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Students Rs. 200.00 per copy

Others Rs. 250.00 per copy

Annual Subscription (National)

Individual Rs. 300.00

Institutional Rs. 400.00

Annual Subscription (International)

Individual US \$30.00

Institutional US \$50.00

Printed in December 2012

ISSN 1813-9892

Biannual

JOURNAL OF

GENDER &

SOCIAL ISSUES

Spring 2012 Volume 11 Number 1

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Notes To Contributors

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Women's Education in Pakistan: Cultural Constraints & Social Challenges

ABSTRACT

Women's empowerment is a long awaited goal in Pakistan which cannot be accomplished without quality education. Women comprise more than half of the population in Pakistan. Ignoring their education not only deprives them of their basic right but also paralyzes the already staggering economy by increasing the number of dependent people. Nonetheless, the education policies given by different governments in different periods had potential to produce good results but they could hardly deliver. One of the major reasons for this failure was the social set-up that proved to be a serious challenge to attain a gender egalitarian society. This study highlights those social-economic and cultural challenges which the Pakistani women have been confronting for the last sixty-five years since independence. It concludes that the prime challenges to women's education are our cultural values having stronghold especially in rural areas of Pakistan, misinterpretation of Islam, women's extensive role in the agricultural activities, strong feudal system, traditional family system and the security concerns of parents regarding their daughters which deprive them of formal education. It further finds that an incremental change in the men's attitude regarding their rigid behavior towards women's education is visible now. It may be due to the rapid urbanization which has brought new trends and ideas, the rising economic challenges coupled with the awareness created by positive and influential role of media which compelled the society to readjust its perceptions regarding women's education.

Key Words: Women's education, literacy, human resource, education policy, culture, religion.

INTRODUCTION

Education is a key to development of human capital therefore it must be relevant to the demands of a society and job market. It must be available for all the segments of

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society without discrimination. But in Pakistan, the public spending on social sectors remained awfully dismal in all the annual national budgets. The reason for low public spending is the lack of political commitment for social sector and not recognising education as a national priority. Pakistani Governments could not touch the heart of the problem that “there is no industrialised society today with an adult literacy rate of less than eighty per cent” (Tharoor 2007: 162).

Women’s education is particularly important because it is their right as an individual and helps them in self development process. It is also inevitable to bring up a better educated and healthier family which is the basis of a good society. It enables them to bring more income into the family and contribute in national economy. According to the census of 1998, the women’s literacy rate in Pakistan was only 32.6 per cent (Census-Data 1998) but it is a much exaggerated figure because it counts all those who manage to sign only. The rural and urban gap in literacy rate is also alarming. It is 7.3 percent for rural women, which is five times lower than that for urban women (37.3 percent) (Mittra and Kumar 2004: 270). The reason might be the cultural constraints which do not slacken off their grip on women. Very few serious efforts were made to educate women, which faced a strong resistance from the male dominated society. The reason for this resistance is often claimed to be the orthodox Muslim society. But scholarly inquiries reveals (Rody 2003: 666-669) that this apathy is basically due to the cultural restrictions which prevail in most of the developing societies that do not allow female especially in rural areas to go for formal education, leaving behind their traditional role in the household.ⁱThe situation is slightly better in other countries of Asia but many of the cultural constraints are common at least in South Asia.

METHODS

It is an argumentative study based on empirical evidences, observation and personal interaction of the researcher with various sections of women from different classes and background. The focus groups are the middle and the lower middle classes. Ironically they are the carrier of the values and resistant to any threat or change to the existing fabric of the traditions but at the same time they become instrumental in the process of development of the society once they are enlightened and motivated.

The study is supported by secondary sources based on valuable researches conducted by various national and international agencies and researchers. Many structured and unstructured informal interviews provided researcher a motivation to make analysis of confronting forces which directly affect personal development of women in the society, in turn their education, a key to personal development. In this process it is found that among other factors, the culture and religion are the major factors that can facilitate or restrict women’s education in a particular society. Culture is a more dominating force and religion exists inside it. Although religion has lot of impact on

ideas, practices and morality of a society but somehow it is adjusted to the culture of its followers keeping its certain distinctive features alive. This study built its analysis on different studies, personal observation, experiences and concluded that male dominant society uses religion in order to maintain status quo and block women's education with the fear that the personal development of women will be a challenge for the existing values system and can breach the century's old fabric of the society.

Government Efforts and Reasons for Failure

The various programmes launched by each five year plan in Pakistan could achieve marginal success due to various factors including low allocations for education sector, lack of sufficient planning and coordination among various agencies and institutions, rapid population growth, and low level of self-motivation among the citizens to equip them with education etc. The most important reason was the social set up which reduces women to a service item or a commodity and not taking them as a person, a full fledged citizen of the society. The religious bonds are quoted as a main hurdle in women's education and their role in economic activities outside home, whereas Islam, the religion of overwhelming majority of this land, empowers women in all fields of life. Women are given all human rights at par with men.ⁱⁱ

Women are given share in family inheritance. They are allowed to have full control over their income that means the religion gives them economic empowerment which automatically leads to the social empowerment. Although the Pakistani society claims itself to be a Muslim society, women are denied of most of the rights given by Islam under the cultural norms to sustain the centuries old social structure of this land. The male dominant society considers any action for women empowerment as a threat to the existing order. Since the education is the most effective mode of bringing empowerment, thereby women have been denied of it to save the existing social fabric of the society. A large scale enlightenment of the society is required to meet the social challenges to the women empowerment generally and women's education particularly. An affirmative action at governmental level can initiate the process but complete change is not possible without that enlightenment which can be brought through education in men and women both.

Cultural Constraints and Challenges

The first and foremost hurdle in the way of the women's education in Pakistan especially in the rural areas is the conservative value system. Unfortunately, women are trapped in an invisible web of norms where they are the symbol of the respect of the family. It is believed that a family can be respectful if its women are respectable no matter how corrupt and bad character their male members are. The word 'respectable' means that women should follow the family norms unquestionably without asking for any right. They should be content to the decisions taken by the head of the family. Most of the people consciously or unconsciously are reluctant to

send their daughters to schools. They believe that giving the right of education to a girl may divert her attention from her household responsibilities.ⁱⁱⁱ

Moreover the access to education is not considered to be a basic human right rather it is taken as a luxury, extravagance and a mere wastage of money. The parents (who are the ones who have to make the investments) perceive the ‘costs’ of education to be high and the benefits would be accrued by the others. It is crucial to spend money on girls’ education due to the scarce resources at the disposal of parents. On the cost side, parents not only have to pay for books, uniforms and fees for girls’ education but they also have to pay for transport.

Nonetheless poverty is one of the major hurdles and parents have to make choice either to spend on male heirs who will carry the economy of the family or the daughters who have to leave home after marriage. A cultural practice of dowry also restricts parents to spend more on education of their daughters. Instead they prefer to save money for dowry, much larger than their real capacity, to save their daughters from disgrace before in-laws family after marriage.^{iv} Despite legislation against the practice of dowry, this cultural tradition has become a curse in Pakistani society and some other South Asian states. Middle and lower middle classes suffer this curse but poor classes have different practice.

They take money for the marriage of their daughters and sale them as a commodity without consulting them. Another hurdle in women’s education is the attitude of the mothers. Since school going girls add to the burden of the household women and they have to work alone therefore more mothers discourage their daughters to continue their schooling.^v A background paper by UNESCO reveals with reference to a study by Lloyd, Mete & Grant (2009) that “in rural Pakistan, girls whose mothers have some sort of formal schooling are less likely to drop out from school” (UNESCO 2011: 14). But those whose mothers have never attended the school face hurdles in continuing their schooling because their mothers do not realize the value of formal education. Marriage at young age and disregard of women’s reproductive choices is another major roadblock in girls’ education. When young mothers are overburdened with repeated pregnancies, little daughters act as little mothers to their siblings. Therefore, to increase girls’ enrollment in schools, their mothers have to be educated by introducing some adult education programmed.

The education is associated with the professional capacity building since the men are supposed to earn for their dependents. On the basis of this correlation, majority of the males opine that there is no need for the women’s education as they don’t have to earn for their families. Traditionally a large section of the rural based landed class and middle and lower middle class in urban areas considers it highly immoral for a girl to go for a job. Earning and feeding the family is a responsibility attributed to

men only. Although the female education institutions^{vi} have brought effective changes and now a good number of families seem prepared to accept the jobs of their daughters in such institutions but still a large section of society does not dare to adopt it because their relatives condemn this practice. The dependence on the earning of the daughters is considered to be a disgrace to the family under the existing norms of the society.

Another threat to women's education in the rural areas is that of the clerics. The uneducated clerics issue verdicts against the women's education by declaring it an un-Islamic practice (Miller 2000:279-80).^{vii} A study in India reveals that the average Muslims cannot dare to defy the local Imams in rural areas. They are not free to send their daughters for modern education because of the fear of fatwa. This power of local Imams is further strengthened due to the silence of Muslim intellectuals. (Upadhyay 2004:990). In rural areas such verdicts are often issued to please powerful landlords and effective families who openly oppose women's education to sustain status quo for the survival of their declining system. As a result in many areas government schools are there but only few parents are daring enough to send their children against the pressure of the landlords. These landlords follow the double standards in this regard as their own daughters are usually educated from the prestigious institutions of the country and abroad but they deprive common people of this facility.^{viii} In fact the boarding schools like Queen Mary College, Lahore, Convent in Murree and Lahore are meant for this purpose.^{ix}

Landed elite fear that the emergence of an educated and well aware class of the people may challenge their domination and would start struggle for their rights which have been ignored for centuries. Women of the tenant class are meant for the service of the feudal and land owners. If they would be educated how would they accept the unjustified behaviour of their masters? Since the politics has been an exclusive domain of the feudal and elites who have been ruling over the country since the dawn of independence. The ignorant and illiterate masses, unaware of their basic rights, would be more likely to blindly vote for the feudal lords. Both civil and military governments could not seriously undertake the challenge of the women's education because of their alliance with the landed class for their survival and governance. The status quo is essential for their ages old strong position in the society therefore they exploit women in the name of culture and traditions. The business class has also joined politics which seems following the traditional trends.

The most problematic issue is the misinterpretation of Islam. The extremist interpretation of Islam is different. They think that Islam is against women empowerment and restricts women's education (Women in Islam 2008). Many times, the cultural values dominate the religious principles. Islam in its core teachings

declares education essential for both men and women and does not impose any restriction on the women's education and their intellectual development (Muslim Women's right in Islam 2012). In fact the first Revelation said, *Iqra* which mean read and the first one to become a believer on this Revelation was Hazrat Khadija, the wife of Holy prophet (PBUH). Holy prophet (PBUH) declared, "Seeking knowledge is obligatory upon every Muslim." (Ibn Maajah: 220) Here Muslim means men and women both. But education is not a priority area in rural areas of any part of Pakistan. People have to move to nearest towns even for the education of boys or send them to hostels. The reason is the unfriendly environment prevailing there that detracts the student from studies. The use of drugs, poverty, quarrels resulting from rivalries within and among baradaris and absence of proper training and guidance are the elements of this unfriendly environment. A very few self-motivated students are able to get through this environment successfully and get education but they are very small fraction of the rural population.^x In these circumstances when boys face difficulties in getting education women are less likely to cross these hurdles.

This challenge becomes multi-fold in the tribal areas of Pakistan where the obscurantist male interpret Islam in their own way and present an anti-women interpretation of Islam. They confine women to their homes only and persecute all those girls who want to go to school, burn schools and set on fire the homes of such families who support girl's education. Such interpretations are damaging the real image of Islam. Taliban are challenging writ of the government in not only tribal areas but also in settled areas of Khyber Pakhtunkhwa (KPK). Whatever their political motives are, first they mount their entire wrath on women living under their areas of control.^{xi} The government of KPK is trying to recover from early shocks but still could not fully establish its control over the affected areas of Swat and surroundings (Zafer 2012: 6). The administration in FATA also seems failed to protect its own system despite long military actions conducted against terrorists time and again (Aziz 2008).

Irony of this rural cultural system is that women are deprived of education. They cannot go out of home but at the same time they have to play a strong role in agriculture outside the home. This role is more open in small land holders and tenant classes where women are part of labour force at the time of sowing seeds and cutting crops. By providing these and other related services they earn staple food and grain for the whole year as their wages. Therefore, most of the small farming families and farm labour do not even think about enrolling their daughters in the schools (Asia's Women in Agriculture 2009). In case of middle and big land owners the women's role is confined to cleaning, sharing and storing crops, when it is reached at home.

Around 65.9 per cent of the Pakistani population lives in the rural areas (Pakistan Economic Survey 2009:17). Most of them own a small piece of land (or even are

landless) and are facing poverty. Such people are only concerned with the food and shelter. Traditionally, these people had been satiated with what they had. Social mobility associated with education is a strong incentive to procure economic benefits but the traditional contentment hardly allows them to get rid of this lethargy. The women's role in agriculture sector cannot be denied but most of them are unpaid workers in their family farms.

The culture that children are the gift of God especially in rural areas and bigger the family size would be, more workers for the family would be available, has created a big challenge of population explosion for the country and added to already alarming poverty in Pakistan. At family level it has created shortage of resources and the axe fall on education. Children are sent to work instead of school and are compelled to support their family (Latif 2011). Females are good choice for services as a maid servant. In the poor classes more children are blessings because they add up to the income of the family.

A report by Catherine Hill & Holly Kearl reveals that sexual harassment of girls students from age 7-12 at primary and middle school cause absence from the school in United States (2011:16). Major reason for this is the lack of female teachers. Female students are more comfortable in the presence of female teachers in education institutions. A study by Min Bahadur Bista in Nepal reveals that increasing the number of female teachers is directly propositional to the number of girl students with a few exceptions (2006: 65-66). In Pakistani villages mostly schools have single teacher more often a male one which bars even willing families to send their daughters to school.

Another hurdle in terms of cultural norms is marriages of the girls within clan and baradaris. Even those who have accepted importance of women's education are compelled to block higher education for their daughters because they think that their marriage would become a problem in the absence of highly educated match in their *baradari*. The reason is that traditionally boys are less interested in education and if a girl gets higher education, parents fear that she will not marry to a less educated cousin while her parents would not be able to revolt from cultural norms. Marrying daughters in other castes is still an abominable phenomenon.

Apart from that the crime rate in Pakistan is increasing day by day, the violence against women, kidnapping, physical and verbal harassment at public places make people reluctant to send their daughters to schools. Since a girl cannot go out of home alone, it becomes a responsibility of either her brother or father to escort her even if the school is at the walking distance. This is also effusive as the roads and streets are filled with the hooligan at the opening and closing time of the female educational institutions which poses a serious threat to the respect of female students and in turn

that of their families.^{xii} This practice also shatters the confidence of a girl that she is unable to survive without the male support in this environment. Police can be deployed in cities but such arrangements are neither available nor practicable for the female students in the rural areas. Other major factors include the lack of economical and safe means of transportation and distant location of schools and colleges not only in remote areas but also in urban areas. Because of these reasons majority girls remain deprived of formal education. The only option open for them is the distant learning but it starts from higher secondary level, therefore it is of no use for the girls living in rural areas who are deprived of basic education.

Corruption in all walks of society has become a part of culture. Education department is no exception. Many schools are traced out which have students but teachers don't come to teach. They either have political influence or bargaining with the local District/Tehsil Education Officer. Corruption also facilitates smooth running of schools on papers but actually they exist for withdrawal of salaries only without providing services to the people. The visit of the local (Tehsil and district) officers is conveyed secretly to ensure the presence of all the teachers while in normal situation they don't come to the schools.^{xiii} The dominant families use their political leverage to patronise such corruption which ultimately keeps not only girls but even boys deprived of basic education. It has been observed that mostly the local teachers belong to the less privileged castes or *Kammi*^{xiv} families therefore, it is difficult for them under the cultural practices to resist the pressure from Chaudhrys, Sardars, Khans, Maliks^{xv} or other dominant families of the village.

One of the most important challenges for women's education is to deal with dropout ratio. Lack of text books, adequate study material coupled with untrained teacher and medium of instructions are the reasons which can be resolved by institutional mechanism with the help of community. Apart from studies lack of adequate facilities, like building, toilets, drinking water etc. cause dropouts from the school after primary level. A study by Rangachar Govinda reveals with reference to the interviews of village girls students in South Asia that many girls leave school after primary school because their menstruation period starts and there is no proper arrangement of toilets in schools (UNGEI 2009 :24). Another reason for female drop out from schools is sexual harassment on the way to and from school. Discrimination on the bases of ethnic identification, cast, religion, economic group and disabilities are the other reasons for drop-outs. According to a report only 20 percent girls students enrolled in primary school continue their education at the secondary level in Pakistan and Afghanistan. In Nepal and Burma this ratio is 40 percent while in India it is fifty per cent (Corporal 2008). There is a need to address these issues to retain those who at least join school.

Women's Response

Pakistani society particularly the urban society is rapidly changing due to the advancement of communication technologies. The old structures are breaking down and new ideas and values are coming up. The discourse on the status of women is also changing. Women are now responding to the call of time. They think that they should perform their role in the development of the society and country by getting more education and earning hand status to support their families. According to the statistics provided by the Population Association of Pakistan, the urbanization rate in Pakistan has exceeded to 32.5 per cent in 1998 which was only 17.8 in 1951 (Bahawar 2008:173). With the rapid urbanization, the needs and demands of the society have changed. People want to live in a modern way. The media has also played a vital role in this regard, presenting women as a civilized and groomed individual of the society. It has compelled men to change their mindsets and adopt liberal standards. Now the standards for a wife have been transformed to an educated and well groomed lady, which were previously limited only to her caste, family and financial status. But these developments are feature of urban middle class population only.

In rural areas the rate of change is relatively slow. Although the open access to media helped them to think in terms of their own rights and various NGOs are also working there to create consciousness but the low education standards, less economic activity, more cultural bonds, strong hold of *baradari* system and clerics pose strong resistance to the process of change. One of the major reasons is weak women response. The usual indifference towards change in rural areas is also visible in women's attitude. But slowly they are responding first through change in life style and adopting fashion trends learned from media. Nonetheless the natural pace of change is inevitable and people who have been resisting their sisters' education are now facilitating their daughters to go for it.

Why do the new emerging social standards focus and emphasise the importance of women's education despite the fact that the male literacy rate is also dismal. A very simple answer to this question is that the feedback and response from the women not only in education but in every field of life is positive. Girls are more likely to get educated and bring fruitful results for their family with the support of their male members. People have started realising that the women's education is not only beneficial for her but also for her family.

CONCLUSION

Gender bias is one of the harsh realities in all traditional societies and Pakistan is no exception. Although Pakistan is a signatory of various international protocols but the society does not visualize women as potential contributing partners in the social life. The cultural constraints and the religious bonds pose a major resistance to implement

the policies for the uplift of the women. These road blocks are more prevalent in the rural areas though not completely absent in cities.

The status of the women in the Pakistani society is a matter of endless debate and deep concern. Some people strongly believe that the presence of more women in the workplace as heads of institutions is merely symbolic. Still the cultural norms are nominally changed where the women are perceived as a subject with little freedom and strapping traditions pressing them ever downwards. But the empirical evidence gives an optimistic view that the picture is not that much gloomy. On the basis of emerging trends in society like change in the value systems, flagging grip of feudal culture, the awareness regarding the need of women's education through media and desire for a competitive growth in society, it can be predicted that the prospects of women's education are bright. The marvellous performance of women in different fields of life, the decreasing rate of dropouts of girls from schools, (Burki 2011)^{xvi} affirmative action of government through reservation of seats for women in professional colleges and universities, role of Higher Education Commission for advancement of opportunities for higher education, the struggle of women organizations for their rights, these all transformations show that the change is coming and women are competing in terms of quantity and quality.

A fundamental change in social attitudes toward women can support these positive signs particularly in the rural areas. That can be brought by educating the society as a whole. If men would be educated they would certainly realise the need for women's education sooner or later. Awareness, cultural liberalisation and education are interdependent variables and support each others' promotion. It is crucial to create awareness to foster cultural liberalisation in the society. That liberalisation would help society to identify the need of an active role of both men and women for sustainable development in social and economic terms. Nonetheless that awareness can be created through education in order to achieve an egalitarian society.

End Notes:

ⁱWomen are traditionally not allowed to go out of homes alone, in South Asia. It is a common tradition in all the communities of sub-continent regardless of the religion.

ⁱⁱThe first business woman in Islam was Hazrat Khadija-tul-Kubra, the dearest wife of the Holy Prophet (PBUH). Hazrat Khadija (R A). She was running her business independently before the advent of Islam.

ⁱⁱⁱField survey conducted in various villages of the provinces of Pakistan: Punjab and NWFP by the researcher in 2008, from September to December. Women from age group of 20 to 60 and girls from age group of 10 to 20 were targeted from lower and lower middle income groups. The data was collected through informal interviews with the target groups.

^{iv}This practice is more common in Punjab and Sindh. Balochistan and KPK are away from this curse. In these provinces bride groom pay for all expenses of marriage.

^v Mothers are over burdened by the social system where the husbands are supposed to work outside only and if they contribute to the household duties of their wives, it earns bad name for them as ‘servant of wife.’

^{vi}Girls Schools, Women Colleges and women universities like Fatima Jinnah Women University and Lahore College Women University are source of higher education and jobs for women.

^{vii}A vast majority of uneducated Muslims totally depend upon the local Imams for their day to day worldly problems and accept the Fatwa as an Islamic verdict and not simply an advice. Fatawa provides guidance by which Muslim community can deal with new issues as and when they arise.

^{viii}Hina Rabbani Khar, Foreign Minister of Pakistan belongs to Muzzafer Gharh that is still in the list of backward areas of Pakistan where school for both boys and girls are situated at long distances. District Jhang of Punjab is a poor region with low literacy especially in women folk but Mrs. Abida Hussain daughter of a local feudal did her A Level and have been controlling the politics of her area for a long time. She has served as member parliament many times. Mrs. Zubaida Jalal served as Federal Minister during Musharraf administration. She belongs to Lasbella district of Balochistan where women literacy was one of the lowest in Pakistan. As the daughter of a Tribal Chief she was a privileged to receive higher education. Later she did a lot for women’s education in her area. See also “c

^{ix}Traditionally feudal used to send their boys to Aitcheson College, Lahore or Lawrence College Murree and girls in Queen Mary College, Lahore, Convent of Jessie’s and Merry Lahore from pre-partition period.

^xIn the past this ratio was better but now crimes and drug addiction have deteriorated the environment and it has become more difficult to survive.

^{xi}“About 700 schools were damaged by miscreants in the last five years in KPK and FATA. Despite the girls have got top 15 positions in the secondary school certificate (SSC) examination.” It also states that Malakand faced “destruction of some 181 schools from 2007 to 2009, among them 118 schools were girls’ schools.” See Ashfaq Yousafzai, “Schoolgirls Beat Taliban,” <http://www.ipsnews.net/2012/07/schollgirl-beat-taliban>, 28 July 2012.

^{xii}Many times, police is deployed at the opening and closing time but there is no way-out to deal with this problem for the girls of the rural areas.

^{xiii}The Ghost schools emerged as a great scandal in the Punjab Education Department, when army investigation teams found that most of the schools exist only on papers and all the staff regularly got pays without doing any duty due to the acute corruption in the department in collaboration with the elites of the area.

^{xiv}The landless working classes of the rural set up who provide manual services to the land owning classes.

^{xv}These are the strong leaders in rural society having hold over major resources of the area and also on the decision making process in the rural society.

^{xvi}“Pakistan does well in one critical area — the drop-out rate in tertiary education. Those who complete tertiary education in Pakistan account for a larger proportion of persons who enter school at this level. The proportion is much higher for girls, another surprising finding for Pakistan. With a

considerably lower drop-out rate at the tertiary level, it is not surprising that the number of years students spend in school in Pakistan (5.6 years) is higher than that in India (5.1 years) but a bit lower than that for Bangladesh (5.8 years). It is in the last two decades that the real brake occurred in Pakistan. The proportion of the 15-plus age group receiving tertiary education in Pakistan increased from only 2.4 per cent in 1990 to 5.5 per cent in 2010. The proportion of students completing tertiary education in Pakistan is 41 per cent higher than that for India. Better performance, when measured in terms of the proportion of the population receiving tertiary education, matters a great deal for the economic future.” See Shahid Javed Burki. (22 August, 2011). Preparing the population for a modern economy. *The Expressed Tribune*, <http://tribune.com.pk/story/236961/Preparing-the-population-for-a-modern-economy/>, retrieved on 15/09/12.

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**Indigenous Knowledge,
Early Warning System and Disaster Management:
A Case Study of Khetran Community in Balochistan, Pakistan**

ABSTRACT

Present study was conducted in a small community Nahar Kot, District Barkhan, Balochistan (Pakistan). The study aims at understanding the role of early warning system in disaster management at community level. Indigenous knowledge has a pivotal role in managing disasters in the absence of the scientific knowledge and vice-versa. This study sheds light on the role of early warning systems i.e. weather predictions based on typology of winds and predictions based on behavior of animals. The analysis shows that these masses of tribal community of Barkhan have an enriched indigenous knowledge purely based on their experiences. They also believe in the elders because of their vast experiences regarding local environment and they also get timely help from their elders to predict weather and mitigate with it.

Keywords: Indigenous Knowledge, Early Warning System, Disaster Management, Rural Balochistan, Khetran Tribe, Baloach, Barkhan, Balochistan, Pakistan.

INTRODUCTION

In the rural community throughout Balochistan, people rely on different types of predictors of future disasters. These modes of early warning help them to reduce

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the affect of expected disaster(s). People have experience of generations to predict droughts on the basis of the changes in the behaviors of the animals. They also understand the types of wind and make certain arrangements to mitigate with the severity of the environment in advance. One can easily find such predictive activities in the different rural communities across Kenya and other African States. Indigenous knowledge is not only prevalent in the case of Balochistan but it has been a major source of the prediction of the environment in different parts of the world too. Before discussing the role of indigenous knowledge in the disaster management one must look into the conceptual frameworks of the above mentioned three terms i.e. indigenous knowledge, early warning system, and disaster management.

According to Shaw, Noralene and Baumwoll (2008) indigenous knowledge is a method and a practice produced by community with keen understanding of their local environment. These skills can take generations to have a command on these. The knowledge regarding the changes in local environment has important characteristics. These include originating within the community, maintaining a non-formal means of dissemination, collectively owned, developed over several generations and subject to adaptation, and imbedded in a community's way of life as a means of survival. According to Farrington and Martin (1988) indigenous knowledge is not an abstract scientific knowledge. It is concrete and relies strongly on intuition, historical experience and directly perceivable evidence. This knowledge finds a wider scope in rural areas and are being used from generations. This Knowledge is based upon one's own experience and may be environmentally sound, cost effective and acceptable to farm families.

After discussing the indigenous knowledge, now we will discuss early warning system in following section. In most of the cases humans have adopted early warning system from animals because they have a greater sense of understanding. Many studies conducted in the Kenya likewise UNEP (2008) have rationalized that the existences of reptiles and other wild animals near by the homes indicates that there is a possibility of drought. Modern early warning system is also developed by examining indigenous experiences. Modern early warning systems are not only sources for predicting floods, tsunami, and earthquakes. It is not possible for the states to provide the efficient early warning systems at community levels. It is bit easier in case of urban settings and towns where technology is advanced. In this situation, the traditional people depend on the traditional as well as indigenous knowledge for the prediction of ecosystem.

Indigenous knowledge has been instrumental in maneuvering the life patterns of traditional communities around the world. It has now become indispensable to

take indigenous knowledge into account prior to any analysis of disasters in such communities. There is a plethora of reason and logic in support of considering indigenous knowledge. Based on the premise that people of such traditional communities are well aware of their ecological conditions; cultural traditions associated with natural calamities have a very intimate association with the area where they have been dwelling normally for centuries. Indigenous knowledge has been of a very practical nature and even pivotal during the course of Cultural Revolution in societies where multi-faceted disasters of various magnitudes inevitably effect the said evolutionary course.

The contemporary world has become more vulnerable to disasters due to the looming effects of global warming. Therefore, a significant change can be witnessed in the policy making of disaster relief and development agencies from post-disaster and technology based approaches to disaster forecasts, early warning systems, mitigation and disaster preparedness activities using the indigenous knowledge in order to reduce the huge loss of life and property. With the development of more social science patterns, the global relief and development has inclined greatly to benefit from the indigenous knowledge in the recent times. So, instead of opting for one strategy, both the natives and the relief and development agencies may complement each other using the indigenous insights and technology based on the scientific knowledge in the greater interest of the humanity.

Background of the Village and Main Ethnic Groups

Present study was conducted in a small village named Nahar Kot, District Barkhan in Balochistan. The village is located at a distance of 18 kilometers from Barkhan. There are about 96 families residing in this village. The major occupation of the community members is cultivation. Majority of the inhabitants work as tenant farmers and few have their own land to work on it or to rent it out on sharecropping and fixed rent. In addition to the cultivation practices people are also fond of cattle and they graze these cattle in the nearby hills as well as in the plain areas. The popular domesticated animals in the village are cows, goats and sheep. The village is almost deprived of basic amenities of life like pure drinking water, gas, proper health facilities, and sanitation. People experience disaster in great number. The common forms of the disasters in the village are drought, earthquake, hail storm, epidemics and famine. Drought is one of the most repetitive disasters. After repetitive and periodic encounters with drought, the community has developed its own indigenous mechanisms of forecasting and mitigating with the disaster.

Majority of the population of this village is of Khetran (Baloch) by lineage. On the history of the Khetran tribe there are few comments in the literature. Like Bakhsh (1974) stated that Khetran tribe is a mixture and combination of Baloch, Pathan and Jat. They were driven in the area of Marri tribe by Bijranis in 1717. While on other side, the excerpts presented in the GOB (1906) asserts that Khetrans are an offshoot of Kanshi tribe of Afghan and descended from Kahir-uddin-Kharshabun son of Saraban who was one of the three sons of Qais Abdur Rashid-the common ancestor of Afghan. The oral history of Khetran does not present a consensus on the origin of the tribe. Different views given by the informants regarding the origin and identity but we have presented only two of these in the following section.

1. “One of the views is that the Khetran tribe originated in Russia. After coming to Barkhan, the tribe settled in scattered settlements in adjoining places. According to this view Khetrans, being belligerent people, do not hesitate to occupy the land in the middle of other Baloch tribes.”
2. “A very popular claim of the natives is that they are descendants of Hazrat Amir Hamza, paternal uncle of Hazrat Muhammad (PBUH). This claim shows their affiliation with Islam from early times. But this claim needs further explanations.”

There is need for the further explanations of the history of this branch of the Baloch tribe. There are only few semi-factual accounts about the origin and subsequent migration of the tribe. The collection of histories of origin of the Khetran and how they arrived here and settled after fighting with the Mughal Emperor might have an iota of truth or these may be reflections of their cultural ethos and how they would like to be perceived. Following are the objectives of the research

1. To understand the prevalence and importance of indigenous knowledge system in the rural settings of Balochistan, Pakistan.
2. To study the early warning system in the study area of Nahar Kot in rural Balochistan.
3. To investigate the predictive behavior among the community members of the Nahar Kot based on the wind system and behavioral changes in the animals.

METHODS

Present study is based on the anthropological fieldwork conducted during 2009-2010. The results presented in the study are based on the following main sources:

1. Participant Observation Method;
2. In-depth Interviews; and
3. Selected Case Studies.

The researchers spent almost six months in the field and maintained their field notes while observing the respondents. In addition to the participant observation methods, in-depth interview of the community elders, shepherd, and owners of the cattle herds were also administered. Five case studies of the different events were also taken to understand the predictive behavior of community members and the accuracy of information they float before the occurrence of any disaster.

RESULTS AND DISCUSSIONS

Early Warning System in the Locale

Early warning in Nahar Kot is purely based on the keen observations of the community experts related to the animal behavior, birds' behavior, insects' movements, the process of vegetation and magnitude and extent of winds, water and air temperatures, clouds appearances etc. Moreover, the indicators which community uses are mostly particular to the indigenous level. Farmers in the study area of Nahar Kot use different type of traditional knowledge to predict rainfall based on their observation of such phenomena as wind movement, lightning, animal behaviors, bird movement, halos or rings around the moon, and the shape and position of the moon on the third to fifth days from the new moon. These types of information provide a framework that farmers use to explain relationships between particular events and changes in the climate and weather. Farmers combine different predictors and indicators to inform critical farming decisions and to decide on adaptive measures.

Indigenous forecasting knowledge to a large extent reflects the interactions between the community and environment over time. Scientific forecasts may also be more useful if ways are found to integrate local knowledge, which has enabled generations to live through severe floods and droughts, into current decision-making strategies. But, custodians of forecasting information are mainly the elderly population while the mode of communication of such information is largely informal and undocumented. In this way only limited knowledge transfers from one generation to the other. It is a loss of centuries' matured indigenous knowledge. In the below mentioned section we will present twofold typologies of the early warning system which are presently active in the study area: i). weather predictions on the basis of wind and ii). weather predictions depending on the behavioral change in animals.

Wind Based Weather Predictions

Early warning system is always an important aspect of indigenous knowledge. People keep trying to predict the environment on the basis of the winds and devise strategies to overcome disaster situations. In case of droughts this early warning system helps people to overcome the disaster situation. Bhatti (2000) writes about the occurring of drought and its effects whilst giving a comparison to other natural disasters like earthquake. Community members in Nahar Kot have developed their own system of weather prediction based on their indigenous knowledge as well as traditional knowledge. There are many factors like wind, its speed and direction, movements of clouds, sun and moon and celestial bodies which help the people to predict the weather. Wind is a very important source of weather prediction in the social and cognitive mapping of the community. It has great value in the life of the community and their cultural stock of knowledge. The natives recognize about seven types of wind (*wa*) which enable them to predict weather, its severity, drought, hailstone and other climatic changes. These predictions help them to formulate disaster coping strategies well in time so that the risks of the coming disasters could be vanished or at least minimized.

Dakanr wa is the first category of the winds recognized by the community members. It starts by the mid of the June and ends at mid of September in the direction of east to west. It brings clouds and causes rains and prosperity in the region and ultimately helps in the growth of herbs, shrubs, trees and crops. Such growth of herbs and crops is beneficial to the livestock. Locally this beneficiary for the community is called as a “*qaal*”. After assessing this type of wind, people feel pleasure and get ready for the bowing seasons of the crops. *Gari wa* (Winter wind) is second category of the winds recognized at local level. It normally blows in the direction of north to south from mid of the January to mid of March each year. It brings a sudden and severe increase in cold. This sudden cold causes many diseases like fever, flue, cough and “*sir saam*.” *Gari wa* causes great damage to crops by drying these up and decreasing yield multifold because. So, keeping in view the severity of this wind people take preventive measure to get rid of this cold wave of weather. There are foods and dressing based preventive measures. Animals also suffer from this kind of wave of cold weather because their folder dries up.

The third major type of the wind is known as “*Lakhe watt ti wa*.” It normally blows form west to east in opposite direction of the *Dakanr wa*. It brings drought, famine and rains scarcity in the region. So, keeping in view the typology of wind people take certain preventive measures to get rid of droughts and famine. The fourth major form of wind is “*Phal Vikerni* or *Run Chorr*” also known as summer wind. It most of the time blows from North to South. It starts in the month of April and ends in July. In local folk wisdom it is known as an anti cloud wind. There is a folk saying in the

community that when this wind blows, the land owners and farmers sell their “*phal*” (a pointed device used to plough the land) as it is vain to plough and sow the farm because this type of wind devastates the crop and there is no yield at all. There is another myth in the community that this wind only blows when a villager divorces his wife.

Purkho wa is fifth category of wind. It most of time blows by the mid of the July to the mid of August from east to west and decreases the severity of hotness of weather. It makes the weather pleasant. It brings clouds and causes immediate rain(s). This wind is useful in lowering down the temperature. It helps herbs and shrubs to grow increasingly. By the vast and fast growth of the herbs and shrubs the pastorals celebrate this season because they love to graze their cattle in this season. The sixth form of wind is called as *Lawar wa*. This is also called as mid day summer wind (this is also known as a *loo* but mainly in the central Punjab region). *Lawar* is very hot wind which blows in the peak of summer season and increases the severity of the hotness. Normally in hot summer the possibility of rains is reduced to many-folds in the study area. It damages crops and other herbs and shrubs. It is almost impossible to go out and carry on daily routines even grazing the cattle. Sometimes it blows for the whole day and sometimes with some intervals.

The role of elders in mitigating strategies is obvious such case has also been identified by UNEP, (2007). There is majority of the elders in the context of the Kenya who tries to predict rainfall. On the basis of the predictions made by these elders majority of the communities get benefited by these. Due to lack of rain and high evaporation, community faces water deficit for the growth of crops. There is no other source than rain because the ground water is either too low in depth to pull out or it is not suitable for cropping and even for drinking. Due to severe hot winds, livestock face stomach diseases. This season results in crop failure and loss of livestock. *Khooni wa* (blood-wind) is the last type of wind. It is a very special type of wind which is recognized by the community as a wind of injustice. It is an effect rather than a cause. The community believes that it blows on when there any of injustices occurred in the region and someone is killed mercilessly. *Khooni wa* blows from two sides i.e. from west to east and south to north. It approximately blows for three days with dust storms. It distresses both animals and human beings. The community members narrate so many incidents of injustice where innocent people were killed mercilessly and the gusty wind blew with storms of dust for about three days.

Predictions Based on the Behavioral Changes in Animals

Can animal predict weather? This is a kind of questions which pushed the environmentalists to think about it. Although there are some assumptions that animals

have a sense to foresee the environmental changes. Toothman (2011) explains that before the start of the storm, animals can easily assess it and start making certain sounds because these animals desire for the shelter and signaling it out for it. In the study area the shepherd and owners of herds are closely associated with the livestock and they easily understand the nature of their animals. While living with their herds of cattle they observe even minor behavioral and physical changes in their stock of animals. So, living in the natural environments they sometimes rely on animals for weather predictions. It must be taken into account that behavioral and physical changes in animals like dogs, jackals, goats, sheep and other insects like termites and birds are also noticed and used for weather and disaster predictions in the community.

Shepherds and livestock owners have observed strange behavioral changes among sheep and goats whenever there is a change in the weather in near future. They believe and have experienced that when sheep and goat keep their face towards the east put their fore limb on the stone and look upward in the sky then it is a harbinger of clouds and rains. There is another behavioral change in the sheep which enables the community members to predict climatic change in the region. The sheep move their head very fast at night, causing their large ears to strike their faces and make a noise. We take this sound of the ear of sheep as a symbol of clouds and rains, said a farmer who owns a large number of livestock. Then we prepare for rain. The third behavioral change which has been noticed by the community members in the sheep and goat herds is that animals look very happy and dynamic when taken out to the meadows in the morning or coming back to the shelter after grazing. They can be seen jumping here and there, playing with each other and dancing while going out or coming back or even in the meadow during grazing. This behavioral change is taken as good news for rain and prosperity in the area. There is special regard for sheep in the community as compared to other animals. Sheep are considered to be harmless, innocent, and sacred. Natives believe that a ewe has certain spiritual powers which enable her to predict any expected change in the environment.

Dogs and jackals are also considered for weather forecasting. The community members have observed that whenever a dog barks in a loud, elongated voice, then there is a danger of some unknown disaster likely to occur in the village in near future. While on other hand when a jackal comes near village and start howling it is perceived as unpleasant. It is believed by the villagers that the howling of jackals is a symbol of impending calamity. The natives also observe the movements of ants very closely to predict weather. Based on their repetitive experiences they have concluded that when ants are moving in large rows carrying their eggs and other food items toward another destination, it symbolizes that rain is expected within a few days. The ants, in the natives' point of view, move to a safer place where they could

save themselves and their food. Voice and movements of frogs are used as weather prediction by the community members in Nahar Kot.

In the community's cultural stock of knowledge, frogs making a lot of noise by their calls are the indicators of rain within a week. The frogs normally come out of their hide-outs in large numbers and start croaking at noon. The farmers, while moving in the fields, observe everything very closely. They have a keen eye on each and every change in the field. New insects and creatures in the fields draw their attention. When a large yellow colored termite is seen in the fields, it is an indicator of rain in the coming days. In above mentioned all predictive events, elders have specific role to perform. In Rural Balochistan, indigenous knowledge is being passed by the elders as it has been observed in the some African States. All in all, the people revered the elders in their role of divining climatic conditions and natural disasters. For instance, some of the elders in Kenya's most communities noticed about the hazards and gave advice to community preemptive measures (UNEP, 2008). A social scientist is always interested in examining and analyzing social issues that prevail in communities being studied. Referring to the topic of this research, the interest may focus on forecast of weather, predicting rains, storm or any sudden change in the climate based on different symbols utilizing indigenous knowledge. Anthropologists have been focusing on the issue of indigenous knowledge in the field of ethno-science was introduced by Conklin (1954).

CONCLUSION

The scope of the indigenous knowledge has been widened. It is considered worldwide but more specifically in the less developed countries. Its significance is obvious. With the help of lifelong experiences on the community elders' early warning system emerged out of it. The early warning system helps people to devise their coping strategies in the rural setting of the most of the developing world. As it was noted by the UNEP (2007) that each community has an array of early warning indicators and well-developed structures through which the wisdom of community is applied to deal quickly and efficiently with disasters. The structures include a council of elders. Major practices of early warning system based on observation of changes in physical environment and behavioral changes in animals and insects are found in majority of the African States. But to some extent such early warning strategies are also found in the other parts of the world like Indian Sub-continent. In the case of Nahar Kot weather predictions based on changes in the wind and behavioral changes on the animals and insects are more common. People easily predict the future changes in the environment and make certain adjustments to cope with these environmental changes.

* . It is an ailment similar to pneumonia, which is caused by exposure to extreme cold.

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Exploring Gender Neutrality in Education (A Case Study of Village Zandra in Balochistan)

ABSTRACT

This research paper “Gender Neutrality in Education” shows local perception of parents regarding their daughters’ education. In spite of the fact that the people are aware of the importance of literacy, there is gender gap. People are still relectant to send their daughters to the schools. This study identifies the factors influencing parental attitude towards their daughters’ education. The focus of study is to find the actual reason of low participation rate of female education with reference to gender empowerment. The efforts have been made to find out the culture perception of parents regarding their daughter’s education and gender discrimination between the sons and daughters. There is no financial benefits for parents to literate their daughters. The main focus of the study is to explore the changes in perception and attitude of parents towards literacy with reference to gender. This research was conducted in Village Zandra District Ziarat. Qualitative anthropological techniques were used to collect emperical data.

KEY WORDS: gender, neutrality, subordination, discrimination, attitude, behavior

INTRODUCTION

Most of the times, 'Gender' is confused with 'sex'. 'Sex' refers to biological and physical differences between men and women in terms of physiques, genes and

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hormones. Gender, however, refers to men and women as two types of persons, and has more to do with the social and cultural construction of ideas about masculinity and femininity and the roles assigned to them. Oakley (1981)¹ refers sex as the biological division into female and male; and parallel and socially unequal division of men and women into femininity and masculinity.

The sex roles are assigned to a person on the basis of gender. Gender is the sexual classification (classification of being male or female). According to Britannica CD Deluxe Edition, (2000)² gender identity is not fixed at birth...is modified and expanded by social factors as the child matures...gender identity develops by means of parental example, social reinforcement and language. Gender is different from sex, which has to do with biological characteristics of a person, whereas gender refers to social creation of girls, boys, women and men. While talking about gender, Berg (1973)³ says, "Gender is a basic category by which the social world is organized. It is the social role of being a female or male."

So when talking of gender we are not referring only to biological differences between men and women, but also taking society and culture into account, and that how they fuse to mold these two categories i.e. male and female. Gender identity and role are based on physical characteristics in one way or the other, as Calhoun and Light in their book "Sociology", say that from the moment a baby is born, it is classified as either a girl or a boy on the basis of physical appearance. They state that biological differences are basic to the destination of male and female. According to Calhoun and Light, (1994)⁴ "Society establishes a set of cultural expectations for each gender; children are taught to conform to what their society expects of them as either a boy or a girl."

Parents in our society generally treat their sons and daughters separately. The sons are preferred over the daughters because they are considered as helping hands for their parents. Parents tend to think that whatever they spent on sons is an investment whereas spending over daughters is a waste, because they are considered as liabilities. Low-income family cannot afford enough money to educate their children, so they choose their son for higher education. The concept of not being dependent on daughter is a reason for the illiteracy among the females. "*Purdah*" is another reason. It is because they feel that their honour is at stake. Awareness about the importance of female education is not a new phenomenon. But there is gap present between male and female child in literacy.

LOCALE OF STUDY

The present research was conducted in Village Zandra, District Ziarat, in Baluchistan, Pakistan. Area wise Baluchistan is the largest province of Pakistan. It shares its

northern border with Afghanistan with major cities of Chagai, Quetta and Zhob. The western border is shared with Iran via districts Makran and Kharan. The eastern end is bounded by the Sind province, whereas the Arabian Sea lies on its south.

The Village Zandra is situated 108 km southeast of Quetta just 12 km short of Ziarat town. The village is 8,000 ft. above sea level and is surrounded by grey hills, apple orchards and Juniper forest, which is considered to be the 2nd largest in the world. Total population of Zandra according to a census carried out in 1986-87 was 2,734 residing in 120. However, according to the survey conducted by the researcher in 2007 the total population had only increased marginally to 3,234 consisting of 295 houses.

METHODS

Methodology of the current research was based upon qualitative anthropological research methods. Methodology means philosophy of the research process which includes the assumptions and values that serve as a rationale for research and the standards or criteria the research use for interpreting data and reaching conclusions. Whereas by “method” we simply mean the research technique or tool used to gather data. The methods used for this research include socio-economic survey, participant observation, key informant interviews, interviews, case studies and focus group discussions. For socio-economic survey 100 households were selected through simple random sample. We choose two key informants in the village on our personal judgment basis, which knew most of the people in the village and their socio-economic conditions. Stratified random sampling technique was used to select the parents having sons and daughters at school going age. Target population was divided into economic classes and 50 couples were selected randomly from each class. Participant observation was used in order to get first hand and accurate information about the respondents. We participated in the daily activities of the village. In-depth interviews were conducted with the elder members of society to get detailed information. Structured Interviews were used to collect information from the parents regarding their preferences regarding their children’s education. Case studies were conducted to get a detailed presentation of data related to different events. This research was a longitudinal study. First of all a 4 months visit was conducted in 1987, then a couple of month long visits in 1990s and finally in 2007. Following are the research objectives.

- To find out the cultural perception of parents regarding to their daughter’s education.
- To find out the actual reasons for the low participation of female in education.
- To find out changes in the parental attitudes towards education due to awareness and economic development.

Research Question

What changes have been brought by the awareness and development in the gender biased attitudes?

Hypothesis

The awareness and economic development failed to bring gender neutrality in education.

Gender Neutrality

This term refers to gender-neutral environment, meaning that male and female are equal at every level. Gender equality by no means seeks elimination of biological differences in two sexes, but that the two have equal rights in productive, reproductive, economic and socio-cultural sphere, so that neither of them is dominated or controlled by the other.

Analyses

Female Subordination

It is a situation in which relationship between man and woman within a social process leads to disadvantage of woman due to her subordination to man. It can be understood as an ideological process, taking place in the realm of attitudes and values wherein people in a society ascribe lesser value to women's gender at the level of behavior and action. The process that can be used to comprehend this phenomenon is that of 'ideological praxis' given by Foucault in Culture Power and History. Foucault (1994)⁵says, "Keeping this stance in my mind I am arguing that the actions or praxis of a group of people belonging to a specific culture are a result of their ideology about the world around them, since all actions and aspects of human actions are symbolically created. Ideology is a process that creates symbols through which actions are created. The ideology and symbolic constructions of culture always create some sort of domination whether it is racial or gendered. The dominant groups in society then reify this ideology so that it becomes a way of life for people rather than a cultural construction." According to Geertz (1977)⁶every action situation is the locus of reification; and because such reification is the practical key and the ontological root of domination, every action situation is the site or negotiation for, or struggle against, domination. He says, "Reification is that process through which people appropriate their created histories as natural, through which cultural constructions are imbued with a sense of inevitable."

Thus when people in a society end up believing that women are inferior to men and that their contribution in economic and non-economic spheres is less, or they are the weaker sex capable of only biological reproduction; or when women are excluded

from certain activities or confined to certain activities defined for them through reification of ideology; it becomes obvious that the ideological praxis regarding women's inferior role has been injected into society by the dominating segment of society, in this case men. This sexist ideological praxis is reified to the extent where a subordinated position of women to men seems natural to the society's member.

Gender Discrimination

Macmillan Dictionary of Anthropology (1986)⁷ defines discrimination as, "The differential treatment of persons according to their classification as members of particular categories such as race, sex, age social class etc. It is distinguished from prejudice, which is the unfavourable or discriminatory attitudes (not actions) towards persons of different categories."

Gender discrimination is not a new phenomenon. It was there, when in Arabia, before the advent of Islam, men used to bury the girl child alive. It is still thriving in this modern world when (like in India) female infanticide is being practiced. It prevailed when women were sold out in the market as slaves. It still persists when she is being trafficked and sold out for prostitution. This age-old system of inequality between man and woman has resulted in low value of a girl child. Parents always pray for a son. The situation is worse in rural areas where birth of a girl brings sadness, while birth of a boy is welcomed as well as celebrated with lots of fun fare.

The discrimination at behavioral level is actually steered by discriminatory beliefs, which were found in the village too. People have different beliefs about their sons and daughters. They wish to have a son rather than a daughter. Parents pray to have a son because he will continue the name of the family, earn money and look after his old parents. They do not celebrate daughter's birth; considering her a burden because she does not earn money. She is considered as an extra mouth to be fed in a family, regardless of the fact that she compensates her nonparticipation in the economic activity by working the whole day at home. She has to cook food, sweep and clean the house, wash clothes etc. In extra time she does embroidery, stitching etc. Even after all this hard work, she is considered as a burden.

Most of the respondents were of the view that the girls should not speak loudly and their voice should not cross the boundaries of the house. Girls were generally believed as more obedient than boys. Boys, on the other hand, were expected to be naughty and that they could speak as loud as they wanted. Nobody could correct them except their fathers and elder brothers. A number of the informants believed that girls are more responsible than boys, soft natured and weaker while boys are hard tempered. It is considered very bad in the village to seek girl's consent for her marriage. The girl who herself talks in favour or against her marriage or groom is considered *bayghairat* (shameless). Many respondents said that people don't tolerate

others talking about their daughters, sisters, wives or even mothers. It is considered as a sin for the girls to come in front of strangers without *pardah*.

A large number of respondents believed that boys are the rulers while girls have to serve their families including parents, brothers, in-laws, husband and children. Girls are expected to be experts in their household chores. About sons, most of the people said that they are important because they earn money and support family, while daughters are somebody else's property. Girls are also desired to be obedient and tolerant being concerned with honour/repute of their families. The discrimination against girls is quite obvious as they are considered as some material thing or possession, which is to be handed over to others. People get worried on the birth of a girl because she is a very big responsibility for the family as the family's honour has to be protected (referring to their chastity/virginity and so the honour of the family) and she has to be married for which a lot of money is required. Son is considered as guardian of the house. He stands for symbol of family's strength. Subsequently, they also earn money and support their family. Daughters, on the other hand, are taken as symbol of family's weakness. Sons are preferred because they bring wives and are the lineage bearers; daughter, however, goes as a wife to somebody else's house. Thus, the natives think that investing more on their girls' education is of no use for them as some other family gets the benefit. The reasons for sons' preference are summarized in the following table:

Table 1: Reasons for the Son's Preference

Why a son?	Why not a daughter?
Provides economic support and old age security.	Heavy responsibility to protect her from dangers like degradation of family's " <i>izzat</i> ".
Permanent members of the family.	Temporary members of family, as they have to leave after marriage.
Transfer of property.	Investing on them means benefiting others.
Perpetuation of lineage.	Symbol of family's weakness.

In the village, it is not only the education, but some other issues as well where discrimination against the girl child exists. In most of the cases it was the woman who showed this type of attitude. Usually it begins even before her birth, when the elderly women pray for the expecting mother, "May God gives you a son" and prevails throughout her life till death.

Birth is the time when parents welcome arrival of the newborn however in Zandra the situation is a bit discriminatory. If the baby is a male, he is welcomed with feasts,

congratulations and exchange of gifts etc., for a girl child the reaction turns as reverse. If she is the first one in the family, the parents/grand parents may not bewail her birth, but even then a depressive silence prevails and nobody dares to congratulate the family, but if she is second or third sister, the females of the family even tend to scream and cry. No father or other male member of the family was ever found reacting in this way. On such occasion, the mother also becomes victim of criticism, scolding, ill treatment, and sometimes even beaten by the mother-in-law who sometimes forces her son for second marriage to have a male child. A change in this discriminating attitude was also observed in the field. According to the tradition I did not congratulate my respondent at the birth of his daughter. He asked me why I had not congratulated him. Then I congratulated him and he offered me the sweetmeat which traditionally was distributed on the birth of a son.

Food distribution is another issue, which is always highlighted whenever discrimination against the female is discussed. Discriminatory behavior of the villagers in the distribution of food resources was observed in many cases. Although it is the girls and women who prepare the food, wash the dishes and serve the meals to the family members but it is the male members i.e. men and boys (if present in the house) who get the food first and also the best part of it. If it is a meat dish, men are served first and also the meat pieces of their choice. And when they are finished with it, the women get the left over share. Majority of the respondents admitted that (under normal circumstances) the males are served food before females. Sometimes before distributing the food, its major share is kept for men if they are not at home.

Mostly mothers serve the food and give better part, especially the meat pieces, to the son. Reason reported for that is, "Meat is not good for the girls because its effect is hot, they start menstruating at an early age and we have to arrange for their marriages early". When I asked the same from the fathers, majority of them were not aware of this phenomenon.

GENDER NEUTRALITY IN EDUCATION

Gender-neutrality meaning that male and female are equal at every level. When we talk about gender neutrality in education means equal educational opportunities for boys and girls and the parents' attitude towards their children seeks elimination of biological differences in two sexes.

Son's Preference for Education

In Zandra the parents normally prefer son as far as the education of their children is concerned. If they ever have to make a choice between son and daughter, mostly son is preferred. In 1987 a sample of 150 parents from three different classes was taken to

get some information about their preferences and again same size of sample was studied in 2007 to note the change in the opinions.

PREFERENC E	FATHERS			MOTHERS		
	LOWE R	MIDDL E	UPPE R	LOWER	MIDDL E	UPPER
Son	42	37	32	45	42	40
Daughter	03	05	10	02	03	04
Equal	05	08	08	03	05	06
TOTAL	50	50	50	50	50	50

Table 2: Preference for a Son or a Daughter in 1987

(Source: Field data)

Figure 1: Fathers' Preference

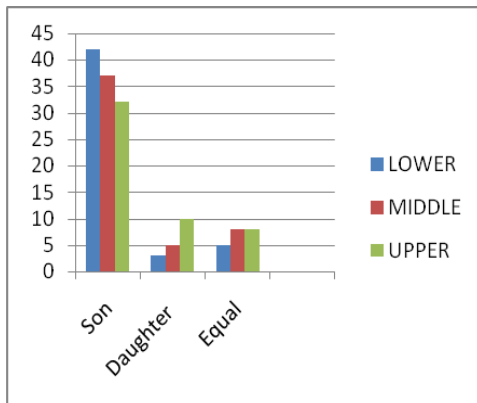


Figure 2: Mothers' Preference

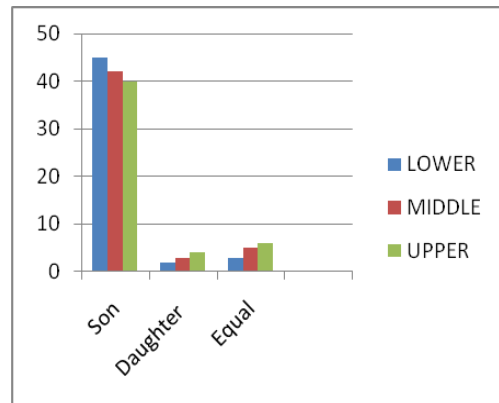


Table 3: Preference of a Son or a Daughter in 2007

PREFEREN CE	FATHERS			MOTHERS		
	LOWE R	MIDDL E	UPPE R	LOWER	MIDDLE	UPPER
Son	27	22	20	31	28	22

E	R	E	R	R	E	R
Son	45	38	35	25	23	22
Daughter	Nil	02	03	04	05	08
Equal	05	08	12	21	22	20
TOTAL	50	50	50	50	50	50

(Source: Field data)

Figure5: Girls Opinion (1987)

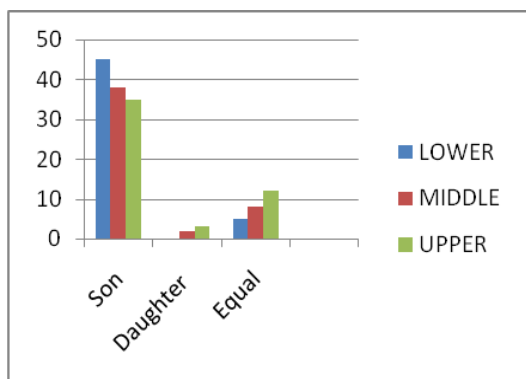
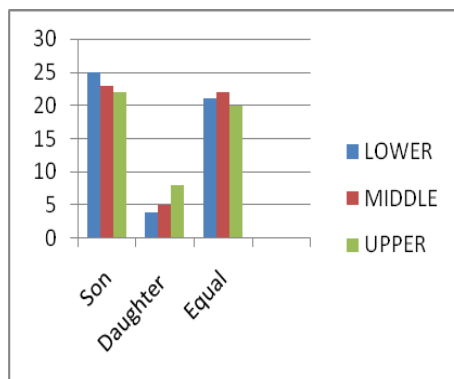


Figure6: Girls Opinion (2007)



A significant change in parents' attitude towards girls' education was observed during last two decades. In 1987, out of 150 girls 118 said that parents prefer their brothers to them. Only, 5 girls said that their parents preferred them to their brothers. While 25 of the girls said that their parents treat them equally. In 2007 only 70 girls reported that their brothers are preferred and 63 reported equality in the parents' attitude towards them. No doubt the sons are still taking the edge but the shift in the attitudes is visible.

Girls' Opinion about Brothers' Preference

A large majority of girls in the village preferred to have brothers rather than sisters because they become earning hands and protectors of the family. On the other hand the daughters have to leave their parents after the marriage. The parents have to spend huge amount of money on the occasion of their marriage and also give them gifts throughout their life so that they should be respected in their in-laws.

Table 5: Girls' Opinion about having Brother or Sister

	1987	2007

PREFERENC E	LOWE R	MIDDL E	UPPE R	LOWE R	MIDDL E	UPPE R
Brother	40	43	38	21	24	20
Sister	04	02	03	07	08	12
Equal	06	05	09	22	18	18
TOTAL	50	50	50	50	50	50

(Source: Field data)

Figure7: Girls Opinion (1987)

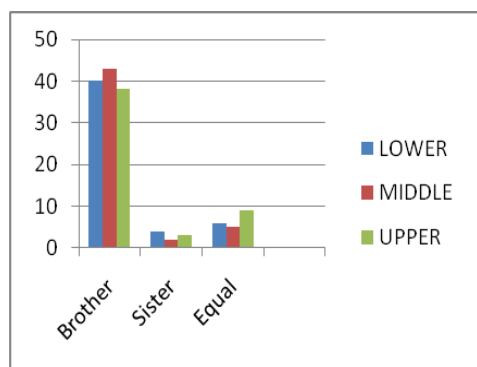
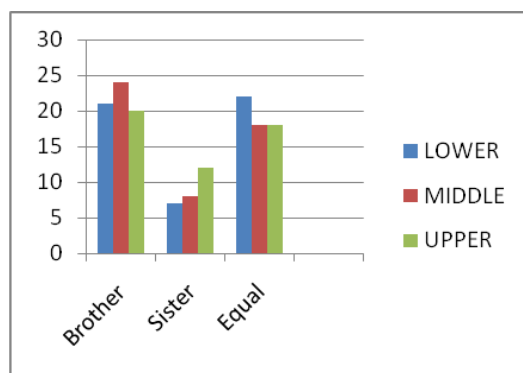


Figure8: Girls Opinion (2007)



In 1987, 121 girls out of 150 preferred for a brother whereas only 9 girls preferred to have a sister and 20 girls reported neutrality. In 2007 the trend towards equality has increased. Out of 150, 48 opted for equality which shows an increase of more than double.

In many cases, the people said that they treat both sons and daughters equally and their number has also increased during the last couple of decades. Number of the respondents who prefer sons mostly for economic reasons is still on top. They said, “We don’t have money to send our daughters to school.” Due to financial constrains we cannot continue the girls education after primary level. However, they get loans for the education of their sons. The boys can get education up to the level they want. They are always encouraged. Even boys weak in studies are pressurized to get higher education while on the other hand intelligent girls having potential to get higher education are not allowed to do so.

Case Study: A 68 years old retired clerk of Municipal Corporation Quetta told the researcher that he is matric while his wife is primary pass. They have a small piece of

agricultural land and some livestock. The old man is presently attached with the Mosque Management. They have 5 sons and 4 daughters. The father wanted at least one of his sons to become lawyers if not all. He had meager resources, but spent generously on the education of his sons. Four of his sons could not go beyond matric. However one of them got admission in Law College Quetta. The father invested each and every thing on him, and finally he became a lawyer. After completing his studies, he settled in Quetta. Today he is not sending money or material to his parents. Even he does not visit them.

Contrary to that, the old man's daughters had the talent and potential for higher studies. He never spent much on their education. His eldest daughter passed her BA examination through distance education system. She wanted to get admission in Law College but was not allowed for it. Now she is working as a teacher in the village. The next to her is also a teacher, and the third one is running a tuition center at home. All the daughters are earning and supporting their parents. On the other hand none of the sons is helping them. The sisters collectively saved some money and got one of the brothers married.

In spite of all this the old man feels proud to be father of a son who is a lawyer in Quetta, though he sends them nothing. He says that the girls have their own problems. When they are highly educated, it becomes difficult to find their match. If they are working, the worries increase because they have to be properly protected when they go out of the house. People talk about them.

CHANGES IN THE ATTITUDES

The attitudes regarding the gender discrimination in the field of education has also changed. Initially the main reason for not sending their daughters to schools was *pardah* but now more of the economic reasons were reported. Some people are still reluctant to invest on their daughters because they are not permanent members of the family and mostly they do not contribute in the household economy even if they are working. Most of the parents say that we do not have to send them for jobs so why to educate them because the males who send their females for jobs face a bad reputation in the society. Economic dependence on females was considered as shamelessness (*baygharity*). This concept was and still is a barrier for the girls in access to education but there is a notable change in it. The people who educate and allow their daughters to work have a different argument. They say that there is nothing wrong in depending economically on females because the people have been doing it since a long time. The ladies have always been working in the fields with the males which are an indirect economic contribution and the male has been enjoying it since forever. So there is no harm in sending the female to work. Above discussion makes it clear that

economy is the main feature behind all types of gender discrimination including education, food, preference, inheritance etc. More investment is made on sons believing them as permanent members of the families as well as the earning hands. As girls have to go to the other family. Delayed marriages of some educated working women were also observed, as the parents do not want to lose an earning member of the family so early as the investor wants the maximum benefit of his investment for himself not for the others.

As education enables a person to put a question, people do not give education to their daughters fearing that they would demand their right of inheritance. Here, thus, again economy plays a role in keeping the girls away from the school. Better food is served to the boys to build them stronger for working heard and earning money. So the sons are preferred in giving food for economic benefits. Economy, thus , becomes the major player in gender discrimination. The today's materialistic life has created more demand for money, increasing discrimination against women.

CONCLUSION

The trend towards education among males and females has changed during last three decades. Now the educational levels are improved as the percentages at elementary, secondary and higher secondary levels have really gone up. Similarly their attitudes towards education have also changed. Now most of the people send their daughters to schools. The elderly women were more for religious education whereas the younger ones were for the formal school education. Among the males trend was similar but the percentage towards formal education was higher. During last two decades this opinion has changed remarkably. No doubt the sons are still preferred but their attitude towards neutrality has really increased.

Pardah has been a major barrier for the girls' education since a long time. The other barriers include division of labour, male decision makers, nonparticipation in economic activities, temporary family membership, and inheritance. Parents belonging to different classes and age groups have their own reasons for not sending their daughters to schools. Young parents were more concerned for economic reasons. So with the passage of time the reasons have been shifted from *pardah* to economy which includes nonparticipation in economic activities, investment on temporary family member and the inheritance.

End Note

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- ¹ Oakley, A. (1981). *On women*. Worcester: Book plan.
- ² Britannica, C.D. (2000). Deluxe Edition, Copyright © 1994-2000 Encyclopedia Britannica, Inc.
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Indigenous Model of Sustainable Development: A Case Study of Techno-Traditional Wisdom in a Punjabi Village

ABSTRACT

The current paper is an attempt to build a case for the revitalization of Indigenous Knowledge System which is intellectual property of a native community that resides in a particular environment and enjoying a friendly ecological interaction with ecological niche. The commercialization of development theory with mere economic terms and statistics has hijacked the integrity of indigenous knowledge and resources. The local populations are under continuous mental stress to produce more and more to earn their living and monetary resources. This paper has a long term vision of refreshing the local knowledge as it discusses the gradual shift in development theory towards giving space for locally based knowledge system as a viable option for launching sustainable development. In fact, all considerable countries of the world are struggling to devise an alternative but sustainable strategy for their livelihoods. In such a case that most of the world's brethren is reviewing their local knowledge systems then why Pakistan lags behind the same. For Pakistan, sustainable development would simply mean non-reliance upon any foreign developmental model. The development that is sprung out of native and local resources both human and natural would call for development not only for the current generation but for the ones to come.

Key Words: Indigenous Model of Development, Sustainable Development, Indigenous Development, Community Mobilization, Community Organization,

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INTRODUCTION

Indigenous Knowledge System (IKS) is equally termed as “Traditional Knowledge”, “Traditional Science”, “Community’s Science” “Local Wisdom”, and “Traditional Wisdom”. On conceptual level, IKS is the knowledge of any particular society or community that is acquired and accumulated through an interaction of community and its out environment including demographical factors, ecological factors, social and cultural environment as well as specific historical, economic and political realities. In the current world, in fact all of the countries specifically developing of third world strive to get self reliant development which is sustainable and erected upon the available native resources. Unfortunately, this dream has not come true because of the two important reasons. First, the technology is not evolved natively and second, the required human resource is not available within the recipient nations willing to see them pursuing the sustainable development. Another argument for IKS not being in its actual place and position is that after the advent of modern approaches towards development is its undermining on the part of governments and development agencies. Moreover, IKS could be helpful in current day’s challenges as supported by Berkes (1993:1-9) in the following words:

“IK has been lauded as an “alternative collective wisdom relevant to a variety of matters at a time when existing norms, values and laws are increasingly called into question”.

A similar argument was discussed by de Vreede (1996) as “development planning has often failed to achieve the desired result: *sustainable development*. In some cases, “dependencies have been created by an outside world that orders and demands (through laws and natural resource regulations) but does not truly contribute to development. Communities are often left to find their own means”. The modern technologies remain foreigner for the societies as they were in past. While strictly evaluating the adoption of modern technologies, what we see is interesting because the upper quartiles of the society or community are allegedly the ones who embrace the new capitalistic technologies because this class is in a position to take a risk to adopt the new and expensive innovations which lower quartile while lacking the resources cannot afford to go after these innovations. Shankar (1996) also agrees with the logic just mentioned as “Western techno-scientific approaches are (in themselves) an insufficient response to today’s complex web of social, economic, political, and environmental challenges. The paradigm in support of “one technology or one knowledge system fits all” has been debunked. IK systems suggest a different approach to problem solving. Whereas Western science attempts to isolate a problem — to eliminate its inter-linkage with various other factors and to reduce a problem to

a small number of controllable parameters — traditional approaches usually examine problems in their entirety, together with their inter-linkages and complexities.”

Similarly, the concept of Green revolution was also an idea that promised for revolutionising agriculture but failures of the same provided a chance to critics to revisit and research the gaps for the failures and side by side the importance of local wisdom was also well searched and documented. The same argument has been reinforced by Palaniappan and Annadurai (2003) as “Need for more intensive and economic agriculture production led to wide use of high doses of concentrated chemical fertilizer but insufficient use of organics led to negative results, decrease in fertility and soil structure. Chemical fertilizers and pesticides pollute our air and water. Agricultural chemicals, including hormones and antibodies leave residues in food that may cause cancer or genetic damage. Soil and energy resources are being depleted. Instead of recycling our wastes back into land as fertilizer, we allow them to pollute our water. We use non-renewable energy resources to produce artificial fertilizer. In future we may be forced to make radical adjustments in such agricultural practices. Thus organic farming requires the total elimination of the most damaging chemicals. Such restrictions would presumably satisfy most concerns about pollution and human health. High yields of crops are heavily dependent on use of chemical fertilizers. But in the long run many problems are encountered. Organic farming techniques will help to increase the organic matter content of soils, thus reducing the bulk density and decreasing compaction. There can be effective conservation systems since they provide soil cover during most of the year and with the greater use of rotation and green manure as a source of soil fertility. So unlike under conventional and mono-cropping systems, due to maintenance of crop cover during greater part of the year there is little runoff and erosion. Modern concept of conservation tillage is effective to reduce erosion but it employs excessive use of herbicides which are hazardous to our environment”.

The indigenous methods of farming and communal life are based upon a friendly relationship with natural resources. The indigenous methods do not harvest the available natural resources on capitalistic approach rather sustainability is made sure so that the resources are also available for the upcoming generations. This argument is supported by WCED (1987) as “Sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Titilola (2006) has made the case further strong by stating that “Sustainable agricultural and natural-resource development means “the utilization, management and conservation of the natural resource base and the orientation of technological change to ensure the attainment and continued satisfaction of human needs — such as food, water, shelter, clothing and fuel — for present and future generations”.

The growing concern upon the real notion and conceptualization of sustainable development is also evident from the works of World Commission on Environment and Development, that defined sustainable development and identified various objectives of it as Reviving growth; Changing the quality of growth; Meeting essential needs for jobs, food, energy, water, and sanitation; Ensuring a sustainable level of population; Conserving and enhancing the resource base; Reorienting technology and managing risk; Merging environmental considerations and economics in decision-making; Reorienting international economic relations; and Making development more participatory” (WCED 1987). Matowanyika (1991) made a likewise comment that “sustainable development comprises five functions as Biophysical and socioeconomic resources; External factors, such as available technologies and development ideologies; Internal factors, including socio-cultural belief systems and local production and technological bases; Population factors; and Political and economic factors”. International Non Governmental Organizations (INGOs) like IUCN (1997:70-75) also started working on the conceptual clarity regarding sustainable development. According to IUCN “a society is sustainable when the human condition and the condition of the ecosystem are satisfactory or improving. IUCN has developed a series of eight (short) volumes to assess actions in terms of progress toward sustainability”.

The central idea of the current research paper is that there is a growing awareness upon the effectiveness of putting indigenous resources and ideas to revitalize the development practices of the native communities. The need of the hour is that why Pakistan should lag behind the same strive so that a model of indigenous development is prepared and discussed in order to at least initiate the debate upon utilizing the natively conceived model for sustainable development. Lacking to which compel Pakistan to adopt another non-western but foreign model of development that would retard the dream of sustainable development from coming true.

LITERATURE REVIEW

Chambers (1985) says “Anthropologists have come to an interest in agricultural development through their long experience in working closely with the horticultural and peasant communities of the third world. This involvement coincides with a national interest in improving the agricultural productivity of “food poor” countries. Although the objectives of agricultural assistance programs may vary from project to project, for instance, some programs have as their goals, the elimination of rural poverty, through the introduction of farming technology and techniques, new plant varieties, commercial fertilizers and similar innovations. Other programs are developed around attempts to improve the nutritional status of people. Still other programs might be directed to deal with problems related to capital improvements in

lesser developed countries, such as encouraging agricultural self sufficiency and reducing the need for food imports, or helping a country develops foods for cash exports”.

The contention here is that why most of the innovations in agricultural sector did not work as they were perceived in the laboratories or other control environments. An undeniable reason provided by a number of anthropologists to this dilemma is the ignorance of the socio-cultural and socio-economic factors that play a vital role in determining the human behavior to accept or reject. Doorman (1991) says Farmer’s decision-making on agricultural technology can be analyzed from three broad perspectives that include (a) Diffusion of Innovation Research; (b) Farming System Research; and, (c) The Anthropological Approach.

Development strategies are often based on short sighted or erroneous ideas about the populations that they will affect. Anthropologists frequently challenge such ideas. It is true that traditional small operation farmers cannot be expected to embrace modern farming innovation, or is this simply a self-fulfilling prophecy resulting from the past systematic exclusion of these farmers from such opportunities. By the same token, anthropologists have sometimes challenged their own cherished notion of the development process. Most early research by anthropologists working in traditional rural communities tended to reject changes in subsistence practices on the basis of deep-seated value orientation. More than this Frank Cancian’s study (1972) “Change and Uncertainty in a Peasant Economy” and Billie R Dewalt’s (1984:29-60) “Modernization in a Mexican Ejido” have argued against this perspective. Both are of the opinion that “in some cases lower and poorer farmers are found to be more receptive to the innovations practices than middle class farmers who are financially secure”.

Bartlett (1980) says that the contribution of applied anthropologists to problem bearing on agricultural practices and innovations have been limited [as have contribution by anthropologists in many other policy domains], by the tendency for the anthropologist to be utilized solely as “trouble shooters” by change agents and government researchers. In this mode of practice in terms of the “consultant” the role of anthropologist is called upon to explain, why a development scheme went wrong or, to anticipate the potential for conflict and misapplication in a newly planned agricultural development schemes. Anthropologists whenever have had an opportunity to work closely with other agricultural specialists over a long period of time their contribution have usually been impressive. But most of the recent work of anthropologists interested in agricultural development has centered on problems of farm management. The work attempts to match formal models of economic

development with a greater understanding of the ways in which farmers make agricultural decision.

Anthropologists have conducted much of their work among agrarian peoples. It is only, recently that a clear potential for applied specialization has emerged in this area. Much of the earlier work to the extent that it had applied implication can be subsumed under the somewhat broader category of community development. Recently, however a number of anthropologists have called for concerted efforts in these areas. Robert Rhoades and Vera Rhoades (1980) for example have argued that anthropologists should be encouraged to specialize as agricultural scientists and to seek employment with the government agencies and firms involved in agricultural development. The recently established bulletin "culture of agriculture" published by the anthropological study group on agrarian systems serves as a vehicle of communication of anthropologist interested in such matters.

Dube (1995) in his book states "The naiveté of the earlier developmental strategy is now apparent and the Third World is left with the sober realization that the process of development is infinitely complex and involves a wide range of interpenetrating variables. Development is not a simple matter of making calculated inputs to raise the output to the desired level. The transfer of technology bristles with difficulties: the transfer of institutions, even if desirable, is almost impossible to accomplish." De Silva (1988) argues "by borrowing foreign technology, the growth of appropriate local technology was smothered; as a result, the developing nations neglected to foster their own research capabilities and innovativeness, perpetuating a dependent relationship. The very character of development, however, ensured a grossly unequal distribution of the benefits and the disparity grew enormously per cent since 1960, this growth has been very unequally distributed among countries, regions within countries and socio-economic groups."

Wigna Raja, et al, (1998) says "Ideas regarding the up-gradation of indigenous knowledge and technology, organization and the conceptualizing of experience could be provided by Participatory Action Researchers. These action researchers would be a new breed of "organic intellectuals". They would be identified and absorbed in the culture and knowledge system of the people and also be equipped with scientific training. Such researchers, while engaged in the struggle alongside the people, would be interacting with their creative ideas and knowledge and at the same time helping to conceptualize the results of their collective social, political and productive efforts. Finally, Participatory Action Research could help rediscover folk literature and use it to reconstruct a sense of community identity. Such consciousness could reinforce the contemporary creative quest of the community". Dube (1995) further adds that "much of the early thinking on development did not accord to culture a central place either as

a goal or as an instrument. A current of thought, powerful in the nineteenth century, held that the continuing and obstructive persistence of tradition would block substantial modernization as traditional values and institutions are incompatible with modernity.”

METHODS

A brief introduction about the locale of study and tools of study are in the following:

Locale

The current study was conducted in Union Council of Sacha Soda in tehsil and district of Sheikhpura district of the Punjab province. The life of this Union Council is characterised by big political players who acted as middlemen in the local power structure. The village community presents the picture of a rural society in transition. This village in recent past has experiences three major development intervention in the domain of agricultural development that include firstly, the installation of tubewells to cope with the water logging problem; secondly, the water management program; and thirdly, Agronomic Research Project to encourage the farmers towards High Yielding Varieties (HYVs) of various crops for better crop produce per acre.

Data collection was done through the exploratory method while using main techniques of participant observation, in-depth interviews, and key informants. The observational checklist was prepared that focused the variable and sub-variables along with all relevant indicators related to the topic of inquiry. The observational provided earlier scrutiny of the events and further allowed the sorting of respondents for later in-depth interviews.

Dick (1998) is of the view that “focus groups are a method particularly suited to preliminary research where some time-economy is a need, and where a more structured approach may be premature. It is common for the group session to be audio-taped (or sometimes videotaped) for later analysis, though that is not my preferred option. Focus groups are a method of group interviewing for obtaining qualitative data. It is not so much a research design as a data collection method” (Dick, 1998). The way of conducting focused group discussion was very interactive in which members were very keen to participate. In a sense, it also provided a forum to the senior representatives to speak up and share their experiences. This method served four important functions which were as under:

1. Firstly identification of the respondents who had been involved in similar activities;

2. Secondly, the preference was given to respondents, who were somehow involved in skills trainings or knowing the importance of the process;
3. Thirdly, the necessity of knowledge about development and community organization in their local terms; and,
4. Fourthly, their willingness to share their experiences was the basic condition during core group operation.

RESULTS AND DISCUSSION

IKS is a “complete traditional understanding of local people about the natural environment of their society that is based on centuries and continued passing through generations”. The IKS is a scientifically verified repertoire of information that includes the cause and effect relationship among the diverse variables. This aim of the current paper was to see how the locals of the village viewed the sustainable development, planning, IKS, participatory development and how these complex terminologies got connected to each other. The current paper is divided into two sections covering indigenous perception of development, indigenous model of development and biases against IKS in development practices.

1. Indigenous Perception of Development
2. Indigenous Model of Development (IMD)

Indigenous Perception of *Taraqqi* (Development)

To conceptualize the term '*taraqqi*', a senior respondent summed up that '*taraqqi bunyadi tur tey wasaael day khatmay day naal, wasaael dey barhaway da naa ay*' (development is basically to utilize resources to ensure its best use without fearing its exhaustion). People of village think that collective efforts can bring positive results and can also help community organize for a joint social cause. Village community is more concerned about their surrounding circumstances in terms of social cohesiveness. The population is segregated in various caste groups which are united at *parya* level. Matters related to village are dealt by seeking social consensus which is the only mean to plan or launch any intervention.

People compare their experience with previous developmental efforts in village and state that development should not be something that puts people in negative competition. This negative competition was experienced by people during running of ARP, SSTP, WMP and Devolution of Power. People view that the projects had weaknesses in its implementation phases. Moreover, the project staff was not trained to cope with the potential hurdles. Many hindrances were oversimplified or ignored by staff and planners which later on turned devastating. Village community thought

that these weaknesses were manipulated by influential landlords to increase their hegemonic control over people. According to them, projects were not democratic in functioning therefore people who did not have any link or support from village power factions were excluded from beneficiaries list. It was due to this pressure that turned people to join these factions just to take benefits from project offerings.

Taraqqi is independence from externalities not an addiction. The beneficiaries have to take their independent decisions in order to exert better and effective control over their livelihoods and available resources at community level. According to local notion, development in terms of mechanical technology as experienced by village farmers has even worsened the situation and led to many problems in village. Firstly, it created an army of unemployed laborers; secondly, it compelled people to migrate to adjacent towns and especially to neighboring districts in search of jobs; thirdly, it caused a trend in favor of international migration especially in Gujranwala district; fourthly, the cities currently experiencing pressed economic crisis were not able to provide work opportunities to all migrants. The bulk of unemployed laborers were frustrated and their idleness raised incidences of conflict and violence within households as well as in village's social life. The negative impacts were more over the middleclass of village that lost its interests in work diligently. Villagers referred to rise in cases of adultery, drinking, theft, money and cell phone snatching. Upon further probing, respondents replied that it is the village youth that is indulged in such criminal acts. Few cases of elopement and consequent fights were also cited. Elders of village responded that unplanned and overwhelming shout for mechanization instead of helping rural people resulted in problems.

Majority of villagers who experienced farm mechanization are again shifting back to their traditional farming practices. The case of economic factors was main reason due to which farmers thought to reap more benefits and the same resulted in the rejoin of traditional practices. The modern agriculture methods became economically infeasible for the subsistence level farmers to keep their pace with it. The process of mechanization only suited wealthy and big landlords who had resources to join commercial agriculture. Their economic cushion provided them a shelter to transform their agriculture chores into a profitable business activity. A core group of key informants of village were comparing their experience with previous projects in which planners and project officials were under influence of powerful factions of village. This core group was critical of '*naukar-shahi*' approach (top-down) adopted by development experts and agencies. Whereas, the core group opined that instead of launching a real grass root development opportunity, the bureaucratic styled development approach only favored power holders of village. It simply excluded the laymen from development process. The local strategy adopted by lay men was that

they also decided to join the factions run by power groups of village to be a part of this exercise.

The core group of villagers insisted upon the local skills to be employed as featuring village level development process while utilizing the local resources. These resources whether they are natural or human have to be locally available so that traditional independence of rural areas is reinstated. This thing could in turn also result positive in favor of controlling overwhelming rural-urban migration. Respondents shared that for long lasting effects of development initiatives, masses have to be the first to receive the benefits. Villagers were critical of public offices because they thought that a layman cannot consult them at his own will. There is no mechanism to assist layman in these departments. Political influence has turned the delivery system to be weak to address a common man's needs. The core group also added their views on why the system in Pakistan stopped responding to the need of people of Pakistan. The views included instability of political office and inefficient delivery system to reply to social needs of people. It is due to which the social institution of family, caste and personal support networks are still influential and operational. People have more faith in their local patron who though exerts power but also helps in cases especially related to dealing with police and other important district offices like agriculture, irrigation, revenue, rural development, community development, education and health.

Baba Waris (an elder from core group) commented that *basti* serves two purposes. Firstly, it responds to the individual needs of persons and secondly it serves the collective social needs of community. Baba Waris divided village community into five classes according to their role and functions in social change process and community work in village. Development is evidently a process of increasing the efficiency of social institutions to respond fruitfully to folks' needs. The classifications propounded by Baba Waris are as under:

1. *Jantey Nahin* (a group of people who have no access to information. They are simply ignorant);
2. *Jantey Hain, Maantey Nahin* (a group of people who possess knowledge and know how to take initiatives but they do not take risk and therefore refrain from accepting change);
3. *Maantey Hain, Amal Nahin Kertey* (group of people who know worth of collective efforts for development but they do not become a part of development practice);
4. *Amal Kertey Hain, Kayam Nahin Rehtey* (a group of people who do accept change and practice but they do not assume the change on sustainable basis); and,

5. *Amal Kertey Hain, Kayam Rehtey Hain* (a group of people who accept and practice change on sustainable basis).

Unlike conventional styles of development, indigenous development notion is erected upon the sustainable utilization of both *abaadi* and *wasaael*. The top-down approach and its immediate opposite bottom-up approaches are directly exclusive of its opponent. The indigenous styled development approach is inclusive of encouragement of self reliance over available human and natural resources. The *basti* approach is the best carrier of indigenous development. It makes a usage of working for the people through people and by the people. The resources are best utilized without the commercial harvest of natural resources. People of village cite examples of *shamilat* (communal land) to be best source of animal pasture during fodder dearth. It also served a source of fire material and provided certain medicinal plants and herbs to the village community. The disappearance of communal lands due to seize of power groups and manipulations of other influential factors, the community lost its traditional source of animal pasture, fuel source and medicinal plants. The deforestation of forest also affected the aesthetics, medical as well as environmental resources of village.

Indigenous Model of Development (ID)

In the lines below, we tried to describe the stages of development as perceived by village people as well as dynamics of how community once responded to communal tasks along with relevant cases and practices.

First Stage: *Sooch Bichar* (Conceptualizing)

Indigenous Development (ID) advocates strong conceptualizing of the term 'development' as it believes that development indicators and needs could be different because of diverse natured challenges faced by communities. As a result of which the needs' prioritization list could be different for different communities. ID believes that development model on macro level must be containing all feed backs from local communities so that common and especially the unique developmental needs are also reflected in the development policy.

Second Stage: *Shinaakhat* (Identification and Homogenizing)

This stage is a multi cluster stage that comprises the following:

1. Consultation on needs and aspirations;
2. Identification of developmental needs;
3. Prioritization of developmental needs; and,

4. Seeking communal consensus on exclusive classification of needs.

This stage is participatory in its nature and requires people to participate in the process so that consultation may lead to some concrete conclusion and results. Usually done in an informal way, the community exchanges ideas and views on required necessities and what additional is required. This is used to happen in communal meetings, like marriages, village council sessions, in planning to fight against any natural disaster, etc. The long continued discussion facilitates step wise clear demarcation between what is really required i.e. Need and what is beneficial but not crucial for survival. Once this has been done, the community itself develops a priorities list and again shared among the community members. The purpose of doing so is to get wider acceptance from community members and to attach a community's ownership feelings towards solution of issues.

Third Stage: *Farahmiyee Wasaael aur Intizaam* (Resource Management)

1. Resources Identification;
2. Resource Categorization; and,
3. Resource Allocation and Mobilization.

Comprising of three factors mentioned above, the importance of resources is authentic and mutually agreed to fix problems within community. The community through an informal chat ponders upon prerequisites for problems' shooting and solution. The resources required for an issue are discussed by community members and further process of identifying the resources is also held. It is done to identify location where the required resources are available. Once the resources are indicated location wise, then comes the stage where there is a discussion about categorization of resources (but this only happens when few of required resources are not available within community). This is called the categorization of resources to see whether problems or issues can be fixed with help of internal resources or some external resources are required (if so then, finding the locations of desired resources and its social cost to be borne by members of community). The community again peeps into possibility of mobilization of resources regarding locally available resources. On the other hand, snow ball method is adopted to find out how to access the available external resources.

Fourth Stage: *Tajaweez* (Interventions)

1. Planning an Intervention leading to Public Participation; and,
2. Identification of Good Practices.

The planning phase contains the social consensus over nature, time and pattern of intervention that is been planned by community members for solution of issue. While going to do so, village experts usually give examples of good practices so that non-renewable resources (time and labor) are saved from waste. Another purpose of discussing and quoting good practices leads to selection of best suited methodology to solve targeted items with sustainability approach. The overwhelming stress on sustainable solutions is because of fact and reality that resources are meager and may not be available for next time therefore best utility of same is to be ensured to root out the issues on permanent basis.

Fifth Stage: *Amali Jama aur Nigraani* (Implementation and Monitoring)

1. Implementation of Intervention;
2. Benefits Acquisition; and,
3. Lessons Learnt.

Most vital is 'implementation stage' where envisaged intervention is allowed to be executed by community members through joint and mutual consultations. This is done in presence of community elders because during this phase chances of misunderstandings are high, therefore, village nobles and community make sure that they are there to witness process when an intervention is being executed. If planned intervention requires various implementation phases, then relevant experts of each phase are also supposed to be there or at least remain available on first call. For example; building a house is diverse natured works that admits many faculties in itself. Like for digging the foundations of house, only a supervisor and labor is required, whereas during construction of walls, labor under supervision of a qualified mason is required. If furnishing of doors and cupboards is at hand, services of a carpenter are needed, similarly an electrician deals in his areas of expertise so does the sanitary person. This phase involves all actors of this phase while bringing overseer under the monitoring of experienced community people.

Sixth Stage: *Takhmina aur Jaiza* (Evaluation and Updating IMD)

Learning of Best Practices.

The final stage is operated at community's experience level and thought processes of villagers in which it helps villagers in comparing things and terming them as good, or better and bad or worst. It is to see that limited resources may not diminish. This stage is operationalized soon after the execution of intervention so that product, process and effect of the new intervention are evaluated in terms of its economic, environmental

and cultural value. The stage is also a future reference for all such kind of activities. Purpose of this exercise is to increase and update knowledge repertoire with previous and current activities. These specific activities are thus evaluated and labeled as good or best practices by the village people with respect to their utility.

DISCUSSION

It is a reality that majority of the agriculture domain is constituted by small farmers who just live up to their subsistence level. It is unfortunate that modern agriculture and its mechanized techniques do not have space for these small growers. Therefore, in agriculture development process these small farmers have left behind and they feel ignored on behalf of stakeholders involved in agriculture development process. The development staff especially the agriculture research agencies seem ignorant of the grass root needs of these small farmers. All major interventions centralizing agriculture development process are single-handedly promoting mechanized agriculture to be single solution to achieve sustainability. Lefebvre (1992) in this regard says that 'Industrial (modern) agriculture leads to the concentration of wealth and decision-making in a few corporate and individual hands, thus hindering the efficient allocation of resources as prices become controlled through corporate collusion and the prevailing subsidy programs of a few industrialized agricultural exporters' (Lefebvre, 1992).

There is an agreement among farmers that they are not represented in government initiatives regarding agriculture. These farmers are left at their own to make their living out of their traditional system of production. In addition, there is a voice at international level to support small scale agriculture because this domain could be a good source of providing employment. It could thus raise independent living for these farmers. In this connection, Oxfam GB advocates:

Smallholder agriculture provides considerably more employment and food staples in less developed countries than do larger commercial farms (Oxfam GB, 2000:1-6).

Grinspun, (2003:49) also contends that:

Small-scale farmers who produce basic grains are critical to the domestic food supply and hence to food security. They contribute to social and biological diversity (through, for example multiple cropping systems) and thus to sustainable development (Grinspun, 2003: 49).

These scholars also see interrelationship of small scale agriculture with sustainability and thus empowerment due to farmers' equitable opportunities and decentralized

landownership. Grinspun (2003) advocates that social organization of small-scale farming may promote empowerments and community responsibility through equitable opportunities and decentralized landownership. For both scholars, small scale farming is often the social basis for community organization and for locally based development initiatives, required for rural diversification and other community goals. Ritchie et al., (1999:3) also describe:

Small scale farms are economically more efficient than large scale operations in terms of resource utilization and productivity (for example out per unit area) (Ritchie, et al., 1999).

Spending in small scale agriculture and developing small scale farmers would contribute in controlling the rural-urban migration. It could also help in controlling the hazards regarding already pressed economic situation in cities. The authors have already described due to absence of patronage for small scale agriculture, particularly in a situation where government is not playing its role for protecting small farmers due to which these farmers have to move to urban centers in search of jobs. Keeping in view current issues of economic stagnation of country, the cities are also unable to provide work opportunities and jobs. Whereas, recognizing the small scale agriculture would facilitate in controlling this trend and would contribute in providing jobs to these people at their local levels.

Small scale farming and local small scale, value-added enterprises are the only foreseeable alternatives to prevent massive migration from the countryside to peri-urban slums and the consequent social and economic burden this process imposes on underdeveloped countries. (Grinspun, 2003: 49).

Therefore, Ricardo Grinspun (2003) has strongly argued that:

Despite its importance, small scale agriculture is seriously endangered by current neo-liberal policies, and the implications for rural poverty, food security, and urban migration are far-reaching (Ibid: 49).

On other hand, modern agriculture has put pressure on the farmer community from two ends. The first is from within their own farmer' community to compete. The second is the criticism over small farmers from government and advocates of modern farming blaming the former not complying with national nutritional requirements. Whereas this is a fact, that modern farming has caught the farmer community into a very expensive nexus of practices that do not simply match and affordable by majority of small scale and subsistence level farmers. Some of them who apply for

the agri-credits from *Zarai Tarraqiati*¹ Bank of Pakistan complain ‘red-tapism’ in disposal of their applications. Those who go after local money-lenders report that in such case, they are caught in high debts which later on become impossible to be repaid. In this realm of affairs, they feel satisfied with their traditional system of production that does not pose threat to farmers for mortgages. Shrybman says that ‘industrial agriculture has tied the fate of farmland to that of fossil fuels thus further threatening the sustainability of food production’ as well as ‘growing health costs from food altered diets based on animal fats and processed foods, and from foods polluted with agro-chemicals.’ Furthermore ‘monocultures and the increased reliance on biotechnology also threaten biodiversity’ (Shrybman, 1999: 46). Grinspun has made a similar quote that ‘agribusiness (modern farming) also create new costs that do not exist in sustainable, small scale agriculture, such as loss of biodiversity’ (Grinspun, 2003: 51).

It can be concluded that rural development programs that focus rural restructuring bring forth a situation for small scale farmers to lose power gradually and thus control over their livelihoods and finally their lives. In this scenario, only those survive who manage to manipulate the situation while making lawful as well as unlawful intrigues. The big landowners due to their local influence, stable economic status and political clout remain largely successful to reap benefits from all such modern opportunities. This real of affairs hold true in case of wealthy and powerful landlords who are major shareholders and benefactors of modern and mechanized farming methods. The statement below verifies the argument that is based upon views and observations extracted through interactions with farming community of Sacha Soda.

Experience demonstrates that urban centers and commercial agriculture are ill prepared to absorb the vast number of poor people (especially small scale farmers) in the countryside (Bailey, 2000:1-8).

To sum up, Fox’s work is most relevant who revisited ‘the Colonial Policy of British Imperialism’ and concluded that:

The English destroyed the old Indian feudal landed system, expropriated the old landlords, but far from liberating the peasantry from feudalism, as agrarian revolutions carried through in capitalistic countries have liberated them, or at worst turned them into wage laborers working on a landlord’s estate, they bound the Indian peasantry to an even more worse serfdom, at the same time crushing down a great number of the old landlords to the same positions (Fox, 2008: 15-16).

¹ Agricultural Development

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CONCLUSION

The study indicated that indigenous methods of agriculture were still in practice by village people especially in the agricultural, health, and political organization. Majority of farmers still practiced traditional methods as they believed that modern methods were not beneficial for them. They came up with examples of problems arising out of use of modern equipment and technology like decline in soil fertility, soil compaction, incompatible fertilizers, habitat destruction, contaminated food, non suitability of modern agricultural tools and nitrate run-off. Not only this, a number of

procedural reasons were quoted by villagers as to why they thought their local methods were beneficial. The reasons referred to as were also important as the modern methods of farming only benefited the wealthy and big land owners, non availability of seeds and sprays during peak seasons. Amongst all these reasons was non-cooperative staff of agriculture department and other agencies, non availability of extension staff for guidance and manipulation of local influential people. For most of the farmers, traditional methods were their heritage left by their forefathers. They emphasized that they experimented that main hallmarks of local methods that included local traditional methods being developed in the local environment and thus able to respond to needs of farmers as well as not destroying the natural resource base.

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