



Munich Personal RePEc Archive

Livelihood Diversification and Opinion Polls' Analysis: Evidence From Tharparkar-Sindh (Pakistan)

Mahmud, Muhammad and Herani, Gobind M. and Rajar,
Allah Wasayo and Farooqi, Wahid

KASBIT, KASBIT, Sindh University, Indus Institute of Higher
Education

20 April 2009

Online at <https://mpra.ub.uni-muenchen.de/15002/>
MPRA Paper No. 15002, posted 04 May 2009 07:33 UTC

Livelihood Diversification and Opinion Polls' Analysis: Evidence From Tharparkar-Sindh (Pakistan)

Gobind M. Herani*, Muhammad Mahmud**, M. A. Qureshi***, and A. W. Rajar****

ABSTRACT

In this paper attempt has been made: (i) to analyse the opinion poll of Tharis about livelihood and its diversification, (ii) to identify the livelihood available resources and attitude of Tharis to these resources. Poll question's answers are analysed accordingly to draw conclusion from this analysis. Study reveals that Tharis have interest in agriculture especially livestock being their main source of livelihood and crops are failed due to shortage of rain fall. Sheep and Goats are the main growing livestock of Thar and Tharis love to rear these cashable livestock with interest because it is easily saleable. Thus it is the sustainable source of income for them. In Thar District the agriculture can be linked to rain falls only. Attitude of Tharis indicates that some of them are ready to divert from conventional agricultural work to other income generating businesses. Therefore, there is a need to create awareness about new opportunities within their district.

JEL. Classification: D13: D31: D33: I33: J24

Keywords: Livelihood Diversification; Tharparkar; Agriculture; Livestock; Sustainable Source.

1. INTRODUCTION

People of the developing countries are poor and presently the concept of livelihood is emerging as survival strategy of rural households (Ellis 2000; Bryceson 2000). Livelihood diversification is defined as the process by which rural households could construct an increasingly diverse portfolio of activities and assets in order to survive and to improve their standard of living (Ellis, 2000). It is observed that rural people are looking forward for the diverse opportunities to stabilize their income as determined by their portfolio of assets - social, human, financial,

The material presented by the authors does not necessarily represent the viewpoint of editors and the management of Indus Institute of Higher Education (IIHE) as well as the authors' institute.

* Dr. Gobind M. Herani, Senior Research Fellow, Indus Institute of Higher Education (IIHE), Karachi-Pakistan.
g_m_rathore@yahoo.com, gobind@kasbit.edu.pk

** Dr. Muhammad Mahmud Dean, Faculty of Management Sciences and finance, Khadim Ali Shah Bukhari Institute of Technology

*** Prof. Dr. M. A. Qureshi, Rector, Indus Institute of Higher Education

**** Prof. A. W. Rajar, University of Sindh, Jamshoro

Acknowledgements: Authors would like to thank the editors and anonymous referees for their comments and insight in improving the draft copy of this article. Authors further would like to declare that this manuscript is Original and has not previously been published, and that it is not currently on offer to another publisher; and also transfer copy rights to the publisher of this journal.

Received: 03-01-2009;

Revised: 01-03-2009;

Accepted: 15-04-2009;

Published: 20-04-2009

natural and physical capital (Ellis 1999; Sudan 2007). In different areas of the world impact of livelihood diversification is different and it varies from negative effects to positive effects like: - the 'withdrawal of critical labor from the family farm' to - the 'alleviation of credit constraints and a reduction in the risk of innovation'. The contribution made by livelihood diversification to rural livelihood is a significant one, which has often been ignored by policy makers who have chosen to focus their activities on agriculture (Ellis 1998; Sudan 2007).

Livelihood literature review explores that though exogenous trends and shocks play a significant role in approaching rural people towards a diversified livelihood strategy. Diversification choices are also confidently embedded in the micro-economic reason of farming households (Hussein and Nelson 1999; Ellis 2000). The availability of key-assets (such as savings, land, labor, education and/or access to market or employment opportunities, access to Common Property Resources [CPRs] and other public goods) is an evident requisite in making rural households and individuals more or less capable to diversify (Dercon and Krishan 1996; Abdulai and Crole Rees 2001, Sudan 2007). The investment of a proper mix of the above endowments is an initial move of any independent activity. Moreover, labor capability and education determines the capability of finding a job and savings are often needed to migrate. Yet diversification may also develop as a coping response to the loss of capital assets needed for undertaking conventional on-farm production. The reduced availability of arable land, increased producer/consumer ratio, credit delinquency, and environmental deterioration can indeed be an important drive towards diversification (Sudan 2007; Herani, Rajar and Khaskheli 2007; Herani).

Pakistan is an agricultural based developing country and livestock contributes 50 percent of its agriculture and 11 percent of GDP of Pakistan. Pakistan Economic Survey (2006). The livelihood diversification is required to be analyzed to improve the condition of its habitants. Agricultural land ownership is decreasing due to high growth rate of population and constant distribution of land and property among the offspring, thus making small units per person. This fact has compelled the people of rural areas to adopt a diversified livelihood strategy.

Tharparkar district is a big desert belt of Pakistan's Sindh Province, its agriculture is rain dependent. Its main source of livelihood is livestock. It shares more than 22 percent of the livestock of Sindh Province as per calculation made in the article of Wasim (2007b). As has already been mentioned that Tharis' livelihood is based on agriculture. As rainfall is not a confirmed source, therefore, alternate of it should be sought (Herani, Rajar and Khaskheli 2007). These conditions have played significant role in approaching rural Tharis towards a diversified livelihood strategy. According to a fair observation Tharis are found engaged in their agricultural fields only in moonsoon and they do not have the capability to utilize their precious time properly diversifying their attention to other income generating livelihood.

Numerous studies are available on this topic, directly or indirectly dealing with this issue. Like: Wasim (2007a & b), about the agriculture and livestock, both the studies are related to the livelihood. There are some studies on the Thar like: Hassan and Hardy (1993) TRDP Evaluation, which has evaluated the effects of drought on Thar district during eighties to 1992. Thardeep, Ban-beli and some other NGOs are also working in Thar area. Their versatile work is mixture of varieties that include agriculture and other alternate approaches for diversified livelihoods. These reports help Tharis in searching other occupations applicable over there. and their reports and leaflets are also available. These NGOs and other lots of NGOs are working in Thar and

engaged in creating awareness as well as motivating Tharis to find new means for their prosperous livelihood. Literature¹ is also available, some of these studies are the chapters of thesis of Herani 2002 and available as working papers (*MPRA Paper*) as e-print. For the livelihood diversification, Education, Skills and Management is important, which helps in finding the alternate jobs for livelihood.

But in their studies the data relating to the opinions of Tharis was not collected or analysed in detail. Agriculture in Thar district is taken as failed activity due to droughts. The uncertain income resources, pressure on common property resource (CPR) the rangeland and searching of alternate diverted resources, are the main causes for conducting this study.

Attempts have been made (i) to analyse the poll opinion of Tharis about their livelihood and diversified methods, (ii) to identify the livelihood based on available resources and attitude of Tharis towards new resources.

This paper is organized as under: Section 2 is about review of literature. Section 3 is about research methodology, in which data collection techniques are discussed, and an analysis is also given. Section 4 is conclusions, and finally in Section 5 recommendations are given.

2. REVIEW OF LITERATURE

Livelihood resources in the developed countries are based on educational knowledge, technology and services sectors. As is the case of Japan, which is poor in natural resources, which are necessary for the development, however proper exploitation through improved skills has made it developed. Highly skilled people living in country can transform the available resources into something usable for consumption and investment purposes that will lead to faster economic growth. Livelihood depends upon development, which directly or indirectly, needs intervention by Government, NGOs and Community Organizations, etc.

Views on Livelihood diversification are supported by a considerable number of literature and much empirical evidence, and that livelihood diversification is generally a good thing for rural poverty reduction. It helps to lessen the vulnerability of the poor to food insecurity and livelihood collapse. It can provide the basis for building assets that permit individuals and households to construct their own exit routes out of poverty. It can improve the quality and sustainability of natural resources that constitute key assets in rural livelihood. These effects occur because diversification widens the people's options, encourage diversified transactions, increases cash in circulation in that area. It also enhances human capital by providing it to those who could diversify towards new skills and experiences. This can be verified by numerous studies².

¹ Herani 2002; Herani, Rajar and Khaskheli 2007; Herani, Rajar and Dhakan 2007; Rajar, Herani and Dhakan 2007; Herani, Wasim, Rajar and Shaikh 2007; Herani, Rajar, Wasim and Shaikh 2008a; Herani, Wasim, Rajar and Shaikh 2008b; Herani 2008a; Herani 2008b; Herani 2008c; Herani 2008d; Herani 2008e; Herani 2008f; Herani 2008g; Herani 2008h; Herani 2008i; Herani 2008j; Thar 2000; Thar 2001; Dawn, Local 19; DAWNS - Local, 01; DAWN-Letters 09; Hassan and Hardy 1993.

² Turner, Hyden and Kates 1993; Ashley 2000; CESS 2003; D'Silva, Wani, and Naganath 2004; Sreedevi, Shiferaw and Wani 2004; Reddy and John 2001; Wani, Pathak, Tam, Ramakrishna, Singh, and Sreedevi 2002; Sudan 2007; Herani 2002; Herani, Rajar, Khaskheli 2007; Rajar, Herani and Dhakan 2007; Herani 2007, Herani, Rajar and Dhakan 2007.

As we know that majority of world's poor population is living in Asia especially in south Asia, which is depending upon the natural resources, mainly agriculture and secondly upon labor work in different sectors. Agriculture has no significant improvement and the mechanization. Skilled human resources are not available in abundance. Literacy ratio is low, educational standards are comparatively low. Feudalism system is very strong and lots of natural resources are owned or controlled by rich and forceful persons of the areas. Land is segmented in small segments and per person land is decreasing to enforce people to select the alternate livelihood. So diversification opportunities are helping people to help them to find out their own exit routes out of poverty. It is also worth mentioning that livelihood diversification enables people to become more productive because they are able to use more inputs for the lands. It is also found that richer get more benefits than poor. It can be verified from couple of studies from Asia, Africa, Ghana and some other countries³.

Numerous studies explore that the prevalence of livelihood diversification is now well recognized (Ellis 1998; 2000); there remains ample scope for differences in interpretation about what this signifies, especially for poverty reduction strategies and policies. Studies of rural portfolio generally converge on the starting figure that, on average, roughly 50 percent of rural household income in developing countries are generated through engagement in non-farm activities and from urban areas or abroad (remittance and pension payments being the chief categories of such transfers). It is verified by recent studies in Africa (Bryceson and Jamal 1997; Ellis and Freeman 2004), as well as past evidence from Africa and Asia. In Latin America, average figure is significantly lower, at around 40 percent (Reardon, Berdegue and Escobar 2001).

Ever-growing literature argues, however, in a different ways, to the agriculturally centered orthodoxy. In Sub-Saharan Africa, diversification can be represented as a failure of agriculture to produce sufficient livelihood for a substantial proportion of rural dwellers (Bryceson and Bank 2001; Bryceson 2002). In Jammu and Kashmir diversification opportunities show that livelihood increases with the diversification (Sudan 2007). In Nepal it is observed that people depending on farms, many of them lack chemical fertilizers to maintain its sustainability. Richer household may supplement farming with incomes from local business or employment (Garforth Malla, Neopane and Pandit 1999; Floyd et al. 2002; Springate-Bajinsky, Dev, Yadav, and Soussan 2003). Yet Livelihood diversification may also develop as coping response to the loss of capital assets, needed for undertaking conventional on-farm production (Sudan 2007).

Some studies show livelihood security between diverse non-farm and farm components, in which the farm component become more productive and diminishes in importance within a diverse livelihood portfolio. Better off households diverse to livestock ownership, engagement in non-farm self employment, and diversity of on-farm and no-farm income sources (Ellis and Freedman 2004). Numerous studies have observed that moving poverty is a cumulative process, often achieved in tiny increments. Assets are traded up in sequence, for example, chicken to goats, to land; or cash from non-farm incomes to farm inputs to higher farm incomes to land or

³ Sudan 2007; Herani 2002; Herani, Rajar, Khaskheli 2007; Rajar, Herani and Dhakan 2007; Herani 2007, Herani, Rajar and Dhakan 2007); Whitehead 2002; Slater 2002; Oberhauser and Pratt 2004; Oberhauser, Mandel and Hapke 2004; Mkandawire and Soludo 2003; Mandel 2006; Hanson 2003; Grant and Nijman 2004; Oberhauser and Hanson 2007; Wong 2006.

livestock (Ellis and Mdoe 2003). Fundamental role played by diversification is reduction in poverty and help to overcome that constraint. As Rakodi (2002: xx) states, it is important to keep “people and house hold in which they live at the centre of the development process, starting with their capabilities and assets, rather than with their problems.” Neo-liberal policies implemented in numerous developing countries across the globe are an out come of the increasing integration of economics operating on the basis of capitalist forces (Gwynne, Klak and Shaw 2003).

Numerous studies from Ghana examine the link between livelihood strategies and gender relation, especially at the household level (Francis 2000; Mandel 2006; Oberhauser and Pratt 2004). In a study of trade activities among women in Porto Novo, Benin, (Mandel 2006) concludes that especial mobility is a critical aspect of access to supplies and markets for goods by women in their urban livelihood. Some others latest studies are also available for the further going in details to related literature which helps in finding out the livelihood (Rena 2007; Pollin, Epstein, Heinz, and Ndikumana 2006; United Nations 2007). Literature from developed to developing countries reveals that livelihood diversification is significant in the growth and development. Asian studies reveal that livelihood diversification is necessary for the developing countries to come out of poverty.

2. METHODOLOGY

2.1 Data Collection Techniques

To achieve the purpose of this study both the primary and the secondary sources were used. First of all reviews of the available literature, which were based on published and unpublished materials including government census reports, research papers, magazines, newspapers and thesis as a sources of information for the study, were considered. A systematic review of the electronic database references was also undertaken before analysing the primary data. The primary data was drawn from the original Ph.D thesis of Herani (2002), which is given as under:

2.1.1 Primary source

The methods for conducting inquiries, in order to collect primary data of agro-based industry, can be of three types: (i). Case Study Method, (ii). Statistical Method and (iii). Sample Survey Method. This study is based upon the random samples survey method and collected data is tabulated and analyzed for the defined purpose covering the period 1988-2000 and it is described as below:

2.1.1.1 The Sample

The primary data for Tharparkar was compiled through questionnaires filled in by 1771 families from 30 villages of Thar District, which according to Thardeep consists of 2350 villages with the population of 9, 14,291 and covered area 19,638 Sq. KM (District Census 1999).

The whole Thar is sandy with dunes, therefore, traveling for the purpose of collecting data, of any sort, is really very difficult. While selecting the villages for survey, the villages of typical nature were marked in order to get complete information about the whole District. To up date the information till 2007, informal questions were also asked from the people of Thar district. Personal observations of the area also helped a lot in reaching the conclusion.

2.2 Data analysis

The collected data then was analysed and presented in tabulated form, maps, graphs and description. This analysis is the base of conclusion drawn and recommendations were made keeping in view the demographic, physical, social and economic conditions; opinions of Tharis' attitude towards the livelihood diversification. In this way the opinion of the participants were recorded and analysed.

Regarding the dependency of employment 81 % of the total families depend upon agro- based industry. Agro-based Industry means cultivated crops (agriculture), uncultivated crops grown by natural ways without cultivation, and range-land used for the purpose of fodder and other purposes that include the entire product and by-products related to agriculture. It employs majority of villagers and is labor oriented and 19 % of families say that they depend upon other labor-oriented work not concerned to agro-based industry.

Regarding the attitude of labor towards agro-based industry, according to total responses, 95 % of families opined that to run agro-based industry it is easy for them as they have interest in such labor work. Other 05 % of families said that other available work available over there, at this time, is easy and profitable for them.

Regarding sustainability for meeting needs about agro-based industry; analysis shows the sustainability of agro-based industry for the purpose of meeting needs, 92 % of families say that livestock is more sustainable for the purpose; 25 % say that dairy products are more sustainable; 39% say that crops are more sustainable, and 82 % say that non-crops are more sustainable.

2.2.1 Livestock

Regarding analysis about the attitude towards the livestock, which Tharis want to keep with them for the purpose of income generating, the following % is in favor of livestock: for buffalos 5 %, cows 21 %, goats 95 %, sheep 91 %, camels 50 %, donkeys 50 % and horse 1 %.

Regarding Cows, analysis shows that 100 % families are of the opinion that cows are useful for the purpose of milk and milk- products only, but not for income generation purposes even in drought conditions; 85 % of families responded that cows are useful for income generation purposes, by selling them and their products; 15 % opined that cows are useful for the purpose of income generation by selling dairy products and 100 % families were of the opinion that cows are useful for the purpose of income generation in good monsoon year other than not in the year of drought.

Regarding buffalos according to analysis: 95 % of families said that buffalos are better for milk, for the use at home, and there is no problem for their fodder expenditure that can be earned through sale of their milk-products; 87% of families responded that these are useful but there is no market to sell milk in that area because every villager has his own live-stock; 100 % families opined that only rich people can afford to buy and look after them however poor villagers cannot afford to have them because of high cost and fodder cost; 86 % of families were of the opinion that these are expensive because of fodder and water consumption, and both are not easily available in Tharparkar. All families agreed that it is difficult and un-affordable by poor people

because of their high cost and high fodder cost, which they cannot afford and 97 families said that buffalos are income generating in all conditions and in every respect.

Regarding goats, 100 % of families, who responded that goats are useful to meet the needs milk for children's nutrition purposes; 100 % families said goats are useful for the purpose of income generation as they can sell them and their and selling their newly born lambs, as well as their dairy products; 100 % families opined that goats are easy to buy and sell, taking it the small saleable item at times of urgent need; 86 % responded goats are not expensive, that is why every one is at ease to have them. Its growth rate is twice a year and can live on naturally grown fodder even in drought conditions.

Aanalysis regarding sheep reveals that: 84 % of families agreed that sheep are useful for families to meet their milk need for child nutrition; 100 % families responded that sheep is useful for the purpose of income generation by selling them and their products like wool, milk and lambs; 100 % families responded that sheep are easy to buy and sell, taking it as easily saleable item at the time of urgent need; 71 % families agreed that sheep are not expensive, comparatively, that is why every people can have it easily, and its growth rate is twice a year and can live on naturally grown fodder in famine condition too.

Regarding camel analysis indicates that: 1- % families think that camels are cheap to rear and buy for every one; 19% families say female camels are more income generating, especially by selling their new born; 91% families agreed that to have camel for income generating purpose. Camels are used to plough the land, which is not a regular practice due to famine problem in Thar; 76% families agreed that they cannot afford fodder for in drought condition and therefore it is expensive animal in Thar.

Regarding horse, no villager is in favor of keeping horses as live stock because they are cheap to buy and rear. No body is saying that female horse is more income generating by giving clots; 100% families say it is good for income generating, it also helps in farming, which is not a confirm job/ activity in the Tharparkar area and also 100 % families say they require too much fodder and are too much expensive to keep for riding and carrying loads only.

Regarding donkeys, 100 % families responded that donkeys are cheap to buy and rear and 95% say donkeys are income generating as they are good for the labor work, such as transportation of goods and it is easy to look after.

Regarding livestock for better income generation: 5 % of families are in favor of buffalos; 9 % are in favor of cows; 99 % are in favor of goats; 95 % are in favor of sheep; 96 % are in favor of camels; 100 are in favor of donkeys and 1 % is in favor of horse, on the condition that there are sufficient trees, and the shrubs in the area, to feed them.

Regarding loan facilities for livestock, questions asked were conditional that, if livestock of better races are given to them, with complete awareness, then they decided as, which livestock will be better for them? they responded as, 9 % are in favor of buffalos, 15% are in favor of cows, 35 % are in favor of goats, 21 % are in favor of sheep, 11% are in favor of camels, 9 % are in favor of donkeys and no body is in favor of horses.

Regarding loans for livestock farming was also based on condition. For example if they are given only three thousand rupees (micro credit) as loan for goats and sheep and have to buy only one of two, then what will be your preference keeping in mind maximum benefits. Response is 76 % for goats and 24 % for sheep.

Regarding caring of livestock with condition that one family member should give full time to look after them, 15% responded that they can look after 50-100 goats/ sheep and 43 % of families say they can look after 10-20 goats/ Sheep.

Regarding livestock needs with the condition that if one family consists on 5 members and has got 20 goats / sheep then 10 % families say that they can meet the needs of the family 100 %; 49 % families said that 75 % and 41 % families say 50 %.

Regarding livestock in drought conditions; here is one condition that "if there is drought and fodder is available at cheaper rates in the area and you have enough livestock to meet the needs of your family"? In these conditions 88 % of families responded that they can save their livestock by selling some of it to meet the needs of the family, 12 % of families said that they will be able to save their livestock, if they are given some help in the shape of loan. And 0 % family said that it does not matter.

Regarding livestock and their lively hood, 23 % of families responded that they have got livestock and they can meet the needs of their family by it; 48 % of families responded that they have got enough livestock only to meeting the nutrition needs; 7 % of families said that they do not have any livestock and 22 % of families said that they have got livestock, which can fulfill their 50%

2.2.2 Dairy Products

Regarding dairy products, 29 % of families said that there is market for milk, edibles and butter in the urban areas other than not in the village, 49 % said that there is no market for dairy products and 22 % said that there is market however rates are very low and not acceptable to them.

2.2.3 Non-Crops / Rangeland

Regarding rangeland / forest (non-crops), 81 % families are of the opinion that if plants are not cut to save rangeland by local villagers then it would fulfill the required fodder needs and 19 % families said that additional fodder will be needed at home.

Regarding storing and cutting of vegetation; they are given iron/cemented sheets for protecting houses and for storing fodder at cheaper rates what could they contribute? In response 1% responded that they will still need to cut plants for fuel and house building; 91 % of families said that it will save 100 % fodder for future and 8 % of families were of the view that more than 50 % reduction will take place in cutting plants.

Regarding plant items the condition was that, if their two acres field is sheltered by fencing for natural vegetation then 82 % of families said that natural vegetation will be enough for the next one year; for at least ten livestock, except horse and buffalos; and 18 % said that natural

vegetation will be enough for the next six months for at least ten livestock except horses and buffalos. 0 % families say fencing is not applicable.

Regarding safety of plants with condition that if they are given iron/cemented sheets along with timber just like bamboo/ eucalyptus at cheaper rates. In the response 86 % of families say that about 100 % plants will be saved; and 14 % of families say that still plants will be cut for fuel at about 2 %.

2.2.4 Agriculture

Regarding agricultural loan on conditions that if they are given loans for digging wells at their farms then 12 % said that they can produce fodder for the survival of livestock and meeting their needs satisfactorily, further they will be able to produce some crops for saving; 83 % say that they can produce only fodder for the survival of livestock meeting their needs satisfactorily and 5 % of families say that it will not benefit.

2.2.5 Ownership of Land and Agriculture

Regarding land and agriculture land's ownerships, 19 % said they do agriculture on the 1/4th share of crop production; 31 % said that they do agriculture on the basis of 1/2 share and 11 % said that they do not do agriculture.

Regarding ownership of farmlands, 58 % of families said that they have got their own farmlands and 42 % said that they don't have any farmland.

Regarding landowner and farming, 18 % of families said that they own farmland and do not do agriculture; 35 % of families don't have their own farmlands but doing agriculture work for others; 8 % of families neither have their own farmlands and nor engaged in agriculture; 39 % of families have their own farmlands and do agriculture.

2.2.6 Choice of Work

Regarding choice of doing work on conditions, such as, if in their area sufficient labor work is available to meeting their needs and there is rain/ enough water for ploughing, then what would be their choice ?, 76 % of families responded that they will leave the labor work and will take risk for farming. And 24 % of families said that for a few days some family members will do farming and other will do labor work.

Regarding interest for farming with conditions for those, who are engaged in farming, were asked questions on the conditions that if, they are doing farming under landlord and in the area labor work is also available then what will be their choice? 62 % of families said that they would prefer working as a laborer and 23 % of families said that they would do farming unwillingly and for the fear of landlord, and 15 % of families said that no such farming system exist in Thar.

Regarding the main source of income, 78 % of families responded that in drought conditions they would have to wait for the next season for crops and will no search any other profession; 22 % of families said that they are aware of other suitable professions and 0 % says drought does not effect.

2.2.7 Remittance Economy

Regarding remittance economy, in response to the question 11 % said that remittance economy received from outside is enough for meeting their needs; 38 % said along with remittance livestock and crops are necessary for meeting the needs in present conditions, and 51 % said that only livestock will be better to meet the needs if fodder is available in the area.

2.2.8 Debt Status

Regarding debt situation, it shows that 9 % of families are farm-bonded loaners; 23% of families are loaners to moneylenders; 20% of families are not loaners in any way; 26% of families said that they are loaners to shopkeepers; 22% of families say that they are loaners to friends/relatives.

Regarding recovery of debt, 72 % of families responded that if labor is available then they would be able to pay within two years; 17 % of families said that if labor is available still they will be able to pay it after 4 years and 11 % of families opined that they will not be able to pay loan and wages will be enough for only meeting needs of the family and pay the interest.

Regarding debt recovery, on small installments basis, with condition that if they are given chance to pay their loans on very small installation basis and labor work of any kind is available then, 69 % of families said that they will be able to pay the loan within next three years and can meet the nutritional needs of the family; 21% of families said that they will be able to meet the needs of the family only other than not able to pay the debt in next three years; and 10 % said that they will be able to pay debt, as well as they will be able to make saving, and can meet the nutritional needs too in next three years.

Regarding poultry farming, no body has got poultry farm for income generating purposes; 1 % said that they have got it for personal nutrition purposes; 1 % said that they have got informal poultry farm and no body has got formal poultry.

Regarding the suitability of poultry farm on conditions that if there is market for poultry at profitable rates, then 13 % said that climate is not suitable for poultry farming, 19 % of families said that if light is available then they would do it; 29 % families said that they need awareness and training and 9 % said that they do not interest to keep poultry and 30 % said instead of poultry, livestock is better.

3. CONCLUSION

Main objective of the study were: (i) to analyse the opinions poll of Tharis about livelihood and its diversification. From the detailed study of this article it is concluded that open poll questions have been asked from the farmers of Tharparkar about agro based industry and background characteristic; and opinions are tabulated and analyzed. This primary data is first ever study of Tharparkar on the subject. Questions asked were enough to know the livelihood diversification. (ii) to identify the livelihood available resources and attitude of Tharis to these resources. We come to know that there are three main resources: Rainfed agriculture, livestock and natural

vegetation available in the rangeland for the purpose of fodder, timber and fuel. There are alternate of it like working in cities, artisanal goods, and common labor work.

From the questions it is concluded that 95 percent families have strong attachment with crops agriculture and livestock. However, they waste their time in waiting for rainfall, which is never confirmed. They do not search alternate sources of income generation eagerly. Majority of Tharis are poor and 80 percent are under the burden of debt. For the purpose of income generation, every one suggested livestock farming; and their preference is goat at first level and sheep at second.

Goat can survive in drought too and mostly people like the income generation from their own villages. If 20-50 goats are reared then one family can meet their needs properly even in drought conditions. All types of livestock except buffaloes can be the source of income if fodder is made available by any means. If poor would be given better races of livestock on loans, refundable on installment basis, then up to coming four years they can be independent and self sustained. But these loans should follow the policy as some NGOs are also working in that area. It needs some new techniques to be implemented for the proper management. Help can be taken from the studies for like: Herani (2002); Herani, Rajar and Khaskheli (2007); Herani, Rajar, Zaman and Alam (2007); Herani (2007); Rajar, Herani and Dhakan (2007); Herani, Rajar and Dhakan (2007).

From the literature review it is observed that in developing countries people's livelihood is depending upon farms and non-farm activities. In some areas intervention in the livelihood by Government and NGO has played a significant role in the diversification. People left or sold their agricultural land and adopted diversified options. It has been observed that this area has mixture of adoption of diversified opportunities and agriculture that are good combinations and helpful for people in improving -farm activities and making assets like livestock, lands etc., and some people may benefits in different ways. So main result is that people improve there livings style and get prosperous. It is also found that if development takes place in the areas then, diversified opportunities are available for the livelihood. So for Thar more development programs are needed to give the opportunities for diversified livelihood. In this way Tharis will get more prosperous.

4. RECOMMENDATIONS

Tharis should be given four to five goats per family as a loan and no family should be left without livestock. Recovery of loan be made in the form of livestock, after three to four year's installments. Fodder should be managed for three to four years at subsidized rate by government /NGOS through (Community Based Organizations) CBOs. After four years, another opinion poll should be conducted, and in the light of that evaluation further program be set up.

Simultaneously, alternate resources, which are already available, should be utilized in the same manner. Participation of endogenous/ local leadership is must in these programs. Recommendations given in the different research studies of Thar may also be considered and new research studies should be carried out.

REFERENCES

- Ashley. 2000. Applying Livelihood Approaches to Natural Resources Management Initiatives: Experiences in Namibia and Kenya. Working Paper 134. UK: Overseas Development Institute.
- Abdulai, A., and A. Crole Rees. 2001. Determinants of Income Diversification amongst Rural Households in Southern Mali, *Food Policy*, 26(4): 437-452
- Bryceson, D. 2000. Rural Africa at the Crossroads: Livelihood Practices and Policies. *Natural Resource Perspectives*. No.52. Overseas Development Institute (ODI). (Available: <http://www.odi.org.uk/nrp/52.html>)
- Bryceson, D. F. 2002. The scramble in Africa: Reorienting Rural Livelihood. *World Development* 30(5): 725-739.
- Bryceson, D.F., and V. Jamal (Eds). 1997. Farewell to Farms: Deagrarianisation and Employment in Africa. *Research Series No. 1997/10*. Leiden, Netherlands: African Studies Centre.
- Bryceson, D.F., and L. Bank. 2001. End of an Era: Africa's Development Policy Parallax. *Journal of Contemporary African Studies*, 19(1): 5-23
- CESS. 2003. 2003. *Andhra Pradesh District Poverty Initiatives Project (APDPIP): Baseline Survey Report in Sustainable Livelihood Framework*. Andhra Pradesh: Center for Economic and Social Studies
- District Census. 1999. *District Census Report of Tharparkar, 1998*. Islamabad: Population Census Organization, Statistics Division, Government of Pakistan, Islamabad. September.
- Dercon. S. and P. Krishnan. 1996. Income Portfolios in Rural Ethiopia and Tanzania: Choices and Constraints, *Journal of Development Studies*, 32 (6): 850-875.
- D'Silva E., S.P. Wani, and B. Naganath. 2004. The Making of New Powerguda Community Empowerment and New Technologies Transform a Problem Village in Andhra Pradesh. Andhra Pradesh:
- Ellis, Frank. 1998. Household Strategies and Rural Livelihood Diversification, *The Journal of Development Studies*, (35) 1: 1-38
- Ellis, Frank. 1999. Rural Livelihood Diversity in Developing Countries: Evidence and Policy Implications. *Natural Resource Perspectives Number 40*, ODI. <http://www.odi.org.uk/nrp/40.html>
- Ellis, Frank. 2000. *Rural Livelihood and Diversity in Developing Countries*. Oxford: Oxford University Press.

- Economic Survey. 2006. Economic Survey, 2005-2006. Pakistan: State Bank of Pakistan, Ministry of Finance, Government of Pakistan.
- Ellis, F. and N. Mdoe. 2003. Livelihood and Rural Poverty Reduction in Tanzania. *World Development*. 31(8):1367-1384
- Ellis, F. and H.A. Freeman. 2004. Rural Livelihood and Poverty Reduction Strategies in Four African Countries. *Journal of Development Studies*, 40(4): April
- Francis, E. 2000. *Making a Living: Changing Livelihood in Rural Africa*. Routledge: London
- Floyd, C., A. H. Harding, K. C. Paudel, D.P. Rasali, K. Subedi, and P. P. Subedi. 2002. Household Adoption and The Associated Impact of Multiple Agricultural Technologies in the Western Hills of Nepal. *Agricultural Systems*, 76: 715-738.
- Grant, R. and J. Nijman. 2004. The Re-Scaling of Uneven Development in Ghana and India, *Tijdschrift voor Economie en Sociale Geografie*, 95(5):467-481
- Gwynne, R.N., T. Klak, and D.J.B. Shaw. 2003. *Alternative Capitalism: Geographies of Emerging regions*. London: Arnold.
- Garforth, C.J., Y.B. Malla, R. P. Neopane, and B.H. Pandit. 1999. Socioeconomic Factors and Agro-Forestry Improvements in the Hills of Nepal. *Mountain Research and Development*, 19(3): 273-278.
- Herani, Gobind M. 2002. *A Comparative Study of Agro-based industry of Tharparkar with Canal Barrage Area Sindh (1988-2000) Suggested Techniques Leading to an Industrial Economy*. Sindh: PhD Thesis, Department of Economics, University of Sindh, Jamshoro, April: 253
- Hanson, K.T. 2003. Creative Allocation of Space as a Response to Economics Crisis. In: *Critical Perspectives on Politics and Socio-Economic Development in Ghana*. Eds. W.J. Tetty, K.P. Puplamu, B.J. Berman. Leiden: Brill Academic Publications:pp 201-222
- Herani, Gobind M. 2008a. A Comparison of Demographic, Social and Economic Conditions of Tharparkar with Canal Barrage Area Sindh (1988-2000): An Introduction. *MPRA Paper 11963*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008b. Earlier Research Work on Tharparkar and Sindh Barrage, and Similar Studies Related to Demographic, Social and Economic Conditions. *MPRA Paper 12133*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008c. Problems of Agro Based Industry of Tharparkar and Barrage Area of Sindh. *MPRA Paper 12136*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)

- Herani, Gobind M. 2008d. Importance of Agro Based Industry of Tharparkar and Barrage Area of Sindh. *MPRA Paper 12137*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008e. Methods and Procedures of Agro Based Industry of Tharparkar and Barrage Area of Sindh. *MPRA Paper 12138*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008f. Perspectives of Agro-based Industry of Barrage Area of Sindh. *MPRA Paper 12135*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008g. Agro-Based Industry of Tharparkar and Barrage Area of Sindh: Solutions and Suggested Policy. *MPRA Paper 12143*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008h. Comparison of Agro-Based Industry of Tharparkar and Barrage Area of Sindh. *MPRA Paper 12140*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008i. Perspective of Agro-Based Industry of Tharparkar. *MPRA Paper 12134*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Herani, Gobind M. 2008j. Agro-Based Industry of Tharparkar and Barrage Area of Sindh: Concluding Remarks. *MPRA Paper 12141*. Germany: University Library of Munich. (Available at: <http://ideas.repec.org/f/phe211.html>)
- Hussein, Karim and John Nelson. 1999. *Sustainable Livelihood and Diversification*. IDS Working Paper, 69. London: Institute of Development Studies.
- Hassan, Arif and Fiona A. Hardy. 1993. *Tharparkar rural Development Project (TRDP) Evaluation 1993*. UK: (Government of Sindh, United Nations Children's Fund (UNICEF) Save the Children Fund (SCF)-U.K).
- Herani, Gobind M., Allah Wasayo Rajar and Muhammad Ali Khaskheli. 2007. Reforming Farmland and Rangeland at Tharparkar: Suggested Implementations for Income Generation. *Indus Journal of Management & Social Sciences*, 1(1): 16-36 (Spring)
- Herani, Gobind M., Allah Wasayo Rajar and Ali Akbar Dhakan. 2007. Self-Reliance Micro-Finance in Tharparkar-Sindh: Suggested Techniques, *Indus Journal of Management & Social Sciences*, 1(2):147-166 (Fall)
- Herani, Gobind M., Allah Wasayo Rajar, Noor Zaman and Adnan Alam. 2007. Knowledge Transformation and Economic Development: The Role of Digital Technology-An Analysis, *Indus Journal of Management & Social Sciences*, 1(1): 37-50 (Spring)

- Herani, Gobind M., Mohammad Pervez Wasim, Allah Wasayo Rajar and Riaz Ahmed Shaikh. 2007. Farming Management in Pakistan: Suggested Techniques. *International Journal of Management Research and Technology*, 1(2):143-153, (July-December).
- Herani, Gobind M. Allah Wasayo Rajar, Mohammad Pervez Wasim and Riaz Ahmed Shaikh. 2008a. The Nature of Poverty and Its Prospects: Pakistan Evidence. *Journal of Global Economy*, 4(3):183-194
- Herani, Gobind M., Mohammad Wasim Pervez, Allah Wasayo Rajar and Riaz Ahmed Shaikh. 2008b. Livestock: A Reliable Source of Income Generation and Rehabilitation of Environment at Tharparkar. *International Journal of Management Research and Technology*, 2(1): (Jan-July) Accepted.
- Mandel, J.L. 2006. Creating Profitable Livelihood: Mobility as a 'Practical' and 'Strategic' Gender Need in Porto Novo, Benin. *Tijdschrift voor Economie en Sociale Geografie*, 97(4):343-363
- Mkandawire, T. and Soludo, C. 2003. *African Voices on Structural Adjustment*. Trenton, NJ: African World Press.
- Oberhauser, A. M., and A. Pratt. 2004. Women's Collective Economic Strategies and Transformation in Rural South Africa. *Gender, Place and Culture*, 11(2): 209-228
- Oberhauser, A. M. and Kobena Hanson (2007), *R-scaling House Hold Strategies: Globalization and Livelihood in Accra, Ghana*, Working paper, USA: Regional Research Institute, West Virginia University
- Oberhauser, A. M., J.L. Mandel, and H.M. Hapke 2004. Gendered Livelihood in Diverse Global Contexts: An Introduction. *Gender Place and Culture*, 11(2):205-208
- Pollin, R., G. Epstein, J. Heinz, and L. Ndikumana. 2006. *An Employment Targeted Economic Programme for South Africa*. New York: UNDP
- Rakodi, C. 2002. Livelihood Approach-Conceptual Issues and Definitions, In: Urban Livelihood, Eds, C. Rakodi, and T. Lloyd-Jones. London: Earth-scan: pp. 2-23
- Rena, Ravinder. 2007. Global Economic Imbalances - A Focus on African Economy. *Bharatiya Samajik Chintan*, 6(1): 15-20 (April-June). New Delhi: (A Quarterly Journal of Indian Academy of Social Sciences).
- Reddy, Ratna V., and Soussan John (2001), *Assessing the Impacts of Watershed Development Programmes: A Sustainable Rural Livelihood Framework*
- Reardon, T., J. Berdegue and G. Escobar. 2001. Rural Nonfarm Employment and Incomes in Latin America: Overview and Policy Implications. *World Development*, 29(3): 395-409

- Rajar, Allah Wasayo, Herani, Gobind M., and Ali Akbar Dhakan. 2007. Demographic, Social and Economic Changes and Future Prospects of Tharparkar District (188-2006). *Indus Journal of Management & Social Sciences*, 1(2):107-128 (Fall)
- Sudan, Falendra. K. 2007. Livelihood Diversification and Women Empowerment Through Self-Help Micro Credit Programme: Evidence from Jammu and Kashmir. *Indus Journal of Management & Social Sciences*, 1(2):90-106 (Fall 2007)
- Slater, R. 2002. Between a Rock and a Hard Place: Contested Livelihood in Qwaqwa National Park, South Africa. *The Geographical Journal*. 168 (2):116-129
- Sreedevi TK., B. Shiferaw and S.P. Wani. 2004. Adarsha Watershed in Kothapally Understanding the Drivers of Higher Impact. *Global Theme on Agro ecosystems, Report no.10:24. Patancheru 502 324*. Andhra Pradesh, India: International Crops Research Institute for the Semi-Arid Tropics
- Springate-Baginsky, O., O.P. Dev, N. P. Yadav, and J. Soussan. 2003. Community Forest Management in the Middle Hills of Nepal: The changing context. *Journal of Forest and Livelihood*, 3(1): 5-20.
- Turner, B.L., G. Hyden, and R. W. Kates (eds.). 1993. *Population Growth and Agricultural Change in Africa*. Gainesville: University Press of Florida.
- United Nations. 2007. *Economic Report on Africa 2007: Accelerating Africa's Development through Diversification*. United Nations Economic Commission for Africa (UNECA) and African Union Ethiopia: Addis Ababa.
- Whitehead, A. 2002. Tracking Livelihood Change: Theoretical, Methodological and Empirical Perspectives from Northeastern Ghana. *Journal of Southern African Studies*, 28(3):575-598
- Wong, M. 2006. The Gender Politics of Remittance in Ghanaian Transnational Families. *Economic Geography*, 82(4):355-382
- Wasim, Mohammad Pervez. 2007a. Contribution of High-Yield Varieties Seeds to Major Food Crops Production, Yield and Area in Punjab – Pakistan. *Indus Journal of Management & Social Sciences*, 1(1): 51-57 (Spring)
- Wasim, Mohammad Pervez. 2007b. Trends and Growth in Livestock Population in Sindh: A Comparison of Different Censuses. *Indus Journal of Management & Social Sciences*, 1(1): 58-75 (Spring)
- Wani, S.P., P. Pathak, H.M. Tam, A. Ramakrishna, P. Singh and T.K. Sreedevi. 2002. Integrated Watershed Management for Minimizing Land Degradation and Sustaining Productivity in Asia. In: *Integrated Land Management in Dry Areas*. Pages 123-147. In: Proceedings of a Joint UNU-CAS International Workshop, (Zafar Adeel, ed.). Beijing, China. 8-13 September 2001.

Websites:

Dawn. Local, 19, October 2000. <http://www.dawn.com/2000/10/19>

DAWNS - Local, 01 November 2000. Oct 31: Various schemes of water, roads, electricity and health care were being undertaken in the desert area of Tharparkar to solve basic problems <http://www.dawn.com/2000/11/01/local.htm> (HYDERABAD, Oct 31 :)

DAWN-Letters 09 July 2000 in the drought- <http://www.dawn.com/2000/07/09/letted.htm>

Thar. 2000. *Thar Drought Presentation (1997 - 1998, 1998 - 1999, 1999 - 2000, 2000-2001)*. <http://www.un.org.pk/drought/Sindhmission.htm> (4-12 June 2000)

Thar. 2001. *Schemes launched in Thar, 23rd May, Karachi*. (Internet source)

www partnership partnerships and Collaborations. Welfare Help build this site If <http://www.doleta.gov/> [/www.partnerships/default.asp](http://www.partnerships/default.asp)