IMPACT OF BASIC EDUCATION ON THE RURAL DEVELOPMENT IN BARANI AREAS

By

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2007
In the name of Allah,
The Beneficent, the merciful.
DEDICATION

This intellectual work is dedicated

To

My Great Parents

And

My Children
CERTIFICATION

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ABSTRACT

Basic education refers to the level of education intended to develop basic learning skills (3 Rs) as well as some basic life skills necessary for the children to improve the qualities of their lives and to continue learning. Basic education is linked with development programs like growth in income, participation in social activities, health awareness, use of mass media and acquisition of land and use of fertilizers, which enable people to improve their living conditions. The major objective of basic education, however, is the improvement of living standard of every one through promotion and enrichment of communal life. It must, therefore, not only encourage all individuals to participate in the activities of community, but also help them to acquire the attitudes, competencies and behavior necessary for taking initiative and responsibility, which will permit them to play an active role within the community in such a manner as to make the best use of the resources and thus to increase its economic prosperity and wellbeing in every field.

Development in any community, a village, a city or a country finds its key in basic education, a pillar on which the building of the knowledge is supported. It is also true that the condition of the educational institutions in any given society reflects the standard of living attitude towards life of that society and the overall development in that area.

The objectives of the study were: (1) to investigate the level of education of the people of barani areas; (2) to explore the impact of basic education on economic development of barani areas; (3) to see the impact of basic education on social development of barani areas; (4) to see the impact of basic education on health of barani areas; (5) to determine the impact of basic education on general awareness of barani areas; and
(6) to see the impact of basic education on the acquisition of land and use of fertilizers in the rural barani areas.

Male and female general population, sanitary workers, health workers, teachers and community leaders constituted the population of the study. Two hundred villages, 50 each from Attock, Chakwal, Jhelum and Rawalpindi were taken as sample of the study.

The researcher through field visits observed the availability, level and quality of education being imparted, social status of the people and development in the areas. The observation list was prepared to observe the quality of education being imparted. This contained criteria to compare the availability of the education and its quality. A questionnaire pertaining to views of the teachers, parents, public and students was also administered. The data so collected were tabulated and analyzed by using relevant statistical techniques. On the basis of the analysis of the data, findings and conclusions were drawn.

Only educated people considered education as the basic ingredient of development and change. However, with growing population, the number of illiterate people had increased in the country, which proved to be a major block in the path toward development.

Where educational facilities did not exist, generations of illiterate people were being produced, and lots of children were not attending any educational institution.

These conclusions proved the hypothesis of the study that communities with better educational facilities had better economic, social, health, general awareness and acquisition of land and use of fertilizers than communities with meager or no education facilities. Rural barani communities with better educational facilities were more inclined towards innovation than communities with little or no educational facilities.
INTRODUCTION

The term Baran means rain so barani means totally depending on rain for irrigation purposes. There are some areas in Pakistan which totally depend on rain for irrigation purposes. Since there are no other means of irrigation due to typography of these areas, therefore, these are less developed as compared to other areas in the country. This study was designed to see the impact of basic education on the development of barani areas.

Education is a process of the socialization according to the social needs for adequate adjustment in the society. Education brings change in the behavior of individuals and empowers them to learn to live with dignity and freedom. In other words, through the process of education, human beings develop abilities, skills and attitudes that help them to modify their behavior according to economic, social, health, general awareness and agricultural production.

Basic education and training is usually considered the most important way of human capital formation, which is prerequisite for sustaining the development of a nation. It is an integral part of life in growth. As such, it contains all the complexity and fulfillment, the agony and the reward, the multiple products that constitute life.

When a child is born, we wash him, clothe him, hold him, feed him and the process of basic education has begun. He is learning from the way our hands hold him that there is some one out there who loves and cares for him.
According to Jones (1988) there is, in each and every child, irrespective of his parentage and his place of birth, a divine fire, the will to know and learn, to experiment and discover which is part of the will to grow and live in the days to come. This divine fire can carry the child to manhood, and, if kept alive, can sustain the child in the man. This is the soul of education, which can inspire the child to limitless heights of learning, ever-widening circles of knowledge, and infinitely exciting journeys into the world of ideas.

The role of educators is to cherish this instinctive drive to discover, and, at the same time, to provide children with the tools of learning and a stimulating atmosphere conducive to learning (Block, 1974). We must also encourage qualities of mind such as self-discipline, humility, and diligence, all of which are necessary if they are to apply their minds consistently and fruitfully. The capacity to work conscientiously, to complete any activity with total commitment and dedication, is a quality we must foster. These are the qualities, which will ensure that children grow and live as good and full, healthy and productive as the lives should be.

Basic education is the key to development in any society (Thomas, 1905). It is also true to say that the condition of the educational institutions in any given society reflects the standard of living and attitudes towards life of that society. It is, in other words, a two way process. The citizens we produce reflect the quality of education they have received. Similarly, society makes its colleges and schools. Members of the society manage them. Our schools, their sufficiency or insufficiency to meet the needs of the whole population, the way the schools are run, depends upon us, the members
of the community. This is a sobering thought. A mere glance at the state of the schools and the statistics of illiteracy in the country will give us a feeling of gross inadequacy.

Basic education is, as a matter of fact, defined as education imparted from five to fourteen years of age (Kriplani, 1994). It is also the primary and elementary level education. This Basic education imparts so much awareness and knowledge that successfully enables the child and afterwards the youth to have a sense of better living conditions that lead to development.

There has always been a discrepancy between urban and the rural areas as far as equity of educational institutions and their standard are concerned. Educational institutions are sparse, of low standard, and the rural population is averse to the need of the time as far as the modern trends of education are concerned. On the other hand, urban educational institutions are better placed, frequent and of high standard. The attitude of the parents is much better and sufficiently inclined towards better future, development and active participation of both male and female members of the society, especially, as far as the girl’s participation in primary education is concerned.

This discrepancy is further augmented when it comes to the rural Barani areas where the literacy rate is lower as compared with other well-irrigated areas. Development depends on awareness education and availability of basic facilities. Basic education makes the population aware of the needs and facilities by study and comparison with other developed areas. This sense of having them is the sense of their rights. A man who knows about his rights is a developed man mentally at least (Kilpatrick, 1981).
Development in the area is basically the fulfillment of his rights to have. To be aware of his or her rights comes from the Basic and higher education. Therefore, basic education seems to be essential for the development of the rural Barani areas. The possible indicators for the development will be income, health facilities, participation in social activities, general awareness and agricultural production.

The past twenty years have seen the planners in Pakistan devising programs for rural barani areas development. Sometimes it took the form of village aid, at others as rural barani works, and now it is named integrated rural barani areas development program (Government of the Pakistan, 2000). In all these programs, the stress has been on the use of new technology for more production as well as financial aid to farmers for purchasing fertilizers, insecticides, tube wells and tractors. These programs were launched throughout the country but failed to achieve any perceptible results in any sector (Aslam, 1990). There has been severe criticism against these programs (Hashmi, 2005). The main drawback of these schemes was that they employed only economic incentives and stressed the use of mechanized farming without considering its after-effects for the poor masses (Swadish and Clark, 1969). Throughout this period rural Barani areas development was conceived as the progress of the agriculture sector, focusing the farmers and usually the progressive farmer who has been exploiting the rural Barani laborers for a long time on account of his ownership of big farms (Aslam, 1990). As governments have always been under the influence of big landowners and business men, the development strategies in Pakistan neglected the rural Barani poor, who is from time unknown suffering from problems of his own. The main cause of his difficulties has always been basic education which has never been considered his right.
During the British period, a system of public schools was introduced to produce a class of loyal to back colonial government (Myrdal, 1968). The result was general ignorance of the basic education of the masses. This system continued after independence. The metropolitan areas attracted more attention. Consequently, a great disparity exists between the literacy rates of rural and urban population. The literacy rate in Pakistan is 44 percent for the rural and 72 percent for the urban areas. For female population of the rural barani areas this rate is 3.2 percent as compared to 21.2 per cent of their counterparts in cities. Mass illiteracy of the rural barani people has resulted in extreme poverty (World Bank, 2004). It affected per capita income of the country which stands at rupees 3600 (about 60 US dollars), (Saeed, 1999). According to Ahluwalia (1998), 32.5 percent of the population is still below this extreme poverty line. Brannon (1995) also pointed out that majority of these extremely poor people belong to rural barani area. They are either farm laborer or farmers of small holdings ranging between 0-1 hectares with subsistence farming. In Pakistan there has been no improvement in the existing situation after independence.

The plight of the poor intensifies when one sees it in the perspective of rapid population growth, which increased at the rate of 2.40 percent during the period of 1951-61 (Bhatti, 1986). In spite of large investment in family planning programs, it accelerated at the rate of 3.45 percent in the next decade. Consequently the density of population per square mile and per hectare increased (Government of Pakistan, 1974).

But the land cultivators did not intensify the labor on their farms to produce better crops. The paradox is that the government also enforced the policy of
mechanized farming which bereaved the labor force of their petty jobs in the rural barani areas.

For the western hemisphere, urbanization has been a sign of industrial development and expansion of employment opportunities, but the city-ward movement of the rural barani people in Pakistan has not actually been related to any such growth. It is the poverty and the need for security which pushes the miserable folk in to the urban centers to seek employment and asylum. The cities are beset with their own problems, and the migrating people have neither education nor the requisite skills to fit easily and productively into the modern urban sector. Unemployment and under-employment have been growing fast with population expansion and have resulted in an increase in the labor force (Bose, 1980). But quite contrarily, the need for labor force has been decreasing in agriculture with accelerated use of mechanization.

Illiteracy and conservatism go hand in hand. This is why the rural area is characterized by superstitiousness and mythical beliefs which have prevented all efforts to influence change. Catalytic outlook on life have made them lazy, deficient in work and lacking in initiative. This is one of the reasons that in spite of huge investments in agriculture, the yield per acre is decreasing in the main food crops of wheat and rice. And the production of other crops (including cotton) is also declining. Increase in acreage is often counterbalanced by decrease in yield per acre, in which Pakistan already stands the lowest in comparison to other countries of the world. Food grain production remained stagnant since independence and the country had to rely much more heavily on food delivering under PL-480 program (Myrdal, 1968).
Leaving these social and economic phenomena aside, one witnesses perpetual political instability and intermittent interference of army in politics and Govt. affairs. Rationalistic movements have always been active and the separation of Bangla Desh's credit goes to them. Secessionists in Baluchistan have also been exploiting the people's emotions to achieve their own ends (Haque, 1997).

These happenings in the country shake one and force one to think deeply as to what is the basic flaw in the development process. The backbone of a democracy is the public opinion. When it is illiterate and unable to decide, what is right or wrong, it is natural that the opportunists get hold of the country. They work for their own interest and not for the sake of masses. Political awareness, economic growth, agricultural production, labor efficiency, and most of all attitudes towards innovation-the base for all socioeconomic development are all related to education (Campbell, 2000). On political participation, Schultz, (1988), on agricultural production, Denison, (1989), on economic development, also supports this view. In Pakistan, a few studies have been done on the relationship of education and earning including one reported by Naeemul Haque (1997), which confirms the results obtained in other countries. Overall effect of basic education on economic, social and political development has not been studied in rural barani communities of Pakistan. As education is so important a factor in development, there is dire need of researches to bring to light its impact on different aspects of rural barani life. The findings of the study can be utilized to guide the national development plan. These will be of value to avoid unnecessary expenditure on rural barani development program at present. The findings will enable the planners to shift their emphasis from economic incentives to educational expansion.
Rural barani areas development programs in Pakistan have always concentrated on economic incentives to farmers to increase farm production and to move toward commercial agriculture. The only tool utilized is the financial aid to purchase modern inputs. The concept of rural barani areas development has been analogous to increase farm output. The scope of the program has been limited to the landowning class neglecting millions of landless people living in rural barani areas who are mostly engaged in activities other than agriculture. The stress on economic incentives and cash cropping ignores the value of basic education—the torch bearer of all development.

The present study was designed to appraise the relationship of basic education with rural barani areas development in economic, social, health and general awareness and acquisition of land and use of fertilizers.

The major objectives of the study were:

1. To investigate the level of education of the people of barani areas.
2. To explore the impact of basic education on economic development of barani areas.
3. To see the impact of basic education on social development of barani areas.
4. To see the impact of basic education on health of barani areas.
5. To determine the impact of basic education on general awareness of barani areas.
6. To see the impact of basic education on acquisition of land and use of fertilizers.
Rural barani communities with better educational facilities will have better economic, social, health, agricultural production and general awareness than communities with meager or no educational facilities. Rural barani communities with better educational facilities will be more inclined towards innovation than communities with little or no educational facilities.
Chapter 2

REVIEW OF LITERATURE

This chapter deals with the review of literature related to the study of impact of basic education on the rural development in barani areas. The literature is reviewed under the following headings.

- Basic education
- Development
- Rural barani areas
- Review of related studies

A thorough study of literature has shown the impact of basic education on the rural development in barani areas. Steps taken to uplift the rural life in barani areas completely failed in the absence of basic education. A section of this chapter deals with researches of rural development of barani areas programs and the causes of their failure. There is a brief review of the present status of barani areas of the Punjab and the area under study. The first section describes the role of basic education and its impact on the improvement of the standard of living and the overall development of the rural barani people.

2.1 BASIC EDUCATION

Basic education is an innovation, not so much a matter of so many years of schooling or so much content covered, but rather the acquisition by the individual, whether young or old, whether in school or out of school of certain knowledge and attitudes which will enable the individual not only to improve the quality of his life but
to continue his education, to the best of his abilities. Basic education must be many
sided, designed not only for the children and adolescents but also for adults, who at
any stage may have need for it (Bishop, 1986).

The concept of basic education is of recent origin, different people have
different perception about it. Some regard primary education as basic education and
other consider literacy as basic education (Chaudhry, 1989). The concept of basic
education implies the will to prepare the entire population for daily life in a concrete
manner. As a formal service, basic education means primary schooling and sometimes
a few years of secondary cycle. As a non-formal service, it comprises the educational
activities designed for those sectors of population, where there is no educational
institution. But the question may be asked, whether their schooling or non formal
activities satisfactorily answer the requirements of basic education or not? (Qaisrani,
1989).

Basic education aimed at acquisition of primary knowledge and skills
necessary for life in a society can be termed as basic education. These skills may
include literacy and innumeracy of social life and skills of understanding of
community life. Necessary for responsible participation in the society under this
preview, basic education includes all formal and non-formal primary education
provided by government, and NGO (Khan, 2000).

2.1.1 Characteristics of basic education

Basic education must be flexible and adapted to the needs and values of human
groups; basic education programs are designed in accordance with the ecological,
socio-economic and cultural characteristics of the concerned area. In rural areas the
way of life and the techniques employed by people engaged in agriculture, animal
husbandry, fishing etc. are taken into account while developing basic education
programs. So flexibility and adaptation of the program to the diverse needs of the
target groups is the precondition for their success (Ali, 2000).

Basic education must provide an educational minimum: provision of
educational minimum depends on the needs of the human group concerned and the
resources available to the community, which should include:

1. Learning of elementary language skills is indispensable for communication
   (listening, speaking, reading, writing, and understanding).

2. Learning of basic mathematic concepts is useful in working life and necessities
   of daily life.

3. Acquisition of knowledge and functional skills useful in family life (household
   budget, health, child care, nutrition, sewing, manual work, etc.)

4. Initiation into the natural sciences to the extent necessary to comprehend
   natural phenomena occurring in the geographical environment. The initiation
   should help people to accept changes in living conditions and to participate
   actively in transforming the environment.

5. Acquisition of notion and development of practical skills that will facilitate the
   remunerative activities (agriculture, fishing, animal husbandry, crafts, etc.)

6. Initiation into civic life, in order to foster participation of the population in the
   social, economic, and political activities of the community.

7. Learning related to particular, felt needs of the community not covered above.

Basic education should be linked with development programs like agriculture
production, health and nutrition which will enable people to improve their living
conditions. Basic education seeks to equip its beneficiaries with the mean of coping successfully with unfavorable natural or socio-economic conditions by increasing agriculture productivity to fight famine, or by giving up unhealthy agriculture which are the roots of many illnesses. It attacks not the effects but the causes of evils and consequently, endeavors to supply lasting solutions to the difficulties encountered by the population (Qaisrani, 1989).

2.1.2 Role of basic education in development

The failure of new inputs for increased agricultural production was in one way or the other related to the illiteracy of the ultimate users. Education is not the basic ingredient for increasing land productivity but it is the important tool for the user to understand technique, to know skills and to be motivated for more production. As the education is the 'great equalizer' of man's condition, it can substantially reduce the hardships of the rural people and elevate them to a level where they can acquire the necessary skills for productive life. According to Bouchard (1980), education cannot increase the amount of land or raw material but it is responsible for developing skills which consequently raise yield and production. It also promotes the qualities of thrift, industry and efficiency which are important to exploit natural resources. Education is a catalytic agent. It stimulates action to seek enrichment in life. As Schultz (1988) says, a person can have more skills, knowledge and capabilities if he gets education. Bouchard (1980) sees in education a socializing force which provides impetus to seek sublimity and elevation. For Wriggins (1998) education is a political instrument which guides people's behavior toward authority. According to him it develops value and practices of political behavior. It contributes to the development of the concept of
good society. Education teaches adaptability, only an educated person can easily adjust himself with new environment in society, in jobs and in professions. Schultz (1988) commenting upon this aspect writes that the basic education develops the qualities of adjustment to change which are necessary for economic well-being. He has attributed every change in society to the success or failure of the education system. According to him education is both cause and effect of any change in society.

The need for more and more education increases with the complexity of life. In the present age of computerized automation, where personal relations have broken off and warm emotions have sunk down beneath the artificial friendships, it is difficult to survive without continued education. For Fredrick Eddyng (2001) the need of more and more education is unlimited. Insufficient education expresses itself in inability to deal with personal and social problems. As the society advances and the complexity of life increases, the need for more education grows. Basic education itself increases appetite for education to enjoy life. Basic education is the only tool through which the ever expanding knowledge of today's world can be transmitted. To keep abreast of the changing requirements of modern technology, a system of universal education is imperative. A UNESCO (2001) report analyzing the causes and outcomes of illiteracy writes that there was a connection between illiteracy and underdevelopment, of which illiteracy is both cause and effect. According to this report extension of primary education and ignoring the adult population was a disastrous endeavor. It was resulting in the wastage of productive manpower, causing delay in social development and creating intergenerational conflicts. Chastain (1995) thinks that all miseries and conflicts of the mankind are attributable to the lack of basic education. He, while giving the opinion of some important disciplines, writes:
"it has been reinforced by the zeal of the humanitarian to help men to conquer poverty and disease by first conquering ignorance; by the economist’s recognition that production and trade cannot expand so long as illiteracy handicaps the people of half the world; by the political thinker’s realization that peace and international understanding cannot be achieved while nations are divided within themselves and among one another by the unabridged gulf separating the literate from the illiterate."

Government of Pakistan’s education policy report, (1998), considers education as “a pre-condition for success in any sphere of development”. The report adds that: “New ideas and new practices cannot be efficiently communicated to minds which are not trained to receive and make use of them. The various efforts to organize community development programs, agricultural extension, family planning, cooperative movement, and self government are dependent for their success on a considerable dissemination of functional education enabling adults to improve their productivity in their respective occupation and their usefulness as citizens.”

Political instability in the country is also due to the lack of basic education. Illiterate masses are incapable of deciding efficiently. They do not form their own opinions, but follow the general way of thinking whether right or wrong; or they accept the dominance of family decisions to favor certain candidate. The rate of casting the vote increases with the rate of literacy. Campbell (2000) concludes that the percentage of persons who actually cast vote increases with educational attainment. Key (1961) in public opinion and American democracy mentions the same results. Attitude towards the importance of voting was measured on five-level scale. Only 25 percent of the grade school graduates were in the top level while 50 percent of the
high school and 60 percent of the college graduate attained this level. No college graduate was in the bottom level. Saad (1992) reports an extremely high correlation of education with the number of children size of the family and the number of children in school. This has also been confirmed by Hassan (1985).

He writes: "a high rate of literacy is positively related with low rate of population, and whenever in the world a country has been able to educate its people, the rate of population growth has decreased."

In this way basic education encompasses all the aspects of human life. It is the foundation stone of civilization. It provides impetus for development. It does not seem possible to transform a society without first preparing a base by educating its members.

2.1.3 Basic Education and Economic Development

Basic education precedes economic development. Higher literacy rate of the developed countries was the main cause of their economic independence. War against the misery of poor masses can be fought by providing them useful basic education. The real revolution in a country begins with the establishment of basic education system, as White (1973) write about the USA.

The basic cause of early development of American economy lies in the fact that the basic education system was well established in the year 1835. Parents were legally obliged to send their children to school.

Process of development and change is related with the process of basic education. According to Harbisson (1995) basic education develops the human
resources, which is the most important factor of national development. In this way basic education and training of the people contributes directly to national development. Basic education exploits and utilizes the innate capacities of the people. Economic development of a country is the result of human effort and not the outcome of accumulated resources. If a country fails to develop its human resources, there is no possibility of its developing any other thing including economy, political system and national unity. There is accumulated evidence which supports the view that investment in education and economic growth go hand in hand. A study by Adam (1982) indicates that there was a close relationship between a country’s attitude towards the basic education of its people and the rate of its development. Another study conducted by the same author concludes that the country’s investing more in basic education had a high rate of economic growth as compare to the country’s spending less on basic education.

John (1962) writes that basic education is more productive than physical resources. Studies about the United States indicates that in 1939 rural males with 7 to 8 years of school education earned $175 to $104 per year more than those who had only 5 to 6 years of schooling. In 1956 males aged 25-44, with eight years education earned over $1,000 per year more than those who had comparatively less education. Studies made by Herman (1971) about the United States data for the years 1939, 1940, 1949 and 1956 about whites and non-whites life-time earning and earning from 25 years to 64 years of age, all conformed that there existed significant difference among the income of the people to different levels of education. Income increases as the years of schooling increase.
A study by Haque (1997) about Rawalpindi rural barani area writes that persons with primary education earn 13 percent more than the uneducated. The earning peak up at the age of 42. Basic education provides entrance to better occupations and employment. According to Harbisson (1995) formal education is the only source through which the people of low income group get access to higher income groups. Studies by Long (1988) indicates an important correlation between the level of education and occupation and employment. According to data provided by Drone (1980) 36.5 percent unemployment exists among illiterate people, while it is 6.7 percent for grade VI or more education. So long the occupational side is concerned; there are only 7 percent skilled workers among the illiterate group, while the ratio reaches 91.0 percent for those from pre-university education.

Dasgupta (1976) considers education a marketable commodity. They write that schooling is used specifically to gain better employment for the child. Illiterate and unskilled people leaving farms and seeking employment in urban areas, often fail to compete with their counterparts from the cities. The cause of this difference is the lack of education, as Schultz (1988) observes that differential in earnings closely correspond to differentials in basic education. In the USA workers in the southern states on the average earn less than in the north or west, and on the average they have less education. He also gives the example of farm workers coming from other areas. They comparatively earn little as compared with urban workers and many of them have no schooling.

Basic education develops the habits of thrift and saving. Illiterate people with sufficient income spend more on feasts and traditional ceremonies and save very little
for their own betterment or for the nation. A study of Bolivian village reports annual expenditure per family on food as 4,318 Bolivians, while 30 percent of it about 1,250 Bolivians was spent on alcoholic beverages consumed on fiestas. In Mexico the production of beer for the first ten months of 1953 stood at 380 while it was 145 for textile industry and 216 for food industry.

Brand (1998) remarks that undeveloped countries can afford relatively less of such waste, but the illiterate people of the developing countries do not realize it.

Basic education is the foundation stone of all developments. A country lacking in basic education cannot develop the innate potential of its people necessary for economic and social development.

2.1.4 Basic Education and Agricultural Development

Today every development depends upon skill and intelligence. Schooling provides opportunities to learn these skills and to use intellect. Learning of skills is the first step towards technical efficiency which consequently provides paying jobs. Centuries old practice of cultivating lands has altogether changed. Now agriculture is largely a matter of skill and knowledge. As Bouchard (1980) says that agriculture is not a mere art but it is a science too and with its mechanization, it requires more basic education.

The main drawback of the developing world is overwhelming illiteracy. Most of the efforts to transform agriculture failed because the people were not ready to accept change. They had not developed sufficient potential to deal with the new situation. According to Rene (1979) serious attempts to develop agriculture should
include basic education which teaches people to accept change. A study by Baugh (1995) indicates that agricultural productivity in Africa and Asia is about 50 percent per capita lower than the level reached by the developed countries when they entered the industrial revolution.

It is not possible to establish linear relationship between one factor and certain outcome. Technology is not the main cause of all developments of the developed world. Advanced technology is also the outcome of the advanced education. Transforming traditional societies requires innovative behavior which is almost completely lacking in the illiterate world. Basic education is the only vehicle which can persuade the people to accept change. In a study Rogers (1958) categorized the innovative behavior of people into 5 categories:

1. Innovative (2.5 percent),
2. Early adopters (13.5 percent),
3. Early majority (34 percent),
4. Late majority (34 percent)
5. Laggards (16 percent)

Demographic characteristics of these groups were recorded. In general, education, status, and number of contacts with others and with governmental agencies were positively associated with early adoption of an innovation. Another study conducted by Rogers (1958) indicates that high need-achievement is related to innovative behavior. The major hypothesis of the study was that agricultural innovativeness scores vary directly with achievements motivation scores. The correlation between these two kinds of scores proved to range between -.91 and +.48
for the 6 communities. Two of the 6 correlations were for the six commodities. Two of the 6 correlation were significant, one at .05 and the other at .01 levels. The range of scores in the most traditional villages was greater. It also appeared that achievement motivation was also related to (a) the amount of exposure to mass-media, (b) the amount of political knowledge (c) the degree of commapoliteness (orientation towards external social system), (d) the level of literacy, (e) the years of formal education (f) the educational aspirations, (g) occupational aspirations and (h) a positive attitude towards credit. It was also established that achievement motivation is inversely related to age and fatalism.

Introduction of change among the farmers depends upon the change of norms, values and aspirations. Tai, (1972) in his study, “factors in decision making in farming problems” conclude that such factors (as norms, values and aspirations), have a direct influence on the adoption process.

Village society of barani area is a closed society. The people cannot leave their centuries old traditions. It is only through the process of basic education that the people start breaking the shell and seem inclined to accept the change. It opens the way towards a wider world by developing new attitude and by improving skills. Hunter (1969), stressing the role of primary schools writes that if agricultural revolution is to succeed and if traditional society of the village of barani area is to be changed, the expansion and improvement of the feeding primary school should be the first task of the process.

The villagers of barani area have started realizing the importance of basic education. They understand that it is necessary for their economic development. They
operators. Though the people were not skilled in farming but most of them had a good deal of schooling.

In Japan, agricultural production increased at the rate of 4.6 percent. Comparative figures for India are 2.1 percent. Schultz (1988), making the comparison of both the countries, writes that on per capita bases, India has 6 times as much agricultural land as Japan. Arable land in India is also of good quality. India has three times as much irrigated area as Japan on per capita bases. But per acre production in Japan is 8 times as that of India. According to a Schultz, though agricultural inputs used by Japan are of far better quality, but the more important factor of this difference is the high level of farming skills and the amount of schooling of the farm people in Japan as compared to traditional farming techniques and general illiteracy of the rural barani people in India.

An astonishing example of misery and poverty with hard work and firing labor has been presented by Stevens (1971). The rural barani area of Panajachel in Guatemala had no machines, no factories, no coops or corporations. The people were hard working, thrifty, and keen on selling their products, renting lands and buying things. It was not an isolated subsistence economy, but closely integrated with the external market. But the traditional hoes, axes and machetes were not replaced by modern tools and equipment. The coffee leaves used as fertilizer were not replaced by chemical fertilizers. Traditional varieties of corn were not changed by new varieties of seeds. Traders and firms also did not offer the new things for sale. They worked hard but they remained poor. They lived without medical care and drugs. They had dirt floored huts to live in. They had hardly any furniture. They lighted the rooms with fire
which smoked them up. Mortality rate was high. Diet was very meager and they could hardly afford meat. The major drawback of the community was that the schools were almost non-existent and the children could not be spared from work to attend school.

Deutsch (1971) has cited the case of Coimbatore region in India. According to him the major reason of conspicuous prosperity of the region was the establishment of an agricultural college. The farms were run by the sons of the first graduates who themselves had more modern education than their parents.

Prior to world war one, in the United States of America, the farmers of Iowa and Illinois moved to lower Louisiana to grow rice. According to Schultz they achieved a higher level of productivity as compared to the other farmers around them. He has also presented the example of farm people of German stock who settled in the sand mountain area of Alabama and other enclaves of European Japanese immigrants in parts of South America. These people have been more productive on account of their finer skill and better education.

Denmark transformed its agriculture between 1870 and 1900. According to Schultz, it had not been possible without huge investment in the schooling of farm pupil.

Saad (1992) studied the land reforms in Egypt. He also studied the relationships of basic education with other indicators of development. He found the following linear correlation ships to mounted IBM system:

1. Basic education and net formed income  .68
2. Basic education and expense on meat  .96
Shoup (1959) "the fiscal system of Venezuela."

It indicates that inclimental return to primary education in Venezuela was 130% per annum based on the differences in the earnings of illiterate agricultural workers and of those who had six years education.
Leagans (1971) has provided concluding remarks about the role of basic education in increasing the farm output and in this way its contribution to uplift of the rural barani people. He writes, “studies of the agricultural development processes increasingly recognize the contribution of general education as one of the essential elements. These studies indicate that economic growth e.g., cannot be explained in terms of capital accumulation and growth of the labour force alone, but rather, the explanation for a large and possibly the major part of economic lies in investment in the development of human resources through basic education,”

So long illiteracy is not eradicated, their can be no hope of stable development in the country. People in Pakistan have always been tradition-bound. They have been skeptical of all new things. If basic education does not open the door toward the new world of technology, the use of new inputs in agriculture on scientific bases will remain a dream. Hussain (1996) a study by Esso Fertilizer Company of Pakistan revealed that 45% farmers interviewed were hesitant to apply fertilizers because they thought that

1. Depletes soil of all nutrients (22%);
2. It causes salinity (11%); and
3. It hardens soil (12%).

According to Schultz (1988) education helps to develop skills, knowledge and capabilities which contribute towards economic developments. It is a socializing force and a great equalizer of a man’s conditions. It develops the qualities of adjustment. It is an instrument of political participation. Gadalla (1992) think basic education
contributes towards population planning according to Romulo (1969); it is the cause and effect of any change in society. Jeffery (1967) opines that all miseries of mankind are attributable to lack of basic education. UNESCO’s reports (2001) say that illiteracy causes delay in social uplift. In this way, the all sport the thesis of this study that basic education is the basic requirement of any program of rural barani transformation.

2.2 DEVELOPMENT

On account of the frequent use of the term, “development” in the present day literature, numerous conceptual and ideological problems have arisen which make it necessary to define the term for the purpose of the study. McGranatham (1970) defines it as, “an interrelated phenomena in which different factors change and grow together over the long run.” According to him development involves both economic and social variables. It is a “changing complex of factors” moving at different rates at different levels of development. He regards it “a movement along a continuum.” Similar opinion has been expressed by Giselle (1962). A Swedish research report also agrees to it. However, Brand (1998) presents an economic point of view. For him development is, “the process of increasing the aggregate or per capita national product or income.” According to Brookfield, (1975) it is the “progress toward a complex of welfare goals.” In the field of rural development in barani areas the same concepts are applied to the development of rural barani people. Ahmed (1978) defines it as, “a process by which the rural poor are assisted in improving their level of output and living on a self sustaining basis through the method of mass participation.” A somewhat better definition has been provided by Aslam (1990) the concept of rural development implies, “the socio-economic transformation of the rural sector of an economy.”
But the betterment of economic conditions is not sufficient, as the most important aspect of the rural life of barani areas is the ways of living and interaction which cannot be changed by mere economic development. Keeping this in view rural development of barani area is defined as the overall transformation of rural barani society.

2.2.1 Rural Barani Development Programs

This included, rural barani areas, dynamics of rural barani areas, population, natural resources, land, water, crops, social classes, poor rural economy, education, health, social welfare, cooperative societies, micro credit schemes and it will proceed as under;

Realizing the problems of the rural barani people, several programs of rural transformation were launched in the country. Some of these are discussed in the following pages.

Rural barani development programs in Pakistan.

1. Concern for the masses of third world rural area.

2. Plight of rural barani masses of Pakistan.

3. Water resources of barani areas

4. Informal seed production technology for barani agriculture

5. Monsoon disturbance and its impact

6. Women farmers and world issues

7. Poverty alleviation measures and social safety nets

8. Integrated rural barani development program

   a. Strategies designed for development of rural barani areas
b. Causes of failure of these strategies
   i. Barani land reforms
   ii. Land tenure
   iii. Credit cooperative
   iv. Cooperative farming
   v. Irrigation
   vi. Mechanization of farming

9. Mechanization of farming

10. Use of new technology

11. Market mechanism and price incentives

2.2.1.1 Concern for the masses of third world rural areas

About the mid of twentieth century, when most of the third world countries achieved independence, the civilized world came to know the misery of half starved millions living in their rural areas. Increased health facilities provided after independence enlarged the span of life which could not be counterbalanced by a similar decrease in the birth rate and accelerated the rate of population growth at an unprecedented pace. The economies of those nations were in fact, in the primary stage of development and could not absorb the growing population productively. Severeness of the problem enhanced with the coming years as the population continued to grow at a compound rate and the meager endeavors to increase farm production proved quite deficient to feed the growing mouths. As the bulk of population belonged to rural areas, where there only source of income was agriculture beset with countries problem, it became imperative to take immediate steps to relieve the situation. World
Bank (2004) reports brought to light the misery of the masses of these areas which is again compounded in the rural balami areas. Economists like Barbara and Myrdal (1968) warned about the unexpected rising population growth. They portrayed horrible pictures of unexpected future. Third world countries formed a forum to press their demands against the increasing pressures of imports upon their economies. With steady rise in population the number of unemployed persons and those living in extreme poverty was increasing. Contrarily the industrial sector of these countries was not developing rapidly enough either to absorb the growing manpower or to produce enough goods to purchase food stuffs according to the needs of the countries.

Brannon (1995) has summarized the causes of increasing concern and awareness about the rural sector of developing countries in the following six points.

1. “Upward revision of estimates of population growth rates and thus the rate of increase in labor force.

2. Severe urban problems arising from strong rural to urban migration patterns and the resultant pressures on public services, as well as the increased visibility of the openly unemployed.

3. Failure of industrial development to absorb the increased flow of labour to the extent initially anticipated.

4. Rising food prices and concomitant urban unrest which have grown out of neglect.
5. Of the agriculture sector, leading in some countries to increase food increase and an offsetting impact on the favorable balance of payment generated by industrial import substitutions.

6. Success of the new yielding varieties and the accompanying package of technological inputs strongly suggesting that the concept of industrialization as the leader and the agriculture the follower in development plans may not be entirely sound.

7. The search for a new and more satisfactory approach to development following the failure of the development decade and the implicit "trickle down" theory.

A vast variety of literature came out suggesting means and ways for the development of less developed countries mainly stressing the need to develop the agriculture sector, not only to absorb the growing manpower but also to produce enough to feed the growing population and to earn sufficient foreign exchange to develop industry. Books like "this hungry world", "hunger", "how will we feed the hungry billions", "world without hunger" and "the world food problems" were published. Tai,(1972) Alexander (1984), Froehlich (1991) and Gadala (1992) studied land reforms and suggested more effective measures to obtain perceptible results from land redistribution.

Wolf (1980) proposed the use of foreign capital for the development of underdeveloped areas. Cochrane (1996) stressed the need of birth control and population planning to restrict the growing population. He presented a multiple approach to the problem of agricultural shortage. John (1992) favored the use of new seed varieties, application of newly acquired knowledge about soils, seeds, irrigation, transportation,
storage, and packaging, use of fertilizers, weather modification and mechanized farming, in addition to the use of chemicals to control plant insects. Though John (1992) pleaded the use of all what we know of nutrition, economics and sociology but his approach was limited to human motivation which cannot go beyond the economic prospects presented before an illiterate peasant unaware of handling the new devices and sometimes and sometimes even afraid of them.

Robert (1968) presented the concept of technical change. After studying American economic development, he concluded that during the period 1909-1949, 7/8 increase in output per manpower in the United States was due to the technological improvement and only 1/8 to the increased use of capital.

Most of the writers pleaded for agricultural development to transform rural society as they felt the approaching wave of famine throughout the world in the wake of demographic explosion. But some people wanted to make agriculture a base for industrial development. Lewis (1994) favored the use of modern technology and mechanization of farming to utilize surplus labor in industry. For him agriculture was not an end in itself but means to develop industry. Lester (1999) also followed this approach. Barbara attaches much importance to market system to provide income incentives to farming families, in addition to land reforms to enable the cultivators to own their own piece of land. She also favors the development of cooperative societies and massive investment in agriculture. Lester (1999) favors the four technologies of mechanizations, irrigation, fertilization and the chemical control of the weeds and insects. Long (1988) referring to Mosher (1971) gives five essentials and five accelerators of agricultural development. Essentials include transportation, markets,
new technology, availability of inputs and incentives, accelerators are education, credit, farmers associations, expanding land base and planning.

All these things were fine to follow if possible by the developing countries with illiterate and tradition ridden societies. But there was little stress on human resource development. The man-specially the man behind the plough was ignored. The first important approach to this direction was made by Harbisson and Myers (1995). They wrote: “In the final analysis, the wealth of a country is based upon its power to develop and to effectively utilize the innate capacities of its people. The economic development of nations, therefore, is ultimately the result of human effort.”

They emphatically stated that: “Indeed, if a country is unable to develop its human resources, it cannot build anything else, whether it is a modern political system, a sense of national utility, or a prosperous economy.”

A remarkable endeavor was made by Schultz (1988) to transform the traditional agriculture. He stressed the need to develop human capabilities through schooling. It was education of the farm people which counted most to increase farm productivity not only in the United States, but also in Japan, Israel and most of the developed countries.

In Pakistan, Siddiqui (1993) suggested political participation of the rural people to develop the rural areas, especially barani areas. Chaudhry (1993) proposed a multi-sectoral activity. He discarded the Govt. approach of making the progressive farmer the focal point of attention and suggested to make village the centre of activity.
Recently, in Pakistan, people have started realizing the importance of basic education and Hashmi's article (2005) is the first bold step in this direction.

The different authors have suggested various methods for development of rural areas. They include things like land reforms, tenancy laws, use of new agricultural inputs, mechanized farming, population control, political participation and basic education of the people. In Pakistan, the movement towards rural barani areas development has taken all these into consideration. The next section deals with the problems of rural barani people of Pakistan and the programs of rural barani areas development.

All the above endeavors of the authors culminate on one particular point: Impact of basic education on development of rural barani areas is pronounced.

2.2.1.2 Rural barani masses plight

Pakistan is a rural country and about 30% of it is barani, i.e. there is no definite canal system of irrigation and they have to rely on nature for the rainy water. About 65% of the population belongs to rural areas. The people are poor and illiterate. They mostly depend upon subsistence farming without any zeal to increase production or to adopt diversified means for additional income. This indifferent attitude of the rural barani people is partly because of the fact that almost every family has its one or two members doing some sort of job in the foreign countries. This attitude of indifference has resulted in low level of per capita income of Rs. 597.00(U.S. 10 $). The World Bank (2004), it is almost extreme poverty and it has existed in Pakistan ever since the independence. In 1990, 32.5% of the people were below this extreme poverty line. This poverty stricken population was not equally distributed between rural and urban
sector. Again the rural people of barani areas suffered the most because of hilly areas, uneven fields, uncertain rains, far-flung areas, weak, difficult and insufficient communication channels between the rural and urban areas. The most troublesome factor was lack of basic education. These people have meager holdings of one hectare or less and many of them have no land at all. In 1980, about 33% of the farms in Pakistan were of 0-1 hectare which covered only 3.5% of the arable area, while 7.5% big farms of over 10 hectares covered 42.7% of the total area. Before the first land reforms of 1960 the situation in Sindh and the Punjab was the worst. As the big land owners constitute the most powerful pressure group in the country, the land reforms could not change the patterns of land ownership substantially.

The big land owners blocked the way to progress for the tenants, share croppers and farm labourers of the rural barani areas for getting free labor for their farms. They discouraged efforts to provide educational facilities in the rural sector for the benefit of the poor section of the society. The dual system of education operated by the colonial govt., continued at the cost of general public for providing better education to the elite comprising big land owners class. A comparison of literacy rate illustrates the existing disparity between urban and rural areas, especially barani areas.

Population in Pakistan has been growing rapidly. As bulk of the population belongs to the rural areas, therefore, the situation is becoming tense for the poverty stricken masses of the rural barani areas particularly. After first census of the country in 1951, there has been about 140% increase in 27 years up to 1978, and the population rose from 33.74 million to 75.62 million and after another 27 years it has risen to 140 million, i.e. 100% increase.
Population growth has been comparatively more rapid in educationally backward barani areas of North West Frontier Provinces, Sindh and Balochistan as compared to the Punjab. The resultant outcome of this rapid growth was the increased density of population per square mile and per hectare of cultivated land. It has provided the rural sector with an abundant supply of labour. As there has been no program of education and training for the growing rural population of barani areas, it has deterred the pace of progress. If this redundant manpower was provided with education and training through some development program, it could help redress the economic plight of the country as it was observed by the National Commission on Education (1959). Over-population on the farms has cost unemployment and underemployment. There is little hope of providing employment or work to this ample force, unless the country arranges for their education and training to make them useful for both agriculture and industry. In general, in Pakistan, on account of low level of education and prevailing illiteracy, the labor efficiency is poor. In spite of low labour input, the labour intensity in agriculture is very low as compared to some other eastern countries. In this way, on the one hand, agriculture failed to keep pace, with population growth, and on the other, it remained reluctant to absorb surplus labor as was actually required to increase production. The overall result has been expansion in open unemployment which is growing rapidly with the growth of population.

Poverty, unemployment and insecurity caused by feuds and quarrels have pushed the poor rural laborers into the urban slums and the cheap exported manpower, especially to the Gulf. The migrating people have neither skill nor training to perform non-farm jobs and the industrial sector is not as wide as to absorb this push of the rural people of barani areas. City-ward movement of the rural people of barani area in
Pakistan cannot be attributed to employment expansion in industry and the cities are beset with problems of their own.

Though huge amounts are invested in agriculture each year, the target of food self-sufficiency has not been achieved. In addition to imports under PL-480 program, thousands of tons food grain is purchased from international market each year. The same is the case of other crops. Surplus production in one crop is counterbalanced by drastic decline in the other. Rise in production is achieved by additional acreage brought under cultivation. Some times additional acreage also proves futile as yield per acre declines and the production remains the constant. According to every yield for 1958-60, Pakistan stands the lowest in wheat and rice production as compared to other countries of the world. This phenomenon prevailed after the independence and the situation has not improved up to this time.

The barani rural life in Pakistan is characterized by tradition, taboos, and conservatism. Due to lack of education and exposure to the outside world, the people have not been able to overpower their superstitious and mythical beliefs. An atmosphere of complacency prevails. The fatalistic outlook has made them contented with their income and there seems no desire to work for betterment. This attitude of the people has resulted in low levels of living. On the whole, the people of rural barani areas are afraid of change. Innovation disturbs the set pattern of their life. They feel secure with their present system. The overall picture of the rural barani area population in Pakistan is too dark and too miserable. The lowest rate of literacy, low level of labor efficiency, large scale unemployment and under-employment, low level of agricultural product, immature urbanization, conservatism and fatalistic outlook
have perpetuated the centuries old traditionalism of the rural barani society. Low status of women, with almost the lowest rate of literacy and early marriage, resulting in rapid population growth are the acute problems for national development. To upgrade the national economy on a self sustained basis, and to establish political stability, a crash program is needed for the education and training of the rural majority in barani areas under study.

2.2.1.3 Water resources

Water resources of the barani areas have been studied and different research programs have been initiated for their development as follows.

i. Irrigation Water Management

ii. Water Harvesting and Conservation

iii. Resource Use Planning

iv. Management of hill-torrent water in Rod-Kohi areas

v. Irrigation Water Management Programme

a) Major Research Activities

1. Designing, layout and installation of high efficiency irrigation system (trickle and sprinkler) using locally manufactured materials to reduce the cost.

2. Development of sustainable parameters for optimum utilization of scarce water resources

3. Permanent raised beds technology for irrigated cropping systems.

4. Sustainable agriculture through Serial Biological Concentration

5. Use of low quality water under saline environment
b) Salient Achievements

1. Developed and commercialized high pressure (> 45 psi) pumps for discharge ranging from 2 to 12 lps for lift irrigation, sprinkler and drip irrigation systems in collaboration with MECO Pumps Industries Pvt. Ltd., Lahore. The costs of these pumps are about one-fourth of the pumps produced by the multinationals.

2. Developed High Density Polyethylene (HDPE) pipes in collaboration with Griffon Pipe Industries Pvt. Ltd., Lahore. The pipe is resistant to weather degradation with highly reduced cost-almost 50% of G.I Pipes. The pipes are being manufactured by about 5 companies in the country.

3. The low cost Raingun sprinkler imported from China was tested and modified to be manufactured locally in collaboration with MECO Pumps Pvt. Ltd., Lahore and M. Azam Khan & Co., Rawalpindi. These locally produced rainguns are cheaper (75%) and require very little maintenance cost.

4. Developed and commercialized the locally produced components of trickle irrigation system (low density polyethylene pipes, tubing emitters, sprayers, filters etc) in collaboration with Griffon Plastic Industries Pvt. Ltd., Lahore.

5. Modified Jack pump for large discharge (over 15 lps) from shallow depths using alternate energy sources (solar, diesel, electric, wind) which requires 1/5th power as compared to standard pumps.

6. The application of supplemental irrigation using raingun sprinkler increased the wheat yield by 2-3 folds in Barani areas.
7. Provided technical services for designing and installation of sprinkler and drip irrigation systems to 22 progressive farmers in Punjab and NWFP.

8. The thin layer of fresh water overlain with brackish water was successfully utilized for orchards using sprinkler and drip irrigation system.

9. By using permanent raised bed technology for irrigated maize-wheat cropping system there was saving of 30% irrigation water coupled with increase in crop yield by 10-15%.

**Water Harvesting and Conservation Programme**

a) Major Research Activities

1. Testing and evaluation of integrated land and water use techniques aimed at enhancing productivity of scrub forest lands, gully-eroded areas and Barani lands on sustained basis.


3. Sustained productivity of water eroded lands.

b) Salient Achievements

1. Using appropriate rain water conservation techniques, the cropping intensity was increased to 200% in medium/high rainfall zones of Barani areas with increase in yield up to 50%.

2. Almost 95% runoff was controlled with vegetative cover of apple-pie in medium rainfall zones of Pothowar.
3. Plants (fruits/forest) were economically grown in gully-eroded areas using eyebrow micro catchments and back slope terraces technologies of water harvesting.

4. Rainfall-runoff relationship was developed under watersheds and gullied barani lands for designing/developing water conservation techniques.

5. Developed low-cost structures for reclamation of gullied lands.

6. The application of supplemental irrigation using Rain gun sprinkler increased the wheat yield by 2-3 folds in Barani areas.

Resource Use Planning Programme

a. Major Research Activities

1. Digital database development for agricultural planning and natural resource management (NRM).

2. Inventory of Glaciers, Glacial Lakes and Identification of Glacial Lake Outburst Floods (GLOF) in HKH Region.

3. Preparation of Natural Land Use Plan

b. Salient Achievements

1. Developed geo-informatics facility to initiate research in remote sensing and GIS applications for agricultural planning and natural resources management.

2. Developed digital and spatial databases for resource use planning.
3. Completed inventory of glaciers and glacial lakes in HKH region of Pakistan. Furthermore, potentially dangerous glacial lakes were identified for future monitoring.

Management of Hill-Torrent Water in Rod-Kohi Areas of Pakistan

a. Major Research Activities

1. Improving water harvesting, diversion and control of runoff water through remodeling of channels and provision of low-cost structures.

2. Monitoring of rainfall, runoff and sediment in two selected gauged catchments and introduction of appropriate intervention.

3. Improving the storage capacity of rainwater (runoff) ponds for domestic and livestock use.

4. Collection of agromet data analysis under different agro-ecological zones in Rod-Kohi areas and reporting on monthly basis.

b. Salient Achievements

1. Developed low-cost water control structures reducing the cost by 25-40% as compared to traditional structures.

2. The provision of low-cost structure reduced runoff losses from 70% to 10-15% through improved water diversion and application to fields.

3. Rehabilitation of watercourses improved conveyance of runoff water by 35-50%.
4. Developed low-cost sand filter hand pumps to provide clean water for human and livestock consumption.

Collaboration with Other Organizations

- The WRRI-NARC has been engaged in operational research with national and international organization which include:

  - Water and Power Development Authority (WAPDA)
  - Planning and Development Division, Government of Pakistan.
  - International Centre for Bio-Saline Agriculture (ICBA), Dubai.
  - Japan International Cooperation Agency (JICA), Japan.
  - International Centre for Integrated Mountain Development (ICIMOD), Nepal.
  - Australian Center for International Agricultural Research (ACIAR), Australia.
  - Commonwealth Scientific and Industrial Research Organization (CSIRO), Australia.
  - Government of Western and Southern Australia.

2.2.1.4 Informal seed production technology for barani agriculture

Informal Seed Production Technology for Barani Agriculture, Agricultural sector is one of the major sources of income and employment for the people of barani areas of Pakistan (Ahmad, 1987). Successful transfers of improved technology to target beneficiaries require strong and viable linkages of development (Ali 2000). The Punjab government has started Barani Village Development Project (BVDP) under the umbrella of Agency for Barani Areas Development (ABAD). The BVDP approach is of participatory type, which is more acceptable at the community level. Increasing the
efficiency of agricultural and rural sectors of barani areas is of prime concern to the BVDP. Rapid progress is crucial not only to improve the quality of life of the people who earn their living from agriculture but also to raise income for improved quality of life.

Besides Barani Agricultural Research Institute (BARI), Barani Livestock Production Research Institute (BLPRI) Khairimurat, district Attock, Soil and Water Conservation Research Institute (SWCRI) district Chakwal, Fodder Research institute, Sargodha and Social Sciences Institute, National Agricultural Research Centre (NARC), Islamabad are collaboration to execute integrated research agenda for different agro-ecological zones of Pothwar region. Average yield of crops per unit of land in Pothwar is much low as compared to other areas. In order to achieve self-sufficiency in food, feed and for sustainable agricultural development, technology transfer is significant. The application level of modern production technology is still very low in the barani areas. Generally, the big farmers are the first beneficiaries of new technology whereas medium and small farm households are usually unable to benefit from new technology.

Furthermore, majority of farmers are poor and avoid taking risk in adopting new technology until they are sure about its benefits. A number of methods and approaches have been adopted for achieving agricultural and rural development for boosting the income of small and medium farm households. The major cause of low impact of new technology has been the poor linkages with the line department / agencies and research institutes. Therefore, the need for creating a strong linkage between research and development agencies for the improvement of agricultural
productivity and conservation of natural resources through rapid dissemination of promising technologies in the area. Different proven technologies, after continuous evaluation for the last four years, are now in the state to be disseminated in the barani areas. This needs a close collaboration and integration of the technology producers and dissemination agencies.

Transfer of technology initiative has been launched throughout the project area. This programme is specifically planned to explore the diffusion process and possible constraints and challenges in the transfer and adoption of technologies of the target population. Farmer’s perception and behavior in the adoption of improved crop seed, low cost soil and water conservation structures, gypsum for moisture conservation and genetic improvement of small ruminants would help in further improvement of technology transfer mechanism. Viable technologies including improved seed of different food and feed crops are recommended after testing at integrated research sites in a participatory manner. The informal seed production of fodder crops is being promoted with the help of Agriculture Extension Development through a participatory technology transfer and diffusion process.

The scientists at Social Sciences Institute (SSI), National Agricultural Research Centre (NARC), Islamabad conducted surveys under which the fodder-growing farmers were interviewed during kharif 2003 at three different locations, viz. Jand, Gujar khan and Pind Dadan Khan of Pothwar barani tract. Agricultural inputs were provided to the farmers at these locations in time and needful advice was given to farmers regarding use of inputs including seeds of maize, sorghum, millet was provided to the farmers. The basic thrust of this campaign essentially involved the
dissemination of improved seeds. There were two basic ways available to farmers for ensuring supply of good seeds for sowing crops in the next season. These were either savings of seed form their own crop or buying it form elsewhere. Likewise, increased in productivity could be attained with substantial improvements in seed selection and more effective management practices. The host farmers produce their own seed for maize, sorghum and millet. The farmers were selected through community organization in the village.

The basic objectives of these associations are to improve the knowledge, skills, increase farm productivity and income of the farmers. The farmers could sustain significant increase in real income by putting less emphasis upon local seed and devoting greater attention to improved seeds production. Many of these opportunities are within the reach of the farmers.

The host farmers of the informal seed production also play an important role in the adoption also play an important role in the adoption and diffusion of new varieties at community level. A number of farmers have purchased seed form these farmers. About ten fellow farmers purchased seed for the next season form each of the host farmer. This will have a multiplying effect in rapid adoption of these promising varieties.

The sample farmers got higher grain and dry stalk yield along with good quality fodder from improved varieties of maize, millet and sorghum. The grain yield of maize, millet and sorghum was 33, 40 and 21 percent higher while of dry stalk was recorded 29, 29 and 50 percent higher then the local varieties of these fodder crops, respectively. The fertilizer response of these new varieties is also better then the local
variety. These improved varieties have high net benefit than the farmers practice with little higher cost. The beneficiary farmers in the barani tract are obtaining more benefits being reaped by the ‘conventional’ farmers.

Seed production needs special efforts to maintain the quality and purity while farmers generally give little attention to their home produced seed. Therefore, for achieving self-sustainability the following measures are advised. (a) Special training for farmers to improved technology for increasing productivity and reducing per unit cost of production. b) Local variety should be replaced by high yield through seed dissemination at micro level. (c) Demonstration trail for informal seed production should be conducted with a participatory approach on regular basis. (d) Community involvement at the time of sowing, maturity and harvesting through field days would also be helpful in technology dissemination process.

2.2.1.5 Monsoon disturbance and its impact

Pakistan has been facing drought conditions for the last six years. The following analysis shows that the combined effect of a number of factors has brought about a change of an irreversible nature in the monsoon system which governs the climate of the south Asia region.

According to Pakistan meteorological services, the drought conditions may continue till December 2002 or even later due to el-nino and la-nina factors and sub-tropical heights which could affect the wheat crop of this year. It has been argued that el-nino and la nina factors have upset the system of rains in India, Pakistan, Iran and Afghanistan (Aziz, 1998). Incidentally el-nino events are a local manifestation of a global phenomenon, which begins with the relaxation of the wind stress that drives
warm water towards the west. In the case of the monsoons, which are also part of a
global phenomenon, the atmospheric pressure at sea level at the south-west of the
Indian peninsula, the ocean temperature in the Bay of Bengal and the rainfall
fluctuation across South Asia are inter-related critical factors (Fatima, 1984).

Precipitation over major areas of Pakistan and snowfall in the catchments areas
of the Indus and its tributaries has been low for the past six years, due perhaps to the
adverse impact of the dominant la-nina factor operating over the bay of Bengal; it can
be the reason for the flood flows in Brahmaputra that inundates Bangladesh and for
the Indus to run dry. The two rivers, it may be mentioned, bring snowmelt to Tarbela
and Mangla dams respectively but both have been running with nominal flows until
may over the last six years. The two events repeat themselves after three to five years
with variable intensity. Since their duration in coming back to normal has been much
longer, there have to be reasons other than just the selective heating of the seawater.

Some of the reasons that immediately come to mind are related to human
activities that may have induced modifications in the monsoon pattern.

2.2.1.6 Women farmers and world issues

At a non-governmental meeting in Mina Mata, Japan, in August, 1992, a
People's Plan for the 21st Century included the "Mina Mata Declaration Action
Programme." Among policy issues affecting the most vulnerable groups, the General
Agreement on Tariffs and Trade (GATT) was roundly criticized for its subjecting
agricultural, livestock and fisheries products to the domination of powerful
Governments of the North and transnational corporations, under the guise of trade
liberalization policies. The Mina Mata Declaration calls for farmers, including family
farmers and farm workers, to organize counter-GATT activities in cooperation with
consumers and environmental activists throughout the world.

A study in Thailand (Carlos 1996), however, illustrates that farmers
themselves need to be educated on the implications of macro policy. A survey (Malik,
1996) found women working in "contract farming" schemes, on family-owned land
under contract to a multinational company, were pleased to have their own hard cash
income from farming for the first time, under new contract farming systems. As family
workers on former paddy fields, the women typically went both unpaid and
unrecognized for their long and laborious hours of cultivation. By growing baby corn
and asparagus for a multinational company they received what they considered a good
income, while others fared equally well in a nearby area growing hybrid maize and
sunflowers. Without knowledge of alternatives, nor of the long-term economic and
political implications, and with no idea of their contractors' profit margins, such
women are unlikely to join activists in a fight for fairer returns from agro-industrial
national and transnational corporations, or for environmental protection and
sustainable production. Far less will they join forces to lobby for their long-term
survival by challenging GATT, unless the necessary information is made available to
them (Maria, 2003).

Similar studies of aquaculture projects in southern Thailand in 1992 show the
same situation. Women engaged in shrimp farming under contract to foreign
companies enjoyed high profits, low risk and a shorter working day than had been the
case in rice farming. These Thai women do not even want to consider possible long-
term problems in the flush of a lifestyle undreamed of just three years earlier; they are quite unconscious of their new vulnerability if disease strikes shrimp.

This can change, however, when a woman or her children experience risk to their health or well-being through pesticide poisoning, for example. Irresponsibility on the part of the agrochemical industry or their agents - such as the contractors who supply farmers with seed, fertilizer and pesticides - is quickly condemned by women who take decisive action against such risks. Wise, not to say shrewd, investors in agro-industry display not so much a social conscience as a long-term insurance against loss of their labour force by taking note of such protests, and by providing appropriate education and other safeguards when pushed into a corner. Company policy thus is subject to the same scrutiny as public policy when economic or political vested interests are at stake. Large companies typically take a long-term perspective which may be impossible for smaller companies, so the politicization of women should include alerting women to both the potential and the limits of their bargaining power.

Women-folk in rural barani areas in Pakistan, almost equally, participates in the agricultural and related activities, shoulder to shoulder with their male family members. They also work as hired labour in the fields and the handicrafts.

2.2.1.7 Poverty alleviation measures and social safety nets

A number of poverty alleviating measures have been introduced in Pakistan. A few of them are very recent programs. Included among these measures are targeted credit for employment, untargeted subsidies with elements which may have impact on poverty reduction, newly launched social action programs, and a variety of social safety nets. The schemes for promoting employment, including self-employment,
center around the provision of directed credit on concessionary terms. The main ones (currently in operation or recently closed) are: the credit programs operated by the Small Business Finance Corporation, the Youth Investment Promotion Scheme, and the Punjab and Sindh Small Industries Corporations; the Self-Employment Program; the Public Transport Revamping Scheme (also known as the yellow cab scheme); the First Women Bank's Small Loans Scheme; the National Self-Employment Program; and the Awami Tractor Scheme (Government of Pakistan, 1982).

All of the schemes have been carried out by public-sector financial institutions (in several cases with funds provided by the State Bank of Pakistan). Recovery rates have been very low, ranging from 42-70 percent; the schemes are not financially sustainable without large periodic infusions of public resources. Only one program, the one operated by the First Women Bank (FWB), has an excellent recovery rate of 97 percent. Demand exceeds supply and the loans were rationed. The rationing process tended to favor those with political connections and/or with existing connections to the financial institutions. These people are not among the poor in society. The rationing effect is greatly reinforced by the weak recovery of loans granted by financial institutions. This makes the loans much more "concessionary" than implied by the interest rate. They generate large rents for the non poor in society (especially those who do not repay). The large expansion of the credit scheme to the private sector under these schemes threatens macro stability and generates inflation.

i. Untargeted government subsidies

Government subsidies granted through credit is only one type of government subsidy. Federal and provincial governments currently grant a wide array of subsidies
of various kinds, apart from subsidized credit. Total subsidies, excluding subsidies for social services, were budgeted at about 1.6 percent of GDP in 1994-95. These subsidies are "untargeted" in the sense that they are not targeted to the poor; however, many of them are aimed at specific groups of beneficiaries.

Since these subsidies are not specifically targeted to the poor, it is likely that the bulk of the benefits are captured by the non poor. This case with credit subsidies was noted before. Another important item is wheat subsidies (Rs 3.4 billion in 1994-95). A detailed study of the incidence of wheat subsidies by household income deciles is not available; the incidence of untargeted food subsidies tends to be regressive. The total subsidies (targeted and untargeted) to the various sectors of the economy constitute a very substantial expenditure on the part of the government budgets; both federal and provincial. They constituted in 1993-94 1.8 percent of GDP, while total government budgeting expenditures constituted 23.3 percent of GDP. Of the total government subsidies in 1993-94, about 35 percent were spent in the agricultural sector and credit subsidies constituted about 32 percent. The third and fourth largest recipients of subsidies were (excluding agriculture) the industrial and the infrastructure sectors, i.e. 18 percent and 14 percent respectively. The remainder 1 percent was spent on miscellaneous items.

To make direct credit schemes financially sustainable requires achieving very high rates of recovery (say, over 95 percent). In addition, interest rates would need to be much higher. The availability of such high-priced loans would still improve the Poor's welfare, so as long as their cost is below that of loans from the Poor's alternative source of credit, i.e. informal lenders.
A careful examination of other existing untargeted subsidies with a view to determining who the actual beneficiaries are, as well as assessing the economic losses resulting from resource misallocation induced by the subsidies is needed. Phasing out untargeted subsidies would free up fiscal resources that could be allocated to reducing the fiscal deficit, as well as to expanding worthwhile targeted programs that really benefit the poor (Ahmad, 1978).

The Government of Pakistan has adopted a series of measures in recent years, ranging from raising minimum wage and generous self-employment loans schemes to addressing social sector issues. The Social Action Program (SAP) launched in 1992-93 is the umbrella program for the social sector through which the government hopes to overcome Pakistan's past deficiencies in social and human resource development. It focuses on the needs of basic education, primary health and nutrition, population planning, and rural water supply and sanitation. Broadly defined, the objectives of the SAP are to improve access, coverage, and quality of basic social services and to address certain crucial imbalances, such as those between male and female access, between rural and urban provision, between primary and tertiary services, between quantitative and qualitative expansion, and between current and development expenditure. It is intended to achieve (1) a significant increase in development expenditures in social sectors, (2) increased provision for recurrent expenditures to improve quality, and (3) initiation of reform to overcome implementation bottlenecks.

Given the implementation constraints in the social sectors which vary across sectors and provinces, progress on SAP was slow during 1992-93. Some success, however, has been achieved in improving female enrollments through revision of
recruitment age and qualification rules for primary school teachers, and better provision for both rural and urban health facilities. Attempts are also made to provide matching grants to private-sector investments in these sectors (Mahmood, 1995).

Realizing the importance of decentralization and community participation in human resource development, the government established the National Rural Support Program (NRSP), a public limited company with a grant of Rs 500 million. The basic structure of the program has been developed, aimed at establishing countrywide network of grassroots institutions in the rural areas, which will provide an institutional base for SAP. Community mobilization work is already underway in all provinces of the country.

ii. Social safety nets

Social protection arrangements in Pakistan have both a private and a public component. At this point in the country's development, private arrangements are by far the more important of the two. Voluntary transfers among households are widespread. The transfers made by both relatives and non-relatives of the poor.

The private social safety net in Pakistan is very important. Forty percent of all households nationwide participated in the network of private transfers in 1991, of which 30 percent were net recipients of transfers and 10 percent were net donors. Among recipients, transfers accounted for 26 percent of household consumption expenditure on average. Transfers were especially important for the poor. Forty-eight percent of households in the lowest quartile of the household per capita consumption expenditure distribution were net recipients of transfers. These transfers financed on average 49 percent of the total consumption expenditure of these poor households.
Transfers tend to flow from upper to lower income households, and hence improve the distribution of consumption (Hassan, 1985).

Households in the lowest quartile that did not receive private transfer (48 & shyp; 52 percent of all households in the quartile) had a low average annual consumption per capita that would have been equivalent to only about 62 percent of the poverty line. Their average consumption was only about 64 percent of the average consumption of households in the lowest quartile which were net recipients of private transfers. Transfer receipts tend to be lower, the higher the pretransfer income. This is particularly so for transfer receipts of households in the lowest quartile. This implies that there is a substitution between public and private transfers, so that government attempts to transfer income to poor households would be offset partly by a decline in private transfers. It would have been ideal if it was possible to target scarce public income transfers to households in the lowest quartile without having private transfers. There are serious difficulties in implementing such an approach. Apart from the tendency of beneficiaries to withhold information on private transfers, if they are known to reduce government transfers, richer relatives may render their poor client households eligible for government transfers simply by withdrawing their support.

iii. Public income transfer programs: Zakat, Ushr, and Bait-ul-Maal Programs

Many poor households do not benefit from private transfers. For some of the households receiving private transfers, consumption levels may be quite low. In order to complement private transfers, the government has introduced certain targeted income transfer programs. The two major programs are the Zakat and Ushr program and the Pakistan Bait-ul-Maal program. They pool resources obtained from the
population at large and strive to redistribute them to those most in need throughout the country. Zakat and Ushr funds can be utilized for 7 different purposes: subsistence allowances, rehabilitation grants, grants for marriage and dowry expenses, grants to schools of religious instruction, stipends through educational institutions, medical aid through hospitals and clinics, and grants to social welfare institutions.

Zakat and Usher are programs of special taxes. Zakat taxes are levied on a range of financial assets at the rate of 2.5 percent per year. Ushr, in contrast, is a tax on agricultural produce. It is charged at 5 percent of crop output, from every landowner, lessee, leaseholder, or landholder. Share tenants may pay the tax voluntarily. Exemptions are also given to agriculturalists who are eligible to receive Zakat, or whose produce from land is less than 948 kilograms of wheat, or its equivalent in value. An additional 5 percent is to be paid voluntarily by farmers in the non-irrigated barani areas.

All collections of Zakat and Ushr are disbursed by Zakat councils at three levels. Zakat deducted at source is paid into a central Zakat fund. A portion of the funds is disbursed to institutions which operate at the national level or in more than one province. The rest of the central funds are transferred to provincial Zakat funds. Provincial funds are divided between local committee for disbursement to individuals. These local funds also receive the Ushr payments made in their area.

Zakat and Ushr collections together amounted to 0.3 percent of GDP in 1988. Of the total sources, the Zakat portion accounts for the bulk (92 percent) of the collections. It also accounts for growth in collections since the inception of the program. Between 1981 and 1989, Zakat collections grew at an annual average rate of
12.7 percent in nominal terms (5.4 percent in real terms) (Naseem, 1995). In contrast, Usfr collections are low and have not been increasing. Usfr is more difficult to collect. It involves assessment of crop values. This assessment is based on projected yields and prices of all the crops on which Usfr is to be charged.

In 1993-94, Zakat revenues amounted to Rs 2,844 million, or about 0.2 percent of GDP. The collection of Usfr was declining and was negligible in 1993-94. Zakat and Usfr cover deserving poor, who are defined as widows, orphans, and disabled individuals that are not able to support themselves. They involve direct cash payments to the targeted individuals, or payments to institutions (e.g., hospitals) to finance the provision of certain services to targeted individuals. They are also used to help provinces in times of natural calamities, and to fund national-level medical and other institutions.

The local Zakat Committees (LZCs), with oversight by the area committees, administer the scheme. They are given a "quota" of 10 beneficiaries for subsistence allowances. If the number of applicants exceeds 10, only the 10 most in need are to be selected. This limits the number of (direct) beneficiaries of subsistence allowances nationwide to about 400,000.

About 60 percent of the funds are to be disbursed for subsistence and rehabilitation allowances, and 40 percent for institutional payments (20 percent for education stipends, 8 percent for religious schools, 8 percent for medical care, 2 percent for social welfare such as financing of dowry, and 2 percent for miscellaneous purposes). In fact, in 1993-94, about 79 percent of total funds disbursed were subsistence and rehabilitation allowances.
The Pakistan Bait-ul-Maal program run by the federal government, introduced in February 1992, seeks to assist groups among the poor that are not among Zakat's target group. Punjab has a program of its own, but very small. The program has several subprograms, the two most important (in terms of funds disbursed) being the Food Subsidy Scheme (FSS, previously food stamps scheme), and the Individual Financial Assistance Scheme (IFA). The IFA covers widows, orphans, and disabled persons in households with monthly incomes below Rs 1,500 per month (regardless of family size), and who do not receive Zakat assistance (e.g., because they are non-Muslim). The target group for the FSS is any other households (not receiving Zakat) with incomes below Rs 1,500 per month. There are fixed quotas of numbers of FSS beneficiaries per Tehsil, based on population. If the number of applicants exceeds the quota, priority is to be given to the poorest applications, with remaining eligible applicants put on a waiting list; there has been a large excess of applicants for FSS benefits.

In 1994-95, up to end of January 1995, 83 percent of funds disbursed went to the FSS. A further 7 percent went to IFA. Payments under both subprograms are made in cash. Fifty-one percent of the benefits under Zakat and Ushkr program in 1991 accrued to the lowest (i.e., poorest) quintile of the household per capita consumption expenditure distribution, and 72 percent to the lowest two quintiles. The remaining 28 percent accrued to households that cannot be considered to be poor (Table 8.5). The analysis suggests that "leakages" in the program were significant. It is not known if targeting has improved since then. In 1992-93, the number of direct beneficiaries of subsistence allowance under Zakat and Ushkr programs exceeded 1.5 million. This
number implies an average payment per direct beneficiary of just Rs 38 per month. This results in "spreading the goods" thinly among many beneficiaries.

Since 1994, beneficiaries of direct subsistence allowances have been limited to 400,000 for the country as a whole, with a limitation of 10 poorest beneficiaries in one area. The total number of beneficiaries in 1993 are estimated to be some 1.1 million nationwide (613,000 widows; 219,000 orphans; and 304,000 disabled), or about 0.9 percent of the country's population. This estimate would cover about 36 percent of the target population with subsistence allowances. Full coverage of the entire target group with subsistence allowances would cost about Rs 3 billion per year at the current rate of Rs 225 per month.

Available estimates indicate that, if Ushr were collected to its full potential, it could generate revenues in the range of Rs 10 to Rs 15 billion per year at current prices. However, the provinces are now in the process of introducing an agricultural income tax, and farmers are likely to resist paying both Ushr and the new income tax.

In 1994, the number of FSS beneficiaries was about 400,000 households, while that of IFA was 10,280. It is estimated that, excluding those receiving Zakat assistance, the total target group for Bait-ul-Maal would be about 1.65 million. This would suggest that the FSS may be currently reaching about one-fourth of eligible households (assuming there are no leakages to households above the lowest deciles, which is a strong assumption).

The FSS is by far the main subprogram under the Pakistan Bait-ul-Maal. Concerns about the FSS, include difficulties in identifying beneficiaries, present low
coverage of the target population, and possible negative impact on incentives to work. In order to improve targeting, as well as for other reasons (i.e., promoting self-esteem, lessening possible negative effects on the supply of labor), introducing a requirement that FSS beneficiaries either contribute some labor to a program of public works, or undergo training at approved institutions may be useful.

It is being increasingly recognized in Pakistan, as elsewhere, that a centralized state is not an efficient manager of social and economic development, and that a lower level of aggregation facilitates not only a better articulation of economic social objectives but also results in more efficient—possibly more equitable—implementation.

State interventions in the social sector, like the provision of physical infrastructure for productive purposes, it is argued, should provide space for wider participation by the people at various levels through the NGOs. Even when local governments function well, there is likelihood that the poorest may be bypassed. Assessing their needs is the primary focus of the NGOs.

2.2.1.8 Integrated rural barani development program

Integrated rural barani development is the recent term used for the process of rural socio-economic transformation. It involves synchronization of development operations because at primitive levels there is an organic arrangement through which natural social, economic, and physical factors are linked in a complex of relationships. This developmental program includes all Governmental and non-Governmental actions to attract the rural people towards new agricultural technology, to increase production and to enhance their standard of living (Chaudhry, 1988).
In Pakistan, agriculture was considered as the predominant segment of economy, it was to be developed as the first step to provide foundation for integrated rural barani development. For this purpose Shadaab Pilot Project areas were selected comprising 50-60 villages. The IRBD program is organized at 5 levels. Primary unit comprises a village. Markaz (centre) comprises 50-60 villages or primary units. It is the hub of the program activities providing facilities of Banking, credit, machinery workshops, storage, marketing, agro-based industries, health, education and recreation. At district level, the selected district council supervises and coordinates the implementation works. At provincial level, there are rural development boards to coordinate and evaluate the work of various departments involved in the process. At federal level, the Ministry of Food, agriculture and rural development provides policy guidelines and the follow up actions.

A long list of objectives, as given else where, was drawn covering almost all the aspects of social life. Malik, (1996) mentioned at least nine of them, while, the Punjab development review gave a list of more than thirteen. It includes coordination of services and supplies of nation building, departments, planning and executing community development projects, farming multi-purpose cooperative societies, setting up of agro-based and agro-allied industries, establishing health centres, introducing mixed farm enterprises, to provide agricultural inputs, to create machinery pools, provision of technical know how, training farmers and farm leaders and providing educational and recreational facilities etc. about 711 Markaz were to be established up to 1980 through out the country to cover 35000 to 40,000 villages by IRBD programs. But up to 1975, the number could not exceed 123. It is revealed by a report that the program could not be expanded after 1973-74 because the concept and requisite
institutional frame-work for rural barani development were not clear and were under examination by the Government.

Farm cooperatives, agro villas, rural credit schemes and pass book system were the other complementary to IRBD program. Farm cooperatives were started to meet the credit requirements of small farmers to enhance their purchasing power to apply new inputs. In December 1972 the agricultural loan scheme was made mandatory by the state bank of Pakistan. Loans are granted against mortgage of land. These loans are recoverable as arrears of land revenue. The pass book which contains the land record of the holder was introduced to facilitate the credit scheme. The purpose of all these schemes has been the modernization of agriculture by providing maximum facilities of credit and loans to purchase fertilizers, insecticides, tube-wells and tractors etc.

The aims and objectives of the programs are high sounding, but in actual practice the stress has been on the increased agricultural production and the big land owners has been made the focal point. But the rural barani development is a great deal more than abundant supply of food grains. Increased farms production can be achieved without influencing the rural barani life. The dream of rural barani uplift can only be realized when the whole population of the area is considered for development. The rural society in Pakistan is highly stratified. Planning for the betterment of progressive farmer consequently, will broaden the gap between the rich and poor and among different strata of population. It is already observed in most of the less-developed countries that big land owners receive the lion's share of all benefits provided under developmental programs. The same is being repeated in Pakistan, as the Govt. itself has restricted the loan limit up to Rs. 2000. for farmers holding lease, and usage rights
against two credit sureties acceptable to banks, which in most of the cases are not available to illiterate leasers and share croppers and the amount is small enough to be of any value in present price peak days; contrarily the land owners get a loan equal to the price of their land.

Larger the acreage, the greater is the amount. Although it has resulted in expedient mechanization of farming, illiteracy, lack of technical know-how and deficient repair facilities have made the land owners disgusted.

One of the main objectives of the program was the coordination of the services and supplies of nation building departments at the centre level. This proved to be the main flaw of the program. The arrogant and corrupt public servants who were all in all in planning and executing the program could not coordinate efforts to implement it successfully. The planning was made in vacuum without any knowledge of the operational level, so it was least related to the social atmosphere of the areas concerned. It was mostly based on the theoretical constructs of western writers, ignoring the identity of political and social systems of two societies. So far as the use of new technology in agriculture is concerned, as emphasized by the IRBDP, it stands agonistic to the elimination of unemployment and underemployment. It is confirmed by the study of Edward (1979) in Pakistan that mechanization reduces the labor force requirement up to 50%. In spite of high price incentives, subsidies and huge loans granted every year. The cause of agricultural is that the basic requirements for development which include educated and alert farm population have not been provided. In addition to the neglect of education, the present program of rural barani
development has all the drawbacks of the previous programs. It absorbed large amounts of scarce public resources, but the relative outcome has been trivial.

Some of the strategies designed for development of rural barani areas have been mentioned above. The following is a discussion of the causes of failure of these strategies.

i. Land Reforms

The Colonial powers had granted large estates to chiefs and dignitaries to win their favors. But after independence, the national Governments tried to redress the grievances of the peasantry by giving them the rights of ownership after fixing a ceiling of land holding for the big land owners (Gouin, 1980). Food problem had also made the land redistribution imperative as the big land owners were least interested either to cultivate all their arable land or to increase production by intensive use of the land. In most of the causes they were absentee land owners on the other hand, the tenants were not inclined to invest in land to get more production as they were not sure of the tenancy rights for the next year. Land reforms were implemented throughout the third world countries. But according to Jesse (1997), it was an emotional issue and the Governments could not take any effective action.

Drone (1980) write that in Columbia agrarian reforms did not change the pattern of land distribution at all. The situation in the South East Asian countries was also the same: the land reforms could not bring any revolutionary changes in the inequalities of village structure and did not produce any favorable economic results. After an extensive study of land reforms in 8 countries of Asia Africa and Latin America, Hewes (1987) concluded that there was no possibility of increasing
production by adopting these programs. Chowsky (1988) commenting on the land reforms in Egypt writes that the present results of land reforms will not raise the living standard of farm people. According to Daniel (1987) the main obstacle in the way of implementation of land reforms has been the disinterest of the landed class not willing to sacrifice its own interest for the benefit of the peasantry. He further says, “In Pakistan the lack of such commitments has much reduced the scope of implementation.”

The same happened with the second land reforms in the country as the landed group exploited the political pressure to protect their interests, and the reforms could not be implemented effectively.

In Philippines, Friar land was redistributed in 1902. More than 165000 hectares were purchased by the Govt. for subdivision and sale to approximately 60,000 tenants. But as Jacoby (1971) writes, on account of illiteracy and lack of credit and marketing facilities, the new owners lost the land within one generation. The same writer citing an FAO report about land reform in Korea says that they did not prove useful for the growth of small farmers and the community leadership is still in the hands of former land lords. In this way the land reforms failed to bring any substantial change in the structure of village life.

As above examples have shown the land reforms of Pakistani Govt. have also failed to bring any significant change in rural barani area people.
ii. Land Tenure

The term “land tenure” refers to the institutional arrangements governing the ownership and utilization of agricultural land (Kaneda 1981). The purpose of land tenure reforms or land tenure acts has been to protect the rights of tenants against the oppressive land owners and to provide them security to work continuously for the modernization of agriculture (Mohanty, 1998). In India and Pakistan these laws provide security of tenure for a span of years from eviction by land lords. All South Asian tenancy laws also provide protection against rack-renting by fixing maximum rentals. But just like the land reforms, the tenure legislations also met with a total failure on account of illiteracy of the peasants and political affiliations of the land lords have practically made the laws completely ineffective. Jacoby (1971) citing a CIDA report about Brazil’s land tenure conditions and socio-economic development of the agricultural sector writes that police force and judiciary play in the hands of Hacendados and the Govt. does not interfere in their internal affairs. So the workers are changed very now and then. The situation in Ghana is the same where the educated elite want to maintain its controlling position within the tribal community. Hexem (1978) senses the failure of almost all the tenancy acts of the South East Asian countries. He gives the examples of Ceylon, Thailand, Malaya and India.

Tenancy rules wherever imposed proved more harmful for the tenants than for the land owners. Government of Pakistan (1982) mentions a report on Hyderabad act of 1951 which revealed that up to 1958 about 2-3\textsuperscript{rd} of the protected tenants had been evicted. Analyzing the causes of the total failure of tenancy laws in almost all South Asian countries, he writes that the tenants lack the moral courage to oppose the
land lords and the civil servants favor respected men of property over the poor and illiterate peasant. Almost the same remarks have been made by Jacoby (1971) about the resultant outcome of tenancy laws in an illiterate society. He says: "Written leases are of little use in areas with a high rate of illiteracy and even the strict provision against unjustified termination of leases can, and will, be evaded where ever the local judges side with the land owners in defending the status quo".

The results of the tenancy laws have been the same through out the third world countries. Jacoby (1971) concludes that, "present conditions clearly prove that laws not only failed to protect the tillers but in many cases even worsened their situation." The same is the case with the tenants of the rural barani areas of Pakistan where land owners, Civil Bureaucracy and the Judiciary side with the land lords.

iii. Credit cooperatives

The main idea of the cooperative societies, community development programs and the encouragement of the local self Government were to persuade people to cooperate for their common interest. The poor masses need credit badly, not only to invest in agriculture but mostly for consumption purposes, when they do not have good crops and some times to meet unusual needs of illness and funerals etc. but quite against the intent of these programs, in most instances it was the upper strata population who picked the fruits. Mariotti (1999) referring to Daniel (1987) writes that credit cooperatives have become mainly the preserves of the landed class in villages, including the money lenders who often acquire their funds from them.

Data obtained from All – India Rural Credit Survey, 1951-52 indicate that 58.6 percent of the cultivators family and 38.6 percent of the non-cultivator family took
loans. It also indicates that there was a positive correlation between the size of the farming operation and the amount borrowed. Small cultivators borrow or are restricted to borrow small amounts. Another study of the cooperatives in India concludes that the leadership of the cooperatives was monopolized by the people of the higher casts and higher income groups. The poor peasants were discouraged to take part in these societies. Performance of credit cooperatives in Pakistan has also been inadequate and in effective. Gadala (1992) commenting upon the cooperative organizations in Egypt writes that there is little possibility of improving the economic position of peasants through this process. The main cause of the failure of the cooperatives and other measures adopted for the betterment of the rural poor has been overwhelming illiteracy. Accesses to land and to other productive resources tend to go hand in hand. Wealthy land owners not only receive a disproportionate share of technical advice and assistance provided by the Govt. agencies and have favored access to credit agencies, but they also usurp educational facilities provided at the cost of poor masses.

iv. Cooperative farming

The concept of cooperative farming mainly stems from the ideology of Marxism which stresses the need of mass cooperation and decentralization of efforts for overall development of society. The immediate goal of cooperative farming in the developing countries was not limited to the economic growth of the rural sector, but it aimed at changing the economic outlook of the people. Specially, in India, it also intended to eliminate class distinction or at least to bridge the gap between the landed class and the landless workers to make society a bit homogenous against the highly stratified element prevalent in the rural life of the country. In Tanzania, Ujamas were
established. But they often resulted in increased centralization and state control. There could not be seen greater participation of peasants and workers in local decision making. In Pakistan, the cooperative farming has less cooperation and more autocratic control with traditional mal practices and scandals of misappropriation of funds resulting in losses of millions of rupees.

Whatever the endeavours made by governments, have only been widening the gulf between the rich and the poor. The fruits of all official efforts to modernize agriculture and to develop the rural Barani areas have been solely reaped by the big land owners and the rich stratum of society.

v. Irrigation

Soil and water provide base for agriculture. There is no possibility of any type of growth without water. In dry areas, the land is irrigated by canals, water pumps or by wells and other different means. While in Barani areas irrigation is only possible by means of rains or rainy water. Amelioratory concept of rural Barani development is shattered when the big land owners are seen using the water resources just like all other means of production exclusively, sharing least with the petty land owners, share croppers or tenants. Poverty and illiteracy make the poor people coward and fearing. They regard the land owners with awe and reverence and cannot defend their own rights.

2.2.1.9 Mechanization of farming

Mechanization is not restricted to the use of tractors, but it includes all other mechanical devices which replace labor and other traditional means of farming and
accelerate the speed of work though, at present, in most of the developing countries it is the only device which is in frequent use for farming purposes. No doubt, the use of mechanical devices saves time and makes double cropping possible, but in a country like Pakistan where rapid population growth and acute shortage of employment opportunities have already created problems, it becomes impossible to reconcile both the issues (World Bank report 1998). Donaldson (1997) studies in Pakistan show a reduction of 24 percent to 8 percent per cultivated acre in labor with tractors. In India, a study by Singh (1989) shows a reduction of 65 percent in family labor use and 25 percent in permanent hired labor. Studies by Amberchrombic (1999) show that in Columbia, one tractor will reduce employment by an average of 5.7 man years, in Guatemala 6.8 man years, and in Chile 4.1 man years.

“Crucial in the task of proper utilization of modern technology is education of the ultimate utilizes. In this role education is a catalytic ingredient that modifies, relates, and activates the other elements essential for agricultural development.”

Dasgupta (1976) has cited an incident of Indians who were provided a tractor. They used it for one season but put in rain where it consequently turned into a heap of rusty metal. Commenting upon this situation he writes; “provision of facilities without proper education and behavioral change can result only in the disorder which was witnessed in Hvasupai Indians.”

The use of new devices in Pakistan, without first providing education to the people of rural barani areas will eventually sharpen the gap between the rich and the poor and give way to increase disparity among different strata of population.
2.2.1.10 Use of new technology

Green revolution technology or new technology in agriculture includes new high yielding varieties of food grains, use of commercial fertilizers, herbicides, insecticides and better control of irrigation water. As for agricultural output is concerned, the use of new technology has become imperative. The traditional means of production are no longer efficient to meet the requirements of expanding population. But the adoption of new technology requires innovative behavior which cannot be found among the traditional peasants of developing countries. Educated big landowners are more inclined towards the adoption of these new techniques. Therefore, the existing inequalities widen with increased modernization of agriculture.

2.2.1.11 Market mechanism and price incentives

Decisions to cultivate marketable products are not only affected by access to market and the cost of transportation but they are also influenced by tenurial arrangements and the financial positions of the cultivators. For subsistence farmers it is not possible to produce cash crops and to purchase food from the market. Often the poor farmer is excluded from the market and cannot share the profit incentives and market mechanisms affect the decision making process of persons already out of the vicious circle of subsistence farming. Tradition-bound people are less affected by price policies. For these people the main aim of life is security and satisfaction. They are least interested in maximization.

Market prices have no effect on production decisions. Price support policies are applied to reduce uncertainty of incomes. But the subsistence farmers and the landless workers who market to their debtors are not affected by these policies.
According to him they have no direct influence on the efficiency of production techniques.

As the concept of rural barani areas development implies the overall transportation of the rural barani sector, the price support policy has proved injurious for the poor section of population who always has to buy food from the market. In developing countries food prices are fixed almost twice as high as compared to the world market places though it substantially increases the net income of large land owners, it creates distrust among the poor masses and cannot contribute towards their betterment.

2.3 **RURAL BARANI AREAS OF THE PUNJAB**

Barani area is defined as the area where source of water for cultivation is only rain water. There may be isolated individual level tube wells for the purpose at scattered areas but majority of the land depends on rainy water for the crops to cultivate. These areas are abundant in Pakistan especially the hilly areas where canal system is difficult to manage because their digging is impossible and the level of the cultivated land is above the river and canal beds.

Barani areas of Punjab are spread over 13 districts and comprise almost more than 30% of the total area in Punjab. These 13 districts are Attock, Rawalpindi, Chakwal, Jhelum, Gujrat, Sialkot, Narowal, Khushab, Mianwali, Bhakkar, Layyah, Rajanpur and D.G. Khan. However, the rural barani area under study includes four districts of Attock, Chakwal, Jhelum and Rawalpindi.
2.4 RESEARCH IN BASIC EDUCATION AND DEVELOPMENT

Farrana (2000) concludes that modern and most advance era of twenty first century demands to include basic education at all levels and higher education in specific fields like information technology, computer and typing courses.

Rahcela (2001) found out that education played a major role in the net farm income of the sample farmers which increased due to higher input level, better technical know-how, higher level of farm mechanization, etc and all this augmenting to availability of sufficient funds in form of credit.

The researcher Awais (2002) summarizes that basic education is a must for the development of the barani area farmers. Farmers have suffered years of negative of per capita growth and had a difficult internal and external agenda to address. Our farming community has been making sacrifices in living standards and economic stability. The external environment within which the small farmer’s effort to resume the sustainable growth in socio-economic status must take place is largely determined by the education level and the trade policies of the agricultural sector. Lack of basic education acts as a severe constraint to developing farmers. Often the farmers are caught between the threat of financial burden and the specter of social imbalance.

Saira (2003) found that lack of basic education and facilities in the rural barani areas enforced the people migrate to cities and abroad. It was seen that provision of education made them go back to their ancestral villages. They celebrate their holidays, religious festival and contribute money in their community programmes.
Ghulam (2005) conducted a research to find out the role of education in the indigenous knowledge system and sustainable rural development. He found out that people had facilities of educational institutions which help them to get other facilities of post office, basic health care, utilization of fertilizers and bringing Sui gas in their villages. There were no proper markets for purchasing of goods, but little shops were present in the village streets. For water resources people had hand pumps, however, purification water supply provided by the government was in pipeline. Landlords and the educated people built their houses in modern pattern with facilities. For fuel most people (uneducated) used wood and *upplay* and stable families (educated) used cylinder gas. In the villages of barani areas majority of families were in joint setup. Man was dominant in family structure. For upper class (uneducated) marriage in the same cast was necessary. The concept of *quami/zat/biradri* was very strong. People preferred to support their own *biradri* members. Landlordship was also observed in the villages. Sharecropper was the major economic and social source in the agriculture production of those landlords. People participated in the occasion like birth, marriage and death irrespective of their level of education.

Ahmad (2004) conducted a study on the basic education and the *panchayat* system in the rural barani areas. He found out that there was the concept of informal panchayat council to resolve the problems of the people. In the villages people had two types of views regarding panchayat. One was traditional and the second was modern. Elder people of the villages were the members of the panchayat. The leadership of the traditional panchayat depended on age, cast, wisdom and land. They
had no consideration for basic education. For modern panchayat system people have started taking into consideration the educational background of the person who is a candidate for the leader of the panchayat.
Chapter 3

RESEARCH METHODOLOGY

The present study was designed to evaluate the impact of basic education on the rural development in barani areas with reference to their economic, social, health general awareness of the people and acquisition of land and use of fertilizers. It is generally believed that all development follows the change in ideas and attitudes which result from basic education. Basic education prepares a stage for future progress where as prevailing illiteracy makes all the efforts of change and transformation futile.

3.1 POPULATION

Cluster of all the barani districts and households living in these barani districts constituted the population of the study.

The study was delimited to the following four districts.

1. Attock
2. Chakwal
3. Jehlum
4. Rawalpindi

3.2 SAMPLE

3.2.1 Sample of Villages

Two hundred villages were taken from the cluster of four districts as sample villages, selected randomly, fifty being from each district.
<table>
<thead>
<tr>
<th>District</th>
<th>No. of villages</th>
<th>No. of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attock</td>
<td>50</td>
<td>250</td>
</tr>
<tr>
<td>Chakwal</td>
<td>50</td>
<td>250</td>
</tr>
<tr>
<td>Jehlum</td>
<td>50</td>
<td>250</td>
</tr>
<tr>
<td>Rawalpindi</td>
<td>50</td>
<td>250</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>1000</strong></td>
</tr>
</tbody>
</table>

The two hundred villages were divided into one hundred and fifty villages which had at least one educational institution of at least primary level and fifty villages which had no educational institution at all.

Villages with educational institutions = 150 referred to as A in the text.

Villages with no educational institutions= 50 referred to as B in the text.

The respondents of these villages were further bifurcated into A-I & A-II and B-I & B-II as detailed below:

- **A-I** = Educated with institution in the village
- **A-II** = Uneducated with institution in the village
- **B-I** = Educated without institution in the village
- **B-II** = Uneducated without institution in the village

### 3.2.2 Sample of Households

One thousand households constituted the sample of the study. Five households were selected from each village by the random sampling procedure. Data received from one thousand questionnaires were computerized. 750 households were declared as those from the villages having educational institutions and 250 households from the villages having no educational institutions.
3.3 RESEARCH INSTRUMENT

The data were required about economic, social, health services, general awareness and acquisition of land and use of fertilizers by the people under study. As the official record was deficient and incomplete to cover these aspects, the researcher had to rely upon information provided by the representative of each family living in the area. Therefore, the main sources of data were the persons referred to as respondents to provide information about their families. The questionnaires required information on the aspect as detailed below:

<table>
<thead>
<tr>
<th>No. of sections</th>
<th>Name</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Basic information</td>
<td>6</td>
</tr>
<tr>
<td>2.</td>
<td>Land information</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>Other occupations</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>Family index</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>Familial relations</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>Information about marriage</td>
<td>9</td>
</tr>
<tr>
<td>7.</td>
<td>Condition of accommodation</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>Social relations</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>Use of mass-media</td>
<td>2</td>
</tr>
<tr>
<td>10.</td>
<td>Interview with female folk</td>
<td>6</td>
</tr>
<tr>
<td>11.</td>
<td>Health awareness;</td>
<td>8</td>
</tr>
</tbody>
</table>

**Total** 62

3.3.1 Pilot Testing

The pilot testing of research instrument was conducted in the district Jehlum. One village of Jehlum district with educational institution and one village without educational institution were selected for pilot testing. Questionnaires were developed, distributed and administered among the head of families or representatives of
households. Based on the difficulties of the respondents, the questionnaires were improved. The language and text were then modified accordingly.

3.4 DATA COLLECTION

Two hundred villages were selected from four districts of the rural barani areas of the Punjab Province. Among these villages 150 were those having educational institutions in them and 50 villages were without educational institution. The villages were selected randomly from the list provided by the District education officers/Executive district officers concerned. The researcher personally visited each village for the purpose of data collection. In each village five households were randomly selected by dividing the village into five portions and taking one household from each portion randomly. The main tool of research was the questionnaire conducted by the researcher on the representative of each family during the months of August and September, 2005. To guarantee reliability, the researcher personally administered the questionnaire on the sample household.

3.5 ANALYSIS OF DATA

The questionnaires received from the respondents were compiled, computed and analyzed statistically. Significance of difference in mean score was tested applying “t-test”.
RESULTS AND DISCUSSION

The major purpose of the study was to see the impact of basic education in the rural development of barani areas. The data collected were tabulated, analyzed and interpreted by using the t-test. The obtained results are presented as under.

Table 1. Gender of Head of Families of group A and B

<table>
<thead>
<tr>
<th>District</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attock</td>
<td>225</td>
<td>25</td>
</tr>
<tr>
<td>Chakwal</td>
<td>230</td>
<td>20</td>
</tr>
<tr>
<td>Jehlum</td>
<td>245</td>
<td>5</td>
</tr>
<tr>
<td>Rawalpindi</td>
<td>231</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>931</td>
<td>69</td>
</tr>
</tbody>
</table>

Table 1 shows that 1000 questionnaires were distributed among heads of families in all four districts. 931 of them were male and rest 69 were females. This shows that in rural barani areas head of families are, mostly, males.

Table 2. Education of Head of Families in Group A & B

<table>
<thead>
<tr>
<th>District</th>
<th>N (Households)</th>
<th>(A)</th>
<th>(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
</tr>
<tr>
<td>Attock</td>
<td>209</td>
<td>131</td>
<td>(63%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>78</td>
<td>(37%)</td>
</tr>
<tr>
<td>Chakwal</td>
<td>253</td>
<td>180</td>
<td>(56%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>73</td>
<td>(44%)</td>
</tr>
<tr>
<td>Jehlum</td>
<td>247</td>
<td>163</td>
<td>(66%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>84</td>
<td>(34%)</td>
</tr>
<tr>
<td>Rawalpindi</td>
<td>291</td>
<td>247</td>
<td>(72%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>44</td>
<td>(28%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1000</td>
<td>721</td>
<td>(65%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>279</td>
<td>(35%)</td>
</tr>
</tbody>
</table>

Table 2 shows that literacy rate of District Rawalpindi is high.
Table 3. Age of Head of families of Group-A & Group-B

<table>
<thead>
<tr>
<th>District</th>
<th>20-30 yrs</th>
<th>31-40 yrs</th>
<th>41-50 yrs</th>
<th>51-60 yrs</th>
<th>61-70 yrs</th>
<th>71-80 yrs</th>
<th>81-90 Yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attock</td>
<td>15</td>
<td>19</td>
<td>140</td>
<td>52</td>
<td>20</td>
<td>4</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>Chakwal</td>
<td>10</td>
<td>20</td>
<td>130</td>
<td>40</td>
<td>25</td>
<td>20</td>
<td>5</td>
<td>250</td>
</tr>
<tr>
<td>Jehlum</td>
<td>8</td>
<td>31</td>
<td>152</td>
<td>36</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>250</td>
</tr>
<tr>
<td>Rawalpindi</td>
<td>12</td>
<td>29</td>
<td>156</td>
<td>31</td>
<td>17</td>
<td>4</td>
<td>1</td>
<td>250</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>99</td>
<td>578</td>
<td>159</td>
<td>77</td>
<td>33</td>
<td>9</td>
<td>1000</td>
</tr>
</tbody>
</table>

Table 3 shows that majority of 1000 head of families were between 30 and 70 years of age.

Table 4. Profession of Head of families of Group-A & Group-B

<table>
<thead>
<tr>
<th>District</th>
<th>Farmer</th>
<th>Non-farmer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attock</td>
<td>150</td>
<td>100</td>
<td>250</td>
</tr>
<tr>
<td>Chakwal</td>
<td>99</td>
<td>151</td>
<td>250</td>
</tr>
<tr>
<td>Jehlum</td>
<td>121</td>
<td>129</td>
<td>250</td>
</tr>
<tr>
<td>Rawalpindi</td>
<td>139</td>
<td>111</td>
<td>250</td>
</tr>
<tr>
<td>Total</td>
<td>509</td>
<td>491</td>
<td>1000</td>
</tr>
</tbody>
</table>

Table 4 shows that 509 head of families were farmers exclusively and rest of the 491 were farmers with additional professions to earn more money.
Table 5. Monthly Income of Head of families of Group-A & Group-B (in thousands)

<table>
<thead>
<tr>
<th>District</th>
<th>1-5</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21-25</th>
<th>26-30</th>
<th>30+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attock</td>
<td>180</td>
<td>45</td>
<td>13</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>Chakwal</td>
<td>115</td>
<td>47</td>
<td>50</td>
<td>13</td>
<td>10</td>
<td>7</td>
<td>8</td>
<td>250</td>
</tr>
<tr>
<td>Jehlum</td>
<td>101</td>
<td>40</td>
<td>20</td>
<td>12</td>
<td>7</td>
<td>30</td>
<td>40</td>
<td>250</td>
</tr>
<tr>
<td>Rawalpindi</td>
<td>183</td>
<td>40</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>250</td>
</tr>
<tr>
<td>Total</td>
<td>579</td>
<td>172</td>
<td>98</td>
<td>35</td>
<td>24</td>
<td>42</td>
<td>50</td>
<td>1000</td>
</tr>
</tbody>
</table>

Table 5 shows that monthly income of the head of families ranges between Rs. 1000 to 5000. This income is not solely from the land, it includes from other sources.

Table 6. Education level of group- A Head of Household and their families

<table>
<thead>
<tr>
<th>Description</th>
<th>Group A (750 households)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>Total (M+F)</td>
<td></td>
</tr>
<tr>
<td>12 years education</td>
<td>1090</td>
<td>640</td>
<td>1730</td>
<td></td>
</tr>
<tr>
<td>10 years education</td>
<td>870</td>
<td>922</td>
<td>1792</td>
<td></td>
</tr>
<tr>
<td>5 years education</td>
<td>1100</td>
<td>995</td>
<td>2095</td>
<td></td>
</tr>
<tr>
<td>Total (A-I)</td>
<td>3060</td>
<td>2557</td>
<td>5617</td>
<td></td>
</tr>
<tr>
<td>Total (A-II)</td>
<td>233</td>
<td>300</td>
<td>533</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3293</td>
<td>2857</td>
<td>6150</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows that in area with educational institution, 1730 members of 750 households possessed at least 12 years education, 1792 members with 10 years education, and 2095 members with 5 years education.
Table 7. Education level of group B Head of households and their families

<table>
<thead>
<tr>
<th>Description</th>
<th>Group B (250 households)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>Total (M+F)</td>
<td></td>
</tr>
<tr>
<td>12 years education</td>
<td>30</td>
<td>12</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>10 years education</td>
<td>70</td>
<td>60</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>5 years education</td>
<td>280</td>
<td>145</td>
<td>425</td>
<td></td>
</tr>
<tr>
<td><strong>Total (B-I)</strong></td>
<td><strong>380</strong></td>
<td><strong>317</strong></td>
<td><strong>597</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total (B-II)</strong></td>
<td><strong>720</strong></td>
<td><strong>933</strong></td>
<td><strong>1653</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1100</strong></td>
<td><strong>1150</strong></td>
<td><strong>2250</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows in areas without educational institutions, 42 members of 250 households possessed at least 12 years education, 130 members with 10 years education, and 425 members with 5 years education.

Table 8. Average earning members per family in Group A & Group B

<table>
<thead>
<tr>
<th>Description</th>
<th>No. of families</th>
<th>Average earning member per family</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>3.76</td>
</tr>
<tr>
<td>B-I</td>
<td>75</td>
<td>3.42</td>
</tr>
<tr>
<td><strong>Total (A-I+B-I)</strong></td>
<td><strong>561</strong></td>
<td><strong>3.59</strong></td>
</tr>
<tr>
<td>A-II</td>
<td>264</td>
<td>2.30</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>2.25</td>
</tr>
<tr>
<td><strong>Total (A-II+B-II)</strong></td>
<td><strong>439</strong></td>
<td><strong>2.28</strong></td>
</tr>
</tbody>
</table>

Table 8 shows that on the average there were more earning members per family in the educated groups A & B.
**Overall comparison of Income of all four districts**

**Ho:** There is no significant difference between the income of educated and uneducated families of the barani areas of all the four districts.

**Table 9:** Comparison of A-I with A-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.ED</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>8116.18</td>
<td>1442.57</td>
<td>87.90</td>
<td>34.13*</td>
</tr>
<tr>
<td>A-II</td>
<td>264</td>
<td>5115.38</td>
<td>953.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 748  t-value at 0.05 level = 1.96

Table 9 shows that t-value was found to be 34.13 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the income of educated and uneducated families of the barani areas of all the four districts.

**Table 10:** Comparison of B-I with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.ED</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>75</td>
<td>7276.80</td>
<td>1205.63</td>
<td>168.50</td>
<td>16.68*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>4465.86</td>
<td>1256.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 248  t-value at 0.05 level = 1.96

Table 10 shows that t-value was found to be 16.68 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the income of educated and uneducated families of the barani areas of all the four districts.

Table 11: Comparison A-I with B-I in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>8116.18</td>
<td>1442.57</td>
<td>153.82</td>
<td>5.45*</td>
</tr>
<tr>
<td>B-I</td>
<td>75</td>
<td>7276.80</td>
<td>1205.63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 559
\[ t\text{-value is at 0.05 level} = 1.96 \]

Table 11 shows that t-value was found to be 5.45 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the income of educated and uneducated families of the barani areas of all the four districts.

Table 12 Comparison of A-II with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>264</td>
<td>5115.38</td>
<td>953.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>4465.86</td>
<td>1256.02</td>
<td>111.62</td>
<td>5.81*</td>
</tr>
</tbody>
</table>

significant df = 437
\[ t\text{-value is at 0.05 level} = 1.96 \]

Table 12 shows that t-value was found to be 5.81 which is significant at 0.05 level. Hence the null hypothesis is rejected.
District wise comparison of Income

District Attock

Ho: There is no significant difference between the income of educated and un-educed families of the barani areas of district Attock.

Table 13: Comparison A-I with A-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>6773.46</td>
<td>1247.62</td>
<td>155.39</td>
<td>16.15*</td>
</tr>
<tr>
<td>A-II</td>
<td>58</td>
<td>4263.29</td>
<td>699.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 155 t-value at 0.05 level = 1.96

Table 13 shows that t-value was found to be 16.15 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the income of educated and un-educed families of the barani areas of district Attock.

Table: 14 Comparison of B-I with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>15</td>
<td>5721.80</td>
<td>524.64</td>
<td>141.92</td>
<td>17.82*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>3192.50</td>
<td>254.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 49 t-value at 0.05 level = 1.96

Table 14 shows that t-value was found to be 17.82 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the income of educated and uneducated families of the barani areas of district Attock.

Table 15: Comparison A-I with B-I in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>6773.46</td>
<td>1247.62</td>
<td>184.58</td>
<td>5.69*</td>
</tr>
<tr>
<td>B-I</td>
<td>15</td>
<td>5721.80</td>
<td>524.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 112 t-value at 0.05 level = 1.96

Table 15 shows that t-value was found to be 5.69 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the income of educated and uneducated families of the barani areas of district Attock.

Table: 16 Comparison of A-II with B-II of in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>58</td>
<td>6773.46</td>
<td>1247.62</td>
<td>185.69</td>
<td>5.66*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>5721.80</td>
<td>524.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 92 t-value at 0.05 level = 1.96

Table 16 shows that t-value was found to be 5.66 which is significant at .05 level. Hence the null hypothesis is rejected.
District Chakwal

**H0:** There is no significant difference between the income of educated and un-educated families of the barani areas of district Chakwal.

**Table: 17** Comparison of A-I with A-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>7734.97</td>
<td>1011.72</td>
<td>148.32</td>
<td>21.63*</td>
</tr>
<tr>
<td>A-II</td>
<td>60</td>
<td>4525.83</td>
<td>901.39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 179 \) \( t \)-value at 0.05 level = 1.96

Table 17 shows that \( t \)-value was found to be 21.63 which is significant at .05 level. Hence null hypothesis is rejected.

**H0:** There is no significant difference between the income of educated and un-educated families of the barani areas of district Chakwal.

**Table: 18** Comparison of B-I with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>18</td>
<td>6715.00</td>
<td>527.49</td>
<td>187.88</td>
<td>16.83*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>3551.27</td>
<td>890.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 56 \) \( t \)-value at 0.05 level = 1.96

Table 18 shows that \( t \)-value was found to be 16.83 which is significant at .05 level. Hence the null hypothesis is rejected.
**Ho:** There is no significant difference between the income of educated and uneducated families of the barani areas of district Chakwal.

**Table 19: Comparison of A-I with B-I in Income**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>7734.97</td>
<td>1011.72</td>
<td>154.65</td>
<td>6.59'</td>
</tr>
<tr>
<td>B-I</td>
<td>18</td>
<td>6715.00</td>
<td>527.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 137 \) \( t\)-value at 0.05 level = 1.96

Table 19 shows that t-value was found to be 6.59 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the income of educated and uneducated families of the barani areas of district Chakwal.

**Table 20: Comparison A-II with B-II in Income**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>60</td>
<td>4525.83</td>
<td>901.39</td>
<td>182.71</td>
<td>5.33'</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>3551.27</td>
<td>890.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 98 \) \( t\)-value at 0.05 level = 1.96

Table 20 shows that t-value was found to be 5.33 which is significant at .05 level. Hence the null hypothesis is rejected.
District Jehlum

Ho. There is no significant difference between the income of educated and uneducated families of the barani areas of district Jehlum.

Table 21: Comparison of A-I with A-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>8402.31</td>
<td>1259.33</td>
<td>126.39</td>
<td>22.62*</td>
</tr>
<tr>
<td>A-II</td>
<td>66</td>
<td>5543.18</td>
<td>499.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 194 t-value at 0.05 level = 1.96

Table 21 shows that t-value was found to be 22.62 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho. There is no significant difference between the income of educated and uneducated families of the barani areas of district Jehlum.

Table 22: Comparison of B-I with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>19</td>
<td>7737.00</td>
<td>522.39</td>
<td>190.81</td>
<td>14.94*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>4885.33</td>
<td>962.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 59 t-value at 0.05 level = 1.96

Table 22 shows that t-value was found to be 14.94 which is at .05 level. Hence the null hypothesis is rejected.
Ho. There is no significant difference between the income of educated and uneducated families of the barani areas of district Jehlum.

Table 23: Comparison of A-I with B-I in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>8402.31</td>
<td>1259.33</td>
<td>162.97</td>
<td>4.08*</td>
</tr>
<tr>
<td>B-I</td>
<td>19</td>
<td>7737.00</td>
<td>522.39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 147 t-value at 0.05 level = 1.96

Table 23 shows that t-value was found to be 4.08 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho. There is no significant difference between the income of educated and uneducated families of the barani areas of district Jehlum.

Table 24: Comparison of A-II with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>66</td>
<td>5543.18</td>
<td>490.24</td>
<td>160.69</td>
<td>4.09*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>4885.33</td>
<td>962.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 106 t-value at 0.05 level = 1.96

Table 24 shows that t-value was found to be 4.09 which is significant at .05 level. Hence the null hypothesis is rejected.
District Rawalpindi

H0: There is no significant difference between the income of educated and uneducated families of the barani areas of district Rawalpindi.

Table 25: Comparison of A-I with A-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ep</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>9167.43</td>
<td>1127.93</td>
<td>120.19</td>
<td>27.83*</td>
</tr>
<tr>
<td>A-II</td>
<td>80</td>
<td>5822.38</td>
<td>638.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 214 \) \( t \)-value at 0.05 level = 1.96

Table 25 shows that \( t \)-value was found to be 27.83 which is significant at .05 level. Hence the null hypothesis is rejected.

H0: There is no significant difference between the income of educated and uneducated families of the barani areas of district Rawalpindi.

Table 26: Comparison of B-I with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ep</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>23</td>
<td>8350.43</td>
<td>990.39</td>
<td></td>
<td>12.02*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>5602.82</td>
<td>737.00</td>
<td>228.42</td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 78 \) \( t \)-value at 0.05 level = 1.96

Table 26 shows that \( t \)-value was found to be 12.02 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the income of educated and uneducated families of the barani areas of district Rawalpindi.

Table 27: Comparison of A-I with B-I in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Eₐ</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>9167.43</td>
<td>1127.93</td>
<td>96.94</td>
<td>8.42*</td>
</tr>
<tr>
<td>B-I</td>
<td>23</td>
<td>8350.43</td>
<td>990.39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 157  t-value at 0.05 level = 1.96

Table 27 shows that t-value was found to be 8.42 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the income of educated and uneducated families of the barani areas of district Rawalpindi.

Table 28: Comparison of A-II with B-II in Income

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Eₐ</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>80</td>
<td>5822.38</td>
<td>638.30</td>
<td>120.92</td>
<td>1.81*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>5602.82</td>
<td>737.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 135  t-value at 0.05 level = 1.96

Table 28 shows that t-value was found to be 1.81 which is significant at .05 level. Hence the null hypothesis is rejected.
Overall comparison of participation of social activities of all four districts

H₀: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of the all four districts.

Table 29: Comparison of A-I and A-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>49.12</td>
<td>9.35</td>
<td>0.62</td>
<td>18.72*</td>
</tr>
<tr>
<td>A-II</td>
<td>264</td>
<td>37.51</td>
<td>7.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 748 t-value at 0.05 level = 1.96

Table 29 shows that t-value was found to be 18.72 which is significant at .05 level. Hence the null hypothesis is rejected.

H₀: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of the all four districts.

Table 30: Comparison of B-I and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>75</td>
<td>43.57</td>
<td>9.85</td>
<td>1.28</td>
<td>9.14*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>31.86</td>
<td>7.77</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 248 CR at 0.05 level = 1.96

Table 30 shows that t-value was found to be 9.14 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of the all four districts.

Table 31: Comparison of A-I and B-I on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>49.12</td>
<td>9.35</td>
<td>1.21</td>
<td>4.58*</td>
</tr>
<tr>
<td>B-I</td>
<td>75</td>
<td>43.57</td>
<td>9.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 31 shows that t-value was found to be 4.58 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of the all four districts.

Table 32: Comparison of A-II and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>264</td>
<td>37.51</td>
<td>7.49</td>
<td>.74</td>
<td>7.63*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>31.86</td>
<td>7.77</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 32 shows that t-value was found to be 7.63 which is significant at .05 level. Hence the null hypothesis is rejected.
District wise comparison of participation of social activities

District Attock

**H₀:** There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Attock district.

**Table 33:** Comparison of A-I and A-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Eₚ</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>37.90</td>
<td>6.80</td>
<td>.86</td>
<td>8.09*</td>
</tr>
<tr>
<td>A-II</td>
<td>58</td>
<td>30.94</td>
<td>4.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 155 t-value at 0.05 level = 1.96

Table 33 shows that t-value was found to be 8.09 which is significant at .05 level. Hence the null hypothesis is rejected.

**H₀:** There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Attock district.

**Table 34:** Comparison of B-I and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Eₚ</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>15</td>
<td>33.13</td>
<td>5.91</td>
<td>1.70</td>
<td>5.53*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>23.72</td>
<td>4.62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 49 t-value at 0.05 level = 1.96

Table 34 shows that t-value of the CR was found to be 5.53 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Attock district.

Table 35: Comparison of A-I and B-I on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ep</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>37.90</td>
<td>6.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-I</td>
<td>15</td>
<td>33.13</td>
<td>5.91</td>
<td>1.67</td>
<td>2.85*</td>
</tr>
</tbody>
</table>

significant df = 112 t-value at 0.05 level = 1.96

Table 35 shows that t-value was found to be 2.85 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Attock district.

Table 36: Comparison of A-II and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ep</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>58</td>
<td>30.94</td>
<td>4.08</td>
<td></td>
<td>.93</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>23.72</td>
<td>4.62</td>
<td>.93</td>
<td>7.76*</td>
</tr>
</tbody>
</table>

significant df = 92 CR at 0.05 level = 1.96

Table 36 shows that t-value was found to be 7.76 which is significant at .05 level. Hence the null hypothesis is rejected.
District Chakwal

H₀: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Chakwal district.

Table 37: Comparison of A-I and A-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>44.53</td>
<td>6.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-II</td>
<td>60</td>
<td>34.21</td>
<td>4.24</td>
<td>.80</td>
<td>12.90*</td>
</tr>
</tbody>
</table>

*significant df = 179 t-value at 0.05 level = 1.96

Table 37 shows that t-value was found to be 12.90 which is significant at .05 level. Hence the null hypothesis is rejected.

H₀: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Chakwal district.

Table 38: Comparison of B-I and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>18</td>
<td>35.83</td>
<td>3.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>29.02</td>
<td>5.33</td>
<td>1.20</td>
<td>5.67*</td>
</tr>
</tbody>
</table>

*significant df = 56 t-value at 0.05 level = 1.96

Table 38 shows that t-value was found to be 5.67 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Chakwal district.

Table 39: Comparison of A-I and B-I on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>44.53</td>
<td>6.54</td>
<td>1.38</td>
<td>11.23*</td>
</tr>
<tr>
<td>B-I</td>
<td>18</td>
<td>29.02</td>
<td>5.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 39 shows that t-value was found to be 11.23 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Chakwal district.

Table 40: Comparison of A-II and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>60</td>
<td>34.21</td>
<td>4.24</td>
<td>1.00</td>
<td>5.19*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>29.02</td>
<td>5.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 40 shows that t-value was found to be 5.19 which is significant at .05 level. Hence the null hypothesis is rejected.
District Jehlum

**H₀**: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Jehlum district.

**Table 41**: Comparison of A-I and A-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Eₜ</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>53.70</td>
<td>5.65</td>
<td>.94</td>
<td>16.15*</td>
</tr>
<tr>
<td>A-II</td>
<td>66</td>
<td>38.51</td>
<td>6.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 194 \)

t-value at 0.05 level = 1.96

Table 41 shows that t-value was found to be 16.15 which is significant at .05 level. Hence the null hypothesis is rejected.

**H₀**: There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Jehlum district.

**Table 42**: Comparison of B-I and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Eₜ</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>19</td>
<td>47.36</td>
<td>7.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>33.66</td>
<td>5.06</td>
<td>1.85</td>
<td>7.40*</td>
</tr>
</tbody>
</table>

significant \( df = 59 \)

t-value at 0.05 level = 1.96

Table 42 shows that t-value was found to be 7.40 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Jehlum district.

Table 43: Comparison of A-I and B-I on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>53.70</td>
<td>5.65</td>
<td>1.75</td>
<td>3.62*</td>
</tr>
<tr>
<td>B-I</td>
<td>19</td>
<td>47.36</td>
<td>7.35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 147 \) \( t\)-value at 0.05 level = 1.96

Table 43 shows that t-value was found to be 3.62 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Jehlum district.

Table 44: Comparison of A-II and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>66</td>
<td>38.51</td>
<td>6.57</td>
<td>1.12</td>
<td>4.33*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>33.66</td>
<td>5.06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 106 \) \( t\)-value at 0.05 level = 1.96

Table 44 shows that t-value was found to be 4.33 which is significant at .05 level. Hence the null hypothesis is rejected.
**District Rawalpindi**

**H₀:** There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Rawalpindi district.

<p>| Table 45: Comparison of A-I and A-II on participation in social activities |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|</p>
<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>56.98</td>
<td>4.28</td>
<td>.65</td>
<td>20.09*</td>
</tr>
<tr>
<td>A-II</td>
<td>80</td>
<td>43.92</td>
<td>6.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 214

Table 45 shows that t-value was found to be 20.09 which is significant than the table value at .05 level. Hence the null hypothesis is rejected.

**H₀:** There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Rawalpindi district.

<p>| Table 46: Comparison of B-I and B-II on participation in social activities |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|</p>
<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>23</td>
<td>53.30</td>
<td>3.84</td>
<td>1.23</td>
<td>12.69*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>37.68</td>
<td>7.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 78

t-value at 0.05 level = 1.96

Table 46 shows that t-value was found to be 12.69 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Rawalpindi district.

Table 47: Comparison of A-I and B-I on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>56.98</td>
<td>4.28</td>
<td>0.88</td>
<td>4.18*</td>
</tr>
<tr>
<td>B-I</td>
<td>23</td>
<td>53.30</td>
<td>3.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 47 shows that t-value was found to be 4.18 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho. There is no significant difference between the participation of social activities of educated and un-educated families of the barani areas of Rawalpindi district.

Table 48: Comparison of A-II and B-II on participation in social activities

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>80</td>
<td>43.92</td>
<td>6.47</td>
<td>1.18</td>
<td>5.28*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>37.68</td>
<td>7.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 48 shows that t-value was found to be 5.28 which is significant at .05 level. Hence the null hypothesis is rejected.
Overall comparison of use of Mass media of all four districts

**H₀.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

Table 49: Comparison of A-I and A-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>26.07</td>
<td>4.53</td>
<td>.36</td>
<td>21.55*</td>
</tr>
<tr>
<td>A-II</td>
<td>264</td>
<td>18.31</td>
<td>4.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant: df = 748  
 t-value at 0.05 level = 1.96

Table 49 shows that t-value was found to be 21.55 which is greater significant at .05 level. Hence the null hypothesis is rejected.

**H₀.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

Table 50: Comparison of B-I with B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>75</td>
<td>21.84</td>
<td>3.96</td>
<td>.54</td>
<td>12.77*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>14.94</td>
<td>3.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant: df = 248  
 t-value at 0.05 level = 1.96

Table 50 shows that t-value was found to be 12.77 which significant at .05 level. Hence the null hypothesis is rejected.
**Ho.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

**Table 51: Comparison of A-I and B-I in the use of Mass media**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>26.07</td>
<td>4.53</td>
<td>.50</td>
<td>8.46*</td>
</tr>
<tr>
<td>B-I</td>
<td>75</td>
<td>21.84</td>
<td>3.96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant d.f. = 559 t-value at 0.05 level = 1.96

Table 51 shows that t-value was found to be 8.46 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

**Table 52: Comparison of A-II and B-II in the use of Mass media**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>264</td>
<td>18.31</td>
<td>4.81</td>
<td>1.16</td>
<td>2.90*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>14.94</td>
<td>3.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant d.f. = 437 t-value at 0.05 level = 1.96

Table 52 shows that t-value was found to be 2.90 which is significant at .05 level. Hence the null hypothesis is rejected.
District wise comparison of use of Mass media

District Attock

**H0:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

Table 53: Comparison of A-I and A-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>23.23</td>
<td>3.60</td>
<td>.55</td>
<td>13.94*</td>
</tr>
<tr>
<td>A-II</td>
<td>58</td>
<td>15.56</td>
<td>3.20</td>
<td></td>
<td>1.96</td>
</tr>
</tbody>
</table>

Table 53 shows that t-value was found to be 13.94 which is significant at .05 level. Hence the null hypothesis is rejected.

**H0:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

Table 54: Comparison of B-I and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>15</td>
<td>18.66</td>
<td>3.13</td>
<td>1.04</td>
<td>6.08*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>12.33</td>
<td>3.96</td>
<td></td>
<td>1.96</td>
</tr>
</tbody>
</table>

Table 54 shows that t-value was found to be 6.08 which is significant at .05 level. Hence the null hypothesis” is rejected.
Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

Table 55: Comparison of A-I and B-I in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>23.23</td>
<td>3.60</td>
<td>.88</td>
<td>5.19*</td>
</tr>
<tr>
<td>B-I</td>
<td>15</td>
<td>18.66</td>
<td>3.13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 112  t-value at 0.05 level = 1.96

Table 55 shows that t-value was found to be 5.19 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

Table 56: Comparison of A-II and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>58</td>
<td>15.56</td>
<td>3.20</td>
<td>.78</td>
<td>4.14*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>12.33</td>
<td>3.96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 92  t-value at 0.05 level = 1.96

Table 56 shows that t-value was found to be 4.14 which is significant at .05 level. Hence the null hypothesis is rejected.
District Chakwal

**H0.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

**Table 57:** Comparison of A-I and A-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>24.76</td>
<td>4.02</td>
<td>.51</td>
<td>15.41*</td>
</tr>
<tr>
<td>A-II</td>
<td>60</td>
<td>16.90</td>
<td>2.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  \( df = 179 \) \( t\)-value at 0.05 level = 1.96

Table 57 shows that t-value was found to be 15.41 which is significant at .05 level. Hence the null hypothesis is rejected.

**H0.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

**Table 58:** Comparison of B-I and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>18</td>
<td>20.11</td>
<td>3.30</td>
<td>.97</td>
<td>6.35*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>13.95</td>
<td>3.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  \( df = 56 \) \( t\)-value at 0.05 level = 1.96

Table 58 shows that t-value was found to be 6.35 which is significant at .05 level. Hence the null hypothesis is rejected.
There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

Table 59: Comparison of A-I and B-I in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>24.76</td>
<td>4.02</td>
<td>.85</td>
<td>5.47*</td>
</tr>
<tr>
<td>B-I</td>
<td>18</td>
<td>20.11</td>
<td>3.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 137 t-value at 0.05 level = 1.96

Table 59 shows that t-value was found to be 5.47 which is significant at .05 level. Hence the null hypothesis is rejected.

There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

Table 60: Comparison of A-II and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>60</td>
<td>16.90</td>
<td>2.82</td>
<td>.68</td>
<td>4.33*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>13.95</td>
<td>3.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 98 t-value at 0.05 level = 1.96

Table 60 shows that t-value was found to be 4.33 which is significant at .05 level. Hence the null hypothesis is rejected.
District Jehlum

**Ho.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Jehlum district.

Table 61: Comparison of A-I and A-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>26.81</td>
<td>4.51</td>
<td>.70</td>
<td>12.57*</td>
</tr>
<tr>
<td>A-II</td>
<td>66</td>
<td>18.01</td>
<td>4.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 194  t-value at 0.05 level = 1.96

Table 61 shows that t-value was found to be 12.57 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho.** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Jehlum district.

Table 62: Comparison of B-I and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>19</td>
<td>22.94</td>
<td>3.40</td>
<td>.93</td>
<td>8.29*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>15.23</td>
<td>3.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 59  t-value at 0.05 level = 1.96

Table 62 shows that t-value was found to be 8.29 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Jehlum district.

Table 63: Comparison of A-I and B-I in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>26.81</td>
<td>4.51</td>
<td>.87</td>
<td>4.44*</td>
</tr>
<tr>
<td>B-I</td>
<td>19</td>
<td>22.94</td>
<td>3.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 147

Table 63 shows that t-value was found to be 4.44 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Jehlum district.

Table 64: Comparison of A-II and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>66</td>
<td>18.01</td>
<td>4.75</td>
<td>.77</td>
<td>3.61*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>15.23</td>
<td>3.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 106

Table 64 shows that t-value was found to be 3.61 which is significant at .05 level. Hence the null hypothesis is rejected.
District Rawalpindi

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Rawalpindi district.

**Table 65:** Comparison of A-I and A-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>28.59</td>
<td>4.03</td>
<td>.63</td>
<td>10.88*</td>
</tr>
<tr>
<td>A-II</td>
<td>80</td>
<td>21.73</td>
<td>4.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 214 \)

\( t \)-value at 0.05 level = 1.96

Table 65 shows that \( t \)-value was found to be 10.88 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Rawalpindi district.

**Table 66:** Comparison of B-I and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>23</td>
<td>24.34</td>
<td>3.43</td>
<td>.82</td>
<td>8.86*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>17.07</td>
<td>3.06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 78 \)

\( t \)-value at 0.05 level = 1.96

Table 66 shows that \( t \)-value was found to be 8.86 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the harani areas of Rawalpindi district.

Table 67: Comparison of A-I and B-I in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>28.59</td>
<td>4.03</td>
<td>.79</td>
<td>5.37*</td>
</tr>
<tr>
<td>B-I</td>
<td>23</td>
<td>24.34</td>
<td>3.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 157  t-value at 0.05 level = 1.96

Table 67 shows that t-value was found to be 5.37 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the harani areas of Rawalpindi district.

Table 68: Comparison of A-II and B-II in the use of Mass media

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>80</td>
<td>21.73</td>
<td>4.81</td>
<td>.67</td>
<td>6.95*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>17.07</td>
<td>3.06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 135  t-value at 0.05 level = 1.96

Table 68 shows that t-value was found to be 6.95 which is significant at .05 level. Hence the null hypothesis is rejected.
Overall comparison of Health awareness of all four districts

Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

Table 69: Comparison of A-I and A-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>30.30</td>
<td>6.27</td>
<td>.41</td>
<td>28.29*</td>
</tr>
<tr>
<td>A-II</td>
<td>264</td>
<td>18.70</td>
<td>4.93</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 69 shows that t-value was found to be 28.29 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

Table 70: Comparison of B-I and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>75</td>
<td>22.52</td>
<td>5.69</td>
<td>.73</td>
<td>12.30*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>13.54</td>
<td>4.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 70 shows that t-value was found to be 12.30 which is significant at .05 level. Hence the null hypothesis is rejected.
**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

**Table 71:** Comparison of A-I and B-I in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E p</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>30.30</td>
<td>4.93</td>
<td>.69</td>
<td>11.27*</td>
</tr>
<tr>
<td>B-I</td>
<td>75</td>
<td>22.52</td>
<td>5.69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant df = 559 t-value at 0.05 level = 1.96

Table 71 shows that t-value was found to be 11.27 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of the all four districts.

**Table 72:** Comparison of A-II and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E p</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>264</td>
<td>18.70</td>
<td>4.93</td>
<td>.45</td>
<td>11.46*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>13.54</td>
<td>4.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant df = 437 t-value at 0.05 level = 1.96

Table 72 shows that t-value was found to be 11.46 which is significant at .05 level. Hence the null hypothesis is rejected.
District wise comparison of Health awareness

District Attock

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

**Table 73:** Comparison of A-I and A-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>24.78</td>
<td>6.00</td>
<td>.87</td>
<td>11.34*</td>
</tr>
<tr>
<td>A-II</td>
<td>58</td>
<td>14.91</td>
<td>4.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 73 shows that t-value was found to be 11.34 which is greater than significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

**Table 74:** Comparison of B-I and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>15</td>
<td>17.40</td>
<td>3.60</td>
<td>1.11</td>
<td>5.39*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>11.41</td>
<td>3.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 74 shows that t-value was found to be 5.39 which is significant at .05 level. Hence the null hypothesis is rejected.
**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

**Table 75: Comparison of A-I and B-I in Health awareness**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>24.78</td>
<td>6.00</td>
<td>1.10</td>
<td>6.70*</td>
</tr>
<tr>
<td>B-I</td>
<td>15</td>
<td>17.40</td>
<td>3.60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 112 t-value at 0.05 level = 1.96

Table 75 shows that t-value was found to be 6.70 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Attock district.

**Table 76: Comparison of A-II and B-II in Health awareness**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>58</td>
<td>14.91</td>
<td>4.83</td>
<td>.88</td>
<td>3.97*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>11.41</td>
<td>3.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 92 t-value at 0.05 level = 1.96

Table 76 shows that t-value was found to be 3.97 which is significant at .05 level. Hence the null hypothesis is rejected.
District Chakwal

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

**Table 77:** Comparison of A-I and A-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>27.99</td>
<td>5.89</td>
<td>.64</td>
<td>16.26*</td>
</tr>
<tr>
<td>A-II</td>
<td>60</td>
<td>17.58</td>
<td>2.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 179
t-value at 0.05 level = 1.96

Table 77 shows that t-value was found to be 16.26 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

**Table 78:** Comparison of B-I and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>18</td>
<td>19.55</td>
<td>4.47</td>
<td>1.21</td>
<td>5.95*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>12.35</td>
<td>3.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 56
t-value at 0.05 level = 1.96

Table 78 shows that t-value was found to be 5.95 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

Table 79: Comparison of A-I and B-I in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E&lt;sub&gt;D&lt;/sub&gt;</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>27.99</td>
<td>5.89</td>
<td>1.18</td>
<td>7.15*</td>
</tr>
<tr>
<td>B-I</td>
<td>18</td>
<td>19.55</td>
<td>4.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 137 t-value at 0.05 level = 1.96

Table 79 shows that t-value was found to be 7.15 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Chakwal district.

Table 80: Comparison of A-II and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E&lt;sub&gt;D&lt;/sub&gt;</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>60</td>
<td>17.58</td>
<td>2.82</td>
<td>.71</td>
<td>7.36*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>12.35</td>
<td>3.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 98 t-value at 0.05 level = 1.96

Table 80 shows that t-value was found to be 7.36 which is significant at .05 level. Hence the null hypothesis is rejected.
**District Jehlum**

**H₀:** There is no significant difference between the use of mass media of educated and un-educated families of the barani areas of Jehlum district.

**Table 81:** Comparison of A-I and A-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>32.76</td>
<td>4.27</td>
<td>.65</td>
<td>20.26*</td>
</tr>
<tr>
<td>A-II</td>
<td>66</td>
<td>19.59</td>
<td>4.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 194 t-value at 0.05 level = 1.96

Table 81 shows that t-value was found to be 20.26 which is significant at .05 level. Hence the null hypothesis is rejected.

**H₀:** There is no significant difference between the use of mass media of educated and un-educated families of the barani areas of Jehlum district.

**Table 82:** Comparison of B-I and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>19</td>
<td>24.68</td>
<td>3.69</td>
<td>1.04</td>
<td>10.82*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>13.42</td>
<td>3.95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 59 t-value at 0.05 level = 1.96

Table 82 shows that t-value was found to be 14.94 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Jehlum district.

Table 83: Comparison of A-I and B-I in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_{D}</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>32.76</td>
<td>4.27</td>
<td>.92</td>
<td>8.78*</td>
</tr>
<tr>
<td>B-I</td>
<td>19</td>
<td>24.68</td>
<td>3.69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 83 shows that t-value was found to be 8.78 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Jehlum district.

Table 84: Comparison of A-II and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_{D}</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>66</td>
<td>19.59</td>
<td>4.33</td>
<td>.80</td>
<td>7.71*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>13.42</td>
<td>3.95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 84 shows that t-value was found to be 7.71 which is significant at .05 level. Hence the null hypothesis is rejected.
District Rawalpindi

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Rawalpindi district.

**Table 85:** Comparison of A-I and A-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>34.00</td>
<td>4.49</td>
<td>.61</td>
<td>20.37*</td>
</tr>
<tr>
<td>A-II</td>
<td>80</td>
<td>21.57</td>
<td>4.31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 214 \) \( t \)-value at 0.05 level = 1.96

Table 85 shows that t-value was found to be 20.37 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Rawalpindi district.

**Table 86:** Comparison of B-I and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>23</td>
<td>26.39</td>
<td>5.42</td>
<td>1.29</td>
<td>8.20*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>15.80</td>
<td>4.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 78 \) \( t \)-value at 0.05 level = 1.96

Table 86 shows that t-value was found to be 8.20 which is significant at .05 level. Hence the null hypothesis is rejected.
**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Rawalpindi district.

**Table 87:** Comparison of A-I and B-I in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>34.00</td>
<td>4.49</td>
<td>1.19</td>
<td>6.39*</td>
</tr>
<tr>
<td>B-I</td>
<td>23</td>
<td>26.39</td>
<td>5.42</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 157 t-value at 0.05 level = 1.96

Table 87 shows that t-value was found to be 6.39 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of Mass media of educated and un-educated families of the barani areas of Rawalpindi district.

**Table 88:** Comparison of A-II and B-II in Health awareness

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>80</td>
<td>21.57</td>
<td>4.31</td>
<td></td>
<td>7.30*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>15.80</td>
<td>4.81</td>
<td>.79</td>
<td></td>
</tr>
</tbody>
</table>

significant df = 135 t-value at 0.05 level = 1.96

Table 88 shows that t-value was found to be 7.30 which is significant at .05 level. Hence the null hypothesis is rejected.
Overall comparison of acquisition of Land & use of fertilizers of all four districts

**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 89:** Comparison of A-I and A-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_0</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>66.38</td>
<td>7.12</td>
<td>.65</td>
<td>21.72*</td>
</tr>
<tr>
<td>A-II</td>
<td>264</td>
<td>52.26</td>
<td>9.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 748 t-value at 0.05 level = 1.96

Table 89 shows that t-value was found to be 21.72 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 90:** Comparison of B-I and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_0</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>75</td>
<td>60.29</td>
<td>7.89</td>
<td>1.14</td>
<td>13.17*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>45.27</td>
<td>9.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 248 t-value at 0.05 level = 1.96

Table 90 shows that t-value was found to be 13.17 which is significant at .05 level. Hence the null hypothesis is rejected.
**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 91:** Comparison of A-I and B-I in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>486</td>
<td>66.38</td>
<td>7.12</td>
<td>.96</td>
<td>6.34*</td>
</tr>
<tr>
<td>B-I</td>
<td>75</td>
<td>60.29</td>
<td>7.89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 559 \) \( t \)-value at 0.05 level = 1.96

Table 91 shows that t-value was found to be 6.34 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 92:** Comparison of A-II and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>264</td>
<td>52.26</td>
<td>9.18</td>
<td>.88</td>
<td>7.94*</td>
</tr>
<tr>
<td>B-II</td>
<td>175</td>
<td>45.27</td>
<td>9.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 437 \) \( t \)-value at 0.05 level = 1.96

Table 92 shows that t-value was found to be 7.94 which is significant at .05 level. Hence the null hypothesis is rejected.
District wise comparison of acquisition of land and use of fertilizers

District Attock

Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 93: Comparison of A-I and A-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>59.45</td>
<td>6.24</td>
<td></td>
<td>1.01</td>
</tr>
<tr>
<td>A-II</td>
<td>58</td>
<td>43.44</td>
<td>6.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 155 t-value at 0.05 level = 1.96

Table 93 shows that t-value was found to be 15.85 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 94: Comparison of B-I and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>15</td>
<td>51.13</td>
<td>4.77</td>
<td></td>
<td>1.49</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>34.44</td>
<td>5.04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 49 t-value at 0.05 level = 1.96

Table 94 shows that t-value was found to be 11.20 which is significant at .05 level. Hence the null hypothesis is rejected.
**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 95:** Comparison of A-I and B-I in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>99</td>
<td>59.45</td>
<td>6.24</td>
<td>1.38</td>
<td>6.02*</td>
</tr>
<tr>
<td>B-I</td>
<td>15</td>
<td>51.13</td>
<td>4.77</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \[ df = 112 \] \[ t-value at 0.05 level = 1.96 \]

Table 95 shows that t-value was found to be 6.02 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 96:** Comparison of A-II and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>58</td>
<td>43.44</td>
<td>6.09</td>
<td>1.15</td>
<td>7.82*</td>
</tr>
<tr>
<td>B-II</td>
<td>36</td>
<td>34.44</td>
<td>5.04</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \[ df = 92 \] \[ t-value at 0.05 level = 1.96 \]

Table 96 shows that t-value was found to be 7.82 which is significant at .05 level. Hence the null hypothesis is rejected.
District Chakwal

Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 97: Comparison of A-I and A-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ep</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>63.41</td>
<td>5.55</td>
<td>.96</td>
<td>15.47*</td>
</tr>
<tr>
<td>A-II</td>
<td>60</td>
<td>48.55</td>
<td>6.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 179 t-value at 0.05 level = 1.96

Table 97 shows that t-value was found to be 15.47 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 98: Comparison of B-I and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ep</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>18</td>
<td>55.83</td>
<td>3.34</td>
<td>1.02</td>
<td>15.42*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>40.10</td>
<td>4.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 56 t-value at 0.05 level = 1.96

Table 98 shows that t-value was found to be 15.42 which is significant at .05 level. Hence the null hypothesis is rejected.
**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 99:** Comparison of A-I and B-I in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>121</td>
<td>63.41</td>
<td>5.55</td>
<td>.93</td>
<td>8.15*</td>
</tr>
<tr>
<td>B-I</td>
<td>18</td>
<td>55.83</td>
<td>3.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 137 \) \( t\)-value at 0.05 level = 1.96

Table 99 shows that \( t\)-value was found to be 8.15 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 100:** Comparison of A-II and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E.D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>60</td>
<td>48.55</td>
<td>6.36</td>
<td>1.05</td>
<td>8.04*</td>
</tr>
<tr>
<td>B-II</td>
<td>40</td>
<td>40.10</td>
<td>4.20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant \( df = 98 \) \( t\)-value at 0.05 level = 1.96

Table 100 shows that \( t\)-value was found to be 8.04 which is significant at .05 level. Hence the null hypothesis is rejected.
**District Jhelum**

**H0:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 101: Comparison of A-I and A-II in acquisition of Land & use of fertilizers**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>68.04</td>
<td>4.76</td>
<td>0.98</td>
<td>15.58*</td>
</tr>
<tr>
<td>A-II</td>
<td>66</td>
<td>52.77</td>
<td>7.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 194

**t-value at 0.05 level = 1.96**

Table 101 shows that t-value was found to be 15.58 which is significant at .05 level. Hence the null hypothesis is rejected.

**H₀:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

**Table 102: Comparison of B-I and B-II in acquisition of Land & use of fertilizers**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E₀</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>19</td>
<td>62.36</td>
<td>5.19</td>
<td></td>
<td>8.61*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>48.57</td>
<td>6.95</td>
<td>1.60</td>
<td></td>
</tr>
</tbody>
</table>

significant df = 59

**t-value at 0.05 level = 1.96**

Table 102 shows that t-value was found to be 8.61 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 103: Comparison of A-I and B-I in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ed</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>130</td>
<td>68.04</td>
<td>4.76</td>
<td>1.26</td>
<td>4.50*</td>
</tr>
<tr>
<td>B-I</td>
<td>19</td>
<td>62.36</td>
<td>5.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 147 t-value at 0.05 level = 1.96

Table 103 shows that t-value was found to be 4.50 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 104: Comparison of A-II and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.Ed</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>66</td>
<td>52.77</td>
<td>7.28</td>
<td>1.39</td>
<td>3.02*</td>
</tr>
<tr>
<td>B-II</td>
<td>42</td>
<td>48.57</td>
<td>6.95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant df = 106 t-value at 0.05 level = 1.96

Table 104 shows that t-value was found to be 3.02 which is significant at .05 level. Hence the null hypothesis is rejected.
District Rawalpindi

**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

<p>| Table 105: Comparison of A-I and A-II in acquisition of Land &amp; use of fertilizers |
|-----------------------------------------------|---------------|--------|---------|--------|--------|</p>
<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>72.47</td>
<td>4.65</td>
<td>.87</td>
<td>13.12*</td>
</tr>
<tr>
<td>A-II</td>
<td>80</td>
<td>61.05</td>
<td>7.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 214  t-value at 0.05 level = 1.96

Table 105 shows that t-value was found to be 13.12 which is significant at .05 level. Hence the null hypothesis is rejected.

**Ho:** There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

<p>| Table 106: Comparison of B-I and B-II in acquisition of Land &amp; use of fertilizers |
|-----------------------------------------------|---------------|--------|---------|--------|--------|</p>
<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_D</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-I</td>
<td>23</td>
<td>68.04</td>
<td>4.94</td>
<td>1.21</td>
<td>12.17*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>53.31</td>
<td>4.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

significant  df = 78  t-value at 0.05 level = 1.96

Table 106 shows that t-value was found to be 12.17 which is significant at .05 level. Hence the null hypothesis is rejected.
Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 107: Comparison of A-I and B-I in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-I</td>
<td>136</td>
<td>72.47</td>
<td>4.65</td>
<td>1.10</td>
<td>4.02*</td>
</tr>
<tr>
<td>B-I</td>
<td>23</td>
<td>68.04</td>
<td>4.94</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 157 t-value at 0.05 level = 1.96

Table 107 shows that t-value was found to be 4.02 which is significant at .05 level. Hence the null hypothesis is rejected.

Ho: There is no significant difference between the use of acquisition of Land & use of fertilizer of educated and un-educated families of the barani areas of the all four districts.

Table 108: Comparison of A-II and B-II in acquisition of Land & use of fertilizers

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>S.E_d</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-II</td>
<td>80</td>
<td>61.05</td>
<td>7.00</td>
<td>1.01</td>
<td>7.66*</td>
</tr>
<tr>
<td>B-II</td>
<td>57</td>
<td>53.31</td>
<td>4.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*significant df = 135 t-value at 0.05 level = 1.96

Table 108 shows that t-value was found to be 7.66 which is significant at .05 level. Hence the null hypothesis is rejected.
DISCUSSION

The study aimed at investigating the impact of basic education in the rural development of barani areas. The study was comparative in nature comprising the group ‘A’ and ‘B’ villages taken from four barani districts of Attock, Chakwal, Jehlum and Rawalpindi. Group ‘A’ represented the villages having one or more educational institutions, while group ‘B’ represented the villages without educational institutions. Group ‘A’ was further divided into AI and AII representing the educated and uneducated households respectively. Similarly group ‘B’ was divided into BI and BII, representing educated and uneducated households.

The head of families (250 from each district) were interviewed in both groups A and B. It revealed that most of the head of families were male (table1). The study also showed that literacy rate of group AI in district Rawalpindi was high as compared to other three districts while, literacy rate of group AII was high in district Chakwal.

The study revealed that education level of group A and B was mostly upto 5 years of education (table 6&7). It was observed that out of 6150 members of 750 households of group A, 1730 had 12 years education, 1792 had 10 years education and 2095 had 5 years education. Similarly, out of 2250 members of 250 households of group B, 42 were educated up to intermediate level, 130 up to secondary level and 425 up to primary level. This was because of the high drop out rate in the rural barani areas. The study results showed that presence of educational institutions in the vicinity had a positive effect on the literacy rate as well as on the level of education. Every year 7.5 million children cannot get education because of high drop out rate (Govt. of Pakistan, 2005).
The study revealed that basic education had great impact on the economic development of the rural barani areas. Overall comparison of income of AII with AII, BI with BII, AI with BI and AII with BII of all four districts showed significant difference at .05 levels (table 9, 10, 11 & 12). District wise comparison of income of Attock between the group A-I and A-II, B-I and B-II, A-I and B-I and A-II and B-II revealed that income of illiterate group was the lowest (table 13, 14, 15 & 16). It gradually increased with the ascending level of education and reached its peak in 12 years education or more. The result supports Harmen (1971) that there existed significant difference among the people to different levels of education. Income increases as the years of schooling increase. This statement also supports Haque (1997). He viewed that persons with primary education earn 13 percentages more than the uneducated.

District wise comparison of income of Chakwal between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that mean income of illiterate group was the lowest than the educated group (table 17, 18, 19 & 20). District wise comparison of income of Jhelum between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II showed that the mean income of educated people was high as compared to illiterate people (table 21, 22, 23 & 24). Similarly district wise comparison of income of Rawalpindi between group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that the mean income of illiterate members was less than the literate members of the households (table 25, 26, 27, 28). There were visible Income differences between every two educated groups and between educated and illiterate groups. However, these were not found in group B. Income differences between groups A and B also were very significant.
The study according to the above data showed that basic education helped the people earn more by adopting more than one profession.

Majority of the respondents viewed that participation in social activity like marriages, dowry, customs, and expenditures on family functions varied from educated to uneducated. Overall comparison of social activities of A I with A II, B I with B II, A I with B I and A II with B II of all four districts showed significant difference at .05 levels (table 29, 30, 31 & 32). District wise comparison of social activities of Attock between the group A-I and A-II, B-I and B-II, A-I and B-I and A-II and B-II revealed that social activities (marriages, dowry, customs and expenditures on family functions) of illiterate group were performed in a desirable way (table 33, 34, 35 & 36). District wise comparison of social activities of Chakwal between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that mean participation in social activity of illiterate group was not desirable than the educated group (table 37, 38, 39 & 40). District wise comparison of social activities of Jehlum between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II showed that the mean participation in social activity of educated people was much desirable as compared to illiterate people (table 41, 42, 43 & 44). Similarly district wise comparison of participation in social activities of Rawalpindi between group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that the mean participation in social activities of illiterate members was less desirable than the literate members of the households (table 45, 46, 47, 48). Educated families were most against the customs than the illiterate families and the illiterate families favored the customs. Both, educated and uneducated wanted to celebrate customs differently. Expenditure on marriage and dowry rose with income and income rose with level of education.
Majority of families in rural barani areas were in joint set up. Ghulani (2005) supported this idea. His study found that in rural barani areas majority of families were in joint set up. The upper class of uneducated people wanted the marriages in the same caste. The concept of the cast was very strong. People preferred to support their own caste members. People participated in the occasion like birth, marriage and death irrespective of their level of education.

The use of mass media includes television, radio programs, newspapers and magazines. Out of all prevalent means of mass media, radio, TV sets, different magazines and newspapers were available in the rural barani areas where educational facilities were available. Majority of the respondents expressed that there was a significant difference between educated and uneducated for the usage of mass media. Overall comparison of use of mass media by A-I with A-II, B-I with B-II, A-I with B-I and A-II with B-II of all four districts showed significant difference at .05 levels (table 49, 50, 51 & 52). District wise comparison of income of Attock between the group A-I and A-II, B-I and B-II, A-I and B-I and A-II and B-II revealed that use of mass media by illiterate group was the lowest (table 53, 54, 55 & 56). It gradually increased with the ascending level of education and reached its peak in 12 years education or more.

District wise comparison of use of mass media of Chakwal between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that mean of use of mass media by illiterate group was the lowest than the educated group (table 57, 58, 59 & 60). District wise comparison of use of mass media of Jhelum between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II showed that the mean of use of mass media of educated people was high as compared to illiterate people ( table 61, 62, 63 & 64). Similarly district wise comparison of use of mass media Rawalpindi
between group A-I and A-II, B-I and B-II, A-I and B-I& A-II and B-II revealed that the use of mass media by illiterate members was less than the literate members of the households (table 65, 66, 67, 68). The study also revealed that highly educated people possessed comparatively more radio sets than the other groups. They were also significantly better in selection of radio programs than the uneducated people of rural barani areas. Saad (1992), who concluded that basic education had very strong link for availability of radio sets, preference to select radio programs and to utilize leisure time.

A positive relationship existed between education and the health measures. Differences were significant between the highly educated group and the low education groups, between the educated group and the illiterate group. Overall comparison of health awareness of A-I with A-II, B-I with B-II, A-I with B-II and A-II with B-II of all four districts showed significant difference at .05 level (table 69, 70, 71 & 72). District wise comparison of health awareness of Attock between the group A-I and A-II, B-I and B-II, A-I and B-I and A-II and B-II revealed that health awareness of illiterate group was not up to the optimum level (table 73, 74, 75 & 76). District wise comparison of health awareness of Chakwal between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that mean of health awareness of illiterate group was not desirable than the educated group (table 77, 78, 79 & 80). District wise comparison of health awareness of Jhelum between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II showed that the mean of health awareness of educated people was much better as compared to illiterate people (table 81, 82, 83 & 84). Similarly district wise comparison of health awareness of Rawalpindi between group A-I and A-II, B-I and B-II, A-I and B-I& A-II and B-II revealed that the mean of health awareness of
illiterate members was not up to the mark than the literate members of the households (table 85, 86, 87, 88).

In the villages of rural barreni areas, people kept cattle in their own sleeping rooms in winter. They did not care for fresh air which is very important for health. This trend increased with descending level of education and it was the highest among the illiterate families. Educated people were comparatively more careful than the illiterate and they avoided the practice, while the majority of the people followed it. The study results indicated that educated people had ventilated and spacious houses as compared to the uneducated people. A positive relation existed between education and the health measures. Uneducated people did not care for health measures. Chastain (1995) concluded that all miseries and conflicts of the mankind were attributed to the lack of basic education. He was of the view that basic education was helpful to control the disease.

Acquisition of agricultural land and use of fertilizers varies with level of education. Illiterate people preferred to use less fertilizer than the educated people because they preferred the animal dung being less expensive. They also used it less because they think that fertilizers spoil the cattle. On the other hand, educated people preferred to use fertilizers and acquire more land as they think that this would increase the production of the crops and over all yields. Overall comparison of acquisition of agricultural land and use of fertilizers of AI with AII, BI with BII, AI with BI and AII with BII of all four districts showed significant difference at .05 levels (table 89, 90, 91 & 92). District wise comparison of acquisition of agricultural land and use of fertilizers of Attock between the group A-I and A-II, B-I and B-II, A-I and B-I and A-II and B-II revealed that acquisition of agricultural land and use of fertilizers by
illiterate group was not up to the optimum level (table 93, 94, 95 & 96). District wise comparison of acquisition of agricultural land and use of fertilizers of Chakwal between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that mean of acquisition of agricultural land and use of fertilizers by illiterate was less than the educated group (table 97, 98, 99 & 100). District wise comparison of acquisition of agricultural land and use of fertilizers of Jehlum between the group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II showed that the mean of acquisition of agricultural land and use of fertilizers of educated people was more as compared to illiterate people (table 101, 102, 103 & 104). Similarly district wise comparison of acquisition of agricultural land and use of fertilizers of Rawalpindi between group A-I and A-II, B-I and B-II, A-I and B-I & A-II and B-II revealed that the acquisition of agricultural land and use of fertilizers of illiterate members was less than the literate members of the households (table 105, 106, 107, 108).

Hassan (1996) a study by Esso fertilizer company of Pakistan revealed that 45% farmers interviewed were hesitant to apply fertilizers because they thought that; (1) it depletes the soil of all nutrients 22%; (2) it causes salinity 11%; (3) it hardens soil 12%. If basic education does not open the door toward the new world of technology, the use of new inputs in agriculture on will remain a dream. On the whole, the people of group A were significantly better than the group B in their attitude toward economic development, participation in social activities, health awareness, utilization of mass media, and acquisition of land and uses of fertilizers. A high correlation existed between this attitude and education.
SUMMARY

The study aimed at investigating the impact of basic education in the rural development of barani areas. The study was designed to appraise the effects of basic education on economic, health services, participation in social activities, utilization of mass media and acquisition of land and use of fertilizers. The objectives of the study were; (1) To investigate the level of education of the people of barani areas. (2) To explore the impact of basic education on economic development of barani areas. (3) To see the impact of basic education on social development of barani areas. (4) To see the impact of basic education on health services of barani areas, (5) To determine the impact of basic education on general awareness of barani areas, and (6) To see the impact of basic education on the acquisition of land and use of fertilizers.

The study was conducted to find out the impact of basic education on the rural development of barani areas. Cluster of all the barani districts and households in these barani districts constituted the population of the study. The study was delimited to four districts, Attock, Chakwal, Jehlum and Rawalpindi. Two hundred villages were taken from the cluster of four districts as sample villages, selected randomly, fifty being from each district. The two hundred villages were divided into one hundred and fifty villages which had at least one educational institution of primary level and fifty villages which had no educational institution at all. Villages with educational institution were referred to as A and villages with no educational institution referred to as B in the text. The respondents of villages of Group A were further bifurcated into A-I & A-II, educated and uneducated respectively and of group B, as B-I & B-II, again educated and uneducated, respectively. Five households were selected from each village by the random sampling procedure, thus making the total of households as one
thousand. Seven hundred and fifty households being educated and two hundred and fifty were uneducated.

The data was required about income, participation in social activities, health awareness, use of mass media and acquisition of land and use of fertilizers. As the official record was deficient and incomplete to cover these aspects, the researcher had to rely upon information provided by the representative of each family living in the area. Therefore, the main source of the data was the persons referred to as the respondents to provide information about their families. The pilot testing of research instrument was conducted in the district Jehlum. Questionnaires were developed, distributed and administered among the head of families or representatives of households. The researcher visited each village for the purpose of data collection. The questionnaires received from the respondents were analyzed. That gave the researcher the data required for the study. The data collected was analyzed. Significance of difference in mean score was tested by “t-test”.
CONCLUSIONS

The following conclusions were drawn on the basis of findings of the study:

1. Most of the heads of families were male. That was because of the male dominated society in Pakistan. Literacy rate of group A-I in district Rawalpindi was high as compared to other three districts, while, literacy rate of group A-II was high in district Chakwal.

2. Educational level of the majority of heads of families of group A and B was mostly up to five years of education. Presence of educational institution in the vicinity had a positive effect on the literacy rate as well as on the level of education. The information provided by the respondents revealed that out of 6150 members of 750 households of group A, 1730 had twelve years education, 1792 had ten years education and 2095 had 5 years education. Similarly, out of 2250 members of 250 households of group B, 42 were educated up to intermediate level, 130 up to secondary level and 425 up to primary level.

3. Majority of the respondents expressed that income level was high in those areas where people were literate and low in those areas where people were illiterate. District wise comparison of income of Attock and Rawalpindi, between the group A-I and A-II, B-I and B-II, A-I and B-I, A-II and B-II revealed that income of illiterate was the lowest. It gradually increased with ascending level of education and reached its peak in twelve years education and more. This showed that increase in income was linked with
increase in years of schooling. Resultantly, increase in income of households promoted economic development.

4. A large number of heads of family opined that educated persons' participation in social activity was most desirable. Majority of educated families were against customs. They participated in social activity like marriages and dowry, and expenditure on family functions varied among uneducated persons. The heads of families expressed that illiterate group performed in marriages, dowry and expenditure on family functions in a desirable way. Illiterate families favoured customs.

5. Majority of the respondents viewed that mass media like radio, TV sets, different magazines and newspapers were available in rural barani areas, where educational facilities were available. However, those areas where educational facilities were lacking, people were not interested in newspapers or magazines and usually viewed entertainment programs on TV rather than educational ones. The literate people discussed politics, expressed their opinion about the functioning of the government and had their input in the general view about the daily affairs of the society.

6. It was expressed by the respondents that educated group of households were well aware of health measures, while, illiterate were ignorant about the health facilities. The educated people built spacious houses which had ventilators and windows. The illiterates used to keep their cattle in their living rooms during winter season. The also built houses which were
closed from all sides and had no windows or ventilators. They did not even bother to open the ventilators even if those existed in the rooms.

7. The respondents expressed their opinion about the acquisition of land and utilization of fertilizers that educated people were more interested in it, especially in Rawalpindi district where literacy rate was higher than other three districts. They thought that acquisition of more land and utilization of fertilizers would help increase their income, while illiterate people, if at all were interested in acquisition of land, wanted that only for honour purpose. They were reluctant to use fertilizers. Their land, usually, was left uncultivated. They grew only major crops. They were mostly involved in land related disputes, mostly, pending in courts. On the other hand, educated people cultivated those crops which earned them more income.
RECOMMENDATIONS

1. Literacy rate in Rawalpindi district is more than other three districts. It is recommended that literacy rate of Rawalpindi district should be increased to 100% and that of other three districts increased to a comparable level. It is proposed that the government should increase percentage of GDP for education at least 4%. It is also suggested that private sector may be encouraged and facilitated to join hands with the government to increase the literacy rate. The schools of the government sector should be facilitated regarding provision of water, electricity and furniture to check the dropout rate.

2. There is more education up to 5 years level and less at secondary and intermediate level. It is recommended that every village should have at least secondary level educational institution in the vicinity. Even if there is a primary institution, its facilities may be increased and the local community may be encouraged to share the responsibility.

3. Income increases with education and income, in turn, influences economic development, positively. It is recommended that the government should provide technical and vocational institutions. The industry owners may establish related technical and vocational institutions in the factory premises. The government may facilitate the industry through reduction of taxes.

4. Illiterates favour the tradition and old customs, while the educated ones want to bring change in the customs in a better way. It is recommended that old customs of excessive expenditure on marriages and other ceremonies, dowry and abusive marriage customs may be crushed by enactment of legislation.
5. People of rural barani areas are more aware of health facilities where basic education is prevalent. It is recommended that every village should have a basic health unit or by involving UNICEF, Asian Development Bank, World Bank and the local community.

6. Educated people are more inclined towards acquisition of maximum land and use of fertilizers. It is recommended that agricultural centers may be opened, at least, at the level of each union council. The centre should have the facilities of seed, fertilizers and informative material about new techniques in agriculture. Local community, especially, big land owners may be encouraged to have their financial inputs.
LITERATURE CITED


Urdu Bazaar, Lahore: Pakistan. pp. 124


Barbara, W. 1968. The rich Nations and the Poor Nations. W. W. North and Company,
Inc. New York: USA. p. 159.


Lahore, Pakistan. pp. 213-217

P.18.


273-308.


Chaudhry, A. P. 1988. Incentives for Rural Female Students in Pakistan: Bridges Harvard University, Cambridge: USA. p. 21


Das Gupta, B. 1976. Migration from Rural Areas to Delhi, Oxford University Press, Manchester: UK. P. 228.


IMPACT OF BASIC EDUCATION IN RURAL DEVELOPMENT OF BARANI AREAS

QUESTIONNAIRE

1. Basic Information

1.1 Name of representative of the family---------------------------------------------

1.2 Education (in years)----------------------------------------------------------

1.3 Age-------------------------------------------------------------------------

1.4 Occupation-------------------------------------------------------------------

1.5 Income per month-------------------------------------------------------------

1.6 Gender 1 - Male 2 - Female

2. Land information

2.1 Total Land-------------------------------------------------------------------

2.2 Arable-----------------------------------------------------------------------

2.3 Cultivated------------------------------------------------------------------

2.4 Yield per acre (food crops) (a)----(b)----(c)----(d)----

2.5 Yield per acre (other crops) (a)--------(b)--------(c)--------(d)--------

2.6 Income from animals---------------------------------------------------------
3. Other Occupations

3.1 Name of Occupation

3.2 Average Income per month

3.3 Expenditure per month

3.4 Other sources of income or side business (Name)

3.5 Income from these sources

4. Family Index

4.1 Group 0-4 years

<table>
<thead>
<tr>
<th>School going</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>nil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BOY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GIRL</strong></td>
<td></td>
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<td></td>
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</tbody>
</table>

4.2 Group 5-14 years

<table>
<thead>
<tr>
<th>School going</th>
<th>earning</th>
<th>daily working</th>
<th>place of</th>
<th>Hours</th>
<th>duty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boy</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Girl</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
</tr>
</tbody>
</table>
4.3 Group 15-24 years  years of education  occupation  yearly income

   Male   1
         2
         3

   Female 1
         2
         3

4.4 Group 25-34 years

   Male   1
         2
         3

   Female 1
         2
         3

4.5 Group 35-40 years

   Male   1
         2
         3

   Female 1
         2
         3
4.6 Group 45-54 years

<table>
<thead>
<tr>
<th>Male</th>
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<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Female</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</table>

4.7 Group 55 and above

<table>
<thead>
<tr>
<th>Male</th>
<th>1</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Female</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

5. Family Relations

5.1 No. of sons------------------

5.2 No. of married sons---------------------

5.3 Married sons living with parents------------------

5.4 Married brothers living together-------------------

5.5 other relatives who live with the family

<table>
<thead>
<tr>
<th>Relation</th>
<th>education</th>
<th>Income</th>
<th>Occupation</th>
<th>Dependent/ Non dependent</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
6. Information about marriage

6.1 Arrangements of marriage for sons (tick one)
   6.1.1 By parents-------
   6.1.2 By Brothers-------
   6.1.3 By themselves------------------

6.2 Type of marriage procession (tick one)
   6.2.1 Traditional---------
   6.2.2 Modern---------
   6.2.3 Semi traditional---------
   6.2.4 No procession---------

6.3 Type of vehicle used (tick one)
   6.3.1 Camel---------------
   6.3.2 Carts---------
   6.3.3 Bus--------------
   6.3.4 Motor Car----------
   6.3.5 On foot-----------
   6.3.6 Some other----------

6.4 Dowry received or granted (give value)---------------------

6.5 Expenditure on marriage or any other social ceremony----------
6.6 Sources of expenditure

6.6.1 Saving-------------------------------

6.6.2 Debt-----------------------------

6.6.3 Helped by relatives-----------

6.7 Did you practice all the traditional customs of the ceremony? Yes / No

6.8 Do you favour the customs? Yes / No

6.9 If no, were you compelled to practice them by yours,

6.9.1 Relatives,

6.9.2 Family members

6.9.3 Wife

6.9.4 Women in family

6.9.5 Education

7. Condition of accommodation

7.1 No. of rooms in your house 1 2 3 4 5 6 7 or more

7.2 No. of persons living in a room

7.3 Do you keep your cattle in the living room in winters? Yes No

7.4 Do you keep the ventilators?

8. Social relations

8.1 Do the workers still obey you? Often Rarely Never

8.2 Do you pay them in cash --------or kind? --------

8.3 Do you obey your landlord? Often Rarely Never

8.4 Do you accept cash/ --------or kind? --------

9. Use of Mass- media

9.1 Do you have at your house
9.1.1 TV  yes  no
9.1.2 Radio  yes  no
9.1.3 Daily newspaper  yes  no
9.1.4 Magazine  yes  no

9.2 You use your TV and Radio for
   9.2.1 News
   9.2.2 Music
   9.2.3 Rural uplift programs
   9.2.4 Political and economical programs
   9.2.5 Educational programs
   9.2.6 other recreational programs

10. Interview with female folk

10.1 Are you an employee?  Yes  No

10.2 If employed, Monthly income -------------------------------

10.3 Which is available at your house?  Tick it
   4. Electric fan  5. Gas heater  6. Oven

10.4 What do you use from the following?

10.5 How many children do you prefer to have?  ------

10.6 Do you prefer suitable spacing amongst successive pregnancies?

11. Health awareness;  what do you do when you fall sick?
11.1 Use home remedial measures?


11.3 Do you get your children vaccinated? Yes no

11.4 Do you get the pregnant lady vaccinated? Yes no

11.5 Where do you want delivery of children?
   1. At home  2. In the Hospital

11.6 What do you do if bitten by a poisonous snake, or Rabid dog?
   1. Home treatment  2. Village Hakim  3. Hospital or a Dispensary

11.7 Which water do you use for drinking?

11.8 Do you use during diarrhea?
   1. Simple or boiled water  2. Oral  3. Re-hydration salt