72%) adopted whole package of improved farm technologies and remaining 24% have used only improved seeds. Similarly, use of chemical fertilizers was also significantly higher in educated farmers.

In the rainfed farming system, insects/pets and weeds are seriously damaging the crop yields. To address these issues, agriculture experts have recommended the use of pesticides and weedicides. During the survey, status of these chemical uses was discussed with the sample farmers. The analysis of empirical data indicated that among the sample farmers only 28.45% were educated and 15% uneducated

farmers applied pesticides and weedicides in their fields. The use of improved farm machinery was common in the both educated and uneducated farmers.

Regarding the use of improved inputs, a 54 years old respondent having education up to *matric* told his story that how he started using improved farm inputs. He stated, “I have 56 kanals of land and belong to a middle class family. My family is not totally dependent on farming because agriculture is risky due to erratic rainfall. Therefore, after completing education, my two elder brothers got job in education department, Government of the Punjab and then I started farming in the village. Traditionally, wheat and some pulses were grown in our village. The use of Green Revolution inputs for these crops was not common. Only farm-yard manure was applied to increase the soil fertility, therefore, the productivity of all the crops was very low.

Due to information gap, I was completely unaware about the use of improved farm inputs and their effectiveness in yield enhancement. One day my brother took me to Agriculture Extension office at Talagang and we discussed stagnation of crop yield with them. He gave me one booklet written in local language and a broacher about the improved crop management practices. During the next cropping season, I decided to follow their recommendations for my wheat crop. Resultantly, that year I got a quite reasonable jump in my wheat yield. After examining the outcome of their recommendation, I continued the use of improved farm inputs and also established personal contact with the agriculture department for guidance and improved technologies. All this happened due to me and my brothers education and contact with the relevant departments”.

Livestock is an integral component of rain-fed farming system. Small farmers of the village largely depend upon livestock for their livelihood. Over the years livestock department has recommended to control various seasonal diseases, use of improved breeds and feed for animals. In the adoption of these livestock related interventions role of education was also assessed. The analysis of the information shows that among the educated families, 65.52% farmers used improved livestock management techniques in the village

Whereas a considerable proportion (34.48%) of educated farmers still used traditional methods of livestock farming. In relation to this, situation of uneducated farmers was relatively weak and about 45% had accepted that they used improved livestock production techniques. While, remaining 55% respondents used their own traditional methods of livestock production as reflected in Table-26. Overall, it is clear from the data that due to the efforts of development organization and departments, presently both educated and uneducated groups started using improved crop and livestock production technologies. The role of education was quite evident and contributing in improving the village economy. The impact of education on agricultural productivity and livelihood level of the people was evident and encouraging for further development of the village.

Table 27. Use of technologies by farmers

Sr. No.	Improved Technologies	Number of Respondents Total (136)	
		Educated (116)	Uneducated (20)
1	Improved Varieties	76.72 (89)	40.00 (8)
2	Fertilizers	95.69 (111)	50.00 (10)
3	Pesticides/ Weedicdes	28.45 (33)	15.00 (03)
4	Improved Machinery	69.83 (81)	55.00 (11)
5	Improved Livestock Prod. Techniques	65.52 (76)	45.00 (09)

Source: Field Data

5.4 Rural Development and Healthcare Facilities

Healthcare facilities carry special importance in the rural communities of Pakistan. Initially, village Chinji was seriously lacking in healthcare facilities due negligence of relevant institutions. The villagers used to depend upon traditional treatment methods . While, in the last 30 years, print and electronic media had imparted awareness and educated people about the seriousness of health issues, use of modern treatment methods. The awareness campaign and severity of diseases in the village had motivated the local leadership, village elders and influential people for the development of healthcare facilities in the village. Due to the continuous and

dedicated efforts of our elders and political leaders, basic healthcare facilities were established in the village.

Presently, people of *Chinji* and its nearest villages are using these basic health facilities. Over the years, some private healthcare facilities have also been established and people were using these private medical facilities. The access of local community to urban hospitals was also increased due to development of rural road network and availability of transport facility. The status of healthcare facilities available in the village is presented in Table-28:

Table 28. Overtime improvements in health facilities in *Chinji*

Health facilities	Frequency	
	1980	2010
Number of Rural Health Centre	0	1
Number of Private clinics	0	1
Number of private practitioners	1	3

Source: Field Data

Figure 24. Basic Health Unit at *Chinji*



Source: Photo by Researcher

5.4.1 Conventional Health Treatment Methods

More than half of the Pakistan's population (67%) resides in rural areas. Generally, rural areas are lacking in healthcare facilities, therefore, as an alternate treatment sources. Similarly, the studied village was also exposed to the traditional sources of healthcare such as Hakims and religious people (Maulvies and Pirs). In view of the respondents, still majority of the local people using traditional treatment methods and it was mainly due to financial constraints. The empirical results also reflected that 15.44%, 17.65% and 13.97% respondents' approached *Hakims, Pirs and Maulvies* and some of them used both *Hakims and Pirs* for treatments purposes. However, due to the establishment of basic health unit in the village local people have started getting medical treatment from the qualified doctors and para-medical staff Table.

In Pakistan, healthcare services are provided by the public and private sector. Since the last 30 years, the institution of local government system has focused on the establishment of basic health facilities in rural areas. Similarly, under previous rural development programs, a basic health unit was established in the studied village and it was providing basic healthcare facilities to the people. The availability of qualified doctors in basic health unit has to some extent changed the traditional system of healthcare. Now people prefer to visit basic health unit instead of traditional hakims.

Table 29. Sample farmers sources of healthcare in the village *Chinji*

Sr. No	Sources	Frequency	Percentage
1	Local Hakims (Herbal Medication)	21	15.44
2	Religious people (Dua)	24	17.65
3	Para-Medical staff	21	15.44
4	Self medication	20	14.71
5	Local Hakims & religious people	19	13.97
6	Qualified doctors	31	22.79
7	Total	136	100.00%

Source: Field Data

The overtime changes in different occupational groups of sample respondents was explored and highlighted in Table 30. The results reveals that presently 37.5% respondents preferred to consult qualified medical doctors for treatment as compared to the past. Subsequently, 24.26% farmers utilized the services of para-medical staff and for that they visited their private clinic. The trend of self medication was also common among all categories of occupations. Overall, about 15.44% respondents completely used self-medication mode of treatment for their families. The findings also indicated that except families having education and belonging to armed forces their mode of treatment was entirely changed overtime and now they preferred to use improved healthcare facilities. The data collected during the field work is reflected in Table-30. Explaining the health issues a strong believer of herbal medication stated, “ For the remedy of seasonal diseases like cough, influenza, vomiting and pain we and our elders used to give homemade herbal medicines. These homemade medicines were time tested and effective against common diseases. He was of the view that our local medicines are comparatively more effective than the allopathic medicines. Stressing his view point he mentioned “*A mixture of velaney, green tea and orange tree leaves is traditionally used against vomiting and diarrhea*”. Extending his discussion, he stated that actual we have learned these treatments from our elders and these are our time tested remedies against the common diseases”.

Table 30. Sample farmers source of treatment by Occupation (Nos)

Household Categories	Doctors	Hakims	Religious People	Para-Medical Staff	Self-Medication
Government Employees	12	0.00	2	4	9
Armed Forces Employees	6	0.00	0.00	2	3
Farmers	27	3	7	15	5
Business Families	3	0.00	3	5	2
Labor Class	0.00	4	3	4	0.00
Private Job	3	6	3	3	2
Total (136)	51 (37.5%)	13	18	33 (24.26%)	21

Source: Field Data

During the field survey, farmers were asked about the major diseases prevalent in the village. In response, a list of major and minor diseases was presented to the researcher of which, some diseases had been eradicated and some were controlled by vaccination. However, some new diseases such as blood pressure, sugar, hepatitis, kidney failure, heart and gynecological problems had emerged rapidly in the area. Exploring different dimensions of disease respondents were asked about the intensity of these diseases. Among the common diseases, intensity of blood pressure was commonly reported by the respondents as high (52.21), medium (27.21) and low (20.59) percent respectively. Similarly, 24.26, 59.56 and 16.18 percent sample farmers reported as diabetic to high, medium and low intensities, respectively.

The other common problems was gynecological issues, which were reported as high by 68.38 percent farmers, medium as 6.62 percent and low as 25 percent. The intensity of remaining diseases like hepatitis, kidney problems and heart problems was relatively low as reflected in table 31. There was one common feeling among the farmers that even having strong curative measures; the prevalence of these diseases was also increasing in the village. The details of the diseases and their intensities are given in Table-31.

Table 31. Common diseases and their intensity in the village

Name of Diseases	Total Sample	Intensity of Diseases		
		High	Medium	Low
Blood Pressure	136	52.21 (71)	27.21 (37)	20.59 (28)
Sugar	136	24.26 (33)	59.56 (81)	16.18 (22)
Hepatitis	136	2.94 (4)	5.15 (7)	91.91 (125)
Kidney	136	5.88 (8)	10.29 (14)	83.82 (114)
Heart Problem	136	8.09 (11)	4.41 (6)	87.50 (119)
Gynecological Problems	136	68.38 (93)	6.62 (9)	25.00 (34)

Source: Field Data

5.4.2 Overtime Trend of Diseases

To have a general perception of farmers about the trend of diseases in the village, farmers were asked to comment on over time phenomenon of diseases. Responding to this question, majority of the farmers (72.79%) reported that over the last 30 years disease incidences have increased in the village. In view of 13.97% respondents, disease incidence had decreased overtime whereas almost same proportion reported no change in rate of diseases occurrence as reflected in Table-32. Overall, it was observed that new medical facilities had benefited the local community in terms of better treatment and emergency cases. Some respondents were also of the view that allopathic medicines have serious side effects on human health. Although the respondents who raised this issue were smaller in number but their argument was very valid because majority of them were illiterate and had no knowledge about the proper use of medicines.

Table 32. Severity of the diseases

Severity of diseases	Respondents	Percentage
Increased	99	72.79
Decreased	19	13.97
No change	18	13.24
Total	136	100.00%

Source: Field Data

In the rural societies, there are various factors that lead towards poor utilization of available healthcare system. These factors are socio-economic, lack of mobility, socio-cultural and socio-religious beliefs and illiteracy³⁴³⁵. The social values, norms and cultural beliefs system of the society often create doubts and false believes patients' minds, which sometimes compel them to consult traditional healers like

³⁴ Katung PY. Socioeconomic Factors responsible for poor utilization of PHC services in Rural communities of Niger J Med 2001; 10: 28-29

³⁵ Stephenson R, Hennink M. Barrieriers to family planning services use among the urban poor in Pakistan. Asia Pac Popul J 2004; 19: 5-26

Pirs and Molvies (religious leaders)³⁶. In the past, due to cultural norms local people were reluctant to use improved healthcare facilities especially for female family members. Therefore, to have a gender based picture of past and present medication trend in the village, sample farmers were asked to describe changes in medication trends. The results indicated that majority of the respondents (83.17%) were of the view that use of modern medicines is relatively more common among males than females . According to 39.34% respondents females are still treated at home by using traditional medicines (Table-32). Knowing to the reasons of gender discrimination, an aged member of the society reported, “Our village is located in the remote and underdeveloped regions of Potohwar, Punjab. In the past there was no healthcare facility in the village, therefore, most of the people used “*hakims*” and “*molvies*” (herblists and religious leaders) as main treatment sources. Some people also used own developed “*nuskhas*” (self prescribed medication) which were time tested and effective against the common diseases. In his views, traditional health seeking practices were popularized due to financial constraints, non-availability of transport, effectiveness of their own *nuskhas*, and cultural norms. Commenting on the Government led-healthcare facilities, he appreciated the government and agreed to allow their woman to visit local dispensary for getting medical treatment”.

Table 33. Use of medicines

Gender	% Respondents
Male	
Increased	83.17
Decreased	0.00
Not Increased not Decreased	16.29
Total	100.00
Female	
Increased	60.66
Decreased	0.00
Not Increased not Decreased	39.34
Total	100.00

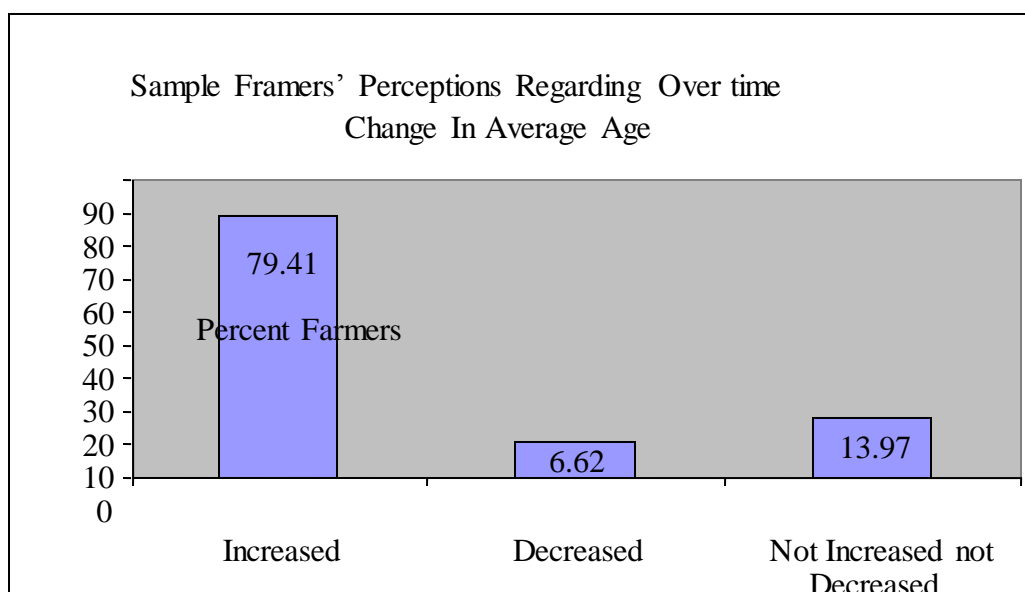
Source: Field Data

³⁶ Nyamongo IK. Healthcare Switching behavior of malaria patients in Kenya Rural Community. Soc Sci Med 2002; 54: 377-386.

5.4.3 Overtime Change in Average Age

Average age is an important indicator for measuring the impact of modern health facilities on human beings' healthy and long life. In the last 30 years, both public and private healthcare services have been improved in the village. The impact of these services on human life was explored and analyzed. The results indicated that over the years average age of the people was increased in the village as it was reported by 79.41% respondents. By supporting their view point, they have highlighted role of availability of healthcare service in the village, regular application of vaccinations and awareness about the preventive measures as important. However, a small group of respondents have adverse opinion and stated that presently average age of the people is less than the previous years. In their opinion, people used pure and natural foods, therefore, incidence of diseases and mortality rate was also less in the past. A group of farmers (13.97%) perceived that there was no change in average age and it is quite similar to the previous years. The results related to the change in average age are reflected in Fig-25.

Figure 25. Perceptions Regarding over time



Source: Field Data

During previous rural development efforts health sector was also upgraded and units of Mother Child Health (MCH) care were established in the basic health units

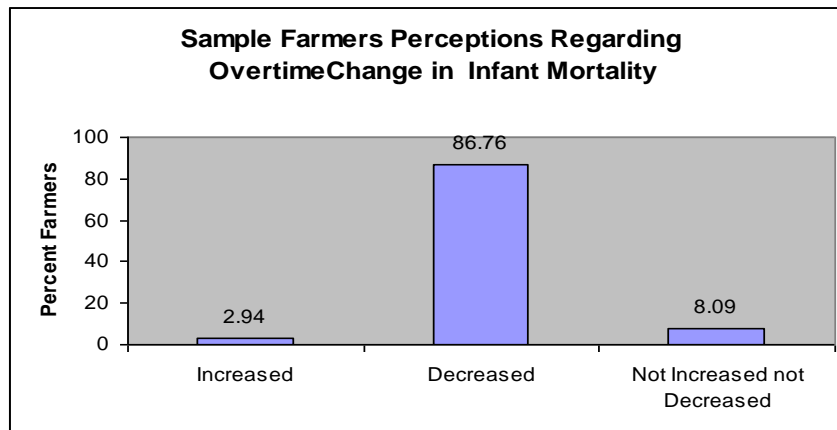
(BHU). These BHUs ³⁷ were placed in rural areas to provide basic health care to the rural masses in Punjab, Pakistan. The village *Chinji* was also one of the villages where basic health unit was established during 1990s, this unit provided ante- and post-natal services in the village. The respondents' views regarding the impact of MCH services on infant mortality was collected to see the improvements in infant mortality rate in the village. The results reflected that during the last 3 decades, there was significant decrease in infant mortality in the village and it was reported by 86.76% respondents.

The facilities like care during pregnancy period change in delivery mode and post birth preventive measure and vaccination had made it possible to decrease infant mortality rate in the village Fig-11. Regarding the problems of infant mortality, an old farmer stated his own story. He told, "I was married at the age of 19 years and at that time population of the village was very low. People usually lived in joint family system. Traditionally people preferred large family size. Mostly families preferred male kids due to patriarchal societal system. Similarly, my parents also wished to have more number of their grand children's and my wife was also aware of the good wish of my parents.

After 3 months of our marriage, my wife got pregnant and whole of my family was very happy. With the grace of God my wife gave birth to my son. These moments were very cheerful both for me and my wife. After two and a half months of his birth my son got sick and his sickness was prolonged due to non-availability of healthcare services in the village and resultantly he died. The loss of my first son was a serious shock for my whole family and at that time I realized the importance of proper healthcare services. Expressing his feelings further, he thanked to God and Government of Punjab for establishing basic healthcare facilities in his village. Further, appreciating this facility, he mentioned that due to this basic health unit infant mortality rate also decreased in the village".

³⁷ BHU; Basic health units established by Government in rural areas

Figure 26. Change in Infant Mortality



Source: Field Data

5.4.4 Vaccine Awareness

The use of preventive measure like vaccination against chronic diseases (Polio, Whooping Cough, Measles, Chickenpox and Malaria) has significantly increased in Pakistan. Every year Government of Pakistan is organizing vaccination weeks to protect the children in their early stage. The vaccination campaigns are also organized in the villages and for that para-medical staff of health department goes door to door to cover each and every child of the country. Moreover, government has also launched vaccine awareness campaigns through print and electronic media. The people understanding about the importance of vaccines was assessed and analyzed. Overall, 67.71 % respondents clearly had shown positive response and recognized that now people are conscious about the vaccination of their kids (Table-34). Presently, almost all people tried to vaccinate their children. Even having such a nice vaccination facility, a notable proportion of respondents (35.29%) stated that there is no change regarding the awareness of vaccination. Basically, most of them were poor and illiterate.

Table 34. Sample farmers views about vaccine awareness

Vaccine awareness	Frequency	Percentage
Increased	88	67.71
Decreased	-	00.00
Not Increased not Decreased	48	35.29
Total	136	100.00

Source: Field Data

The people of the village *Chinji* availed healthcare services from public and private sectors. Both sectors have some positive and negative aspects. So, to see the effectiveness of available healthcare facilities respondents' satisfaction level was explored. For this purpose, working of both systems was discussed and recorded. First of all, the quality and effectiveness of government led-healthcare system was discussed and found that people in general were happy over the availability of healthcare facilities in their village. However, about the quality of services provided, majority of them (63.24%) were not satisfied. Their unsatisfactory responses were further probed to know the underlying reasons. The non-availability of medicines, lack of clinical tests facilities and diagnosing proficiency of the doctors has been reported as their major reasons of dissatisfaction.

The private health facilities at village level were very limited. Only one qualified doctor was available in the village. In case of serious and chronic diseases, most of the people visited tehsil headquarter hospital at Talagang. Commenting over the expertise of the private doctor, majority of the respondents (58.09%) were dissatisfied. Similarly, some Para-medical and other unauthorized practitioners were also providing healthcare services to the villagers. Usually families belonging to low income group visited these clinics for treatment. The farmer's responses over degree of satisfaction from the treatments provided by para-medical and unauthorized practitioners, again majority of the farmers (72.79 %) were dissatisfied. From this analysis, it can be concluded that in general, the respondents were dissatisfied over the quality of basic healthcare facilities provided by the public and

private sectors. Although people have shown their dissatisfactions from the available medical facility but even then they were utilizing these services. The details of empirical results are presented in the Table-35:

Table 35. Farmers ranking about satisfaction from the Govt. institutions

Sr. No	Evaluation Parameters	Total Sample	Farmers Responses (%)		
			Excellent	Satisfactory	Unsatisfactory
1	Satisfaction from the Govt. Provided Health Services	136	0.00 (0.00)	28.68 (46)	63.24 (90)
2	Satisfaction from the Services Provided by Private Doctors	136	6.62 (03)	35.29 (57)	58.09 (76)
3	Satisfaction from the Services Provided by Para-Medical Staff and other Unauthorized Practitioners	136	0.00 0.00	27.21 37	72.79 99

Source: Field Data

5.5 Transformation of Social and Political Structure

5.5.1 Social Structure

The social institutions and relationship among these institutions is called social structure of the society. Overall this structure performs certain roles and responsibilities³⁸ just to satisfy needs of the individuals and respective societies. It is also responsible for the transmission of culture, values and regulation of human

³⁸ Chaudhry (1993) narrated that the social structure of the society stands for those super organic forces which maintain the balance or equilibrium of the society.

behavior. Among the social institutions, each one has its importance in terms of helping the local communities and bringing desired social changes in the society.

The process of social change is a difficult and long term task. It takes years to reshape traditional norms, values, role and responsibilities. The change in social system actually produced changes in the whole social fabrics of the society which reshaped the traditional way of life. The process of social change usually starts with the diffusion of innovations or innovative ideas. The resultant changes are of two types, imminent and contact changes. The imminent changes usually come through internal influence, whereas sources of contact changes come due to contacts with external culture. When persons belonging to two different cultures come into contact they exchange their cultural traits.

As main focus of this study was to see the overtime changes therefore, information related to types of changes and sources of these changes have been collected and analyzed. The collection of such information is difficult because it needs historical information which is quite tricky and complex. Hence to resolve this issue, first of all researcher identified 5 most informative persons with the help of local host. The selected group was diverse in terms of social classes, education and castes. Even a low caste member called "Mirasi" was also included in the group³⁹. The discussion sessions were organized in an informal and friendly environment. The farmers were given the liberty to discuss each and every important event regarding the village development. The case study was also conducted just to reconfirm the information collected through group discussion. The person selected for case study was an ex-teacher and democratically elected representative of the local community.

Explaining the changes in social and political structures, role of following institutions and social factors have been highlighted by the respondent. According to him, "Social change in our society does not come in a systematic process, rather it is unplanned and contribution of many government and non-governmental organizations. Almost all participants have highlighted role of Agency for Barani Area Development (ABAD), Successive Local Governments, National and Punjab

³⁹ *Mirasi*; A person belonging to poor class and supposed to maintain lineage record of major casts

Rural Support Programs as a sources of socioeconomic changes in the village. While discussing these changes, they have also pointed out contribution of social factors like competition to acquire political power, education and urban exposure”.

It is a well established fact that societies are not static. They gradually improve and change. Similarly, the community under study was also changed overtime. To some extent it was transformed from traditional to modern one⁴⁰. The researcher has explicitly watched these changes during his stay in the village. Their thinking and behaving patterns have been changed. Moreover, as a result of changes majority of the people (70%) used modern means of communications like cell phones, electric fans, television, air conditioners, refrigerators and modern vehicles for transportations in their houses. Due to better economic conditions people have shifted from *katcha* houses to *Pacca* houses (mud to cemented houses). The uses of modern healthcare and sanitation facilities were also common and even their traditional dress patterns have also been changed. During the discussion a 55 years old participant pointed out that “in 1970s, socioeconomic and physical conditions of our village were very weak. More than 70% people lived in *katcha* houses at their own farm lands. Sewerage and sanitation facilities were completely lacking at that time. Explaining the past situation he stated that most of the houses were without four-walls and even people have no toilets in their houses. For this purpose, both male and female members had to use open spaces in the fields. Economically, people were very poor because of rainfed agriculture. However, in relation to development, he appreciated the military regime of General Muhammad Zia-ul-Haq. Arguing positive points of military regime he mentioned that in 1981 General Zia sent army personnel to Saudi Arabia and during that period most of our people got an opportunity to serve in Saudi Arabia and other Middle East countries. By serving in these countries, they earned enough money and sent back to their families. Hence, as a matter of fact, these foreign remittances have raised socioeconomic status of the local masses”.

⁴⁰ James Saxton and D. Clyde M. Wood, Development and Modernization among Maya: A comparative analysis of 10 Guatwmalan Towns, Human Development Organization, Vol.36 No.2, Summer 1977, pp 156-172.

Explaining the overtime development of village infrastructure, he said that “during the General Zia’s Regime, local bodies’ elections were held in the country and people got a chance to select their democratic leadership. Luckily the members elected during that regime worked effectively and developed basic village infrastructure. They mainly focused on the pavement of village streets, drinking water and to some extent on the improvement of sanitation system. In addition, at that time, provincial and federal governments also provided development funds to members of provincial and national assembly’s (MPAs and MNAs) for the development work. Our village also benefited from those development schemes”.

The phenomenon of competition among major castes to grab communal power had bound the traditional leaders to work for the betterment of the village. This competition was very positive and had benefited the local community. Describing the dynamics of caste competition, a member belonging to Bhatti caste shared, “In our village two main castes are residing and members of each caste want to maintain their identity and power in the village. Although members of almost all castes have good social relations with the members of other castes, they always helped each others in their good and bad times. But at the time of election, they compete to maintain their authority in the local power structure. The caste and biradri leaders played their role in uniting the biradri members and for that they used local traditions, money, and political influence, administrative and religious institution⁴¹. Moreover our society is living in a very close proximity and dependent on large land holders for economic assistance. Therefore, caste and biradri heads always try to help poor biradri members and work on the village development schemes to attract the local communities. Most of the times, these caste and biradri leaders remain in a competitive environment. Actually, from all these tactics they want to maintain their power and authority at the village level. Furthermore, he stated that physical factors like “road network and modern means of transport have also provided an opportunity to the people to interact with the urban communities and as a result of this interaction, a change in material (use of household gadgets) and non-material culture (thinking and behavior patterns) was also observed during the

⁴¹ The anthropology of politics: A reader in Anthropology, Theory and Critique Vincient, Joan (Ed). Willey-Blackwell, 2002.

study. Explaining other dimensions of the development, he was of the view that due to overtime development people of this village has also experienced some negative aspects of development. As an example, he stated that people of the village are now more materialistic and individualistic as compared to the past. Now they work only for their financial interests and do not participated in the communal work. If development activities match their interests then they participated otherwise does not spare time to help other community members”.

A member of landless family having 46 years age explained further, “Traditionally we are relying on landowners for economic assistance. We are providing them our services at their houses and farms and reciprocating to our work they provided use food and shelter. In the past, when off-farm and government employment opportunities were lacking, this informal arrangement has benefited us and other poor families of the village. The land owners cared our families and provided us food, shelter and also some money for our daily needs. Moreover, at the time of ceremonies like Eid, Marriage, births and deaths they financially helped and fulfilled our needs. While with the passage of time due to Islamic law of inheritance their land was distributed among the family members. In this way, their agricultural lands were fragmented and squeezed resultantly their economic position also weekend. This situation has changed farmers’ attitude and behavior. They have started working at their own in both houses and farms. This situation has seriously threatened livelihood of my landless families and forced me to search other income sources. Ultimately, I started non-farming work to meet my family requirements. Overall, this change has altered the societal norms, values and belief system of the people. Now, almost all segments of society take into account their financial interests and then participate in any social or economic activity”.

Over the years, the development organizations working in the area have tested various development approaches. In early 1980s, mostly top-down and supply driven approaches have been used but with the passage of time, experts have realized ineffectiveness of conventional approaches and they introduced participatory approaches for rural development. Therefore, in the late 1980s, a mix of bottom-up and top-down approaches were adopted to initiate the developmental activities. Considering and seeing the benefits of participatory approaches, the

National Rural Support Program (NRSP) had established multi-functional community organizations (COs) in the village. Further, to make the organizations more vibrant and effective, an elected body of COs was constituted consisting of president, general secretary and members. Subsequently on the similar lines, a woman community organization (WCO) was also established in the village. The concept of social mobilization was used as strategic intervention for rural development activities.

The impacts of overtime developmental activities on local social institutions and routine life of the local people was assessed and analyzed. Actually, this analysis shows sequential history of changes and their consequential effects on the social environment of the studied community⁴². In relation to this, empirical results and views of the respondents are described in the subsequent section.

In view of the farmers, traditionally people lived in a joint family system but over the years this system was disintegrated rapidly. However, elderly people still believed that joint family system was comparatively better than the nuclear family system. So, to understand their logic and underlying reasons this issue was further explored in a focus group discussion session. In favor of their stance for preferring joint family system, their argument was that food security of the family, social protection and cohesiveness among the family members were better addressed. While admitting these benefits younger generation (having less than 45 years of age) was in favor of nuclear family system. The empirical results also supported their point of view because 62% respondents had indicated that over the years nuclear family system was expanded in the village. The causes of expansion in nuclear family system were; economic pressures, increased size of households and limited natural resources. During their discussion on the family system, some respondents have highlighted reduction in family size as important factor and now average family size of the village was 6 persons per household.

⁴² Megee and Warns 2000 supported the argument of Malinowski that institutions are built to satisfy the basic human needs. Similarly Kristen (1983) described that institutions must synchronize their working in accordance with the requirements of their beneficiaries so that they can continue as fundamental part of their social system.

Among the social factors, influence of caste and *biraderi* was predominant in village. This phenomenon was commonly observed in the village. The people specifically belonging to main castes of the village had praised and felt proud on their castes and *biraderi* groups. Mainly village development, politics and marriages were the main areas where decisions were made purely on the basis of caste and *biraderi*. Moreover, politics and development activities have strong association, therefore, traditional leaders (caste and *biraderi* heads) always tried to snatch political power by any means. Usually, they used influence of their *biraderi* members, relation with main political parties and officials of local administration. Here an important question arises that for what purpose they were competing with each other? To explore the real causes of this competition, members of different castes and *biraderies* were interviewed and their views were analyzed and discussed here. The analysis of their information clearly indicated a split in their point of views. The respondents belonging to upper middle class and rich families had considered “identity” as major reason of this competition. Basically, through this competition they showed their caste or *biraderi* as superior from other caste of the village. Moreover, though uniting their *biraderies*, traditional leaders wanted to maintain their power and authority in the village. For that purpose they were exploiting sentiments of their *biraderi* members and used the numeric strength in their own favor during the local bodies or national level elections.

However, during the last 30 years, the situation relatively changed and this change was mainly attributed to education, media exposure and social mobility. Overall, changes in social factors had produced positive impact on attitude and behavior of the local people. Responding to the question of overtime changes in *biraderi* system, 50.78% farmers indicated that role of *biradri* system is still exists and people are favored in decision making on the basis of *biraderi*. While a significant proportion of the respondents 45.23 percent pointed out that trend of caste/*biraderi* system is decreasing in their village. About the issue of caste and *biraderi*, there was a dichotomy in all sample groups because personally during the discussion they viewed *biraderi* system as negative factor but practically they favored their own caste/*biraderi* members. Moreover, in case of any conflict or competition, leaders or decision makers always preferred members of their own *biraderi* and ignore the real facts and/or merit.

The concepts of marriage and caste/biraderi have strong linkages and are interrelated. Almost all major castes felt proud on their lineage and preferred to marry within their own caste. The empirical results showed that there was no change in marriage patterns because majority of the people still look for their own caste/*biraderi* while selecting mates for marriages⁴³. The tradition of marriage within their own caste had created problem of late marriages due to lack of appropriate pairs within caste and *biraderi* group. The trend of intra- caste marriages is a new phenomenon and it is still at initial stages. Presently, intra-caste marriages were observed in lower middle and upper classes of the society. Explaining the advantages and disadvantages of within cast and out of cast marriages and couples' relation in both systems, a 63 years old person having 3 daughters pointed out, "Biradari is the most important factor for us and by customs rishtas (marriage proposals) in our community are made at the time of birth. Traditionally, elder members of the family decided about the marriages of their children and rest family members respected their decisions. Describing his own case, he said that we are four brothers and all of us are married. Our marriages were arranged by our parents in the family like the daughters of my maternal uncle and two of my "*Bhabi*" (brother's wife) are daughters of my father's brothers. While, one of our brother was married out of *biraderi* and our family was happy with this marriage. After three years, God has gifted them a son to our brother and on this birth our whole family was very happy. But after birth of this child, a family conflict started between husband and wife. The main reason was change in the attitude of my *bhabi*, her indecent behavior with family members. Due to this reason our whole family was disturbed and a serious dispute started between our two families. The elders of both families tried their level best to resolve the issue but after an effort of one and half years matter was not resolved. Consequently, they were divorced and separated. This event badly disturbed our family life and also forced us to marry our children within the *biraderi* or family. Explaining the consequences of this event, he said that as I have three daughters and all of them are educated and reached at the ages of their marriages. But presently there is no educated male in our family

⁴³ See Mina Zulfikar Ali; Agrarin Society in Transition: Modernization, Development and Change pp. 84, 2003.

and my daughters are waiting for marriages. Sharing his experiences he said that now people's demands and expectations are very high in respect of "jahaiz" (dowry) and I am not able to fulfill their all requirements. So all these marriage

Table 36. Overtime changes in the social structure of the village

Sr. No	Social institutions	Percentage (%)
A	Family System	
	Joint family System	37.41
	Single family system	62.59
	Total	100.00
B	Cast /Biradri System	
	Increased	3.99
	Decreased	45.23
	Not Increased not Decreased	50.78
	Total	100.00
C	Trend of Marriages in Biradri	
	Increased	4.09
	Decreased	14.78
	Not Increased not Decreased	81.13
	Total	100.00
D	Role of Religious Institution	
	Increased	6.5
	Decreased	63.89
	Not Increased not Decreased	29.61
	Total	100.00

Source: Field Data

related modalities created problems for the parents and usually delayed the marriages. Adding further, he told that in rural culture, delay in marriages specifically delay in female marriage created very painful situation for both parents and girls. The girls surpassing 30 years of age without marriage faced psychological and physical problems in a male dominated society".

Finally, the role of religious leaders was also assessed and analyzed. The people of *Chinji* were neither very religious nor liberal. They were following Islamic laws in their routine life. The role of "Maulvi" (religious leader) in the village was very limited and not involved in the decisions related to village development. They were only confined to mosque activities and other religious matters. It was also evident

from the analysis that 63.89 percent farmers were of the view that the influence of religious institution had decreased over the years as reflected in Table-36.

Although, above mentioned changes have benefited the local community but at the same time people have also experienced some negative impacts of the development. The cultural values like helping poor and landless families were moved out from the society. Presently, no one is ready to share others burden. The local people were not sparing time to resolve communal issues. These cultural changes have actually made the people more materialistic and self-centered. They always tried to secure their interests and not caring others. These cultural changes have also affected the family structure. Presently, most of the families were living in a single family system. Now these families were relatively more insecure in food and financial resources.

In short it was clear from the results that the rural development efforts made over the last 30 years had changed rural life style and socio-economic conditions of the people. Simply, improvement in education had brought attitudinal change in the society which is necessary to make the people progressive, eager to improve social, economic and physical aspects of their life. Generally, it is reflected from the discussion that over the years things have been improved in the village and society as a whole is absorbing the shocks of development and taking its due course.

The sociopolitical institutions have close association and reciprocating to each other's activities⁴⁴. The change in one institution definitely influenced working of other institutions of the society. So having this paradigm in mind the researcher has tried to see the impact of previous rural development activities on the sociopolitical system of the village. The subsequent section will explain overtime changes in the socio-political system and their positive and negative impacts on the society.

⁴⁴ Truu 1990 pointed out that economy like other systems of the society is also a subsystem of which is working in its own boundries and contents and similarly Murphy 2002 accepted and highlighted the functionalsits narration that each part of the society has link with other parts and this is necessary for the functioning of whole system.

5.5.2 Political Structure

Generally, power structures mean the device of control which relates to the allocation of power and resources among the members of a group (Singh, 1982). It deals with the problems like how power and resources are distributed, how power is exercised for one's own sakes as well as for the sake of community. The purpose of this discussion is to explain the power relations in the village Chinji and to study how far and in what ways the democratic political structure differ from traditional power structure.

The past village level studies reflected that rural life in Punjab is regulated by three social factors: (a) caste system; (b) *biraderi* network; and, (c) tenure status⁴⁵. Moreover, studies also reveal that social groups at the village level are mainly based upon inter-kin and inter-caste hostilities/linkages and not upon tenancy status.

Exploring the traditional power structure of the village, it was asked from the respondents that how traditional leaders acquired power in the society. Responding to this they have highlighted caste/*biraderi* and size of land holding as their main power sources. The leaders having numerical strength of their *biraderi* members usually enjoyed societal power in the village. Actual numerical strength of *biraderi* members was used to acquire political power in the rural politics. Similarly, size of land holding and financial strength is also necessary to have power in the society. Basically, traditional leader supposed to entertain (offer tea, lunch and dinner) his followers/community members and officials coming to his *bathak or dera* (male members meeting place). Therefore, *biraderi* heads were mainly selected on the basis of their financial strengths.

Although, *biraderi* system is changing in the village but still this system has strong roots in the society and *biraderi* heads are enjoying communal power. In the changing scenario of the village, the families having influence in government

⁴⁵ See Mirza, A. H., D. M. Freeman & J. B. Eckert (1975), Village Organizational Factors Affecting Water Management Decision-Making among Punjabi Farmers. Water Management Technical Report No. 35, Colorado State University, Fort Collins, Colorado.

institutions or forces were also enjoying power at the grass root level. Basically, the successive military governments in Pakistan had provided an opportunity to civil and military officials to establish their authority and influence in the political system of the country. Availing this opportunity, some families had inducted their family members in the politics through local government system.

Regarding the conventional practice of decision making, majority of the respondents pointed out that in the past most of the decisions were made by the *biraderi* heads or members of influential families. Actually, society has authorized traditional leaders to make decision about the betterment of village and even political decisions. Explaining the practices of decision making most of respondents were of the view that this practice has isolated majority of the people from the political process and strengthened undemocratic forces (traditional leaders) in the village. The poor family's dependency on large farmers, lack of resources, lack of motivation to acquire power and awareness further empowered the traditional leaders. Actually, this situation was purposely created, maintained and maneuvered by traditional leaders. The main purpose of this exploitation was to intact people with them and uses their votes in favor of their candidates . They establish their personal contacts with the leaders of main political parties and tried to adjust their family members in lucrative official positions. They also got personal benefits like credit, development schemes for their farms and establish their influence in the local administrative institutions. This situation was also suited to main political parties because it was easy for them to negotiate and utilize local power structure in favor of their candidates during general elections. Hence, leadership of main political parties protects their interest and fulfills their legal and illegal demands. Likewise, development activities were also approved on the recommendation of these elders. Overall, majority of the respondent agreed that this vested interests based power structure has increased disparities, polarization and severe imbalances in the society.

Over the years, education and media exposure had increased political awareness among the community members. Currently people are talking about their rights of clean drinking water, health, education, sewerage and sanitation. In the changing political environment of the village, both traditional and democratic leaders are

bound to address their issues. The consecutive local government systems had provided an opportunity to the people to participate in the democratic process and acquire power. This opportunity was provided under the new local government system by allocating reserved seats for labor, farmer and women's of the village. Availing this opportunity, people have developed new democratic leadership by utilizing their vote power. Due to the induction of new leadership influence of biraderi heads and traditional leaders was reduced in the village.

The subsequent case study is an example of newly emerged leadership of the village. Mian Aziz Ahmad was an educated man, retired from the education department. He belonged to main caste of the village and upper middle class status in the village. Narrating his story, he told that after his retirement, he thought that he would work for the development of his village. For this purpose he mobilized and organized the local community members and contacted with National Rural Support Program (NRSP) and Agency for Barani Area Development (ABAD) for development work. Due to his sincere efforts, various small scale development activities were started and completed. In his view, local community benefited from these development initiatives and as a result he got farmers confidence and then decided to participate in the local government elections. Further, he told the researcher that due to his efforts, majority of the voters voted in my favor and I was elected as Nazim (Head of Union Council) of the Union Council. So being a Nazim, I planned and implemented various development projects to improve the village infrastructure. Adding further, he proudly told the researcher that last year his Union Council was considered as an exemplary union council due to better work and effective utilization of public money. Therefore, as an incentive his union council was given extra budget for further development of the village”.

Explaining the past and present power dynamics of the village, he stated that previously numerical strength of people and land holding were main sources of power. But later on some traditional leaders have also sought power from their linkages with main political parties. While in the present democratic system, power is mainly derived from votes of people. The traditional leaders used to enter into power corridor through their hereditary status while in comparison to this entry into democratic system is very difficult which needs a strong political struggle to win a

vote bank. In their views, dynamics of decision making in both traditional and democratic systems is entirely different. In the traditional system, leaders used to behave like dictators and generally imposed their decision on the people. The community was supposed to obey their directions otherwise they were punished for disobedience. Whereas, decisions making process in democratic system is quite participatory, elected leaders make decision through consultative processes by accommodating and protecting interests of the masses”.

Almost all respondents were of the view that overtime the democratic system had generated attitudinal changes in the political leaders . Now most of them respect their community members, extend cooperation and also spend enough time in the village. On the other hand, local community is also changed and people are no more bound to support their traditional leaders. They preferred to select educated and more dedicated workers as their representatives. Further, praising the local government system they told that this system was in favor of democratic leaders and provided them statutory power to make and implement their decisions. Hence, to attain institutional official power and resources both traditional and democratic leaders compete with each other.

Explaining dynamics of both systems, they told that basic difference in traditional and democratic leaders was their difference in objectives and intentions. The traditional leaders used their power or influence mainly to resolve communal conflicts, while democratic leaders were primarily elected for village development. Although, local government system has changed the traditional power structure but in view of respondents it was still under the influence of traditional leaders. Therefore, they have suggested continuation of local government system to change the traditional power structure. Regarding the paradigm shift in local leadership, almost all respondents were in favor of new democratic system. Supporting the democratic system they suggested the involvement of elected members in the planning and implementation stages of rural development activities.

The respondents’ insight regarding the change in socio-political structure and dynamics of old and transformed systems were explored and analyzed. The purpose of this exercise was to use collective wisdom and knowledge in the analysis process.

The indicators used to evaluate the characteristics of traditional and democratic power structures were adapted from Singh (1982). The analysis clearly indicated that to some extent traditional leaders still used their *biraderi* power or *Numbardari status*. The village *Numberdar* is a representative of the village and also worked as honorary revenue collector for the government. Although *Numberdar* is a nominee of government but by nature it is a hereditary position as most of the times after the death of *Numberdar*, his elder son of the family or brother of the late *Numberdar* takes his position as new *Numberdar* of the village. Officially, *Numberdar* is responsible to collect the revenues from the village and deposit it to the government treasurer office. Almost all administrative officials (police, tehsildars, *patwaris*, health, education, agriculture etc) contact him when needed. The *Numberdar* is supposed to arrange their meetings with the local community at his own *Dera or Bathak* (a separate room in the house for social meetings). He also provides good hospitality to the officials and the meeting participants. Therefore, his position is quite respectful in village as he is their all times leader. Generally, this kind of title is enjoyed by the person who is relatively old, socially influential in his community and financially well off.

On the other hand, in new sociopolitical system, leadership is mainly assigned by the society not by the government. Moreover, these leaders were selected through a democratic process and they were titles as councilor, members of union council and nazims. Their mandate was to plan and execute the village level development schemes. They have statutory power and authorized to use government funds for the developmental activities.

As the entry point of traditional leader is hereditary, therefore, they have no threats of losing their leadership. They always try to implement their decisions (by force and/or social pressure which ever work) in the society by using their own power and social (friends/relatives) pressures, etc.. In view of the respondents, community members are bound to obey their decisions. If any member violate or disobey their decision they try to penalize him by implementing social boycott, launching false court cases against them, creating troubles for him in his day-to-day matters. Comparing the traditional power system with the democratic power system, respondents appreciated the role of democratic leaders. Stating the advantages of

democratic leadership they told that this system provided them an opportunity to elect their leaders and these leaders were answerable to the community members. Moreover, if they failed to satisfy their voters then voters had choice to replace their elected leaders. The comparative analysis of traditional and democratic systems of leadership is reflected in Table-37.

Table 37. Overtime sociopolitical changes in village *Chinji*

Sr. No	Indicator	Traditional	Transformed
1	Locus of Power	<i>Biraderi</i> Head and Numberdar (A Government appointed revenue collector)	Nazim (An elected representative of the community in the local Govt. System)
2	Nature of power	Feudal & Government	Democratic
3	Entry into power/position	Hereditary	Elected by village community
4	Leadership	Autocratic	Democratic
5	Sanctions	Derive power from land and <i>Biarderi</i>	Derive power from community
6	Institutions of power	Non-Statutory	Statutory (Union Council)
7	Aim of the institution	Conflict resolution & collection of revenues	Village development

Source: Field Data

Explaining the existing social-political system of the village, majority of the respondents were of the view that the families of traditional leaders were still trying to maintain their power and influence in the village. They have changed their conventional methods of controlling people and maintaining their leadership. Now by using their *biraderi* influence they participated in the democratic process and tried to snatch institutional power. The overtime changes in socio-political structure were appreciated and welcomed by local community. Their appreciation was quite

understandable because almost all developmental activities of village had been initiated by these local democratically elected leaders of the village⁴⁶.

5.6 Overtime Changes in Rural Economy

The economy of village *Chinji* was primarily based on agriculture. Rainfed farming was predominant in the area. Wheat and groundnut were their main crops. Livestock is an integral component of their farming. Almost all households keep 2 to 3 animals to fulfill their bread and butter needs. Over the years, lot of changes had taken place in agriculture⁴⁷. Being a main source of livelihood, whatever happened to agriculture, it directly or indirectly affects the rural masses⁴⁸. Therefore, keeping in view the importance of agriculture sector various institutions and organizations worked hard to improve farm related activities in the village. About the contribution of different organizations, majority of the people applauded the positive role of Agency for Barani Area Development (ABAD), Department of Agriculture and Livestock, Government of Punjab, National Rural Support Program (NRSP), Punjab Rural Support Program (PRSP). During the last 30 years, these institutions have introduced new cash crops, high yielding and drought resistance varieties, improved farm technologies, irrigation facilities and high yielding breeds of animals.

Due to these interventions, the studied village has experienced many changes in their farming activities. Overall, local villagers regarded these changes as very positive and multifarious. The present study attempts to examine overtime changes and their impact on the socioeconomic conditions of the people. Therefore analysis

⁴⁶ Eisenstadt (1973) described that modernization requires the development of a base level of a certain factors like social mobilization, structural differentiation, development of free resources, diversity of social organizations, and the development of regulative and allocative mechanism in the economic, political and other institutional spheres.

⁴⁷ Murdock (1961) argued that any event which produces change is a historical event and it occurs at a certain time and place.

⁴⁸ Pasha (2002) mentioned that positive and negative developments in agriculture sector not only affect the rural communities but also economic growth of the country.

of rural economy between two periods of time was important to explain the real changes and their trends.

The term “rural economy” has different dimensions and generally it denotes farming and its allied sectors. So to make this study more comprehensive almost all aspects of agriculture have been studied and analyzed⁴⁹. However, changes in farm technologies, rural skills, crop and livestock productivity and changes in natural resources have been studied and discussed in the following section⁵⁰.

5.6.1 Crop Diversification

Change is a gradual process and it goes through different developmental phases. While the dynamics of change varied region to region and field to field in which change is required. Similarly, the selected village had also experienced changes in farming sector. Their farming was based on rainwater and rainfall was less and erratic in the area. Traditionally, wheat, fodder and some pulses were grown in the village but wheat was their preferred crop for food and feed security concerns. While in kharif season they only cultivated fodder crops for their livestock population. Over the years, village agriculture had gone through many changes and farmers’ preferences had also been changed. They had replaced their conventional crops and started cultivation of some cash crops like groundnut and vegetables. Among the new crops groundnuts was very prominent and it was widely adopted by the farmers. Presently, groundnut is grown in about 70% areas. The intervention of new crops had economically benefited the farming communities and diversified

⁴⁹ Rostow in his theory of change has identified five stages of economic development. According to him, third stage in development process is important because it brings a drastic increase in the rate of investment and method of production. It is just like people of Chinji who have invested in agriculture and changed their method of production.

⁵⁰ Harris 1997; stated that to understand any culture, first it is important to understand local production systems. His point of view was also accepted and validated by Marx by explaining that production system has basic role in social evolution, influencing the sociological and ideological level of the society (Megee and Wams 2000)

the farming activities. The information related to crop diversification and resultant alterations in area allocation trend is presented in Table-38.

It is evident from the data that crop diversification has changed farmers' area allocation patterns. The change in area allocation trend is reported in both *Rabi* and *Kharif* cropping seasons. Among the Rabi crops, majority of the farmers had reported reduction in gram area by 50% --- mainly due to diseases attack on gram. The cultivation of other traditional crops like oats and barley has also reduced. Whereas in Rabi season, wheat crop was expanded over the years. The main underlying reason was feeding requirements of human and animal population of the area. Overall, an estimated increase in wheat area was about 30 percent.

Table 38. Changed cropping pattern and area allocation trends (% Area)

Changes in Kharif Season Crops		Changes in Rabi Season Crops	
1980	2010	1980	2010
Sorghum (5%)	Sorghum (5 %)	Wheat (40%)	Wheat (70 %)
Millets (5%)	Millets (5 %)	Oats (10 %)	Oats (5 %)
Mungbean (5%)	0.00	Barly (5 %)	0.00
Mothbean (5%)	0.00	Gram (10 %)	Gram (5 %)
Groundnut (10%)	Groundnut (70%)	Mustard (5 %)	Mustard (5 %)
Maize 1%	Maize (5%)		
0.00	Fodder (Sadabahar 5%)		
Fallow Land (69%)	Fallow Land (10%)	Fallow Land (30 %)	Fallow Land (15 %)

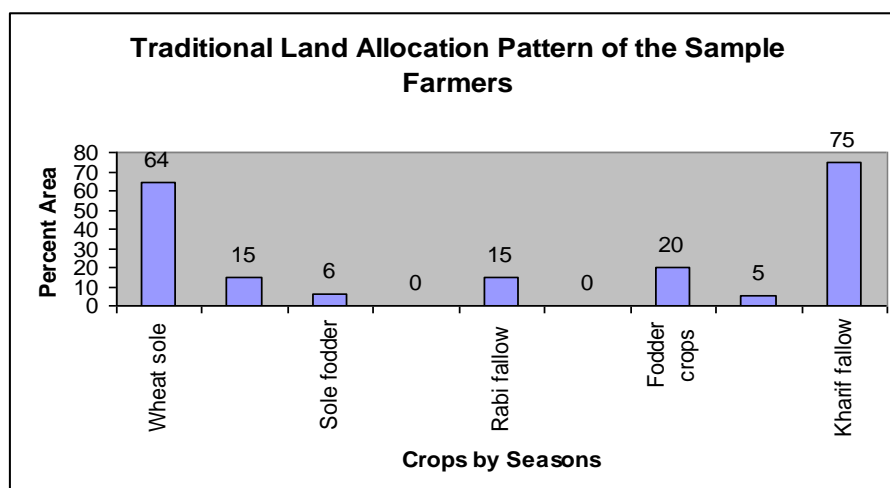
Source: Field Data

Similarly, changes in Kharif season area allocation trend was also reported by the respondents. The main reason of change in kharif area was the introduction of groundnut crop. This intervention of ground was well accepted and now almost all households allocated major share of their land to groundnut crop. The average reported area captured by groundnut crops was around 70 percent. This shift in area

has significantly increased farmers income and employment opportunities in the village.

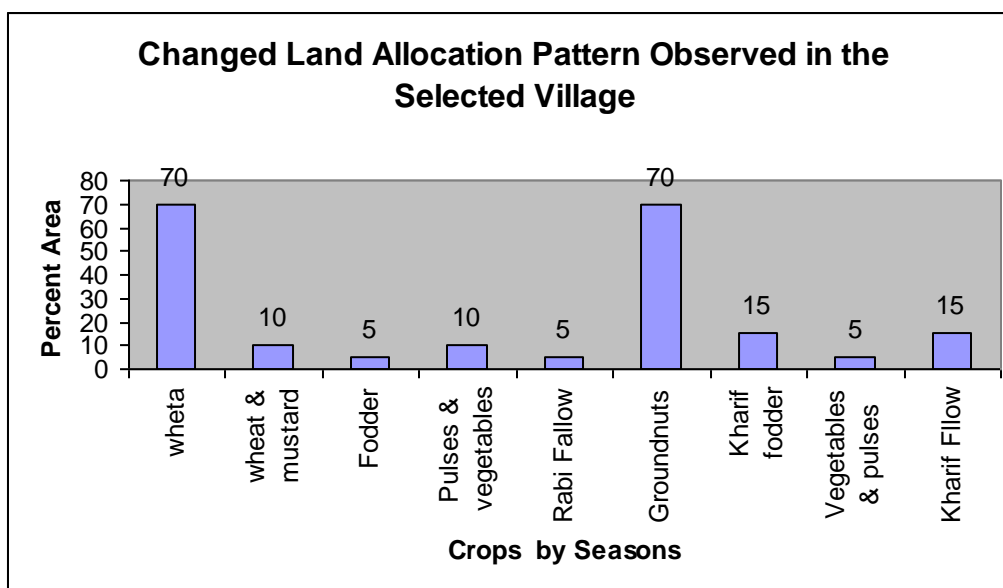
Traditionally, farmers cultivated land for their own sustenance and observed mono cropping system. Regarding the benefits of new crops 90% respondents were of the view that economic benefits of groundnut crop has attracted the farmers to bring fallow land under cultivation. The adjustment of groundnut in their cropping system has also increased cropping intensity and income level of the people. The estimated gross benefit from groundnut crop was Rs.34,000 per acre. This was quite healthy increase in their income and in view of the farmers; this increase in income had improved their socioeconomic conditions and social status in the village. The empirical results related to traditional and changed land allocation patterns are reflected in figures 27 and 28.

Figure 27. Pattern of the Sample Farmers



Source: Field Data

Figure 28. Land Allocation Pattern



Source: Field Data

5.6.2 Overtime Change in Cropping Intensity

Cropping intensity is an important parameter used to measure overtime improvements in agriculture sector. The term cropping intensity can be defined as a ratio between the area under crops and the area operated by the farmers. It is reported in percentage form (Iqbal, 1989; Shah, 2002). Many factors like soil type, soil moisture, improved technologies, financial and physical resources of the people influenced the cropping intensity⁵¹. In relation to this, government and non-government organizations have tried to improve their natural and financial resources of the local communities. The information related to cropping intensity was collected and analyzed on the basis of rainfed and irrigated farming systems. The empirical results clearly indicated a significant change in both irrigated and rainfed farming systems of the village. In the rainfed farming system, the estimated increase in Rabi cropping intensity was about 15.36 percentage points. Similarly, increase in Kharif seasons cropping intensity was about 87.16 percent and it was due to induction of groundnut crop in farming. Describing the positive impact of increased cropping intensity, Mr. Ahmad a lower middle class farmer told, “ I have

⁵¹ Iqbal and Khan (1991) described quite similar factors that affected the cropping intensity in any area.

23 kanals of land and my all agricultural land is rainfed. The major share (18 kanals) of my land is situated near to village and rest 5 kanals are away from the village. Before introduction of cash crops, we only cultivated wheat and some fodders for our family subsistence. At that time my family was under serious financial crises and we were thinking some off-farm activities. During that period my uncle visited our family and he suggested us to cultivate groundnut in the kharif season and made our farming more intensive. First time he provided us groundnut seed and in the upcoming kharif season we planted it on our farm. Luckily this year situation of rainfall was also good and we received good crop and additional farm income in that year. In the subsequent year we have intensified our agricultural land and planted groundnut on about 14 kanals. That year we again cultivated good crop yield and economic benefits from groundnut crop. With this intervention our family was happy and then we also included some pulses crops in our farming system. Overall, crop intensification improved our livelihood and had great impact on our daily life”.

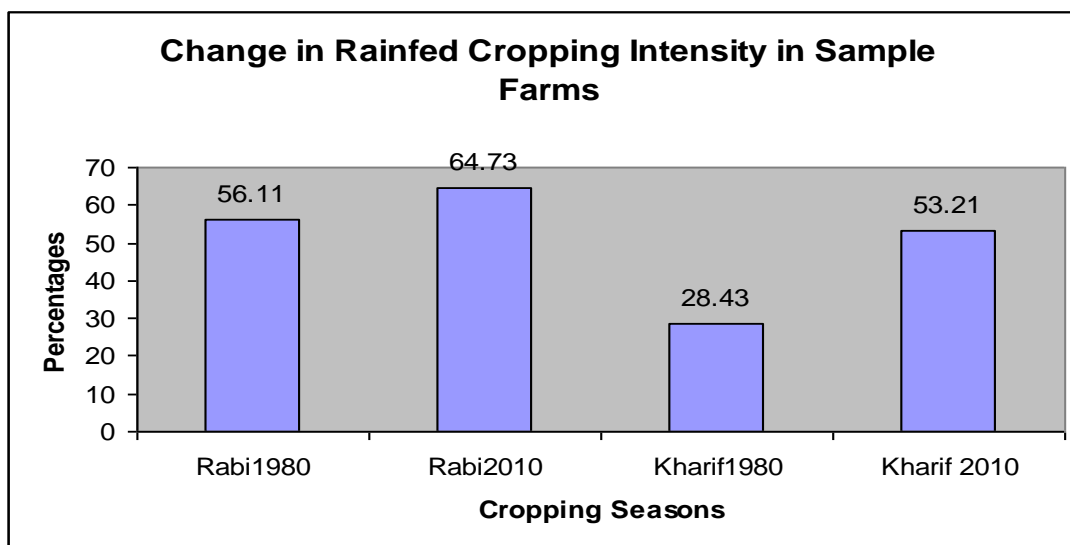
The development of water resources like wells, dug-wells and small dams have made it possible for the farmers to cultivate horticultural and other cash crops in the village. This irrigation facility was only available to limited farmers and most of them belonged to rich families. The analysis showed that due to development of irrigation facility Rabi season cropping intensity was increased by 23.32 percent. The availability of irrigation facility has also increased Kharif season cropping intensity and that increase was about 17.61 percent. Overall, results indicated that during the last 30 years government and non-government organizations have developed different irrigation sources for agriculture purposes in the village⁵². Among the respondents, majority of them (73%) had pointed out a significant increase in their farm and household income. Their social life⁵³ was also improved

⁵² The results are quite similar to Bhutta (1999) and Supple (1985). Both of them were in view that the change in cropping intensity was due to change in cropping patterns and agronomic practices;

⁵³ Alvi (1972) and Egler (1960) pointed out that economic anthropology is linked with farming, off-farm employment, education, political practices and social value system.

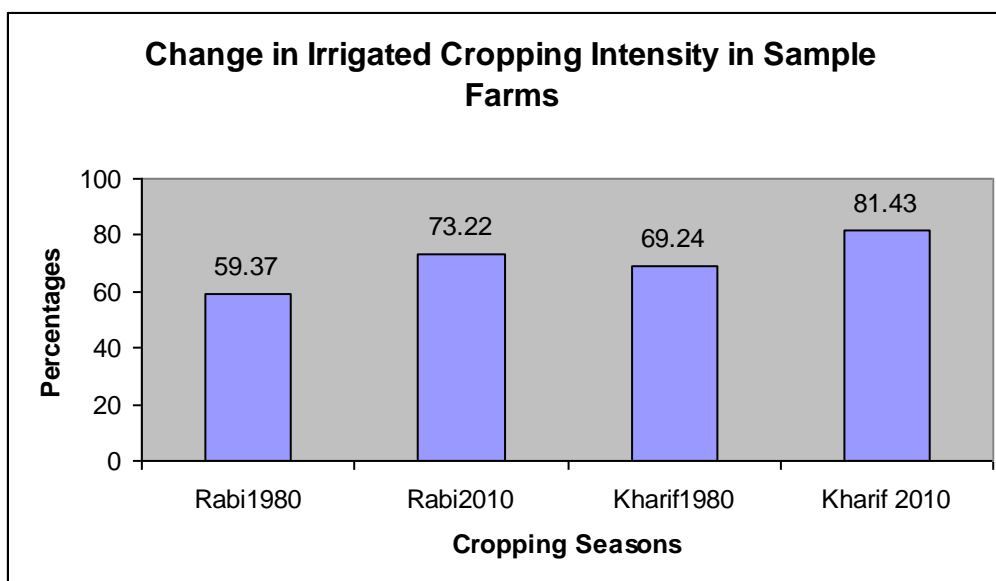
considerably. The nutrition of children improved and they also enrolled their children in the educational institutions.

Figure 29. Cropping Intensity in Sample Farms



Source: Field Data

Figure 30. Irrigated Cropping Intensity in Sample Farms



Source: Field Data

5.6.3 Improvement in Farm Traction Power and Irrigation Sources

In the rainfed farming system, timely performance of tillage operations and moisture conservation is necessary to have a good crop yield. And for that

agriculture mechanization is extremely important⁵⁴. Since last 3 decades, use of agricultural machinery was relatively increased in the village. Among the mechanical implements tractors were the most adopted one. More than 90% farmers replaced bullock's cultivation with the tractors. Their land preparation activities were much better than the previous years. The intervention of tractor improved their farming activities and now they were able to preserve soil moisture and rainwater for longer period. It provided them an opportunity to grow more crops in the village.

Traditionally, people used bullocks and camels for cultivation and "*pora*" technique for sowing purposes. The use of tractor was mainly started in late 1970's and at that time roughly 8 percent farmers used tractors for land preparation purpose. Initially, the people having enough financial resources have purchased tractors in the village⁵⁵ and most of them used these tractors at their own farms; not renting out tractor services to the fellow farmers. Actually, it was a matter of social respect and dignity, therefore, they hesitated to provide tractor on rental basis. They only facilitated their relatives and close friends by providing their equipment and machinery free of cost. However, with the passage of time trend was changed and rental services of farm machinery started in the village. The availability of tractors on rental basis had significant contribution in popularizing the mechanization at farm level. The empirical evidences clearly indicated that presently majority of the sample farmer (93.38%) used tractors for land preparation and to perform other farm related activities. The information related to tractor ownership showed that only 26.47% farmers had their own tractors and rest 73.53% had used its rental services for land preparation purposes.

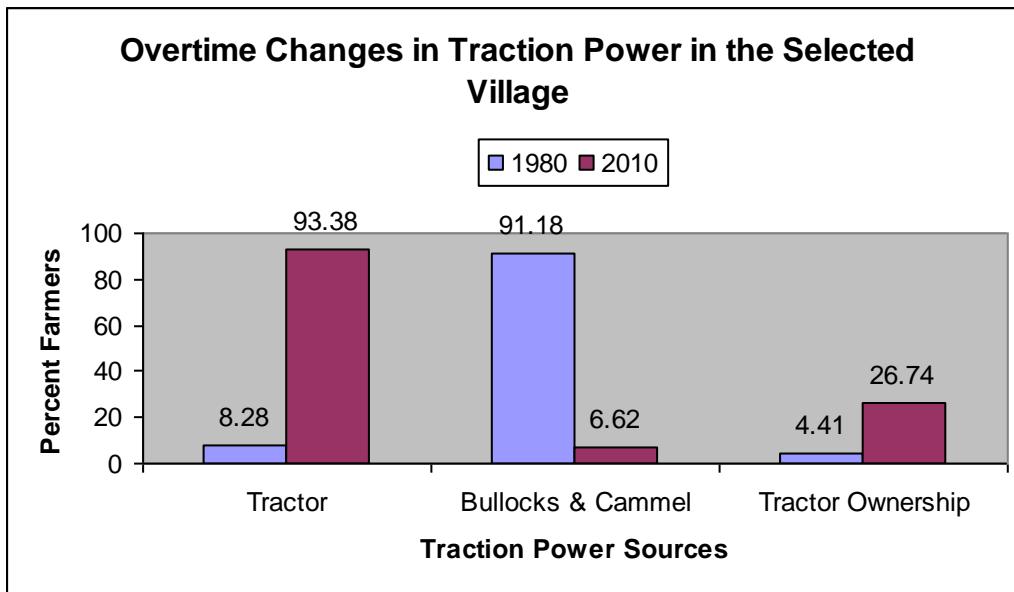
The use of tractors has also generated employment opportunities in small scale enterprises of the village. The members of non-farming families started to learn repair and maintenance of tractors and farm implements. These new skills have

⁵⁴ Dube (1967), techno-economic changes necessarily induce some changes in the socio-political order

⁵⁵ Kibe 2007 highlighted that economic anthropology is linked with human behavior that direct individuals to the economic choices. The large farmers always try to use improved means of production because of their economic position.

generated demand for skilled labor in and around the selected village. During field work researcher has personally observed 05 auto-workshops in the village and about 15 to 20 skilled persons were working in these workshops. They were providing repair and maintenance services to the local community as well as to neighboring villages. Moreover, use of tractors and trolleys had also improved their means of communication in the village. A respondent belonging to the non-farming family highlighted the benefits of mechanization. He stated, “I had 3 sons; all were uneducated due to poor financial conditions. We all worked as farm laborers and even then it was difficult for us to meet basic needs of our family. As we had no other option at that time, therefore we were forced to do this cheap labor work. Moreover, during 1980’s mechanization displaced us from the farms and at that time our livelihood was under serious threats. So to tackle this bad situation I sent my elder son to the nearest town for any labor work. He started work on an auto-workshop and within 2 years he learned mechanical skills. And that was the time when we decided to set up a small auto-workshop in the village. As our village is a big village and people of some neighboring villages are also visit here to purchase their household and farm items. Therefore in this context location of our village to set up a new business was very favorable. So after getting some loan from the friends I established an auto-workshop for the repair and maintenance of tractors and allied farm machinery. Due to the first ever workshop and good skills of my son our business was progressed very quickly and presently all our male family members are engaged in workshop business. Now our life is happy and our children’s are getting educations which we never thought about as a farm laborers. So farm mechanization on one hand disturbed our livelihood seriously and on the other hand provided us an opportunity to improve our socioeconomic conditions”.

Figure 31. Overtime Changes in Traction Power



Source: Field Data

5.6.4 Availability of Irrigation Facilities

Rainfed agriculture was predominant in the village. Almost all farmers conserve rainwater for cultivation purposes. For this purpose land preparation was started during the preceding season. In the dry areas farmer tried to cultivate their fields early to destroy weeds and conserve moisture for the longer period. Generally, farmers plough their fallow land every month until the starting of monsoon period (Jully-August). After monsoon rains farmers performed planking activity to conserve moisture for the upcoming crops. A large majority of the farmers (87%) perceived this practice as important to get good crop yield and to avoid crop failure.

Realizing importance of the water for agriculture, local leaders and members of self help organizations have contacted with the relevant institution for the development of irrigation facilities in the village⁵⁶. After their continuous persuasion,

⁵⁶ Ferdinand Tonnies (1887) stated that mostly changes originate from the communities like *Gemeinschaft* that thrive on tradition and distrust innovation to societies where change in agriculture has taken place due to knowledge producing and distributing centres that encourage credit facilities, plant and animal stock breeding, etc.

departments and organizations (ABAD, Small Dam Organization & NRSP) have accepted their demands and developed small scale water reservoirs, wells and tube wells in the village.

Some organizations have also provided financial and technical support to farmers for efficient utilization of newly developed water resources. Availing these opportunities some farmers have established their water resources in the village. In relation to this farmers have highlighted following water resources as new developments in the village

1. Persian Wheels
2. Dug-wells
3. Small Dams.

The information related to historical development of water resources and their extent of usage indicated that in 1980's out of the 136 sample farmers only 13 had irrigation facilities at their farms and the Persian wheel was their main source of irrigation. In 2010 situation of water resources was improved in the village and out of 136 sample farmers 37 utilized irrigation facilities for agricultural purposes. Among these 37 farmers, 27 used dug-wells and the rest 7 and 3 farmers used Persian wheels and small dams' water for agricultural purposes Table-39.

Over the years use of Persian wheel relatively decreased while the trend of dug wells and small dams increased in the village. Although these irrigation facilities were available in the village but extent of their use was very limited. They also pointed out associated problems like recharging of wells, dams, water transportation losses as problematic factors. Overall, the farmers having irrigation facilities were applying two irrigations to wheat crop which is insufficient and below the recommended irrigations for wheat crop. The impact of irrigation facility on crop productivity was obvious and it had increased farm productivity and socioeconomic conditions of the people. Further highlighting the benefits of irrigation facility Mr. Kamal a member of a farming family pointed out "Traditionally we are observing rainfed farming system, which is very much risky and less productive as compared to the irrigated farming system. Before the establishment of irrigation facility we had no option to further intensify our cropping system. Mainly Agency for Barani Area Development and NRSP has provided technical and financial help to establish irrigation facility at our farms. Now we have limited water resources and to some

extent able to produce high value crops like vegetables and some fodders for commercial purposes. Actually, this facility has saved us from the risks of crop failure and economic losses. Due to limited irrigation facility we are now able to provide all basic facilities to our coming generations and their livelihood status is also better than our generation”.

Table 39. Sample Farmers distribution about the use of irrigation sources

Farm Irrigation status (%):	1980 (% Farmers)	2010 (% Farmers)
Persian wheels	9.56 (13)	5.14 (07)
Dugwell	0.00	19.85 (27)
Small Dams	0.00	2.20 (03)
Having no Irrigation Facility	90.44 (123)	72.78 (99)
Total	100.00 (136)	100.00 (136)

Source: Field Data

5.6.5 Improvement in Farm Transportation

Transportation is an essential part of the farming activities. It helped farmers to move their farm produce to the main market. Traditionally people used animal driven transportation means for this purpose. The horses, camels, bullock, donkeys were mainly used as transport means. Among these animals, majority of the farmers (80%) used donkeys and donkey carts to transport their farm produce and inputs, while some large farmers also used automobiles and horses for the marketing of their agricultural produce. However, in 1985 Government of Punjab had started building farm to market road project for the development of agriculture sector. During that period rural roads infrastructure was developed and transport facilities were also improved in the village. Presently, almost all household of the village

utilized improved means of transportation. The farmer's views regarding the effectiveness of farm to market road were also collected and analyzed. Answering to this question farmers stated that provision farm to market road had significantly benefited the local community in terms of transforming the animal driven transportation mean into a motorized system Table-40.

Although means of farm transport changed from animal to mechanically driven motors but keeping of farm animals still continued in the village. Mainly these animals have some social and cultural values and also used for recreational purposes. During the annual festivals, horse dance, donkey cart races were specially organized and local people enjoyed these events. In addition to recreation, animal shows/festivals also provided opportunity to farmers to buy and sell good breed of animals. In view of the respondents, keeping of good breed animals is prestigious and generally high priced animals were kept by the large farmers.

The social and economic impacts of improved farm transport have also been discussed with the people. Overall, almost all of them were happy with this change and told that this change had increased their mobility and opened up new avenues for economic development. The development of rural road network has increased their access to urban based civic facilities such as hospitals, schools colleges and main markets. As compared to the past, presently local people have easy access to town headquarter and the institutions working for their benefits.

Table 40. Sample farmers' views about the change in farm transportation

Mode of transport	1980 (% farmers)	2010 (% farmers)
Bullock cart	3.68 (05)	0.00
Donkey cart	14.71 (20)	22.06 (30)
Donkey without carts	72.06 (98)	41.91 (57)
Tractor Trolley	4.41 (6)	26.47 (36)
Mazda+Suzuki Pickup	5.14 (07)	9.56 (13)
Total	100.00 (136)	100.00 (136)

Source: Field Data

5.6.6 Improvement in the use of Farm Implements

The mechanization had played vital role in improving the farm productivity. The most popular and effective mechanical tools introduced in the last 30 years were tractors, threshers, groundnut cleaning fan and soil cultivation implements. Moreover, use of new farm technologies like fertilizers, pesticides, improved varieties and irrigation management practices has further supported mechanization of the village economy⁵⁷.

⁵⁷ According to Ensminger (1972), Groenveld (1978), Lawania (1992), Rural Development seeks to involve a process of transformation from traditionally oriented rural culture towards an acceptance and reliance on science and technology". Over the years, people of village Chinji have adopted new technologies and knowledge for the improvement of their farming activities. Consequently their production level has significantly increased in the village.

Figure 32. Groundnut threshing fan



Source: Photo by Researcher

Traditionally, farmers used animal driven implements for cultivation purposes and most of these implements were manufactured by the local artisans called "*Lohars*". In the old social set up, there was an informal contract between farming families and local artisans regarding the repair and maintenance of farm implements. According to the social contract, local manufacturer provided technical services to the farming families and in reciprocity farming families were bound to meet their household needs. Actually, it was a kind of barter caring system where both parties were caretaker of each other's interests. Apparently, this arrangement seems beneficial for both parties but actually it was more in favor of the farming families. This reciprocal system was also used as an instrument in maintaining the class structure of the society. Although, farming families used to give some share of their farm produces as rewards of their services but even then they were called as "*Kamees*" (lower castes) in the village. Though *Kamee* system is deep rooted in the society but over the years this system to some extent reduced due to economic pressures on both farming and non-farming families in the village.

In view of the respondents, use of animal driven power was very laborious, time consuming and difficult to operate. Due to these problems local people started using tractors and mechanical farm implements in mid 1970's. Initially, some large farmers have purchased these implements but gradually their use was increased significantly in the village.

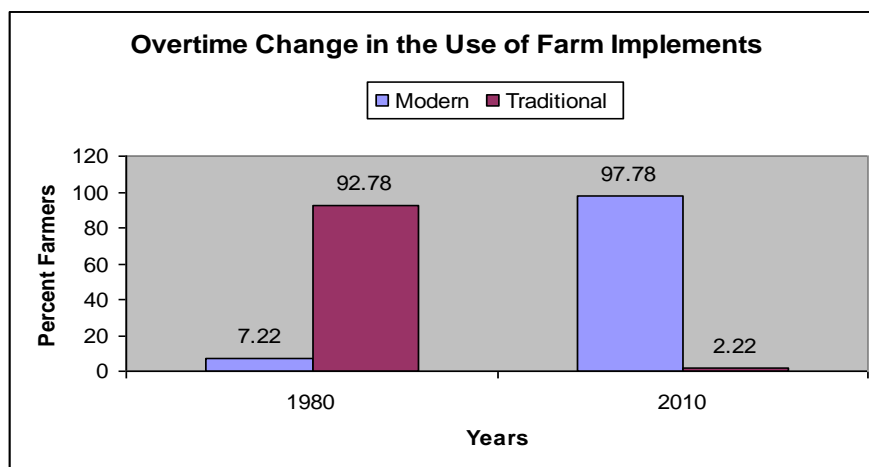
It is evident from the empirical findings that before 1970's almost all farmers used bullocks and donkeys for land preparation purposes. While over the years farmers have changed their traditional cultivation practices and started mechanization of their farming activities. The data regarding the use of farm implements showed that presently 25 percent sample farmers had their own tractors and allied implements that were provided on rental basis to the villagers. The availability of machine implements on rental basis had also promoted mechanization in the village. Almost all farmers were happy with the use of new farm implements and told that this change had saved their time, labor and reduced pre- and post-harvest losses.

Though the use of mechanization has benefited the farming community but at the same time it had made the society more materialistic⁵⁸. The farm mechanization has also affected social norms and values of the society. Traditionally the families having lands have social bindings to provide food and shelter to the land less families. The farming families also helped them at the time of marriage, death, birth and even at Eids. While in reciprocity non-farming families provide services to them at farm and their houses. This was an informal and unwritten agreement between them and since centuries it was in practice. Actually non-farming families worked as laborers and mechanization has reduced labor requirements significantly. Responding to the situation, members of poor families pointed out that the economic pressures have changed farmers' interests in their services and now they are reluctant to help poor households. This situation has badly disturbed the landless, laborers and lower classes of the village. Initially, it was a shock to them but with the passage of time they recovered and searched new livelihood sources. They have learnt new skills, got employment in the cities and some of them have also started their own business. They viewed this transition as beneficial for them. In view of him now they are relatively in a better position as compared to the past. He further told that now they were independent in decision making and even some members belonging to poor families had also been elected as members of the Union

⁵⁸ Chaudhary (1982) described that change in economic status of a household changes farmers economic behavior.

Council. The information related to farm implements and their ownership status is presented in following graph and Table-41.

Figure 33. Overtime Change in the use of Farm Implements



Source: Field Data

Table 41. Status of sample farmers by ownership of farm implements

Farm implements	1980 (% farmers)	2010 (% farmers)
Tractor	3.67 (5)	25.73 (35)
Cultivator	3.67 (5)	25.73 (35)
Disk plough	2.20 (3)	18.38 (25)
Raja hall	0.00	14.70 (20)
Rotavator	0.00	14.70 (20)
Hand sprayer	0.00	7.35 (10)
Thresher	0.00	22.05 (30)
Trolley	0.00	23.52 (32)
Seed drill	1.47 (2)	14.70 (20)
Donkey cart	87.5 (119)	47.79 (65)

Source: Field Data

5.6.7 Improvement in Credit Sources

In the rainfed areas, majority of the people are poor and needed financial help even to perform their agricultural activities. The agricultural credit was mainly needed to purchase the modern farm of inputs (seed, fertilizer, pesticides and weedicides etc.), to hire tractor services for ploughing and drilling purposes. Traditionally farmers met their financial requirements from the informal sources like from the sale of livestock (sheep/goats and young calves), selling groundnut and off-farm employment (himself or his family members like brothers etc.). However, some large farmers met their financial requirements from the sale of surplus farm produce.

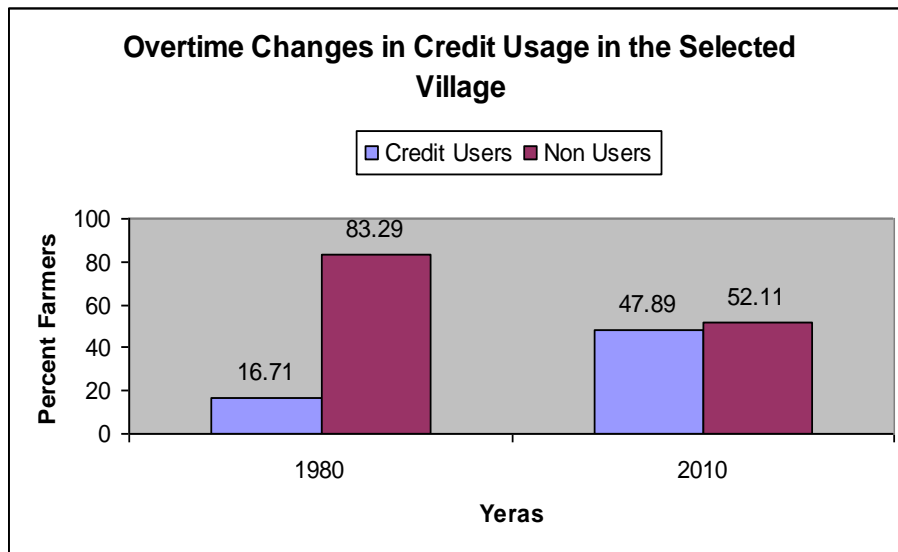
It is clear from the previous studies that rural masses seriously lacked institutional credit facility in Pakistan. The increase in agricultural activities had further aggravated the situation and demand for institutional credit increased⁵⁹. Giving importance to farmers demand government of Pakistan started formal credit facility in the village. The institutions like Agricultural Development Bank (ADBP) now called Zari Taraqati Bank (ZTBL), Microfinance Banks, National Rural Support program (NRSP) and Agency for Barani Area Development (ABAD) had launched various credit schemes to attract the farming communities. Due to the involvement of government and non-governmental institutions trend of credit usage has been expanded in the village. In relation to this there was consensus among the farmers that agricultural loans and micro-credit facilities were effective and increased their farm productivity. In their views micro-credit facility improved overtime and it had improved their bargaining power and saved them from the market exploitations. Usually farmers purchased inputs on credit basis from commission agents and input

⁵⁹ Friedman and Lindbrom (1978); Sonyal (1994) concluded that until and unless six basic elements of development like labor intensive agricultural, institutional credit, minor public works, light industry establishment in and around farms, establishment of local self help org. and participation in decision making process.

dealers. Actually, by providing credit facility they bounded the farmers to sell their produce to them and also charged high interest rates. This informal arrangement was quite exploitative and majority of them were unhappy with this exploitative system. As compared to the past, presently both farming and non-farming families preferred to avail institutional credit.

The comparative analysis of credit users and non users reflected that in 1980's trend of credit usage was only 16 percent but gradually it increased and now 47.89 percent farmers had shown that they were availing loans for agricultural purposes Fig-18. The finding given in the table below reflected that among the credit users, still 56.92% farmers used informal credit sources and rest 43.08% used institutional credit sources. In reply to the question that, why they are not using institutional credit facilities? 72% mentioned about strict repayment schedule, higher interest rate and lengthy procedure of institutional credit as critical factors associated with the utilization of formal credit sources. A respondent belonging to poor class, having 13 kanals of agricultural land explained the importance of informal credit sources and how he himself progressed by utilizing informal credit sources. He told that he was a poor farmers and not able to use recommended level of inputs and technologies at his farm. So under his resources situation, he always received less yields of almost all crops. He said I hardly met the requirements of my family. I was worried about with this situation and wanted to improve my farm productivity but I had no answer to how I could achieve my targets. One day I have discussed this matter with my friend, he had made my contact with team of National Rural Support Program. They have listened my problems and advised me to become member of village Community Organization. After getting membership, they provided me improved seeds and Rs. 20000 for other farm operations. Along with this facility I also worked hard and resultantly in the subsequent year my crop was very good and received good yield. By increasing productivity I had not only returned their loan money but also saved some money for the management next crop. Finally, he told that getting loan from formal sources was difficult and that was the reason he was motivated to get loan from the informal sources i.e. NRSP. Further he thanked his friend and NRSP who guided him and provided credit facility for the purchase of inputs".

Figure 34. Credit Usage in the Selected Village



Source: Field Data

Table 42. Sample farmers distribution by credit sources

Access to credit (%)	1980 (% Farmers)	2010 (% Farmers)
Friends	21.74 (5)	10.77 (7)
Relatives	47.83 (11)	20.00 (13)
Arthies/Input dealers	30.43 (7)	26.15 (17)
Banks	0.00	29.23 (19)
NRSP	0.00	13.85 (9)
Non Credit Users	(113)	(71)
Total	136	136

Source: Field Data

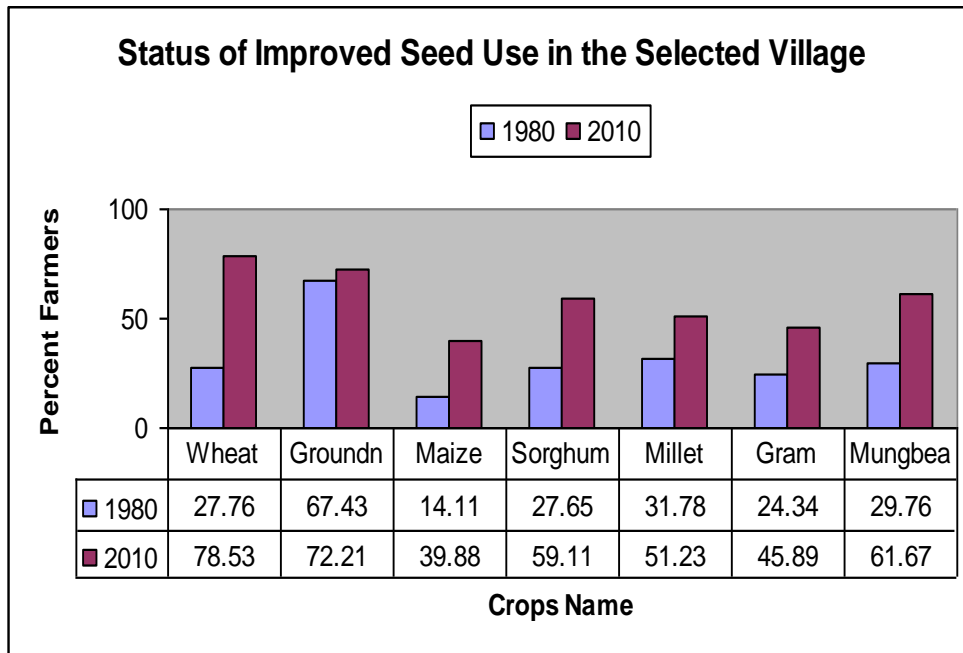
5.6.8 Improved Seed use Trend

In the field of agriculture, use of good quality seed has special significance and considered important to improve farm productivity and profitability. It also saves the farmers from the losses associated with diseases and insect attacks. So keeping in view the importance of seeds the farmers past and presents trends regarding the adoption of improved seeds was assessed and analyzed. In the past two decades, people used to practice mono-cropping system in the village and planted only wheat crop in the rabi seasons. They commonly used indigenous wheat varieties due to its good eating taste preferences and non-availability of improved seeds. In addition to this, local varieties also gave good quality *bhusa* (wheat straws) liked by the livestock. However, increase in population and economic pressures had forced the farmers to replace local seeds with high yielding varieties.

Realizing the needs of farming communities the department of agriculture started working on varietal development of major and minor crops like wheat, maize, sorghum, millet and groundnut etc. After developing high yielding varieties, these were promoted and extensively demonstrated by the relevant institutions. With their continuous efforts, trend of using improved seeds was expanded in the area.

The empirical findings regarding the use of improved seeds indicated that initially some large farmers adopted these seed and then gradually, the demand for improved seed was increased and trend of using indigenous seeds drastically changed. This technological change has increased per acre productivity of all major and minor crops. Although per acre productivity of almost all crops increased but relatively increase in yield of wheat, groundnut and pulses was higher as compared to other crops. Overall this change has significantly benefited the farming communities by improving farming activities.

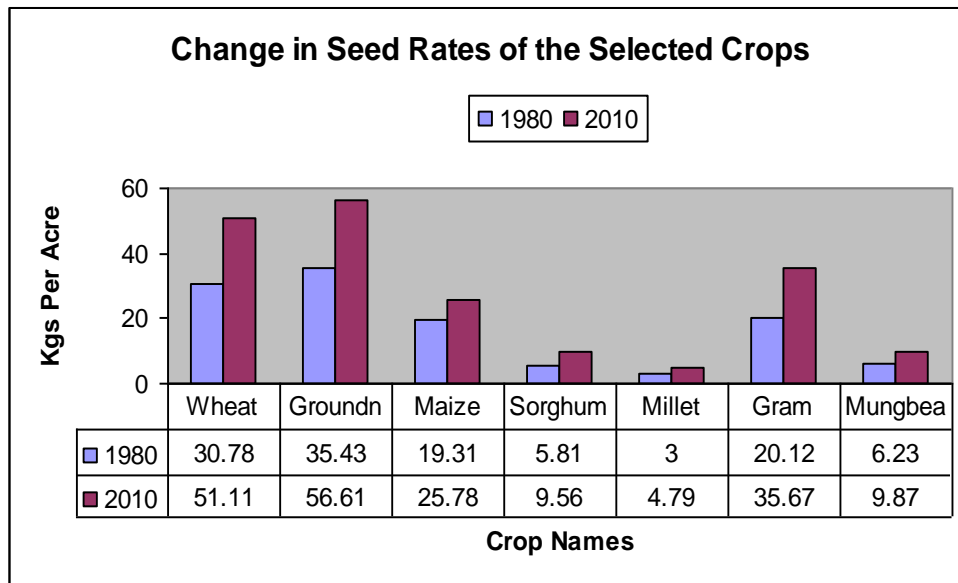
Figure 35. Status of Improved Seed Use



Source: Field Data

In relation to the improved seeds, farmers further pointed out that to have a better crop, use of recommended quantity of seed was also important. But contrary to this majority of the respondents 72% highlighted that they were using less seed rates of almost all crops. Traditionally, respondents used 30 kg seed for wheat and 35 kg per acre for groundnut crop which was quite less than the recommended quantity of seeds. But over the years this trend was changed and presently farmers were applying 51.11 Kg seed of wheat and 56.61 Kgs seed for groundnut crop. Similarly, change in seed rate of minor crops was also reported by the farmers. The conventional seed rate of maize, sorghum, gram, millet and mungbean crops were reported as 19.31, 5.81, 20.12, 3.00 and 6.23 kgs per acre, respectively. However, these trends were changed and now farmers used 25.78, 9.56, 4.79, 35.67 and 9.87 kgs seed of respective crops. This was a quite impressive development because it had improved farm productivity and profitability in the village. The information related to change in seed rate is given in Fig-20 which is reflecting past and present trends of seed rates of major and minor crops grown in the village.

Figure 36. Change in Seed Rates



Source: Field Data

5.6.9 Fertilizer Application Trends

The fragmentation of land is a common problem in the rainfed areas. Land is divided in two or three pieces located at different places, which create many problems regarding crop management. In local dialects the land situated near the village is called “*Lepara*” and lands which are situated at the distance are called “*Mera*” lands⁶⁰. The use of inputs like fertilizers and Farm Yard Manure (FYM) differ significantly on both of these lands. Traditionally, farmers only used FYM in their lepara fields. Generally, it was used for wheat crop because of its non-availability and difficulties in its application in the fields. It is also a laborious and time consuming activity. Both male and female members participated in collection and distribution of farm yard manure (FYM).

The use of chemical fertilizer started in late 1970’s and in the beginning farmers were reluctant to use chemical fertilizers. It was mainly due to the lack of knowledge, resources and awareness about the effectiveness of the chemical fertilizers. In relation to motivate the farmers, some respondents told that initially

⁶⁰ See Supple K.R., Barani Framing System of Punjab: Constraints and opportunities for increasing productivity, PARC . 1985.

Agriculture Department also established fertilizer demonstration plots in their village. Subsequently farmer field days had also been organized to discuss the performance and benefits of fertilizer application. Even in the early years, chemical fertilizers were provided free of cost to the farmers. Ultimately, due to the combined efforts of government institutions, input dealers and progressive farmers use of chemical fertilizers was popularized in the village. Initially chemical fertilizers were partially adopted but after experiencing the benefits of these fertilizers people completely adopted this new intervention.

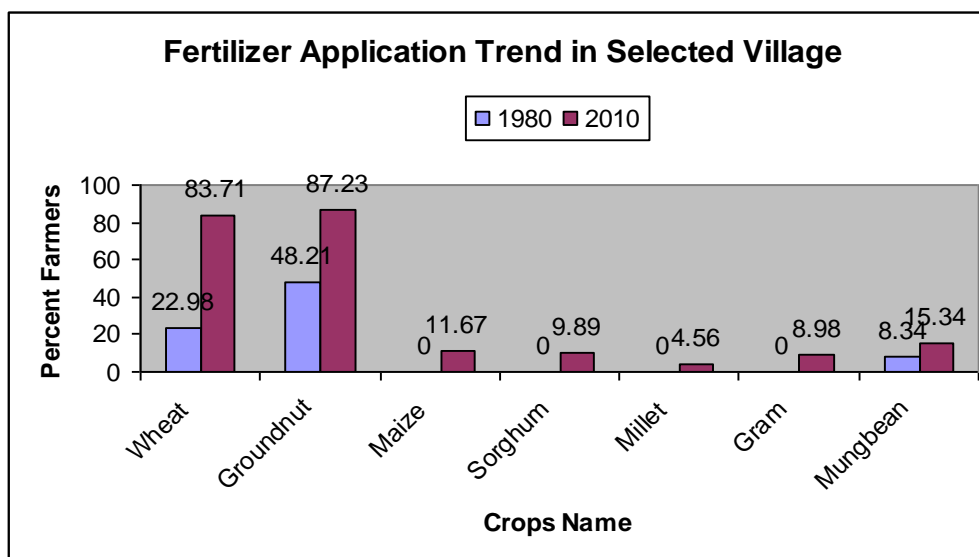
Figure 37. Traditional Fertilizer (FYM)



Source: Photo by Researcher

Over the years, use of chemical fertilizers was much popularized in the area and at present 83.71% farmers applied fertilizers on wheat crop and 87% also used chemical fertilizers in the groundnut field. During the discussion farmers have pointed out that trend of fertilizers has increased manifolds in the recent years. Even some farmers have complained about the shortage of fertilizers especially at the planting times. The overtime changes in fertilizer application trends by crops are given in the graph below:

Figure 38. Fertilizer Application Trend in Selected Village



Source: Field Data

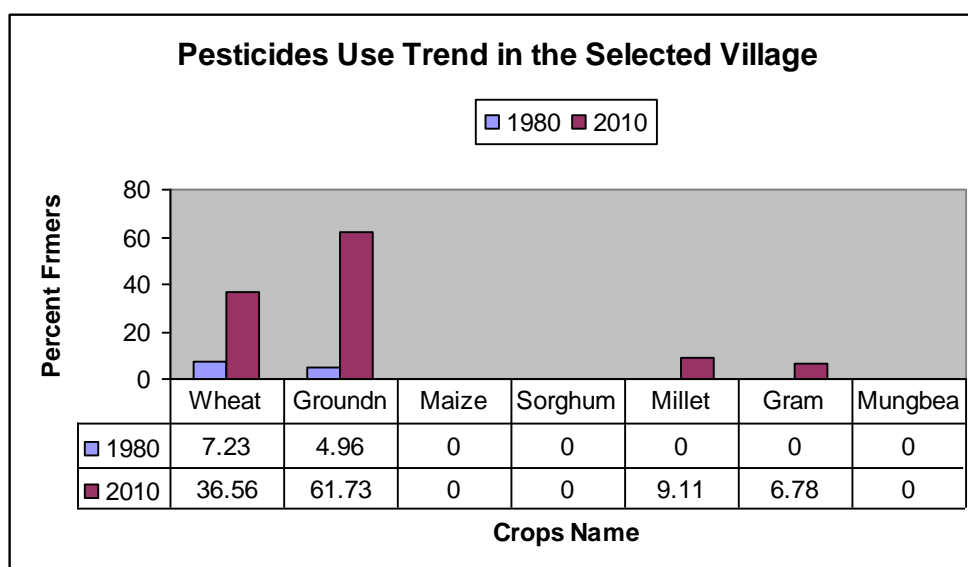
5.6.10 Pesticides Application Trends

In the last two decades, use of pesticides significantly increased in Pakistan. During 1980, the estimated consumption of pesticides in Pakistan was 665 tons and in 1999 its consumption was increased up to 45,680 tons in Pakistan (Khan, 2002). Initially, use of pesticides was started in irrigated areas but gradually their use was expanded in rainfed areas⁶¹. During the field work, the past and present trends of pesticide use were discussed with the farmers. Explaining, the history of pesticide use they told that in 1980's use of pesticide was not common; only some large farmers used pesticides on wheat (7.23%) and groundnut (4.96%) crops. However, in the recent years pesticide use on groundnut crop was increased and at present 61.73% farmers used pesticides in groundnut fields. Similarly, use of weedicides on wheat crop also increased and among the sample farmers --- 36.56% used weedicides to eradicate weeds from the wheat fields. The crops like gram, millet and vegetables also have some commercial value. Therefore, a few of the farmers used pesticides on these crops. The irrational use of pesticides was common in the village. It was mainly due to lack of knowledge and awareness about the pesticides usage. The excessive use

⁶¹ Poswal and Williamson (1998) & Ahmad and Poswal (2000) were in view that increase in pesticide consumption has not led necessarily to increase the yield of crops.

of pesticide also created health and environmental problems for the farmers⁶². In view of above discussion, it is necessary for the concerned institutions and non-governmental organizations to sensitize the local community members about the rational use of pesticides. The graph given below clearly indicates the pesticides application trend in the village under study:

Figure 39. Pesticides Use Trend



Source: Field Data

5.6.11 Productivity Trends of Major Crops

The focus of almost all rural development programs was to improve rural economy and socio-economic conditions of the rural masses by increasing crop and livestock productivity. Therefore, to achieve this objective most of the organizations had used agriculture as main tool for rural development. Similarly in the village *Chinji*, governmental and non-governmental organizations had introduced various agricultural development interventions. Among the given interventions, improved seed, farm mechanization, rehabilitation of agricultural land, use of chemical fertilizers, development of irrigation facilities and new knowledge about production

⁶² Khan (2002) explained that chemical control by pesticides increased the pest problem, also disturbed the agro-ecosystem and killed the environment friendly organisms such as parasitoids, predators and birds.

and marketing of agricultural commodities was common that had increased per acre yield of major and minor crops.

Discussing the over time improvements in farm productivity an aged member of the village pointed out that “In our village almost all the households cultivated wheat crop as staple food. Its by product *bhusa* (wheat straws) was used to feed animals. He said that in the past we used our indigenous varieties of wheat which were low yielding. Explaining their varietal preferences, he told that even having less yields we preferred our traditional varieties due to better chapatti taste and higher quantity of *bhusa*. But over the years our population increased and that this phenomenon changed our preferences. Then we have decided to contact with agriculture officer for consultation and guidance.

During the consultation process they advised us to cultivate improved varieties of wheat to meet the requirements of human and animal population of the village. At that time we have first planted Pak-81 wheat variety in our village. This new variety performed very well and it gave good yield. The yield of our indigenous varieties was about 11 monds per acre but the estimated yield of Pak-81 variety was about 17 monds per acre. Overall, this was a quite reasonable jump in wheat yield and this increase in yield motivated the local people to use improved seeds and now we change our seed almost after 5 years”.

Wheat was commonly grown crop and used as staple food in the village. There was considerable variation in grain yield due to land type and erratic rainfall in the area. The reported wheat yield during 1980 was about 12 monds per acre which was much less than the potential yield. So with the passage of time, this yield gap was seriously realized by farmers and agriculture department. Therefore, at that time agriculture department had introduced and disseminated high yielding wheat varieties in the area and farmers were motivated to adopt new cultivars and planting techniques. As a result of these efforts, wheat yield was significantly increased in the village. The estimated per acre increase in wheat yield was 108 percent approximately.

The groundnut crop was cultivated as a cash crop. It was mainly grown in Kharif season and generally farmers devoted maximum of their land for this crop. Being a

commercial crop, farmers paid special attention and tried to use best management practices to have a good crop yield. Its per acre yield was also varied due to climatic factors. In the initial years of its introduction, groundnut yield was between 8-10 mounds per acre but gradually high yielding varieties, better management and technical knowledge had improved groundnut yield in the village. Presently, on an average farmers are getting 17 mounds per acre which was higher than the previous yield level of the area. The introduction and productivity of groundnut considerably improved farmers livelihood sources because before this crop subsistence farming was commonly observed in the village and there was no cash crop. Generally farmers were poor and had serious financial constraints.

Maize is another important traditional crop of the village. Generally, it was cultivated for dual purpose; maize grains are used as staple food and its dry stalks are as fodder to feed the livestock. A few farmers having enough land and maize quantity also used maize as cash crop and sold it to the fellow farmers. It was reported by the farmer that over the years, area, production and yields of maize crop was slightly increased in the village. The improvement in maize crop productivity was mainly due to high yielding seeds, change in tillage and moisture conservation practices. Comparing the past and present situation of maize productivity, most of the respondents told that under conventional production methods their average maize yield was 7 mounds per acre, but gradually maize yield was increased to the level of 16 mounds per acre. As a whole, this increase was very impressive and helped farmers in resolving their food security issues.

Gram was considered as minor crop but commonly grown in the village. Almost all farmers allocated some area to this crop. Conventionally, gram was used for the consumption of both human and animal population of the village. Most of the households feed gram to energize their small animals and also to increase milk productivity. Gram was mainly cultivated on *mera* lands (piece of land away from the village) and its reported average yield was 7 mounds per acre as indicated in the Table-43. The subsequent increase (67%) in gram yield was very encouraging. The prices and demand of gram had increasing trend which was very encouraging for the promotion of this crop.

Table 43. Overtime changes in the productivity of major crops

Crops	1980	2010	% Change
Wheat			
Avg. Yield (Mds/acre)	12.00	25.00	108
Groundnut			
Av. Yield (Mds/acre)	8.00	19.00	137
Maize			
Av. Yield (Mds/acre)	7.00	16.00	128
Gram			
Av. Yield (Mds/acre)	9.00	15.00	67

Source: Field Data

5.6.12 Minor Crops Productivity Trends

In the rainfed farming system, minor crops have special significance and are considered essential to meet the food, fiber and fodder requirements of the human and animal population. Generally, minor crops are cultivated on marginal lands and are not given due attention by the farmers. The main reason behind their negligence was the relative importance of these crops in the household economy. Discussing the overtime trends of minor crops, farmers have reported various changes in terms of area, production and yields of these crops. Adding further about the changes, they told that changes in farmer preferences need for crop diversification and economic pressures had actually motivated the farmers to intensify their farming businesses. The identification and explanation of past and present status of minor crops is important to review the farm economy of the village. Hence, information regarding overtime productivity trends of minor crops was compiled and discussed in the following section.

Sorghum was an important fodder crop and used by both farming and non-farming households for their livestock population. Usually, farmer allocates area to sorghum on the basis of their animal population. The farmers having more animals allocated

more area to sorghum crop and some farmers also cultivate sorghum for commercial purposes. The non-farming families usually purchased sorghum as fodder from these people. Mostly farmers preserved sorghum dry stalks to be used during the fodder scarcity months. The overtime data on sorghum productivity is presented in Table-44 which shows an increasing trend in sorghum yield. The reported average conventional and increased yields of sorghum were 6 and 10 monds per acre. This improvement show 67% increase in sorghum per acre yield. Appreciating increase in sorghum yield, farmers were optimistic that sorghum yield could be further improved by adopting improved crop management practices.

Normally, farmers intercropped millet with sorghum and used it as fodder purposes. In the traditional dietary pattern, local people used millet flour for their own consumption. But over the years' the trend of using millet flour was reduced and it was replaced with wheat flour. During the survey, a significant improvement in millet productivity was reported by the farmers but even then it was not popularized and the area under this crop was reduced over the years. Comparing the past and present yield trends farmers reported that during 1980's average production of millet was 5 monds per acre, whereas in the present years average yield of millet was reported 8 monds per acre. Overall, this analysis shows 60% increase in yield over the last 30 years. Actually, millet was planted in the *mera* lands and farmers did not use any kind of inputs on it. Therefore, as compared to other minor crops increase millet productivity was relatively less.

The mungbean was generally grown for domestic consumption in the village. Therefore, people generally allocated less productive lands for the cultivation mungbean crop. Its straw is used for the consumption of small ruminants (sheep & Goats). During the field work, it was noted that farmers were much selective in varietal selection and most of them preferred drought resistant cultivars for their fields. Over the years, majority of the farmers have replaced their indigenous varieties with high yielding ones. The empirical results clearly indicated overtime increase in mungbean productivity in the village. The average mungbean yield during 1980 was 3 monds per acre and presently it was improved considerably and gone up to 6 monds per acre. The estimated increase in mungbean yield was 100% as compared to the previous year's and this is a very positive change in terms of

improvement in farm economy. Discussing the overtime changes in mungbean productivity, some progressive farmers indicated that it could be further improved by adopting complete technological package associated with new varieties.

In local dialect, Brassica was called *Taramera*. It was mainly cultivated for both human and animal consumption. Overtime this crop reduced its importance and consumption in the village. Consequently, area and production of this crop also decreased in the village. However, yield of this crop has increased from 3 to 5 monds per acre during 1980 to 2010. Over, all it showed 67% increase in *Taramera* yield which was also encouraging for the farmers. Moreover, farmers had also pointed out that as an oilseed crop, it had potential to be promoted as commercial crop in the village as well as in the region. The respondents also viewed their ecological environment as more conducive for *Taramera* crop because in the harsh climatic conditions sustainability of other crops is difficult. However, for the promotion of this crop, majority of the respondents suggested value addition and establishment of market outlets as important steps.

Table 44. Overtime changes in the productivity of minor crops

Crops	1980	2010	% Change
Sorghum			
Av. Yield (Mds/acre)	6.00	10.00	67
Millit			
Av. Yield (Mds/acre)	5.00	8.00	60
Mungbean			
Av. Yield (Mds/acre)	3.00	6.00	100
Taramera (Brasica)			
Av. Yield (Mds/acre)	3.00	5.00	67

Source: Field Data

5.7 Livestock Productivity Trends

The livestock is an integral component of rainfed farming system. It has significant contribution in farm and household economies. It provides essential food items like milk, meat, eggs and also used for farm transportation purposes. Over the last 30 years, different species and breeds of animals have been introduced in the area. Among the new breeds, some were adjusted in the harsh environment of the area and benefiting the local communities. In relation to this, farmer intentions regarding the selection of animal type and species were discussed with the respondents. Explaining their animal criterion, they pointed out ability of animals to adapt in the harsh climatic and topographic conditions was used as yard stick. The most common animals raised in the area were goat, sheep, cows, buffalos and donkeys.

In the village *Chinji*, almost every household kept 2 to 3 small and large animals. The farmers having big land holding preferred to keep large animals (buffalo and cows) and among the large animals, they preferred cow because of its easy handling and less consumption of food as compared to buffalos. Whereas, the farmers having less financial and natural resources liked to keep sheep and goats.

Figure 40. Traditional livestock production system



Source: Photo by Researcher

During the discussion there was a consensus among the participants that over the last 30 years, livestock species and composition was changed in the village. The estimated change in small animals was about 85 percent and these animals were

mainly replaced with buffalos and cows. However, among the cartels farmers preferred to have cows as compared to the buffalos. The data related to change in livestock numbers shows that during 1980 only 3 to 4 buffaloes were available in the village but gradually strength of buffaloes increased up 400 percent. While reported change in cow was about 50 percent. The animals used for farm transportation (donkey and horses) purposes had also lost their strength in the village and farmers started use of tractors for both farming and non-farming activities.

Similarly, sheep population in the village was drastically reduced by 65%, while goats population was increased about 71 percent. The change in small ruminant's composition has many reasons but in view of the farmers, grazing habit of sheep and taste preferences of goat meat had contributed in changing the small ruminant composition in the village. The farmer reported change in the livestock composition is reflected in Table-45. The farmer responses regarding overtime changes in livestock composition were quite similar to census reports⁶³. It also indicated an increasing trend of goat population in the respective district and tehsil. This change has also some links with grazing habits of sheep and goat. The sheep grazed on the land; eat grasses and other shrubs available on the surface of soil. Whereas the area is rainfed and growth of shrubs and grasses are mainly dependent on rainfall. In the low rainfall situation it was difficult for the farmers to graze and maintain their sheep population. Whereas, eating habits of goat are different from the sheep. Goat collects feed stuff from surface of soil, grazed bushes, crop residues and tree leaves. It shows that sheep are selective in their feed but goats eating habits are diverse. Therefore, keeping in view the varied climatic conditions, vegetation and eating habits of sheep, farmers preferred to have goat as compared to the sheep.

⁶³ Punjab Development Statistics, 2000, Bureau of Statistics Government of Punjab; Livestock Census Survey 2006, Government of Pakistan, Statistic Division, Agric. Census Organization, Lahore, Pakistan.

Table 45. Perceptions about the change in livestock population

Livestock Species	1980 (%Population)	2010 (%Population)	%Change
Buffaloes	3.67 (5)	18.38 (25)	400.00
Cows	29.41 (40)	44.11 (60)	50.00
Sheep	44.11 (60)	15.44 (21)	- 65.00
Goat	52.20 (71)	89.70 (122)	71.83
Draft animals	93.38 (127)	13.97 (19)	- 85.04
Horses	20.58 (28)	8.08 (11)	- 60.71
Donkey	75.73 (103)	63.97 (87)	- 15.53

Source: Field Data

Table 46. Overtime changes in livestock composition

Livestock species	1996	2000	Percent change
Cattle	183	131	-28.41
Buffaloes	153	120	-21.57
Sheep	125	100	-20.00
Goat	378	449	18.78

Source: Punjab Development Statistics, 2000

It was quite clear from the discussions that in the village animals were maintained by grazing, cultivated fodders, crop residues and under special situations on some concentrates. Whereas, sheep and goats population entirely survive on grazing, crop residues and tree-leaves, most commonly the leaves of *bair* tree (*Zizyphus*). The rangelands, uncultivated waste lands and cultivated fallow lands were used as main grazing areas. The grazing was free of cost and had no restriction to graze on private lands while, the forest lands were restricted and without getting licenses from the Forest Department, grazing was prohibited. The Forest Department charges Rs.50

per animal per season as grazing fees. Their timing of grazing was varied by seasons; in summer people take out their animals early in the morning and brought back in the evening. While in winter grazing activity was performed 4 to 5 hours daily.

During the field work it was observed that livestock housing was not conducive and most commonly animals were kept in open areas. In summer, thorny bushes had been used to prevent the flock from getting out and to protect from wild animals. While in winter, animals were kept in *katcha* rooms without proper sanitation and sewerage system. The breeding of small ruminants was unorganized and free of cost. It was customary to allow bucks in flock all the time resulting in kidding almost around the year. The animal fattening was relatively a new phenomenon in the village⁶⁴. It was started purely as a commercial activity therefore, its scale in the village quite limited.

Furthermore, some farmers have also pointed out cultural and social aspects of livestock in the village. Socially, the family having large herd size holds respect in the society because livestock is used as social collateral. The person having large number of animals had the ability to help landless families of the village and by tradition, these rich families are supposed to provide milk and milk products free of cost to the needy/poor families. Traditionally the use of *Lassi*⁶⁵ (bi-product of yogurt while making *desi ghee*) was very common in the village, almost every farming household prepared this drink that was used in the breakfast and even at the lunch time. The families having no animals got *Lassi* free of cost from the livestock holding families. Socially and culturally, it was a set practice through which poor families fulfill their nutritional requirements. But over the years, this tradition had been partially changed and now farmers have started selling the milk, therefore, trend of sharing *Lassi* with poor families is considerably diminished. In addition to this, livestock has also some cultural and recreational values in the village. The competition of milking animals, bullock and donkey races were

⁶⁴ Victor Stoltzfus, Amish Agriculture, Adaptive strategies for economic survival of Community Life. Rural Sociology, Volume 38, No 2, Kansas, Allen Press, 1973, pp. 196-206

⁶⁵ Lasi; it is a blend of water and yogurt, this drink is commonly used in rural areas

important supports of cultural events like seasonal *melas* (festivals). These events provided recreational facilities to the local people and for this purpose they spent lot of money on the management of sports animals. These festivals also generated economic opportunities in the village. In the rainfed farming system, farmers keep both small and large animals. The main objectives of keeping animals were to meet the basic food requirements. While the large animals were also used as traction power but with mechanization trend of keeping animal was changed in the village. Presently, most of the farmers were rearing livestock for commercial purposes. The empirical results indicated that among the sample respondents 48.52% have animals only for income purpose. Moreover, due to increase in human population, demand for milk and meat has also increased overtime. Therefore, to meet this demand government has promoted livestock activities and also initiated various livestock development projects in the country. These development initiatives have improved livestock productivity and motivated the farming community to invest in livestock farming.

Culturally the sale of milk and milk products were not common in the village. Only few families were engaged in the milk business. The milk and byproducts of milk (Ghee, Yogurt and Lassi) were shared with friends, relatives, neighbors, poor and landless families. But over the years farmers intentions regarding the production of animals was changed and they have adopted livestock as an enterprise. The sale and purchase of livestock and livestock products increased during the last 30 years.

The comparative analysis of having animals indicated that in the past 15% farmers of the village kept animals to avoid from uncertain situations but overtime this trend was changed and now 34.52% respondents reported that they kept animals just to avoid risks of crop failure. Traditionally, animal dung was used as farm yard manure but with the introduction of chemical fertilizers this trend was reduced in the area. But still 6 percent respondent used farm yard manure in their fields.

It was observed that increased economic pressures changed local customs, norms, values and even thinking patterns of the people. Traditionally, people were reluctant to sell and purchase the milk and its products. They felt their responsibility to look after the poor and landless families of the village. But over the years, their intentions

and attitudes were changed. Describing this change a 55 years old respondent belonging to lower middle class stated, “my grandfather was a respectable man and he had 97 kanals of agricultural land. My father and his 4 brothers were living in a joint family. All my uncles were married and our family was consisting of 24 members. Primarily, our main source of income was agriculture and we also had quite good number of animals. My grandfather was used to help the poor and landless families of the village. Even having economic pressures, he tried his best to help others because he thought that this gesture was important to maintain the centuries old cultural norms and values. Therefore, he never allowed my father and his brothers to sell milk and milk products like Lassi, yogurt and even ghee. Later on after his death, our land and livestock was distributed among the family members (five brothers). This distribution caused severe economic pressures on our families and it changed our family traditions. Now my uncles and even my father are reluctant to support poor families. Adding further, he stated that economic pressures had also changed intentions of my father regarding the animal production. We have now started sale of milk and ghee in and around the village without any hesitation. Further extending his discussion, he stated that initially my father was felt uncomfortable due to cultural taboos but steadily his attitude changed and he was thinking just like a business man”.

Table 47. Overtime changes in the objectives of livestock raising

Objectives	1980	2010
Income from milk and milk products	5.17 (7.00)	13.97 (19)
Income from the sale of Y. Stock+ adult +Dwarf & Sacrificial animals	10.29 (14)	48.52 (66)
Reduce uncertainty from crop income	15.44 (21)	34.55 (47)
Use of animal dung for soil fertility	15.44 (21)	6.61 (9)
Farm draught power needs	53.67 (73)	12.5 (17)

Source: Field Data

5.7.1 Improvement in Livestock Productivity

The information related to livestock productivity was collected through group discussion and sample survey. According to the respondents, various livestock related interventions have been introduced during the last 30 years. In relation to this, the role of Barani Livestock Research Institute (BLPRI) and Agency for Barani Area Development (ABAD) was appreciated and lauded by the participants. The replacement of low yielding animals with high yielding and crossing of local breeds with improved breeds were mentioned as main sources of improving livestock productivity in the village.

Among the milking animals, buffalo was their preferred animal. Overall, almost all people like buffalo milk but most of them were unable to maintain buffaloes within their resource situations. However, the farmers having enough resources still prefer buffalos and milk products of buffaloes in the village. The comparative analysis of milk yield of buffaloes had revealed that during 1980's average milk yield of buffalo was 5.16 liters per day which was improved to the level of 7.54 liters per day. Overall, change in milk yield was improved upto 46.12% in the village. Similarly, milk productivity of cow was also increased. The empirical results reflected an around 39% increase in cow milk. Explaining the advantages of large animals productivity, majority of the respondents were of the view that productivity gains has further promoted livestock activities in the village.

In the village, more than 85% household kept goats and they commonly used goat milk for their domestic consumption. The common goat breeds of the area were *Rulgud*, *Teddy*, *Desi* and *Beetal*. Among these breeds, beetal goat has more milk potential as compared to other breeds of the area. During the study, overtime milk productivity of goat breeds and consumption of goat milk was discussed with the people. The analysis of this discussion has clearly indicated a 100 percent increase in milk productivity of goat that helped the poor families in terms of improving their nutrition levels.

The sample farmers were further asked about the factors that had increased livestock productivity in the village. Responding to this question, most of the respondents have mentioned improved goat breeds, use of concentrates, increased

fodder availability and improvement in animal health facilities as important factors. Among the contributing factors, role of good animal breeds was highlighted by 46.45% respondents Table-48.

Table 48. Farmers perceptions regarding the increase in livestock productivity

Productivity and Reasons	1980	2010	% Change
Increase in Buffaloes Milk Productivity (lit/day)	5.16	7.54	46.12
Increase in Cows Milk Productivity (lit/day)	6.23	8.67	39.16
Increase in Goat Milk Productivity (lit/day)	0.25	0.50	100
Reasons of Increase	Percent Farmers		
Change in Animal Breeds	47.45		
Use of Concentrates	21.11		
Increase in Fodder Availability	17.76		
Awareness and Improvements in Animal Health Facilities	13.68		

Source: Field Data

5.7.2 Improvements in Fodder Chopping

The farm mechanization has altered the conventional practice of farm management and provided an opportunity to the farmers to utilize their time in a more productive manner. Fodder harvesting and chopping is a laborious and time consuming activity. On average farmers spent 3 to 4 hours daily on this activity and this activity was mainly performed jointly by female and male family members⁶⁶. Traditionally fodder was chopped through a hand driven or animals driven tool called *toka* or fodder chopper. The overtime trend analysis of this important activity shows that in the past hand toka (manual fodder chopper) was used by 82.35% farmers but gradually it was replaced with electric motor driven fodder choppers as reflected

⁶⁶ N. Haseeb, Agriculture Research, Extension and Development for Woman in Pakistan. UN Development Fund for Woman. UNIFEM Proceedings of Woman in the Agriculture Sector of Pakistan 1992.

from the empirical results (55.88% farmers). However, 36.77% people belonging to poor families still used manual machines for fodder chopping purposes. Elaborating the benefits of electric motor chopper, they told that this new machine made their life easy, it had saved time and energies of women folk. Mainly it had reduced working hours and now they needed 10-15 minutes for fodder chopping⁶⁷. It was also observed that some women specifically belonged to the poor and landless families used their time more efficiently and they started earning reasonable amount by picking groundnut and vegetables. In relation to the benefit of fodder chopping machine, one of the respondents Mr. Allah Ditta told his story that how electric chopper benefited his family. ‘Mr. Allah Ditta was a small farmer and had one cow and 6 goats. His family size was 06 persons including his wife and children. Financially, he was very weak and most of the time worked as laborer in and around the village, while in his absence his wife carried out the livestock related activities and for this she spent lot of time daily. Among the livestock activities, fodder collection and chopping was very laborious and time consuming for her as she spent 3 to 4 hours daily on these activities. His wife was very courageous and curious to share economic burdens of her husband. Narrating his story, he told that one day his wife planned to get micro credit facility from NRSP for some economic activity. With little effort, she was able to get required amount for the purchase of an electric fodder chopper; actually through this chopper she wanted to save her time and energy for other productive activities. After purchasing this machine she saved enough time and started kitchen gardening and groundnut picking. Through these activities she earned a reasonable amount and now she could easily finance children education and health related matters of the family’.

⁶⁷ The modernization has also conceived as a process that denotes transition of society from one level (considered as lower, traditional, pre-industrial and underdeveloped) to another (as higher to the preceding ones, modern, industrial, developed etc. (Lerner, 1968; Rostow, 1960; Eisenstadt, 1966).

Table 49. Overtime changes in fodder chopping sources

Chopper Status	1980	2010
Fodder Chopper ownership (%)	100.00	100.00
Fodder chopper types (%):		
Bullocks operated toka	3.67 (05)	0.00
Electric Machine	0.00	55.88 (76)
Hand machine	11.02 (15)	36.77 (50)
Manual Toka	82.35 (112)	7.35 (10)
Total	100.00 (136)	100.00 (136)

Source: Field Data

Overall, it is evident from the results that during the last 3 decades agriculture of the area had experienced many changes in the village. The conventional agricultural practices have been replaced by improved one and comparatively farming is now better than the past decades. Presently, people are using improved inputs and technologies at their farms. The productivity analysis clearly indicated improvements in the yields of almost all major and minor crops. Having all such kind of improvements, it is also true that productivity gap still exists between potential and actual yields of all crops grown in the village. The trend of farm mechanization also increased over the years and now almost all mechanical implements are available in the village. Beside, farming activities, livestock productivity also improved and trend of keeping high yielding animals has become popular in the area.

6 SUMMARY

The study was conducted in village *Chinji* of District Chakwal, Punjab, Pakistan. Basically, this study was exploratory and descriptive in nature. An effort was made to highlight the overtime developments of the village, resultant changes and patterns of these changes at micro-level. Furthermore, social, economic, institutional and political changes and factors of these changes have also been explored and discussed in the present study.

The total geographical area of Pakistan is 796,095 sq kilometers of which the rural landscape is about 62%. The population of Pakistan is around 160 million. Among the total population, 67 percent live in about 50,000 villages scattered all over the country. Therefore, the rural Pakistan may legitimately be termed as the backbone of the national economy.

Majority of the rural population consists of small farmers. Around 93% farmers have less than 12.5 acres of land. Among these farmers, 60% have less than 3 acres of land. There is considerable evidence for the marginalization of the rural populations. Rural areas are considered most disadvantaged in terms of access to services, education, health and also worst served by infrastructure of various types.

Since the inception of Pakistan, almost all successive governments had made efforts to upgrade rural areas by using a blend of democratic and bureaucratic approaches, each of which provided its distinctive structures, rules and working style. The dominant approach used for rural development in Pakistan was administrative rather than political. In Pakistan, many rural development programs have been launched by the government and non-governmental organizations aiming at modernization of agricultural sector and betterment of the life and environment of the rural masses. However, among these programs only few of them had achieved their desired targets. The common reasons behind their failure and ineffectiveness were the approaches, processes and mechanisms adopted for the implementation of rural development programs/projects. Political interference and capacity of implementers were also highlighted as bottlenecks of the previous projects.

In rural Punjab, formal and informal institutions are working for the socio-economic development of the rural communities. The performance of these institutions was not according to the expectations. The analysis of development institution shows that over the years working of informal institutions was improved but in comparison working of formal institutions (government led institutions) was bureaucratic and not supportive for the developmental activities.

Ecologically, studied village was located in the rainfed tract of Punjab, Pakistan. The village has a long history of working with government and non-governmental institutions; therefore, advantage of collecting diverse views and experiences was higher as compared to other villages. Actually this was the main reason of selecting village *Chinji* as locale of the present study. Over the last 30 years, mainly following institutions and organizations have contributed in the development of the village:

- Local Government Systems
- Provincial and Federal Government Institutions
- Non-Governmental Organizations

The ethnic groups of the village belonged to the local tribes of *Bhatti* (Rajput), *Awan*, *Malik*, *Lohar* (Blacksmith), *Mochi* (Cobbler), *Nai* (Barber), *Mirasi* (Family history maintainers), *Pawali* (Cloth weavers), *Sunar* (Goldsmith), *Kumhar* (Pottery makers), *Qasai* (Butchers). Among these castes Awans, Maliks and Bhatties considered as *zamindar* (agriculturists) castes of the village as they also own major share of agricultural lands in the village.

During 1980's most of the families 77.21% lived in a joint family system but with the passage of time, phenomenon of joint family system was replaced with nuclear family system. Presently, nuclear family system was dominant in the village. Mainly following factors have contributed in this change.

- Distribution of agricultural land
- Economic pressures
- Increased population of the households

The local community of the studied village strictly observed societal norms, values and committed to observe these traits. Although, they love their traditions but it was also reality that increased social mobility and urban exposure have to some extent changed their traditional thinking pattern and life styles.

The local people were well aware about the importance of development agencies and they were confident in dealing with the development organizations and institutions. The attitude of the people regarding developmental activities was very positive and they always welcomed development institutions in the village.

Comparatively, 75.74, 16.91 and 7.35 percent respondents viewed local government system as excellent, satisfactory and unsatisfactory, respectively. The people who have appreciated the role of local government were educated and mainly belonged to main castes of the village. Basically, they were the originators of local leadership and being members of main *biraderies*, they take special interest in the local government system.

The Agency for Barni Area Development (ABAD), Agriculture Research and Extension Departments, Education Department, Health Department, Water and Power Development Authority (WAPDA) and Pakistan Poverty Alleviation Fund (PPAF) were the institutions who have played their role in the development of studied village.

In the last 3 decades, government institutions and local representatives have introduced various social sector development schemes in the village. The roles of schemes like basic health unit, local road network and establishment and up gradation of boys and girls schools and communication facilities have been well recognized by the respondents. Similarly, up gradation of rural economy was also focused and interventions related to irrigation, crop diversification, improved crop management practices, high yielding animals and poultry farming were also introduced in the village.

The direct share of non-governmental organizations in the overall development of the village was very limited. It was quite understandable because the NGOs had their own limitations and working conditions. They work only with their CO

members and played with small budgeted schemes. The main NGO working in studied village was NRSP which was also collaborating with government institutions like ABAD and PPAF for developmental activities.

Development in education sector had shown tremendous progress in the village. At present, both male and female educational institutions existed and available to all segments of the society. Traditionally, female education was not given importance in the village but with the passage of time rural mind set was changed and importance of female education was realized in almost all income group families (rich, middle or poor classes), now they preferred to educate their girls. Overall, during the last 3 decades, education level of the village was improved significantly.

In view of respondents, role of education in the use of improved farm technologies was very positive. Results indicate that among the 116 educated respondents 76.72% used improved seeds. Similarly, use of chemical fertilizers was also higher among the educated farmers as compared to the illiterate households that prove that the education had positive impact on the adoption of improved farm management techniques.

The increasing trend of diseases and their harmful effects had motivated the village elders and influential people to develop health facilities in the village. Therefore, under previous rural development efforts, one basic health unit was established in the village and now people preferred to visit this basic health unit instead of traditional hakims. Due to awareness and availability of preventive measures, infant mortality rate was significantly reduced in the village as it was reported by 86.76% respondents.

The changes occurred during the last 30 years had both positive and negative impacts on the society. The positive value of sharing poor and fallow farmers' burden was weakened in the society. The people's interest in resolving and taking part in communal issues was also damaged to some extent. Overall, these overtime changes have made the society materialistic and self-centered.

The caste and *biraderi* system was strong and dominant in the village. Traditionally, communal power was enjoyed by caste and *biraderi* heads (head of a lineage

group). However, education and media exposure had partially changed traditional power structure of the village. Since the last decade, influence of the democratically elected representatives was also increased. The families belonging to traditional power structure were still trying to impose their decisions on the local community.

The increasing economic pressures and distribution of agricultural land had significantly reduced the influence of traditional power structure, while education and media exposure had also contributed toward this change and provided opportunity to rest of the community to gain power and enjoy leadership status in the village. Moreover, experience of democratically elected leadership had also brought behavioral changes in the traditional leadership.

Almost all respondents were in favor of democratic leadership. They suggested that in future rural development projects and programs local leadership should be consulted and included in the decision making processes. In support of their argument, they were of the view that local level participation will be useful for sustaining the project activities. On the basis of their previous experiences, most of them had pointed out centralized decision-making as the main problem of development project.

New farm technologies, improved skills and provision of micro-credit facility were reported as effective interventions to improve rural economy. These interventions were mainly introduced by the Agriculture Research and Extension Department, Agency for Barni Area Development (ABAD), Local Government Institution, Punjab Rural support Program (PRSP), National Rural Support Program (NRSP) and Poverty Alleviation Fund (PPAF).

It was observed that in the past 69.23% farmers worked as fulltime farmers. Subsequently the situation was changed and phenomenon of full time farming was decreased in the village and the ratio of full time farmer was decreased to 30.34%. The distribution of agricultural land and increased household expenditure were the main reasons that had compelled the farmers to opt for off-farm activities. As a result of this change, the phenomenon of part time farming was expanded in the village.

The overtime change in the status of skilled and unskilled labor force was analyzed. The results indicated that in the year 1980, the strength of unskilled labor was higher (62.13%) in the village but situation was improved overtime and it came to 40.67% around 2010. It means skilled manpower is expanding in the village.

In the village, two major cropping seasons were observed. One correspond to summer and monsoon (June to September) and was locally called as Kharif season, while other was Rabi or winter (October-May). Almost all crops were grown in these two cropping seasons.

Wheat was Major Rabi crop of the area, but some farmers also intercropped wheat with mustard, while other crops grown during Rabi season were canola and fodders (triticale, jai, shaftal, berseam etc.). In Kharif season, farmers preferred to cultivate groundnut, maize and sorghum crops, while some farmers also cultivate legumes like mung and mash in summer season.

A significant proportion 41.63% of the respondents pointed out that agriculture was their major source of income. While over the years, the share of off-farm income was increase up to 40.13 % in the village. Further analysis of this information indicated that the households having large land holdings and irrigation facilities earned major share of income from agriculture, whereas educated and business oriented families were getting their major share of income from off-farm sources. Similarly, the farmers having easy access to grazing lands and enough fodder/forage resources were earning their livelihood from the livestock activities.

The local community was asked to define poverty according to their own criterion and then highlight overall poverty status of the village. Overall, their criterion was based on social and economic factors such as size of land holding, off-farm income and livestock numbers. According to their definition, only 5% households were rich and 33.80% belonged to middle class, 45.60% were poor and 15.40% were very poor in the village.

The information related to tenancy status shows that 76% farmers were owner operators, 7.35% households worked as tenants and 16.18% as owner-cum-tenants

in the village. Over the years, status of owner operator was slightly reduced and phenomenon of owner-cum tenant was increased.

The land holding of sample farmers varied and ranged between 8 to 187 *kanals*, however, average farm size of the village was 27 *kanals*. In view of the respondents 50 to 75 *kanals* of land is sufficient for the survival of an average family. During the last 30 years, strength of small farmer was (having less than 2 hectares) increased in the village and in reciprocity number of medium and large farms were decreased. The main reason of this change was the law of ancestral rights of the family members.

Over the years, the village agriculture has gone through many changes. The traditional crops grown in the village have replaced with some new crops. And among the new crops groundnut crop was widely adopted and grown in 70% area of the village. The change in Rabi season crops was not reported, whereas, area under wheat crops was further 30% increased in the village.

Empirical findings reflected improvement in cropping intensities of both irrigated and rainfed farming systems. In the rain fed farming system, overtime Rabi cropping intensity was increased up to 15.36% whereas increase in Kharif cropping intensity was increased upto 87.16% which was drastic change. The main reason of this increase was cultivation of groundnut on fallow lands and these lands were usually remain uncultivated before introduction of groundnut crop in the area

The improvement in cropping intensity has also increased the social and economic activities in the village. Among the sample farmers 73% pointed out increase in their farm income and that increase had generated social impacts on the society. The living standard of farming and non-farming families was improved and people have started to enroll their children in the educational institutes.

Before mechanization, farmer usually used bullocks and camels for cultivation purpose. Only few respondents 8.82% having large land holdings used tractors for land preparation. The overtime developments in farming had revealed that among the sample farmers 93.38% used tractors for farming activities. Overall this change has improved farm productivity and cropping intensity in the village.

Irrigation facilities were improved over the years. During 1980, out of the total 136 sample farmers only 13 farmers used irrigation water for agricultural purposes. This situation was improved and overtime use of water for agricultural purposes was increased in the village. Presently, 37 respondents have shown that they have irrigation facility at their farms. The common irrigation sources developed over the year were dug-wells, Persian wheels and small dams.

It is evident from the data that in the past, majority of the farmers (80%) used donkeys and donkey carts to transport their farm produce and inputs. Only some large farmers used automobiles and horses for the marketing of their agricultural produce and self mobility. The development of farm to market road network had paved way for the modern means of transportation in the village. The provision of vehicles has provided an opportunity to the local community to utilize urban based income generating opportunities.

The inventory of farm implements had showed that 25% sample farmers have their own tractors and other farm implements. The trend of using mechanical implements was significantly increased; now both owners and non-owners of the implements mechanically operated their farms. Although mechanization has benefitted the farming community; but at the same time it has also displaced the rural labor and their livelihood was seriously disturbed.

In the past, harvesting and sowing activities of crops started like a social event; almost all family members and poor households helped each other at that moments. The host families were supposed to provide a delicious food to the helping members. But overtime this tradition was also changed and now people are reluctant to help others without their personal interest.

Initially, there was no credit facility in the village. People fulfill their credit requirements from their friends and relatives. While with the passage of time, farmer's credit requirements were increased and to fulfill their credit needs they have pressurized the government to provide them institutional credit facility for agriculture activities. So as a result of their efforts, now both formal and informal credit facilities are available in the village.

The comparative analysis of overtime change in credit users and non users reflected that during 1980's, the strength of credit users was only 16% but after having awareness about the credit facilities, the ratio of its users was increased to 47.89%. The information related to the credit sources reflected that among the credit users, 56.92% farmers used informal credit sources and rest of 43.08% used institutional means of credit.

The use of chemical fertilizers was common in the village and among the users 83.71% used fertilizers for wheat and 87% used for groundnut crop. Almost every farmer intended to apply recommended dosage of fertilizer to their crops. Moreover, trend of using chemical fertilizer has positive impact on crop productivity and on the livelihood of the farming communities.

Per acre yield of almost all major crops was increased over the years. During 1980's average wheat yield was 12 monds per acre but after continuous effort of different organizations, wheat yield was increased to 25 monds per acre. Overall, estimates showed 108% change in wheat productivity which was very encouraging for the farmers. Similarly, groundnut yield was also increased. In the initial years, groundnut yield was reported between 8-10 monds per acre and after standardization of its management practices average groundnut yield was increased to the level of 17 monds per acre.

Livestock is an integral part of rainfed farming system. Traditionally, almost all households keep one or two animals for their domestic needs. The past trend of having livestock still existed in the village and it was also reflected by a large majority of the respondents, i.e., 89.32%. On an average every house hold keeps 1.7 cows and 3.56 goats.

Among the livestock species, major change was observed in draft animals. Their use was mainly reduced due to mechanization of farming activities. Over the years, farmers' preferences regarding type of animals were changed and now they prefer to have milking animals instead of small ruminants. While among the small ruminants, strength of sheep was reduced and goat's population was increased manifolds in the village. The main reasons of this change were the grazing habit of sheep and preferences of people regarding the taste of goat meat.

Over the years milk productivity was increased in the village. The average milk yield of buffaloes in the past was 5.16 liter per day which is increased overtime and presently an average buffalo produces 7.54 liters milk per day. The estimated increase in buffalo milk yield is 46.12%. Similarly cow milk yield is also increased by to 39%.

Overall, it is evident from the results that during the last 3 decades agriculture of the area have experienced many changes in the village. The conventional agricultural practices have been replaced with improved one and comparatively farming is now better than the past decades. Presently, people are using improved inputs and technologies at their farms. The productivity analysis clearly indicates the improvements in the yields of almost all major and minor crops. Having all such kind of improvements, it is also true that productivity gap still exists between the potential and actual yields of all crops grown in the village. The trend of farm mechanization was also increased over the years and now almost all mechanical implements are available in the village. Beside, farming activities, livestock productivity was also improved and trend of keeping high yielding animals is popularizing in the village.

7 CONCLUSION

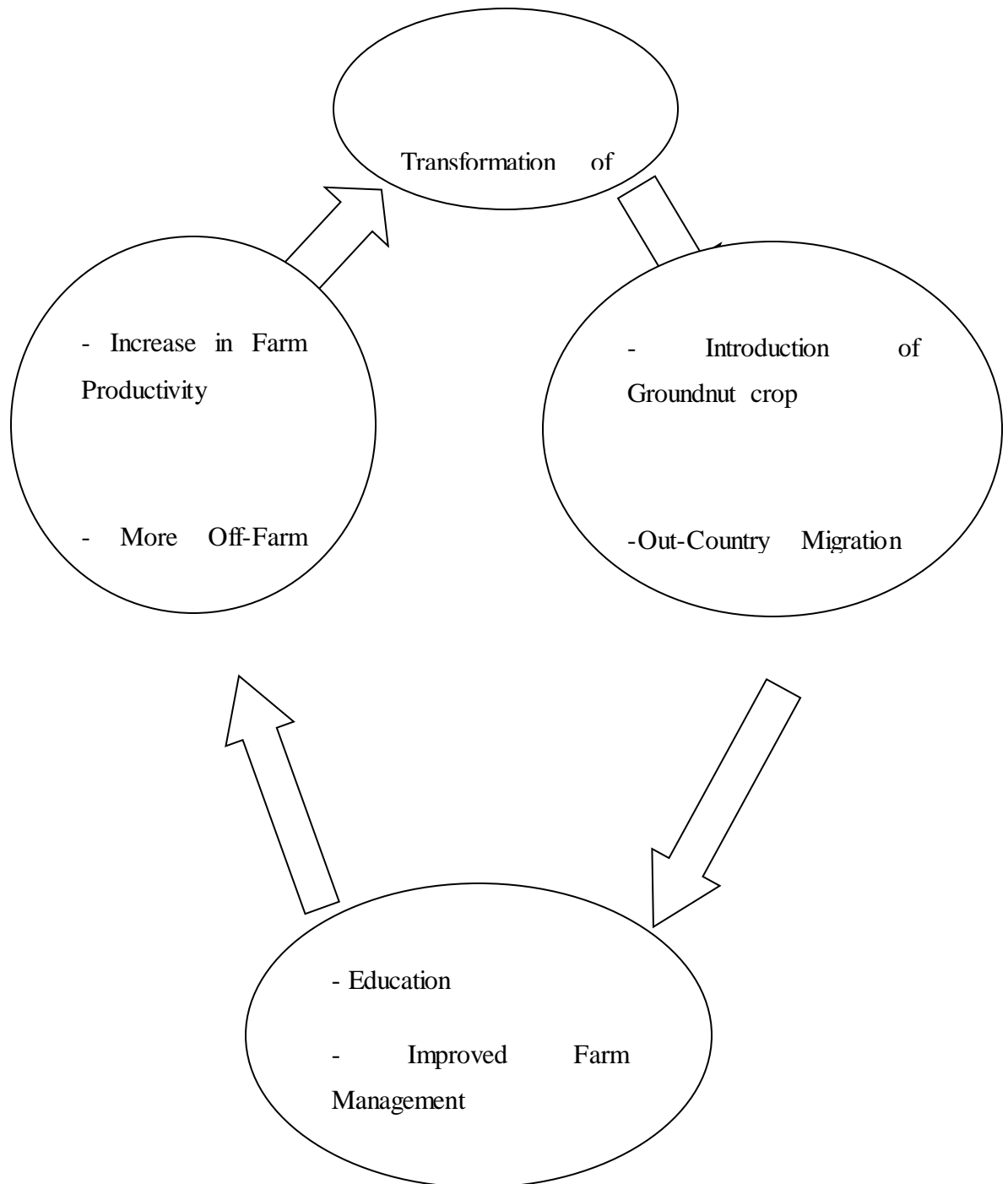
Conclusions of the study are based on empirical analysis, field discussions and literature reviewed. The researcher's personal experiences have also been used to explain the theoretical and practical dimensions of the rural development with reference to Pakistan's cultural and sociopolitical situation. The discussion was focused around the objectives presented in section 1.5 and research hypothesis. Almost all illustrated hypothesis of the study have been substantiated by empirical findings.

Proposing a theoretical model that fits into study in hand was a difficult task. Because there is not even a single clear-cut theory or model as presented in the theoretical framework that is totally applicable to the research topic. Hence, the contents of theories like Modernization theory, Dependency theory, Structural Functionalism, Theory of Cultural Materialism, systematic and coincidental factors of change and Rostow's growth model seems important and relevant to understand the overtime developments, resultant changes and process of these changes. Moreover, keeping in view the objectives and hypothesis of the study contents of the above mentioned theories and development models have been selected to finalize theoretical framework of this study.

The development process of the village is divided into two periods i.e. political and military regimes. The development strategies and approaches adopted during political and military regimes were not the same. Almost all military governments had adopted bottom up approaches. They established local bodies system and initiated development work from the grassroots level. The results of this study proved that in Pakistan local participation and extent of development was relatively higher during military governments. These findings have also verified the hypotheses that participatory approaches are more effective than the bureaucratic approaches of development. The literature published during 1990's has also verified effectiveness and importance of participatory approaches in the developmental activities Hussain (2000), Gurung (1998), Rocheleau (1991), Argyle (1958), Lewin (1939), Dustin and Davis (1967), Smith (1967), Haythron (1956), FAO (2003), Riddell & Robinson (1995), ADB (2007) and Mullah (1997). While, contrary to the

military governments, all political governments had used bureaucratic models and planned development activities at federal and provincial levels. Therefore, most of their initiated projects were remained ineffective and failed to address the grassroots level issues. The model that had contributed in the development of village *Chinji* was cyclic rather than linear. The development process of the village is as under;

Village Development Process



In village Chinji, both formal and informal institutions are working for the socio-economic development of the local people. These institutions have their own objectives, mandate, working styles and operational procedures. It is clear from the findings of this study that government institutions are still using bureaucratic approaches and their procedure are complex, lengthy and problematic for the local communities. Whereas, working environment of informal institutions was relatively improved over the years and people were happy with their procedures and operational mechanisms. Recognizing the role and importance of institutions North (1996) particularly considered institutions as the carrier of the process of economic change. In his view, political and social institutions are the actors that introduce new technologies when they perceive that they can improve their competitive position by adopting such innovations. The empirical evidences of this study verified North's argument by highlighting the role of various formal and informal institutions in the betterment of village life. Further, almost all respondents agreed that the technologies and innovations introduced by these institutions had produced social and economic changes in the area.

Regarding the performance of non-governmental organizations/institutions local community members had shown mix responses. The variation in their response was quite understandable because NGOs have limited scope, worked only with CO members and played with small budgeted schemes. Therefore, direct share of non-governmental organizations in the overall development of the village was very limited.

The social institutions of the village are based on face-to-face relations. The norms and values are their main regulatory measures to control the village life. Even in the presence of some new formal institutions like Union Councils, Zakat and Ushr Committees and Cooperative Societies, the importance of caste and 'biraderi' institution has not changed, people still respect and own their biraderi leaders.

During, the study role of different institutions in village development was studied and it was found that among the institutions, role of Local Government Institution was recognized as most effective for development activities. However, contribution of some provincial and federal institutions like Agency for Barni Area Development

ABAD, National Rural Support Program NRSP, Agriculture Research and Extension Departments, Education Department, Health Department, WAPDA and Pakistan Poverty Alleviation Fund PPAF was also very constructive and recognized by the local community member. Although people have serious reservations about the quality of services provided by government institutions but even then they acknowledged positive role of public institutions.

The field observations and empirical findings indicated that in the past economic and development activities have strong association and they were supportive to each other. Their positive association has benefited the farming and non-farming communities of the village. Hence, on the basis of this conclusion one can suggest that in the future development activities, economic aspects of development projects should be duly considered.

There is a consensus between structural functionalists like Malinowski and Radcliffe Brown that every society has some basic needs and to meet these needs Malinowski stressed on the importance of social institutions but contrary to his view point Radcliffe Brown talked about the effective leadership of these institutions. The present empirical analysis indicated that in the rural structure of Pakistan effective institution and vibrant leadership both are important to meet the basic needs of rural communities.

Although change is bound to happen with the passage of time, but pattern or direction of that change is completely dependent on the factors like quality of development opportunities, situation of natural resources and effective institutions of the society. Analysis revealed that during the last three decades, some formal and informal institutions have introduced various development interventions which had produced drastic changes in almost all spheres of the village life. The direction of these changes was positive and progressive in nature. These changes have transformed rural culture, economy and society. It was also confirmed by the fact that over the year's society of village Chinji was modernized and due to this modernization their farm productivity was increased significantly.

During the last 30 years, power structure of the village was partially changed. It was mainly due to the initiation democratic process at grassroots level and emergence of new leadership in the village. Moreover, better performance of democratically elected leaders has encouraged local people to support new leadership in the village. Presently, both traditional and democratic power structures existed in the village and each of them was trying to maintain their authority in the village. Overall, majority of the people (farming and non-farming) preferred democratically elected leaders than the traditional ones.

The society of the village *Chinji* was heterogeneous and consists of various castes and *biraderies*. Different castes/*biraderies* have their own leaders and interests in the village. Therefore to protect their interests and maintain their identity, each group compete with others. This situation has created a competitive environment in the village and each clan or group wants to take credit of the development activities. So to maintain their political interests, these groups encouraged development activities in the village. Overall, findings of this study proved that in certain situations heterogeneous societies are also better than homogeneous societies. This conclusion has verified and confirmed the third hypotheses of this study “A relatively heterogeneous and competitive environment facilitates the developmental activities”.

The empirical results had also verified first and second hypotheses of the study. The analysis presented in section 5.5 titled ‘changes in power structure’ proved that the democratically elected leaders perform better than the traditional leaders. In the same section, farmers have also verified second hypothesis that bottom up approaches are more effective than the top-down approach of rural development.

The role of caste and *biraderi* was common in the village life. Sometime, even to resolve their family issues people consult their biradari heads instead of any political and government institutions. Basically, local people respect and obey their decisions in letter and spirit. Although, this system still existed in the village but as compared to the past now cast and *biraderi* system seems much weaker than the previous years. Further, describing the importance and role of cast/biradri Alvi 2001

stated that it is important in social relationship which is tied in terms of brotherhood or biradri system (the patrilineal social relationship) in the rural Punjab.

Over the last 30 years, most of the traditional norms and values have been changed. Now society of Chinji seems more materialistic and individualistic. In view of Chatto 1971, empirical results clearly indicated that society of village *Chinji* is moving towards modernization and adjusting new realities in the prevailing social system. In his view modernization is a change in traditional way of doing the things in an innovative and productive manner, and mostly defined in terms of economic development. In agriculture it refers to a shift in farming from subsistence to commercial production and in ecology it specifies movement of population from farm and village to urban centers (Smelser, 1966). By and large, society of village Chinji is encompassing through all these developmental stages and gradually progressing towards modernization.

The changes in different components of social and economic institutions (social systems, political structure and agriculture, etc.) can be induced by improving educational system as it has been considered as a powerful agent of social transformation (Adamu, 1994; Singh, 1982; Durkheim, 1938; Fagerlined, 1982; Adams, 1977), Karabel (1977), Paulston (1976) and Schultz (1964). In the light of above discussion, parameters of education and technical advancement were discussed with respondents. From this empirical research, what really emerged, as a significant factor was the people consciousness about the value of education. The respondents attributes towards female education were also very positive and they considered femal education as important to bring them at par with boys. Overall it is reflected from the results that during the last 30 years, education level of people was considerably improved in the village The positive impact of education was also evident from the findings which shows that education had improved social status and livelihood of the educated families.

The data related to overtime changes in employment status shows that in the past majority of the farmers worked as fulltime farmers but subsequently this situation was changed and the phenomenon of full time farming was reduced in the village. The main reason of this change was high risks in rainfed farming system, therefore,

to avoid from associated risks local people have diversified their income sources. This income diversification trend had produced positive impact on the social life of the local people.

Traditionally, people used to depend on *Hakims* and *Peers* (religious leader) for health treatments. However, this trend was changed during the last 30 years and now people preferred to use modern healthcare facilities instead of traditional methods. Initially, some conservative families had shown their reservations regarding the female treatment from male doctors but with the passage of time their attitudes were changed and now people have no hesitation to use modern healthcare facilities and even to visit male doctors.

It was evident from the results that both farming and non-farming families were poor and they need credit facility even to purchase their farm inputs. Over the years, trend of formal and informal credit facilities popularized and established in the village. The results indicated that large farmers usually used formal credit sources (commercial banks and ZTBL) whereas, small farmers preferred to get loan from informal credit sources like National Rural Support Program NRSP and Pakistan Poverty Alleviation Fund PPAF. The reasons of using informal credit sources were their easy procedure and flexible repayments plans.

The performance of agriculture sector is tied up with the wellbeing of rural population; whatever happens to it is bound to affect farming communities. Overall results indicated that during the last 30 years period productivity of almost all major and minor crops has increased in the village. Moreover, it is also a fact that even having significant change in farm productivity; farmers were not happy with their farming activities. The main reason behind their dissatisfaction was ever increasing trend of input costs which ultimately makes their farming uneconomical. Hence, on the basis of these finding it can be concluded that if government want to improve agricultural activities in those areas where agriculture is dependent on rain water then he should reduce their cost of production.

Results of this study revealed that the primary change in rural economy was due to introduction of modern machinery or introduction of new technology in this area, which had simplified farm work, particularly in terms of saving time. Where

traditional methods of farming took days and weeks, now the work was done in minutes and hours. Therefore employment for men had become an additional means of livelihood. Since this area did not possess large landholdings, there was barely enough grain for the year. Presently, most of the men were employed in government jobs and some in the private sector.

Almost in all previous rural development programs, agricultural interventions have been used as strategic tool to improve the socio-economic conditions of the rural masses. For this purpose various agricultural interventions (irrigation schemes, institutional credit new crops/varieties, improved animal breeds and mechanization) were introduced by the formal and informal institutes. The given interventions had mainly benefited the farming families and the rest non-farming families were generally deprived off from the benefits of previous development efforts. The conclusion clearly suggested that in the future rural development programs government should focus on the development of all segments of the society.

The composition of agricultural land has changed over the years. The existing land distribution pattern is further converting economical holdings into uneconomical fragments of lands. Moreover, increasing trend of population is also aggravating the situation and posing serious threats on the natural as well as on the financial resources of the people. In the present situation, it is important for the government to focus on the small scale farming and develop low cost technologies which may suited to small farmers.

The village agriculture has gone through many changes. Most of the conventional crops have been replaced and some new crops were adjusted in the rainfed farming system. The changes in farming system had increased cropping intensities of both rainfed and irrigated farming systems. In the rainfed farming system, Rabi cropping intensity was increased up to 15.36% and similarly Kharif cropping intensity was increased up to 87.16%, which is very encouraging for the farming communities and agriculture of the area. The increase in cropping intensity was due to introduction of new crops like groundnut and canola.

With the passage of time use of tractors and allied implements was increased in the village. This rapid mechanization has improved farm productivity and income of the farming families. However, along with these benefits mechanization has also posed some negative impact on the local traditions, norms and values of the society. Mainly pro-poor traditions like helping poor and non-farming families were gradually disappearing from the society and people became more materialistic. In relation to this, there was a consensus among the respondents that mechanization has badly affected social solidarity and cohesiveness of the local people. Further, due to decrease in hand labor of agricultural activities and use of tractors and threshers, the social and cultural activities of the people had also considerably decreased in the area.

Livestock is an integral component of rainfed farming system. It has social, economic and cultural dimensions and also used as social collateral in the village. Over the years, strength of different animal species changed in the village. The trend of keeping small animals was increased as compared to the large animals. While, among the small ruminants, sheep population was reduced and goat's population was increased notably. The milk productivity of both small and large ruminants was relatively improved and marketing of milk was started in the village. The trend of change in animal species is linked with farmer's resources and feeding stuff available in their grazing lands.

Livestock has social and cultural values in the society. It was used as social collateral; therefore, the families having large herd size were considered as rich and powerful in the village. Moreover, in the rural festivals, animal were also used for recreational activities, animal competitions organized to make these festivals more enjoyable and lucrative for the people. The events like milk competition, bullock and donkey races and dog fights were organized as main events of the festivals. Hence, from the above discussion it can be concluded that animals has social, economic and recreational values in the village life therefore, government should focus on the development of livestock sector in the rainfed farming system.

The role and importance of women in agriculture and livestock management is evident from the research results. In rainfed areas of Potohwar region females are

actively involved in farming and even non-farming activities. It is unfortunate that almost in all previous rural development programs/projects women population was seriously ignored and they were not given a chance to improve their traditional skills. Even their recreational activities were also compromised. This negligence has hindered women's interests and development opportunities in the village.

The review of literature revealed that changes from an agrarian based economy to Industrialisation passes through the same process worldwide. The shift from tradition to modernity subsequently followed, what was particularly noticeable was the nuclearisation of the family and the break up of family ties. The empirical findings of this study substantiated the conclusions derived from the literature reviewed. The results depicts that due to modernization and development of small scale enterprise in the area trends of joint and extended family system was weakened and nuclear family system was popularized. The change in family system had not only affected the family institution but to some extent it has also disturbed the social structure of the village.

There is a consensus among the people that most of the previous rural development programs were ineffective and less productive. Even a number of projects did not achieve their desired targets. The ineffectiveness of these programs is also well documented in the program evaluation reports and other published documents of the government. The common reasons mentioned for their futility were bureaucratic approaches, project securitizing processes, implementation mechanisms and political interference from the political families. Further, analysis concluded that the participatory approach proved fragile against the already existing local participatory groups of caste, 'biraderi', neighborhood, friendship and factional groups. The management of rural development programs could not overcome the weaknesses of the traditional institutions and their effects on development projects.

Though change is a common feature of the societies and comes with the passage of time. The way of life as described by the elder respondents seems to be changed over the years. From the time of their childhood to the present, every fact of life had undergone change. The entire agricultural system, the way of living, nature of households, settlement patterns, diet and food habits, dress patterns and

every conceivable aspect of life had been transformed over the last three decades. Of course this change coincided with out-migration and the advent of modern machinery which was then introduced into this village. This aspect was responsible for bringing transformation in everyday life of the people. Although, elder generation of the village recognize the need to move ahead in the modern time but even then they talked about their past life with deep sentiments.

GLOSSARY

Biraderi	An endogamous kinship group based on blood or marriage relations
Chingi	Name of the village where study was conducted
Chak	A village (block of land identified as the smallest administration unit)
Chakbandi	The gross area commanded by an outlet for irrigation
Chowkidar	Watchman
Councilors	Elected members of the village committee, worked as team members with the nazim and naib-nazim
Daira	A place of mens' gathering for discussions, guests entertainment, etc.
Dhok	A separate place in the big village where 30-50 households are based
Imam Masjid	Religious leader who leads the prayers and takes care of the mosque
Izzat	An expression of power and esteem whose English synonyms are: honor, reputation, status, face or esteem
Kammee or moeen	Members of non-agricultural castes providing skilled services to the farming community in return of annual contractual payments
Kacha House	Houses made of earth
Kharif	Crops sown in April and harvested between October-December

Mirasi	A low caste member of the community who keeps lineage record of different caste groups and also known as traditional singer or musician
Musalli	A member of the <i>kammi</i> class, usually landless laborers
Nazim	Head of union council
Nazrana	The jargon used for the amounts paid as bribe
Naib Nazim	Deputy head of union council
Lumbardar	Generally pronounced as Numberdar who is headman of the village and responsible for collecting land revenues, irrigation fee and forwarding them to the government
Panchayat	An assembly of village elders to settle disputes and regulate the traditional codex of village
Parda	Veiling of women
Patwari	A field level employee of revenue and Irrigation Departments.
Rabi	Crops sown in October-December & harvested in April-May
Secretary Union Council	A government official performing the secretarial jobs of the Union Council
Khou	Dug-well, usually operated through animals
Union Council	An elected local government body consisting of 21 councilors
Zamindar	Landowner
Zilladar	Junior member of the supervisory staff of the revenue division of the Irrigation Department supervising a number of patwaris

BIBLIOGRAPHY

- Adams, D.K, (1977) Development Education, Comparative Education Review. Vol. 21 No. 2 & 3.
- Adamu, A. Uba (1994) Educational Reforms in Nigeria Department of Education Bayero University, Kano.
- ADB, (2007). A Poverty Targeting Strategy for Pakistan. Asian Development Bank.
- Afxentious, PC. (1990) 'The Rhetoric and Substance of Basic Needs; Blackwell Publishers, 108 Cowley Road, Oxford.
- Agrwal, Arun, (1995) Dismantling the Divide between Indigenous and Scientific Knowledge. Development and Change, Vol. 26.
- AIOU, (2001). Approaches of Rural Development, Book Code 2514, Published by National Book Foundation., Islamabad.
- Anker, D. I. W (1973). Rural Development Problems and Strategies. International Labor Review, Vol.108, pp. 461-48.
- Ahmed M. (2002). Voting Behavior in Rural and Urban Areas of Punjab. Department of Political Science, Govt. College University, Faisalabad, Pakistan
- Ahmad M.; Parveen, S. and Zeb J. (1988). Participation of Rural Women in Agriculture and Household Activities: A Micro-level Analysis. Social Sciences Divison PARC, Islamabad.
- Ahmed, A. S (1984) 'Dubai Chalo: Problems in Ethnic Encounter Between Middle Eastern and South Asian Muslim Societies.' Asian Affairs-15, pp. 262-76.
- Alavi, H.A (1972) 'Kinship in West Punjab Villages, 'Contributions to Indian Sociology. New Series, Vikas Publishing House, Delhi.
- Allan, Kenneth (2006a) 'Contemporary Social and Sociological Theories: Visualizing Social Worlds.' Thousand Oaks, California.

Altaf Zafar, 2006. Challenges and Prospects of Rural Development in South Asia. Report on Training Course on Rural Development Through HRD, SAARC Human Resource Development Center, Islamabad.

Anwar T. SK Qureshi and H. Ali (2004). Landlessness and Rural Poverty in Pakistan. *The Pakistan Development Review*, 43: 4 (II) pp. 855-874.

Argyle, M., Gardner, G., and Ciofi, F (1958). Supervisory Methods Related to Productivity, Absenteeism and Labor Turnover: *Hum. Relat*, 11: 23-40.

APDAC, 1976. World Bank Annual Development Report. Caiden Kuala Lumpur: Asian Center for Development Administration (**APDAC**), 1976.

Badruddin, m. (1990), Perspectives in Pakistan's Irrigated Agriculture. International Irrigation Management Institute (IIMI), Lahore, Pakistan.

Bahar, S. (1987). Women in Crop Production and Management Decisions in Rain-fed Areas of Punjab, Pakistan. Implication for extension, Social Sciences Division, PARC. Islamabad.

Balck, Cyrile E. 1966. Modernization of Japan and Russia, New York, the Free press 9-26,

Bandaragoda, d. J., & Saeed Ur Rehman (1995), Warabandi in Pakistan's Canal Irrigation Systems: Widening Gap between Theory and Practice. IIMI Country Paper Pakistan No. 7. International Irrigation Management Institute (IIMI) Colombo, Sri Lanka.

Barhoum, M. Issa (1984) Contemporary Social and Economic Conditions in the Muslim World and the Process of Social Change, Research Paper 'Trends and Factors of Contemporary Social Change in the Muslim World in a 'A Workshop Jointly Held with the Administrative Staff College-Lahore/Pakistan.

Barker, Joel. 1993. Paradigms: The Business of Discovering the Future, Harper Business, a Division of Harper Collins Publishing, New York, New York.

Bashir, Ahmad Dr. (2005). Role of Farm and Non Farm Productivity in Economic Growth and Poverty Reduction in South Asia. Paper Presented in Training Course on Rural Development through Human Resource Development, SAARC Human Resource Development Center, Islamabad.

Bethe, J. (1964). Other Cultures: Aims, Method and Achievements in Social Anthropology, Glencoe, III.

Berdichewsky, Bernardo (1978). "Class and Ethnic Consciousness: the Case of the Mapuche Indians of Chile," in Perspective of Ethnicity, Edited by R.E.Holloman and S. Aroutiounov. World Anthropology. The Hague: Mouton

Benedict, R., 1961. Patterns of Culture, Published by Boston Mass, Houghton Mifflin, Edition 8.

Benjamin, D. and L. Brandt. 2002. "Agriculture and Income Distribution in Rural Vietnam under

Ben-Porath, Y. (1980). The F-Connection Families, Friends and Firms and the Organizations of Exchange. Population and Development Review, pp. 1-30.

Bernaed, Russel H. (1993). Research Methods in Anthropology: Qualitative and Quantitative Approaches, Sage Publication London.

Bertocci (eds.), *Rural Development in Bangladesh and Pakistan*, Hawaii University Press, 1976.

Bernstein, Henry (1977). Notes on Capital and Peasantry, Review of African Political Economy.

Birket-Smith, KAJ (1965). The Path of Culture. A General Ethnology. Translated from Danish. Madison: University of Wisconsin press.

Bendix, R. Guenther R., 1984. Force, Fate, and Freedom. On Historical Sociology by

History and Theory, Vol. 24, No. 2 (May, 1984), pp. 196-208. Published by: Wiley
Article Stable URL: <http://www.jstor.org/stable/2505282>

- Biasutti, Renato (1959). *Le razze e i popoli della terra*, volume one. Torino.
- Bhatia, R. and Falkenmark.(1992) *Water Resource Policies and the Urban Poor: Innovative Approaches and Policy Imperatives*. Background Paper for the ICWE, Dublin, Ireland.
- Bhatti, M. H. (1984), *Aspects of Rural Labour: An Empirical Investigation in two Villages in Punjab - Pakistan*. *Socioeconomic Studies on Rural Development*, Vol. 56. Göttingen.
- Blankstein, I. (1960) *The Politics of Latin America* in Gabriel Almond and James S. Coleman, *The Politics of Developing Areas*. Princeton: Princeton University Press.
- Boas, Franz (1943). *The mind of primitive man* (revised edition). New York.
- Bodington, S.; George, M. and Michaelson, J. (1986). *Developing the Socially Useful Economy*, Macmillian Press Ltd, London.
- Bottrall, A. F. (1981), *Comparative Study of The Management and Organization of Irrigation Projects*. World Bank Staff Working Paper No. 458, Washington, D.C.
- Bromley, D.W. Chavas (1982). *Land and Water Problem. An Institutional Perspective*. *American Journal of Agricultural Economics*, Vol. 64, pp. 834-844.
- Bruyn, Severyn Ten Hurt, (1958). *A Comparative Study of Community Action Program*, Ph.D. Dissertation, University of Illinois.
- Bungicout, (1982). *Popular Participation in Development in Africa*. *Assignment Children*, Vol. 2/82, pp 57-77.
- Burki, Shahid Javed, (1969). *West Pakistan Rural Works Program: A Study of Political and Administrative Response*. *JSTOR: Middle East Journal* , Vol. 23, No. 3 (Summer-1969)
- Burki, Shahid Javed, (2001). *Basic Need Approach and Pakistan's Development*. Book code 2514, titled "Approaches of Rural Development", Allama Iqbal University, Islamabad.

Castells, Manuel 1996. *The Rise of the Network Society (The Information Age: Economy, Society and Culture, Vol 1)*. Malden: Blackwell Publishers Inc., 1996. Print.

Chamber, R. (1983). *Rural Development*. Longman Scientific & Technical.

Chatto padhyaya P. 1971. "Modernization of Economic Life in Under Developed Countries", pp184-273 I A.R. Desi (ed.) *Essay in Modernization of Under Developed Societies Vol. 2*, Bmombay, Thacker and Company.

Chaudhary, K. M. (2002), *Community Infrastructure Services Program (CISP)*, HRD manual, Muzafarabad, Department of Local Government and Rural Development, Govt. of AJK.

Chaudhary, M.H (1982) 'Migration and Social Change in Humak Village,' Unpublished M. Sc thesis. Department of Anthropology, Quaid-i- Azam University, Islamabad.

Chaudhry, M. A. (1985), *Economics of Alternative Irrigation Water Allocation and Price Rules in Pakistan*. Colorado State University, University Microfilms International, Ann Arbor Corporation, New York, New York.

Chayanov, A.V (1966) 'The theory of Peasant Economy,' In (eds) D. Thorner, B. Kerblay, and R.E.F. Smith, *Homewood*, American Economic Association, Illinois.

Chirot. 2000. *Modernization, Cultural Change, and the Persistence of Traditional Values*. *American Sociological Review*.

Chopra, Ramesh (2005) *Academic Dictionary of Anthropology*, Isha Books, Delhi.

Chambers, R. (1980). *Basic Concepts in the Organization of Irrigation*, in: Coward, E.W. (ed), *Irrigation and Agriculture Development in Asia: Perspective from the Social Sciences*, Cornell University Press, Ithaca and London, pp. 28-50.

Chambers, R. (1989). *Reversal, Institutions and Change*, in Chambers, R.A. Pacey and L.N.Thrupp (eds.) *Farmer First. Farmer Innovation and Agriculture Research*, Intermediate Technology Publication, London, pp. 181-195.

Cheema, & S. Mohmand (2007). Decentralization and Inequality in Pakistan: Bridging the GAP that divide. In M.A.Saqib(ed) Devolution and Governance: Reforms in Pakistan. Oxford University Press.

Clammer, John (1987) 'Beyond the New Economic Anthropology, Published by Macmillan Press, London.

Clark, Gordon L. (2005) ' Money Floes like Mercury: the Geography of Global Finance,' *Geografiska Annaler Series B; Human Geography*, volume 87, Issue 2, January, 2005, Blackwell Publishing, 108 Cowley Road, Oxford.

Copp, James H. (1972). Rural Sociology and Rural Development. *Rural Sociology*. 45 (Winter) 515-533.

Cohen, J.M. and N.T. Uphoff, (1977). Rural Development Participation: Concepts and Measures for Project Design, Implementation and Evaluation. Rural Development Monograph No. 2, Cornell University, Ithaca New York.

Darling, M.L (1934) *Wisdom and Waste in the Punjab Village*, London, Oxford University.

Datt, G. and M. Ravallion. 1998a. "Farm Productivity and Rural Poverty in India." *Journal of Development Studies* 34 (4): 62-85.

Datt, G. and M. Ravallion. 2002. "Is India's Economic Growth Leaving the Poor Behind?" *Journal of Economic Perspectives* 16: 89-108.

Department of Agriculture, Food and Rural Development 2000. Annexes, *Agri-Food 2010*. Stationery Office, Dublin.

Desi. A.R., 1975. *State and Society in India: Essay in Dissent* Bmbay, Popular Parkashan.

Deutsch, K. (1961). *Social Mobilization and Political Development*. American political science review. Vol. IV. Cited by S.T.Akindele (2004)

Diao, X., P. Hazell, D. Resnick, and J. Thurlow. 2005. "The Role of Agriculture in Pro-Poor Growth in

Dittmer, Kunz (1960). *Ethnology general*, (Originally Published in German)
Mexico City: Fondo de Cultura Economica

Drucker, Peter, 1993. Post-Capitalist Society, HarperCollins Publishers, Inc. New York, New York.

Drucker, Peter. 1989. The New Realities. Harper and Row, Publishers, Inc. New York,

Dube, S.C. (1964). *India's Changing Village: Human Factor in Community Development*. Routledge and Kegan Paul Ltd. London.

Dudley Seers (Ibid: 124-25)

Durkheim (1956). *Division of labor in society*, Glencoe, The free press.

Durkheim, E., (1938) *The Evolution of Educational Thought Lectures on the Formation and Development of Secondary Education in France*, Translated by Collins, P., and London:

Dustin, D.S and Davis (1967). *Authoritarian and Sanctioning Behavior*, *J, Pers, Soc. Psychol* 6:222-224.

Egler, Z (1960) ‘ *A Punjabi Village in Pakistan .*’ New York: Columbia University Press.

Ehtisham Ahmad and Stephen Ludlow 1989, “Poverty, Inequality and Growth in Pakistan” *The Pakistan Development Review*, Volume 28 (Winter1989)

Eisenstadt, S.N. 1966. *Modernization: Protest and Change*. Englewood Cliffs N.J., Prentice Hall. 1-9.

Eisenstadt, S.N. 1977. *Sociology Theory and Analysis of the Dynamics of Civilizations and Revolution* *Daedalus* 106 (4): 59-78.

Eisenstadt, S.N.1996: *Modernization: Protest and Change* Englewood Cliffs N.J, Prentice Hall.

Eisenstadt, S.N., 1973. *European Civilization in a Comparative Perspective*, Oslo, Norwegian University Press.

Etienne, Gilbert (1995). *Rural Change in South Asia*. Vikas Publishing House Pvt. Ltd, 576, Masjid Road, Jangpura, New Delhi.

Evans-Pritchard, Sir Edward (1940). "The Nuer". Oxford, 1940.

Fan, S., C. Chan-Kang, and A. Mukherjee. 2005. "Rural and Urban dynamics and poverty: Evidence from China and India." Draft Paper, IFPRI, Washington, D.C.

FAO (1981), *Farmer's Participation and Organization for Irrigation Water Management*. Land and Water Development Division, FAO, Rome.

FAO, 2003, *Extension through Women's Community Development Groups: A Case Study of Female Extension Assistants*, Research, Extension & Training Division Sustainable Development Department FAO Rome, 2003.

Finsterbusch, K. and W. Von Wicklin (1987). *The Contribution of Beneficiary to Development Project Effectiveness and Administration and Development*, Vol. 17, pp 1-23.

Fichter, (1968). *Grundbegriffe der Soziologie*, Wien, New York.

Fridman and Lindblom, (1978). Quoted by Sonyal 1994 in "Ideas and Institution's: Why the Alternative Development Paradigm, Withered Away, Regional Development Dialogue, Vol. 15, No. 1.

Freedman, J. and Wai, L. (1988). *Gender and Development in the Barani Areas of Pakistan*. Paper Prepared for Agriculture, Canada.

Ford, C.D. (1937). *Habitat, Economy and Society: A Geographical Introduction to Ethnology* (second edition), New York.

Goode, William J. and Paul K. Hatt (1952). *Methods in Social Research*. New York: McGraw Hill.

Gans, H., 1972. Relativism, Equality, and Popular Culture. In B. Berger (Ed.). 'Authors of their own lines'. Intellectual Biographies by twenty American Sociologists (pp. 432-449), Berkeley, CA: University of California Press.

Galli, Rosemary (1981) 'The Political Economy of Rural Development: Peasants, International Capital and the State: Case Studies in Colombia, Mexico, Tanzania and Bangladesh,' Alibris, Emeryville, CA

Gebaure, D.H.E. (1980). The Importance of Farmer Participation for More Effective Organizations of Irrigation system. M.Sc Dissertation, Reading University, Reading.

Giddens, Anthony 1971. Capitalism and Modern Social Theory: An Analysis of the Writings of Marx, Durkheim and Max Weber, Cambridge University Press, 261 pages

Ghimire, J. (2000) NGO development in Nepal. In Swar, B.B., Naupane, S.R. & Basnet, SK.(ed) Social Development and INGOs Activities in Nepal 2000. Community Development Service Association, Kathmandu.

Gore, M.S. 1971 "Education and Modernization" pp. 228-39 in AR. Desi (ed.) Essay on Modernization of Underdeveloped Societies Vol. 2, Bombay Thacker and Company

Government of Pakistan, (1998). District Census Report of Chakwal.

Government of Pakistan, (2004). Pakistan an Official Hand Book.

Government of Pakistan, (2005). Economic Survey of Pakistan.

Government of Pakistan, (2007). Vision 2030, Planning Commission of Pakistan.

Government of Pakistan, (2009). Economic Survey of Pakistan.

Gurung, S.B. (1998) Rural Development Approaches in Nepal: Some Experiences. Development Associates for Rural and Regional Development (DEVA), Kathmandu

Haq, Khadija 2002. Human Development in South Asia-2002. Agriculture and Rural Development, Mehboob-ul-Haq Development Center, Islamabad

Harbison, F: Myers, C A (1964) 'Education, Manpower, and Economic Growth,' Strategies of Human Resource Development, McGraw-Hill Book Company, New York.

Harris, Marvin (2001) 'The Rise of Anthropological Theory: A History of Theories of Culture (updated Edition)' Rowman & Littlefield Publishers, Inc. Oxford OX-2 9JJ.

Harris, Marvin (2001) 'Cultural Materialism: The struggle for Science of Culture, Simon & Shuster, New York.

Harris, Marvin, John & Lewis, Colin M. (1997). The New Institutional Economics and Third World Development, Routledge Taylor & Francis group Limited. London.

Hart, Keith (2007) 'Money is Always Personal and Impersonal,' Anthropology Today Volume-23, October 05, 2007, Blackwell Publishers, 108 Cowley Road, Oxford, pp. 12-16.

Hashmi AA, MH. Sial and MH. Hashmi (2008). Trends and Determinants of Rural Poverty: A Logistic Regression Analysis of Selected Districts of Punjab. The Pakistan Development Review, 47: 4 (II) pp 909-923.

Hayami, Y., & M. Kikuchi (1981), Asian Village Economy at the Crossroads: An Economic Approach to Institutional Change. University Press, Tokyo

Hayami, Yujiro and V. Ruttan. 1985. *Agricultural Development: An International Perspective*. Baltimore, MD: Johns Hopkins University Press.

Haythron, W.W., Couch, A., Haefner, D., Langham, P., and Carter, J.K (1956). The Behavior of Authoritarian and Equalitarian Personalities in Groups. Hum, Relat. 9:57-74

- Hazell, P. and S. Haggblade. 1991. "Rural-Urban Growth Linkages in India." *Indian Journal of Agricultural Economics* 46 (4): 515-29.
- Haq, W. (1977). *Towards a Theory of Rural Development*. Development Dialogue (2)
- Haq, Khadija (2002). *Human Development in South Asia-2002*. Agricultural and Rural Development. Mehbub-ul-haq Human Development Center, Islamabad.
- Herbon, D. (1988). Socioeconomic Reproduction in Bangladesh, Methodology of an Empirical Study in Maing W. D. Herbon (eds). *Third world Research Recent Developments and Appropriate Research Approaches*. Socioeconomic Studies on Rural Developmet, Vol. 80. Aachen pp-48-49.
- Hibbs, Douglass, (1973). *Mass Political Violence: A Cross Sectional Analysis*, New York:Wiley.
- Hibbs, Douglas and Ola Olsson. 2004. "Why Some Countries Are Rich and Others Are Poor." *Proceedings of theNational Academy of Sciences of the United States ofAmerica* 101 (10): 3715–20.
- Hobo T. (1996) *Endogenous Development and Rural Villages in Japan*, Iwanami Shoten, Horton, Hunt, ed., 1996:369
- Hobel, E. Admson (1966). *Anthropology: The Study of Man* (third edition), New York: Mcgraw Hill.
- Hobbs, Daryl J. (1980). Rural Development: Intentions and Consequences. *Journal of Rural Sociology*, 45(1), pp. 7-25.
- Hopkins, Nicholas S. (1969). *Canadian Journal of African Studies*, Vol 3. No.1, Winter, pp-168-173.
- Horowitz, Michal M. and Thomas M. Painter (1986). *Anthropology and Rural Development in West Africa*. West View Press, Boulder and London.

Hoselitz, Bent, F. 1968 " Economic Growth and Development: Non Economic Factors in Economic Development " pp. 275-84 in Jason C. Frinkle and Tichard W. Gable (eds.) Political Development and Social Change New York, John Wiley

Hussain, F. (2000) Sustainability of NGO-led Development Projects: Lessons From South Asia. In Vartola, J., Ulvila, M., Hossain, F. & Dhakal, T.N. (eds.) development NGOs Facing the 21st Century: Perspective From South Asia. Institute for Human Development, Kathmandu.

Hussain, Ishrat (2005) Education, Employment and Economic Development in Pakistan. Inaugural Address Delivered at the Conference on Education Held at Woodrow Wilson Centre, Washington D.C. on April 15, 2005 (website).

ILO (2001) World Employment Report 2001, Life at Work in the Information Society. Geneva: International Labor Office.

Institute of Development Studies (IDS) 1989. Interactions for Local Innovations, in: Chambre, R. A. Pacey and L.N. Thrupp (eds.) Farmer First: Farmer Innovation and Agriculture Research. Intermediate Technology Publication, London, pp. 43-51.

Inkeles A. 1976, Modernization of Man in Socialist and Non-socialists Countries, Mark G. Field school (ed). Social Consequences of Modernization in Communist Countries Baltimore, John Hopkins University press

Inkeles, A. (1966), The Modernization of Man pp. 139-50 in Myron Weiner (ed.) Nodernization: The Dynamics of Growth, New York, Basic Books

International Labour Organization (1998) World Employment Report 1998-99: Employability in the Global Economy, How Training Matters. Geneva.

Iqbal M. (1993). Sociology: Published by Aziz Book Depot, Urdu Bazar Lahore.

Islam, Qamar-UL., & Anjum, Ghulam Abbas (2006). A Review of Rural Development Programs of 20th Century and Replication of an Effective Program in 21st century: A Case Study of Rural Punjab, Pakistan.

Jagirdar Syed A. Hashmi, (2005). Concept, Philosophy and Approaches to Rural Development in South Asia. Training Course on Human Resource Development through HRD 8-28 August 2005, SAARC Human Resource Development Center Islamabad, Pakistan.

Jahoda, Marie; Mortan Deutsch and Stewart W, Cook, Research Methods in Social Relations. The Dryden press, New York.

Jameson, Fedric (1991). Postmodernism or the Cultural Logic of Late Capitalism, Duke University Press, North Carolina.

Jason C. Frinkle and Tichard W. Gable (eds.) Political Development and Social Change New York, John Wiley

JICA (2008). Agriculture and Rural Development. Available on www.jica.go.jp/english/publication/reports/annual/2011/pdf/25.pdf. Accessed on 10/11/2011.

Jim Frawley and Gillian Phelan, Teagasc, Rural Economy Research Centre, 19 Sandymount Avenue, Dublin 4

Johnston, B.F. (1970), Agriculture and Structural Transformations in Developing Countries: A Survey of the Research, *Journal of Economic Literature*, 8(2) pp. 369-404.

Jutting, Johannes & Morrisson, Christan (2005) Changing Social Institutions To Improve The Status Of Women IN Developing Countries, Brief Policy No. 27 Jul-2005, OECD Development Center, Paris, p.06.

Karsten, Siegfried G. (1983) 'Dialectics, Functionalism and Structuralism in Economic Through,' *American Journal of Economics & Sociology Inc.* Volume-42, No. 2, April, 1983, Blackwell Publishers, 108 Cowley Road, Oxford & 350 Main Street, Malden, MA, pp. 180-192.

Kalshoven, G.N.E. Tapay and A. Schrevel (1989). Organization and participation in South-East Asian Irrigation Systems. Agricultural University, Wageningen.

Keller, W. John (2007). The importance of Rural Development in the 21st century- persistence, sustainability and Future. Accessed on 13-8-2009. <http://www.regional.org.au/au/countrytowns/keynote/keller.htm>

Keefer, P. and S. Khemani. 2004. "Why do the Poor Receive Poor Services?" *Economic and Political Weekly* 39 (9): 935-943.

Khan et al,1992 A Socio-Economic Study of Azad Jammu and Kashmir Publication No. 278, Punjab Economic Research Institute, Lahore, FAO Rome, UNDP and GOAJK, Nov. 1992

Khan, Nexus between Rural Development, Growth and Poverty Rductin In South Asia, SAARC Jouranal of Human Resource Development, SAARC Human Resource Development Center, Vol. 4, No. 1: pp. 3-4.

Khan, Naseer Ahmad (2010). The Changing Role of Post Office in the Socioeconomic Development in Pakistan. A Ph.D Thesis Submitted to Anthropology Department, Quaid-i-Azam University, Islamabad.

Khan, M.A.; M.I. Khan; Sheikh, A.D; Khan, N.A. & Tariq, B. (1999). Baseline Survey of Livestock Management in Rainf-fed Farming System of Potohwar and Shakargarh, Punjab. GTZ, GmbH and SSI, NARC Collaborative Socio-economic Study.

Kroeber, A.L. (1948). *Anthropology*. New York: Harcourt Brace & Jovanovich.

Kuhnen, F. (1968), *Agriculture and Beginning Industrialization: West Pakistan Socio-economic Investigations in Five Pakistani Villages*. Opladen.

Kuper, Adam (1977) 'The Social Anthropology of Radeliff- Brown,' Routledge Taulor & Frances Group, London.

Kuznets S. (1955). Economic growth and Income Inequality. *American Economic Review*, Vol. 45, No 1, pp 1-28.

Lacroix, Richard (1985), "Integrated Rural Development in Latin America," World Bank

Lall, Sanjay, and John Weiss (2004) *Industrial Competitiveness: The Challenge for Pakistan*. ADB Pakistan Resident Mission, Islamabad. (ADB Institute-Pakistan Resident Mission Paper.)

Larik, Noor Muhammad (1998). *Paper on Employment Generation and Poverty Alleviation*, PIDE.Islamabad

Lefebvre, Alain (1984) 'Punjabi Village Women and International labour Migration from Pakistan,' in (eds.): k. Ferdinand and B. Selmer, *Islam: Family and Society*, Conference Report, The State Research Council for the Humanities, Copenhagen, pp. 173-191

Lefebvre, Alain (1985) 'International Manpower Migration from a Punjabi Village in Pakistan,' in (eds.): A. Guha, J. Prabhu and F. Vivekananda, 'Immigrant Women and Children in Industrial Europe, Institute for Alternative Development Research, Oslo.

Lefebvre, Alain (1990a) 'International Labour Migration from Two Pakistani Villages with Different Forms of Agriculture,' *The Pakistan Development Review*, Vol-29, No. 2, pp. 59-90.

Lefebvre, Alain (1990b) 'Women, Honour and Money in Pakistani Villages: An Example of the Strengthening of Traditions through Economic Development,' *Denny Verden*, Vol-23, No.4, pp. 84-89.

Lefebvre, Alain (1999). *Kinship, Honour and Money in Rural Pakistan. Susistence Economy and the Effect of International Migration*, Q. Richard: Curzon.

Lenski Gerhard and Jean Lenski. (1987) *Human Societies*, 5th ed. New York: McGraw-Hill.

Lerner 1958: *The Passing of Traditional society: Modernizing the Middle East* New York, the free press, 43-75.

Lerner D.1968: "Modernization; Social Aspect" pp.386-95 in D.L. Shill(ed) *International Encyclopedia Of Social Sciences* (10) New York, Mac Millan.

Lerner, D1958: *The Passing Of Traditional Society: Modernizing the Middle East* New York, the Free Press.

Levy, Marrison J. (1966). *Modernization and the Structure of Societies*. Princeton University Press.

Lewin, K and White, R. K (1939). Patterns of Aggressive Behavior in Experimentally Created Social Climates. *Journal of Psychology* Vol. 10.

Loffler, U.J. (1992). Kapitalbildung und Verwendung Landlicher Haushalte in Nordwest-Pakistan. *Sozialökonomische Schriften zur Ruralen Entwicklung*, Bd. 89, Aachen.

Lowdermilk, M. K. (1990). Irrigation Water Control and Anarchy, in: *Sampath, R. K., & R. A. Young (eds.), Social, Economic and Institutional Issues in Third World Irrigation Management*. Studies in Water Policy and Management, No. 15, Boulder, San Francisco & Oxford, pp. 155-173.

Lowdermilk, M. K.; D.M. Freeman & A.C. Early (1978). *Farm Irrigation Constraints and Farmers Response: Comprehensive Field Survey in Pakistan*. Water Management Technical Report No. 1. Vol.1-VI, Water Management Research Project, Colorado State University, Fort Collins, Colorado.

Malik, W.A. (1990). *A Study of Agricultural Knowledge System in Pakistan*, Islamabad Pakistan, Leo Book, 1990.

Malik, S.J. (2005). *Agricultural Growth and Rural Poverty, A Review of Evidence*. Pakistan Resident Mission, Asian Development Bank. Working paper no-2, pp-11.

Manig, W., & F. Kuhnen (1986), The Case of Pakistan, in: *Klennert, K. (ed.), Rural Development and Careful Utilization of Resources: The Cases of Pakistan, Peru and Sudan*. Report of an International Seminar, DSE: Food and Agriculture Development Center, Feldafing, pp. 19-58.

Manig, W. (1991). Rural Social and Economic Structures and Social Development, in Manig W. (eds), *Stability and Change in Rural Institutions in Northern Pakistan*. Socio-economic Studies on Rural Development, Vol. 85, pp. 13-139.

Mayer, Jorg (2000). Globalization, Technology transfer and Skill Accumulation in Low Income Countries. United Nation Conference on Trade and Development (UNCTAD). Geneva.

Marx, Karl, (1970). *The German Ideology*. Ed. C. J. Arthur. New York: International Publishers Co.

Maxwell, S., I. Urey, and C. Ashley. 2001. "Emerging Issues in Rural Development: An Issues Paper."

Mandelbun, Kurt 1945. "The Industrialization of Backward Areas". (Oxford: Basil Blackwell).

Mcpheerson and Mcgarry (1990). User Participation and Implementation Strategies in Water and Sanitation Projects. International Journal of Water Resource Development, Vol.3, pp 23-30.

Meier, G.M. (1995). Leading Issues in Economic Development. Sixth Edition, Oxford University Press, New York, Oxford.

Melkote, S.R. (1991) Communication for Development in the Third World: Theory and Practice, New Delhi: Sage Publications.

Melkote, S.R. (1991) Communication for Development in the Third World: Theory and Practice, New Delhi: Sage Publications

Memon S.Q., Khan J.A & Iqbal A. 2001. Approaches of Rural Development. Allama Iqbal Open University, pp 185, Islamabad.

Merrey, D.J. and J.M. Wolf (1986). Irrigation Management in Pakistan: IMMI Research Paper No. 4. International Irrigation Management Institute, Digana Village.

Mcgee, Jon R & Warms, Richard L (2000). Anthropological Theory: An Introductory History, Mcgraw Hill: New York.

Mirza, A. H., D. M. Freeman & J. B. Eckert (1975), Village Organizational Factors Affecting Water Management Decision-Making among Punjabi Farmers. Water

Management Technical Report No. 35, Colorado State University, Fort Collins, Colorado.

Mirza, A. H., and A.R.Qazi (1975). The Process of Irrigation Management at Farm Level. *Journal of Rural Development and Administration*, Vol. XXIV, pp. 98-112.

Mirza, B. Baig (2006). Role of Sustainable Agriculture in Rural Development in Pakistan: Some Thoughts. *Journal of Rural Development and Administration*, Vol. XXXVII, No. 2, pp 1-10. Pakistan Academy of Rural Development , Peshawar Pakistan

Misra R.P and Bhooshan (1981). *Rural Development: National Policies and Experiences* in Misra R.P (ed) Maruzen Asia for UNCRD, Nagoya.

Mosher, A.T. (1972). *Projects of Integrated Rural Development*, New York: The ADC Inc.

Mohamud, K.B. (2004) *The Basic Development Needs Integrated Approach: Working Together for Health and Poverty Reduction in Underprivileged Rural and Urban Settings*, Global Forum for Health Research Forum 8, Mexico.

Morgan,Lewis Henary (1877). *Ancient Society, or Researches in the of Human Progress from Savagery, Through Barbarism to Civilization*, New York.

Moore, W. and Cook, R. (1963) *Social Change*, (ed.) Prentice-Hall Inc. Englewood Cliffs, New Jersey.

Murphy, Robert F. (2002) 'American Anthropology 1946-1970,' University of Nebraska Press, Lincoln.

Murdock, G.P. 1961. *Africa: Its peoples and their culture history*. New York: McGraw-Hill.

Muhammad, S. (194). *An Effective Communication Model for the Acceptance of New Agricultural Technologies by Farmers in Punjab, Pakistan*. Ph.D Thesis Department of Agricultural Extension and Rural Development, University of Reading, Reading, England.

Mustafa, Usman, Kalab Abbas and Amara Saeed (2005). Enhancing Vocational Training for Economic Growth in Pakistan. *The Pakistan Development Review*, 44: 4 part II (winter 2005), pp. 567-584.

Muthaba (1987). Participation Forms of Self Reliance in Rural Development. The Experience from South Africa. African Center for Applied Research and Training in Social Development. Research Series No. 4, Tripoli.

Muller, J.O. (1996). Concept of Cooperation, Unpublished Script, Gottingin.

Mullah, U. (1997). Extension Program in Pakistan. In E. Basir (ed.) *Extension Methods*, pp. 35-60, Islamabad, Pakistan: National Book Foundation 1997.

Mullard, (1987). Decentralization and Local Control: A Centralist Critique *Community Development Journal*, Vol. 22, No 2, pp. 148-151.

Myrdal, G. 1968 "Asian Drama" An Inquiry Into the Poverty of Nations Harmondsworth, penguin

Nabli, M.K.& J.B. Nugent (1989). The New Institutional Economics and its Applicability to Development. *World Development*, Vol.17, pp. 1333-1347.

Nader, L. (1972) *Up the Anthropologist—Perspectives Gained from Studying Up*. in *Reinventing Anthropology*. Ed. Dell Hymes. NY: Random House.

Naisbitt, John and Patricia Aburdene. Megatrends 2000. 1990. Avon Books, The Hearst New York.

Nash Manning, (1968). "Some Social Aspects of Economic Development" pp. 285-96 in

National Engineering Services Pakistan (NESPAK), and PIC Consultants (1990). *On Farm Water Management-III Project: Feasibility Study. Main Report, Vol. 1. Lahore.*

North, D. (1996), *Understanding the Process of Economic Change*, London, Institute of Economic Affairs.

North, D.C. (1984). Transaction cost, Institutions and Economic History. *Journal of Institutional and Theoretical Economics*, Vol. 140. pp. 1-17.

NPA (2002). *Development Terms-Norwegian People Aid's Dictionary*.

NRSP, (2002). *Implementation of Khushal Pakistan Program Through NRSP*

NRSP, (2004). *NRSP Report on Khushab Region*.

Nurul-Haq, (1979). *Participation of Rural Workers in the Development Process: A Case Study of Bangladesh Rural Academy, Bogra*.

Nurkse, Rangnar. 1953. *Problems of Capital Formation in Underdeveloped Countries*. New York: Oxford Univ. Press, 1953

Nwachukwu, Ifeanyi N. and Ezech, Chima I. (2007): *Impact of Selected Rural Development Programmes on Poverty Alleviation in Ikwuano LGA, Abia State, Nigeria*. Published in: *African Journal of Food, Agriculture, Nutrition and Development*, Kenya , Vol. 7, No. 5 (2007): pp. 1-17

Oakley, P. and Pratt, B., Clayton, A. (1998) *Outcomes and Impact: Evaluating Change in Social Development*. NGO Management and Policy Series No. 6. Oxford:

O Cooner, David and Maria Rosa Lunati (1999). *Economic Opening and Demand for Skills in Developing Countries: A Review of Theory and Evidences* (Technical Paper No. 149) Organization for Economic Cooperation and Development, Development Center Paris.

Olson, M. (1965). *The Logic of Collective Action*. Cambridge, MA:Harward University Press.

Pakistan, Government of (2005) *Medium Term Development Framework 2005-10*. Islamabad: Planning Commission.

Pakistan, Government of (2005c) *Medium Term Development Framework (MTDF) 2005-10*. Islamabad; Planning Commission, Government of Pakistan.

- Pakistan, Government of (2007) Pakistan Economic Survey 2004-05. Islamabad: Finance Division, Economics Adviser's wing.
- Panday, D.R. (1999) Nepal's Failed Development: Reflections on the Mission and the Maladies. Nepal South Asia Centre, Kathmandu.
- Panhwar M.H. (2005). Allivation of Rural Poverty. ([http://Panhwar.com/Article 16.htm](http://Panhwar.com/Article16.htm))
- Papa, M. J. Singhal, A; Papa, W.H (2006) 'Organizing for Social Change: A Dialectic Journey of Theory and Praxis,' Sage Publications, New Delhi.
- Parks, R.E.1951. The City Suggestions for the Investigation of Human Behavior in the Urban Environment, American Journal of Sociology 20 (March) : 572-612
- Parsons, T.1960: Societies: Evolutionary and Comparative Perspectives Englewood Cliffs, N.J., And Prentice Hall.
- Parson, Talcott. 1954. 'The incest taboo in relation to social structure and the socialization of the child', British J. Sociol., 5 (2), 1954.
- Pasha M.Rehman (2002) The Journal, Inefficient Water Management: Its Impact On Economic Growth, NIPA Karachi: VoI-7 No. 4
- Pelto, P.J & Pelto G.H. (1978). Anthropological Reseach; The Structure of inquiry, Cambridge University Press, London.
- Pirzada W. H 1999. Sustinabale Rural Development in Pakistan, A new Millinum Perspective . Sci.Tech. & Dev. Vol. 18 (4) pp 53-55
- Polanyi, K (1957a), 'The Economy as Instituted Process,' in (eds.) Polanyi, K: Arensberg, C and Pearson, H.W, 'Trade and Markets in the Ealy Empires. The Free Press, Glencoe.
- Ravallion, M. and S. Chen. 2004. "China's (uneven) Progress Against Poverty." Development Research Report, World Bank, Washington, D.C.

- Ravallion, M., and G. Datt. 1999. "When is Growth Pro-poor? Evidence from the Diverse Experiences of India's States." Policy Research Working Paper No. 2263, World Bank, Washington DC.
- Reardon, T., J. Berdegue, and G. Escobar, 2001. "Rural Non Farm Employment and Incomes in Latin.
- Reader, Soran (2006). *Dose a Basic Need Approach Need Capabilities?*. Balckwell Publishers, 108 Cowley, Oxford.
- Rehana, Yousaf, 2006 " Interventions of NGO's and Socio-Economic Changes "M.Phil Thesis, Department of Anthropology, Quaid-i -Azam University, Islamabad
- Reich, Robert B. 1992, The Work of Nations. Vintage Books, Random House Publishing, New York, New York.
- Riddell, R.C. & Robinson, M. (1995) *Non-Governmental Organizations and Rural Poverty Alleviation*. Clarendon Press, Oxford.
- Rocheleau, Diane E. (1991) *Genders, Ecology, and the Science of Survival, Stories and Lessons from Kenya*. Agriculture and Human Values Winter/Spring.
- Romer, P. (1990). Endogenous Tehnical Change. *Journal of Political Economy* 98:3 part-2.
- Rosenweig, M. and W. Foster, 2004. "Agricultural Productivity Growth, Rural Economic Diversity, and Economic Reforms: India, 1970-2000" *Economic Development and Cultural Change* 52: 509-42.
- Rosenstein-Rodan, Paul N. 1943. "Problems of Industrialization of Eastern and South-Eastern Europe." *Econ.J.*53 (June-September 1943): 202-211.
- Rostow, W.W.1960: *The Stages of Economic Growth* Cambridge, Cambridge University Press.

Rutledge, Scootlash (1997) *Sociology of Postmodernism*, The International Library of Sociology, Routledge 11 New Fatter Lane, London EC4P 4EE & West 35th Street, New York.

Ruttan, V.M. & Y. Hayami (1984). Towards a Theory of Induced Institutional Innovation. *Jouranal of Development Studies*, Vol. 20, pp. 203-223

Sagardoy, J.A.A, Botral and G.O. Uittenbogaard (1986). *Organization, Operation and Mainantance of Irrigation Schemes*, FAO Irrigation and Drainage Paper No. 40, Rome.

SARDF, (1997). *South African Rural Development Framework*, Available at: www.anc.org.za/rdp/rdevframe.html.

Sahibzada, Muhibul Haq (2003) *‘Rural Development in Pakistan*, Institute of Policy Studies, Islamabad.

Schrevel, A. (1989), *Indonesia’s Irrigation Sector: Some Preliminary Conclusions From a Socio-Economic Perspective*, in: *Kalshoven, G., et al. (eds.)*, *Organization and Participation in South-East Asian Irrigation Systems*. Agricultural University, Wageningen, pp. 45-87.

Schmidt, W.,W.Koppers (1924). *Volkern und Kulturen*. Regensburg.

Schultz, T.W (1964). *Transforming Traditional Agriculture*. New Heaven CT, Yale, University Press.

Schultz, T.W (1995). *Leading issues in economic development*. Sixth edition. Oxford University Press, Oxford.

Sen, A. (1981). *Poverty and Famines, an Essay on Entitlement and Deprivation*, Clarendon Press, UK.

Seymour-Smith (1986). *Dictionary of Anthropology*, London. The mecmillan press.

Seer, (1979). *The Meaning of Development in Lehman, D (ed) Development Theory: Four Critical Studies* London: Farnk Cass

Shahid Javed Burki, (1969) Middle East Journal, VOL. No. 3 (Summer 1969), pp. 321-342

Sharma, S.L.1978: Concept of Modernization: Rationality as an Alternative Interpretation Social Action 28(1):37-49.

Shahidullah, (2006). Rural Development: A Case study of District Government in Northwestern, Pakistan. Ph.D. Thesis submitted to Gomal University Dera Ismail Khan, Pakistan.

Sheikh, A.D.; Byerlee, & M. Azeem Khan (1988). Analytics of Barani-farming system of northern Punjab. Cropping intensity, Crop Livestock Interaction and Food Self-Sufficiency.

Shaik, Haffis,; Y.V.R. Redddy; Y.S. Ramkrishna; and L.L. Somani (2007). Rural Transformation. Agrotech Publishing Academy, Udaipur-313002 India.

Shanker, Raj, and Anwar Shah (2001). Bridging the Economic Divide Within Nations: A Scorecard on the Performance of Regional Development Policies in Reducing Regional Income Disparities. Washington D.C: World Bank.

Shils, E.A. 1961. The Intellectual Between Tradition and Modernity, The Hague Mouton and company.

Siddique, A. Jameel (1980). A Review of Rural Development Programs, Local Government and Rural Development Division, Government of Pakistan, P. 17-46.

Sillitoe, P. (2000). Let Them Eat Cake: Indigenous Knowledge, Science and the 'Poorest of the Poor. Anthropology Today, Vol. 16 (6)

Singh, R.G., 1982. Rural Modernization: Contradictions and Change, Intellectual Publishing House, Delhi 30-32.

Smelser, N.J.1966: The Modernization of Social Relation pp. 110-21 in Myron Weiner (ed) Modernization: The Dynamic Of Growth New York, Basic books.

Smith, W.C. 1965. Modernity of a traditional society, New Delhi, Asia publishing house.

Smith, W.P (1967). Power Structure and Authoritarianism in Use of Power in Trade. *J. Pers.* 35: 65-89.

Sonyal B. (1994). Ideas and Institutions: Why the Alternative Development Paradigm, Withered away, *Regional Development Dialogue*, Vol. 15, No. 1.

Spencer, D. 1994. "Infrastructure and Technology Constraints to Agricultural Development in the Humid and Sub-humid Tropics of Africa." *Environment, Production, and Trade Division Discussion Paper No. 3*, IFPRI, Washington, D.C.

Staff Working Papers, Nr. 716, World Bank, Washington DC.

Strutz, C. (1994). Small Scale Industry and Rural Development. Institute of rural Development, Discussion paper No.16, George August University, Gottingen.

Syed, J.I. (1991). *Dehi Taraqi*, Allama Iqbal Open University Press, Islamabad, Pakistan.

Syken, Karen (2005). *Arguing with Anthropology. An Introduction to Critical Theory of Gift*, Routledge Publishers, Oxford.

Swaminathan M.S. (1982). *Science and Integrated Rural Development*, Concept Publishing Company, New Delhi.

Tapay, N. (1989). Organizational Structure, Management and Effectiveness of Large-Scale Irrigation Systems in the Philippines: Focus on Farmer Participation, in: *Kalshoven, G. et al. (eds.), Organization and Participation in South-East Asian Irrigation Systems*. Agricultural University, Wageningen, pp. 16-44.

Timmer, P. 2005. "Agriculture and Pro-Poor Growth: What the Literature Says." Draft paper, Agricultural and Rural Development Dept., World Bank, Washington, D.C.

Truu, M.L (1990). Economic System, Economic Performance and the Mixed Economy, Vol.-58, Issue 4, December.

Toffler, Alvin, Power shift, Bantam Books, New York, NY, 1990.

Tönnies, Ferdinand (1887). *Gemeinschaft und Gesellschaft*, Leipzig: Fues's Verlag. (Translated, 1957 by Charles Price Loomis as *Community and Society*, East Lansing: Michigan State University Press.)

USDA, http://medlibrary.org/medwiki/Rural_development. Accessed on 13th November, 2011.

Uphoff, N.T.J.M. Cohen and A.A.Goldsmith (1979). Feasibility and Application of Rural Development Participation. A state of the Art Paper, Cornell University, Ithaca, NY.

Uphoff, N. T., & M. J. ESMAN (1974), Local Organizations for Rural Development: Analysis of Asian Experience. Rural Development Committee, Cornell University, Ithaca, N. Y.

Ulrich, G.J.U.Krappitz and E Gholi (1991). Participatory Approach for Group Events: Basic Concept: Case Study, Practical Steps, DSE and ZEL, Feldafing.

Valdes, A. and W. Foster, 2003. The Positive Externalities of Chilean Agriculture: the Significance of its Growth and Export Orientation: A Synthesis of the ROA Chile Case Study. Santiago, Chile: Pontificia Universidad Catolica de Chile.

Waseem, M. (1982). Local Power Structure and the Relevance of Rural Development Strategies: A Case Study of Pakistan. *Community Development Journal*, 1982, 17:225-233.

Waheed, Chaudhry, (1996). Water Users Associations in Pakistan: Institutional, Organizational and Participatory Aspects. Ph.D Thesis Submitted to George-August-University Gottingen (Germany).

Walter, (1981). Pakistan's Agriculture.

Waschkuhn, A. (1987). Allgemein Institution Ent Theorie als Rahmen für die Theorie politischer Institutionen, in Gholer G (Hrsg), Grundfragen der Theorie Politischer Institutionen, Forschungsstand problem-perspektiven, Opladen.

Wilk, Richard R. (1996) 'Economies and Cultures: Foundations of Economic Anthropology' West View Press, Oxford OX-2 (JJ).

William O. F. (1964) On Culture and Social Change Chicago: University of Chicago Press

William, Colin,; & Milington, Anderw C. (2004). The Diverse and Contested Meaning of Sustainable Development. The Royal Geographical Society, June 2004, University of Leicester.

World Bank, (1975), Rural Development: A Policy Paper, Washington D.C World Bank.

World Bank, (2004). "A Review of Rural Development Aspects of PRSPs and PRSCs, 2000-2004."

Wright, S. (1990). Development Theory and Community Development Practices in H. Buller and S. Wright (eds). Rural Development Problems and Practices. Aldershot: Avebury

Yousaf, Rehana, (2006). Interventions of NGO's and Socio-Economic Changes. M.Sc thesis submitted to Department of Anthropology, Quaid-i-Azam University, Islamabad.

Zegarra F.L. Iacoacci, P.L., Ross miller, G.E., Skoet, J., Stamoulis, K. and Stinger, R. (1993) the State of Food and Agriculture FAO Agriculture Series, no 26 pub. Rome, Italy.