Invisible Workers

A Case Study of Unpaid Female Family Helpers in District Lahore

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I Neha Riaz Khan hereby solemnly declare that the work described in my thesis "Invisible Workers: A Case Study of Unpaid Female Family Helpers in District Lahore" has been carried out by me under the supervision of Dr. G.M Arif. I have not used any further means for the completion of this work except those I have explicitly mentioned in this thesis. All concepts adopted and copied from other written sources have been properly referred with the source.

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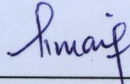I am solely responsible for the content of this thesis and I own the sole copyrights of it.
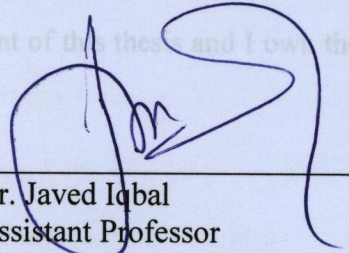
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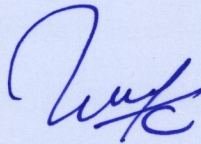
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DEDICATION

To my beloved parents and grandparents

ABSTRACT

Work, time investment and skills utilization are usually rewarded through money or different types of life securities. Although, there are workers who do not claim any direct payment for their work such as unpaid family helpers. These unpaid family helpers work in small scale set-ups operating at their homes and do not get compensated in cash or kind for their work. The present study focuses on measuring socioeconomic value of work performed by these workers. It estimates their contribution in annual household income and their involvement in household decision making and spending. Primary data has been collected from a sample of 200 respondents. It employed time use survey as a technique which is internationally known for measurement of unpaid work. The study used specialist cost approach for estimating the percentage proportion of household income that comes from the work of unpaid female family helpers. A closer look at time use statistics reveal the reasons behind this phenomenon. Unpaid family helpers are involved in activities similar to household activities; these activities are primarily considered to be women-specific activities in Asian countries. These activities include crafts production, agricultural activities, and livestock management at home. The study conclude that the income contribution of UPFFHs' is not negligible to be all ignored. Therefore policy makers must recognize the importance of UPFFHs' in household economy. The term used for unpaid female family helpers is discriminatory in itself, the prefix 'unpaid' used for such workers should be replaced with some decent alternative. Unpaid family helpers is a status of employment therefore they should be admired by labor force survey.

Key words: Unpaid family helpers, Time Use Survey, SNA Activities, Specific Cost Approach, Social and Economic Value.

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ACRONYMS

LFS	Labor force survey
PAHO	Pan American health organization
PSLM	Pakistan social and living standard measurement survey
SNA	System of national account
TUS	Time use survey
UPFH	Unpaid family helpers
UPFFH	Unpaid female family helpers
UPMFH	Unpaid male family helper
WIEGO	Women in informal employment: globalizing and organizing
WEF	World economic forum

CHAPTER 1

INTRODUCTION

1.1   Background

The issue of recognizing women as productive members of the household is an issue of particular importance in developing countries, where women participation in economic activities both paid and unpaid is least acknowledged. Particularly unpaid work of women, which is not usually recognized as an economic activity, is an intrinsic part of the economy (Sinha, 2010).

The status of unpaid work of women has a long history, initially it was perceived as double burden of women but after the First Women's Conference in 1975 (Mexico City) unpaid work has been seen as unjust distribution of work between sexes (Swiebel, 1999). Subsequently, economists have recognized the importance of unpaid works such as help in family business, raising children and elder care taking. However, due to the difficulty of measuring time invested on unpaid work and assigning it socio-economic value, the idea of including unpaid work in economic frameworks has been discouraged (Folbre & Yoon, 2005).

Historically, economists and other analysts equated work for paid employment only and money or other valuable items has been usually given to workers for their work. With time new types of workers have been recognized who fall in the definition of workers by means of their work but not by means of their remuneration as they do not claim payment in form of money or any type of kind behavior such as unpaid family helper or contributing family helper (Akhtar, 2011). According to the labor force survey

2012-13 of Pakistan the simplest definition of a contributing/unpaid family helper is, "a person who works without pay in cash or in kind on an enterprise operated by a member of his/her household or other related persons".

Now the unpaid work of family helpers is a worldwide phenomenon. However, the type of these workers and nature of their work varies from region to region in accordance with the current stage of development of each country. Making Rostow's stages of development a base it is said that countries at initial stages of development with more agriculture based economy have traditional types of unpaid family helpers[1] (UPFHs). These include women helping their husbands on farm in agricultural activities, in fishing, in business related to the production of eatables and cloths. In contrast to agricultural based economy, the industrial countries at later stages of development have newer types of UPFHs which include political wife and executive spouse (Philipps, 2008).

Conceptually, unpaid family work can be explained through the WIEGO[2] model of '4Es', Exclusion, Entry (Barriers), Exploitation, and Exit for informal workers. This model is based on four major schools of thoughts. 'Exclusion' is based on dualists school of thought which argue, formal and informal sectors are independent bodies and there is a mismatch between demand and supply of labor in formal sector; hence the informal sector comes into existence as a safety net for low skilled workers who need to earn a livelihood so they can enter into informal sector easily. 'Entry' represents legalists school of thought which majorly focus on rural to urban migrants who are incapable of following strict rules and regulations followed by formal sector consequently these

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[1] For the purpose of present study UPFH is used to mention unpaid family helper.
[2] WIEGO stands for Women in Informal Employment: Globalizing and Organizing

workers are absorbed by informal sector. 'Exploitation' represents structuralists school of thought which argues there is subordination and exploitation of informal sector by formal sector, formal capitalist firms reduce the cost of labor and increase competitiveness in labor market by bringing in sub-contracting work and flexible rules for specialized labor and hence exploit informal workers. Finally 'Exit' represents voluntarists school of thought which argue considering the cost of involving in formal sector (taxes, social protection contributions) and benefits of involving in informal sector (avoiding cost of formality), workers make a calculated decision to exit formal sector. It has been argued that the phenomenon of UPFHs fits into two schools of thought; one is dualists (exclusion) and other is structuralists (exploitation) (Chen, Vanek, Lund, & Heintz, 2005; Wilson, 2011).

In the context of developing Asian countries, where economy is mainly based on agriculture, the market production and home production units are largely overlapped; many market activities are performed at homes by spouse, children or parents of the employee or even sometime by family members who accompany the employee in fields (Chen, 2001; Sinha, 2010). Therefore, women's productive activity remains unrecognized, invisible and unpaid. Even this work falls out of socially acceptable definition of work. In developing countries a large share of economically active population especially women is involved in unpaid works due to insufficient employment opportunities and poor labor laws (Sinha, 2010).

According to Chen et al. (2005), self-employed and UPFHs are at the highest risk of encountering poverty, and unpaid work is mainly performed by women. International labor organization (ILO) defines the sum of UPFHs and own account workers as

vulnerable employees; vulnerable employees are the employees "who have inadequate earnings, low productivity and difficult conditions of work" (Nalishebo, 2013).

1.2 The case of Pakistan

World Economic Forum (2013) ranked Pakistan second-worst in equal economic participation and opportunity for male and female. According to the Labor Force Survey 2012-13 of Pakistan, 26.3 percent of workers are UPFHs and more than half of them are women. Pakistan labor force survey statistics of previous years shows that female employment rate has increased significantly in Pakistan to 22.4 percent in 2012-13 from 13.5 percent in 1996-97. However, looking at percentage distribution by employment status it is obvious that the major rise is in percentage share of UPFHs. The Figure 1.1 shows, that the share of unpaid female family helpers[3] (UPFFH) reached 13.5 percent in 2012 from 7.3 percent in 1996. It that although in Pakistan female employment rate is increasing but the quality of employment generated in the country is declining. The

Figure 1.1
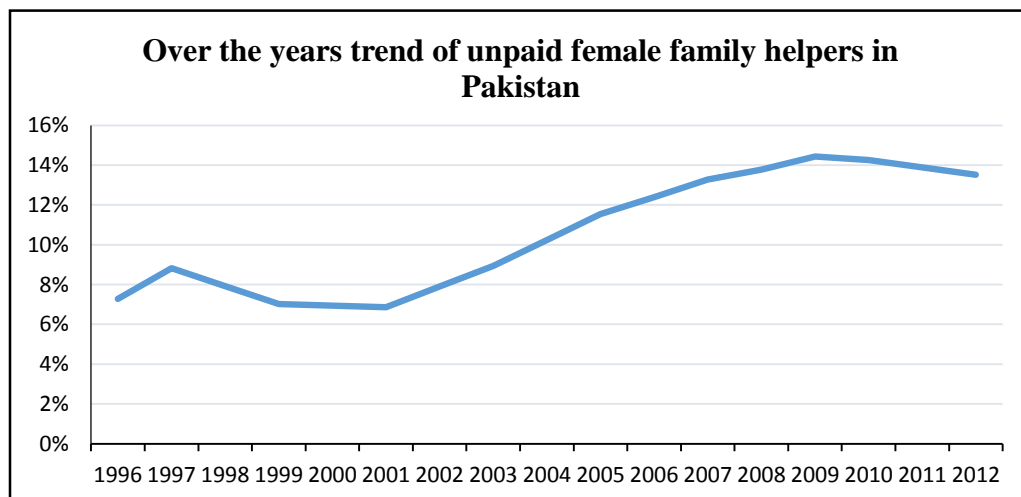
Data source: Labor force survey 1996-2012, Pakistan Bureau of Statistics

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[3] For the purpose of present study UPFFH is used to mention unpaid female family helper.

majority of these female UPFHs are engaged in the agriculture sector (LFS, 1996-2012).

The time use survey was conducted in Pakistan for the first time in 2007; results in calculating the time used on unpaid work but the importance of this time for household economy has not been estimated. However, the time use survey 2007 of Pakistan has categorized UPFHs' work as system of national account[4] activities (SNA activities); SNA activities are the range of activities included in production account. The significant increase in the number of UPFHs as shown in Figure 1.1 suggest that their work should be valued. However, it is important to understand that while saying 'assigning value to unpaid work' researcher does not mean to get an exact figure, as actually no such figure can or does exist. Rather, the purpose of assigning value to unpaid work is to present a picture of the nature of unpaid work performed by women to determine its importance and contribution for the family, society and economic production of country.

1.3   Statement of problem

UPFHs invest a large portion of their time on family business but remains unpaid. Socially they are not even considered as workers and are deprived of all the privileges a paid worker enjoys. Unpaid helpers do not have the opportunities to get into paid employment, as they are likely to lack specialized skills and specific level of education. Also, they are likely to face restriction on moving and working outside their homes. Despite the vulnerability of unpaid helpers, their share in the labor force of Pakistan has increased over the years. The issue of unpaid work needs to be thoroughly investigated. If a person is categorized under one of the status of employment and work performed by him/her is included in gross domestic product calculation, then his/her contribution in the

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[4] For the purpose of present study SNA stands for system of national accounts.

economy or household income also needs to be recognized. There is a need to examine the determinants of unpaid work as well as understand the socio-economic value of unpaid work.

1.4 Research questions

By operationalizing my research problem I have arrived to the following research questions:

1. What is the value of work performed by UPFHs? Is this value capable enough of empowering unpaid workers and bringing them in a bargaining position over household resources?

2. What are the subjective feelings of UPFHs about themselves and their work?

1.5 Objectives of the study

The overall aim of this study is to assign socio-economic value to UPFHs' work. It particularly attempts to estimate women's contribution to the household economy and social development through their unpaid work. The specific objectives of the study are:

1. To estimate the economic value of the work of unpaid female family helpers (UPFFHs);

2. To determine the contribution of UPFFHs in household income; and

3. To assign an approximate social value[5] to the work of UPFFHs.

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[5] Social value of work is a subjective measure which varies area to area. For this study, the social value of unpaid work has been operationalized as – i). Family integration brought by unpaid work, ii). Self-perception of unpaid workers about themselves and their work, iii). Empowerment of unpaid female family helpers.

1.6   Significance of study

This study would expectedly argue that undervalued and unpaid work of women is important for household economy. The researcher believes that sufficient knowledge and information about the UPFHs work and calculation of the proportion of household income come from their work will help convince people to appreciate the importance of their work. The study can also provide baseline information on valuation of' work to the future researchers. As a whole this study will problematize the unrecognized unpaid role of female family helpers as a defined status of employment in Pakistan's household economy.

1.7   Limitations of the study

Present study is an academic dissertation conducted for partial fulfilment of MPhil degree; under pressure of time bound framework and monetary constraints the sample size is small, as the study is confined to only one town of district Lahore with a sample of 200. On the other hand being a study of mix nature few generalizations has been made which can be problematic but at the same time generalizations made on the basis of some extensive data (case studies, time use survey) are more reliable. However while making such generalizations study and its implications should be context specific; patriarchal system may not be an issue in any other country but in Pakistan it is an obstacle in free mobility of women even for the purpose of education and job. Therefore, the results of the research may not be helpful in understanding the socio-economic value of UPFHs in other regions with different social, cultural and traditional backgrounds.

1.8   Directions for future research

Our research mainly focused on valuing the work of female unpaid workers. More research in needed for maintaining gender differences in value, amount and type of unpaid work performed. At the same time there is a need to understand the differences in empowerment associated to paid and unpaid work, this difference can be generated by comparing decision making and spending pattern of unpaid female workers to decision making and spending pattern other informal female workers.

1.9   Plan of the study

The study is organized in the following manner. Chapter 1 gives the brief introduction which includes background of the study, trends in Pakistan, research questions and the research objectives. In chapter 2, literature review has been presented. Chapter 3 discusses the conceptual framework (different concepts and relation of the concepts), sources of data, data collection techniques and methods of data analysis which has been utilized to carry out this study. In chapter 4, 5, and 6 results of the study have been discussed. Chapter 4 discusses the descriptive statistics and calculation of the economic value of unpaid work. Chapter 5 estimates the determinants of the economic value of unpaid work and determinants of time invested on unpaid work. Chapter 6 gives the social value of UPFFHs work by dealing with qualitative data collected through in-depth interviews. Chapter 7 is about conclusion and policy recommendations.

CHAPTER 2

LITERATURE REVIEW

Keeping in view the broader area of our research, relevant literature has been reviewed in this chapter to identify the gap in existing knowledge. The following text reviews the relevant literature in chronological order.

In the earlier studies Mesa-Lago (1969) has explained different types of unpaid labor is found in socialist Cuba such as unpaid labor by employed workers, unemployed women, students, prisoners, and military recruits. According to Mesa-Lago, two economic factors seems to stimulate the unpaid work in Cuba; one is artificial labor shortage in agriculture that is caused by rural to urban migration and other is the desire to control inflation by wage saving hence filling the labor vacuum with unpaid workers. However, unpaid labor is not always productive and some forms of unpaid labor also have negative effect. This negative effect is a consequence of low productivity of unpaid laborers' who are and therefore increase the operation cost.

Women are involved in different types of paid and unpaid work that benefits their family members. According to Papanek (1979) social standing of a family also depends on these specific types of work that effect family's relation with other members of community. This type of work is also known as 'work for family's status production'. However, status of women in the family and the social standing of the family are two independent things and improvement in social standing of family does not mean that status of women in the family will also be elevated.

A related concept of subsistence production[6] has been explained by Beneria (1982) which is more common in agricultural and less-developed countries. The idea here is that a farmer with the help of his family cultivates on a small farm of his own but he cultivates only what is sufficient for the use of his family. Although, this is an old practice but present day idea of family members especially female helping in household business/ household income and food generation activities has emerged from the practice of subsistence production.

In the very time Khandker (1987) analyzed the factors affecting labor force participation decision of women. Khandker studied 'Time use data' collected from a sample of 500 married women of rural Bangladesh has been classified into three categories namely: i) not producing cash income, ii) producing cash income in family enterprise, and iii) producing cash income outside the family enterprise. The study argued that women's decision to be a part of labor market is neither an independent choice of women nor the decision is dependent only on societal factors; it is also influenced by economic constraints. In rural Bangladesh where women are highly involved in activities for producing cash in family enterprise they work as UPFHs. It is also found that this work is substitutable to work for producing cash income outside the family enterprise. As the level of women education increases the probability of women getting involved in producing cash income outside family enterprise also increases. Women's whose husband have assets before marriage and still holds land are less likely to produce cash income both in and outside the family enterprise.

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[6] Subsistence production is the method by which mostly farmers and sometimes other workers produce enough food for their own family but not enough for sale.

Similarly Engberg, Sabry, and Beckerson (1988) have analyzed the time distribution of women living in two villages of Malawi (Africa). Their study found that women invested a large portion of their time to subsistence production. However a different trend has also been observed in households involved in tobacco production. Time investment of women of such households take a shift from subsistence production to tobacco production during tobacco production season. Women time investment on household production unit takes a new form in which what is produced is not only for the use of family but also for selling and earning.

Role stress of poor women in four developing countries including Pakistan, Bangladesh, Nepal, and Philippine was discussed by McGuire and Popkin (1990). After probing the time allocation of rural women they said poor women lack resources. When they put extra effort to fulfill one of their role, other roles get neglected. Hence, their extra effort sums up to zero and the whole process is known as engendered zero-sum game. To make it a positive-sum game there is a need of programs that address the simultaneous dual constraints faced by women: time constraint and money constraint. The study also mentioned that of among the four developing countries, the work performed by the rural women from Pakistan was most demanding and time consuming.

In their paper 'evaluating unpaid time contributions by seniors: a conceptual framework' Joshi, Denton, Gafni, Lian, Robb, Rosenthal, and Willison (1997) have discussed the identification, quantification, and valuation of unpaid time contribution by senior citizens. The paper has mentioned that unpaid work can be measured by input or output method and unpaid work can be valued by opportunity cost approach and replacement approach. However, considering the strengths and weaknesses of all the

methods Joshi et al. (1997) have identified unpaid work as any type of obligatory or non-obligatory work that holds some benefits to the recipient, the provider or the third party. For quantifying the unpaid work the best used approach is the input approach that measures the specific activities and exact duration of time spent these activities. According to Joshi et al. (1997), such types of work which can be performed by a third party (someone else for remuneration) can be valued. Canadians make a significant economic contribution to their communities through unpaid work but due to the issues in assessing value of unpaid work their work is not valued.

There is no inherent trait in any type of work that make it paid or unpaid. All the types of work can be paid or unpaid on the basis of historical and local contexts that vary from area to area. All the activists and academics use the concept of unpaid work from their own angle while focusing on specific part of population or policy issues. Women-in-development experts consider subsistence production and domestic production as an important part of economic growth. Gender equality experts advocate for equal distribution of paid employment and unpaid care work between women and men. Welfare experts who want an appropriate place for volunteer work in the society advocate for the recognition of socially useful activities. Policy-makers has been advocating for 'workfare' to solve the problems of unpaid workers by putting money into their work hence declining unemployment. All of the above are views of different actors about unpaid work. United Nations has provided a platform to all these actors to spread their views but still there is lack of a shared body of knowledge. The issue of unpaid work from a gender perspective needs to be addressed prior to all other issues but it cannot be assumed that eliminating gender issue would disappear all types of unpaid work. There are certain type

of human needs that are met by non-market activities. Therefore, unpaid work should be studied from all different perspectives and should be recognized as an important element in socio-economic policy making (Swiebel, 1999).

According to Sathar and Kazi (2000) gender system determine the forms of relation between men and women in each society. Gender system in Pakistan favors men over women where all the major decisions are taken by men and older people. Women educational attainment, employment opportunities and market approach abilities are limited which leaves them with no option except becoming a part of family business which is largely unpaid. In their work, 'Pakistani Couples: Different Productive and Reproductive Realities', Sathar and Kazi (2000) look closely at production and reproduction spheres of rural people. Findings shows that husbands of women doing paid job admire the role of their wives in household income as compare to women doing unpaid contributing work. Relationship between education attainment and unpaid work is negative and U-shaped; uneducated women are at the highest risk of being a part of unpaid employment which falls with the years of schooling. Women with paid employment have greater mobility and decision making authority as compared to women who are not involved in any economic activities or who are involved as unpaid workers.

Sirianni and Negrey (2000) construct the idea that the time distribution between household labor and market labor is based on gendered social pattern of each society which is usually unequal. Women gave more time to household labor and their market labor is undervalued as compare to men. They also said that the assumption that if women enter in paid market labor then the burden of unpaid work on them will get lesser is wrong; as in United States where work dimensions transformed to get women into

market labor but domestic work, which include child care work and unpaid family work, is still women's domain. Women have triple burden as they have to provide domestic work, their own paid work and in the third shift they have to provide unpaid family work. So introducing women to paid market labor is not the way to bring women of unpaid market labor.

While analyzing the factors that affect the women's decision about participation in economic activities Naqvi and Shahnaz (2002) noted that education is a significant factor that increases the chances of women to get involved in paid jobs. On the other hand, women coming from rural families and from families whose head is illiterate and working as UPFH have greater chances of getting involved in low paid jobs.

According to De-Vaus, Stanton, and Gray (2003), if a country has more aged population it is supposed that financial cost of government is high due to income support to the older population. However, while considering the financial cost of older population, the support of older population to the welfare of the country is ignored. The study explored the contributions older Australians made to their society through unpaid caring work. This unpaid caring and voluntary work holds economic value measured by time use survey. Study estimate that Australian aged 65 years and above contribute about $39 billion per year and Australians aged 55 to 64 years contribute about $35.5 billion per year through their unpaid care and voluntary work.

Hewitt, Western, and Baxter (2005) used the Australian data of the project titled 'Negotiating the life course 1996/97', for analyzing the role of marriage in determining the wage of men and women. Study found that the material status of women is not an important indicator in determining the wage earned. However, study revealed that find

for men there is a positive relation between being married and wage earned; married men earn 15 percent more than unmarried men, as they receive unpaid service from their female partner.

According to Brooks (2005), feminists have consensus about the issue of unpaid work but the issue is still ignored among tort[7] law scholars. Feminists are struggling to reach a single method of valuing unpaid work since last twenty years. The article sheds light on the importance of Fobel v. Dean as a defining moment case of value of unpaid work. Fobel was an unpaid worker, performing half of the family business work and majority of the household work. Suddenly she encountered two major injuries while performing her unpaid work. Foble v. Dean get into a case on damage awards in tort for women unpaid work while using replacement cost approach of valuing unpaid work. Fobel's case expands the criteria of tort and make it consider impairment of household seriously without making distinction on the basis of place of work (home or market). Fobel claims the compensation for loss should come to unpaid workers directly and not to their immediate family. The study also concluded that more methods of valuing unpaid work should be tested by tort.

According to Philipps (2008), unpaid market labor is a form of economic activity. It should not be considered a sub-category of unpaid care and domestic work, nor as a type of participation in labor market. In Canada court has encountered a number of cases asking for relief in income tax by claiming a portion of their income is associated to unpaid family workers and unpaid work has no associated income tax. This policy has its dual implications on one side tax payers' use it to get relief from some portion of income

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[7] A tort, is a civil wrong that unfairly causes someone else to suffer loss or harm resulting in legal liability for the person who commits the tortious act.

tax by associating the portion of income to the work of unpaid family workers. Besides, on the basis of being unpaid /nontaxable work revenue authorities think that unpaid work is a personal, family activity and is not related to the earning of income. Like in the case of family businesses where business owner have to pay tax and splits the profit of his business between family members to get it taxed at a lower rate, again in such cases courts have to decide whether the family member actually provide business related services by observing their division of time between different tasks, their movement areas and business activity area. This article discusses different challenges faced by feminist political economy while theorizing unpaid market labor.

In a report, "The economic contribution of Pakistani women through their unpaid work", Arshad (2008) consider household work (care taking of elders and children, bringing water, cleaning, and cooking) as unpaid work. The objectives of research were to take a picture of women's unpaid work in rural and urban areas, to estimate the worth of women's unpaid work and to get familiar with women's own feelings about their unpaid work. Quantitative and qualitative data has been collected from a sample of 647 women living in six rural areas of Mansehra district and one urban area of Rawalpindi district. The study found that if works like care taking of elders and children, bringing water, cleaning, and cooking are out-sourced it would cost PKRs 4000/month and PKRs 2150/month for rural and urban households respectively every month. These findings did not take into account the fact that value of different types of household work vary from area to area. The study conclude that women of Pakistan contribute about 23.3 percent of GDP of Pakistan.

According to Pupo, and Duffy (2012) there are multiple forms of unpaid work for example household work, care taking work, help in family business, and volunteer work. Volunteerism is a newer type of unpaid work, usually youth gets involved in volunteer work with the hope of getting paid job after completing their volunteer work. The key dimensions that interplay between unpaid work and social inequality are: there is some sense of coercion, compulsion or requirement in unpaid workers; the same work is paid somewhere else in the economy; and, the participation in unpaid work is directly related to socially constructed power structure of the society.

The reviewed literature shows that many studies exist which measure the time invested by UPFHs on family business. Literature also shows that work performed by UPFHs is equally important as paid market work but their work is often confused with domestic work or unpaid care work. However, we were unable to find any such study conducted in Pakistan which assigns economic value to the work of UPFHs. Nevertheless, few international studies exist that assign economic value to child care and domestic work of women. Measuring social as well as economic value of UPFHs' work is missing in existing literature and policy studies between literature and policy making.

CHAPTER 3

CONCEPTUAL FRAMEWORK AND RESEARCH METHODOLOGY

3.1 Conceptual framework

International agreements like millennium development goals and sustainable development goals have been designed to achieve a minimum standard for population of world nations. As the *'Goal 8'* of sustainable development goals is about promoting inclusive and sustainable economic growth, employment and decent work for all, including women and young people, it directly addresses the issue of UPFHs. According to ILO almost half of the developing world workers especially women with fewer job opportunities are trapped in vulnerable jobs (Efroymson, 2010).

Figure 3.1 shows that the increasing trend of vulnerable employment needs to be seen in institutional context. World nations are signatory of international agreements while at the same time they want to maximize their profit so as to maintain their power relation. All the major institutions of a society such as **political, economic, and education systems** support one another in maintaining their profit maximization and consequently increasing inequalities for poor. **Labor regulations** formed by political, economic and education system controls the entrance of labor into the labor market (divide the population into **employed and unemployed** population) especially formal labor market (divide the employed population into **formal and informal** labor). Here **political system** is understood in a broad sense that include all the actors that are meaningful for understanding the social context of a country such as political parties,

trade unions, employer associations, and civil society organizations (Benach; Muntaner;

&   Santana,   2007).

Figure 3.1: Conceptual framework of socio-economic value of UPFHs work

| Political power system | Economic power system | Education power system |

| Social & family network |
| Personal characteristics Level of education, Level of skills, & |
| Labor market policies |
| Unemployed |
| Employed |
| i. Formal |
| ii. Informal |
| Material deprivation & economic inequalities |
| Society and culture |
| Gender discrimination |
| Employers |
| Employees |
| Self employed |
| Unpaid family helpers |
| Avoiding tax |
| High risk of encountering poverty |
| No direct payment |
| Vulnerable work |
| Help in family business |
| Economic contribution |
| Grains for family use |
| Family integration |
| Working together |
| Help in household chores |
| Household decision making & spending |
| Self needs |
| Child needs |
| Family needs |
| Community needs |

Basic causes   Underlying causes   Immediate causes   Immediate outcomes   Underlying outcomes

Source: The framework is established by the researcher on the basis of reviewed literature of Benach et al., 2007; Chen et al., 2005; Swiebel, 1999; Nalishebo, 2013; Beneria, 1982; Philipps, 2008; Papanek, 1979

Formal capitalist firms and trade unions support such policies that indirectly involve informal labor and promote privatization of economic system in order to reduce their cost of labor by bringing in sub-contracting work that is available at cheap rates **(radicalism) (structuralism)** (Chen et al., 2005; Benach et al., 2007). Formal market demands labor with certain specific skills and training; which poor people are incapable of demonstrating. Consequently, the disadvantaged group is systematically driven out of the formal market and pushed into the informal market. The formal market exploits these workers with low wages and bad working conditions **(dualists).** On the other hand, are the **micro-entrepreneurs who avoid taxes and regulations** by splitting their profits between family members **(legalists)** (Chen et al., 2005).

The conceptual framework shown in Figure 3.1, shows that micro level factors are also potential cause for few types of works to be unpaid. One of the micro level factor is **social and family network** that explains why a type of work is paid for someone and unpaid for others in the same family. For example, UPFHs are usually unskilled workers doing menial jobs as these jobs are closely related to work done by women in their home. However, there are individuals who get paid for the same work (for being male and for being head of household). Social and family network has made a divide between work done within home and outside home on the basis of **gender**; females are confined within the boundaries of home and males are supposed to work outside home. The second type of micro level factors include a nexus of: **gender, class, material deprivations and economic inequalities**; on which people are exploited and discriminated, as they are controlled by the powerful (Benach et al., 2007). The third type of micro level factors are **personal characteristics** of people including the level of education they have, level of skills they have, and their health

condition, which may be linked to under valuing of some workers. Hence, this indicates that it is not any inherent trait that make some work paid, underpaid and unpaid (Swiebel, 1999).

All of these institutional and micro level factors led towards undervaluing specific types of work usually performed by women. Women in informal employment: globalizing and organizing has categorized unpaid helpers below all other statuses of informal employment **(employer, employees, self-employed and UPFHs)** with highest risk of **encountering poverty and vulnerability for being unpaid** (Chen et al., 2005; Nalishebo, 2013). Vulnerability is defined as the probability or risk of being in poverty today or falling into deeper poverty in the future (World Bank, 2011). Poverty and vulnerability are negative and immediate outcomes of unpaid employment, however unpaid work also have positive underlying outcomes as they contribute to the economic growth **(neoliberalism).** Therefore, there must be basic infrastructure and social service for informal economy to operate **(liberalism)** (Benach et al., 2007).

Concept of subsistence production explains that UPFHs help their family members **on small farms**, to produce for the use of their family (Beneria, 1982). Philipps (2008) said unpaid market labor is a form of **economic activity** as UPFHs help in generating and saving family income. If UPFHs do not work for family enterprise they may have employed a paid employee for the work to get done. According to Papanek (1979) **social standing** of a family also depends on these specific types of work that effect family relation with others' in community and also effect the relation of family member's with one another. Informal work hence provides the place where family members integrate and **help each other** and provide **social and emotional support** to deal with family issues.

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Keeping in view this complex interplay of various factors given rise to few important queries. The first question that arise pertains to the income earned by UPFHs (What is the amount earned by UPFHs?). Secondly, whether the amount earned by UPFHs is sufficiently enough for UPFHs to earn them a decision making role in the family (is the earned amount sufficient to make unpaid helpers involve in household decision making and spending?). These are the two questions that have been explored in this study.

3.2   Methodology and methods

3.2.1 Difference between methods and methodology

Methods and methodology are often used interchangeably however these terms are different in nature. Methodology is the logic of research, how to find out about things, and how to gain knowledge whereas the tools, techniques and process used for obtaining this knowledge are research methods.

3.2.2 Research methodology

"Methodology connotes a set of rules and procedures to guide research and against which its claims can be evaluated" (Miller & Brewer, 2003, p.192). Different types of methodological approaches exist such as: i) qualitative approach, ii) quantitative approach, iii) correlational/regression analysis approach and iv) meta-analysis approach. For the present study a combination of different approaches have been employed, a combination of two or more than two approaches is known as triangulation or mixed method approach. Creswell (2013) describes triangulation or mixed method approach as follows, "triangulation is an approach to inquiry that combines or associates both qualitative and quantitative forms of research" (p. 203). According to Miller and Brewer (2003) methodological triangulation is of two types: between method triangulation and within method triangulation. In the present study

between method triangulation has been employed in which three different research techniques (qualitative, quantitative and correlational analysis) are combined together to increase the strengths of each other.

UPFHs usually help in their family business to increase family income or to save family assets which otherwise might have been used for hiring additional labor. It is difficult to gain a complete picture of unpaid family workers work as women themselves tend to underestimate their work. The work of UPFHs is economically and socially valuable for their family; the present study has been designed to find that value of unpaid work.

3.2.2.1   Economic value of unpaid work

Economic value is generally measured in relative units of currency. Literature shows that economic valuation of unpaid work can be done through two types of methods; one is "direct" or "output" method and other is "indirect" or "input" method. Output method is based on measuring the output produced by directly observing their value or price[8] and their quantity. Input method is based on valuing output produced in term of its cost of inputs and it requires information about the time spent on unpaid work (De-Vaus et al., 2003). For the present study the input methods has been adopted where time-based values obtained from the time use study are converted into a monetary equivalent.

Time use survey contain a range of information on demographic, household characteristics, human capital, and detailed information about time use for a complete

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[8] For full output-based valuation one needs (a) the output of the service, measured in physical units; (b) intermediate consumption, and (c) market prices for the physically-measured items referred in (a) and (b)

day using time use diary. All the activities reported by 200 respondents on time use diary are categorized into ten broad categories:

1) Employment for establishments, for example help a family member who is employed in a factory and bring his work to home.

2) Primary production activities, for example help family members in growing maize or other vegetables on a household plot or collecting fuel and water.

3) Services, for example help a family member in selling fruit and vegetables at the side of a road, or doing hairdressing at home.

4) Household maintenance, for example cooking and cleaning.

5) Care provision, for example caring for children, the sick, or elderly in the household.

6) Community service, for example attending a political meeting or helping other households.

7) Learning, for example attending school or doing homework.

8) Social and cultural activities, for example socializing with family or friends.

9) Mass media use, for example watching television or listening to the radio.

10) Personal care, for example sleeping, eating and drinking, dressing, and washing.

These ten categories are then grouped into three broad groups of national account system given by Pan American Health Organization, 2010, the groups are as follows:

1) The activities in categories 1–3 fall in the SNA activities; SNA activities are the activities whose production is included in GDP calculation.

2) The activities in categories 4–6 fall in extended SNA activities; extended SNA activities are those activities who have production but their production is not included in GDP calculation.

3) The remaining four categories fall in non-SNA activities; non-SNA activities are regarded as nonproductive actives.

For the purpose of present study, the SNA activities group and its categories are of specific importance.

Time use diary divides 24 hours of a day into 48 slots each of 30 minutes. Information on different dimensions for each slot has been collected such as what was the activity, when it started, when is ended, anything else done at the same time, where the activity took place and if someone else took part in activity. The overlapping of activities or simultaneous activities is an important issue to be discussed. For a single time slot of time use diary if a person has reported two or more activities we consider them as overlapped activity. Activities like tending animals and collecting fuel, firewood or dung and travel related to primary production are the activities mostly overlapped or occur simultaneously with activities like crop farming, socialization and community services. In such a case we inquire from the respondent which one is the major time consuming activity and consider it as primary activity and other activity is considered as secondary activity. This ranking is often context specific without any universal rules. Hence calculating the exact time for overlapped activities is a difficult task. Context specific time calculation of overlapped activities makes it difficult to compare the results with other studies. While allocating time to primary and secondary activities an 80:20 proportion has been used; 80 percent time is allotted to primary activity and 20 percent time to secondary activity. After

collecting the field data primary and secondary activities reported in time use diary have been categorized and coded according to the activity and coding list given as Annexure B that is a reformed form of Pakistan time use survey 2007 activity and coding list. The same activity can be coded differently according to the purpose of the activity recorded in the time use diary.

Time use surveys estimate the number of hours spent on unpaid work, next we have to convert these hours into a monetary value and for this reason we have to assign an hourly wage to time spent. Many approaches are used to assign value to unpaid work. Four major approaches are: i) mean wage approach, ii) opportunity cost approach, iii) generalist approach, and iv) specialist approach. For the present study specialist approach has been used which "assigns different wages to different activities, regardless of who performs them. In each case, the paid worker whose functions and circumstances most closely match the unpaid work concerned is chosen" (Pan American Health Organization, 2010, p. 60). List of specialist cost for all the activities involved in the present study has been given in Table 4.5, where per hour specialist cost is mentioned by C_{ag}. The list has been developed by inquiring and observing per hour payment for each activity in the local community if a labor is hired for the same activity. For example, cooking activities have been assigned the wage of a chef in the local community, handicrafts production have been assigned the value at which the same labor in available in the local community and so on.

According to Pan American Health Organization (2010) after calculating the time spent on unpaid work on daily basis and per hour specialist cost of each unpaid work; the economic value of unpaid work can be estimated by using the following formula:

$$VUW = \Sigma_g \, \Sigma_a \, [P_g \; x \; DUWH_{ag} \; x \; C_{ag}] \; \ldots \ldots \; (i)$$

Where *VUW* is the estimate of the value of unpaid work;

- P_g is the number of people in each group (g) of the sample;

- $DUWH_{ag}$ is the daily average of unpaid working hours in the activity (a) by people in the group (g); and

- C_{ag} is the wage per hour of the activity (a) carried out by people in the group (g).

Considering three major categories of SNA activities _ employment, primary production activities and services the above equation can be restated as:

$$VUW = [P_{g1} \times AUWH_{ag1} \times C_{ag1} + P_{g2} \times AUWH_{ag2} \times C_{ag2} + P_{g3} \times AUWH_{ag3} \times C_{ag3}].....$$

(ii)

- Where *g1* is group of people involved in employment;

- *g2* is group of people involved in primary production activities;

- *g3* is group of people involved in services.

After calculating the value of unpaid work the percentage share of UPFHs in total per year income of the household has been estimated by using this formula:

$$PSUW = AVUW \div AHI \times 100...... (iii)$$

- Where *PSUW* is the percentage share of UPFFHs in household income;

- *AVUW* is the average income from unpaid work;

- *AHI* is the average household income per year.

3.2.2.2   Determinants of time invested on unpaid work and determinants of UPFHs' contribution to household income

Subsequently multiple simple linear regression has been used to find the determinants of time invested on unpaid work and determinants of UPFHs'

contribution to household income. This analysis has helped us to find the relationship between different dependent and independent variables.

The functions are

$$TIME = \beta_0 + f(X_1............X_n) + \varepsilon........ \text{(iv)}$$

$$PERSHA = \beta_0 + f(X_1............X_n) + \varepsilon.......... \text{(v)}$$

Where *TIME* is the time invested by UPFFHs in SNA activities on daily basis and *PERSHA* is the percentage share of UPFFHs in household income. β_0 is the constant and $X_1............X_n$ are the independent variables. Independent variables are divided on three levels; individual, family and community. Definitions of these variables have been presented Table 3.1.

Table 3.1: Definitions of Variables

Dependent Variables	
Financial share of UPFFHs in household income	Per year percentage share of UPFFHs in household income. This share can be any number between 0 - 100.
Daily time invested by UPFFHs in SNA activities	Time spent by UPFFH in household business/ household income generating activities on daily basis. This time is measured in hours and minutes (Hours: Minutes).

Independent Variables	
Individual level variables	
Age	Age of the UPFFH (respondent) in completed years.
Education	Education of UPFFH (respondent) which is categorized into three categories namely illiterate, under matric and matric and above. Each category is represented in form of a dummy variable. UPFFH is categorized as illiterate if she did not get any formal education and the dummy=1 if UPFFH is illiterate, 0 otherwise. UPFFH is categorized as under matric if her level of formal education is below matric and the dummy=1 if UPFFH is under matric, 0 otherwise. UPFFH is categorized as matric and above if her level of education in matric or more than matric and the dummy=1 if UPFFH is matric and above, 0 otherwise.
Marital Status	Marital status is measured by a dummy variable where it takes value 1 if UPFFH (respondent) is married, and zero otherwise.
Family level variables	
Household headship	Household headship is measured by a dummy variable where it takes value 1 if UPFFH (respondent) is from male headed household, and zero otherwise.
Type of family	Type of family is measured by a dummy variable where it takes value 1 if UPFFH (respondent) is from nuclear family, and zero otherwise. Nuclear family: A family composed of one or two parents and their children. Joint family: A family composed of parents and children as well as other kin.
Number of household members	Continuous measure of people living in the household of UPFFH (respondent).

Number of household earners	Continuous measure of earning people living in household of UPFFH (respondent).
Livestock ownership	It is measured in adult cow equivalent units. The detailed information of cow adult equivalent units is given in Appendix B (Table 1), and specifically livestock holding calculated as follows. Livestock Holding= $W_1A_1 + W_2A_2 + W_3A_3 +…..+ W_nA_n$ A_i=Number of animals of type "I" owned by household, W_i=Weights or Score recommended by Government of Punjab, Livestock and Dairy Development Department.
Land ownership	Land ownership is measured by a dummy variable where it takes value 1 if household of UPFFH (respondent) own land, and zero otherwise.

Community level variables

Area	Location of the household whether it is near to big city or away from city. Area is measured by a dummy variable where it takes value 1 if household of UPFFH (respondent) is near large city, and zero otherwise.

3.2.2.3   Social value of unpaid work

The methods explained above are used to measure the economic value of unpaid work, determinants of time invested in unpaid work and percentage share of UPFHs in household income. Measuring the social value of unpaid work is of particular importance as there is no single definition of 'social value'. Social value is a broader concept which includes all non-financial impacts of work, including care taking of individual, their communities, societies and environment. It is difficult to quantify and measure; therefore usually known as "soft outcomes" of work (Budlender, 2011; Mulgan, 2010).

Last part of the present research is about estimating social value of unpaid work of UPFFHs. Social value is a subjective concepts which is inevitable to be operationalized in order to reach a working definition. For the present study social value of unpaid work has been operationalized under the indicators like,

- family integration;

- self-perception of unpaid workers about themselves and their work; and

- empowerment of unpaid female family helpers.

Empowerment is also a subjective concept which is operationalized into various working definitions. For the present study following the operationalized definition of empowerment constructed by Shrestha and Chhetri (2001) and Arshad (2011) for their work on women we have operationalized empowerment under the following indicators:

- decision making and spending for self needs,

- decision making and spending for children needs,

- decision making and spending for family needs, and

- decision making and spending for community needs (Arshad, 2011).

Responses of UPFFHs have been recorded and analyzed on four levels of participation ranging from full participation to no participation, where

- Level 1 is self-decided (participation in household decisions without any influence of family);

- Level 2 is jointly decided (participation in household decision with some but less than decisive influence);

- Level 3 is participation in household decision with greater influence of family members; and

- Level 4 is no participation or participation with total influence of family members.

3.2.3 Data sources

According to Miller and Brewer (2003) data sources are of two types such as, primary data sources and secondary data sources. "Secondary data analysis involves the analysis of an existing dataset, which had previously been collected by another

researcher, usually for a different research question. The collection of original data by a researcher is called primary data collection" (p. 285). The present study is mainly based on primary data collected by the researcher through time use survey and in-depth interviews. However data sets produced by time use survey of Pakistan 2007, Labor Force Survey (1996-2012), and Pakistan Social and Living Standard Measurement Survey (2012-2013) have been used as secondary data to compare and strengthen the findings of current study.

3.2.4 Research design

"Research design is the model used by the researcher to discharge 'the burden of proof' - the logical organization that allows him or her to feel that whatever they have done in their research allows them to reach valid conclusions" (Miller & Brewer, 2003, p. 262). Considering our research questions and objectives, we have used descriptive-explanatory research design. A descriptive-explanatory research design enables the researcher to obtain "a picture of the specific details of a situation, social setting, or relationship" (Neuman, 2000, pp. 21-22).

The present study has employed descriptive research design for several reasons; i) economic valuation of UPFFHs work is based on time use statistics; how do the sampled UPFFHs spent their time on the previous day of their interview is a descriptive measure, ii) the fact that the rational underlying the unpaid and unrecognized nature of UPFHs work needs to be identified and described, and iii) my research also demands to construct a relation between value of unpaid work and empowerment of unpaid workers, where social value and empowerment both are subjective measures.

3.2.5 Population

All unpaid female family helpers (UPFFHs) living in Pakistan are the total population (universe) of the study. The sampling frame is informal, a resource from which a researcher can select a smaller sample size based upon expert judgements. Hence, all unpaid female family helpers (UPFFHs) living specifically in district Lahore are included in sampling frame for this study.

3.2.6 Sampling

"Sample is a small group that is assumed to be related to the population from which it is drawn" (Best & Kahn, 2006, p. 356). "The logic of using a sample of subjects is to make inferences about some larger population from a smaller one - the sample" (Berg, Lune, & Lune, 2004, p. 30). Bryman (2015) explains population as "the universe of units from which the sample is to be selected" (p. 187).

Sample can be selected from the population using two types of procedures namely probability and non-probability sampling procedures. The current study has used probability sampling method. Sarantakos (1998) states that "probability sampling employs strict rules in the selection process that every unit of the population has an equal, calculable and non-zero probability of being selected for the sample" (p. 141)

3.2.6.1   Sampling technique

Probability sampling is highly reliable and its results have high degree of representativeness. There are many types of probability sampling techniques including simple random sampling, systematic random sampling and stratified random sampling. In the current research stratified random sampling has been employed for the selection of sample.

"Stratified random sampling is a special form of simple or systematic random sampling, in which the population is divided into a number of strata and a sample is drawn from each stratum. These subsamples make up the final sample of the study" (Sarantakos, 1998, p. 145). The study has used stratified random sampling as first the target population is divided into four strata on the basis of their geographical distance from the city of Lahore; starting with an area located in the periphery of Lahore city and ending with a community located at about a distance of 7 kilometers from the city of Lahore. The sampling frames for each of the four strata has been developed. Fifty respondents from each of the four communities have been selected by employing simple random sampling technique that sums up to a total of 200 respondents. Four most informative families (one from each strata) have also been selected by us as case studies for qualitative data collection.

3.2.6.2   Sample size

According to Best and Kahn (2006), "the ideal sample is large enough to serve as an adequate representation of the population about which the researcher wishes to generalize and small enough to be selected economically – in term of subject availability and expense in both time and money" (p. 19). Keeping in view the time frame, money constraints, and convenience of the researcher a sample of size 200 has been employed for the present study.

3.2.6.3   Sampling unit

Sampling unit can be an individual, group of people, process, or entity which is explored by the researcher to get information relevant to his/her research topic. The units of sampling for present research are individuals; specifically individuals aged 15+ years and helping in household income generation without getting paid and living in the locale of the study.

3.2.7 Data collection tools

Blaikie (2000) has defined methods of data collection as "the techniques or procedures used to collate and analyze data" (as cited in Grix, 2010, p.30). Data can be collected from primary or secondary sources and according to the sources of data the techniques of data collection vary. The present study has used triangulation research strategy (combination of qualitative, quantitative and correlational research strategies); hence multiple methods are used to collect information for the current research. Detail of methods used for collecting data for current study is as follows:

3.2.7.1   Time use survey

"Time-use survey makes statistics that are quantitative summaries of how individuals "spend" or allocate their time over a specified period - typically over the 24 hours of a day or over the 7 days of a week. These time-use statistics shed light on: i) what individuals in the reference population do or the activities they engage in, and ii) how much time is spent doing each of these activities" (United Nations, 2005, p. 05).

The time use survey has been used as the major data collection technique for present research; and for this reason a structured questionnaire of five sections have been developed (shown in Annexure A). The sections of questionnaire are as follows:

1) Demographic profile

2) Household roster

3) Family assets, durables and sources of income

4) Time use survey diary

5) Household decision making and spending

The questionnaire was tested on 10 UPFFHs. Changes in questionnaire were made in light of their responses and field experience for final data collection. About 210 UPFHs have been visited and interviewed on the established questionnaire out of which 10 questionnaires have been excluded due to missing information.

3.2.7.2 Case studies

In the book entitled the A-Z of Social Research, a case study has been defined as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used" (Yin, 1989 cited in Miller and Brewer, 2003, p.22). A case may refer to an individual, several individuals together, an event or an entity. Different sources of data for conducting a case study are: direct observation, participant-observation, interviews, and physical articles.

In the present study four case studies have been taken; one from each sampled community. Here each case refer to two persons one is UPFH and other is the head of UPFH household. Sources of evidence used are unstructured interview and participant observation. "Unstructured interviews are based on a clear plan that the researcher keeps constantly in mind. These interviews however are characterized by a minimum of control over the informants' responses. The idea is to get people to open up and let them express themselves in their own terms and at their own pace" (Bernard, 2011, p.211). "Participant observation is the observation of a setting by a researcher who becomes a participant in the social situation being observed" (Best & Kahn, 2006, p. 259). In this research the use of participant observation started at the phase of entering community and continued throughout the process of data collection from all of the four sampled communities.

3.2.8 Locale of the study

The larger area (district) covered for the study is district Lahore. Within the district Lahore, four different areas located between Shahdra Lahore and Sheikhupura has been selected. Name and specifications of all the four areas are a) "Thatta Akber Shah" also known as *"Major Riaz Da Dera"* is an area of Kot Abdul Malik, b) Rehmanabad is also an area of Kot Abdul Malik c) Deen Pura also known as *"Haji Hayat Da Dera"* is an area of Kot Abdul Malik, located at a distance of about 3 kilometer from Lahore and the people of this area are known as "Deen Dar (religious) people" and d) Mustafabad is an area of Shadara Lahore which is a periphery of city of Lahore. Since these are not homogenous groups and for the present study it is difficult to identify and locate the sample therefore as mentioned above the study has adopted stratified random sampling technique to select individuals aged 15+ years and helping in household income generation without getting paid. While working in these areas we were able to collect very useful information to answer research questions.

CHAPTER 4

DESCRIPTIVE STATISTICS OF UNPAID FEMALE FAMILY HELPERS AND ECONOMIC VALUE OF THEIR WORK

This chapter carries out a descriptive analysis of the activities done by the sampled UPFFHs with reference to their type of work. It also measures the percentage contribution of UPFFHs in household income. For preserving the clarity of concept while comparing our results with previous studies we have termed our survey as 'unpaid family helpers' survey' now onward.

4.1 Descriptive analysis

Activities of individuals are classified into three broad categories, namely SNA activities, extended SNA activities and non-SNA activities (Saqib & Arif, 2012). SNA activities are the activities whose production is included in GDP calculation, extended SNA activities are those activities whose production is not included in GDP calculation and non-SNA activities are regarded as nonproductive activities (Pan American Health Organization, 2010). We have classified all the activities reported by 200 primary respondents in categories and sub-categories of the national account system. Specifically, the SNA activities and their sub-categories are considered for the present section of assigning economic value to unpaid work.

Table 4.1 shows there are three categories of SNA activities _ i) employment, ii) primary production activities and iii) services. Analysis of unpaid family helpers' survey shows that out of 200 sampled UPFFHs, 50 percent are involved in services, 32 percent of the respondents are involved in employment and only 18 percent are involved in primary production activities (Table 4.1). Within the category of services

the sub-category named, making and selling of textile and related craft has the highest percentage of respondent (35 percent). Similarly, within the category of employment the sub-category named, home-based work for an establishment secures second position with a percentage of 24 percent respondents.

Table 4.1: Percentage distribution of the sampled UPFFH by the type of activities (SNA only)

Type of activities	(N)	(%)
Employment	**63**	**32**
Home-based work for an establishment	47	24
Domestic and personal services produced by domestic work	4	2
Employment in establishment	12	6
Primary production activities	**36**	**18**
Crop farming and market gardening: planting, weeding, harvesting, picking	36	18
Services	**101**	**50**
Food processing and preservation activities: grain processing, butchering, preserving, curing	2	1
preparing food and beverage preparation, baking, confectionery and related activities	10	5
Making and selling textile and related craft: weaving, knitting, sewing, embroidery	71	35
Leather and related craft: weaving, knitting, sewing, shoemaking, tanning, products of wood	13	7
Services provision such as computer services, transport, repair of vehicles, baby-sitting, and massages.	3	2
Services for income and other production of goods not elsewhere classified	2	1
Total	**200**	**100**

Source: Unpaid family helpers' survey conducted by researcher

Table 4.2 displays the percentage distribution of the sampled UPFFHs by different age groups, level of their educational attainment, marital status, type of family and family headship. Unpaid family helpers' survey shows that old workers are less likely to be among UPFFHs relative to young ones as the figures in Table 4.2 reveals majority of the respondents belong to age groups 15-24 years and 25-34 years; 52 percent and 28 percent respectively. The age group 35 years and above has the smallest proportion 21 percent of respondents. A similar trend has been observed by Ahmad (2011) in his micro-data analysis of Pakistan labor force survey 2006-2007; age group 15-19 hold the highest percentage of UNFHs with a decreasing trend over the age years. Appendix A (Table 1) shows that a similar trend has been observed in

Pakistan Bureau of Statistics (2012) data of Punjab province; percentage of UPFFHs decreases with the increase in age however the decrease is not as sharp as observed in unpaid family helpers' survey.

Table 4.2: Percentage distribution of UPFHs in type of activities by age, education, marital status, type of family and family headship

	Types of activities			Total (%)
	Employment (%)	Primary production activities (%)	Services (%)	
Age	**31**	**18**	**51**	**100**
15 to 24 Years	15	10	26	52
25 to 34 Years	10	4	14	28
35 Years and above	6	4	11	21
Education	**31**	**18**	**51**	**100**
Illiterate	14	15	29	58
Less than matric	11	3	16	31
Matric and above	6	0	6	12
Marital Status	**31**	**18**	**51**	**100**
Others (Unmarried/ divorced/ widowed)	17	6	21	44
Married	14	12	30	56
Type of Family	**31**	**18**	**51**	**100**
Nuclear family	20	8	32	60
Joint family	11	10	19	40
Family Headship	**31**	**18**	**51**	**100**
Male headed household	29	16	45	91
Female headed household	2	2	6	9

Source: Unpaid family helpers' survey conducted by researcher

Education is the basic element in determining the employment status of population. As the level of education increases people start moving towards paid employment. Table 4.2 shows that, according to unpaid family helpers' survey more than half (58 percent) of sampled UPFFHs are illiterate, almost 31 percent end up with education below matriculation and only 12 percent had educational level above matriculation. Appendix A (Table 2) shows that a similar trend has been observed in Pakistan Bureau of Statistics (2012) data of Punjab province; percentage of UPFFHs decreases with the increase in the level of education they attain.

Unpaid family helpers' survey has classified marital status as married and others (unmarried, divorced and widowed). Distribution of UPFFHs across married and others shows that marital status is not a significant indicator in determining the percentage of UPFFHs. As Table 4.2 shows that according to unpaid family helpers' survey 44 percent respondents were unmarried and 56 percent respondents were married with only a slight difference of percentage in both categories. However, Appendix A (Table 3) depicts that in female specific data of Pakistan Bureau of Statistics (2012) for Punjab province married women are more likely to work as UPFHs than the unmarried women.

Type of family is classified as nuclear family and joint family. Unpaid family helpers' survey shows that type of family is not a significant indicator in determining the percentage of UPFFHs. As Table 4.2 shows that 40 percent of the respondents were from nuclear family and 60 percent respondents were from joint family with a difference of 10 percent in both categories.

Head of households are generally male in Pakistani society with a small proportion of female headed households (Ahmad, 2011). Unpaid family helpers' survey shows that the percentage of sampled female headed households 9 percent is too small to compare with the percentage of male headed households 91 percent as depicted in Table 4.2. Appendix A (Table 4) shows a more descriptive form Table 4.2.

4.2 Economic value of UPFHs' work

The main objective of this study is to estimate an approximate economic value of UPFFHs work and their percentage contribution in household income. According

to Pan American Health Organization (2010) unpaid work can be valued by using this formula:

$$VUW = \Sigma_g \ \Sigma_a \ [P_g \ x \ DUWH_{ag} \ x \ C_{ag}] \ ...... \ (i)$$

Where *VUW* is the estimate of the value of unpaid work;

P_g is the number of people in each group (g) of the sample;

$DUWH_{ag}$ is the daily average of unpaid working hours in the activity (a) by people in the group (g);

C_{ag} is the wage per hour of the activity (a) carried out by people in the group (g).

Considering three major categories of SNA activities _ i) employment, ii) primary production activities and iii) services the above equation can be restated as:

$$VUW = [P_{g1} \ x \ AUWH_{ag1} \ x \ C_{ag1} + P_{g2} \ x \ AUWH_{ag2} \ x \ C_{ag2} + P_{g3} \ x \ AUWH_{ag3} \ x \ C_{ag3}] \ .....$$

$$(ii)$$

Where *g1* is group of people involved in employment;

g2 is group of people involved in primary production activities;

g3 is group of people involved in services.

4.2.1 Calculating the hours by activity type

SNA activities are of specific importance as their production is included in GDP calculation but for UPFH these activities are unpaid. Table 4.3 shows the time use patterns of the sampled UPFFHs by type of their activities _ SNA, extended SNA and non-SNA. It is noteworthy that all the 200 sampled UPFFHs are involved in these three types of activities. The UPFFHs spent on average about 06:21 (Hours: Minutes) on SNA activities, 05:57 (Hours: Minutes) on extended SNA activities and 11:41 (Hours: Minutes) on non-SNA activities a day before the interview day. This distribution of time is not much different from the Pakistan time use survey 2007

statistics, which shows that the UPFFHs spent about 04:15 (Hours: Minutes) on SNA activities, 05:12 (Hours: Minutes) on extended SNA activities and 14:33 (Hours: Minutes) on non-SNA activities (Saqib & Arif, 2012). This comparison shows that the UPFFHs of district Lahore invest relatively more time (2 hours) on SNA activities as compare to the national average shown by the 2007 time use survey. The gender-wise statistics by the 2007 time use survey shows that unpaid male family helpers (UPMFHs) spent 06:09 (Hours: Minutes) on SNA activities, 00:23 (Hours: Minutes) on extended SNA activities and 17:28 (Hours: Minutes) on non-SNA activities. Saqib and Arif (2012) observed that unpaid family helpers spend more time in extended SNA activities that the remaining group of workers (self-employed, employee, and employers). Male unpaid family helpers and over all males in employment spent little time in extended SNA activities which in Pakistan has been specified for females therefore unpaid female family helpers have been focused for the present study.

Table 4.3: Mean time (Hours: Minutes) spent daily by UPFHs on three broad categories of all activities

Activity type	Hours: Minutes	(N)
SNA Activities	6:21	200
Extended SNA Activities	5:57	200
Non-SNA Activities	11:41	200
All Activities	24:00	600

Source: Unpaid family helpers' survey conducted by researcher

Table 4.4 shows the time use data of unpaid family helpers' survey by three personal and two family indicators of UPFFHs, namely age, level of education, marital status, type of family and household headship. Table 4.4 shows pattern of time use is not much influenced by age of the respondents. However, respondents fall in age group above 35 years spent comparatively more time in primary production

activities. As expected, learning activities are more associated with age groups 15 to 19 years and 19 to 24 years.

In term of the level of education, UPFFHs having education up to matric and respondents with education above matric spent least portion of their time in SNA activities relative to other respondents. The highest portion of their time is invested on non-SNA activities specially learning and personal care activities. Hence we can assume that increasing the level of education may help in bringing women out of unpaid work. Table 4.4 also shows that primary production activities/ agricultural activities are usually being done by the illiterate people. Marital status did not show any notable difference in time use pattern of married and unmarried UPFFHs. However, we can say married UPFFHs spent relatively more time in SNA activities at the cost of the time of non-SNA activities.

Table 4.4: Mean Time Spent (Hours: Minutes) on Different Activities by age, level of education, marital status, type of household and family headship

	SNA			Extended SNA			Non-SNA			
	Employment	Primary production activities	Services	Household maintenance	Care for children, and elderly	Community services	Learning	Social and cultural activities	Mass media use	Personal care and self-maintenance
Age	**5:57**	**5:55**	**5:49**	**5:11**	**1:26**	**1:24**	**6:09**	**1:47**	**0:54**	**9:04**
15 to 19 Years	5:09	4:59	6:09	5:06	0:48	1:12	7:42	1:57	0:56	9:16
20 to 24 Years	5:53	6:48	5:31	5:26	1:35	1:48	4:36	1:42	1:15	8:52
25 to 34 Years	6:35	5:07	5:48	5:32	1:48	0:12		1:16	0:38	8:40
35 Years and above	6:07	7:36	5:45	4:31	0:46	2:24		2:22	0:52	9:37
Level of education	**5:57**	**5:55**	**5:49**	**5:11**	**1:26**	**1:24**	**6:09**	**1:47**	**0:54**	**9:04**
Illiterate	6:21	6:27	5:42	5:09	1:24	1:28		1:49	0:47	9:04
Less than matric	6:07	5:40	6:08	5:29	1:30	1:12		1:42	0:51	9:00
Matric and plus	4:43	0:24	5:34	4:33	1:34		6:09	1:45	1:33	9:13
Marital status	**5:57**	**5:55**	**5:49**	**5:11**	**1:26**	**1:24**	**6:09**	**1:47**	**0:54**	**9:04**

Unmarried/ divorced/ widowed	5:47	5:23	6:00	4:56	0:35	1:12	6:09	1:59	1:07	9:19
Married	6:07	6:14	5:42	5:23	1:44	1:28		1:37	0:43	8:53
Type of household	**5:57**	**5:55**	**5:49**	**5:11**	**1:26**	**1:24**	**6:09**	**1:47**	**0:54**	**9:04**
Nuclear Family	6:04	5:33	5:53	5:15	1:32	1:16	7:57	1:41	0:58	9:00
Joint Family	5:45	6:21	5:42	5:06	1:18	1:48	4:21	1:55	0:50	9:11
Family headship	**5:57**	**5:55**	**5:49**	**5:11**	**1:26**	**1:24**	**6:09**	**1:47**	**0:54**	**9:04**
Male headed household	6:06	6:03	5:51	5:07	1:27	1:16	6:09	1:49	0:53	9:05
Female headed household	4:06	4:58	5:34	5:49	1:16	1:48		1:26	1:06	8:50

Source: Unpaid family helpers' survey conducted by researcher

Table 4.4 shows that type of household is not an indicator of influence on the time use pattern of UPFFHs. However type of family headship influence the time use pattern; the respondents in male headed households spent more time on employment for establishment and primary production activities as compare to their counterparts in female headed households. The respondents from the female headed households are not generally able enough to make their way to learning activities.

4.2.2 Per hour wages of unpaid work

For the purpose of present study Table 4.5 is of specific importance as it measures the economic value of UPFFHs work and first objective the present study is about measuring this value. In first column of Table 4.5, P_g shows the number of people in each category and sub-categories of SNA activities. The number of people involved in employment for establishment (66 people), primary production activities (59 people), and services (104 people) sums up to 229 people which is a troubling figure as the number of respondents involved in present research are only 200. Here we need to understand that respondents may involve in more than one type of SNA activities on daily basis for example respondents involved in crop farming may also be involved in tending animals and collecting fuel; while measuring the number of

people involved in different categories such respondents are counted twice or thrice according to the number of SNA activities in which they are involved.

In second column of Table 4.5, $DUWH_{ag}$ shows the time spent by respondent in different categories of SNA activities on daily basis. Time use surveys produced data of time use in form of minutes which are then converted into hours: minutes' format by using excel date system of converting minutes into hours.

Table 4.5: Mean time (Hours: Minutes) spent and mean per hour cost of each activity group

Type of activities	Number of people in each group (P_g)	Daily average working hours for each group ($DUWH_{ag}$)	Average per hour wage of each group (C_{ag}) (PKRs)	Value of Unpaid Work (VUW)
Employment	**66**	**5:57**	**23.99**	**9085.86**
Home-based work for an establishment	47	6:24	19.82	5967.8
Domestic and personal services produced by domestic work	5	5:12	23.00	598
Employment in establishment	14	4:41	38.36	2520.05
Primary production activities	**59**	**4:33**	**28.11**	**6282.86**
Crop farming and market gardening: planting, weeding, harvesting, picking, etc.	36	6:43	21.63	5234.46
Tending animals and fish farming	15	1:13	48.00	878.4
Collecting fuel, firewood or dung	8	1:03	20.00	170
Services	**104**	**5:42**	**39.24**	**23218.52**
Food processing and preservation activities: grain processing, butchering, preserving, curing	2	3:15	30.00	195
preparing food and beverage preparation, baking, confectionery and related activities	10	4:46	49.90	2380.23
Making and selling textile and related craft: weaving, knitting, sewing, embroidery	73	5:48	40.34	17082.07
Leather and related craft: weaving, knitting, sewing, shoemaking, tanning, products of wood	13	6:57	31.08	2812.47
Services provision such as computer services, transport, repair of vehicles, baby-sitting, and massages.	3	4:30	30.00	405
Services for income and other production of goods not elsewhere classified	3	4:10	27.50	343.75

Source: Unpaid family helpers' survey conducted by researcher

In third column of Table 4.5, C_{ag} show mean wages for all categories and sub-categories of SNA activities calculated on an hourly scale based on data collected from unpaid family helpers' survey. These wages are calculated by observing the specialist approach which disaggregates the data via categories and sub-categories of activities; rather than generalizing them on the basis of employment status where all the types of UPFHs are treated the same way. The respondents were asked about the amount each household has to pay for hiring a labor in place of UPFFH (respondent) in situations they were not available to work. All the sub-categories include a variety of activities with a variety of wage rates that are aggregated by taking their mean for each category and its sub-categories. In Table 4.5 C_{ag} shows the average per hour wage for each category and sub-categories in Pakistani rupees (PKRs). As time use survey produces data in form of hours and minutes, it is essential to get an hourly rather than a weekly or monthly wage (Pan American Health Organization, 2010).

In last column of Table 4.5, *VUW* shows the value of unpaid work of all the 200 respondents for all the activities in which they are involved, this value is calculated by using the formula *(i).....VUW = Σ_g Σ_a [P_g x $DUWH_{ag}$ x C_{ag}]* as mentioned above for valuing unpaid work. Table 4.5 shows that value of few types of unpaid works are reinforcing their own importance such as the prominent value 17082.07 PKRs of sub-category 'making and selling textile and related craft' is worth considering, Table 4.5 also shows that about 73 respondents are involved in this sub-category which is a huge number recommending a thorough study of the people involved in the sub-category. Other prominent value of unpaid work are 5967.8 and 5234.46 which are of sub-categories 'home-based work for an establishment' and 'crop farming and market gardening' respectively. Here we can build the expression that some types of unpaid works are more common among UPFFHs of district Lahore

such as making and selling textile and related craft work, home-based work for an establishment and crop farming and market gardening. Agricultural activities such as crop farming and market gardening seem to be unfit when we talk about districts like Lahore, but we need to understand that district is a broader entity that includes cities and their surrounded suburban[9] areas.

4.3   Percentage share of UPFHs in household income

Second objective of this study is to determine the contribution of UPFFHs in household income; as by measuring the value of unpaid work merely we cannot assume its importance for the family. In order to estimate the importance of UPFFHs work we have to deal with household level data for calculating the percentage share of UPFFHs in household income. Percentage share of UPFFHs in household income can be measured by using this formula:

$$PSUW = AVUW \div AHI \times 100\ldots\ldots\ (iii)$$

Where *PSUW* is the percentage share of UPFFHs in household income;

AVUW is the average value of unpaid work per year;

AHI is the average household income per year.

Few activities like collecting fuel, firewood, dung and travel related to primary production activities are dropped for making final estimations. Although these activities have been added in SNA activities but to date no statistical agency has included them in the calculation of gross domestic product (GDP) (Pan American Health Organization, 2010). Tending animals and fish farming activity always occur in combination with some other income generating activity; in order to make

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[9] Suburban areas are those having agriculture as well as market based economy.

calculation on family level we have to deal with only one major type of income generating activity for each respondent.

In first column of Table 4.6, *AHI* shows annual average income of households calculated from data collected through household roster, family assets, durables and sources of income. In second column, *AVUW* shows annual value of unpaid work calculated by converting per day value of unpaid work in per year value for all the 200 respondents and afterwards taking its average. In last column, *PSUW* shows percentage share of UPFFHs' in their household income calculated by using the formula *(iii)…..PSUW = AVUW ÷ AHI × 100.*

Table 4.6: Percentage share of UPFHs in household income

Type of activities	Average household income per year *(AHI)*	Average value of unpaid work per years *(AVUW)*	Share of UPFFHs in household income (%) *(PSUW)*
Employment	**495238**	**52128**	**12.49**
Home-based work for an establishment	444127	46345	12.22
Domestic and personal services produced by domestic work	421500	61817	14.80
Employment in establishment	720000	71548	12.78
Primary production activities	**556505**	**60517**	**13.05**
Crop farming and market gardening: planting, weeding, harvesting, picking, etc.	556505	60517	13.05
Services	**483711**	**85362**	**22.77**
Food processing and preservation activities: grain processing, butchering, preserving, curing	348000	55542	16.86
preparing food and beverage preparation, baking, confectionery and related activities	603740	86878	18.47
Making and selling textile and related craft: weaving, knitting, sewing, embroidery	476950	89199	24.33
Leather and related craft: weaving, knitting, sewing, shoemaking, tanning, products of wood	485692	78965	20.65
Services provision such as computer services, transport, repair of vehicles, baby-sitting, and massages.	368000	52620	14.26
Services for income and other production of goods not elsewhere classified	420000	62095	21.35

Source: Unpaid family helpers' survey conducted by researcher

Table 4.6 shows that UPFFHs involved in category services has the highest share (22.77 percent) in household income. Within the category services, the respondents of sub-categories making and selling textile and related craft (24.33 percent) and leather and related craft (20.65 percent) has the highest percentage share in household income (PSUW). Percentage shares of UPFFHs involved in categories employment (12.49 percent) and primary production activities (13.05 percent) are also worth mentioning. To reinforce the importance of percentage share of UPFFHs' in household income we can compare the results with percentage share of remittances in household income. According to household integrated economic survey (HIES) 2013-2014, about 8.75 percent of household income comes from remittances and remittances share in household income is considerable that it is mentioned separately. Whereas, the percentage share of UPFFHs in household income is more than the share of remittances but it is ignored and undocumented.

Our stance here is that livestock, property, owner occupied houses, social insurance benefits including pension, gift and assistance and remittances are mentioned separately as sources of household income in household integrated economic survey (HIES) but UPFFH despite having a larger share in household income are not mentioned separately and remain ignored. The share of UPFFHs in household income should be acknowledged separately as a source of income.

CHAPTER 5

DETERMINANTS OF UNPAID FEMALE FAMILY HELPERS SHARE IN HOUSEHOLD INCOME AND TIME INVESTMENT IN SNA ACTIVITIES

In the previous chapter we have measured the time used by the UPFFHs on different activities and their contribution in household income. This chapter aims to identify the variables that are likely to be related to the time used on unpaid work and unpaid workers contribution in household income, focusing on the personal characteristics of the sampled UPFFHs and their households.

5.1 Estimate of multiple linear regression model

There are numerous individual, family and geographical variables that can be associated with the contribution of UPFFHs to the family income and to the time they invested in SNA activities. For the present study multiple linear regression model has been used to identify these factors.

The functions are

$$\text{TIME} = \beta_0 + f(X_1 \text{............} X_n) + \varepsilon \text{........ (iv)}$$

$$\text{PERSHA} = \beta_0 + f(X_1 \text{............} X_n) + \varepsilon \text{……….. (v)}$$

Where TIME is the time invested by UPFFHs in SNA activities on daily basis and PERSHA is the share of UPFFHs in household income. β_0 is constant and $X_1 \text{............} X_n$ are independent variables. Independent variables are divided on three levels; individual, family and community. Three individual level variables included in regression analysis are: age, education and marital status of UPFFHs. Six family level variables being entered in the equation are: gender of household head, type of family,

number of household members, number of household earners, livestock owned and land ownership. Only one community level variable is included in regression analysis that is the area of residence (near or away from Lahore). Definitions of these variables have already been presented in Table 3.1. Some other characteristics like type of work, type of industry (Saqib & Arif, 2012), occupation of household head and dependency ratio (Kousar, 2010) may be important determinants but due to small size of sample and data limitation we did not include them in the study.

In model TIME, the dependent variable is time contribution of UPFFHs in SNA activities; the increase in time investment in SNA activities is at the cost of females' personal care and rest time. In model PERSHA, the dependent variable is percentage contribution of UPFFHs in household income which is from 0 percent to 100 percent. R^2 values for model TIME (12 percent) and model PERSHA (50 percent) shows that 12 percent of the total variation in dependent variable can be explained by independent variables for model TIME; while 50 percent of the total variation in dependent variable can be explained by independent variables for model PERSHA.

The ANOVA Tables of model TIME and model PERSHA represented as Table 5.1 Table 5.2 indicates that both models are statistically significant. However the model PERSHA predicts the outcome variable more significantly at 1 percent level of significance as compare to model TIME that predicts the outcome variable at 5 percent level of significance.

Table 5.1: ANOVA table of model TIME

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	153483.24	11	13953.022	2.320	.011
Residual	1130555.94	188	6013.595		
Total	1284039.18	199			

Source: Unpaid family helpers' survey conducted by researcher

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Table 5.2: ANOVA table of model PERSHA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	11270.389	11	1024.581	16.816	.000
	Residual	11454.594	188	60.929		
	Total	22724.982	199			

Source: Unpaid family helpers' survey conducted by researcher

Table 5.3 shows unpaid family helpers' survey data results of multiple linear regression models. As stated above, Model TIME takes daily time invested by UPFFHs in SNA activities as dependent variable. The results of this model show 4 out of 10 independent variables have a significant effect on the time invested by UPFFHs in SNA activities. Model PERSHA takes percentage contribution of UPFFHs in household income as a dependent variable. The results of this model shows that 6 out of 10 independent variables have a significant effect on the percentage contribution of UPFFHs in household income.

Table 5.3: Multiple linear regression model: The determinants of UPFFHs share in household income and time investment in SNA activities

	Model TIME (Daily time invested by UPFFH in SNA activities)	Model PERSHA (financial share of UPFFHs)
	B	**B**
(Constant)	410.222*	31.728*
Age AGE (Years)	.689	-.032
Under matric UNDMAT(Yes = 1)	-2.327	2.819**
Matric & above MATABV(Yes =1)	-48.037**	1.159
Marital Status MS (Married = 1)	-23.607***	1.520
Type of household headship THH (Male headed household = 1)	-8.960	-1.051
Type of family TOF (Nuclear family = 1)	3.589	3.737*
Household size TNHM (Number)	1.626	-.886*
Number of earners TNHE (Number)	-19.037*	-3.424*
Livestock NOL (Number)	6.617***	-1.720*
Land ownership LAND (have land = 1)	-46.307	-3.024
Household location AREA (Near to large city = 1)	.366	-7.316*

Source: Unpaid family helpers' survey conducted by researcher

*Significant at 1 percent or less level of confidence.

**Significant at 5 percent or less level of confidence.

***Significant at 10 percent or less level of confidence.

5.1.1 Education

In Table 5.3 unpaid family helpers' survey results for model PERSHA shows positive relationship between financial contribution of UPFFHs in household income and having no education or having education below matriculation level, whereas this contribution of the matriculated helpers is insignificant, suggesting their relatively less engagement in terms of time investment in unpaid work. The results of model TIME supports this view; it shows a significant but negative relationship between the time use and education (10 years and more).

A possible reason is that as the level of education increases the chances of movement of UPFFHs towards paid employment also increases; consequently their involvement in unpaid employment decreases or ceased (Shahnaz, 2006).

5.1.2 Marital status

In Table 5.3 unpaid family helpers' survey results for model TIME shows a significant and negative relationship between time invested by UPFFHs in SNA activities and being married. It shows that married women invested less time in family business (SNA activities). As married life increases the usage of time in activities like child and elder care, household maintenance and help in income generation activities takes the secondary position (Ahmad, 2011).

5.1.3 Type of family

In Table 5.3 unpaid family helpers' survey results for model PERSHA shows a positive and significant relationship between contribution of UPFFHs in household income and nuclear family type. It shows that in nuclear families UPFFHs have more share in household income as compare to joint families. The possible explanation is

that in joint families there are more people to earn consequently total income of the household remains high which lowers the proportion of UPFFHs contribution in household income. On the other hand nuclear families left with less working members (parents-in-law, sister-in-law, daughter-in-law, and children-in-law are not there) to share the load of family business (SNA activities) (Kousar, 2010, p.209).

5.1.4 Household size

In Table 5.3 unpaid family helpers' survey results for model PERSHA shows a negative and significant relationship between financial contribution of UPFFHs in household income and number of household members; as the number of household members increases the share of UPFFHs in household income decreases; following the same reason as of type of family (as the number of people increases there are more people to share the load of family business (SNA activities), as well as there are more people to claim their share in income generated from family business (SNA activities) (Kousar, 2010, p.209)).

5.1.5 Number of earners

In Table 5.3 unpaid family helpers' survey results for model TIME show a negative and significant relationship between the time invested by UPFFHs in family business (SNA activities) and total number of earners in the household. Similarly model PERSHA also shows a negative and significant relationship between the financial contribution of UPFFHs in household income and total number of earners in the household. The logic behind the relation is obvious, as the number of earners per household increases bulk of the work load and time investment in family business is shared by those earners. Consequently, the share of UPFFHs in household income as well as their invested time in family business (SNA activities) decreases.

5.1.6 Livestock

There are different types of livestock including buffalo, cow, horse, donkey, goat, and sheep and value of these animals vary from one another. In order to compare them we have to change their unit of measurement to a single standard unit. For the purpose of present study 'cow equivalent score' given in Appendix B (Table 1) generated by livestock and dairy development department, Government of Punjab 2000 has been used to bring different types of livestock to a single unit.

In Table 5.3 unpaid family helpers' survey results for model TIME show a positive and significant relation between time invested by UPFFHs in income generating activities (SNA activities) and total number of livestock owned by the household. Meanwhile, the model PERSHA shows a significant and negative relationship between the financial contribution of UPFFHs in household income and total number of livestock owned by the sampled households. It shows that as the number of livestock per household increases the time invested by UPFFHs in income generating activities (SNA activities) also increases but their share in household income decreases. It is largely because as the number of livestock increases at household level the total income of the household also increases making the share of UPFFHs' small. Increase in the number of livestock results in increasing the time investment of UPFFHs; however UPFFHs have human constraints limiting them to a specific input and income share. This situation leads to the possibility of involving other family helpers or some paid employee for livestock management with a division of UPFFHs share in household income.

5.1.7 Household location

In Table 5.3 unpaid family helpers' survey results for model PERSHA displays a significant and negative relationship between percentage contribution of UPFFHs in household income and location of the house. It shows that in such households located near large cities UPFFHs have fewer shares in household income. One possible reason behind the relation is that males of households located near large cities usually work as employees in adjacent city and also do some side business on part time basis with the help of their family members (UPFFH). As the business is small therefore income produced and UPFFHs' share in this income is also small.

In conclusion we can say that independent variables such as type of family, household size, livestock and household location have more significant impact on share of UPFFHs in household income as compare to the impact on time invested by UPFFHs in SNA activities. If a variable is insignificant in explaining the change in time invested by UPFFHs in SNA activities, it does not mean it is also insignificant in explaining the change in share of UPFFHs in household income.

CHAPTER 6

SOCIAL VALUE OF UNPAID FEMALE FAMILY HELPERS' WORK

Recognizing the importance of unpaid female family helpers (UPFFHs) in household income and family wellbeing it is important to analyze the social value of unpaid work. Social value is a subjective concept which needs to be operationalized in order to reach a working definition. For the present study social value of unpaid work has been operationalized under the indicators such as i). Family integration brought by unpaid work, ii). Self-perception of unpaid workers about themselves and their work iii). Empowerment of unpaid female family helpers. Empowerment is also a subjective concept which is operationalized into various working definitions by different researchers. However, for the purpose of present study it has been operationalized under the indicators such as participation of UPFFHs in household decision making and household spending.

6.1 Empowerment of UPFFHs

Shrestha and Chhetri (2001) and Arshad (2011) have also defined empowerment as operationalized in our study i.e. participation in household decision making and spending. This indicator is further explained under a model with four levels of participation ranging from full participation to no participation. Level 1 is self-decide (participation in household decisions without any influence of family); Level 2 is jointly decide (participation in household decision with some but less than decisive influence); Level 3 is participation in household decision with greater influence of family members; and Level 4 is no participation or participation with total influence of family members.

Table 6.1 presents the data collected through the unpaid female family helpers' survey on their participation in decision making and spending on household level. It reveals that more unpaid female workers are involved in decision making and spending regarding their self needs and needs of their children than their involvement in decision making and spending regarding the needs of their family and community needs.

Table 6.1: Percentage distribution of UPFFHs by indicators of empowerment and level of decision making

	Levels of Participation				
	Self-decide	**Decide with less influence of family**	**Decide with great influence of family**	**No participation in decision making (Family takes the decision)**	**Total**
	Level 1 (%)	**Level 2 (%)**	**Level 3 (%)**	**Level 4 (%)**	**(%)**
i. **Decision making and spending for self needs**					
Purchasing of personal use items for yourself	61.5	9.5	3.5	25.5	100
Seeking doctor/ hakim treatment for yourself	16.5	23.5	50.0	10.0	100
Seeking reproductive health treatment	26.1	21.8	23.5	28.6	100
Moving outside the village	19.5	23.0	28.0	29.5	100
ii. **Decision making and spending for children's needs**					
Purchasing of uniform/stationary for your children	38.7	40.6	7.5	13.2	100
Seeking doctor/ hakim treatment for your children	40.6	27.4	18.9	13.2	100
Decision about the schooling of your children	31.8	54.1	12.9	1.2	100
iii. **Decision making and spending for family needs**					
Involvement in purchasing of daily needs for family	24.5	24.0	13.0	38.5	100
Making decision to work as wage laborer	5.0	10.5	8.0	76.5	100
Borrow or lending money	24.0	32.0	2.5	41.5	100
Involvement in buying and selling land	2.0	7.5	12.5	78.0	100
Making decision of your children marriage	39.1	30.0	11.8	19.1	100
iv. **Decision making and spending for community activities**					
Attending community meeting of same gender	11.0	28.0	15.0	46.0	100
Provision of help to neighbors/relatives	28.0	19.5	18.5	34.0	100
Respondent vote casting in 2013 general election	19.2	11.3	21.9	47.7	100

Source: Unpaid family helpers' survey conducted by researcher

6.1.1 Decision making and spending for self needs

In Table 6.1 unpaid family helpers' survey results points towards different level of empowerment enjoyed by the respondents. More than half of the respondents (61.5 percent) reported that they decide about the purchasing of their personal use items independently (Level 1). Whereas; for half of the respondents (50 percent) the decision for seeking doctor/hakim's[10] treatment for herself is greatly influenced by their family's consent (Level 3). In addition Appendix C (Table 1) shows that in female headed households respondents' decision about their self needs are mostly taken by their family members (Level 4). Appendix C (Table 2) shows a positive relation between age and control over decision for self needs where about 70 percent respondents with age 35 years and above decide themselves (Level 1) about having general health treatment, reproductive health treatment and moving outside their city/village.

6.1.2 Decision making and spending for children's needs

According to the results of Table 6.1 all the decisions related to the needs of children are mostly taken by respondents themselves or jointly with their husbands. Hence we can say that the influence of family (other than husband) on decisions related to the needs of children is less. About fourth-fifth of the respondents decide themselves or with the consent of their husband about purchasing of daily need items for their children as well as their schooling (aggregate Level 1 and Level 2). However in female headed households, the respondents have less control over decisions related to the needs of their children (Appendix C, Table 1). Appendix C (Table 2) shows that for respondents aged 24 years or below and their decision regarding the needs of their

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[10] Hakim is a local doctor who treats patients using herbs.

children have high influence of family members; however UPFFHs (respondent) are always involved in making decision about the schooling of their children (Level 1, Level 2, Level 3).

6.1.3 Decision making and spending for family needs

Every indicator of family needs shows different patterns of decision making. Table 6.1 shows permission of working as wage laborer in 76.5 percent cases and decision about buying and selling land in 78 percent cases is generally taken by the family of unpaid workers without any involvement of unpaid workers in the decision (Level 4). However, about 70 percent of the respondents take decision by themselves or jointly with their husbands about the marriage of their children (aggregate Level 1 and Level 2). In female headed household decisions are taken solely by family members (Level 4). Young respondents have relatively less influence on decisions related to the needs of family and respondents (Appendix C, Table 2).

6.1.4 Decision making and spending for community activities

Decisions about community activities are highly influenced by the families of UPFFHs (respondents'). Table 6.1 shows that in 46 percent cases respondents' decision about attending a community meeting is taken by their family on their own (Level 4). Similarly in 47.7 percent cases respondents' decision about vote casting is taken by their family on their own (Level 4). Appendix C (Table 1) shows that in 83.3 percent female headed households' respondent's decision of attending a community meeting is made by their family members (Level 4). Appendix C (Table 2) shows a positive relation between age and level of decision making, as age increases UPFFHs control over household decision making also increases.

The qualitative data (in-depth interviews) supports the survey results, for example one of the respondent said, '*We have a joint family and my father-in-law with consultation of my husband take all monetary decisions. However, I often participate in decisions related to the needs of my children and household needs along my husband*' (case no.1, horse cart decoration, age 37). Similarly another respondent mentioned, '*I am dependent on my mother-in-law for any type of support, she is the one who decides everything in the family*' (case no. 2, Mukaish embroidery[11], age 26). On the other side, a well satisfied unpaid worker of a nuclear family mentioned, '*I and my husband face every hurdle together, and we share everything with each other. For me it is not important to see that money comes to whom, if money is coming to our home and we both are spending it by deciding mutually it should be enough*' (case no. 4, hotel business, age 37).

6.2   Family integration and unpaid work

Merriam-Webster defines integration, "incorporation as equals into society or an organization of individuals of different groups (as races)". If a family is an organization and its members are incorporated as equals into the family, it is known as 'family integration'. This part examines how women's unpaid role in household income generation creates integration among family members and provides a platform to unpaid workers for negotiating about their status in family.

The present analysis reveals that the unpaid family work provides the space where integration between its members takes place. Admitting the importance of unpaid work for family business all the members of family helps in it whenever they find time. While working together members of the family find time to sit together, talk to each other and discuss their daily family issues. Hence, unpaid work act as an

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[11] Mukaish work is a type of embroidery. It is done by weaving a thin wire in form of patterns on fabric

agent of creating harmony between the members of family. As one of UPFHs mentioned, *'When there is high load of work my husband and elder daughter help me with cutting and mixing'* (case no.4, hotel business, age 37). A respondent involved in decorating horse cart said, *'It's been 15 years since I have been involved in this work; initially my mother-in-law taught me the skill, she also used to help me in work'*. She also mentioned, *'All my sisters-in-law are also involved in same type of work, I often take my work to their home in neighbors and we all work together. While working together we chit chat with one another and enjoy our work'* (case no.1, horse cart decoration, age 37).

Family members of UPFHs have also reported similar sort of role of unpaid work. Husband of a respondent mentioned, *'Sometimes after dinner all the family members help my wife in decorating horse cart while watching television'* (case no.1, horse cart decoration). A family member (father) of another respondent said, *'She is not a helper to me, she is my companion to work'* (case no.3, shop helper). In another case mother-in-law of a respondent mentioned, *'keeping in view their burden of work I often help them in taking care of their children'* (case no. 2, Mukaish embroidery).

We observed during our field visits that type of family and family headship are also important factors in determining family integration. Unpaid female workers were more deprived in female headed household as observed during the field study, 'mother-in-law was not letting the respondent to talk freely to researcher, she was the sole decision maker of the household and was trying to deepened her position' (case no.2, Mukaish embroidery, age 26). On the other hand, we have observed during our field visits that unpaid female workers of nuclear families are at an advantage. For instance, in one of our field visit to a respondent's house who belonged to nuclear family it was observed that the whole family assisted the female in performing

household chores. The visit was made around 5:00 PM and the entire family was sitting in anteroom; husband and elder daughter were cutting vegetables while younger ones were doing their homework and the respondent was making tea' (case no. 4, hotel business, age 37).

6.3 Self-perception of unpaid workers

Merriam-Webster defines self-perception, "the idea that you have about the kind of person you are". For the present study it is the concept, how unpaid female workers look at themselves or place themselves in the family and broadly in the society.

The present analysis reveals that most of the unpaid female workers were aware of the importance of their work for family business, however some unpaid workers were reluctant to consider their work even as work. As one of the respondent mentioned, *'We are poor people with a large family, male members of our household are lazy and do not work. My husband is also a lazy person, he neither works nor earns a single penny. I am dependent on my mother-in-law for any type of support, she decides everything in the family. I have to help my mother-in-law in earing household income'* (case no.2, Mukaish embroidery, age 26). A respondent helping her father in vegetable shop said, *'I like to help him in shop as it is our home business and if we will not work for it then who else will work'* but at the same time she also mentioned, *'While helping my father I do not feel like working instead to me it's a way of passing time in a good way'* (case no.3, shop helper, age 16). A well satisfied respondent who was equally involved in every household dealing with her husband said, *'My husband runs a hotel on the ground floor of our home and earns enough for family. I have to cook all the food for hotel as my husband is not good at cooking and*

cooking is not men's area of work. On the other hand food cooked by me is more demanded by customers. We both work for our children and our home' (case no. 4, hotel business, age 37).

CHAPTER 7

CONCLUSIONS AND POLICY RECOMMENDATIONS

7.1 Conclusions

The issue of unpaid work has been in discussion globally since long. It affects all the mankind but female unpaid helpers are more disadvantaged. Unpaid work is opposite of decent work and unpaid workers are at the highest risk of encountering poverty. Goal 8^{12} of sustainable development goals addresses the issue of unpaid work by a call for promoting decent work. In Pakistan a total of 26 percent workers (employed) are UPFHs, with a proportion of females contributing 13.52 percent and males contributing 12.48 percent engaged in unpaid family work (LFS, 2012).

The major objectives of this study are to examine the economic value of females' unpaid work; estimate the percentage contribution of UPFFHs' in household income; and to assign a social value to the unpaid work of female family helpers. For this purpose primary data has been collected through time use survey and case study method. An empirical formula has been used for measuring economic value of unpaid work and percentage contribution of UPFFHs' in household income. Multiple linear regression has been used to analyze the determinants of the time used by UPFHs in unpaid work and economic value of unpaid work. Social value is a subjective measure and to present study social value of unpaid work has been operationalized under the indicators like, family integration; self-perception of unpaid workers about themselves and their work; and empowerment of unpaid female family helpers. Empowerment is also a subjective measure and for the purpose of present study empowerment is equated for the involvement of UPFFHs' in household decision making and spending.

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[12] promote inclusive and sustainable economic growth, employment and decent work for all

The salient points regarding results of the study are as follow:

- The percentage contribution of UPFFHs in household income is significant. The women involved in category 'services' have the highest share of about 22.8 percent in their household income as compared to the women involved in categories 'employment for establishment' and 'primary production' having a share of about 12.5 percent and 13.1 percent respectively in their household income. Category 'service' contain activities such as food preparing and processing, making textile and crafts and personal care services; in developing Asian countries activities of making food, textile and crafts which are performed within the premises of home are mostly considered as female's work. Therefore female's involvement in such type of activities is highest regardless of the purpose of work whether performed for domestic use or market use. On the other hand category 'employment for establishment' involved activities like assisting some family member in his/her job, performing work brought by a family member from his/her job to home; and category 'primary production activities' involve activities such as crop farming, tending animals and collecting fuel. Activities which are performed outside the premises of home or brought in from outside the home are mostly considered as male's work. Therefore female's involvement in such type of activities is relatively low.

- It is estimated that UPFFHs' involved in the category 'primary production' spent less time in unpaid work about 4:33 (hours: minutes) as compare to women involved in the categories 'employment for establishment' and 'services' those who spent about 5:57 (hours: minutes) and 5:42 (hours: minutes) respectively. Time spent in performing primary production activities has seasonal variations; depending on the type of crop and its time of cultivation the time spent increases

whereas during the time of crop growth the time spent decreases. On the other hand time spent on activities involved in the categories 'employment for establishment' and 'services' have no seasonal variation and follow same time trend for the whole year.

- Increase in level of education of UPFFHs has shown a negative impact on time invested on unpaid work, so relatively high female literacy is an important policy option for promoting decent work. As female's level of education increases they find less spare time from education activities to get involve in unpaid work. As increase in the level of education also increases the probability of getting into paid employment and hence the time invested on unpaid work decreases.

- Total number of household earners is negatively related to the time by UPFFHs' on unpaid work and their income contribution. As the number of household earners increases their household income also increases hence the need to earn more by involving unpaid family helper decreases.

- In nuclear families, women working as UPFHs are contributing more to their family income. Nuclear families usually have limited earners placing a relatively high demand on family members to support in increasing household income.

- UPFFHs are more involved in decision making and spending regarding their self needs and needs of their children; on the other hand they have less participation in decision making and spending regarding the needs of rest of the family and community. Providing care to family members and fulfilling children's needs are usually female's duty especially in developing Asian countries. Therefore, decisions about spending on clothes, food, health, and medical care are usually taken by females. On the other hand decisions about borrowing or lending loan,

renting in or out a home and casting a vote are usually taken by male members of the family.

This research starts with a simple question, what is the value of work performed by UPFFHs'? While connecting the dots of results estimated by this research we can conclude the study by emphasizing on importance of UPFFHs' work in household economy. UPFFHs' contribute a handsome amount in their household income and their work is admired by their family members in different ways. Researcher has observed that males of sampled households are more involved in household chores as, in evening they help their wives in cooking by cutting vegetables and making salads while sharing their rest of day's activities with each other. No doubt there are families where UPFFHs' are oppressed but we cannot ignore the positive side of the picture. Unpaid work provide the space where harmony is created between the family members and they share each other's burden therefore their work should be admired and respected by the policy makers.

7.2   Policy recommendations

In the light of above findings several policy areas emerged need to be addressed.

- The term used for UPFFHs' is discriminatory in itself, the prefix 'unpaid' used for such workers should be replaced with some decent alternative.

- Our study has shown the income contribution of UPFFHs' is not negligible to be all ignored. Therefore policy makers must recognize the importance of UPFFHs' in household economy and their work must be comprehended in GDP calculation just as foreign remittances are admired in GDP.

- UPFHs / contributing family helpers is a status of employment but not admired by labor force survey. As unpaid work is a status of employment and UPFHs' income contribution is considerable so they should be admired by labor force survey.

- NGOs with the help of local government should introduce different types of support programs in these communities such as loan scheme, community development programs and technical trainings. These community development programs will eventually uplift the economic condition of local people, so they would be motivated to engross women in better work options.

- Considering the skills of UPFFHs' women should be provided proper work options in their own villages. Providing proper work would bring UPFFHs' out of vulnerable unpaid work and engross them in decent work.

APPENDICES

Appendix A

Table 1: Percentage distribution of UPFFHs of Punjab by their age.

Age groups	N	Percentage
Less than 15 Years	344	6.83
15 to 24 Years	1320	26.19
25 to 34 Years	1,033	20.5
35 to 44 Years	1,040	20.63
44 to 99 Years	1,303	25.85
Total	5040	100

Source: Calculated from Pakistan Social and Living Standard Measurement PSLM survey (2012-2013), Pakistan Bureau of Statistics

Table 2: Percentage distribution of UPFFHs of Punjab by their level of education.

Level of education	N	Percentage
Illiterate	3,836	76.11
Below matric	1,032	20.48
Matric and above	172	3.41
Total	5,040	100

Source: Calculated from Pakistan Social and Living Standard Measurement PSLM survey (2012-2013), Pakistan Bureau of Statistics

Table 3: Percentage distribution of UPFFHs of Punjab by their marital status.

Marital status	N	Percentage
Married	3,515	69.74
Others (unmarried, widow, divorced)	1,1525	30.26
Total	5,040	100

Source: Calculated from Pakistan Social and Living Standard Measurement PSLM survey (2012-2013), Pakistan Bureau of Statistics

Table 4: Percentage distribution of UPFHs in type of activities by age, education, marital status, type of family and family headship

	Employment			Primary production activities	Services						Total (%)
	Home-based work for an establishment (%)	Domestic and personal services (%)	Employment in establishment (%)	Crop farming and market gardening: planting, weeding, harvesting, picking, etc. (%)	Food processing and preservation activities (%)	Preparing food and beverage preparation (%)	Making and selling textile and related craft (%)	Leather and related craft making (%)	Services provision such as computer repair, baby-sitting, and massages (%)	Services for production of goods not elsewhere classified (%)	
Age	**24**	**2**	**6**	**18**	**1**	**5**	**36**	**7**	**2**	**1**	**100**
15 to 19 Years	5	2	2	5	1	0	12	1	0	1	26
20 to 24 Years	7	0	2	6	0	1	10	2	0	0	26
25 to 34 Years	8	1	1	5	0	1	11	2	1	0	28
35 Years and above	4	0	2	4	1	4	3	3	1	1	21
Education	**24**	**2**	**6**	**18**	**1**	**5**	**36**	**7**	**2**	**1**	**100**
Illiterate	10	2	3	15	1	4	19	5	1	1	58
Less than matric	11	1	1	4	1	2	12	1	1	1	31
Matric and plus	3	0	3	0	0	0	6	1	0	0	12
Marital status	**24**	**2**	**6**	**18**	**1**	**5**	**36**	**7**	**2**	**1**	**100**
Unmarried/divorced/widow	13	2	3	6	1	1	17	1	1	1	44
Married	11	1	3	12	1	5	19	6	1	0	57
Type of family	**24**	**2**	**6**	**18**	**1**	**5**	**36**	**7**	**2**	**1**	**100**
Nuclear Family	14	2	4	9	1	3	23	3	1	1	60
Joint Family	10	1	2	9	0	2	13	4	1	1	40
Family headship	**24**	**2**	**6**	**18**	**1**	**5**	**36**	**7**	**2**	**1**	**100**
Male headed household	23	2	6	16	1	5	30	7	2	1	91
Female headed household	1	1	1	2	0	0	6	0	0	0	9

Source: Unpaid family helpers' survey conducted by researcher

Appendix B

Table 1: Cow Equivalent Score

Animal Type	Age and Sex Composition	Weight Awarded
Cattle	Breeding Bulls	1.00
	Bullocks	1.20
	Milking Cows	1.00
	Dry Cows	0.80
	Heifers	0.40
	Young Stock	0.25
Buffaloes	Buffalo Breeding Bulls	1.20
	Milking Buffaloes	1.50
	Dry Buffaloes	1.20
	Buffaloes Heifers	0.60
	Young Stock	0.30
Camels	Camel	1.50
Sheep	Sheep	0.25
Goats	Goat	0.25
Donkeys	Donkeys	0.50
Horse	Horse	1.00

Source: Livestock and Dairy Development Department, Government of Punjab 2000

Appendix C

Table 1: Percentage distribution of UPFFHs by family headship, indicators of empowerment and level of decision making

		Levels of participation				
		Self-decide	**Decide with less influence of family**	**Decide with great influence of family**	**No participation in decision making**	**Total**
		Level 1 (%)	**Level 2 (%)**	**Level 3 (%)**	**Level 4 (%)**	**(%)**
Decision making and spending for self needs						
Purchasing of personal use items for yourself	Male headed household	62.1	9.3	2.7	25.8	100
	Female headed household	55.6	11.1	11.1	22.2	100
Total		61.5	9.5	3.5	25.5	100
Seeking doctor/ hakim treatment for yourself	Male headed household	18.1	25.3	48.9	7.7	100
	Female headed household		5.6	61.1	33.3	100
Total		16.5	23.5	50.0	10.0	100
Seeking reproductive health treatment	Male headed household	28.2	23.6	23.6	24.5	100
	Female headed household			22.2	77.8	100
Total		26.1	21.8	23.5	28.6	100
Moving outside the village	Male headed household	21.4	23.6	29.7	25.3	100
	Female headed household		16.7	11.1	72.2	100
Total		19.5	23.0	28.0	29.5	100
Decision making and spending for children's needs						
Purchasing of uniform/stationary for your children	Male headed household	41.0	42.0	8.0	9.0	100
	Female headed household		16.7		83.3	100
Total		38.7	40.6	7.5	13.2	100
Seeking doctor/ hakim treatment for your children	Male headed household	43.0	27.0	19.0	11.0	100
	Female headed household		33.3	16.7	50.0	100
Total		40.6	27.4	18.9	13.2	100
Decision about the schooling of your children	Male headed household	33.3	55.6	9.9	1.2	100
	Female headed household		25.0	75.0		100
Total		31.8	54.1	12.9	1.2	100
Decision making and spending for family needs						
Involvement in purchasing of daily needs	Male headed household	26.9	25.8	13.2	34.1	100
	Female headed household		5.6	11.1	83.3	100
Total		24.5	24.0	13.0	38.5	100
Making decision to work as wage laborer	Male headed household	5.5	10.4	8.8	75.3	100
	Female headed household		11.1		88.9	100
Total		5.0	10.5	8.0	76.5	100
Borrow or lending money	Male headed household	26.4	33.5	2.7	37.4	100
	Female headed household		16.7		83.3	100
Total		24.0	32.0	2.5	41.5	100

Involvement in buying and selling land	Male headed household	2.2	8.2	13.7	75.8	100
	Female headed household				100.0	100
Total		2.0	7.5	12.5	78.0	100
Making decision of your children's marriage	Male headed household	41.7	31.1	12.6	14.6	100
	Female headed household		14.3		85.7	100
Total		39.1	30.0	11.8	19.1	100
Decision making and spending for community activities						
Attending community meeting of same gender	Male headed household	12.1	29.1	16.5	42.3	100
	Female headed household		16.7		83.3	100
Total		11.0	28.0	15.0	46.0	100
Provision of help to neighbors/relatives	Male headed household	29.1	19.8	20.3	30.8	100
	Female headed household	16.7	16.7		66.7	100
Total		28.0	19.5	18.5	34.0	100
Respondent vote casting in 2013 general election	Male headed household	20.1	12.2	20.9	46.8	100
	Female headed household	8.3		33.3	58.3	100
Total		19.2	11.3	21.9	47.7	100

Source: Unpaid family helpers' survey conducted by researcher

Table 2: Percentage distribution of UPFFHs by age groups, indicators of empowerment and level of decision making

		Levels of participation				
		Self-decide	Decide with less influence of family	Decide with great influence of family	No participation in decision making	Total
		Level 1 (%)	Level 2 (%)	Level 3 (%)	Level 4 (%)	(%)
Decision making and spending for self needs						
Purchasing of personal use items for yourself	15 to 19 Years	61.5	7.7	3.8	26.9	100
	20 to 24 Years	56.9	11.8	5.9	25.5	100
	25 to 34 Years	66.1	12.5		21.4	100
	35 Years and above	61.0	4.9	4.9	29.3	100
Total		61.5	9.5	3.5	25.5	100
Seeking doctor/ hakim treatment for yourself	15 to 19 Years	1.9	7.7	73.1	17.3	100
	20 to 24 Years	2.0	21.6	58.8	17.6	100
	25 to 34 Years	3.6	48.2	44.6	3.6	100
	35 Years and above	70.7	12.2	17.1		100
Total		16.5	23.5	50.0	10.0	100
Seeking reproductive health treatment	15 to 19 Years		11.1	33.3	55.6	100
	20 to 24 Years	4.8	23.8	23.8	47.6	100
	25 to 34 Years	4.1	32.7	26.5	36.7	100
	35 Years and above	70.0	10.0	17.5	2.5	100
Total		26.1	21.8	23.5	28.6	100
Moving outside the village	15 to 19 Years	5.8	23.1	28.8	42.3	100
	20 to 24 Years	5.9	19.6	23.5	51.0	100
	25 to 34 Years	8.9	33.9	37.5	19.6	100

	35 Years and above	68.3	12.2	19.5		100
Total		19.5	23.0	28.0	29.5	100

Decision making and spending for children's needs

Purchasing of uniform/stationary for your children	15 to 19 Years		50.0		50.0	100
	20 to 24 Years	18.8	37.5	6.3	37.5	100
	25 to 34 Years	39.6	39.6	8.3	12.5	100
	35 Years and above	47.5	42.5	7.5	2.5	100
Total		38.7	40.6	7.5	13.2	100
Seeking doctor/ hakim treatment for your children	15 to 19 Years		50.0		50.0	100
	20 to 24 Years	12.5	50.0	6.3	31.3	100
	25 to 34 Years	18.8	31.3	35.4	14.6	100
	35 Years and above	80.0	12.5	5.0	2.5	100
Total		40.6	27.4	18.9	13.2	100
Decision about the schooling of your children	15 to 19 Years			100.0		100
	20 to 24 Years	7.7	61.5	30.8		100
	25 to 34 Years	19.4	66.7	13.9		100
	35 Years and above	55.9	41.2		2.9	100
Total		31.8	54.1	12.9	1.2	100

Decision making and spending for family needs

Involvement in purchasing of daily needs	15 to 19 Years	1.9	21.2	5.8	71.2	100
	20 to 24 Years	5.9	21.6	15.7	56.9	100
	25 to 34 Years	19.6	41.1	21.4	17.9	100
	35 Years and above	82.9	7.3	7.3	2.4	100
Total		24.5	24.0	13.0	38.5	100
Making decision to work as wage laborer	15 to 19 Years	3.8	9.6	3.8	82.7	100
	20 to 24 Years	3.9	5.9	5.9	84.3	100
	25 to 34 Years	3.6	10.7	5.4	80.4	100
	35 Years and above	9.8	17.1	19.5	53.7	100
Total		5.0	10.5	8.0	76.5	100
Borrow or lending money	15 to 19 Years	5.8	21.2	1.9	71.2	100
	20 to 24 Years	11.8	23.5		64.7	100
	25 to 34 Years	25.0	46.4	7.1	21.4	100
	35 Years and above	61.0	36.6		2.4	100
Total		24.0	32.0	2.5	41.5	100
Involvement in buying and selling land	15 to 19 Years				100.0	100
	20 to 24 Years			2.0	98.0	100
	25 to 34 Years		10.7	10.7	78.6	100
	35 Years and above	9.8	22.0	43.9	24.4	100
Total		2.0	7.5	12.5	78.0	100
Making decision of your children's marriage	15 to 19 Years		25.0		75.0	100
	20 to 24 Years	5.9	47.1	5.9	41.2	100
	25 to 34 Years	14.3	44.9	20.4	20.4	100
	35 Years and above	87.5	5.0	5.0	2.5	100
Total		39.1	30.0	11.8	19.1	100

Decision making and spending for community activities

Attending community meeting of same gender	15 to 19 Years		9.6	7.7	82.7	100
	20 to 24 Years		19.6	9.8	70.6	100
	25 to 34 Years	5.4	51.8	21.4	21.4	100

	35 Years and above	46.3	29.3	22.0	2.4	100
Total		11.0	28.0	15.0	46.0	100
Provision of help to neighbors/relatives	15 to 19 Years	17.3	13.5	5.8	63.5	100
	20 to 24 Years	17.6	19.6	11.8	51.0	100
	25 to 34 Years	39.3	25.0	21.4	14.3	100
	35 Years and above	39.0	19.5	39.0	2.4	100
Total		28.0	19.5	18.5	34.0	100
Respondent vote casting in 2013 general election	15 to 19 Years			50.0	50.0	100
	20 to 24 Years	11.8	7.8	19.6	60.8	100
	25 to 34 Years	18.2	9.1	20.0	52.7	100
	35 Years and above	31.7	19.5	24.4	24.4	100
Total		19.2	11.3	21.9	47.7	100

Source: Unpaid family helpers' survey conducted by researcher

Appendix D

	Sociodemographic characteristics of respondent's family	UPFHs' views about the importance of her work	Views of one of the family member of respondent
Case 1 Deen pura	This is a joint family with 7 people lived and eat together. The family is a male headed household with one unpaid helper who is responsible for decorating horse cart (locally known as "Bhaggi"). Whole family is involved in a single type of income generating activity that is renting out horse carts for functions. In the past family was used to rent out horses to work for film industry of Pakistan. The family earns about PKRs. 576000 per year out of which PKRs. 18000 are saved by unpaid labor, otherwise family has to pay same amount for making cart decorated. Unpaid helper (respondent) is a married 37 years old women, who is illiterate and have 3 sons	I was a single daughter of my parents and my father was a clerk. Before marriage, I have never seen my mother working for money. After marriage, my husband ask me to help my mother in law in decorating horse cart. My husband and father in law rent out horse carts to people for functions, we have two cats and six horses. If they make the cart decorated by professionals it cost about PKRs. 2000 every second week. It's been 15 years since I have been involved in this work; initially my mother-in-law taught me the skill, she was also used to help me in work. I like the work of decorating horse cart as when I get done by decorating cart it feels good to see something beautiful made by me. However sometimes I feel pressurized either by family members and load of work. I have to give two whole days to this work twice or thrice a month but now I am used to of this work as it's been long time since when I have been involved in same work. All my sisters-in-law are also involved in same type of work, I often take my work to their home in neighbors and we all work together. While working together I chit chat with them and enjoy my work. We have a joint family and my father-in-law with consultation of my husband take all monetary decision. However I often participate in decisions related to the needs of my children and household needs along my husband.	<u>Views of respondent's husband</u> I admit the importance of my wife's work as she help saving household money. Whenever she works hard and horse cart decorated by her attract more customers I appraise her work. Sometime for appraising her work I bring chicken to make her happy. Sometime after dinner all the family members helped my wife in decorating horse cart while watching television. All the monetary decisions are taken by me and my father, women remains at home and are unaware of worldly dealings. However my wife participate in decisions regarding the need of children. <u>Researcher's observations</u> The tone and style of respondent's husband was taunting. He smirks whenever he was talking about the importance of her wife's work.

Case 2 **Thatta akber shah**	This is a joint family with 15 people lived and eat together. The family is a female headed household with four unpaid helpers, all involved in embroidery work (locally known as "mukaish" work). Family is involved in different types of income generating activities like embroidery work and employment in iron factory. The family earns about PKRs. 444000 per year out of which PKRs. 144000 are earned by unpaid labor. Unpaid helper selected for the current study is a married 26 years old women who is illiterate and have one daughter and one son.	*"Mukaish embroidery"* is a time consuming and difficult work done by using a wire which often hurts on my hand. In addition to *mukaish embroidery* I have to look after my two children and all household activities. Often I get tired of this work and want to have some break but my mother-in-law asked me to complete at least 3 *"dupattas"* per day. We are poor people with a large family, male members of our household are lazy and did work. My husband is also a lazy person, he neither works nor earns a single penny. I am dependent on my mother-in-law for any type of support, she decides everything in the family. I have to help my mother-in-law in earing household income. My mother-in-law is used to say that if we will not work we will die of poverty and if I want to eat I have to work.	<u>Views of respondent's mother-in-law</u> Neither my husband (respondent's father-in-law) nor my sons had earned for me ever. From the day I came here after marriage I am earning for my family. Now I am getting older and members of my family are increasing so I have to make my daughters-in-law work. All the women of this society help in their household business so what is new about her for helping in her own household business. She is not the only one working in our home, all her sisters-in-law worked with her. They work to feed their children and husband as I am not able to earn for all of them anymore. However keeping in view their burden of work I often helped them in taking care of their children. <u>Researcher's observations</u> They style of respondent's mother-in-law was defending her own position.
Case 3 **Rehmanabad**	This is a joint family with 6 people lived and eat together. The family is a male headed household with two unpaid helpers; one is involved in managing vegetable shop with her father and mother is involved in stitching clothes with her mother. As a whole family is involved in different types of income generating activities like vegetable shop, tailoring, and paid employment in shoe factory. The family earns about PKRs. 624000 per year out of which PKRs. 86000 are saved by unpaid labor, otherwise family has to pay same amount for hiring paid employees. Unpaid helper selected for the current study is an unmarried 16 years old women having education unto 6th grade.	I have studied up to 6th grade but since my childhood I like to accompany my father to vegetable market. I am the dearest child of my father and he never asked me to work with him but I like to help him in shop as it is our home business and if we will not work for it then who else will work. My mother want me to get involved in stitching and household chores with her like my elder sister but I do not like this work. While helping my father I do not feel like working else to me it's a way of passing time in a good way. At the same time it's a way of getting out of home on daily basis; otherwise me and my sister are not allowed to move much in the community.	<u>Views of respondent's father</u> Both of my daughters are very dear to me. They always care about the load of work on me and my wife and tries to share it. However my younger daughter take more interest in shop related work. She accompany me to vegetable market, help in washing vegetables, help in opening and closing shop and help in keeping vegetable under sky at night after covering them with wet cloth. She often ask me for sweets and other eatables on our way to vegetable market and I love to hear these demands from her. She is not a helper to me else she is my companion to work. <u>Researcher's observations</u> They researcher was amazed to see the love of father for his daughter in his eyes, talk and style. Researcher had lunch with the family, raita and salad were served in an eatable manner. Researcher was informed that it was made by the brother of the respondent.

Case 4 Mustafabad

This is a nuclear family having 6 people lived and eat together. The family is a male headed household with one unpaid helper (respondent) who is responsible for preparing food and beverage preparation. Family owns a small hotel business located on the ground floor of their house, the hotel is owned and managed by head of the household. The family earns about PKRs. 540000 per year out of which PKRs. 84000 are saved by unpaid labor as if this labor was not available the family had to hire cook.

Unpaid helper (respondent) is the wife of household head, she is a 37 years old women who is illiterate and have two daughters and two sons.

My husband runs a hotel on the ground floor of our home and earn enough for family. I have to cook all the food for hotel as my husband is not good at cooking and cooking is not men's area of work. On the other hand food cooked by me is more demanded by customers. We both work for our children and our home. When there is high load of work my husband and elder daughter help me with cutting and mixing. Often during summer I get tired of this work but support of my husband is always there sometime he even do not open hotel to give me some rest. I and my husband face every hurdle together, and we share everything with each other. It is not important to see that money comes to whom, if money is coming to our home and we both are spending it by deciding mutually it should be enough.

Views of respondent's husband

She has always been a support to me. Prior to this business I was a street vender, even at that time all the snacks, confectionery and beverages were made by my wife. We both work together from the start of our marriage now we work to educate our children. This business is all dependent on her skills and work but she cannot be the front face of this business as our social environment do not allowed.

Researcher's observations

When researcher visited the family for interview it was about 5:00 PM. Whole family was sitting in sitting room; husband and elder daughter was cutting vegetables, other children were doing their homework and respondent was making tea.

ANNEXURES

Annexure A

Questionnaire for Measuring Socio Economic Value of Unpaid Family Helpers (UPFFH) Work Living in District Lahore

Researcher is a student of Pakistan Institute of Development Economics (PIDE) situated in Islamabad and is currently conducting her MPhil research. The information collected will be kept strictly confidential and used only for academic purpose.

Neha Riaz (Development Studies), Email: nehariaz@yahoo.com

Form No …………………..

Section 1: Demographic profile

1. Name of Area/Locality:	2. City/ Village/ Town
3. Date (dd/mm/yy):	4. Day of the week on which interview has been taken

5. What is your (UPFFH) name (Respondent)?	6. Name of your (UPFFH) father or husband
7. Name of the Household head	8. Your (UPFFH) mobile number
9. Home Address	

Section 2: Household roster

10. (a)What is the type of household?
  i. Nuclear Family
  ii. Joint Family
	10. (b) What is the type of family headship?
	  i. Male headed household
	  ii. Female headed household

11. What are the total numbers of household members'?	

Interviewer   Comments:

_____

_____

_____

_____

12. Household members who live and eat together in this household, starting with the head	13. Gender Male =1 Female =2	14. Relationship to household head? Head =1 Spouse =2 Child =3 Grandchild =4 Parent =5 Brother/Sister =6 Son/Daughter-in-law =7 Father/Mother-in-law =8 Other relative =9 Not related =0	15. Age (in completed years)?	16. Marital status? Never married =1 Married =2 Divorced =3 Widowed =4 Only Nikah solemnized =5	17. Education No education =0 Primary =1 Middle =2 Secondary =3 Intermediate =4 BA/ BSc =5 Engineering =6 Medicine =7 MA/MSc =8 MPhil/ PhD =9 Religious education =10	18. Did any work during last week? Yes =1 No =2 (If yes, go to question 21)	19. Have any business (shop, farm, service etc.) Yes =1 No =2 (If yes, go to question 21)
i.Head							
ii.Respondent							
iii.							
iv.							
v.							
vi.							
vii.							
viii.							
ix.							
x.							

Household members	20. Provide any help in the family business/ farm or other economic activity? Yes =1 No =2 (If yes, go to question 21)	21. Main occupation?	22. Employment status Paid Employee =1 Self-employed (Non agri) =2 Owner cultivator =3 Contract Cultivator =4 Share Cropper =5 Unpaid Family Helper =6 Employer =7 Livestock (Only) =8	23. Income per month? (In Pakistani Rupees)	24. What is the nature of work done by the enterprise/institution/office? Agriculture, Forestry, Fishing =1 Mining & Quarrying =2 Manufacturing =3 Electricity, Gas & Water =4 Construction =5 Wholesale & Retail trade =6 Transport & Storage =7 Real Estate, Insurance =8 Social & Personal Services =9 Other =0	25. Did the [NAME] was available for work last week or looking for a job? Yes =1 No =2	26. What was the main reason [NAME] was not available/looking for work during the last week? Illness/ Handicapped = 1 Other constraints (pregnancy etc.) = 2 Temporary laid off = 3 Student = 4 Housekeeping = 5 Retired = 6 Landlord/Property = 7 Too Young / Old = 8 Other = 0
i.Head							
ii.							
iii.							
iv.							
v.							
vi.							
vii.							
viii.							
ix.							
x.							

Section 3: Ownership of Assets

27. Does the household;	Yes =1 No =2 NA=99	If yes what is the area (in Acer)?	If Yes what is its value (in PKRs)?
Own agricultural land?			
If yes, Lease out (rent out) agricultural land?			
Take on Lease (rent in) agricultural land?			
OWN Non-agricultural land / plot?			
OWN house?			
OWN Shop/ Commercial Building(s)?			
		If Yes, then how many (in numbers)	Value per animal(PKRs)
Own CATTLE?			
Own SHEEP and/or GOATS?			
Own LADEN (horse, mule, donkey) animals?			
Own POULTRY?			
Total			

28. Does the household currently own any of the following?	Yes =1	No =2	29. What is the total income of Household?		
1) Electric iron			30. What were the sources of Household Income during last year?		
2) Electric fan				Activity	Amount (PKRs)
3) Sewing machine			1.	Crops	
4) Radio			2.	Livestock	
5) Chair/Table			3.	Shop	
6) Watch/Clock			4.	Other business	
7) Television			5.	Employment in govt./public sector	
8) VCR/CD player			6.	Private sector employment	
9) Refrigerator			7.	Property (Non-agricultural)	
10) Air cooler			8.	Gifts / Cash	
11) Air conditioner			9.	Sale of Assets	
12) Computer			10.	Domestic remittances	
13) Bicycle			11.	Foreign remittances	
14) Motorcycle			12.	Pension	
15) Car or Truck			13.	Other (Specify here)	
16) Tractor				Total	

Rest of the question will be asked only from Unpaid Female Family Helper [UPFFH]

Section 4: Time use survey

Time		What were you mainly doing? *Please report what you were doing in each 60 minutes slot.	Were you doing something else at the same time? *when doing several things report two most important were.	Persons helping in activity(other than the UPFFH) 1 = Alone 2 = Father 3 = Mother 4 = Sons or daughters 5 = Spouse 6 = Other family member 7 = Other persons	Place of activity 1 = At Home 2 = At School or work 3 = On travel 4 = Other
Starting time	Ending time				
04:00 am	04:30				
04:30	05:00				
05:00	05:30				
05:30	06:00				
06:00	06:30				
06:30	07:00				
07:00	07:30				
07:30	08:00				
08:00	08:30				
08:30	09:00				
09:00	09:30				
09:30	10:00				
10:00	10:30				
10:30	11:00				
11:00	11:30				
11:30	12:00 pm				
12:00 pm	12:30				
12:30	01:00				
01:00	01:30				
01:30	02:00				
02:00	02:30				
02:30	03:00				
03:00	03:30				
03:30	04:00				
04:00	04:30				
04:30	05:00				

05:00	05:30				
05:30	06:00				
06:00	06:30				
06:30	07:00				
07:00	07:30				
07:30	08:00				
08:00	08:30				
08:30	09:00				
09:00	09:30				
09:30	10:00				
10:00	10:30				
10:30	11:00				
11:00	11:30				
11:30	12:00 am				
12:00 am	12:30				
12:30	01:00				
01:00	01:30				
01:30	02:00				
02:00	02:30				
02:30	03:00				
03:00	03:30				
03:30	04:00 am				

31. According to the nature of work what is its market value per hour

S#	Brief detail of work Note: type of work should be same mentioned in time use survey	Value of the work	Per hour market value of the work
01			
02			
03			

General information about work

32. Do you think, you play some role in income generation or just share work load?	33. What are the main reasons of continuing a work having no direct monetary benefits?

34. Do you feel any pressure from the family to continue this work?
    i.   Yes
    ii.   No
	35. How do you feel about doing your work? (satisfied, unsatisfied, easy or difficult)

36. Who receives the money for your work?	37. Since how long you are working as UPFFH?
	   i. 0 to 10 years
	   ii. 10 to 20 years
	   iii. more than 20 years

38. At what age you started working as UPFFH?	39. Are you engaged in the same type of work from the beginning?
	   i. Yes
	   ii. No
	If No; what was the nature/type of your previous work?

Section 5: UPFFH helper role in household decision making and spending

40. Decision-Making and income spending for Self Needs (Level 1)

i. Can you purchase jewelry, clothes and daily use items for yourself? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making	ii. Can you seek doctor/ go to hospital/ seek *Hakim* treatment for yourself on your own (for issues such as headaches, stomach upsets, fever, cough, colds etc.)? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making
iii. Can you seek treatment related to your reproductive health on your own (pregnancy, delivery and postpartum stages)? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making	iv. Can you move outside the village alone to visit relatives 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making

41. Decision-Making and income spending for Children's needs (Level 2)

i. Can you purchase daily clothes, school uniform, and stationary for your children? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making	ii. Can you seek doctor/ go to hospital/ seek *Hakim* treatment for your children on your own? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making
iii. Who decides about the schooling of the children? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making	

42. Decision-Making for Family Needs (Level 3)

i. To what extent you are involved in purchase of daily needs (e.g. food, salt, oil, spices, sugar, match etc.) 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family	ii. Are you permitted to work as wage laborer; 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making

	4. No participation in decision making		
iii.	Can you borrow or lend money in cash; 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making	iv.	To what extent your suggestion is taken up for buying/selling of land and rent in/rent out of land; 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making
v.	Are you consulted while deciding about marriage of your children? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making		

43. Decision-Making for Community Activities (Level 4)

i.	Are you allowed to attend community meetings of same gender? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making	ii.	Do you provide any type of help to you neighbors and community (such as help in daily household chores, help through money)? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making
iii.	Did you caste vote in 2013 general election? 1. Self-decide 2. Decide with less influence of family 3. Decide with less influence of family 4. No participation in decision making		

Annexure B

Coding Activities List

Type of activities	Code
1. Employment	
Home-based work for an establishment	113
Domestic and personal services	114
Employment in establishment	115
2. Primary production activities	
Crop farming and market gardening: planting, weeding, harvesting, picking, etc.	211
Tending animals and fish farming	220
Collecting fuel, firewood or dung	236
Travel related to primary production activities (not for establishment)	280
3. Services	
Food processing and preservation activities	310
Preparing food and beverage preparation, baking, confectionery etc.	321
Making and selling textile and related craft: weaving, knitting, sewing, embroidery	331
Leather and related craft: weaving, knitting, sewing, shoemaking, etc.	332
Services provision such as computer services, repair of vehicles, and massages.	370
Services for income and other production of goods not elsewhere classified	390
4. Household maintenance	
Preparing food and cooking where cannot distinguish	410
preparing food (e.g. grinding, milling, cutting, heating water, chopping wood)	411
Cooking, making drinks, setting tables and serving	412
Cleaning up after meal	413
Cleaning and upkeep of dwelling and surroundings	420
Care of textiles: sorting, mending, washing, ironing and ordering clothes and linen	430
Shopping for personal and household goods	441
Do-it-yourself home improvements and maintenance	460
Household maintenance, management and shopping not elsewhere classified	491
5. Care for children and elderly	
Physical care of children: washing, dressing and feeding	510
Teaching, training and instruction of household's children	520
Physical care of sick or disabled adult	541
Physical care of elderly adult	542
Supervising children	561
Supervising elderly adult	563
Travel related to care of children	581
Care of children, the sick, elderly and disabled	590
6. Community services	
Community services	690
7. Learning	
General education: school / university / other attendance	710
Homework, studies and course review related to general education	720
Learning not elsewhere classified	790
8. Social and cultural activities	

Participating in cultural activities, weddings, funerals, births and others	810
Participating in religious activities	820
Socializing with family or/and non-family at home	831
Games and other pastime activities	860
Social, cultural and recreational activities not elsewhere classified	890

9. <u>Mass media use</u>

Watching television and video	920
Listening to music/radio	930

10. <u>Personal care and self-maintenance</u>

Sleep and related activities	1011
Eating and drinking	1020
Doing nothing, rest and relaxation	1050
Individual religious practices and meditation	1060
Personal care and self-maintenance not elsewhere classified	1090

Source: Derived from Pakistan time use survey 2007 coding activity list

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