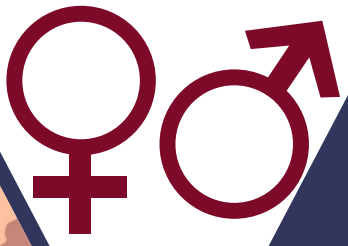
PIDE ON GENDER

Volume 1



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PAKISTAN INSTITUTE OF DEVELOPMENT ECONOMICS (PIDE)
ISLAMABAD

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PREFACE

Gender is a term that is variously used by different people. From those shy of using the word 'sex' to those who define it differently. If we try to categorise all the different usages, we can put them into three major groups. One, the physiological and bodily aspects (sex); two, the self-defined identity; and three, the norm-related identity, which the American Psychological Association very aptly refers to as the 'sex role'—a role assigned by the norms based on a society's perception of a person's sex.

If we look at the research done at the Pakistan Institute of Development Economics (PIDE) on 'gender', we see that it is mainly taken as a social construct. Since 1957, PIDE, through its research published in its flagship journal, *The Pakistan Development Review*, and other research products, like the working papers, monographs and conferences, has centred on issues critical for women in development (WID), women and development (WAD), and gender and development (GAD). Among WID, the focus has been on female employability, economic opportunities, and modernisation. Among WAD, the focus has remained on researching structural forces depriving women of their agency and empowerment and the impact of neoliberalism on women's lives. Research on GAD has centred on themes such as gender mainstreaming, women's strategic and practical needs (health, skills and education), inclusivity, opportunities, and institutional changes and responses.

The first in the series, the current volume entails a collection of articles published over the last 30 years with a gender lens used to look at the issues under consideration.

The first study titled '***Time Poverty, Work Status and Gender***' measures time poverty and its incidence across sexes, occupational groups, industries, regions, and income levels using the Time Use Survey conducted in 2007, the first, and till now the last, nationwide survey of its type in Pakistan. The study concludes that women are more time-poor than men, whether employed or unemployed, due to specific activities considered women-specific, which they have to perform irrespective of their employment status. Working women are far more time-poor than those not working. Women accepting a job have to make a major trade-off between time poverty and monetary poverty. The close association of time poverty with low income found in this study emphasises that the government can help reduce time poverty by enforcing minimum wage laws and mandatory ceiling on work hours in industries with a high concentration of time poverty. Eradication of monetary poverty can also eliminate the need to work long hours at low wages just to survive. The study's findings are reminiscent of the scholarship on gender across South Asia, and still is very relevant as inequality is not just on the basic distribution of income but also concerning the distribution of duties, responsibilities and opportunities, between men and women.

The second paper included in this volume is ***Self-reported Symptoms of Reproductive Tract Infections: The Question of Accuracy and Meaning***. Taking a three-pronged approach of conducting interviews followed by clinical and medical

diagnoses, the study compares women's self-reports regarding their experiences with reproductive tract infections (RTIs) with the medical diagnoses carried out to ascertain the presence or otherwise of the infections. The study found out that there is a weak concordance between women's self-reports and the medical diagnosis. This weak concordance has a very peculiar trend with the less empowered women over-reporting RTI-related symptoms and the more empowered ones under-reporting their experience with the infections. The paper refers to the over-reporting by the less empowered women as their '*bodily idioms of distress'*—what they could not express otherwise they express as a disease symptom. Based on these findings, the research also points out that the conventional health surveys, relying solely on verbal responses, do not essentially represent the actual health situation of a population studied. Any policy intervention formulated exclusively on this information would be flawed and need to be complemented by understanding the socio-cultural construction of illness.

Next is the research titled ***Voice and Votes—Does Political Decentralisation Work for the Poor and for Women? Empirical Evidence from the 2005 Local Government Elections in Pakistan*** speaks of intersections between, and among, women, politics, and poverty. This intersectional lens renders an avenue for conducting granular research on how the marginalised voices can be mainstreamed through formal politics. This critical lens is also the core of the next paper in this volume, titled ***Gender Exploitation: from Structural Adjustment Policies to Poverty Reduction Strategies.*** The researchers posit that the intervention of foreign consultants, development organisations, and International Financial Institutions (IFIs) has widened the economic gap between the so-called First and the Third World. Women have been facing the disproportionate burden of this foreign intervention on socio-cultural and economic grounds. The impact of social adjustment programmes (SAPs) on women's lives is the most recurrent theme in post-colonial societies, including Pakistan's. Informalisation of women's economic work, the value of their work, and feminisation of poverty are a few of the most contemporary concerns of SAPs and their impact on women.

PIDE's gender research includes micro-studies as well within the GAD approach. The next paper in the volume, titled ***Modelling Gender Dimensions of the Impact of Economic Reforms on Time Allocation among Market, Household, and Leisure Activities in Pakistan***, can be grouped under this domain. The study shows that trade liberalisation, with compensatory measures, increases aggregate demand for labour. However, it suggests that this impact must be evaluated not only through market-based criteria such as whether trade liberalisation maximises flows of goods and services and increase employment opportunities or not, but also include factors like unpaid household work and leisure to reveal the true cost of adjustment.

Speaking of micro-studies, PIDE has also published research entailing qualitative research strategies. One such study, titled ***Accommodating Purdah to the Workplace: Gender Relations in the Office Sector in Pakistan***, is interview-based research in which female office workers from Lahore were interviewed. The study examines the increasing market integration of women, particularly from the lower middle classes, into secretarial and technical occupations in the office sector in urban Pakistan. The study shows that gender-linked perceptions and relations inherent in the social order of Pakistani society, particularly the absence of socially sanctioned modes of communication between the

sexes, leads to a strong sexualisation of gender relations and incessant harassment of women inside offices. Female office workers use many strategies, derived from their experiences, to manoeuvre in official spaces, appropriate public spaces, and accommodate *purdah in* the office environment. By "creating social distance", "developing socially obligatory relationships", "integrating male colleagues into a fictive kinship system", and "creating women's spaces" they can establish themselves in a traditionally male field of employment, namely, the office sector.

The Cultural Context of Women Productive Invisibility: The Case of a Punjabi Village is another intellectually stimulating research detailing the cultural context of women productive invisibility. The study speaks of productive, reproductive and social reproduction of labour, while also explaining the forms of work (productive, reproductive and community-management) rural women are involved in. The research also makes a critical statement about inequality in the distribution of responsibilities and obligations in the rural settings of Pakistan.

The last paper in the volume, ***The First Women Bank—Why and for whom?***, focuses on the debates surrounding the relevance, reliability and utilisation of women banks. Whether banks will empower women or not, will it sustain their livelihoods, will it function as a social welfare agenda or as a financial organisation, will it respond to concurrent issues of resource constraints faced by women or is it a mere buzzword, are some of the critical concerns raised in the paper.

The current volume is a humble homage to all academics who have rendered their efforts for writing such relevant research and furthering intellectual debates on women and gender in and of Pakistan. We hope that forthcoming volumes will help generate more debates, more discussions, and mainstreaming research on gender, covering all facets of their lives.

Durr-e-Nayab
Fahd Zulfiqar

Time Poverty, Work Status and Gender: The Case of Pakistan*

NAJAM-US-SAQIB and G. M. ARIF

INTRODUCTION

Time is a valuable economic resource. It may be spent in a variety of ways, but employed persons spend a significant portion of it in the labour market for monetary gains. They still have other demands on their time resource such as self-care, home production of goods and services and leisure. These demands on time may reach a point where people may be categorised as time poor. In many developing countries including Pakistan, working women may be more time poor than men because of their household responsibilities. Time poverty may also be related to certain occupations and industries where workers have to work longer hours.

The concept of time poverty is not new to economics literature, though the revival of interest in this phenomenon and efforts to measure it empirically are relatively a recent development. Part of the reason for this renewed interest appears to be the availability of time use data for a number of countries. The publication of the report on Time Use Survey 2007 (TUS) has added Pakistan to the list of such countries [Pakistan (2009)]. Naturally, the availability of this data has rekindled interest in time use research in Pakistan. The compilation of this dataset has for the first time opened unlimited vistas for research on time use in Pakistan.

The present study focuses on analysis of the various aspects of time poverty among the employed though, for comparison, it has included the not-working sample as well. The study begins by exploring the analytical framework used to study time poverty in the next section. In Section 3, it describes the dataset and discusses its descriptive statistics. This section also delineates the methodology used in this study and deals with the question of how to empirically estimate time poverty. Section 4 presents the results of the present study. The final section summarises the main findings of this study and in conclusion presents some policy recommendations.

ANALYTICAL FRAMEWORK

Defining time poverty is not a straightforward exercise. It is a complex matter that involves a number of theoretical and empirical considerations. Once these issues are clarified, we can move on to the main focus of our study. The incidence of time poverty

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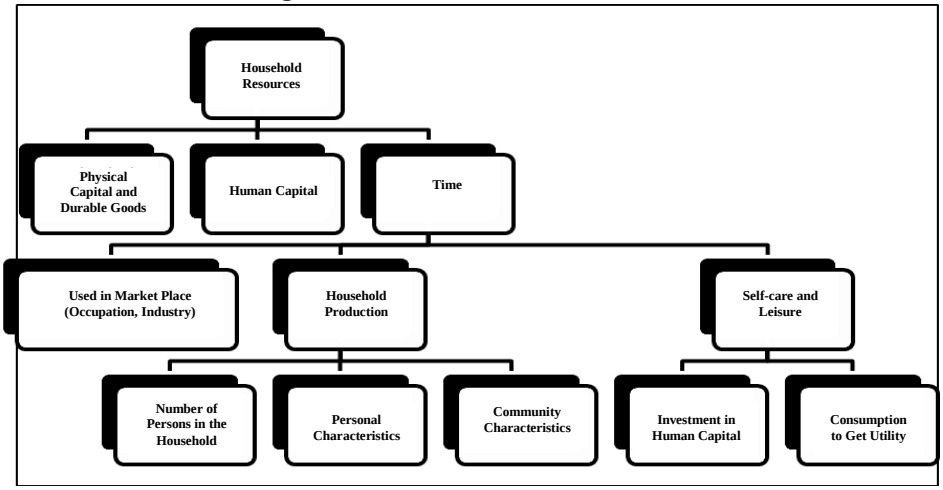
among the employed itself has multiple dimensions that need to be investigated. Though Vickery's (1977) seminal paper on time poverty is regarded as a major step towards analytically expounding the concept, the antecedents of his work can be found in the classical paper by Becker (1965) who developed a framework that treated time as a household resource that is used as an input in the production of household goods and services.[1] However, it may be recalled that time was recognised by economists as a constrained resource long before Becker's work.

To understand the concept of time poverty, it would be instructive to begin by looking at the resources that can be used to enhance the welfare of a household or an individual. As shown in Figure 1, these resources can be divided into three broad categories, namely, physical capital, human capital and time.

Fig. 1. Household Resources and Their Use



The role of physical capital is well known. It generates a stream of revenue over its lifetime that adds to household income. Becker (1975) and Mincer (1974) have highlighted parallels between physical and human capital. According to their theory, investment in human capital also generates a stream of income over the lifetime of the individual. Therefore its role in enhancing the welfare of an individual has marked similarities with that of physical capital and can be easily understood by drawing parallels between the two types of capital.

As noted earlier, time is also an important household resource that can be put to a variety of uses. Since Becker's path breaking work, the role of time as an input in household production has been well-recognised. The literature on household production postulates that households combine market goods, time, personal and household characteristics along with other inputs to produce household goods and services.[2] Oates (1977) and Hamilton (1983) have extended this approach by showing that community characteristics must also be included as inputs in the household production function. This implies that if there is complementarity between time and

[1]For a more detailed analysis of the economics of time use, see Hamermesh and Pfann (2005).

[2]For an excellent review of literature on home production, see Gronau (1999).

other inputs, i.e. if time can be used more efficiently in the presence of the above mentioned inputs in the household production function, then time poverty will also depend on these variables.

Time can be used in self-care and leisure as well. Self-care and leisure may be regarded as utility enhancing consumption activities, but their role in improving human capital cannot be ignored. Spending time in rest, leisure and taking care of oneself makes one more productive. Equally, time spent in productive activities can be used to make leisure more productive because it generates income that can be spent on goods that are complementary to leisure, such as books and television.

In addition, time can be used in the market place to directly generate income. The income thus generated has a direct role with respect to monetary poverty. More interesting for us is the fact that employment increases the time used in committed activities which has strong bearing on time poverty. This raises the spectre of the trade-off between monetary poverty and time poverty. One more layer of complexity is added when we recognise the direct substitutability between time and money. This is evident from the simple fact that time can be bought by hiring the services of other persons or by purchasing time saving devices.

The gender dimension of this issue is important as well. In developing countries, for example, tradition assigns certain activities such as cooking and childcare solely or primarily to women, so that they have to perform these activities even if demand on their time increases as they enter the labour market. If we keep this possibility in mind, the answer to the question whether getting a job makes women better off no longer remains a clear cut yes because now the trade-off between time and monetary poverty as well as personal and social preferences comes into play.

Economists have long recognised poverty as a multifaceted phenomenon, though income based measures of poverty are more commonly known. The United Nations Development Programme and Oxford Poverty Development Initiative have recently formalised the concept of multidimensional poverty into a new poverty index called Multidimensional Poverty Index (MPI).[3] This index takes into account ten measures of deprivation related to health, education and living standards but ignores time poverty, which is an important dimension of overall poverty. However, overlooking time poverty may lead to an incomplete measurement of overall poverty as it may result in a number of highly deprived people being classified as non-poor. It may also hamper a true understanding of the extent of deprivation of those who are both time poor and income poor.

The above discussion can be summarised into the following points:

- Time poverty is an important aspect of overall poverty because monetary poverty line provides only a partial measure of poverty.
- It is theoretically possible that some persons could be monetarily rich but time poor and vice versa.
- There are theoretical grounds to believe that both the household and community variables are important determinants of time poverty.
- The gender dimension of time poverty is important, especially for developing countries.

[3]For more detail, see UNDP (2010) and Alkire and Santos (2010).

DATA AND METHODOLOGY

The Dataset

This study is based on the Time Use Survey (TUS) 2007 sponsored by the Strengthening PRS Monitoring Project of the Ministry of Finance and conducted by the Federal Bureau of Statistics, Government of Pakistan [Pakistan (2009)]. This is the first nationwide time use survey for Pakistan. The survey was conducted from January to December 2007 and covered a cross-section of 19,600 households. It represents both national and provincial levels with rural/urban breakdown. The year-round coverage of the survey was designed to capture seasonal variation in the time use pattern.

While the survey provides useful information about the household and the community, the prized section of the survey is the diary that records all the activities of two selected persons from each household who are ten years of age or older.[4] The activities are recorded over a period of 24 hours. The entire day is divided into 48 half-an-hour slots and each person is asked about the activities he/she was engaged in during each half hour. An elaborate coding scheme is used to classify the activities reported by the respondents. It is the first time that such a detailed account of time used in daily activities has been made available for Pakistan. Some important details of how this data was used in this study and some of its salient characteristics are described below.

The individuals aged 10 years and above, who filled the diary to report their activities during the past 24 hours, form the unit of analysis for this study. These individuals are grouped into two broad categories, working or employed and not-working or not employed. The subsample of 'employed' persons consists of those who have worked for income or profit at least for one hour during the week preceding the survey. This definition is consistent with that used by the Pakistan Bureau of Statistics (PBS). The 'not-working' or 'not employed' subsample is the residual category consisting of both the unemployed and those who are out of the labour force. This type of categorisation has recently been used by Kalenkoski, Hamrick and Andrews (2011) to determine the time poverty thresholds based on pooled data from 2003-2006 American Time Use Surveys (ATUS).

Sample Characteristics

Since the major objective of this study is the analysis of time poverty of the employed sample by gender and other characteristics related to labour market, it would be instructive to have a brief description of these characteristics. Table 1 shows the socio-demographic characteristics of the total sample as well as for the working and not-working sub-samples separately, while the labour market specific indicators of the employed sample are reported in Table 2, where the relevant figures from Pakistan Labour Force Survey [Pakistan (2010)] have been provided for comparison. Information on monthly income and sources of income is given in Table 3.

Fifty two percent of the total respondents who filled the diary are females. The mean age for the total sample is 31 years and the male sample is on average one year older than the female sample. About 40 percent of the sample is drawn from urban areas and more than half were married at the time of the survey. There is a gender difference in terms of the proportion living in urban areas and the marital status, but it is relatively small (Table 1).

[4]For details of the procedure used to select two individuals from each household, see, Pakistan (2009).

Table 1

Sample Characteristics

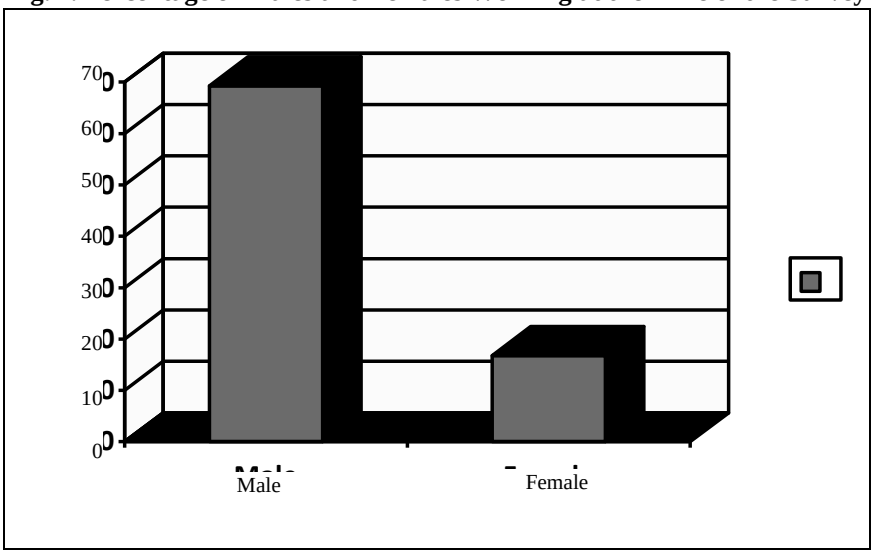
	Total Sample			Not-working/Not Employed			Employed		
Sample	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
% Female	–	–	51.6	–	–	74.3	–	–	20.5
Mean Age (Years)	30.9	31.4	30.4	28.4	23.7	30.1	34.3	34.9	32.0
% Urban	39.4	40.5	38.4	42.2	45.2	41.1	35.7	38.4	25.0
% Rural	60.6	59.5	61.6	57.8	54.8	58.9	64.3	61.6	75.0
Marital Status									
Currently Married	56.6	53.4	59.7	41.7	16.8	58.3	68.9	69.6	66.5
Unmarried	39.2	44.1	34.5	47.2	79.8	35.9	28.2	28.3	27.6
Others	4.2	2.5	5.7	5.1	3.4	5.7	2.9	2.1	5.0
All	100	100	100	100	100	100	100	100	100
(N)	(37832)	(18321)	(19511)	(21871)	(5630)	16241)	(15961)	(12691)	(3270)

Source: Calculated from the micro-data of Time Use Survey, 2007.

Figure 2 shows the percentage of males and females working at the time of the survey. Whereas more than two-thirds of the males were found working at the time of the survey, the corresponding figure for the females was only 17 percent. Consequently, while three-quarters of the not-employed sample consists of females, their proportion among the employed sample is only one-fifth (Table 1).

Another noteworthy gender difference among the not-working persons is in their marital status. Table 1 shows that approximately 60 percent of the not-working females are in the 'currently married' category as compared to only 17 percent for the males. This gap is much narrower and in opposite direction among the employed persons, the two figures being 67 percent and 70 percent for women and men respectively. The overwhelming majority of the employed females (about 75 percent) live in rural areas, while this figure for the not-working women is about 60 percent.

Fig. 2. Percentage of Males and Females Working at the Time of the Survey



Source: Calculated from the micro-data of Time Use Survey, 2007.

One of the reasons for the higher percentage of working women living in rural areas appears to be their substantially higher representation among agricultural workers (48 percent as compared to 29 percent men; Table 2). Within the employed sample, the majority of females fall in three occupation groups—agriculture workers (48 percent), craft workers (19 percent), and unskilled (elementary) workers (18 percent). Only 15 percent women are professional or associate professional workers. Employed males are engaged in four major occupational categories: agriculture (29 percent) professionals and associate professionals (24 percent), elementary work (21 percent) and, craft and machine work (18 percent). In terms of industrial classification, women are concentrated in agriculture, manufacturing and, community and social service sectors. In addition to these three sectors, the employed males have a substantial representation in the trade sector as well (Table 2).

Table 2 also shows that employment status of 46 percent of the employed males is reported as 'employee', while the corresponding figure for women is 39 percent. The most pronounced gender difference in employment status is found in the 'unpaid family helper' and 'self-employed' categories. Compared to just 10 percent of the males, around half (47 percent) of the females are unpaid family workers. On the other hand, 39 percent of males are self-employed as compared to only 14 percent of females.

Table 2

Labour Market Characteristics of the Employed Sample

Labour Market Characteristics (Percentages)	Working/Employed Sample					
	Both Sexes		Male		Female	
	TUS*	LFS**	TUS*	LFS**	TUS*	LFS**
Occupation						
Professionals	15.4	14.2	18.4	17.1	3.8	2.6
Associate Professional	6.6	5.3	5.5	5.0	10.9	6.6
Clerks	1.5	1.6	1.8	2.0	0.3	0.2
Service and Workshop	5.2	4.9	6.4	6.0	0.8	0.6
Agricultural Worker	33.0	37.4	29.3	31.3	47.5	60.9
Craft Workers	14.2	15.2	13.0	16.1	19.1	11.8
Machine Operators	4.0	4.0	5.1	5.0	9.1	0.2
Elementary (Unskilled) Occupation[a]	20.0	17.4	20.7	17.5	17.5	17.1
Industry						
Agriculture	39.7	44.6	35.3	36.9	57.0	75.0
Manufacturing	12.8	13.0	10.8	13.3	20.3	11.8
Electricity	0.8		1.0		0.1	
Construction	6.9	6.3	8.7	7.8	0.2	0.4
Trade	14.8	14.6	19.1	17.9	2.2	1.8
Transport	5.1	5.5	6.4	6.8	0.3	0.2
Finance	1.8		2.2		0.3	
Community and Social Services	17.6	15.7	17.1	14.4	19.5	10.6
Undefined	0.3	2.3	0.4	2.9	0.1	0.2
Employment Status						
Employees	44.2	36.0	45.7	36.0	38.5	22.2
Self-employed	34.0	34.2	39.2	39.6	13.7	12.8
Unpaid Family Helpers	17.9	28.9	10.4	19.7	47.2	65.0
Employers	3.9	0.9	4.8	1.2	0.6	–
(N)	(15961)	–	(12691)	–	(3270)	–

Source: *TUS: Calculated from the micro-data of Time Use Survey, 2007.

**LFS: Figures for fiscal year 2007-08 taken from Pakistan Labour Force Survey 2008-09.

a: Elementary occupation includes unskilled workers such as street vendors, cleaners, domestic helpers, and labourers in construction, agriculture, and mining sector.

Three labour market characteristics of the TUS employed sample are also compared in Table 2 with the LFS employed sample. While most of the TUS and LFS figures are fairly close to each other, there are three noteworthy differences between these datasets. One, LFS shows a higher representation of females among agriculture workers as compared to TUS while in case of female craft workers and machine operators' TUS figures are larger. Two, among industries, LFS reports a higher percentage of women in agriculture as compared to TUS data, whereas TUS figures are higher for women working in the manufacturing sector. Three, the percentage of unpaid family helpers in the TUS is lower than that in the LFS. An important procedural difference also exists between the two. The TUS has used female enumerators to report the activities of female respondents, while this task is performed by male enumerators in the LFS. Therefore, it may be argued that the reporting of female activities is more reliable in the TUS.

The gender difference in employment status reflects itself in the monthly income statistics too (Table 3). More than 43 percent of the employed women reported no monthly income,[5] whereas 45 percent of them were earning a monthly income of Rs 4000 or less. This contrasts sharply with the corresponding figures for the employed males. Among them, the proportion without any monthly income was only 8 percent while approximately 60 percent of them were earning more than Rs 4000 per month. Wages and salaries, and business are the major sources of monthly income for both the employed men and women.

Table 3

Distribution of the Employed Sample by Monthly Income and Sources of Income (Percentages)

Income and Sources of Income	Both Sexes	Male	Female
Upt to Rs 2000	15.1	9.8	35.6
2001-3000	9.4	10.3	5.7
3001-4000	12.5	14.8	3.6
4001-5000	11.3	13.7	2.2
5001-6000	8.6	10.3	2.0
6001-7000	6.3	7.5	1.7
7001-8000	4.7	5.6	1.2
8001-9000	3.2	3.8	0.9
9001-10,000	2.9	3.4	0.9
10,000 or More	9.8	11.6	2.9
Don't Know/Refusal	1.3	1.4	0.8
No Income[a]	14.8	7.7	42.6
Sources of Income			
Wages and Salaries	44.2	45.5	38.8
Business	37.0	43.1	13.1
Transfer Income	3.2	2.7	5.0
Other	0.9	1.0	0.4
No income[a]	14.8	7.7	42.6
All	100	100	100

Source: *TUS: Calculated from the micro-data of Time Use Survey, 2007.

**LFS: Figures for fiscal year 2007-08 taken from Pakistan Labour Force Survey 2008-09.

a: These are unpaid family helpers.

[5]These women are primarily unpaid family helpers.

The differences in the characteristics of working and not-working women in terms of age and schooling are presented in Appendix Table 1. It shows that the share of teenagers (10–14 years old) is greater (17.7 percent) among the not-working women sample as compared to the working sample (7.4 percent). Approximately two-thirds of the working women are in their prime age, that is, 15–39 years, while the corresponding share for the not-working sample is 56 percent. The proportion of aged women among the not-working sample is modestly higher (8.4 percent) than among the working sample (4.9 percent). In terms of education, it is interesting to note that the not-working women sample appears to be more literate than the working women sample. However, the share of degree holders is relatively greater among the working women.

In short, this description of the characteristics of the employed and not-employed sample of the 2007 TUS by rural-urban classification shows a great deal of variation in their demographic profile and economic activities, which are likely to be closely associated with their time use patterns and time poverty.

Methodology

This study proceeds in two steps. The first step consists of an examination of the time use pattern of the respondents by the type of activities as classified in the TUS 2007. The focus has been on differentials in time use pattern by gender, region, work status, and other labour market indicators. The TUS 2007 organises activities of the respondents in three broad categories, namely, System of National Accounts (SNA) activities, extended SNA activities, and non-SNA activities. The SNA activities consist of employment for establishments, primary production activities not for establishments, like crop farming, animal husbandry, fishing, forestry, processing and storage, mining and quarrying; secondary activities like construction, manufacturing, and activities like trade, business and services. Extended SNA activities include household maintenance, care for children, the sick and the elderly and community services. The activities related to learning, social and cultural activities, mass media and personal care and self-maintenance constitute Non-SNA activities.

To proceed to the second stage of the study, which deals with various aspects of time poverty as discussed in Section 1, it is inevitable to operationalize the concept of time poverty. What we need is a working definition of time poverty that makes it possible to estimate a time poverty threshold using our dataset. The estimated threshold can then be used to classify people either as time poor or non-poor. This objective can be achieved by using a methodology that is similar to that used for estimating monetary poverty.

The first thing that needs to be decided in this regard is whether to use an absolute or a relative measure of poverty. Both measures are common in the literature on monetary poverty, though the choice of an absolute measure is a bit more arbitrary. Often a certain level of per adult calorie intake equivalent based on "minimal" calorie requirements is taken as the poverty threshold. Unfortunately, things get more difficult in case of time poverty as there is no agreed level of "minimal" time needed by a person to avoid being time poor. Therefore we have to resort to a relative definition of time poverty that involves using some measure of the central tendency (such as mean, median or mode) of time distribution or its multiple as a time poverty cut-off point.[6]

[6]This definition is relative with respect to different time distributions and must not be confused with the measures of relative poverty that take into account the wellbeing of other people in the neighbourhood.

The issue of the choice of a poverty index comes next. We use the headcount index, which gives the proportion of people who are time poor. The results presented using this index are easy to grasp, even by a non-professional. In addition to being simple and straightforward, it belongs to the FGT class of poverty indices that possess certain desirable properties.[7]

Which are the activities that make people time poor if they exceed a predetermined limit is another question that has to be dealt with. While it is easy to exclude activities such as leisure and vacationing from this list, much more thinking is needed to decide on the activities that belong to it. The literature on time use describes these activities in such terms as "necessary or committed activities" and time spent in these activities as "non-free minutes" [Kalenkoski, *et al.* (2007)]. The activities to which an individual has committed as his economic or social responsibility may be regarded as necessary activities and time spent in these activities may be counted as non-free minutes contributing to his/her time poverty [Kalenkoski, *et al.* (2011)]. Thus, the figures of non-free minutes (time spent on committed activities) hence obtained can then be used for defining time poverty threshold(s) and calculating time poverty.

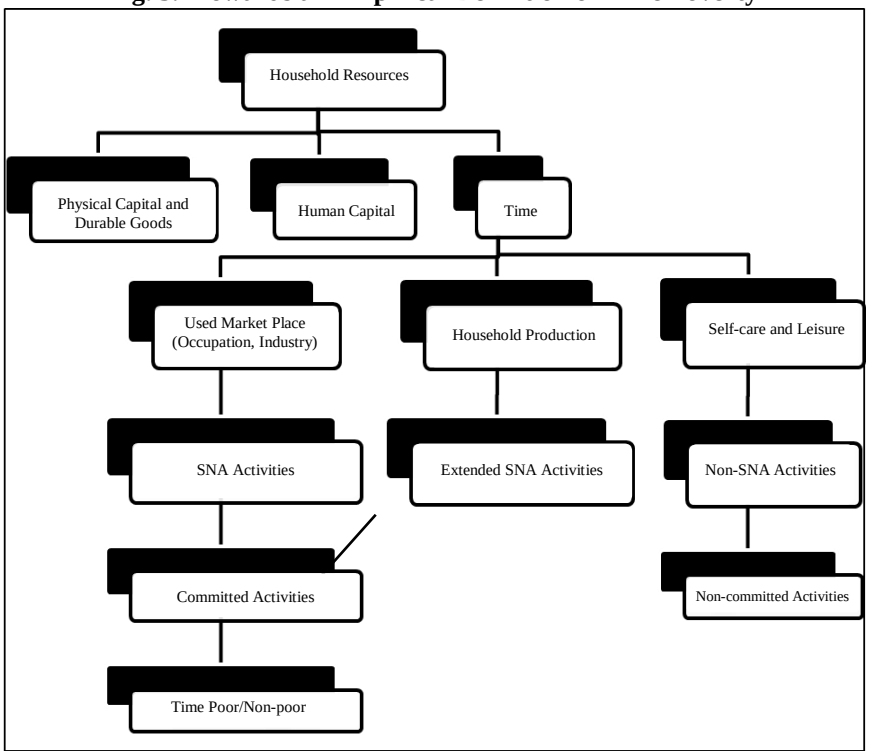
As noted above, the time use survey data organises activities performed by the respondents in three broad categories, namely, SNA, extended SNA, and non-SNA activities. A careful scrutiny of the list of the activities falling under each of the three broad categories, as reported at the beginning of this section, reveals that the first two categories consist of what we may safely call committed activities. For instance, the major activities included in the SNA, such as employment, production, trade and business activities, are considered 'committed' because these activities are directly related to the livelihood and economic wellbeing of working persons and their households, and they have committed to perform these activities in exchange for monetary or other economic benefits. Similarly, some social responsibilities which are essential for the welfare of household members such as care for children, the sick and the elderly are also categorised as committed activities, as they must be performed as a social obligation. These activities are part of the extended SNA activities. Therefore we add time spent by the respondent in SNA and extended SNA activities to calculate the total time spent by her/him in committed activities. Figure 3 shows the link between the concept and the empirical definition of time poverty as discussed above.

A poverty line or threshold that is used to calculate the headcount index is often defined as a multiple of the median of the non-free time of an individual. In the absence of an agreed cut off point for time poverty based on sound theoretical grounds, the only option left is to follow a threshold level commonly used by previous empirical studies of time poverty. Following Lawson (2007) and Bardasi and Wodon (2006), this study uses 1.5 times the median time spent in SNA and extended SNA activities as the time poverty line. Based on this methodology, the time poverty line is computed as 10.5 hours (630 minutes). The time poor are those who have spent more than 10.5 hours in a day on the committed activities (SNA+ex-SNA).[8] In other words, persons who work 63 hours in a week are deemed to be time poor.

[7]For more detail on FGT indices of poverty, see Foster, Greer and Thorbecke (1984).

[8]Using same methodology, Bardasi and Wodon (2006) have reported a time poverty line of 70.5 hours per week for Guinean adults (age 15 years and older).

Fig. 3. Towards an Empirical Definition of Time Poverty



However, it can be argued that the value of 10.5 hours used in this study as the poverty line is an arbitrary cut-off point. A natural question then would arise that what difference would it make if a higher or a lower cut-off point was chosen as poverty line. In the absence of well-established practices to measure time poverty, alternative poverty lines have commonly been used in the literature [Bardasi and Woden (2006)]. Following this practice, two alternative poverty lines have also been used in the analysis; 9 hours as a lower cut-off point and 12 hours as a higher cut-off point.

RESULTS

Time Use

Table 4 sets out data on the time use patterns for the full sample as well as working and not-working subsamples separately, controlling for gender and rural-urban areas. The male sample that filled the diary spent on average 5 and a half hour a day in SNA activities. In contrast, the female sample spent 5 hours in ex-SNA and only 1 hour and 15 minutes in SNA activities. Men spent about half an hour more in non-SNA activities as compared to women.

Some more details emerge as we look at the time use statistics separately for the working and the not-working sample. In the not-working sample, both males and females spent an average of around half an hour in SNA activities. The real gender difference is observed in the remaining two categories. On ex-SNA activities, the not-working male sample spent only half an hour as compared to more than 5 hours spent by the not-working females. The not-working men spent about 5 hours more than women in non-SNA activities.

Table 4

Mean Time Spent (Hours:Minutes) on Different Activities by Work Status, Gender and Rural/Urban

	Total Sample			Employed Only			Not-working		
Sample	SNA	Ex.SNA	Non-SNA	SNA	Ex.SNA	Non-SNA	SNA	Ex.SNA	Non-SNA
Total Sample									
All	03:15	02:55	17:50	06:58	01:22	15:40	00:32	03:54	19:34
Male	05:21	00:32	18:07	07:32	00:32	15:56	00:24	00:32	23:04
Female	01:15	05:10	17:35	04:42	04:39	14:39	00:34	05:16	18:10
Rural Areas									
All	03:25	03:03	17:32	06:44	01:34	15:42	00:44	04:16	19:00
Male	05:27	00:31	18:02	07:22	00:32	16:06	00:34	00:29	22:57
Female	01:35	05:21	17:04	04:41	04:52	14:27	00:48	05:27	17:45
Urban Areas									
All	02:58	02:43	18:19	07:22	01:02	15:36	00:14	03:46	20:00
Male	05:13	00:33	18:14	07:49	00:32	15:39	00:13	00:35	23:12
Female	00:44	04:52	18:24	04:44	03:59	15:17	00:16	04:58	18:46

Source: Calculated from the micro-data of Time Use Survey, 2007.

The employed males spent 7 and a half hours in SNA activities while the corresponding time for the female sample was less than 5 hours. On ex-SNA activities, the employed males spent an average of only 32 minutes in 24 hours whereas the female sample used up, on average, 4 hours and 39 minutes of their day on these activities. The gender gap in the employed sample in the time spent in non-SNA activities was substantially smaller as compared to that in the not-working sample.

A comparison of the time use pattern of the working, and not-working samples reveals that employed males spend almost the same small amount of time (32 minutes) in ex-SNA activities in both cases. In contrast, despite having to work around 5 hours a day in the labour market, the women's lot in terms of shouldering the responsibility of ex-SNA activities is not changed substantially after accepting employment. The time spent by them in ex-SNA activities is reduced, on average, from 5 hours and 16 minutes to 4 hours and 39 minutes, a gain of just 37 minutes. This lends credence to the view that some activities in the developing countries are considered to be women specific which they have to perform, whatever else they may or may not be doing.

The overall result is that women end up working more hours than men whether they accept paid work or not. Not-working women spend about 5 more hours in SNA and ex-SNA activities combined as compared to not-working men. This gender gap persists in the working sample, though it is reduced to 1 hour and 16 minutes. Men also have more free time that they spend in non-SNA activities in both the cases though this gender gap is much smaller in the working sample.

While the time used in SNA and ex-SNA activities by the males is almost the same in both rural and urban areas, women living in rural areas spend more time on both the types of activities as compared to those living in urban areas. They also have less time available to them for non-SNA activities as compared to their urban counterparts. This rural-urban divide in the time spent by women in SNA and ex-SNA activities combined on the one hand and non-SNA activities on the other

prevails both among working and not-working sample, though the gap is much wider among the working women. A working woman living in the rural area spends, on average, more than double the time in SNA and ex-SNA activities as compared to a woman living in the urban area.

Tables 5–7 show the time use data by three labour market indicators of the employed sample, namely the occupational class, industry and employment status, and gender and rural-urban areas. Service workers and plant/machine operators, who mostly work in the informal sector,[9] spent on average 8 and a half hours in SNA activities, approximately 2 hours more than the time spent in SNA activities by professional and clerical workers. The latter usually work in the formal sector where the number of working hours is fixed, whereas those employed in the informal sector usually work longer hours. This difference persists in rural as well as urban areas. Male workers spent on average more time in SNA activities than their female counterparts in all occupational categories. Moreover, male professional and agricultural workers had relatively more free time than the workers in other occupations.

Table 5

Mean Time Spent on Activities by the Employed Sample by Their Occupation

	SNA			Ex-SNA			Non-SNA			Male			Female		
Occupation	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	SNA	Ex-SNA	Non-SNA	SNA	Ex-SNA	Non-SNA
Managers	08:34	08:15	08:04	00:39	00:34	00:32	14:47	15:11	15:24	08:23	00:26	15:11	04:38	04:09	15:13
Professionals	06:23	06:12	06:07	01:06	01:04	01:04	16:31	16:44	16:49	06:27	00:48	16:45	04:31	02:53	16:36
Ass. Professionals	05:26	05:31	05:34	01:47	01:47	01:47	16:47	16:42	16:39	06:08	00:43	17:09	04:38	03:31	15:51
Clerk	06:49	06:56	07:00	00:39	00:41	00:42	16:32	16:23	16:18	06:58	00:35	16:27	04:28	03:02	16:30
Service Workers	08:28	08:28	08:28	00:30	00:35	00:39	15:02	14:57	14:53	08:34	00:29	14:57	05:11	03:42	15:07
Agri-workers	06:03	06:02	05:45	01:56	01:56	01:55	16:01	16:02	16:20	06:45	00:32	16:43	04:21	05:16	14:23
Craft Workers	06:31	06:50	07:09	02:09	01:45	01:21	15:20	15:25	15:30	07:51	00:32	15:37	04:11	04:57	14:52
Plant and Mach-Operator	08:27	08:34	08:42	00:28	00:27	00:26	15:05	14:59	14:52	08:34	00:27	14:59	08:15	02:14	13:31
Elementary Occup.	07:28	07:34	07:44	01:05	01:03	01:00	15:27	15:23	15:16	07:49	00:33	15:38	06:23	03:25	14:12

Source: Calculated from the micro-data of Time Use Survey, 2007.

Table 6

Time Spent by Industry

	Total			Rural			Urban			Male			Female		
Industry	SNA	Ex-SNA	Non-SNA	SNA	Ex-SNA	Non-SNA	SNA	Ex-SNA	Non-SNA	SNA	Ex-SNA	Non-SNA	SNA	Ex-SNA	Non-SNA
Agriculture	06:15	01:49	15:56	06:15	01:50	15:55	06:04	01:43	16:13	06:52	00:30	16:38	04:45	04:59	14:16
Manfu.	06:49	01:55	15:16	06:24	02:28	15:08	07:10	01:26	15:24	08:02	00:31	15:27	04:16	04:50	14:54
Elect. Gas	06:30	00:42	16:48	06:21	00:41	16:57	06:34	00:42	16:44	06:26	00:40	16:54	08:00	03:10	12:50
Constr.	07:44	00:36	15:40	07:44	00:37	15:39	07:44	00:34	15:42	07:45	00:35	15:40	04:41	03:47	15:32
Trade	08:38	00:30	14:52	08:46	00:33	14:41	08:32	00:28	15:00	07:04	00:23	16:33	05:20	04:04	14:36
Transport	08:24	00:36	15:00	08:15	00:38	15:07	08:33	00:33	14:54	08:25	00:34	15:01	06:52	02:40	14:28
Finance	07:28	00:33	15:59	07:26	00:30	16:04	07:29	00:33	15:58	07:26	00:32	16:02	08:37	01:08	14:15
Com. Social. Ser	06:30	01:22	16:08	06:30	01:20	16:10	06:28	01:24	16:08	07:00	00:42	16:18	04:47	03:39	15:34

Source: Calculated from the micro-data of Time Use Survey, 2007.

[9]The Labour Force Survey defines the informal sector on the basis of the type of enterprise and the number of persons working in the enterprise. The TUS 2007 reveals that the service workers and plant/machine operators are primarily engaged in the informal sector.

Table 7

Time Spent (Hours:Minutes) by Employment Status

	Both Sexes			Males			Female		
Employment Status	SNA	Ex. SNA	Non-SNA	SNA	Ex. SNA	Non-SNA	SNA	Ex. SNA	Non-SNA
Employee	07:18	01:11	15:31	07:44	00:33	15:43	05:20	04:04	14:36
Self-employed	07:21	00:52	15:47	07:36	00:33	15:51	04:25	04:27	15:08
Unpaid Family Helper	05:07	02:59	15:54	06:09	00:23	17:28	04:15	05:12	14:33
Employer	08:13	00:31	15:16	08:20	00:25	15:15	04:30	03:27	16:03

Source: Calculated from the micro-data of Time Use Survey, 2007.

In terms of industrial classification, workers engaged in trade, transport and construction sectors spent more time in SNA activities than those working in other sectors. This pattern of time use is not influenced much by gender or region.

Overall, the female unpaid family helpers spent 3 hours more in a day on committed activities than the male unpaid family helpers. The situation of women working as employees or self-employed was not much different. Unpaid family helpers spent less time on committed activities than the other three categories of workers. However, a glance at the gender distribution of time reveals that female unpaid family helpers spent a lot more time in ex-SNA activities than their male counterparts (more than 5 hours vs. only 23 minutes). This resulted in female unpaid family workers spending more time in committed activities than any of the remaining three groups of workers.

It is worth focusing on women who spent some time in SNA activities (Table 8). On average these women spent more than 3 hours with virtually no difference in rural and urban areas. However, there was significant difference in this regard between the working and not-working women. In urban areas, the former spent an average of 5 and a half hours in SNA activities while the latter used only one hour and 41 minutes. The working rural women spent on average 5 hours in SNA activities as compared to 2 hours and 10 minutes used by the not-working sample. Overall, working women give considerable time to their labour market activities.

It appears from these simple statistics on the time use pattern that in Pakistan (rural and urban areas alike) the participation of women in the labour market does not reduce their time commitment for ex-SNA activities. Males spend little time in ex-SNA activities, which, in Pakistani culture, appear exclusively to be for females. Although women spend much less time than men in SNA activities, their overall time spent on committed activities (SNA+ ex-SNA) is greater than the time spent by their male counterparts in these activities.

Table 8

Time Spent (Hours:Minutes) by Women in SNA Activities

	Urban	Rural	Total
Working	05:29	04:56	05:04
Not-working	01:41	02:10	02:03
Total	03:14	03:16	03:15

Source: Calculated from the micro-data of Time Use Survey, 2007.

Time Poverty

The time use patterns of both the working and not-working samples are reflected in the time poverty statistics. The last row of the first panel of Table 9 indicates that, based on a 10.5 hours a day poverty line, time poverty is 14 percent for the entire TUS sample. As expected, the employed people (male as well as female) are more time poor than those in the not-working category, mainly because the latter, in general, did not spend time in SNA activities (see discussion in the previous section). This difference is quite large in both urban and rural areas. Time poverty is substantially higher among not-working as well as working women as compared to men in the respective categories. Working women are hugely more time poor as compared to the not-working women (36.8 percent versus 10.2 percent respectively). This raises the question whether getting a job is a bane or bliss for women. The answer depends on the resulting trade off between monetary and time poverty and its valuation by women. Moreover, if time poverty is computed from the time used for the SNA activities only, the incidence of poverty among women is negligible, less than 2 percent.

In urban areas, 12.3 percent people are time poor, while for the rural areas this figure is 15 percent. Time poverty in rural areas is higher among females than males. The opposite is true for urban areas. Within the employed sample, 22.5 percent people are found time poor, with no major difference between rural and urban areas. However, time poverty among the employed female sample is double the time poverty among the corresponding male sample. The difference in rural areas is around two and a half times. In urban areas, although more females are time poor than males, the difference is just 5 percentage points. As noted earlier, it is due to the fact that female participation in the labour market brings hardly any change in their time allocation for activities related to household maintenance, care of children and the elderly.

The second and third panels of Table 9 present results for two alternative poverty lines; one with a lower cut-off point of 9 hours per day and the other with a higher cut-off point of 12 hours per day. As expected the two poverty lines lead, respectively, to higher and lower estimates of time poverty, though the general pattern of time poverty across various categories remains generally the same. The change in time poverty due to change in cut-off point is substantial, for example, increasing cut-off point to 12 hours per day brings down time poverty levels to almost negligible in most of the categories, while a decrease in the cut-off point to 9 hours per day increases considerably the time poverty of both males and females.

It would be interesting to compare the results reported above with the time poverty estimates for some other countries. Bardasi and Wodon (2006) report an overall time poverty rate of 17.6 percent for Guinea, whereas the corresponding figures for men and women are 9.5 percent and 24.2 percent respectively. The overall time poverty rate estimated by Lawson (2007) for Lesotho is 7.9 percent, while 8.3 percent men and 6.8 percent women are reported to be time poor. So, time poverty in Pakistan, based on a 10.5 hours per day cut-off point, is lower than in Guinea but higher than in Lesotho.

Table 9

% Time Poor by Work Status, Gender and Rural-Urban Areas

	Working/Employed			Not-working/Not-employed			Total Sample		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Poverty line = 10.5 hours per day									
Urban	23.2	22.4	27.9	5.6	0.5	7.6	12.3	14.9	9.8
Rural	22.2	16.6	39.8	9.2	0.5	12.1	15.0	12.1	17.7
Total	22.5	18.9	36.8	7.7	0.5	10.2	14.0	13.2	14.7
Poverty line = 9.0 hours per day									
Urban	44.7	44.3	46.9	13.2	0.9	18.0	25.2	29.4	21.1
Rural	42.1	36.1	61.2	20.1	1.1	26.2	30.0	26.2	33.4
Total	43.0	39.3	57.6	17.2	1.0	22.8	28.1	27.5	28.7
Poverty line = 12.0 hours per day									
Urban	8.7	8.2	11.5	1.7	0.1	2.3	4.4	5.4	3.3
Rural	8.6	5.7	17.8	2.9	0.1	3.8	5.5	4.1	6.7
Total	8.6	6.7	16.2	2.4	0.1	3.2	5.0	4.6	5.4

Source: Calculated from the micro-data of Time Use Survey, 2007.

In Pakistan, only a few studies have estimated the money-metric poverty incidence across the occupational groups. The general conclusion of these studies is that the level of poverty is higher among unskilled (elementary workers), skilled and service workers than that among other occupational categories.[10] The time poverty data presented in Table 10 show higher incidence of time poverty among services workers, machine operators and workers in elementary occupations than among the clerical, professional and agriculture workers. This implies that unskilled and skilled workers along with the service workers are at the receiving end of both monetary and time poverty.

Table 10

Incidence of Time Poverty (% Poor) by Occupation (Employed only) and Industry

Occupation/Industry	All Areas			Rural Areas	Urban Areas
	Both	Male	Female		
Occupation					
Manager	27.9	27.8	39.4	32.2	25.5
Professional	12.5	12.8	11.1	14.4	11.7
Associate Professional	12.8	9.4	19.4	12.2	13.1
Clerks	10.0	9.6	20.4	11.3	9.4
Service Worker	33.6	34.1	19.2	33.0	34.1
Agriculture	18.5	9.3	40.5	18.5	19.9
Craft Worker	24.3	20.1	35.3	26.5	22.1
Machine Operator	32.7	32.6	59.9	31.6	34.0
Elementary	23.6	20.6	43.2	24.3	25.2
All	22.5	18.9	36.8	22.2	23.2
Industry					
Agriculture	19.5	10.0	42.3	19.4	21.4
Manufacturing	27.7	22.4	24.9	31.5	23.4
Electricity	13.8	12.6	66.7	18.2	11.6
Construction	17.6	17.5	33.3	17.6	17.5
Trade	32.0	31.9	27.5	34.3	30.6
Transport	32.4	32.3	40.0	32.9	31.8
Finance	16.9	16.7	22.2	12.5	17.7
Services	18.1	16.7	22.9	18.4	17.9
All	22.5	18.9	36.8	22.3	23.2

Source: Calculated from the micro-data of Time Use Survey, 2007.

[10]See Jafri (1999) and Qureshi and Arif (2001).

In the male employed sample, time poverty is less than 10 percent among the associate professionals, clerical workers and agriculture workers, whereas one-third of the service workers and plant/machine operators are time poor. The incidence of time poverty among females is much higher than that among their male counterparts in all categories of occupations except professional and service workers. A noteworthy point is that approximately half of the employed women in elementary, skilled and semi-skilled occupations are time poor. These differences in time poverty across occupations persist in rural as well as urban areas. The case of female agriculture workers is interesting. Table 10 shows that 41 percent of these women are time poor whereas only 9 percent of their male counterparts fall in this category.

Table 10 also shows the data on time poverty across the type of industry where the sampled workers were employed. High incidence of time poverty was observed in trade, transport and manufacturing sectors for both male and female workers. In the agriculture sector, time poverty among women was four times higher than that among men. It corroborates the time poverty data across the occupational categories discussed above.

One important lesson from the analysis of the time poverty data across the occupational and industrial classification is that low paid occupations and sectors get more time of the workers. So these workers are poor in money-metric terms as well as in terms of time use. They work for longer hours and get low wages, insufficient to sustain a decent living standard. Rural women working in the agriculture sector are particularly in a disadvantageous position in terms of time poverty.

The finding that low paid occupations are associated with high incidence of time poverty is further reinforced by the monthly income data. Table 11 shows that, generally, the lower the monthly income the higher the incidence of time poverty. For the employed sample, the incidence of time poverty among those who earn a monthly income of Rs 10,000 or more was 16 percent as compared to 30 percent among those who earn Rs 2000 or less per month, indicating a difference of 14 percentage points between the highest and the lowest income group. This gap was wider among women as compared to men, though much smaller between urban women as compared to rural women. In most of the income groups, women were found to be more time poor than their male counterparts in rural as well as urban areas. This indicates a harder trade-off for women between higher income due to joining labour market and increased time poverty as compared to their male counterparts. The trade-off between supplying additional work hours and time poverty is also harder for working women as compared to working men, but less hard as compared to those women who have to make a decision about joining the labour market.

The gender dimension of time poverty can be understood more clearly from the employment status data than from any other labour market indicators. Figure 4 shows a vast difference between males and females in the incidence of poverty in all three categories of employment status: “employees”, “self-employed” and “unpaid family helpers”. The time poverty among the female ‘unpaid family helpers’ is around five-fold the time poverty among their male counterparts. In the case of employees, the gender difference in time poverty is around 10 percentage points, favouring the male. This difference is even greater for the self-employed category. Finally, education was found to reduce the incidence of time poverty, particularly among college and university graduates. In addition, the lowest gender gap in time poverty was found among these graduates (Appendix Table 2).

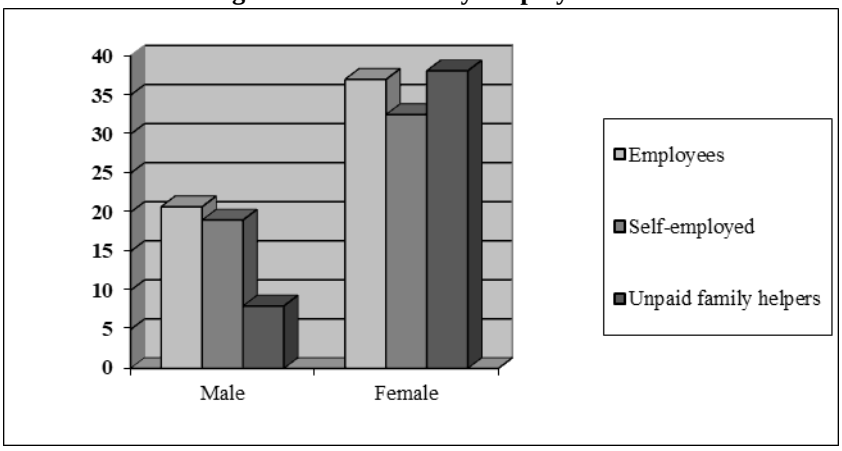
Table 11

% Time Poor by Income Per Month (Rs)

Income Per Month	Total			Rural			Urban		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
Upto 2000	29.8	16.5	39.7	29.2	15.3	44.3	24.2	19.7	28.7
2001–3000	23.6	21.7	36.9	21.5	19.2	43.6	28.6	28.5	29.1
3001–4000	22.8	22.1	33.9	21.2	20.4	35.7	26.3	25.9	31.3
4001–5000	23.2	22.6	37.0	20.9	20.2	46.4	27.4	27.1	31.1
5001–6000	21.5	21.7	17.2	19.3	19.1	23.1	24.5	25.3	13.2
6001–7000	29.4	20.2	24.1	19.8	19.8	20.7	21.4	20.9	28.0
7001–8000	17.7	16.9	32.5	13.4	12.3	35.0	22.4	22.0	30.0
8001–9000	16.6	16.2	23.3	13.6	12.5	31.3	20.0	20.3	14.3
9001–10000	17.8	17.9	16.7	13.6	13.6	12.5	21.9	22.3	16.2
10001 or more	15.8	15.3	24.0	12.9	11.0	30.4	17.3	17.0	21.9
Don't Know	22.1	19.8	45.5	14.8	12.7	33.3	38.5	35.1	199
Refused	22.7	24.2	11.1	17.3	17.0	20.0	34.8	42.1	0

Source: Calculated from the micro-data of Time Use Survey, 2007.
Note: 18 percent of the employed sample has no monthly income.

Fig. 4. % Time Poor by Employment Status



Source: Calculated from the micro-data of Time Use Survey, 2007.

Determinants of Time Poverty

The analysis carried out in the previous subsection primarily focused on the incidence of time poverty by gender, the place of residence and labour market indicators. Studies focussing on the determinants of time poverty include several other individual, household and community level variables that can be associated with time poverty.[11] Due to data limitation, it is not possible to examine the relationship between time poverty and all these variables. Focusing on some socio-demographic and labour market characteristics of the sampled persons who filled the diary, this section has carried out multivariate analyses to examine the relationship between time poverty and some of these characteristics. The dependent variable is time poverty which takes the value 1 if the

[11]See for example, Bardasi and Wodon (2006), Lawson (2007), McGinnity and Russell (2007), and Merz and Rathjen (2009).

sampled person is time poor; otherwise it takes the value 0. Since the dependent variable is binary, logistic regression rather than OLS is used for the multivariate analysis. Six models have been estimated. Model 1 is based on the entire sample (working and not-working persons) while models 2 and 3 are estimated separately for the male and female samples. Model 4 has included only the employed sample to analyse the relationship between time poverty and labour market indicators including occupation, industry, employment status and income. Models 5 and 6 divide the employed sample between urban and rural areas respectively to take care of the varying work patterns between the two types of areas.

Four independent demographic variables, age, sex, marital status and presence of children younger than 7 years in the household are included in the regression analyses while the level of educational attainment is used to study the relationship between time poverty and human capital. The place of residence represents the influence of community variables on time poverty. Four labour market indicators, occupation, industry, income and employment status, are included in models 4, 5 and 6 to understand their correlation with time poverty. Three seasonal dummy variables have also been included in models 4 and 6, as working hours in rural areas are considerably affected by changing seasons. The operational definition of all these variables and results of the six models are presented in Table 12.[12]

Model 1 includes the entire TUS sample. The results of this model corroborate the bivariate analysis carried out in the previous section. All variables included in this model have an independent and significant effect on the probability of being time poor. The employed persons are more likely to be time poor than those not employed/not-working. It is mainly because the not-working sample spends less time on the committed activities, particularly those falling under the SNA activities category. Moreover, the economically active women use their time in household maintenance and child care in addition to SNA activities. Estimation results of model 1 also show that overall, women are more likely to be time poor than men. As discussed earlier, the underlying cause behind this finding is their time use pattern. The quadratic relationship between age and time poverty also turns out to be significant. The significant and positive relationship between time poverty and being married shows that marriage increases the use of time on committed activities. Same is true for the presence of less than six years old children in the household. Model 1 shows a positive and significant relationship between time poverty and having no education or having education but below the matriculate level. It means that 10 or more years of education enable individuals to have more free time for activities like personal care and rest.

The results of models 2 and 3, in which the analysis is carried out separately for the male and female samples, show no major qualitative change in the findings except that living in urban areas has a positive relationship with male time poverty. In the case of the female model, this relationship turns out to be negative. It shows that males living in urban areas and females living in rural areas are more time poor than their counterparts. It is largely because of the involvement of rural women in farm activities.[13]

[12]The decision to join the labour market (and the number of hours to be supplied) itself depends on a number of other variables including wage rate. To the extent that this may introduce endogeneity in the present context, the coefficients of the regression models that include employment status as an explanatory variable should be interpreted with care.

[13] See Tables 5 and 10.

Table 12

Logistic Regression: The Determinants of Time Poverty
Dependent Variable Time Poor = 1

		Model 1 (Full Sample)	Model 2 (Males)	Model 3 (Females)	Model 4 (Employed)	Model 5 (Employed Urban)	Model 6 (Employed Rural)
Constant		–4.429*	–6.525*	–6.299*	–2.618*	–1.853*	–2.497*
Age (years)		0.084*	0.056*	0.130*	0.050*	0.010	0.070*
Age^2		–0.001*	0.000*	-0.002*	0.000*	0.000	–0.001*
Gender (male=1)		–1.088*	–	–	–1.064*	–0.439*	–1.375*
Place of Residence (urban=1)		0.094*	0.462*	–0.324*	0.119*	–	–
Employment Status (employed=1)		1.772*	3.557*	1.753*	–	–	–
Marital Status (married=1)		0.706*	0.104	1.187*	0.426*	0.433*	0.386*
Children < 7 Years in the Household (Yes=1)							
Education (below matric=1)		0.286*	0.090*	0.458*	0.166*	0.114*	0.183*
Occupation (service workers, machine operators/unskilled=1)		0.392*	0.421*	0.236*	0.375*	0.372*	0.429*
Employment Status (unpaid family helpers=1)		–	–	–	0.007	0.166*	–0.049
Industry (transport, trade and manufacturing=1)							
Monthly Income (below the minimum wage of Rs 7000=1)		–	–	–	0.097	–0.103	–0.148*
		–	–	–	0.763*	0.567*	0.857*
Season	(Quarter 1=1)	–	–	–			
	(Quarter 2=1)	–	–	–	0.208*	–	–
	(Quarter3=1)	–	–	–	0.418*	–	0.303*
		–	–	–	0.561*	–	0.544*
		–	–	–	0.141*	–	0.044
N		37815	18308	19507	15959	5696	10263
– 2 log Likelihood		25513	12371	12144	15550	5938	9572

Source: Estimated from the micro-data of Time Use Survey, 2007.
*Significant at 5 percent or less level of significance.

In order to learn about the relationship between time poverty and labour market indicators, model 4 has been modified to include only the employed sample. In this model, age, sex, marital status, education and place of residence have signs similar to those in model 1. The positive and significant relationship between time poverty and working as unskilled labourers, service workers and plant/machine operators in the urban areas (model 5) shows the hard work of these manual workers. It has been shown earlier that these workers, who are mainly males, spend little time in ex-SNA activities and work long hours in the labour market which makes them time poor. The number of such workers is perhaps too small in rural areas to provide sufficient variation for meaningful estimation of their effect. Although working women use relatively less of their time in the labour market, they take all kinds of responsibilities at home. This dual burden on the sampled women contributes to their time poverty. They are left with relatively little free time for personal care and rest. Unpaid family helpers are generally rural females who, by definition, receive no income for their work, so that a dummy for this category is likely to be highly collinear with the income dummy. Dropping the income dummy from the regression for rural areas (model 6) makes the dummy for unpaid family helpers highly significant.

The industry, in which a worker is employed, is a strong correlate of his/her time poverty. Workers engaged in trade, transport and manufacturing sectors are more time poor than those engaged in other sectors including agriculture, service and construction. The monthly income also gives a similar message: the workers in low income groups are more time poor than the workers in high income groups.

CONCLUSIONS AND POLICY IMPLICATIONS

Availability of time use data is relatively a recent phenomenon in Pakistan. This has allowed us to measure time poverty and look at its incidence across gender, occupational groups, industries, regions, and income levels. The study also uses multivariate regression analysis to examine the relationship between its various determinants. The results of this study provide some important insights into the phenomenon of time poverty in Pakistan and lead to some interesting conclusions.

The first important finding of this study is that women spend more time in committed activities than men whether they are employed or not. As a result, women are more time poor than men in both the circumstances. A closer look at time use statistics indicates the reason behind this occurrence. It appears that there are certain ex-SNA activities, such as household maintenance, and care for children, the sick and the elderly, that are women specific probably due to socio-cultural reasons. Women have to perform these activities irrespective of their employment status, while Pakistani men are not usually involved in them. This substantially increases the time spent by women in committed activities. Since men spend little time in ex-SNA activities, they have more time available for non-SNA activities including leisure and personal care as compared to women.

The finding that women generally spend more time in committed activities and are more time poor as compared to men has two noteworthy implications that are likely to influence school enrolment decision of the females. According to the human capital theory, the decision to enrol in school depends, among other things, on the opportunity cost of education. The monetary value of the hours worked at home is one of the components of this opportunity cost. Since women work more hours at home as compared to men, their opportunity cost of getting enrolled in a school is likely to be higher, making them less likely to enrol in school. However, a cancelling factor is simultaneously at play. Women are also more time poor as compared to men because they work more hours at home. Hence, assuming that time poverty results in reduced labour productivity and workers are paid in the labour market according to their marginal productivity, women would earn less as compared to men for working the same hours. Consequently, another component of opportunity cost of education, which consists of the monetary value of the forgone work in the labour market, would be smaller for women. This would make them more likely to enroll in school. Thus, the net effect of women's time spent in committed activities on female school enrolment could either be positive or negative. However, this issue can only be sorted out by further empirical research that entails generating a single dataset that combines information that is available separately in time use and labour force surveys.

The results of this study also indicate that working women are far more time poor as compared to not-working women, because time spent by them in ex-SNA activities does not reduce considerably enough to compensate for the extra time they devote to their job. Moreover, women face a harder trade-off between higher labour market earnings and increased time poverty as compared to men. In other words, while entering the job market, not only they have to face higher time-poverty in

exchange for reduced monetary poverty, but also the terms of exchange are more unfavourable for them than for their male counterparts. This raises the seemingly intriguing issue of whether expanding the job market for women through economic and noneconomic measures would make them better off? In the neoclassical framework, the choice of accepting or rejecting the job offer and number of hours worked will depend on the decision maker's marginal valuation of leisure as depicted by her preferences and valuation of time in the labour market as indicated by the prevailing wage rate. Assuming that women have the same preferences as men, it can be argued on the basis of the findings mentioned above that women have to make more difficult choices in their labour supply decisions as compared to men because women have to spend considerable time on certain ex-SNA activities even after joining the labour market.

Among the various categories of employment status, the case of female unpaid family helpers is unique in several respects. Time poverty among them is around five-folds the time poverty among their male counterparts. They are more time poor even as compared to fellow women in other employment status categories. The likely cause of the high incidence of time poverty among the females in the agriculture sector is the significant presence of unpaid family helpers.. The apparent reason for the huge gender gap in time poverty among unpaid family helpers is that female unpaid family helpers spent a lot more time on ex-SNA activities than their male counterparts.

People in certain professions such as unskilled, skilled and services sector are found to be more time poor as compared to people in other professions. The same is true for some industries like trade, manufacturing and transport. These professions and industries generally require extended hours from the workers, while offering low wage rates. This catches the workers in a situation in which they are both monetary and time poor at the same time. The close association of time poverty with low income found in this study corroborates our conclusion.

In the light of these findings, several policy areas emerge where we need to focus. The first thing that needs to be done is to generate awareness about a fair distribution of responsibilities between men and women. If this can be done, a significant portion of the gender gap in time poverty is likely to be eliminated.

The situation of female unpaid family helpers needs immediate attention not only due to both the magnitude and the gender gap in time poverty that they are facing, but also because they are more likely to be monetarily poor. Generally, these are the women who work along with other family workers in areas such as agriculture and household help and maintenance. As the name suggests, they do not receive any payment for their work. To fully understand their condition, a more thorough study focusing on this particular group is needed.

Though participation in the labour market, particularly among women, is not the only reason for time poverty, the findings of the study show that working people are generally more time poor as compared to the not working population and time poverty is concentrated in certain occupations and industries. This opens up an opportunity for the government to play its part in reducing time poverty. The line of action is to enforce minimum wage laws to reduce monetary poverty of those who

are more likely to be time poor as well and to put mandatory ceiling on work hours in the industries which have high concentration of time poverty. Eradication of monetary poverty in general can also go a long way in this respect by eliminating the need to work long hours at the lowest wage rate just to survive. Improving education also has significant potential in this regard, as high education is found to be associated with low time poverty.

Appendix Table 1

Socio-demographic Characteristics of Women

Age	Working	Not-working
10–14	7.4	17.7
15–19	11.1	13.2
20–24	13.7	12.5
25–29	14.8	12.0
30–34	13.9	10.3
35–39	11.2	8.0
40–44	8.4	6.0
45–49	7.3	5.0
50–54	4.7	3.7
55–59	2.6	3.2
60+	4.9	8.4
All	100	100
Highest Class Passed		
No Formal Education	71.8	54.8
< Primary	5.0	9.3
Primary	5.7	14.2
Middle	2.8	7.9
Matriculation	5.2	7.3
Intermediate	3.5	3.9
Degree and Above	6.1	2.6
All	1001	00

Source: Calculated from the micro-data of Time Use Survey, 2007.

Appendix Table 2

% Poor among the Employed Sample by Education and Gender

Education	Both Sexes	Male	Female
No Formal Education	26.9	18.7	41.1
Below Primary	20.6	19.8	25.6
Primary	21.6	20.7	30.8
Middle	21.8	21.2	32.2
Matriculation	20.7	19.7	30.2
Intermediate	16.1	15.0	23.9
Degree and above	13.6	13.0	16.4
All	22.5	18.9	36.8

Source: Calculated from the micro-data of Time Use Survey, 2007.

REFERENCES

Alkire, Sabina and Maria Emma Santos (2010) Acute Multidimensional Poverty: A New Index for Developing Countries. (OPHI Working Paper No. 38).

Bardasi, Elena and Quentin Wodon (2006) Measuring Time Poverty and Analysing Its Determinants: Concepts and Application to Guinea. In C. Mark Blackden and Quentin Wodon (eds.) *Gender, Time Use, and Poverty in Sub-Saharan Africa*. (World Bank Working Paper No. 73, 75–95.)

Becker, Gary S. (1965) The Allocation of Time. *Economic Journal* 75, 493–517.

Becker, Gary S. (1975) *Human Capital.* Chicago.

Foster, J., E. J. Greer, and E. Thorbecke (1984) A Class of Decomposable Poverty Indices. *Econometrica* 52, 761–766.

Gronau, Reuben (1999) Home Production—A Survey. In *Handbook of Labour Economics*. Vol. 1, Chapter 4.

Hamermesh, D. S. and G. A. Pfann (eds.) (2005) *The Economics of Time Use. Contributions to Economic Analysis* 271. Amsterdam, San Diego and Oxford. Elsevier.

Hamilton, B. W. (1983) The Flypaper Effect and Other Anomalies. *Journal of Public Economics* 22, 347–361.

Jafri, S. M. Younus (1999) Assessing Poverty in Pakistan. In *A Prifile of Poverty in Pakistan.* Mahboob Ul Haque Center for Human Development. Islamabad.

Kalenkoski Charlene M., Karen S. Hamrick, and Margaret Andrews (2011) Time Poverty Thresholds and Rates for the US Population. *Social Indicators Research* 104, 129–155.

Kalenkoski, Charlene M., Karen S. Hamrick, and Margaret Andrews (2007) Time Poverty Thresholds. Presentation at the 29th Annual International Association for Time Use Research Conference, Washington, DC.

Lawson, David (2007) A Gendered Analysis of 'Time Poverty'—The Importance of Infrastructure. Global Poverty Research Group. (Working Paper GPRG-WPS-078).

McGinnity, Frances and Helen Russell (2007) Work Rich, Time Poor? Time-Use of Women and Men in Ireland. *The Economic and Social Review*, 38: 3, 323–354.

Merz, Joachim and Tim Rathjen (2009) Time and Income Poverty: An Interdependent Multidimensional Poverty Approach with German Time Use Diary Data. (IZA Discussion Paper Series No. 4337.)

Mincer, Jacob (1974) *Schooling, Experience, and Earnings.* Chicago.

Oates, W. E. (1977) On the Use of Local Zoning Ordinances to Regulate Population Flows and the Quality of Local Public Services. In O. Ashenfelter and W. E. Oates (eds.) *Essays in Labour Market Analysis.* Wiley. New York.

Pakistan, Government of (2010) *Pakistan Labour Force Survey 2008-09.* Islamabad: Statistics Division, Federal Bureau of Statistics.

Pakistan, Government of (2009) *Time Use Survey 2007*. Islamabad: Statistics Division, Federal Bureau of Statistics.

Qureshi, Sarfraz. K. and G. M. Arif (2001) Profile of Poverty in Pakistan, 1998-99. (MIMAP Technical Paper Series No. 5).

UNDP (2010) *Human Development Report 2010*. 20th Anniversary Edition. United Nations Development Programme. New York. USA.

Vickery, C. (1977) The Time Poor: A New Look at Poverty. *The Journal of Human Resources* 12:1, 27–48.

Self-reported Symptoms of Reproductive Tract Infections: The Question of Accuracy and Meaning*

DURR-E-NAYAB

Many developing countries are devising means to improve collection of information regarding health by strengthening surveys, censuses and registration systems. Such surveys are used to identify health problems, estimate prevalence, determinants and distribution of health issues, and study possible trends in the health status of the population. The aim is to develop means to provide low-cost, valid, reliable and comparable information regarding health, and to build the base to monitor health systems. These surveys and censuses also provide policy-makers the evidence to formulate and adjust their strategies as the situation demands.

Ever since reproductive health, especially women's reproductive health, was elevated in the agenda of governments throughout the world after the International Conference on Population and Development (ICPD) in Cairo, 1994, countless surveys on the topic have taken place. Measuring morbidity in a community, including reproductive morbidity, through interview questionnaire seems to be the cheapest and most practical way, but there is a difference between incurring a lower cost and being cost-effective. The latter quality largely depends on how valid the responses are when compared to the most thorough medical examination. The question of being cost-effective also arises in using alternative medical techniques. Thus, validity and cost are the two main concerns in evaluating the accuracy of women's reports of their disease conditions obtained in verbal surveys to that derived from medical examination.

Among all the issues confronting women's reproductive health, reproductive tract infections (RTIs) have gained much attention after an association was established between these infections and HIV/AIDS. The key components of reproductive health, as envisaged by the ICPD 1994 and later by the Fourth World Conference on Women in Beijing (1995), and the +5 conferences held in 1999 and 2000, include maternal mortality and morbidity, perinatal mortality and morbidity, abortion and post-abortion care, and contraceptive use, infertility and female genital mutilation, and all these factors are linked to RTIs in one way or another[14] making them an area of much interest.

* The article was published in *The Pakistan Development Review*, *46*(3), 2007, pp. 241–265.

[14] For details on the nature of RTIs, and linkages between these infections and materno-feotal health see Nayab (2005a).

The interest of the present paper is not just to compare information provided by women, expressed in reports of current experiences regarding RTI related symptoms, with the medical examination but to also compare two medical procedures, that is clinical and aetiological diagnoses. This gives us the opportunity to assess the WHO recommended syndromic approach to identify and manage reproductive tract infections in resource poor environments, as prevalent in low and middle-income countries, like Pakistan. Most studies have found rather poor concordance between these three diagnostic approaches, including those done by Walraven, *et al.* (2005), Desai, *et al.* (2003), Remez (2003), Bhatia and Cleland (2000), Kaufman, *et al.* (1999), Hawkes, *et al.* (1999), Filippi, *et al.* (1997), Zurayk, *et al.* (1995), Klitsch (2000), Sloan, *et al.* (2000) and Garg, *et al.* (2001). The low level of agreement found in these studies are attributed to lack of clarity in the diagnostic criteria, asymptomatic nature of some infections leading to no clinical signs, and cultural perceptions of women regarding gynaecological health.

The present paper, thus:

(1) Critically assesses the validity of self-reports obtained in verbal surveys with medical diagnoses, that is clinical examination based on the WHO's syndromic approach, and aetiological diagnosis.
(2) Evaluates the consistency of clinical diagnosis against aetiological diagnosis, with the first being cheaper and the latter considered to be a more reliable and accurate way of diagnosing the presence or otherwise of an infection. This is important for the sake of policy formulation regarding health delivery.
(3) Explores the meaning of self reports, especially in instances when they are not found to be in concordance with medical diagnoses.

METHODOLOGY

The paper is part of a larger study, Rawalpindi Reproductive Tract Study 2001-2002 [RRTIS (2001-2002)], conducted, as the name implies, in the city of Rawalpindi, Pakistan. The acceptable size of the sample for a survey to estimate the prevalence of any disease/infection depends upon: the expected prevalence of the disease in the population from the available evidence; the degree of precision wanted in the estimate; and whether a time trend is to be monitored or not [WHO (2000); de Vaus (1995)]. A large sample size is needed if: higher precision is required; there is an intention to study the trend over time; and if the expected prevalence is low. For an acceptable sample size for the present study, calculations were based on the existing evidence of RTI prevalence rates as found by laboratory diagnosis. Available evidence shows RTI prevalence rates, for the laboratory based studies, to range from ±5 percent to ± 15 percent [NACP (2002); Wasti, *et al.* (1997); Karachi Reproductive Health Project (1997); Mohammad, *et al.* (1997)]. Following the WHO guidelines, a sample size of 385 is acceptable for a similar prevalence rate, with 95 percent degree of confidence and a precision of ±3 percent. Using this as the base, a sample of 500 households was decided upon for the study, keeping in mind the probable refusal rate for the medical part of the study and the budgetary constraints.

Based on the economic status of the households, a representative sample of 500 households was drawn using 25 primary sampling units (PSUs) of the Federal Bureau of Statistics (FBS), which is 20 households from each PSU. Of these 500 households 508 women were found eligible for the study, of which 311 women gave consent for medical part of the study.[15] For eligibility, women were to: be aged between 15 to 49 years old; be currently married; and have their husbands living with them. With the median age of marriage in urban Pakistan hovering around 19 years [PFFPS (1998)], inclusion of young females aged 15–19 years was a logical choice. Being currently married was of significance because if women were not in a union, they were unlikely to be sexually active or using contraceptives, which were factors of interest to this study. Similar reasons led to the decision to include only those women whose husbands were living with them at the time of the study.

The sub-sample, comprising women who consented for the medical component of the study, was compared with the total sample to gauge any biases that might have crept in the selection. In many instances, no difference existed, while for others the difference generally remained in the range of 1-5 percent. Differences, however, were found in the proportions of the economic groups and the number of symptoms reported by women. The sub-sample has a 10 percent under-representation of women from the upper economic group. Similarly, women who did not report any symptoms were under-represented by 10 percent over women reporting more symptoms. Details of differences in background characteristics between women in the total sample and the sub-sample consenting for medical examination can be seen in Annex II.

For a holistic approach to the issues under study three tools were used for the collection of data. These were: administering a questionnaire; having a clinical examination based on the algorithms defined by the WHO in the Syndromic Approach; and finally to have an aetiological diagnosis to ascertain the presence or otherwise of any infection. An open-ended questionnaire was developed for the study inquiring about women's: social and economic characteristics; obstetric and gynaecological history; contraceptive history; hygiene practices, including menstrual hygiene; health status; knowledge regarding RTIs; experience of RTI symptoms including their frequency, duration and severity; health seeking behaviour; inter-spousal communication; and autonomy status.[16]

The clinical examination, based on the WHO recommended Syndromic Approach was the first step of the medical investigation regarding RTIs. This approach is based on identification of syndromes, which are a combination of symptoms, reported by the client, and signs, observed during clinical diagnosis, following the algorithms given by the WHO. Respondents were examined in a private space, where the bed was further shielded by a curtain. Except for the doctor,[17] and the nurse helping her, no one else had access to that part of room while the examinations were carried out. The examination included:

[15]Refusal rate for undertaking medical part of this study by women having different characteristics can be seen in Annex II.

[16]Despite hiring experienced enumerators, who had worked on many surveys by the Population Council, a month long training was given to them to fully understand the questionnaire, its aims, and the sensitivity with which it was to be conducted.

[17]A single doctor, an experienced gynaecologist, conducted all the clinical examinations so that there were no issues of standardisation or consistency.

- Inspection of the genitals.
- Abdominal and bimanual exam.
- Pelvic exam.
- Collection of samples for aetiological diagnosis.

Samples for the aetiological diagnosis, taken from the respondents during the clinical examination, were clearly marked by the respondent's code number, her age, and the date the sample was taken. Her name was not written on the sample containers for confidentiality purposes. Samples were transported immediately to the laboratory as the clinical examinations were conducted in the same premises. It reduced the time and expenditure involved to transport the samples in a bio-safe manner and an appropriate environment.

Effort was made to use the method with better sensitivity and specificity for diagnosing each infection in the aetiological, while respecting the constraints of time and budget available for the study. The selected laboratory/hospital had sufficient equipment and trained pathologists to guarantee quality results. Table 1 gives an abridged account of the aetiological methods used for screening each infection, and the type of sample taken for it. (For a detailed description of the assays used in the study refer to Annex I.)

Table 1

Aetiological Assays Used to Detect RTIs

Infection	Detection Assay	Nature of Sample
Candidiasis	Culture-Gram Stain	Vaginal smear
Bacterial Vaginosis	Culture-Gram Stain	Vaginal smear
Trichomoniasis	Culture	Posterior vaginal smear
Chlamydia	Direct Fluorescent Antibody (DFA)	Endo-cervical vaginal smear
Gonorrhoea	Culture	Endo-cervical vaginal smear
Syphilis	Rapid Plasma Reagin (RPR)	Serum
Genital Herpes	Culture	Cells from lesions
Chancroid	Culture	Smear from the base of the ulcer, pus removed
HPV	Cellular Morphology	Endo/ecto-cervix cells
Other[1]	Culture	Vaginal/cervical smear

Source: Nayab (2005a).

Note: 1. The other category includes infections like E-coli, staphlococus aureaus, etc.

2. For a detailed account of the aetiological assays employed in the study see Annex I.

As stated earlier, it was one of the objectives of the study to investigate consistency of women's self-reports with the clinical and aetiological diagnoses. With the data available, accuracy of clinical diagnoses could also be measured, comparing them with the more reliable aetiological results. These measures would be calculated following the procedure given in Box 1. The measures given in the box will also tell us the rate of women responses for:

- *True positives*: women reporting symptom(s) and having an infection.
- *True negatives*: women not reporting symptom(s) and not having an infection.
- *False positives*: women reporting symptom(s) but not having an infection.
- *False negative*: women not reporting symptom(s) but having an infection.

Box 1: Comparison of Women's Report of Symptoms with Medical Diagnosis of Presence of Disease

Woman Reports Symptom(s)	Medical Diagnosis of Presence of Infection		
	Yes	No	Total
Yes	A	B	A+B
No	C	D	C+D
Total	A+C	B+D	N

Sensitivity: Ability of a symptom to lead to detection of a disease if present = $\frac{A}{A+C}$

Specificity: Ability of a symptom to cause the ruling out of a disease if not present = $\frac{D}{B+D}$

Positive Predictive Value: Percent of those who report a symptom and for whom the disease is present = $\frac{A}{A+B}$

Negative Predictive Value: Percent of those who did not report a symptom and for whom the disease is not present = $\frac{D}{C+D}$

Percentage of Agreement: Percent of those whose reporting of a symptom is consistent with the presence of disease = $\frac{A+D}{N}$

Kappa Statistics: Comparing agreement against that which might be expected by chance = $\frac{(P_o - P_e)}{(1 - P_e)}$, where P_o = observed agreement and P_e = expected agreement. P_o is same as Percentage of agreement

P_e is $\left\{\left(\frac{A+C}{N}\right)\times\left(\frac{A+B}{N}\right)\right\}+\left\{\left(\frac{B+D}{N}\right)\times\left(\frac{C+D}{N}\right)\right\}$

Sources: Detmer and Nicoll (1994), Bhatia and Cleland (2000), Zurayk, *et al.* (1995), WHO (2000).

The scale used to judge the strength of agreement, represented by the aforementioned indicators of specificity, sensitivity, positive and negative predictive values, percentage of agreement and Kappa value, is as follows.

- Zero percent – No agreement
- 10-20 percent – Poor agreement
- 21-40 percent – Fair agreement

- 41-60 percent – Moderate agreement
- 61-80 percent – Substantial agreement
- 81-100 percent – Strong agreement.

For the measurement of self-reported prevalence of RTIs, women were asked questions about their experiences regarding symptoms, associated with different reproductive tract infections, at the time of the interview. Some of these symptoms could represent problems other than RTIs but since they are associated with one of more RTIs they were part of the questionnaire. The symptoms, their description and their association with different RTIs are presented in Table 2.

Table 2

Symptoms, Their Description and RTIs they can be Linked to

Symptom	Description	Possible Link to RTIs
Abnormal Vaginal Discharge	Discharge that is not usual to the woman in colour, texture, odour or consistency, and if it caused an itch in the genitals.	Bacterial vaginosis, candidiasis, trichomoniasis, chlamydia, gonorrhoea
Lower Abdominal Pain	Nature, duration and severity of pain in the lower abdomen	Chlamydia, gonorrhoea
Menstrual Irregularity	Changes in duration, quantity, cyclicality or consistency of blood during menstruation.	Chlamydia, gonorrhoea
Dysmenorrhoea	Pain during menstruation.	Chlamydia, gonorrhoea
Sores, Warts, Ulcers on Genitals	Presence of sores/warts/ulcers on any genital.	Genital herpes, chancroid, syphilis (primary), HPV
Dyspareunia	Painful urination or burning sensation during urination.	Chlamydia, gonorrhoea
Dysuria	Painful intercourse, bleeding or bad odour after intercourse.	Chlamydia, gonorrhoea, trichomoniasis
Lower back ache	Only if it was reported accompanying any of the above symptoms.	Bacterial vaginosis, candidiasis, trichomoniasis

Source: RRTIS (2001-2002). Adapted from Nayab (2005b).

RTIs mentioned in Table 2 are mainly of two types, having different agents of infection, modes of transmission and possible health problems for mother and her child. The two types are:

- **Endogenous Infections.** These are the most common RTIs, resulting from an overgrowth of organisms normally present in the vagina. These include bacterial vaginosis and candidiasis.
- **Sexually Transmitted Infections (STIs).** These are transmitted through sexual activity with an infected partner, and have more serious repercussions. These include infections like, syphilis, herpes, human papillomavirus, gonorrhoea, trichomoniasis, chancroid and chlamydia.

Self-reported symptoms were classified as endogenous infections if the woman only complained about having abnormal vaginal discharge, with or without lower backache, and as STIs if the woman complained of experiencing one or more of the symptoms other than those categorising endogenous infections, and also when one or more of these symptoms were reported accompanying those categorising endogenous infections.

Ethical considerations are inseparable from a successful completion of a research process. Cassell and Jacobs (1987) define research ethics as, "A code is concerned with aspirations as well as avoidances, it represents our desire and attempt to respect the rights of others, fulfil obligations, avoid harm and augment benefits to those we interact with" [quoted in Glense and Peshkin (1992), p. 110]. Considering the nature of the problem under study a special effort was made to avoid any such situation. As a start, clearance was taken from the Ethics Committee at the Australian National University, Canberra, as it had funded the study, before leaving for the fieldwork, and then again from the Holy Family hospital, Rawalpindi, before the actual work began.

The ethical issues in this study vis-à-vis the respondents were mainly of three kinds:

(1) Informed consent.
(2) Confidentiality.
(3) Result notification, and partner notification in case of a positive result.
(4) Provision of treatment if tested positive for an infection.

Before conducting the interview women were explained the nature and purpose of the study, the approximate length of the interview, the issues to be covered in it and her right to leave the interview at any stage she felt like. Interview was only conducted if she gave her consent knowing all these things. Likewise, respondents' consent was sought for the medical part of the study after explaining to them the procedures involved in it and the available opportunity of having free of cost treatment in case they tested positive for any infection. It was made clear that no remuneration in cash or kind would be given for their participation in the interview, other than free transport (for the initial examination) and treatment (till the infection is cured). Women also had the flexibility to change their mind and not go for the medical examination, after giving consent for it the previous day at the end of the interview.

RESULTS AND DISCUSSION

Comparison of Clinical Examination with Aetiological Diagnosis

As stated earlier, diagnosis in the clinic was based on algorithms defined in the WHO manuals for syndromic management, which recognises several possible causes of frequently presented syndromes and recommends treatment based on an assessment of the most likely causative organisms, while aetiological diagnosis was based on the assays given in Table 1. Results of the comparison between these two instruments for the 311 women taking the medical diagnosis in the present study show very high sensitivity (95 percent) and substantially high specificity (77 percent) for infections (Table 3). This means that clinical examination is unlikely to miss the presence of an infection but is relatively more likely to miss the absence of an infection. From the low positive predictive value (56 percent), an over-diagnosis of infections in the clinical diagnosis can be inferred. Likewise, the Kappa value of 58 percent presents just a moderate strength of agreement between the clinical and aetiological diagnosis for the presence of any infection.[18]

[18]Expressed here as a percentage, Kappa value can range from 1 to –1 passing through zero, with 1 signifying total agreement, 0 no agreement and –1 total disagreement.

Sensitivity of the clinical diagnosis for STIs was much poorer (50 percent) than the sensitivity for endogenous infections ((91 percent), implying missing of sexually transmitted infections in cases where they are present. On the contrary, the specificity of clinical diagnosis for STIs is better (99 percent) than its specificity for endogenous infections (77 percent), referring to the comparative inability of the procedure to rule out presence of an endogenous infection when it is not present (Table 3). The over-diagnosis of endogenous infections in clinical diagnosis is also reflected in the rather low positive predictive value (50 percent). There is just a fifty-fifty chance of a clinically diagnosed endogenous infection to be confirmed by aetiological testing. High percentage of agreements, for both, STIs and endogenous infections, are mainly due to the high negative predictive values, as the positive predictive value, especially for endogenous infection is a low 50 percent. After discounting the proportion of agreement that is to be expected according to chance alone, shown by the summary measure of Kappa value, the agreement between the clinical and aetiological diagnoses drops down to 57 percent and 52 percent for STIs and endogenous infections, respectively.

Table 3

Comparison of Clinical Diagnosis with Aetiological Assessment of Infection

I. Having any Infection			
Has an Infection Clinically	Has an Infection Aetiologically		
	Yes	No	Total
Yes	70	55	125
No	4	182	186
Total	74	237	311
Sensitivity = 95%		Positive predictive value = 56%	
Specificity = 77%		Negative predictive value = 98%	
Kappa value = 58%		Percentage of agreement = 81%	
II. Having a STI			
Has any STI Clinically	Has a STI Aetiologically		
	Yes	No	Total
Yes	7	3	10
No	7	294	301
Total	14	297	311
Sensitivity = 50%		Positive predictive value = 70%	
Specificity = 99%		Negative predictive value = 98%	
Kappa value= 57%		Percentage of agreement = 97%	
III. Having an Endogenous Infection			
Has an Endogenous Infection	Has an Endogenous Infection Aetiologically		
Clinically	Yes	No	Total
Yes	58	57	115
No	6	190	196
Total	64	247	311
Sensitivity = 91%		Positive predictive value = 50%	
Specificity = 77%		Negative predictive value = 97%	
Kappa value = 52%		Percentage of agreement = 80%	

Source: RRTIS (2001-2002).

Comparison of Self-reports with Medical Diagnoses

Table 4 compares women's report of the RTI symptoms with the diagnosis of reproductive tract infections from the clinical examination. Along with comparing the responses for the presence of any RTI, analysis is also done for STIs and endogenous infections separately. Self-reported symptoms have high sensitivity (90 percent) when compared with clinical diagnosis for presence of any infection but the specificity is a low 26 percent. The positive predictive value and percentage of agreement are also a moderate 45 percent and 52 percent, respectively. These low values could be attributed to over-reporting of symptoms by women, in absence of clinically diagnosed infections. The Kappa value of 14 percent further shows poor concordance between self-reported symptoms and presence of infection clinically.

Table 4

Comparison of Self-reports with Clinical Diagnosis

I. Having any Infection			
Reports a Symptom	Has an Infection Clinically		
	Yes	No	Total
Yes	113	138	251
No	12	48	60
Total	125	186	311
Sensitivity = 90%		Positive predictive value = 45%	
Specificity = 26%		Negative predictive value = 80%	
Kappa value = 14%		Percentage of agreement = 52%	
II. Having a Sexually Transmitted Infection			
Reports STI Related Symptoms	Has a STI Clinically		
	Yes	No	Total
Yes	9	216	225
No	1	85	86
Total	10	301	311
Sensitivity = 90%		Positive predictive value = 4%	
Specificity = 28%		Negative predictive value = 99%	
Kappa value= 2%		Percentage of agreement = 30%	
III. Having an Endogenous Infection			
Reports Endogenous Infection Related Symptom	Has an Endogenous Infection Clinically		
	Yes	No	Total
Yes	12	14	26
No	103	182	285
Total	115	296	311
Sensitivity = 10%		Positive predictive value = 46%	
Specificity = 93%		Negative predictive value = 64%	
Kappa value = 4%		Percentage of agreement = 62%	

Source: RRTIS (2001-2002).

Comparing self-reports with clinical examination for the nature of existing infection, we see the indicators to be slightly better for endogenous infections. For STIs, sensitivity is 90 percent but the specificity is a low 28 percent. On the contrary, the trend is reversed for the endogenous infections, with sensitivity being a poor 10 percent and specificity at a high 90 percent. The positive predictive value of self-reported symptoms is a poor 4 percent, with the total percentage of agreement at a fair 30 percent. The corresponding indicators for endogenous infections are comparatively higher but after discounting for agreement according to chance alone, comparison for both kinds of infections show a poor Kappa value (Table 4).

Comparison of self-reports with the aetiological diagnosis for any infection shows a further decrease in the percentage of agreement (Table 5). The positive predictive value of self-reports is only 28 percent, implying an over-reporting of symptoms by a big proportion of women, and the total percentage of agreement is just a fair 40 percent. Since over eighty percent women report having symptoms the chance of missing an infection is not much, reflected in the high sensitivity rate, but the actual infection rate diagnosed through aetiological testing being at 24 percent, the comparison shows a much lower rate of specificity and positive predictive value for the self-reports (Table 5). The poor agreement between self-reports and the aetiological diagnosis is also evident from the poor Kappa value for the comparison (10 percent).

Table 5

Comparison of Self-reports with Aetiological Diagnosis

I. Having any Infection			
Reports a Symptom	Has an infection Aetiologically		
	Yes	No	Total
Yes	70	181	251
No	4	56	60
Total	74	237	311
Sensitivity = 95%		Positive predictive value = 28%	
Specificity = 24%		Negative predictive value = 93%	
Kappa value = 10%		Percentage of agreement = 40%	
II. Having a Sexually Transmitted Infection			
Reports STI Related Symptoms	Has a STI Aetiologically		
	Yes	No	Total
Yes	13	212	225
No	1	85	86
Total	14	297	311
Sensitivity = 93%		Positive predictive value = 6%	
Specificity = 29%		Negative predictive value = 99%	
Kappa value = 3%		Percentage of agreement = 32%	
III. Having an Endogenous Infection			
Reports Endogenous Infection Related Symptom	Has an Endogenous Infection Aetiologically		
	Yes	No	Total
Yes	4	22	26
No	60	225	285
Total	64	247	311
Sensitivity = 6%		Positive predictive value = 15%	
Specificity = 91%		Negative predictive value = 79%	
Kappa value = –4%		Percentage of agreement = 74%	

Source: RRTIS (2001-2002).

Comparison for the nature of infections as expressed in self-reports with aetiological diagnosis again shows weak concordance (Table 5). If the self-reports have strong sensitivity value, the specificity value is low and vice versa, for STIs and endogenous infections, respectively. Both comparisons, which is for STIs and endogenous infections, have poor positive predictive values, reflecting the wide gap between the reporting of symptoms and actual prevalence of infection. The overall agreement in the two comparisons is better for the endogenous infections, having a 74 percent agreement between self-reports and aetiological screening, while for the STIs the rate goes down to 32 percent (Table 5). However, if we discount the proportion of agreement that is to be expected by chance, represented by the Kappa values, the trend is reversed, with the self-reports for STIs, despite having very poor agreement (3 percent), being somewhat better than the value for endogenous infections (–4 percent). Irrespective of the differences in patterns shown by different indicators, the overall agreement between self-reports and aetiological diagnosis remains weak.

Classification and Meaning of Self-reports

The discordant responses given by women and the aetiological screening for RTIs need further analysis for explanation. The comparison between women's self-reports and aetiological testing helps us identify the magnitude of positive and negative responses, including both true and false reports. Table 6 presents these results achieved by comparing women's self-report for experiencing any symptom and an aetiological presence of any infection. Majority of the self-reports (58 percent) fall in the false positive category, followed by true positive (22.5 percent) and true negatives (18 percent). Women who did not report any symptom but tested positive for at least one infection comprised 1.3 percent of the sample (the false negatives in Table 6). The 58 percent false positive responses support the notion of over-reporting of symptoms by women.

Table 6 also shows differences between these classifications of responses across women with different characteristics. Age does not show significant relation with the four measures, however, level of education does (Table 6). Women with more years of education have the lowest true positive rate (9 percent), and the highest true negative (23 percent), false positive (64 percent) and false negative (3.6 percent) rates. Likewise, women living in joint/extended households, with a false positive rate of 65 percent, tend to over-report their symptoms. Differentials between economic groups also show a significant relation, with women in the upper economic group having the lowest true positive responses (12 percent), and the highest true negative (21 percent), false positive (64 percent) and false negative (2.4 percent) responses. Women with more years of schooling and those belonging to the upper economic group had the lowest rate of reporting symptoms but they had an even lower rate of aetiologically diagnosed infections, giving them higher false positive response rates. Women on the other end of these two categories, that is those with no education and those belonging to the lower economic group, had the highest rate of self-reported symptoms but they actually had more infections too, so despite some over-reporting by them they still have a lower false positive response rate.

Table 6

Classification of the Results of the Comparison between Self-reports for Any Symptom and Aetiological Testing for Any Infection by Selected Characteristics of Women

Background Characteristics	True Positive	True Negative	False Positive	False Negative	*p-value*
Total	22.5	18.0	58.2	1.3	
Age of Woman					*0.485*
<25	17.7	25.8	56.5	0.0	
25-34	26.0	14.5	58.0	1.5	
34<	21.2	17.8	59.3	1.7	
Ever been to School					*0.134*
Yes	18.6	18.1	61.8	1.5	
No	29.9	17.8	51.4	0.9	
Level of Education					*0.051*
11 years or more	8.9	23.2	64.3	3.6	
1-10 years	22.3	16.2	60.8	0.7	
No education	29.9	17.8	51.4	0.9	
Background Area					*0.947*
Urban	21.7	18.3	58.7	1.3	
Rural	25.0	17.1	56.6	1.3	
Family Type					*0.346*
Nuclear	25.1	17.9	55.6	1.3	
Joint/extended	15.9	18.2	64.8	1.1	
Economic Group					*.011*
Lower	34.8	16.9	47.3	0.9	
Middle	16.6	17.8	64.3	1.3	
Upper	11.9	21.4	64.3	2.4	
Inter-spousal Age Difference					*.000*
Wife older	35.7	7.1	42.9	14.3	
Same age	22.2	16.7	61.1	0.0	
Husband 1-10 yrs older	21.3	20.5	57.3	0.8	
Husband >10 yrs older	25.0	7.5	67.5	0.0	
Duration of Marriage					*0.490*
≤ 1 year	5.6	27.8	66.7	0.0	
2-5 years	19.1	23.8	55.6	1.6	
6-15 years	24.6	13.1	61.5	0.8	
16 years or more	25.0	18.5	54.6	1.9	
Number of Pregnancies					*0.022*
None	0.0	37.5	62.5	0.0	
1-2	13.3	25.3	59.0	2.4	
3-4	27.3	11.4	60.2	1.1	
5 or more	28.2	15.3	55.7	0.8	

Continued—

Table 6—(*Continued*)

Number of Children					*0.034*
None	4.4	34.8	60.9	0.0	
1-2	16.4	20.0	60.9	2.7	
3-4	31.4	12.8	55.9	0.0	
5 or more	25.0	17.1	56.6	1.3	
Current Contraceptive Use Not					*0.101*
using	21.5	19.6	57.6	1.3	
Users	23.5	16.3	58.8	1.3	
Traditional method users	*7.4*	*22.2*	*66.7*	*3.7*	
Modern method user	*27.0*	*15.1*	*57.1*	*0.8*	
Ever Wanted to Get Pregnant and could not					*0.003*
Yes	11.8	26.5	55.9	5.9	
No	23.8	17.0	58.5	0.7	
Number of Symptoms Reported					*0.000*
No symptom	0.0	93.3	0.0	6.7	
1-2 symptoms	19.2	0.0	80.8	0.0	
3-4 symptoms	26.6	0.0	73.4	0.0	
5 or more symptoms	53.2	0.0	46.8	0.0	
Decision-making Authority					*0.244*
No sat at all	31.8	0.0	68.2	0.0	
Moderate say	25.0	18.8	54.7	1.6	
Substantial say	24.4	17.3	55.9	2.4	
Major say	16.3	22.5	61.2	0.0	
Freedom from Threat					*0.011*
Afraid and beaten *Battered)*					
Afraid but not beaten *(Anxious)*	23.3	3.3	73.3	0.0	
Not afraid but beaten *(Defiant)*	24.7	15.1	59.1	1.1	
Neither afraid nor beaten	28.2	23.1	48.7	0.0	
(Contented)	18.5	26.1	52.9	2.5	
Freedom of Mobility					*0.478*
Needs permission:					
Always	23.6	14.8	60.1	1.5	
Never	21.7	25.3	51.8	1.2	
Depends	16.0	20.0	64.0	0.0	
Control over Household Income **					*0.012*
Has control	19.3	21.5	57.4	1.8	
Does not have control	30.7	9.1	60.2	0.0	

Source: RRTIS 2001-2002.

The inter-spousal age difference is highly significant for the four response classification (Table 6). Women with husbands more than ten years older to them have the highest false positive rate (68 percent), while women who are older than their husbands have the highest true positive responses (36 percent). The latter also have the

highest false negative response rate (14 percent). The number of pregnancies and children women have show significant relation with the response categories, as can be seen from Table 6. The true positive responses generally increase with the increasing number of pregnancies and children, accompanied by a gradual decrease in true negative responses. The false positive rate remains almost similar across women with different numbers of pregnancies and children, remaining within the 56-62 percent range (Table 6). Not much difference is found between women who are using contraceptives and those who are not, however women using traditional methods of contraception have the lowest true positive rate (7 percent), and the highest true negative (22 percent), false positive (67 percent) and false negative (4 percent) responses. Another significant association for this response classification exists for women who reported to be experiencing infertility, primary or secondary. Contrary to what is expected, reporting infertility has a lower true positive rate (12 percent), compared to those who did not complain of infertility (24 percent). There is not much difference between their false positive responses (Table 6). As would be expected, the number of symptoms reported by women is strongly related to this classification. The more the number of symptoms a woman report the more likely she is to have a true positive response, and the reverse being true for the false positive responses (Table 6). This relation do look tautological as to actually have an infection some or a combination of symptoms need to be present but the strong relation found between the two shows that in situations where laboratory testing is not possible, the number of reported symptoms can help in ascertaining the presence or otherwise of RTIs.

Association of women's autonomy status with this response classification shows an interesting pattern. Women with lower autonomy level not only have higher true positive responses but also higher false positive responses, the relation being significantly strong for the freedom from threat and control over household income indicators (Table 6). Battered women have a false positive rate of 73 percent compared to 53 percent for the contented women, despite the former having a true positive rate of 23 percent in comparison to 19 percent for the latter. Likewise, women having no say at all in household decision-making have a false positive rate of 68 percent with 32 percent of their responses classified as true positives, both rates being higher than the ones for women in other categories of this indicator (Table 6). This pattern is generally shared by all the four autonomy indicators used in this study.

A notable aspect of this classification is the comparatively higher rate of false negative responses among women with better socio-economic and autonomy status. Despite a low overall rate of false positive responses, this trend could be inferred from Table 6. Women with more years of education, those in the upper economic group, having substantial say in household matters, have freedom from threat and have at least some control over household income are examples of women with better socio-economic and autonomy status having higher false negative responses. Women with 1-2 pregnancies and children have a comparatively low true positive rate compared to those with more pregnancies and children but have a higher false negative rate (2.4 and 2.7, respectively). A similar trend is also found for traditional contraceptive users, who have a low true positive rate (7 percent) but a comparatively high false negative rate (4 percent). Women who are older than their husbands present a peculiar situation that is not common in the socio-cultural environment of Pakistan. The rate of false negatives among them is higher (14 percent) than women having husbands older to them, irrespective of the age difference, along with having the highest true positive rate (36 percent).

Psychogenic[19] factors seem to underlie the trends and the disparity that exist between the reported and actual infection levels. Women with better status are less likely to report any symptom, including those having an infection aetiologically, mirrored in their higher false negative responses. On the contrary, women with lower socio-economic and autonomy status do have high infection rates but their rate of self-reported symptoms is even higher, represented by their high false positive responses.

Before further discussing this suggested relationship, it is worthwhile looking into the factors that determine a woman's reporting of symptoms and her actually having an infection. Table 7 presents the results of the most robust models created through logistic regression to determine factors influencing the report of symptoms and aetiological presence of an infection. The models include only those factors that came out to be significant after running stepwise forward conditional method logistic regression. The method allows specifying how independent variables are entered into the analysis. The entry criterion set to include a variable in the model was .05 and the removal criterion was set at 0.1, with a maximum of 20 iterations. A variable's entry in such a model relies not only on how well it fits the entry criterion but it is also omitted if it causes the tolerance of another variable already in the model to drop below the entry criterion. The final models generated for both reporting a symptom and having an infection are shown in Table 7. It is evident that factors determining the reporting of symptoms are quite different from those influencing the aetiological presence of an infection. Autonomy indicators of freedom from threat and control over household income are significantly related to the reporting of symptoms while they are not among the factors significantly affecting the aetiological presence of an infection. A similar trend exists for inter-spousal age-difference, which is significant for reporting of symptoms but not for actually having an infection. On the contrary, woman's economic status is significant for having an infection but not for reporting a symptom, with the women belonging to the lower economic group five times more likely to have an infection than their richer counterparts (Table 7). This is understandable in the light of other factors that are significant for the aetiological presence of an infection. Among these is the means of protection used during menstruation, with the women from the lower economic group mainly using old cloth, which is a sub-group that is more than three times likely to have an infection compared to women who are not menstruating. Women's contraceptive use is highly significant for having an infection, but it is not so for reporting of a symptom (Table 7). The likelihood of having an infection increases by over three times when the woman is using IUD, hinting towards iatrogenic sources of transmission of infection. Interestingly, it is the number of pregnancies that is significant for the reporting of symptoms but for actually having an infection, it is the gap between the last two pregnancies that is significant. Women who had a gap of less than 12 months between the last two pregnancies were 12 times more likely to have an infection than those how had only one or no pregnancy at all (Table 7).

Reviewing the differences in factors significant for the reporting of symptoms and having an infection it is understandable to find a disparity between the two. While mainly socio-psychological factors influence the reporting of symptoms, the demographic and

[19]Psychogenic responses refer to those that are produced by psychological and mental factors, rather than organic factors.

physiological factors affect the actual presence of an infection. Being a battered woman is more likely to affect her psychological well being, than using any particular contraceptive method or menstrual protection, prompting her to report symptoms. Thus the reported symptoms, especially those classified as the false positives, are greatly influenced by woman's psychological and emotional state, and could be referred to as what Nichter (1981) calls the "idioms of distress".

Table 7

Logistic Regression Analysis for Factors Significant for Reporting of Symptoms by Women, and for Aetiological Presence of an Infection

Predictor Variable	Reporting a Symptom Odds Ratio *(95% CI)*		Having an Infection Odds Ratio *(95% CI)*	
Age of Women				
<25	–		–	
25–34				
34<				
Level of Education				
11 or more years	–		–	
Never been to school				
1-10 years				
Family Structure				
Nuclear	–		–	
Joint/extended				
Background Area				
Urban	–		–	
Rural				
Economic Group				
Upper	–		1.00	
Middle			–1.57	*(0.69-4.11)*
Lower			4.95	*(2.42-7.98)*
Inter-spousal Age Difference	1.00			
Same age				
Wife older	0.64	*(0.49-1.80)*	–	
Husband 1-10 yrs older	–	*(0.54-2.34)*		
Husband >10 yrs older	.71	*(5.43-8.17)*		
	6.49			
Number of Pregnancies				
1-2	1.00			
None	–0.51	*(0.21-1.71)*	–	
3-4	3.07	*(1.40-6.89)*		
5 or more	2.85	*(1.36-4.63)*		
Gap between the Last Two Pregnancies			1.00	
None or only one	–		12.03	*(11.16-*
≤12 months			4.27	*15.21)*
13-36 months			6.50	*(2.87-5.79)*
>36 months				*(3.79-8.91)*

Continued—

Table 7—(*Continued*)

Predictor Variable	Reporting a Symptom Odds Ratio *(95% CI)*		Having an Infection Odds Ratio *(95% CI)*	
Menstrual Hygiene				
Not menstruating			1.00	
Commercial sanitary pads		–	1.91	*(0.61-4.63)*
Cotton wool/new cloth			2.51	*(1.02-5.74)*
Old/used cloth			3.11	*(1.44-5.71)*
Current Contraceptive Use				
Non-users			1.00	
Pills			–0.38	*(0.96-1.48)*
IUD			3.49	*(1.80-6.28)*
Injections		–	–0.14	*(0.02-1.31)*
Condom			–0.16	*(0.05-0.55)*
Tubectomy			1.22	*(0.50-2.81)*
Rhythm			–0.00	*(0.00-0.00)*
Withdrawal			–0.77	*(0.24-2.76)*
Decision-making Authority				
Major say				
No say at all		–		–
Moderate say				
Substantial say				
Freedom from Threat				
Neither afraid nor beaten *(Contented)*	1.00			
Afraid and beaten *(Battered)*	8.99	*(5.67-11.40)*		–
Afraid but not beaten *(Anxious)*	1.7	*(0.86-3.52)*		
Not afraid but beaten *(Defiant)*	1.3	*(0.47-2.84)*		
Freedom of Mobility				
Needs permission:				
Never		–		–
Always				
Depends				
Control over Household Income				
Has control	1.00			–
Does not have control	3.90	*(1.63-6.43)*		
Constant	0.055*		–4.176***	
Model Chi square	47.827***		72.535***	
Degrees of freedom	10		15	
Reporting predictive correctly	84.6%		81.7%	
Hosmer- Lemeshow Test	0.740		0.690	
Number of cases	311		311	

Source: RRTIS 2001-2002.

Note: *** p<.001, **p<.01, and * p<.05, for having/not having any infection.

a. Category marked a represents the reference category.

b. Dashes represent factors that were excluded from the model as they were not found to be significantly associated with having/reporting an infection at the criteria set in the regression model.

c. Number of cases in each category can be found in Annex II.

"Idioms of distress" are "adaptive responses to circumstances where other modes of expression fail to communicate distress adequately or provide appropriate coping strategies" [Nichter (1981), p. 379]. The term distress here refers to a broad range of feelings, including those of vulnerability, dissent, apprehension, resentment, inadequacy, dissatisfaction, suppressed anger and other anxiety states that if expressed overtly could lead to conflict and disharmony. Women thus speak through their bodies what they cannot express in words. They, consciously or unconsciously, convert a psychological conflict into a physical manifestation, which helps them to divert their focus away from a troublesome emotional or psychological issue to what may be a more acceptable physical problem, something they also find comparatively easier to express than the actual cause of the problem. Since women's health is socially and culturally constructed around woman's reproductive health, it is usually symptoms related, directly or indirectly, to the womb that become a means of expression. In the words of Zola, this is "what constitutes the necessary part of being a woman" (1966, p. 619). This conversion of psychosocial stress is reflected in the large false positive response rate in the present study, expressing woman's perceived balance, or imbalance, in different domains of her life, including, body, marriage, family and household.

With knowledge about their bodies in general and reproductive system in specific being scant there are misconceptions among women regarding their bodily experiences. During the course of the present study when women were inquired about what they thought caused the symptom(s) they reported to be experiencing, 38 percent said it was due to "*Kamzori" (*weakness).[20] Likewise when they were asked about the possible consequences of experiencing RTI related symptoms 43 percent again considered weakness as a possible result. These responses were most common with regard to experiencing abnormal discharge. Thus, reported symptoms are associated to the cultural and personal meanings women attribute to their experiences. Assigning weakness as a cause and consequence of abnormal discharge can in fact be expressions of powerlessness, vulnerability, lack of control and psychosexual problems. As also pointed out by Patel and Oomman in India, the reporting of abnormal discharge is more a "somatic idiom" of depression and psychosocial distress than evidence of disease (1999, p. 30). Similarly, dyspareunia can be an expression of marital dissatisfaction, instead of a disease symptom. The high rate of reporting backache can in fact be a somatisation of stress and anxiety resulting from excessive and arduous housework that is not gratifying in itself. Dr John D. Stoeckel very aptly refers to it as the "trapped housewife syndrome" (cited in Zola 1966). The fatigue and pain is more related to depression than to actual physical exertion. There is a substantial body of literature linking chronic pelvic pain and backache to psychological factors [Savidge and Slade (1997); Fry, *et al.* (1997); May, *et al.* (2000); Wood, *et al.* (1990)]. The battered women being ten times more likely than the contented ones to report a symptom (Table 7) and having a false positive rate of 73 percent (Table 6) provide a clue to the psychogenic nature of self-reported symptoms.

[20]Bhatti and Fikree (2002), Ramasubban, *et al.* (2001), Mazhar (2001), Singh, *et al.* (2001), also show weakness as an illness in itself along with being the cause and consequence of other problems, especially the ones sexual in nature, including RTIs.

The disparity between the self-reports and aetiological diagnosis arises because of interpreting reports having deep personal socio-psychological and cultural meanings attached to them, in a totally biomedical framework. Self-perceived morbidity is a function of both, the actual burden of pathology and the individual's social, psychological and cultural context, while the biomedical framework naturally takes only pathological factors into account, leading to the gap between the two. There is potential for mistranslation while interpreting one in the other's framework, but both biomedical and individual meanings of the symptoms are important. As findings of this study show, not all women reporting symptoms have infections and not all those not reporting any symptom are without an infection. Not always are these symptoms used as an "idiom of distress" and may represent an actual presence of infection. Generalising self-reports either way can result in excessive or inappropriate treatment in one case or missing of infection in the other.

CONCLUSIONS

Poor agreement exists between women's self-reports and aetiological diagnoses, with the former over-representing the presence of infection. Some of the self-reported symptoms are pathogenic in nature, as represented by the true positive reports, but majority of the self-reports are false positives when compared to aetiological diagnosis. Self-reports can thus also have psychogenic origins, and are actually being used by women to express a state of psychological or emotional distress. Women in socially, culturally or emotionally weaker situations find their bodies to be the medium for their expression of distress. This could be especially true in situations where alternative means of expression or even stating the actual reasons of distress are judged to be more difficult and/or threatening than presenting them as physical conditions. This idea of psychogenic factors playing role in women's self-reported symptoms is further strengthened by the finding that for reporting of symptoms, socio-cultural and autonomy factors are significant while for actually having an infection it is mainly the demographic and physiological factors that play a significant role.

Clinical examination, based on the syndromic approach to manage RTIs, generally shows a moderate level of concordance with the aetiological diagnosis in this study. It not only over-diagnoses infections but in cases also misses infections. Validity of the reports is weaker for sexually transmitted infections than for endogenous infections. Although the cost of clinical examination would be less than aetiological diagnosis for the screening of reproductive tract infections, but findings of this study prove it an unreliable way of assessing the presence or absence of these infections.

For policy implications, clinical diagnosis, based on the syndromic management approach, was also assessed against laboratory diagnosis, that is considered to be a more reliable and accurate way of diagnosing the presence or otherwise of an infection. Based on the Kappa values, moderate agreement was found between the two. However, the worrying aspect of the comparison is the low sensitivity value for STIs and an equally low positive predictive value for endogenous infections in clinical diagnosis, representing missing of infections and over-diagnoses, respectively. Devising low-cost, easy to conduct, laboratory tests is imperative in the given scenario. Some of the tests, especially those needed for the more common endogenous infections, are actually not that

expensive to conduct but since they are rarely conducted commercial laboratories charge exorbitant rates for them.

Discordant responses while comparing self-reports with laboratory diagnosis, and the analysis to decipher what they actually meant lead us to conclude that women's self-reports and pathological presence of disease two different aspects of health, and this difference us reflected in the gap between the perceived and the actual disease level. As the multivariate analysis show, for actually having an infection it were mainly physical/tangible reasons that were responsible while for reporting of symptoms it were the perceived/intangible factors that were more dominant. What women could not say in words, they converted into bodily expressions, and with reproductive functions considered the primary focus of women's lives in the society, symptoms associated with this function were frequently used as the language to express their distress. Patel (2003) also found that in developing countries the strongest association of complaints regarding abnormal discharge is with depression not RTIs. Reported physical symptoms present psychosocial disorders through somatisation. There is evidence that anxiety and depression can have effect on autonomic nervous system, leading to muscle-tension related pains, and a distressed person is more likely to interpret normal physical experience as pathological [Patel and Oomman (1999); Hunter (1990) and Van Vliet, *et al.* (1994)].

In this scenario, it would be realistic to infer that the conventional health surveys, relying solely on verbal responses, do not necessarily represent the real health situation of a study population, and thus any policy intervention formulated exclusively on this information would be flawed and not achieve its desired results. If the health of the population, specifically that of women, is to be alleviated, there is a need for a fresher approach to understand the non-medical context of illnesses. It could be referred to as an ethno-sensitive approach to epidemiology. The relation between physiological and non-physiological factors is not that straight forward. Even if symptoms are not found to be associated with pathology, the finding of pathology does not necessarily imply that it was the cause of the symptom. Example in this regard can be chronic pelvic pain, caused by PID, which in turn may cause marital problems leading to depression, which in turn could aggravate the pain experience and delay recuperation. Self-reports, therefore, are important for their socio-cultural and metaphorical connotations, and could be used to address issues, like social and emotional stress and excessive workload, that concern women's health in the broader context. Thus, there is a need for, as put forward by Patel and Oomman (1999, p. 34), "An interactive model of aetiology which incorporates physiological and psychosocial factors" to understand this complex relation.

ANNEX I

Details of Laboratory Assays Used to Detect RTIs

Within the constraints of time and budget, attempt was made to select laboratory assays that had better diagnostic efficiency. Exception in this regard however was detection of HPV infection. For HPV, cellular morphology, having lower diagnostic efficiency, was selected to screen women for the infection because the more efficient alternative through DNA detection was neither affordable nor available.

Since samples were collected within the premises of the laboratory, there was no transportation time involved and the probability of samples being contaminated were thus minimised. The details of these assays are as follows:

Infection	Nature of Sample	Method of Detection
Candidiasis	Vaginal smear	A swab of the vaginal secretions was inoculated into Sabouraud's agar within an hour of collection and incubated for up to two days at 37° C. Colonies were identified as yeast by performing a Gram stain. The quantity of yeast was determined, with more than 103 colony-forming units/ml of vaginal secretions usually being associated with disease.
Trichomoniasis	Posterior vaginal smear	A swab of secretions taken from the posterior vaginal fornix was used within an hour of sample collection to inoculate a tube of Diamond's modified medium. The culture was incubated at 35°C for up to four days with daily examination by wet prep for motile trichomonas.
Bacterial Vaginosis	Vaginal smear	A swab of vaginal secretions was rolled onto a glass slide and air-dried. The slide was gram stained and a standardised 0-10 point scoring method was used to evaluate the smears. Points were given by estimating the number of three different bacterial morphotypes from 0 to 4+, including large Gram-negative rods, small Gram-negative/variable rods, and curved Gram-negative/ variable rods under the microscope.
Chlamydia	Endogenous-cervical vaginal smear	In direct immunofluorescence assay (DFA), cells collected on swabs were rolled onto glass slides, fixed and stained with fluorescein-labelled monoclonal antibodies specific for the major outer membrane protein of C. trachomatis. DFA allows for the visualisation of the distinctive morphology and staining characteristics of chlamydial inclusions and elementary bodies. It also permits simultaneous assessment of the specimen adequacy. The presence of ten or more elementary bodies is generally accepted for the test to be positive.
Gonorrhoea	Endogenous-cervical vaginal smears	The endo-cervical swab was used immediately after collection to inoculate a plate of modified Thayer-Martin. The selective medium contains anti-microbial agents that allow the growth of N. gonorrhoea and inhibit the growth of other bacteria. The plate was incubated at 35 degrees C for up to three days. Typical colonies were tested with Gram-stain, oxidase and catalase and superoxal tests for presumptive identification of N. gonorrhoea. To confirm a presumptive culture, the isolated organism was tested for sugar fermentation by growth in standard carbohydrate fermentation tubes.

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Syphilis	Serum	Nontreponemal antibody tests for syphilis, which are used for screening patient serum, are based on detection of antibodies to a cardiolipid-cholesterol-lecithin antigen. Undiluted serum was added to the antigen on a slide. The reagents were then mixed and rocked and observed for flocculation. The rapid plasma reagin (RPR) test, in which the antigen is mixed with charcoal so the antigen-antibody complexes can be seen without a microscope, was used to screen women for syphilis.
Genital Herpes	Cells from lesions	Lesions were rubbed at their base with a cotton swab after breaking any intact vesticles. The sample was then used to inoculate a fibroblast cell-line . The diagnosis was made by observation of a characteristic cytopathic effect on the cells after incubation for up to one week (although most positives occur within 48 hours of cell inoculation) and confirmation of the virus by staining the infected cells with monoclonal antibodies specific for HSV.
Chancroid	Smear from the base of the ulcer	Before obtaining material for culture, the ulcer base was exposed and made free of pus. Culture material was obtained from the base of the ulcer with a cotton swab and immediately inoculated directly onto culture plates. H. ducreyi is a fastidious organism and requires special media for growth. An effective medium for H. ducreyi isolation contains Columbia agar base, foetal bovine serum, haemoglobin, IsoVitalex, activated charcoal and vancomycin. Plates were incubated for up to three days at 33-35 degrees C in 5% CO2 atmosphere. A Gram stain was performed on suspected colonies. Gram-negative bacilli from colonies compatible with H. ducreyi were identified based on their requirements for X but not V factor for growth.
HPV	Endo/ecto-cervix cells	Epithelial cells were collected from the endo-cervix and ecto-cervix using a wooden spatula. Cells were rolled onto a glass slide, and stained with the Papanicolaou stain and read by the pathologist. Particular abnormal cellular morphology is indicative of an HPV infection.

Source: RRTIS 2001-2002. (Provided by the Pathology Department, Holy Family Hospital, Rawalpindi.)

ANNEX II

Differences in Background Characteristics between Women in the Total Sample and the Sub-sample Consenting for Medical Examination, and the Refusal Rate for Medical Examination

Background characteristics	Total Sample		Medical Sub-sample		Refusal Rate (%)
	Percent	Cases	Percent	Cases	
Total	100.0	508	100.0	311	38.8
Age of Woman					
<25	18.9	96	19.9	62	35.4
25-34	42.1	214	42.1	131	38.8
34<	39.0	198	37.9	118	40.4
Level of Education					
11 years or more	24.2	123	18.0	56	55.5
1-10 years	42.1	214	47.6	148	30.8
No education	33.7	171	34.4	107	37.4
Background Area					
Urban	76.8	390	75.6	235	39.7
Rural	23.2	118	24.4	76	35.6
Family Type					
Nuclear	71.5	363	71.7	223	38.6
Joint/extended	28.5	145	28.3	88	39.3
Economic Group					
Upper	22.8	116	13.5	42	63.8
Middle	46.3	235	50.5	157	33.2
Lower	30.9	157	36.0	112	28.7
Inter-spousal Age Difference					
Wife older	3.0	15	4.5	14	6.7
Same age	5.9	30	5.8	18	40.0
Husband 1-10 yrs older	78.9	401	76.8	239	40.4
Husband >10 yrs older	12.2	62	12.9	40	35.5
Duration of Marriage					
≤ 1 year	5.7	29	5.8	18	37.9
2-5 years	20.7	105	20.3	63	40.0
6-15 years	38.4	195	39.2	122	37.4
16 years or more	35.2	179	34.7	108	39.7
Number of Pregnancies					
None	4.5	23	5.1	16	30.4
1-2	28.7	146	26.7	83	43.2
3-4	29.1	148	28.3	88	40.5
5 or more	37.6	191	39.9	124	35.1
Number of Children					
None	8.1	41	7.4	23	43.9
1-2	36.4	185	35.4	110	40.5
3-4	32.2	164	32.8	102	37.8
5 or more	23.2	118	24.4	76	35.6
Currently Pregnant					
Yes	9.4	48	10.9	34	29.2
No	90.6	460	89.1	277	39.8
Ever Wanted to Get Pregnant and could not					
Yes	11.4	58	10.9	34	41.4
No	88.6	450	89.1	277	38.4
Gap between the Last Two Pregnancies					
<12 months	15.6	79	14.5	45	43.0
13-36 months	45.7	232	52.7	164	29.3
>36 months	22.1	112	16.7	52	53.6
None or only one	16.8	85	16.1	50	41.2

Continued—

Annex II—(*Continued*)

Background Characteristics	Total Sample		Medical Sub-sample		Refusal Rate (%)
	Percent	Cases	Percent	Cases	
Current Contraceptive Use					
Not using	51.2	260	50.8	158	39.2
Pills	4.1	21	4.2	13	38.1
IUD	7.5	38	7.7	24	36.8
Injections	3.0	15	2.9	9	40.0
Condom	14.4	73	14.1	44	39.7
Tubectomy	9.8	50	11.6	36	28.0
Rhythm	2.2	11	1.9	6	45.5
Withdrawal	7.9	40	6.8	21	47.5
Ever Wanted to Get Pregnant and could not					
Yes	11.4	58	10.9	34	41.4
No	88.6	450	89.1	277	38.4
Decision-making Authority	7.1	36	7.1	22	38.9
No sat at all	18.5	94	20.6	64	31.9
Moderate say	47.6	242	40.8	127	47.5
Substantial say	26.8	136	31.5	98	27.9
Major say					
Freedom from Threat					
Afraid and beaten					
(Battered)		87			31.0
Afraid but not beaten		150			38.0
(Anxious)		57			31.6
Not afraid but beaten	17.1	214	19.3	60	44.4
(Defiant)	29.5		29.9	93	
Neither afraid nor beaten	11.2		12.5	39	
(Contended)	42.1		38.3	119	
Freedom of Mobility					
Needs permission:					
Always	61.8	314	65.3	203	35.3
Never	27.6	140	26.7	83	40.7
Depends	10.6	54	8.0	25	53.7
Control over Household Income		364			38.7
Has control	71.7	144	71.7	223	38.9
Does not have control	28.3		28.3	88	

Source: RRTIS 2001-2002. Adapted from Nayab (2006a).

REFERENCES

Bhatia, J., and J. Cleland (2000) Methodological Issues in Community-Based Studies of Gynecological Morbidity. *Studies in Family Planning* 31:4, 267–273.

Bhatti, L. I., and F. F. Fikree (2002) Health-Seeking Behaviour of Karachi Women with Reproductive Tract Infections. *Social Science and Medicine* 54:1, 105–117.

Cassell, J. and S. E. Jacobs (eds.) (1987) Handbook on Ethical Issues in Anthropology. Washington, DC: American Anthropological Association.

De Vaus, D. A. (1995) *Survey in Social Research*. Melbourne: Allen and Unwin.

Desai, V. K., J. K. Kosambiya, H. G. Thakor, D. D. Umrigar, B. R. Khandwala, and K. K. Bhuyan (2003) Prevalence of Sexually Transmitted Infections and Performance of STI Syndromes against Aetiological Diagnosis in Female Sex Workers of Red Light Area in Surat, India. *Sexually Transmitted Diseases* 79:2, 111–115.

Detmer, W. M. and D. Nicoll (1994) Diagnostic Testing and Medical Decision Making. In L. M. Tierney, S. J. McPhee and M. A. Papadakis (eds.) *Current Medical Diagnosis and Treatment*. Connecticut: Appleton and Lange.

Filippi, V., T. Marshall, A. Bulut, W. Graham, and N. Yolsal (1997) Asking Questions About Women's Reproductive Health: Validity and Reliability of Survey Findings from Istanbul. *Tropical Medicine and International Health* 2:1, 47–56.

Fry, R. P. W., A. H. Crisp, and R. W. Beard (1997) Sociopsychological Factors in Women with Chronic Pelvic Pain: A Review. *Journal of Psychosomatic Research* 42:1, 1–15.

Garg, S., P. Bhalla, N. Sharma, R. Sahay, A. P. R. Saha, P. Sodhani, N. Murthy, and M. Mehra (2001) Comparison of Self-Reported Symptoms of Gynecological Morbidity with Clinical and Laboratory Diagnosis in a New Delhi Slum. *Asia-Pacific Population Journal* 16:2, 75–92.

Glense, C. A. and Peshkin (1992) *Becoming Qualitative Researcher: An Introduction*. New York: Longman Publishing Group.

Hawkes, S., L. Morison, S. Foster, K. Gausia, J. Chakraborty, R. W, Peeling, and D. Mabey (1999) Reproductive-Tract Infections in Women in Low-Income, Low-Prevalence Situations: Assessment of Syndromic Management in Matlab, Bangladesh. *Lancet* 354:9192, 1776–1781.

Hunter, M. (1990) Gynaecological Complaints. In C. Bass (ed.) *Somatization: Physical Symptoms and Psychological Illness*. Oxford: Blackwell Scientific Press.

ICPD (1994) *Programme of Action*. New York: UNICPD Secretariat.

Kaufman, J., Y. Liqin, W. Tongyin, and A. Faulkner (1999) A Study of Field-Based Methods for Diagnosing Reproductive Tract Infections in Rural Yunnan Province, China. *Studies in Family Planning* 30(Jun), 112–119.

Klitsch (2000) Two Approaches to Managing Vaginal Discharge Lead to Overtreatment, Missed Infections and Wasted Funds. *International Family Planning Perspectives.* 26:2, 89–90.

KRHP (Karachi Reproductive Health Project) (1997) Prevalence of Sexually Transmitted Diseases Amongst Women in Low-Income Communities of Karachi. *Infectious Diseases Journal of Pakistan* 4:2.

May, C. R., M. J. Rose, and F. C. W. Johnston (2000) Dealing with Doubt. How Patients Account for Non-Specific Chronic Low Back Pain. *Journal of Psychosomatic Research* 49, 223–225.

Mazhar, S. B., M. A. Agha, and M. A. Shaikh (2001) Knowledge and Misconceptions About Sexually Transmitted Infections in Married Women—Perspectives from Islamabad. *Journal of Pakistan Medical Association* 51:11.

Mohammad, R. (1998) *Pattern of Sexually Transmitted Diseases at a Referral Centre of Karachi.* Unpublished manuscript.

NACP (2002) *HIV/AIDS in Pakistan: A Situation and Response Analysis*. Islamabad: National AIDS Control Programme (NACP).

Nayab, D. (2005a) Reproductive Tract Infections Among Women in Pakistan: An Urban Case Study. *The Pakistan Development Review* 44:1, 131–158.

Nayab, D. (2005b) Health-seeking Behaviour of Women Reporting Symptoms of Reproductive Tract Infections. *The Pakistan Development Review* 44:2, 1–35.

Nichter, M. (1981) Idioms of Distress: Alternatives in the Expression of Psychosocial Distress. A Case Study from South India. *Culture, Medicine and Psychiatry* 5, 379–408.

Patel, V. (2003) *Depression, Dollars and Developing Countries*. Retrieved, 2007, from the World Wide Web: http://www.worldbank.org/wbi/B-SPAN/depression_disability/sub_depression_disability_index.htm.

Patel, V. and N. Oomman (1999) Mental Health Matters Too: Gynaecological Symptoms and Depression in South Asia. *Reproductive Health Matters* 7:14, 30–38.

PFFPS (1998) *Pakistan Fertility and Family Planning Survey 1996-97*. Islamabad: National Institute of Population Studies (NIPS) and Centre for Population Studies, London School of Hygiene and Tropical Medicine.

Ramasubban (2001) Weakness ('Ashaktapana') and Reproductive Health among Women in a Slum Population in Mumbai. In C. M. Obermeyer (ed.) *Cultural Perspectives on Reproductive Health*. New York: Oxford University Press.

Remez, L. (2003) Syndromic Diagnosis of Reproductive Tract Infections Leads to Substantial Unnecessary Treatment in Vietnam. *International Family Planning Perspectives* 29:1, 48.

Savidge, C. J. and P. Slade (1997) Psychological Aspects of Chronic Pelvic Pain. *Journal of Psychosomatic Research* 42:5, 433–444.

Singh, G., A. Avasthi, and D. Pravin (2001) Dhat Syndrome in a Female—A Case Report. *Indian Journal of Psychiatry* 43:4.

Sloan, N. L., B. Winikoff, N. Haberland, C. Coggins, and C. Elias (2000) Screening and Syndromic Approaches to Identify Gonorrhea and Chlamydial Infection among Women. *Studies in Family Planning* 31:1, 55–68.

van-Vliet, K. P., W. Everaerd, and F. J. van-Zuuren (1994) Symptom Perception: Psychological Correlates of Symptom Reporting and Illness Behaviour of Women with Medically Unexplained Gynecological Symptoms. *Journal of Psychosomatic Obstetrics and Gynecology* 15, 171–181.

Walraven, G., Nadeem Zuberi, and M. Temmerman (2005) The Silent Burden of Gynaecological Disease in Low Income Countries. *International Journal of Obstetrics and Gynaecology* 112:9, 1177–1179.

Wasti, S., M. K. Ashfaq, R. Ishaq, and R. Hamid (1997) Prevalence of Chlamydial Infection in Females Attending Antenatal and Family Planning Clinics in Karachi Pakistan. *The Australia and New Zealand Journal of Obstetrics and Gynaecology* 37:4, 462–465.

WHO (2000) *Sexually Transmitted Infections: Prevalence Study Methodology*: World Health Organisation.

Wood, D. P., M. G. Wiesner, and R. C. Reiter (1990) Psychogenic Chronic Pelvic Pain: Diagnosis and Management. *Clinical Obstetrics and Gynecology* 33:1, 179–195.

Zola, I. K. (1966) Culture and Symptoms. An Analysis of Patients Presenting Complaints. *American Sociological Review* 31:5, 615–630.

Zurayk, H., H. Khattab, N. Younis, O. Kamal, and M. el-Helw (1995) Comparing Women's Reports with Medical Diagnoses of Reproductive Morbidity Conditions in Rural Egypt. *Studies in Family Planning* 26:1, 14–21.

Voice and Votes—Does Political Decentralisation Work for the Poor and for Women? Empirical Evidence from the 2005 Local Government Elections in Pakistan*

REGINA BIRNER, SARFRAZ KHAN QURESHI, KAMILJON AKRAMOV, and BILAL HASSAN KHAN

INTRODUCTION

Decentralisation is associated with the hope that "bringing government closer to the people" will improve the provision of public services by increasing people's voice in decision-making, and by making the government more accountable to them. Decentralisation is also associated with the hope that disadvantaged groups of society, including the poor and women, will have better possibilities to exercise voice at the local level. Some countries have combined decentralisation with affirmative action, for example, by reserving seats in local councils for women and other disadvantaged groups. Yet the empirical evidence regarding the impacts of decentralisation has been mixed [Bardhan (2002); von Braun and Grote (2002); Jütting, *et al.* (2004); Steiner (2005)]. In many cases, political decentralisation has not been associated with fiscal and administrative decentralisation, thus limiting the scope of what local governments can actually do. Building capacity at the local level and overcoming coordination problems has been another challenge. Local elite capture has been identified as a major problem that can prevent positive effects of decentralisation for the poor, especially in societies with hierarchical power structures at the local level [Bardhan (2002)]. With regard to gender, there are concerns that decentralisation—even if associated with affirmative action—will not be sufficient to overcome gender-based discrimination. Again, the empirical evidence is mixed [ADB (2004)]. Chatthobadhay and Duflo (2004) found that that women who were elected as village leaders under the reservation policy in the Indian states of West Bengal and Rajastan invested more in those public goods that more closely linked to women's concerns, such as drinking water. Baden (1999) showed that it depends on local power structures and on the availability and competition over resources whether or not women benefit from decentralisation. In view of the mixed results, important knowledge gaps remain regarding the possibilities to promote public service provision for the poor and for women through political decentralisation and associated affirmative action.

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This paper examines one major mechanism by which decentralisation can help to improve public service provision for the poor and for women: voting. Three questions are addressed in this paper: (1) To what extent do the poor and to which extent do women use their vote in local government elections to exercise voice regarding public service provision? (2) Which factors influence their decisions to make use of this mechanism? and (3) What are the constraints faced by elected council members to represent the interests of poor constituencies and of women in local governments? The analysis is based on a voter and candidate survey, which the Pattan Development Foundation conducted before and after the 2005 Local Government elections in Pakistan [Pattan 2006).

Pakistan presents an interesting case for analysing local government elections. The country engaged in a far-reaching decentralisation process in 2001. The hopes that decentralisation will improve public service provision have been particularly pronounced, because other strategies to reach that goal had limited success. In fact, Pakistan's track record of public service provision has been rather poor prior to decentralisation [ADB/DFID/World Bank (2004)]. As an indication, growth in Pakistan had been associated with fewer improvements in health and education outcomes than in comparable developing countries. The female-male literacy gap in Pakistan even increased with economic growth while it declined in comparable countries. Likewise, infant mortality declined at a much lower rate in Pakistan than in comparable countries. Moreover, the link between increased funding and improvements service provision was weak as compared to other countries. Thus, neither growth nor increased public spending was likely to improve rural service provision [ADB/DFID/World Bank (2004)]. Against this background, the decentralisation reforms hold considerable promise to address to overcome the long-standing problems of public service provision in Pakistan.

Voting is obviously only one step in an impact chain that links political decentralisation with pro-poor public service provision and gender equity. However, it is an essential step, and—in fact—the major mechanism by which political decentralisation can be expected to lead to improved outcomes. Hence, a better empirical understanding of this mechanism, and the factors that influence how well it works for the poor and for women is an important element in assessing the success of decentralisation reforms.

The paper is organised as follows: Section 2 of presents a conceptual framework that maps the mechanisms that are essential for achieving improved public service provision through decentralisation and locates the role of voting in this context. Section 2 also describes the decentralisation reform in Pakistan in terms of this framework. Section 3 presents the results of the empirical analysis, and Section 4 concludes.

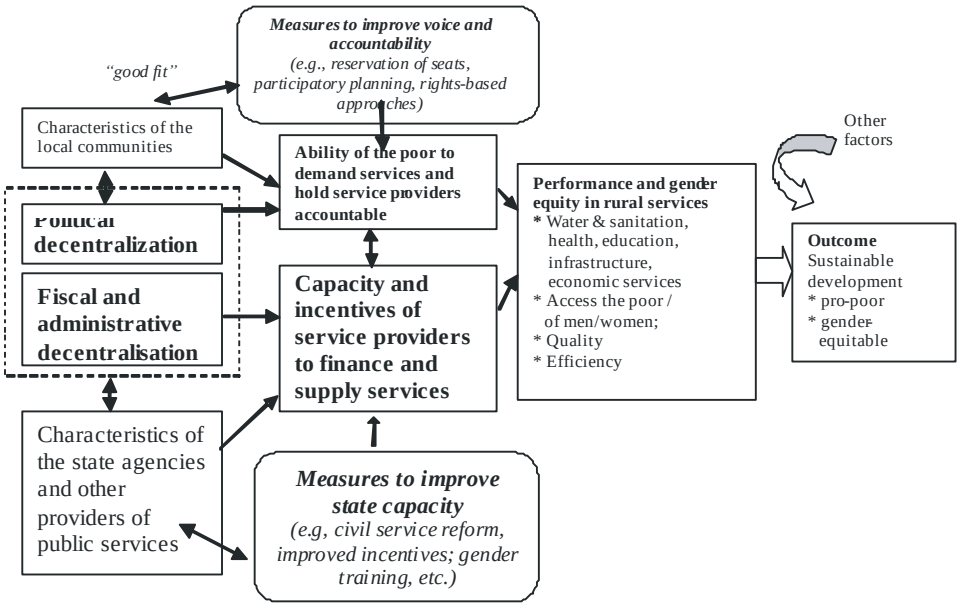
DECENTRALISATION AND PUBLIC SERVICE PROVISION

Conceptual Framework

Figure 1 presents a conceptual framework that maps the mechanisms by which decentralisation can improve the performance of public service provision. Major public services in the provision of which local governments could become involved include, among others, water and sanitation, basic health and education, agricultural advisory and veterinary services, irrigation management and forestry. Likewise, decentralisation may

shift responsibilities for the provision of rural infrastructure, such as roads, to local governments. Performance of service provision can be measured by using service-specific indicators, which capture (a) the quality of the services provided, (b) the access of different groups of society to these services, and (c) the efficiency of service provision. As Figure 1 (see box at the right-hand side of the diagram) indicates, improved performance and gender equity in public service provision can be considered as an important factor in influencing overall development outcomes. To analyse the factors that influence the performance of public service provision, it is useful to distinguish between (a) the capacity and the incentives of the service providers to finance and supply these services to the poor in a gender-equitable way (*supply-side factors*), and (b) the ability of citizens—independently of income statues and gender—to demand these services and hold service-providers accountable (*demand-side factors*). As shown in Figure 1, both factors are influenced by the extent of political, administrative and fiscal decentralisation.

Fig. 1. Conceptual Framework



Source: Authors.

The term political decentralisation refers to the shift of authority to elected local governments. Administrative decentralisation describes the transfer of administrative staff to local governments. Fiscal decentralisation refers to the level of authority that local governments have in raising revenues and making autonomous expenditure decisions regarding their own revenues and regarding transfers from higher levels of government.

Figure 1 indicates that next to decentralisation, there are other approaches that can contribute to improved public service provision. On the demand-side, measures to increase voice and accountability may include affirmative action, such as the reservation of seats for women and other disadvantaged groups in local councils, as mentioned above. Other demand-side measures include participatory planning methods, social

auditing and the right to information. The effectiveness of these approaches depends on their suitability to reduce obstacles to political participation that are associated with the characteristics of the local population, such as the prevalence of gender discrimination and patron-client relationships ("good fit" link in Figure 1).

On the supply side, measures that can accompany fiscal and administrative decentralisation may include civil service reforms, improved systems of public expenditure management, outsourcing of service provision, and public-private partnerships. Specific measures to address problems of inequity and social exclusion may include training and awareness creation among the staff of service providers. According to the theory of representative bureaucracy, increasing the percentage of female staff and staff representing poor and disadvantaged groups may also help. The effectiveness of these approaches depends on the extent to which they are able to address the specific problems that account for low performance and social exclusion of public service provision ("good fit" link in Figure 1).

This framework indicates that voting is an essential factor, though not the only factor, by which the poor and disadvantaged groups can exercise demand for a better and more inclusive public service provision. Voting is also a major factor by which citizens can hold public service providers accountable. However, voice and accountability will only lead to better service provision, if the public administration has the capacity to improve service provision. Hence, one can hypothesise that the perception of citizens regarding this capacity has an influence on their willingness to vote, and to consider service provision on their voting behaviour. The framework suggests that characteristics of the local communities, for example, the extent to which they consider it appropriate for women to make their own decisions regarding voting, also influences voting behaviour.

Supply- and Demand-side Approaches to Pakistan's Devolution of Power Policy

The decentralisation reforms that the Musharraf government announced in 2000 ("Devolution of Power" Plan) and enacted with the Local Government Ordinance in 2001 entail both demand-side and supply-side measures. A three-tier local government structure was created, consisting of the Union, Tehsil and District level. There is an elected council at each level, which is headed by a Nazim. The electorate for the union councils comprises all registered voters who are Pakistani citizens and 18 years or older. They directly elect the Union Council members and the Union Nazim on a non-party basis. The elections for the Tehsil and District-level council members and Nazims are indirect. These bodies are elected by the Union Council members. An important demand-side measure is the reservation of 33 percent of seats for women in all tiers of local government. Seats are also reserved for peasants and workers. The government also introduced other demand-side measures, such as social audits [Saleem (2006)].

Elected local governments existed prior to the devolution in 2001, but they did not play any significant role, as they were practically inactive, especially in rural areas [Cheema, *et al.* (2004)]. Most state functions were carried out by the Provincial administration. As a supply-side measure, the devolution policy transferred the responsibility for most public services that were previously under the local provincial administration to the local governments. This administrative decentralisation process

was, however, not uniform across all functions, with significant heterogeneity in its extent across different administrative departments and across different services within a department. As an important measure to create accountability, the bureaucracy is now responsible to *elected* heads of local government at all three levels. In the previous system, the Deputy Commissioner—a key figure in local government—used to report to the non-elected provincial bureaucracy. Fiscal decentralisation, another supply-side measure, was promoted, as well. The expenditure budget share of local governments in aggregate provincial and local government spending increased from approximately 10 to 30 percent [Cheema, *et al.* (2004), p. 35]. The financial transfers to local governments are based on a formula, which takes population and backwardness into account.

EVIDENCE FROM THE 2005 LOCAL GOVERNMENT ELECTIONS

Data and Methods

The results presented here are based on a pre-election and a post-election voter and candidate survey of the 2005 Local Government Elections, the second round of elections since the 2001 devolution was enacted. The survey was conducted by the Pattan Development Organisation [Pattan (2006)]. The sample size was 3,792. A three-stage sampling procedure was used. At the first stage, 59 districts were sampled with their probability proportionate to their size. At the second stage, districts were stratified according to urban and rural locations. At the third stage, the respondents were selected from the voter list, using a random start number and the random walk method. Due to the low population density in Balochistan, a booster sample was drawn for this province. For the analysis, the sample was weighted accordingly [Pattan (2006), p. 7]. Pattan also conducted a pre- and post-election survey of the Union councilors to cover the indirect elections. This paper presents descriptive statistics derived from survey, focusing on a comparison of the results by poverty groups and by gender. Thus, the paper provides a basis for subsequent studies, which will employ analytical statistics, such as logistic and multi-level models [Akramov, *et al.* (2007)].

Poverty Status of Respondents

In order to analyse to which extent the poor use their vote as voice, it is necessary to disaggregate the survey data by poverty groups. The voter survey featured two questions, from which the poverty status of the respondent can be derived. One question referred to the monthly income of the household. As this question is difficult to answer for respondents that do not receive a monthly wage, such as farmers, the prevalence of missing data is rather high (13.5 percent). The second question grouped the respondents into the categories described in Table 1. Approximately half of the respondents reported that they have only enough income to provide adequate food and shelter for the family (Category 2 in Table 1).

Considering official poverty figures, one can assume that more people opted for this category than would actually classify. In view of the high level of missing data for the question on monthly income, the categories of Table 1 are nevertheless used as a basis for the analysis. Three groups are distinguished: (1) “very poor” (food insecure), corresponding to Category 1 in Table 1, (2) “poor/medium” (Category 2 in Table 1), and (3) ‘better-off” (Categories 3, 4, and 5 in Table 1 combined).

Table 1

Poverty Groups in Post-election Voter Survey

Question: There are several ways to describe a household's financial situation. Please tell me which of these statements best describes the situation in your household.	Percent	Average Monthly Income*
1. We sometimes do not have enough income to eat three meals a day	12.1	2,750
2. We have enough income only to provide adequate food and shelter for the family	50.5	4,680
3. We have enough income to provide food and shelter and to buy new clothing from time to time	25.9	9,260
4. We have money left over from time to time after meeting our basic needs	8.2	12,790
5. We always have money left over after meeting our basic needs	2.6	25,230
Missing	0.6	–

Source: Pattan (2006) Post-Election Survey of voters.

*Reported monthly family income in Rs In 2005, the poverty line was approx. Rs 930 per adult household member per month. The survey asked for the number of children below age 15, but not for the entire household size. Hence, it is difficult to compare the reported average monthly income of the household with the poverty line.

The Decision to Vote

As stated above, participation in local government elections is a necessary, though not a sufficient condition, to be able to use the right to vote as a mechanism to exercise voice regarding public service provision and to hold local governments accountable. According to the official figures of the National Election Commission, voter turnout in the Local Government Elections declined from 52.3 percent in the 2001 elections to 47.4 percent in the 2005 elections [ECP (2005)]. Voter turnout reported in post-election surveys is usually higher than the actual voter turnout, because respondents often feel a responsibility to vote and give an expected answer. This was also the case in the Pattan survey, in which the reported voter turnout was 56.5 percent. Table 2 compares the figures from the Election Commission and the Pattan survey by Province and gender. The highest difference (16 percent) in voter turnout between the Election Commission data and the Pattan data was observed for Balochistan. Still, the differences seem modest and do not suggest a major bias in the data used for this study.

Table 2 shows that women's voter turnout was considerably lower than men's voter turnout in all Provinces. The difference was particularly pronounced in NWFP, followed by Sindh. At the national level, 39.5 percent of the women voted, as compared to 56.8 percent of the men.

Table 2

Voter Turnout by Gender and Province

	Election Commission			Pattan Survey		
	Male	Female	Total	Male	Female	Total
Punjab	61.5	44.0	53.5	68.6	55.2	62.2
Sindh	47.6	24.3	37.6	57.9	37.1	50.3
NWFP	57.4	21.1	41.2	72.7	26.6	48.1
Balochistan	39.3	21.5	31.1	52.7	41.5	47.4
Total	56.8	35.9	47.4	65.8	46.3	56.2

Sources: ECP (2005), Pattan (2006): Post-election voters' survey.

Table 3 shows voter turnout by income group. In NWFP, only 22 percent of the very poor respondents voted, as compared to more than 60 percent of the better-off respondents. However, in the other Provinces, voter turnout among the very poor was comparable or even higher than that in the other income categories.

Table 3

Voter Turnout by Income Group and Province

	Very Poor (Food Insecure)	Poor/Medium	Better-off
Punjab	59.0	61.8	63.9
NWFP	22.1	45.0	66.2
Sindh	58.3	52.5	41.3
Balochistan	52.3	42.3	51.6
Total	55.8	56.1	57.2

Source: Pattan (2006) Post-election voters' survey.

Table 4 displays the voter turnout for location, age group, literacy and education, disaggregated by gender. The data indicate that both men and women in rural areas were more willing to vote than people in urban areas. A higher percentage of small and medium-sized farmers voted than any other occupational category. Voter turnout was higher among illiterate men and women than among literate ones.

Participation increased with age, both among men and women. Among the different professional groups, the largest difference in male and female voting behaviour was observed among professionals. The percentage of professional women who voted was particularly low. Answering the question "In your opinion, did the results of the recent local government elections accurately reflect the way people voted or do you think there was rigging?", 52 percent of the respondents felt that the elections reflected the way that people voted, 25 percent were of the opinion that this is not the case, and the rest was undecided. Table 5 displays the differences by income group and gender with regard to this question. Less than half of the very poor and less than half of the female respondents believe that the elections reflect the way that people voted.

Table 4

Voter Turnout by Category and Gender

	Female	Male
Location		
Urban	39.3	57.3
Rural	49.7	70.2
Age Group		
18-20	18.3	28.0
21-50	49.3	68.4
More than 50	66.3	72.9
Literacy		
Literate	39.1	63.5
Illiterate	51.0	72.2
Occupation		
Self-employed Shopkeeper	46.9	63.0
Self-employed Business or Trade (except shop keeping)	39.3	65.1
Government Servant	41.4	55.9
Private Sector Employee	50.7	45.7
Manual Labour	47.1	50.6
Small or Medium Sized Farmer	46.9	63.6
Large Farmer / Landowner	48.8	48.4
Professionals (Doctor, Lawyer, etc.)	32.1	75.5
Retired	53.0	48.6
Housewife	34.6	–
Unemployed	46.7	70.3
Others	46.2	44.8

Source: Pattan (2006) Post-election voters' survey.

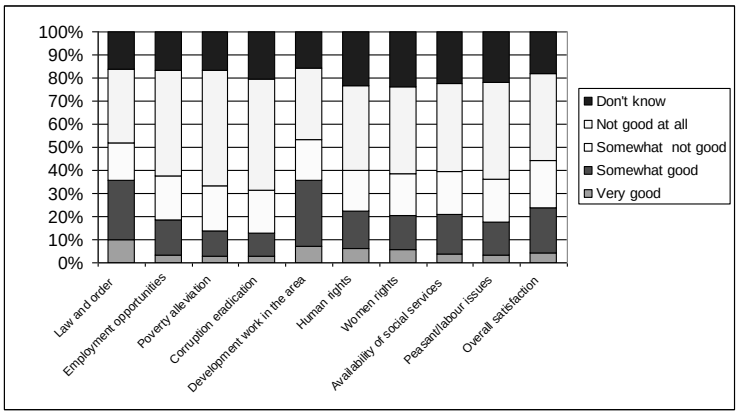
Table 5

Perceived Fairness of the Elections by Income Group and Gender

	Income Group			Gender	
	Very Poor	Poor/ Medium	Better-off	Female	Male
Reflect the Way People Voted	44.9	54.7	50.9	45.9	57.7
There was Rigging	25.3	21.7	29.2	22.9	26.7
Don't Know	29.8	23.5	19.9	31.2	15.5

Source: Pattan (2006) Post-election voters' survey.

Fig. 2. Satisfaction with Performance of District Nazim (2001-2005)



Source: Pattan (2006) Post-election voters' survey.

Since the topic of this paper deals with performance of public service provision, it appears useful to present people's perceptions in this regard. Figure 2 displays the satisfaction of the respondents with various aspects of the performance of the previous District Nazim (2001-2005). The figure shows that in general, satisfaction with services is rather low. Law and order received relatively high scores, whereas poverty alleviation and control of corruption received relatively low scores. This result implies that people do not appear to believe that the development work carried out is particularly poverty-focused. Interestingly, there were no major differences between income groups and between men and women in regard to satisfaction with different services.

Table 6 shows the answers to the question: "When the new union council sets development priorities for your area, how much attention do you think they will pay to the problems of ordinary people? Only 8.7 percent of the very poor feel that Union Councils pay a lot of attention to common people's problems, whereas 17.5 percent of the better-off respondents feel that this is the case. There are also gender differences regarding this perception, as shown in Table 6.

Table 6

*Voters Perception Whether Union Councils Take Common People's Problem into Account when Setting Development Priorities**

	Income Group			Gender	
	Very Poor	Poor/Medium	Better-off	Female	Male
A lot	8.7	14.6	17.5	13.4	16.4
Some	24.3	33.1	31.9	26.4	36.4
Very Little	17.8	18.0	19.7	18.1	18.9
None at All	28.4	20.7	18.6	27.3	14.8
Don't Know	19.9	13.1	11.8	14.1	13.0
Refused	0.9	0.6	0.5	0.7	0.5

Source: Pattan (2006) Post-election voters' survey.

* The question was formulated as follows: "When the new union council sets development priorities for your area, how much attention do you think they will pay to the problems of ordinary people? Do you think they will pay a lot of attention, some attention, very little attention or no attention at all?"

Table 7 displays the reasons that people gave for not voting. The table reveals that—to a considerable extent—the very poor and women did not vote because they did not have an ID card, were not registered as voters, or because their name was not in the electoral list. Around 5 percent of women were stopped by their husbands. Lack of possessing an ID card was also a major reason why people could not vote.

Table 7

Reasons Not to Vote by Gender and Income Group (Percent of Respondents)

	Income Group			Gender	
	Very Poor	Poor/ Medium	Better-off	Female	Male
Did not have ID card	40.9	35.4	21.1	38.6	19.5
Not registered as voter	10.5	12.5	13.0	12.5	12.2
Went to polling station but my name was not on the electoral list	15.6	13.2	13.9	10.6	18.1
Went to polling station but queue too long	0.0	0.4	1.3	0.8	0.5
No transport	0.5	0.1	0.4	0.5	–
Stopped by community	2.1	1.8	1.5	2.9	–
Stopped by my husband	6.8	2.8	2.4	5.3	–
Fear of violence	0.0	0.3	0.2	–	0.6
Too hot / bad weather	0.6	0.5	0.9	0.6	0.8
I was out of town/village	7.7	7.8	10.9	4.4	15.4
Had to work	2.4	4.7	5.8	3.0	7.4
Didn't want to cast vote	2.2	2.5	6.4	3.6	4.2
Elections don't matter	3.3	2.4	4.7	3.0	4.1
No reason in particular	2.1	3.2	6.0	4.2	3.8
Other	5.4	11.5	10.9	9.1	12.8
Don't know	0.0	0.3	0.2	0.5	0.2
Refused	0.0	0.5	0.4	0.4	0.4

Source: Pattan (2006) Post-election voters' survey.

The fact that women were stopped by the community or their husbands from voting is related to opposition against women's participation in elections. During the 2001 Local Government elections, thousands of women seats were uncontested due to local opposition to female participation in the political system. In whole districts like Kohistan, Lower Dir and Battagram in NWFP and Dera Bugti in Baluchistan, no female candidates were allowed to contest elections following joint decisions made by the local leaderships of all major political parties [Qureshi (2006)]. Table 8 displays the percentage of respondents who answered that they oppose women's participation in elections, when answering the question: "Do you oppose or support women's participation in election?"

Table 8

Percent of Respondents who Oppose Women's Participation in Elections

	Female	Male
Location		
Rural	19.3	19.7
Urban	12.9	18.4
Education		
Illiterate	19.5	25.7
Primary or Middle	15.6	19.2
Matric or FA/Fsc	11.1	16.4
More than FA/Fsc	10.8	10.9
Age group		
18-20	11.6	18.5
21-30	14.4	17.7
31-40	17.1	19.1
41-50	19.3	20.8
More than 50	22.8	22.0

Source: Pattan (2006) Pre-election voters' survey.

The survey showed that the likelihood of opposition to female participation was greater in case of illiterate women and those that only passed primary school than those with higher educational status. The same was true for male respondents. Similarly, the survey established that the likelihood of opposition to women participation in elections increases with age.

Another problem related to the decision to vote is the electorate's knowledge and awareness regarding the voting system. This question was asked in the pre-election survey, which did not have a comparable poverty group classification than the post-election survey. Table 9 displays the results by gender. Only 9.6 percent of the female voters knew who would vote for Tehsil Nazims and for candidates on reserved seats for District and Tehsil Councils. In contrast, almost half of the men were aware of this important aspect of the voting system. Moreover, in percentage terms, twice as many men than women knew the correct number of ballot papers to be given to voters on polling day.

Table 9

*Knowledge about the Voting System (by Gender***)**

(a) Q: "Who Votes for District and Tehsil Nazims and Reserved Seats for District and Tehsil Councils"		
	Female	Male
Voters like Myself	39.8 %	33.4 %
Union Nazimeen and Councilors	9.6 %	46.1 %
Others	2.6 %	0.9 %
Don't Know	47.9 %	19.7 %
(b) Knowledge about Provision of Ballot Papers to Each Voter on Polling Day		
Incorrect	95.5 %	90.5 %
Correct	4.5 %	9.5 %

Source: Pattan (2006) Pre-election voters' survey.

Considerations in Voting

While the previous section dealt with the factors associated with the decision to vote, this section is concerned with the considerations that people who voted took into account when deciding for whom they should vote. Table 10 presents the descriptive statistics on the following question: "Now thinking about who you voted for union Nazim, please tell me which of the following factors were important in deciding who to vote for?" Multiple answers were possible. The table indicates that more than half of the voters in each income and gender category consider in their voting decision the plans of the candidate to work on issues that are important to the respondent and his or her family. This parameter is the best available indicator in this data set that citizens use their vote to exercise voice in public service provision. The table shows that next to performance-oriented voting, identity-based voting played an important role, as well. Almost half of the respondents consider the ethnic or family background of the candidate important for their voting decision. Around 70 percent of the respondents state that their own assessment of the candidate is important, but a considerable share of the voters also considered the opinions of others, including the landlord, the community and husband or father as important. The percentage of the very poor who pay attention to the opinion of landlord and his political faction was larger than that of the less poor groups. The integrity and honesty of the candidate was apparently also important across income groups and gender. Since multiple answers were allowed, it is not possible to judge which of the factors listed in Table 10 were decisive for the voters.

Table 10

Considerations in Voting by Income Group and Gender

	Very Poor	Poor/ Medium	Better-off	Female	Male
Personality of the candidate	75.8	89.6	89.5	81.8	91.9
Candidate's religious views	60.0	68.5	66.6	70.5	64.8
Candidate's plan to work on issues important to respondent and family	65.6	62.5	57.6	66.1	57.9
Ethnic or family background of candidate	51.6	53.4	49.5	51.9	51.4
Opinions of husband/father	66.0	59.3	55.1	84.2	42.2
Opinion of local landlord or his political faction	43.1	38.3	27.9	36.1	33.8
Own opinion or assessment of the candidate	71.3	78.1	80.0	70.2	82.9
Integrity or honesty of the candidate	78.5	83.7	83.3	79.6	85.1
Joint decision of village / neighbourhood	67.4	70.1	60.5	62.9	67.9
The candidate/s belong to your same biradar	34.4	38.2	36.9	36.7	37.6
The political party of the candidate	43.8	41.8	43.6	32.4	48.5
Personal relations with candidate	52.5	64.6	62.6	47.7	71.0
Others	100.0	100.0	88.8	85.7	96.3

Source: Pattan (2006) Post-election voters' survey.

The Role of the Candidates

Using voting to exercise voice for better service provision and for more gender equity will be more effective, if the candidates attach priority to these issues. In the candidate survey, 25 percent of the respondents were women. The pre-election survey of the candidates does not have the same poverty groups as the post-election voters survey

quoted above. Therefore, reported monthly household income is used to form income groups, in spite of the problem of missing variables. Two groups of candidates are formed: (a) candidates who reported an income of less than 3,000 Rs (16.6 percent of the candidates), and (b) candidates who reported a higher income. In the pre-election survey of the candidates, Pattan asked the question: "What are the three major local priority issues that you are highlighting in your election campaign?" Table 11 displays the results.

In general, poor and non-poor as well as female and male candidates have similar priorities. Expectedly, poor candidates place more emphasis on poverty reduction. Interestingly, this is also true for female candidates. For all candidates, street pavement, education and water and sanitation have a rather high priority. Rights issues, in contrast, are not high on the agenda. Only 1.5 percent of the male candidates mentioned women issues and violence against women among their three top priorities. In the case of female candidates, the respective figure was 8.9 percent. Expectedly poor candidates place more emphasis on labour rights than other categories of candidates. Health and water, which are often considered to be a higher priority for women, were less frequently among the top priorities of female candidates than of male candidates. Health was surprisingly low on the agenda of the low-income candidates.

Table 11

Campaign Issues Mentioned by Candidates as Priority

	Income Group		Gender	
	Below 3,000*	Above 3,000*	Female	Male
Economic Issues				
Priority Reduction	22.1	10.7	23.4	11.2
Employment	5.2	8.4	7.8	8.7
Inflation	2.5	0.8	2.3	0.7
Food Security	0.3	0.5	1.2	0.4
Government Services				
Education	34.4	40.4	4.01	39.4
Health	16.7	28.6	25.7	28.4
Water	20.3	36.9	28.3	35.4
Sanitation	30.8	42.1	32.1	43.7
Street Pavement	58.8	62.6	53.4	63.1
Electrification	19.4	31.2	18.1	33.0
Rights				
Women Issue/Violence Against Women	3.0	3.3	8.9	1.5
Minority Rights	2.3	2.6	0.7	3.2
Labour Rights	8.4	5.5	3.6	6.7
Tenant Rights	4.0	3.0	3.1	3.7
Governance				
Law and Order/Crime Control	5.1	5.4	2.7	6.4
Tackling Political Corruption	0.0	1.5	0.5	2.0
Religious Issues				
Strengthening Religion	0.0	0.3	0.0	0.6
Other	**22.8**	**26.0**	**42.2**	**24.4**

Source: Pattan (2006) Pre-election survey of candidates.

*Candidates who reported a household income of more/less than Rs 3,000.

Table 12 displays the educational statues of the candidates. More than half of the poor candidates and more than half of the female candidates who were included in the sample of the Pattan survey were illiterate. The overwhelming majority of the women candidates described themselves as housewives.

In addition to challenges in terms of educational background, female councilors face other constraints that may limit their possibilities act effectively. Pakistan's devolution laws lack provisions for the inclusion of women in budgetary committees or for an equal distribution of funds to male and female councilors. Moreover, the law does not ensure female participation as male relatives of female councilors continue to represent them at council meetings. There are no women rights committees at the district level. Female candidates also have to cope with the burdens of security and mobility. In most parts of the country, women continue to face difficulties in moving freely in their constituencies. Moreover, in many areas, women councilors have to cope with the biases and prejudices of their male colleagues. In one instance, the male councilors in Malakand lodged a formal complaint against a woman member for actively participating in council sessions [Naz (2005), p. 57]. Security is another major problem for women councilors. There have been instances where female members have even been murdered e.g., in Kohat, Peshawar and Abbottabad [Qureshi (2006)].

Table 12

Educational Status of Candidates

	Income Group		Gender	
	Below 3,000*	Above 3,000*	Female	Male
Illiterate	53.3	13.0	53.3	8.2
Primary	25.4	12.4	15.8	14.0
Middle	8.2	15.7	7.3	16.3
Matric	12.0	26.7	9.7	28.8
F.A/F.Sc	1.0	11.5	6.4	11.5
B.A/B.Sc or more	0.0	11.6	5.1	11.3
M.A or a Pofessional Degree	0.0	8.2	0.8	9.1
Doctorate or Post-Doctorate	0.0	0.5	1.6	0.2
Refused	0.0	0.5	0.0	0.5

Source: Pattan (2006) Pre-election survey of candidates.

*Candidates who reported a household income of more/less than Rs 3,000.

CONCLUSIONS

The results indicate that there are considerable obstacles for citizens to use their vote as a mechanism to exercise demand for improved service provision and gender equity and to hold public service providers accountable. In particular, administrative barriers to voting, specifically the lack of identity cards and incomplete registration in election lists prevent citizens from voting. Poor people and women are particularly affected by these problems. Moreover, only half of the respondents believe that the electoral outcomes accurately reflect people's voting decisions. On the positive side, income status and residence in rural areas do not seem to discourage people from voting. NWFP is an exception, however. In this Province, voter turnout among the very poor was

particularly low. In general, illiterate citizens and citizens from rural areas were more likely to vote than literate and urban citizens. Expectedly, men showed a higher voter turnout than women. Among the people who voted, one can observe that both identity-based voting and performance-based voting played a role. It appears that women, very poor people and people in rural areas are more somewhat more inclined to use their vote to improve their living conditions. More than 40 percent of the very poor consider the opinion of the landlord and his political faction in their voting decision, which can be considered as an indication of the elite capture problem.

One can expect that the prospects of low-income and of female candidates to be effective in reducing poverty and gender inequity will be limited due to a variety of constraints, including a lack of provisions for their representation in committees. Moreover, in view of the high level of illiteracy among both low-income and female candidates, training may be particularly important to improve their effectiveness. In conclusion, there is a need to make to improve the electoral process so that more people, and especially more poor people and more women, have the possibility to use their vote to exercise voice. There is also a need to improve the working conditions for low-income and for female candidates to become effective representatives of their constituencies once they are elected.

The paper dealt with voting, which is only one mechanism by which decentralisation can lead to better service provision. As the framework presented in the paper shows, there is a need to study voting in the context of other measures that improve the ability of citizens to demand better services, such as social audits. Moreover, the capacity and incentives of decentralised government agencies to improve public service provision with a poverty and gender-focus need to be studied, as well. Future research may focus on explaining differences in the performance of local governments, taking these factors into account. Analysing different demand-side and supply-side measures in an integrated context will hopefully help policy-makers and stakeholders to better understand "what works where and why" in improving local governance.

REFERENCES

ADB (2004). Gender and governance issues in local government—regional report of technical assistance in Bangladesh, Nepal, and Pakistan. Asian Development Bank. Manila.

ADB/DFID/World Bank (2004). Devolution in Pakistan. Main Report. Islamabad.

Akramov, K., Qureshi, S. K., Birner, R., & Khan, B. H. (2007). Decentralisation, local government elections, and voter turnout in Pakistan. International Food Policy Research Institute (IFPRI), Washington, DC. (Manuscript).

Bardhan, P. (2002). Decentralisation of governance and development. *Journal of Economic Perspectives, 16*(4), 185–206.

Bardhan, P. & Mookherjee, D. (2000). Relative capture of government at local and national levels. *American Economic Review, 90*(2).

Chatthobadhay, R. & Duflo, E. (2004). Women as policy makers—evidence from a randomised policy experiment in India. *Econometrica, 72*(5), 1409–1443.

Cheema, A., Khwaja, A. I., & Qadir, A. (2005). Decentralisation in Pakistan: Context, content and causes. Kennedy School of Government. (Faculty Research Working Papers Series, RWP05-034, April).

ECP (2005). Local government elections 2005. Province-wise Turnout. http://www.ecp.gov.pk/content/lgturnout2005.html; accessed 12/10/06.

Inayatullah (1999). Moving towards change. Savera. Islamabad.

Jütting, J., Kauffmann, C., McDonnell, I., Osterrieder, H., Pinaud, N., & Wegner, L. (2004). Decentralisation and poverty in developing countries: Exploring the impact. Paris, France. (OECD Working Paper No. 236.)

Naz, R. (2005). Training of women councilors in Pakistan: A review, in Pakistani women in context: A companion volume to the Pakistan country gender assessment.

Pattan (2006). Common grounds–1: Analysis of local government election 2005. A Report based on Survey of Voters. Pattan Development Organisation, Islamabad

Qureshi, S. K. (2006). Engendering growth for poverty reduction—The Pakistan experience. Paper presented at the International Conference on "Poverty, Equity and Access to Justice of the Poor in South Asia" at the Centre for the Study of Law and Governance, Jawaharlal Nehru University, New Delhi, November 7-9.

Saleem, M. (2006). Accountability under local government system. National Reconstruction Bureau. Paper Presented at the 22nd Annual Conference of the Pakistan Society of Development Economists, Lahore, December 19-22.

Steiner, S. (2005). Decentralisation and poverty reduction: A conceptual framework for the economic impact. German Overseas Institute, Hamburg, Germany. (Working Paper No. 3.)

Von Braun, J. & Grote, U. (2002). Does decentralisation serve the poor? Chapter 4 in E. Ahmad and V. Tanzi (eds.) *Managing Fiscal Decentralisation.* New York: Routledge.

Waseem, M. (2006). *Democratisation in Pakistan, A Study of the 2002 Elections*. Oxford University Press.

Gender Exploitation: from Structural Adjustment Policies to Poverty Reduction Strategies*

KHADIJA ALI

INTRODUCTION

The aim of this paper is to review the existing empirical research concerning women's exploitation as a result of policy measures imposed by the World Bank and the IMF, particularly under Structural Adjustment Policies (SAPs). The central argument here is that SAPs have not been successful in achieving their basic objectives of 'adjusting' the economies instead, these policies have created severe social problems for the human beings, particularly for the poor and middle-income groups, in the countries where they (SAPs) have been implemented [Beneria and Feldman (1992); Cornia, Jolly and Stewart (1987); Floro (1995); Messkoub (1996) Moser (1989)]. Among these groups, although all members have to mobilise their efforts to support households so as to cope with the economic crisis, women have to bear an unequal share of this burden [Agrawal (1992); Ali (2000); Beneria (1992, 1995); Cagatay (1995); Chant (1991); Elson (1991, 1992a); Feldman (1992); Floro (1995); Reilly and Gorden (1995); McFarren (1992); Moser (1992); Perez-Aleman (1992); Sahn and Haddad (1991); Safa and Antrobus (1992); Stewart (1992); Trip (1992)].

In response to the rejection of Structural Adjustment by the critics all over the world, Poverty Reduction Strategy have been introduced by the International Financial Institutions (IFIs). The basic concern of this paper is to explore whether policy-makers have learnt any lesson from past experience while adopting the new strategy of development. Do this strategy really presents a shift from the controversial structural adjustment policy of the past. To find out the answers of these questions, second section of the paper gives a brief background of Structural Adjustment and Poverty Reduction Policies. Third part explains whether new development strategy is really different from the old one or not. Gender exploitation, particularly under SAPs is reviewed in Section Four and Section Five discusses how gender issue has been dealt in Poverty Reduction Strategy Papers prepared by different countries so far. The last section concludes the discussion and presents the policy recommendations.

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BACKGROUND

Structural Adjustment Policies

The term 'structural adjustment' as defined by World Bank (2001) is a set of policies directed by the IMF and the World Bank as primary conditions for re-scheduling the existing loans as well as granting further loans to debtor states of the Third World countries, especially after the oil price shocks of the 1970s and the world recession of the 1980s. These policies combine short-run stabilisation measures and longer-run adjustment measures, which are either applied sequentially or simultaneously or overlap each other. Structural Adjustment Policies (SAPs) are characterised by:

- an emphasis on economic growth;
- tight fiscal policies reducing the public budget deficit;
- tight monetary policies reducing the money supply;
- wage and price policy to control inflation
- wide-ranging privatisation and liberalisation;
- charging for basic services;
- withdrawal of the state from production and marketing; and
- exchange rate policies to reduce the balance-of-payments deficits.

The basic objectives of SAPs as presented by aid-giving agencies were to help the countries in economic crisis through the utilisation of their resources in the most efficient way, to restore the balance-of-payments equilibrium, and to revive growth rates under the policy packages of the World Bank and the IMF. But there is nothing new in this strategy. 'In a similar fashion those development policies that have failed in the past, SAPs were off the shelf, drafted in the north for those in the south, without taking into account social and cultural context, least of all the impact on different sectors of the population' [Woods (1995), p. 2]. Therefore, the results of this 'one-size-fits-all' approach, insensitive to countries' particular circumstances, have been far from beneficial to the social welfare and economic condition of developing countries and their people, as strongly criticised all over the world [Ali (1999); Beneria and Feldman (1992); Cornia, Jolly and Stewart (1987); Floro (1995); Marshall and Woodroffe (2001); Messkoub (1996); Moser (1989)]. According to critics, SAPs.

Poverty Reduction Strategy

In response to the worldwide criticism about the impacts of SAP on human beings, particularly with reference to poverty, the IFIs have recently changed their development strategy to redesign macro policies in the light of the objective of reducing poverty. Under the new strategy that was launched at the 1999 World Bank/IMF annual meetings, each country receiving loans from these institutions had to prepare a Poverty Reduction Strategy Papers (PRSP), which outlines each country's objectives with regard to poverty reduction and formulates the policies needed to achieve these goals. PRSPs are now a condition of most grants aid and concessional lending to the world's 78 poorest countries [Marshall and Woodroffe (2001)]. Until the beginning of the 2003, 20 countries had completed PRSPs and over 45 had produced Interim-Poverty Reduction Strategy Papers (I-PRSPs) [Zukerman and Garrett (2003)].

A review of policies presented in five countries,[21] Poverty Reduction Strategy Papers (PRSPs) and eleven countries,[22] Interim- Poverty Reduction Strategy Papers (I-PRSPs) by Marshall and Woodroffe (2001) shows that core policies across all countries are:

- economic Growth;
- macroeconomic stability;
- prudent monetary/fiscal/budgetary policies;
- structural reforms: both liberalisation and privatisation;
- development of, or enabling environment for, the private sector.

According to this review, the emphasis of all PRSPs and I-PRSPs is on achieving high economic growth rates and low inflation rates.

HOW PRSPs ARE DIFFERENT FROM SAPs

Looking at the policies framed in the macroeconomic models of SAPs and PRSPs/I-PRSPs, it seems that there is not much difference between the new and the old development strategies of the World Bank and the IMF. To accelerate economic growth through privatisation and liberalisation were the core of SAPs and now this is again at the centre of PRSPs and I-PRSPs. The weakest point of the new strategy is that it seems the lessons have not been learnt from the past experiences and again the general thrust of the macroeconomic policies is on achieving higher growth rates so that poverty can be reduced/eliminated supposedly through trickledown effect. While the worldwide experience of the past 30 years has rejected this kind of strategy by showing that increased growth rates did not help in ending up hunger and poverty because the 'trickle down' did not work [Zaidi (2003); Houghton (2000)]. It is because economic growth does not automatically result in better distribution of resources and the reduction of poverty nor is it necessarily sustainable, given its emphasis on full employment of the labour force within the existing global production system [Bradshaw (2002)].

There is no disagreement that the high growth rates are very important for the economic development for any country but this perspective has its flaws while linking it with poverty reduction under certain conditions. For instance, poverty reduction through growth is limited when income and asset inequality are high because under this condition growth is concentrated in a few groups, bypasses poor smallholders and micro entrepreneurs, and creates little employment for the unskilled [Addison and Cornia (2001)]. It is clear now that the Poverty Reduction Strategy (PRS) does not appear to have been successful in integrating macroeconomic issues and poverty issues more closely than in the past [Marshall and Woodroffe (2001)]. The main reason may be because the IMF continues to advise countries on macroeconomic direction, while the World Bank advises on the design and impact of poverty reduction strategies [IMF (2001) and Wood (2000)].

The above analysis puts a question mark by asking whether PRSPs will be really helpful to fight against poverty nevertheless these PRSPs now govern the lives of the

[21]Bolivia, Burkina Faso, Mauritania, Tanzania, Uganda.

[22]Benin, Central African Republic, Chad, Ethiopia, Guyana, Kenya, Madagascar, Mali, Malawi, Nicaragua, Zambia.

millions of the world's people who live under extreme poverty and hunger and are deprived of their socio-economic rights.

GENDER EXPLOITATION

The basic objective of the models given above is to integrate all the economies of the world into one economy to make the world a real global village. This model of global village requires perfect competition at domestic as well as at international level within all countries for all of their resources whether physical or human. To make developing countries able to take part in this competition, the above market-based growth models require from these countries to achieve higher economic growth rates by using liberalisation, deregulation, privatisation, tight monetary and fiscal policies. These measures are to expose developing economies for the best utilisation of their resources domestically as well as internationally and to make them more market-oriented by reducing state intervention and liberalising all markets.

In this 'pure macroeconomic' agenda, the social impacts of the policy measures have rarely been taken into account. Hardly any attempt has been made to link micro units of the economies, particularly households, with their macro framework. The negative effects of these policy measures upon the lives of the millions, who can be affected directly or indirectly, have not been taken into serious consideration.

In the past, whenever people were given importance in any policy, it was assumed that targeting "people" was enough [Shiverenje (2002)]. Planners and policy-makers did not take into account the differential impact of government planning and policies on women and men separately. Although there is growing evidence that whenever there are economic crises, women have to bear an unequal share of this burden [Agrawal (1992); Ali (2000); Beneria (1992, 1995); Cagatay (1995); Chant (1991); Elson (1991, 1992a); Feldman (1992); Floro (1995); McFarren (1992); Moser (1992); Ofreneo and Acosta (2001); Perez-Aleman (1992); Reilly and Gorden (1995); Sahn and Haddad (1991); Safa and Antrobus (1992); Stewart (1992); Trip (1992)]. All of these studies agree that macroeconomic factors such as economic recession, the debt crisis, globalisation, structural adjustment, and stabilisation policies have impinged on the lives of poor, seriously affecting women who earn less, own less, control less, and work hardest. The impact of economic crises and restructuring have created further pressures on and obstacles for women more than men in terms of livelihood resources, living standards and conditions, and access to alternative labour or employment opportunities [Ofreneo and Acosta (2001)].

The market based pro-growth models affect women through the following policy measures on which these models are based on:

(i) Devaluation and Trade Liberalisation

Devaluation and trade liberalisation combined with the removal of subsidies, is intended to alter production incentives and encourage producers to increase the production of tradables by shifting resources from nontradables to tradables whose prices increase after policy reform. The extent to which resources can be shifted depends on the supply response of these resources.

Is the supply response of women as producers, traders, labourers, and farmers positive? Are they able to share the benefits of these measures proportionately? These are some of the fundamental doubts related to women's share in development under today's development policies. Because empirically, where higher economic returns are involved, it tends to be men who take over new opportunities [Coelho and Coffey (1996)]. Development in the agricultural sector, for instance, affects women particularly in the countries where they are heavily involved in this sector [Stewart (1992)]. These women are traditionally and socially concentrated in subsistence food producing activities, which is the non-traded sector of agricultural production. The supply response of women farmers to shift from the non-traded to the traded sector, depends on their mobility within these sectors, access to cash-crop land, credit, market inputs such as fertiliser and seeds, and services such as irrigation and extension.

In practice women are constrained to move from the non-traded to the traded sector because of the segregation of 'women's work' and 'men's work'. Men are considered to work for tradable sector such as cash crops, while women produce nontradables to provide food for households. A greater increase in the price of tradables increases the demand for women's labour and land for their husbands' cash crop, leaving less land and time for their own subsistence crops. In this way many women are required to work more in their own fields as well as in their husbands' fields but are not encouraged to transfer their labour from one activity to another [Elson (1992)]. This presents yet another constraint on women to devote enough time to their own farms to produce some marketable product. Because of the constraints women farmers can not compete with male farmers which results in an increase in men's relative income and power within the household as well [Coelho and Coffey (1996)].

In labour surplus economies the effects of trade liberalisation together with devaluation may increase the labour-intensive exports. This provides more job opportunities for women since they are usually concentrated in the production of labour-intensive exports. For example, in Chile, following the substantial trade liberalisation, firms laid off female workers first when business declined but they hired proportionately more female workers when business recovered [Fan, Melitz, and Severe (1996); Levinsohn (1999)]. Job reallocation rates were also more than twice as high for female workers as for male workers. Evidence from Chile and Colombia also indicates that firms' demand for female blue-collar workers is more elastic than for male blue-collar workers over recent periods of trade liberalisation [Fajnzylber (2000)].

The increasing demand for female labour in tradable manufacturing sectors in some parts of the world, such as Asia and the Caribbean, underlines the increased feminisation of the labour force associated with SAPs which has worsened the distribution of income, pulling women into the labour force to supplement the family income [Cagatay and Ozler (1995); Lim (1993); Standing (1989)]. Trade adjustment policies have provided the opportunity for employers to seek out the cheapest labour to compete in the global market. This process has been made possible by substituting women for men and by converting many forms of work into jobs traditionally performed by men [Howes and Singh (1995); Standing (1989)].

On the other hand, the supply response of large female labour reserves, which were ready to work on low wages, has also played an important role in the feminisation of labour [Lim (1993)]. As a consequence, in the Philippines, for example, women make

up 80 percent of the workforce in the Export Processing Zones (EPZs) [Chant and Mcllwaine (1994)].[23] In Sri Lanka the figure is around 85 percent [Rosa (1989)]. The cost of this process begins with the destruction of alternative remunerative jobs for the women, and for their male earning members in the households [Elson (1992)]. This situation is followed by offering a new kind of 'women work' particularly for single, literate women, to earn higher wages than those offered elsewhere, but with long hours of stressful work [Paul-Majumder and Begum (2000); Agrawal (1996); Elson (1992, 1995); Howes and Singh (1995)].

(ii) Cut in Public Expenditures

(a) *Cuts in Public Sector Employment and Real Wages*

Although the cut in real wages and the employment have affected both men and women, women's employment opportunities in some cases suffer the most while in others women find better off than men. For example, women's real wages fell by 15 percent during the period 1976 to 1984, while men's wages fell by just 11.4 percent [Franckle (1988)].[24] Similarly in Sri Lanka and Taiwan, when employment of both men and women fell during the recession, the employment of women fell proportionately more [Stewart (1992)]. In addition, the rate of unemployment for women is usually higher than that of men. For instance, in 1984 unemployment in Jamaica reached 36.5 percent for women in 1984 as compared to 15.8 percent for men [Boyed (1987)][25] and in Barbados this was 15.1 percent for women and 13 percent for men in 1985 [Massiah (1988)].[26] A sharp increase in unemployment among women was also found in Brazil and Chile [Brown (1995)]. In many countries, for example Malaysia and the Philippines, the early spurt in women's employment declined in the 1980s with thousands of young women losing their jobs [Brown (1995)].

On the other hand, in some countries the female participation rate in the labour force has tended to rise during the recession/stabilisation periods as women have tried to sustain their household incomes. For instance in Equador, the female participation rate increased from 40 percent in 1978 to 52 percent in 1988 and in the Philippines this rate rose from 60 to 64 percent during 1982-84 [Mosers (1992)]. Rising participation rates were also noted in Jamaica, in Costa Rica, in Chile and Uruguay in the late 1970s and early 1980s [Berger (1988)].[27] SAPs also played a very important role in increasing the female labour force in the Newly Industrialised Countries [Lim (1993)]. On average in developing countries, the female labour force has been growing twice as fast as male labour, particularly in export-oriented manufacturing sectors [Cunningham and Reed (1995)]. But where an increase in female labour participation has been shown, it was concentrated in the informal sector [Beneria (1992); Stewart (1992)]. This employment in the informal sector grows as a proportion of total employment and reduces the average earnings of female labour. The expansion of low paid jobs in the informal sector, mostly

[23]As cited by Duckworth (1995), p. 6.
[24]Cited in Stewart (1992), p. 26.
[25]Cited in Stewart (1992), p. 26.
[26]Cited in Stewart (1992), p. 26.
[27]As quoted by Stewart (1992), p. 27.

resulting from Structural Adjustment Policies, can be explained by the various world wide macro-economic trends—including deregulation, privatisation, and the search for lower labour costs—which according to Standing (1989) have led to the wide spread 'informalisation' of many sectors of the adjusted economies. In this way, *Labour market deregulation and privatisation of public sector activities are tending to erode distinctions between the 'formal sector' and the 'informal sector', as many jobs in the 'formal sector' are being made more 'flexible'—which frequently means loss of job security, loss of rights to sick pay, pensions, redundancy compensation, and maternity leave, and increasing intensity of work as job boundaries and the technical division of labour are altered* [Elson (1992), p. 62].

(b) Price Deregulation

(i) *Increase in Food Price*

Price deregulation policy affected women's quality of life by the following ways:

The removal of subsidies plays a very important role in increasing prices of consumer goods. It is evident from most of the countries for which data is available, that food price indices rose significantly faster than the overall consumer price index during the adjustment period [Cornia, *et al*. (1987)]. The rise in food prices combined with a complete freeze or decline in wages, results in a sharp fall in real household income [Elson (1992); Moser (1992); Stewart (1992)].

The net effect of an increase in food price has been found in a fall in the level of nutrition as a result of substituting cheap sources of calories for expensive ones and a reduction of protein intakes for the whole household [Cornia, *et al*. (1987); Elson (1992); Palmer (1992); Stewart (1992) and Moser (1992)]. Within the households, especially the poorest ones, the distribution of food and resources is often unequal [Duckworth (1995)]. Female family members are most likely to be affected by a decline in food consumption because preference is given to male wage earners [Cornia (1987)]. Since mothers are not able to buy enough food of the right type to feed the whole family, priority is given to adult males, especially in South Asian countries [Elson (1992)]. UNICEF studies also reveal a widespread deterioration in the nutritional status of children and pregnant or lactating mothers in both rural and urban areas of the countries with IMF stabilisation and World Bank structural adjustment programmes [Cornia, *et al*. (1987)].

(ii) *Reduction in or Imposition of Charges on Social Services*

The deterioration in publicly-provided social services, especially health and education, is likely to hit women harder than men because household investment in women's and girls' education and nutrition appears to be more sensitive to policy-induced income shocks and price changes than similar investment in men and boys [World Bank (2001)].

Taking the example of cuts in health sector, evidence shows that women and children have been the most vulnerable groups affected by the governments' budget cuts. For example, in Tanzania, the mortality of children under 5 has increased since 1980 from 193 per thousand to 309 in 1987 [Pearson (1992)]. In Sub-Saharan countries, maternal mortality in 1989 was the highest in the world [Michel (1995)]. Maternal

deaths have been increasing at an alarming rate due to deterioration in the health services. Similarly in early 1988, 71 mothers died in the Muhumbili Medical Centre (Tanzania) during the first 13 weeks of January, compared with 65-70 deaths recorded annually in the previous years [Meena (1991)]. In Zimbabwe, maternal mortality rose from 90 per 100,000 live births in 1990 to 168 per 100,000 in 1993, after the World Bank introduced medical 'user fees' [Cunningham and Reed (1995)]. The main reason of this loss of the women's lives, as shown by different studies, is that when households have to spend money for medical care which is difficult to afford, it is more likely to be spent on the men and boys, than on women and girls [Duckworth (1995)]. This is despite the fact that women need greater health care than other family members because of their heavy workload, on which the whole household depends.

Reduction in public expenditure on education and an increase in the educational costs resulting from charging a fee, may have affected girls' education more adversely than boys'. This is because boys generally receive priority when a household is under financial crisis and a choice must be made to send either a girl or boy to school [Duckworth (1995); Mehra (1991)].

This situation is most evident in African rural areas, for example, in Tanzania, where people began to educate only the male children, thus renewing the colonialist tradition of giving the girls fewer educational opportunities [Meena (1991)]. In 1990, just 20 percent of girls of appropriate age were enrolled in primary schools in Niger compared to 38 percent of boys. In Senegal, primary school enrolment among girls was 49 percent as compared to 71 percent of boys [World Bank (1990)].[28] All this shows that poor women have become worse of both for health and education facilities.

(iii) ***Cuts in Public Expenditure and Women's Workload***

Cut in public expenditures through cuts in social services provided by the state have also worsened the quality of life of women by increasing their workload. These services are assumed to be accommodated by households by reshuffling their expenses and by providing some of them at home. But policy-makers ignore the time spent on the strategies adopted by members of the households, particularly by women, to adapt to this increasing cost on their household budgets by earning income, and at the same time, by producing non-market goods and services at home [Floro (1995)]. On that account, it is women's time and the intensification of their work, which allows many households to be able to maintain their consumption level and to cope with changing economic conditions. They have to take the responsibility for the allocation of limited resources, as a result of cutbacks in consumption subsidies and the existing basic services provided by the state, to ensure the survival of their households [Moser (1992)].

Otherwise women have to involve themselves in income-generating activities to supplement their household budgets [Ali (2000b); Moser (1992); Chant (1991); Lim (1993); Standing (1989); Stewart (1992); Zack-Williams (1992)]. But women's participation in the labour market to support their household budgets does not mean any reduction in their domestic role because: '…whenever someone has to assume someone else's role, it is the women who automatically assume men's roles and not vice versa' [Lado (1992), p. 791]. 'Instead, what has happened is the normalisation of

[28]As quoted by Mehra (1991), p. 1444.

the double day; women with family responsibilities are assumed to be able, willing, and even obliged to take paid work' [Glazer (1980), p. 257]. In this way the new burden on women resulted from the shift of costs from the state to the women [Afshar and Dennis (1992); Ali (2000a); Cagatay, Elson, and Grown (1995); Coelho and Coffey (1996); Duckworth (1995); Elson (1992); Floro (1995); Gleiser (1993); Idemudia (1991); Moser (1992); Palmer (1995); Woods (1995)]. But 'women's labour is not elastic...a breaking point may be reached when women's capacity to produce and maintain human resources may collapse' [Elson (1989), p. 57].

The above discussion raises the question of how successful can be any policy if that operates at the cost of longer and harder working days for women by stretching their labour both within the market and the household? Are policy-makers waiting for the time when women's capacity to sustain an ever-increasing burden reaches its limit? Will this process of adjustment continue until the women are no longer able to work, or the household food security and welfare are at risk?

(iii) *Efficient Utilisation of Resources*

The paradigm of development of a free market system where economic efficiency can be improved by competing market forces depends on the following assumptions:

- Perfect mobility of resources.
- Equal job opportunity for labour.

In the context of gender, are these assumptions applicable to female labour as one of the most important resources of economic development? To investigate the answer to this question, the following section analyses the above propositions one by one.

(iv) *Perfect Resource Mobility*

Among the resources needed for the development of any economy, capital is the most mobile resource, domestically as well as internationally. Human resources, on the other hand, face many immigration controls to cross one boundary to another to take part in the global market. Among all human resources, women are in the worst position. In many countries they are not allowed to move within the country from village to town or from one town to another. Social and cultural constraints are the origin of immobility among women [Palmer (1995)]. Even in the case of the highly qualified and well trained, this 'human capital' in many societies is wasted because of traditions. If there are no social and cultural restrictions on women's mobility, their domestic responsibilities in household reproductive activities do not allow them to move outside their homes, especially for a long time. Women who are willing to work and use their abilities on a competitive basis in the labour market are the victims of 'sectoral immobility' and 'occupational immobility'. This kind of immobility is because of the social norms about 'men's work' and 'women's work', which exist in all societies, including the west, although differing in the rigidities and flexibilities of their norms [Coelho (1996)].

(v) *Equal Job Opportunities*

The second premise of the model of a perfectly competitive market is access to the job market without sex-discrimination, which enables labour to compete on equal terms for available jobs. But this model ignores the gender-based segregation in the labour market which exists in all countries of the world and does not appear to decrease, even when women's possession of human capital approaches that of men [England (1992); Jacobs (1989); Momsen (1991); Peterson (1989)]. Therefore, it is the labour market segmentation by sex rather than the differences in human capital or their reproductive roles which put women at a disadvantage in competition for many jobs [Bergman (1989); Cohen and House (1993); Fuchs (1989)]. In this way the differences in earning are rooted in a consistent bias against women.[29]

Occupational segregation can be found in all sectors of economic activity. For example, manufacturing is commonly divided among 'feminised' industries where, women are confined to a limited range of industries such as electronics, textile, garments, food processing, footwear, chemicals, and rubber and plastic products [Cagatay and Beric (1990); Heyzer (1989); Lim (1993); Momsen (1991); Standing (1989)]. Within these industries, women have been given menial 'dead end' jobs that are ill paid and repetitive in nature and have poor career prospects [Heyzer (1989); United Nations (1989)]. Higher-paid and higher-skilled industries are dominated by men, where very few women are employed [Heyzer (1989)]. Thus, women are severely under-represented in the high-level managerial and supervisory positions but over-represented in the lower end of the occupational ladder [Lim (1993)].

In the service sector, gender stereotyping of work continues to confine women's participation to 'female' activities in education, health, and social services, where teaching and nursing are seen as extensions of women's nurturing role into the public domain [Lim (1993); Momsen (1991)] and thus tend to be devalued [Momsen (1991)]. While in the informal sector, women work as petty traders and domestic workers in the services sector which, are the worst paid jobs, normally due to the concentration of female labour in these two activities [Joekes (1987),[30] p. 109; Ali (1999)].

Occupational segregation is also reinforced by the social, cultural, religious patterns of a society, and discriminatory demand for labour on the basis of gender, especially in the developing countries [Mazumdar (1989)]. Thus occupational segregation and women's lack of mobility suggest that the increasing size of female labour force has created an oversupply of female candidates for the limited female dominated occupations which ultimately has pressed their wages down.

The above analysis explains there are distortions in the labour market as women who are confined to unpaid family labour, do not have equal job opportunities because of gender and occupational segregation, and are unable to move freely between employers to produce the best return for the highest pay.

The World Bank and IMF are trying to liberalise all markets in developing countries by removing the distortions, which misallocate resources in both the factor and product market. Removing these distortions, it is assumed, will help to improve the

[29]According to Cohen and House (1993) seventy-three percent of the differences in earnings would disappear in Khartoum, Sudan, if women enjoyed the same occupational distribution as men.

[30]As cited by Lim (1993), p. 182.

economic efficiency of developing economies in the long run. But how is it possible when a market is still facing distortions with half of this factor still being utilised in 'economically inefficient' way? In fact policy-makers know that this is not the case. This factor is utilising all of its energies to help develop the households and its economy, directly or indirectly, without any economic reward, which is estimated to be of the order of £6.8 trillion for women's paid and unpaid work [UNDP (1995)].

POVERTY REDUCTION STRATEGY IN THE GENDER PERSPECTIVE: HAS ANY LESSON BEEN LEARNT FROM PAST EXPERIENCES?

More than a quarter of a century since the UN declaration of International Women's Year in 1975 and more than two decades of adoption of the Structural Adjustment Programmes in the developing world, the World Bank policy research report (2001) finds no explicit change in any region where women and men have equal social, economic, and legal rights [World Bank (2001)].

Critical feminist groups in Africa, Asia and Latin America were among the first to challenge Structural Adjustment policies, and to recognise their neo-colonial nature [Mbilinyi (2001)]. It was in the Nairobi World Women's Conference in 1985 that DAWN (Development Alternatives for Women Network) organised a workshop to challenge the process of SAP. A large number of delegates from all over the underdeveloped world participated in this workshop. At this forum the undemocratic way in which SAP was being imposed on indebted countries was underlined, with emphasis on the non-participation of grassroots poor people, particularly women;

It was also recognised world-wide that by imposing their own manifest, the International Financial Institutions, through SAPs have intensified the plight of the chronically poor and, to some extent, pushed people who were on the margin of subsistence below the poverty line thereby creating the 'new poor'. For example, in Latin American countries the "new poor" have been added to the " structural poor" of the past [Beneria (1995)].

To dispel criticisms of their Structural Adjustment Lending, the IMF and the World Bank have now introduced a new development strategy with the name of Poverty Reduction strategy by redesigning macro policies in the light of the objectives of reducing poverty. Now the question is where women, who constitute 70 percent of the world's 1.3 billion living in poverty [UN Development Report (1995)] and suffer disproportionately from the austere measures of SAP, stand in this agenda of poverty reduction.

Poverty reduction as one of the key development issues was identified by the United Nations and then undertaken at the World Summit (WSSD) on Social Development held in March 1995 in Copenhagen. Like the other UN conferences, the WSSD acknowledged gender as a theme that cuts across development issues such as poverty [Oferneo and Acosta (2001)]. The fourth World Conference on Women held in Beijing also included poverty as one of its "Critical Areas of Concern", asking governments to engage the full and equal participation of women in the review of macroeconomic and social policies towards women's advancement [Oferneo and Acosta (2001)]. United Nations Development Programme in its Poverty Report 2000 has also stressed the weak links of anti-poverty plans to macroeconomic redistribution, debt reduction, gender and environmental policies

and declared that these links have strengthened if human poverty is to be overcome [UNDP (2000)].

To overcome human poverty, apparently Poverty Reduction Strategy has a greater focus on poverty reduction, yet different reviews and reports about various PRSPs and I-PRSPs prepared by different countries so far provide a gloomy picture as far as the issue of gender is concerned. A comparison of 2002 and earlier PRSPs indicates that progress is being made toward engendering content but that there is still a long way to go before PRSPs thoroughly integrate gender issues [Zukerman (2002, 2002a)]. In a Briefing Paper (2002) from German Development Institute it is described that no success has been made so far to integrate a gender-specific perspective into the macroeconomic framework of Poverty Reduction Strategy. For example engendering growth was one of the five basic policy objectives of Pakistan's I-PRSP, it did not acknowledge the gender dimensions of poverty. It was deficient in addressing gender concerns at all levels, especially for macro economic policies as well as for sectoral policies other than education, health and population [Ahmed (2003)]. Most of the PRSPs have a weak track record on identifying and addressing gender inequalities [Zukerman and Garrett (2003)].

A survey of PRSPs and I-PRSPs of 16 different countries[31] by Marshall, Woodroffe and Kjell (2001), shows that gender is obviously mentioned in most of the PRSPs and I-PRSPs but only two countries' i.e. Kenya and Ethiopia have analysed gender related matters in an appropriate way. In general, according to the survey, there are very few proposals to address the poverty consequences of gender inequalities directly, although a few strategies talk of assistance for girl students with school fees, access for mothers to health services or access for women to micro-credit.

A new review by Gender Action of 13[32] Poverty Reduction Strategy Papers (PRSPs) written by Zukerman and Garrett in 2003 finds that 3 PRSPs [Malawi, Rwanda, and Zambia] address gender issues commendably if not completely. Even these three best engendered PRSPs do not thoroughly mainstream gender, but they are more gender sensitive than are the other 10 PRSPs. Eight PRSPs have simply applied an outdated Women in Development approach, defining gender issues as reproductive health, girls' education and a few other issues that vary by country. The remaining two PRSPs almost ignore gender issue. Only two PRSPs [Malawi, Rawanda] promote women's rights. No PRSP engendered measures like trade liberalisation and privatisation. Most PRSPs state women are included in their participatory consultations but none break down the numbers of men and women consulted. Only a few PRSPs data are sex-disaggregated.

According to Mbilinyi (2001), feminist organisations have pointed out that the PRSPs are gender-blind and promote gender inequality and the impoverishment of women more than men. No specific measures have been taken to challenge male dominant systems in production and reproduction. Most of the Poverty reduction measures have not taken into account many of the key priorities of women, such as the urgent need for improvement in maternal health services; support for food production and marketing within the country; and eradication of gender discriminatory practices

[31]See foot notes 1 and 2.

[32]Albania, Ethiopia, Gambia, Guinea, Guyana, Malawi, Niger, Rwanda, Senegal, Tajikistan, Vietnam, Yemen, Zambia.

within the social services and economic infrastructure. Most importantly, women have remained marginalised within the decision-making process of PRSPs at government and civil society level, especially grassroots poor women.

CONCLUSION AND POLICY RECOMMENDATIONS

This paper has provided an overview and assessment about the gender exploitation resulting from certain policy packages imposed by the World Bank and IMF to provide loans for helping the economies in crises.

The analysis given in the paper shows that in many cases the lesson has not been learnt from the past experiences while adopting the new development strategy. The most important message from the critics of the past development paradigm is that the new development strategy must be engendered because research compelling correlates greater gender equality with more equal human rights for men and women, and greater poverty reduction and economic growth [World Bank (2001)]. It is therefore, suggested in the paper that Poverty Reduction Strategy Papers must be engendered by taking the following action urgently if the objective is really to tackle the problem of poverty:

Analyse from a gender perspective, policies and programmes—including those related to macroeconomic stability, structural adjustment, external debt problems, taxation, investments, employment, markets and all relevant sectors of the economy—with respect to their impact on poverty, on inequality and particularly on women; assess their impact on family well-being and conditions and adjust them, as appropriate, to promote more equitable distribution of productive assets, wealth, opportunities, income and services [Beijing Platform for Action (1995), p. 40].[33]

Beyond PRSPs, gender equality must be promoted in implementing PRSP agendas. For that purpose, World Bank Poverty Reduction Support Credits (PRSCs)—a new name for Structural Adjustment Loans SALs in the new PRSP framework; International Monetary Fund Poverty Reduction and Growth Facilities (PRGFs) and Enhanced Structural Adjustment Facility (ESAF), all three lending instruments, must be engendered. All development projects in all sectors including agriculture, health, water, etc., must mainstream gender to promote women's rights and achieve poverty reduction goal.

This goal can be achieved by fully incorporating the interests and concerns of women in the PRSPs by taking the measures that can positively affect all important roles of women i.e. productive, reproductive and community management.

(1) To incorporate women's productive role in the mainstream development projects and programmes, it is very important to identify gender roles first and then make the programmes/policies that must have a positive effect on women's access to:

- land, particularly rural land for food crops for household and market consumption and urban land for housing, particularly the poor female-headed households;
- full personal control and rights for land;
- credit and other services, micro finance institutional support, boosting agricultural incomes, and increasing loans for agriculture.

[33]As mentioned in Afreneo and Acosta (2001).

- education, skills, training and information, that can be had by providing targeted subsidies, including

  (a) grants, stipends, fellowships, vouchers for tuition and other costs, and
  (b) subsidising girls' schools or girls' places in schools;

- opportunities for paid employment or other income-earning activities, particularly when women's existing sources of income are destroyed or reduced;
- credit, particularly where women are not able to arrange any formal collateral by allowing substitutes for traditional collateral requirements, simplifying procedures, reducing travel distances;
- control over loans and full utilisation of credit;
- non-governmental organisations or private sector that are provided by direct or indirect state (or donor) support to promote female access to financial intermediation;
- job retraining programmes that account for gender differences in education, skills, and placement in labour force;
- training programmes other than gender stereotypes (e.g., sewing and food processing for women, electronics and auto mechanics for men;
- develop skills/marketing training packages (especially for agriculture) linked to micro-credit schemes;
- gender sensitive safety nets and support systems;
- labour legislation to protect the rights of workers particularly related to wages and conditions of work both in formal and the informal sectors;
- social security cover for health, maternity disability and retirement benefits to women in the informal sector; and
- income tax rebates to women entrepreneurs, single earners, women-headed households, supplementary income earners and all people with disabilities.

(2) While incorporating reproductive roles, women will be positively affected only if they have easy access to:

- items of household consumption such as fire wood or water' by investing in water, power, and transportation infrastructure, particularly in rural areas;
- basic package of reproductive health services, including family planning inputs;
- daycare for children by providing subsidies for out-of-home care, including vouchers and capitation grants to early childhood development and other childcare facilities;
- maternity benefits for women, including paid postnatal leave, protection against dismissal during the leave, and paid nursing breaks (the paid maternity leave can be financed through general tax revenues or social security administration as in Costa Rica, or the cost of maternity leave can be spread more equitably across female and male workers and firms by using insurance and other mechanisms, as in the United States);

- social assistance to widows and elderly women who are not eligible for pension benefits;
- legal rights, including protection against gender related violence;
- food of adequate nutritional levels; and
- labour-saving technology for household work.

(3) Women's role in regard to community management can be positively affected if they have access to:

- decision-making at community level, by increasing female participation and consultation with women's organisations in the design of government intervention,
- income, particularly where the project relies on their voluntary labour,
- partnership between government and civil society that promote gender awareness in public spending and strengthen women's voice in policy-making;
- local audits of governments programme implementation.

To mainstream gender in all kinds of development projects while taking all the roles of women, as discussed above, into account, it is very important to pay more attention to such participatory mechanisms that would allow for the strong representation and voice of poor, marginal women, and the processes to enhance the accountability of concerned government and non-government organisations.

Aside from involving the grassroots poor women in the decision-making process of PRSPs at the government and civil society level, gender sensitivity training is needed for executives, planners, and programme implementers—to know and employ the theory and methodology of gender-responsive planning and administration.

But it is only with gender-specific data that gender-aware planning, implementation, and evaluation is possible. For that purpose an intensified collection of gender-specific data is required that can have a gender perspective on projects at micro as well as at macro level. Without systematically gender-disaggregated data on income and other welfare measures an empirical and gender-based assessment of poverty trends and incidence are almost impossible.

Therefore, it is very important to *engender* the process and methods of data collection in a phased manner, and selectively to produce key indicators on gender dimensions of poverty, as well as sector-wise monitoring indicators. It is also important to ensure that collection of data by all sectoral ministries is disaggregated by sex, age, and socio-economic groups.

REFERENCES

Adison, T. & Cornia, G. A. (2001). Income distribution policies for faster poverty reduction. WIDER, United Nations University. (Discussion Paper No. 2001/93.)

Afshar, H. & Dennis, C. (1992). Women, recession and adjustment in third world: Some introductory remarks. In H. Afshar & C. Dennis (eds.) *Women and adjustment policies in the third world*. Hong Kong: Macmillan Academic and Professional Ltd.

Agrawal, B. (1992). Gender relations and food security: Coping with seasonality, drought, and famine in South Asia. In L. Beneria & S. Feldman (eds.) *Unequal burden: Economic crises, persistent poverty, and women's work*. Oxford: Westview Press.

Agrawal, N. (1996). The benefits of growth for Indonesian workers. World Bank, Development Research Group, Washington, D. C. (Policy Research Working Paper 1637.)

Ahmad, N. (2003). Mainstreaming gender in the PRSP: Summary of report. Unpublished.

Ali, K. (1999). Structural adjustment policies and household budgets. *The Kashmir Economic Review, 7*(1).

Ali, K. (2000). Structural adjustment policies and household coping strategies. *South Asian Studies, 15*(1&2).

Ali, K. (2000a). Balancing budgets on women's back: A case study of Pakistan urban working women. *Pakistan Economic and Social Review, 38*(1).

Ali, K. (2000b). Structural adjustment policies and women in the labour market: Urban working women in Pakistan. *Third World Planning Review, 22*(1).

Beneria, L. (1992). The Mexican debt crisis: Restructuring the economy and the household. In L. Beneria & S. Feldman (eds.) *Unequal burden: Economic crises, persistent poverty, and women's work.* Westview Press Oxford.

Beneria, L. (1992a). Accounting for women's work: The progress of two decades. *World Development, 20*(11).

Beneria, L. (1995). Toward a greater integration of gender in economics. *World Development, 23*(11).

Beneria, L. & Feldman, S. (eds.) (1992). *Unequal burden: Economic crises, persistent poverty, and women's work.* Westview Press Oxford.

Beneria, L. & Roldan, M. (1987). *The cross-roads of class and gender: Industrial homework, subcontracting and household dynamics in Mexico City.* Chicago: The University of Chicago Press.

Bergman, B. R. (1989). Does the market for women's labour need fixing? *Journal of Economic Perspectives, 3*(1).

Bradshaw, S. (2002). Poverty: An analysis from the gender perspective. Catholic Institute for International Relations. Global Policy Forum-Social and Economic Page.

Brown, E. D. (1995). India: Women and the International Monetary Fund. Open letter to Dr. Monmohan, Singh, Finance Minister. *IMF: WB_Str._Adjustment. 1995* http://www.stile.lut.ac.uk/~gyedb/STILE/Email0002090/mll.html.

Cagatay, N. & Beric, G. (1990). Transition to export-led growth in Turkey: Is there a feminisation of employment? *Review of Radical Political Economics, 122*(1).

Cagatay, N., Elson, D., & Grown, C. (1995). Introduction. *World Development, 23*(11).

Cagaty, N. & Ozler, S. (1995). Feminisation of the labour force: The effects of long term development and structural adjustment. *World Development, 23*(11).

Chant, S. (1991). *Women and survival in Mexican Cities: Perspectives on gender, labour markets and low-income households*. Manchester and New York: Manchester University Press.

Coelho, K. & Coffey, M. (1996). Gender impacts on policy' extracted from reversing the flow-toward gender-oriented information systems in agriculture. *SD DIMENSIONS (Sustainable Development Dimensions)* (FAO, March 1996) http://. Fao.org.WAICENT/faoinfo/sustdev/WPdirect/WPan0007.htm

Cohen, B. & House, W. J. (1993). Women's urban labour market status in developing countries: How well do they fare in Khartoum, Sudan. *The Journal of Development Studies, 29*(3).

Cornia, G. A. (1987). An overview of the alternative approach. In G. Cornia, R. Jolly, & F. Stewart (eds.) *Adjustment with a human face* Vol. 1. Protecting the Vulnerable and Promoting Growth. Oxford: Granden Press.

Cornia, G., Jolly, R., & Stewart, F. (eds.) (1987). *Adjustment with a human face*. Vol.1. Protecting the Vulnerable and Promoting Growth, Granden Press, Oxford.

Cunningham, S. & Reed, B. (1995). Balancing budgets on women's backs: The World Bank and the 104th U.S. Congress. *Dollars and Sense* 202, Nov/Dec Sommerville, MA. Economic Affairs Bureau.

Duckworth, B. (1995). The invisible women: How free market reforms increase the burden of poverty on women. A Report for the UN Conference on Women, Beijing. Christian Aid. http: www.oneworld.org//christian_aid/caid_invisible. html.

Elson, D. (1995). Gender awareness in modelling structural adjustment. *World Development, 25*(11).

Elson, D. (1989). The impact of structural adjustment on women: Concepts and issues. In O. Bade (ed.) *The IMF, The World Bank and The African Debt.* Vol. 2. London: The Social and Political Impact, Zed Book Ltd.

Elson, D. (1991). Male bias in macroeconomics: The case of structural adjustment. In D. Elson (ed.) *Male bias in the development process.* Manchester: Manchester University Press.

Elson, D. (1992). Male bias in structural adjustment. In H. Afshar & C. Dennis (eds.) *Women and adjustment policies in the Third World.* Hong Kong: Macmillan Academic and Professional Ltd.

Elson, D. (1992a). From survival strategies to transformation strategies: Women's needs and structural adjustment. In L. Beneria & S. Feldman (eds.) *Unequal burden: economic crises, persistent poverty, and women's work*. Oxford: Westview Press.

England, P. (1992). *Comparable worth: Theories and evidence.* New York: Aldine de Gruyter.

Fajnzylber, P. (2000). A note on gender and labour demand in Colombia and Chile. Universidaed Federal de Minas Gerais, Belo Horizonte, Brazil.

Fan, W., Melitz, M., & Severe, C. (1996). *Firm heterogeneity across worker gender and skill level: Evidence from trade liberlalisation in Chile*. An Arbor: University of Michigan, Department of Economics.

Feldman, S. (1992). Crisis, poverty, and gender inequality: Current themes and issues. In L. Beneria & S. Feldman (eds.) *Unequal burden: Economic crises, persistent poverty, and women's work*. Oxford: Westview Press.

Floro, M. (1995). Economic restructuring, gender and the allocation of time. *World Development, 23*(11).

Fuchs, V. R. (1989). Women's quest for economic equality. *Journal of Economic Perspectives, 3*(1).

Giesler, G. (1993). Silence speak louder than claims: Gender, household, and agricultural development in South Africa. *World Development, 21*(12).

Glazer, N. (1980). Everyone needs three hands: Doing unpaid and paid work. In S. F. Berk (ed.) *Women and household labour.* London: Sage Publication.

Heyzer, N. (1989). Asian women wage-earners: Their situation and possibilities for donor intervention. *World Development, 17*(7).

Houghton, I. (2000). *Is there a difference between PFP and PRSP*? Kenya: Action Aid.

Howes, C. & Singh, A. (1995). Long-term trends in the world economy: The gender dimension. *World Development, 23*(11).

Idemudia, P. (1993). Rural women's quality of life under structural adjustment policy and programmes: A Nigerian case study. University of Toronto, Canada. (Unpublished Ph.D. Thesis).

Idemudia, E. P. (1991). The impact of structural adjustment programmes on women and their households in Bendel and Ogaun States, Nigeria. In C. Gladwin (ed.) *Structural adjustment and African women farmers.* Gainesville: University of Florida Press.

International Monetary Fund (2001). Progress report on the heavily indebted poor countries initiative and poverty reduction strategy papers programme and work priorities for 2001 Bank-Fund joint implementation committee.

Jacobs, J. A. (1989). *Revolving doors: Sex segregation and women's care*. Stanford: Stanford University Press.

Lado, C. (1992). Female labour participation in agricultural production and the implications for nutrition and health in rural Africa. *Social Science and Medicine, 34*(7).

Levinsohn, J. (1999). Employment responses to international liberalisation in Chile. *Journal of International Economics, 47*(2), 321–44.

Lim, L. (1993). The feminisation of labour in the Asia-Pacific rim countries: From contributing to economic dynamism to bearing the brunt of structural adjustment. In N. Ogawa, G. Jones, & J. Williamson (eds.) *Human resource in development along the Asia-Pacific rim.* Oxford/New York: Oxford University Press.

Marshall, A., Woodroffe, J., & Kjell, P. (2001). Policies to roll-back the state and privatise? Poverty reduction strategy papers investigated. United Nations University. (Discussion Paper No. 2001/120).

Mbilinyi, M. (2001). Discussion: PRSP from a gender perspective. www.aidc.org.za/sapsn/discussion/genderperspective.html.

McFarren, W. (1992). The politics of bolivia's economic crisis: Survival strategies of displaced tin-mining household. In L. Beneria & S. Feldman (eds.) *Unequal burden: Economic crises, persistent poverty, and women's work*. Oxford: Westview Press.

Meena, R. (1991). The impact of structural adjustment programmes on rural women in Tanzania. In C. Gladwin (ed.) *Structural adjustment, and African women farmers.* Gainesville: University of Florida.

Mehra, R. (1991). Can structural adjustment work for women farmers. *American Journal of Agricultural Economics, 73*(5).

Messkoub, M. (1996). The social impact of adjustment on Tanzania in the 1980s: Economic crisis and household survival strategies. *International Journal of African Studies, IJAS* No. 1 April. http://www.brad.ac.uk./research. ijas.tazadj2.htm

Michel, A. (1995). African women, development and the North-South relationship. In M. D. Costa & G. F. D. Costa (eds.) *Paying the price*: *Women and the politics of international economic strategy*. London: Zed Books.

Momsen, J. H. (1991). *Women and development in the Third World.* London: Routledge.

Moser, C. (1989). The impact of recession and adjustment at the micro level: Low income women and their households. In Guayaqquil, Equador (ed.) *The invisible adjustment: Poor women and the economic crisis.* New York: UNICEF.

Moser, C. (1992). Adjustment from below: Low-income women, time and the triple role in Guayaquil, Equador. In H. Afshar & C. Dennis (eds.) *Women and adjustment policies in the Third World*. London: Macmillan Academic and Professional Ltd.

Ofreneo, R. P. & Acosta, M. L. (2001). Integrating gender concerns in anti-poverty reduction strategies. www.aer.pb/projects/poverty/pdf/gender/pdf

Palmer, I. (1992). Gender equity and economic efficiency in adjustment process. In H. Afshar & C. Dennis (eds.) *Women and adjustment policies in the Third World*. Hong Kong: Macmillan Academic and Professional Ltd.

Palmer, I. (1995). Public finance from a gender perspective. *World Development, 23*(11).

Paul-Majumdar, P. & A. Begum (2000). The gender imbalances in export oriented industries: A case of the ready made garment industry if Bangladesh. Background Paper for Engendering Development. World Bank, Washington, D.C.

Pearson, R. (1992). Gender matters in development poverty and development in the 1990s. In T. Allen & A. Thomas (eds.*) Poverty and development in the 1990s.* Oxford University Press in Association with the Open University.

Perez-Aleman, P. (1992). Economic crisis and women in Nicaragua. In L. Beneria & S. Feldman (eds.) *Unequal burden: Economic crises, persistent poverty, and women's work.* Oxford: Westview Press.

Peterson, R. (1989). Firm size, occupational segregation, and the effects of family status on women's wages. *Social Forces, 68*, 397–414.

Reilly, C. & Gordon, A. (1995). *Survival strategies of poor women in urban Africa: The case of Zambia.* Chatham, UK: Natural Resources Institute. (NRI Socio-economic Series 10).

Safa, H. & Antrobus, P. (1992). Women and the economic crisis in the Caribbean. In L. Beneria & S. Feldman (eds.) *Unequal burden: Economic crises, persistent poverty, and women's work.* Oxford: Westview Press.

Sahn, D. E. & Haddad, L. (1991). The gender impacts of structural adjustment programmes in Africa: Discussion. *American Journal of Agricultural Economics, 73*(5).

Shiverenje, H. (2002). *Engendering the interim-poverty reduction strategy paper and MTEF processes: Participatory policy-making approach—The case of collaborative centre for gender and development.* Kenya: Gender Team, Poverty Reduction and Social Development Group.

Standing, G. (1989). Global feminisation through flexible labour. *World Development, 17*(7).

State Bank of Pakistan (1997). *Annual report, 1996-97.*

Stewart, F. (1992). Can adjustment programmes incorporate the interest of the women? In H. Afshar & C. Dennis (eds.) *Women and adjustment policies in the Third World*. Hong Kong: Macmillan Academic and Professional Ltd.

Tripp, A. M. (1992). The impact of crisis and economic reform on women in urban Tanzania. In L. Beneria & S. Feldman (eds.) *Unequal burden: Economic crises, persistent poverty, and women's work*. Oxford: Westview Press.

UNDP (1995). *Human development report 1995.* UNDP/Oxford University Press.

UNDP (2000). *Poverty report 2000*. New York: United Nations Development Programme.

United Nations (1989). *World survey on the role of women in Development.* New York: ST/CSDHA/6 United Nations Office at Vienna Centre for Social Development and Humanitarian Affairs.

Wood, A. (2000). *New development tools or empty acronyms? The reality behind the comprehensive development framework and poverty reduction strategy papers*. Bretton Woods Project.

Woods, Z. (1995). Women: IMF and World Bank and structural adjustment programmes and their effects on women. *Youth sourcebook on sustainable development.Winnipeg:11SD,1995*. On-line. Internet. http://192.197.196.001/ youth/ysbl077.htm.

World Bank (2001). Engendering development: Through gender equality in rights, resources, and voice. A World Bank Policy Research Report. World Bank and Oxford University Press.

World Bank (990). *Adjustment lending policies for sustainable growth: Policy, research and external affairs.*

Young, K. (1992). Household resource management. In L. Ostergaard (ed.) *Gender and development.* London and New York: Routledge.

Zack-Williams, A. B. (1992). Sierra Leone: The deepening crisis and survival strategies. In J. E. Nyang'oro & T. M. Shaw (eds.) *Beyond structural adjustment in Africa: The political economy of sustainable and democratic development.* New York: Praeger Publishers.

Zaidi, S. H. A. (2003). An alternative poverty reduction strategy. *DAWN-Business*, 23 June, 2003, the Internet Edition. http://DAWN.com

Zukerman, E. (2002). *Evaluation of gener mainstreaming in advocacy work on poverty reduction strategy papers (PRSPs).* Oxford: Oxfam Great Britain. www.genderaction.org.

Zukerman, E. (2002a). *Poverty reduction strategy papers and gender*. DTZ. www.genderaction.org

Zukerman, E. & Garrett, A. (2003). Do poverty reduction strategy papers (PRSPs) address gender? A gender audit of 2002 PRSPs. A gender action publication. www.genderaction.org.

Modelling Gender Dimensions of the Impact of Economic Reforms on Time Allocation among Market, Household, and Leisure Activities in Pakistan*

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INTRODUCTION

Women and men are different from each other not only biologically but also in terms of constraints and discriminatory behaviour they face. Women are less fed, less educated, less mobile, less empowered, and overburdened by household work such as cooking, cleaning, taking care of children and the aged, fetching water, looking after farm animals, and gathering wood [Cagatay (1995); Sathar and Kazi (1997); Siddiqui, *et al.* (2001)]. These activities not only restrain them from education and training but also severely constrain their ability to respond to economic incentives as men do and fail to achieve equal level of men. Men as a breadwinner receive both nutritional and educational priority [White and Masset (2002)], while women remain relatively illiterate and malnourished. Consequently, different quality and quantity of female-labour and male-labour emerges which play a very important role in determining the impact of any policy change.

A number of studies[34] conducted in the late 1980s and the 1990s ask the question: Do changes in economic reforms affect men and women equally? These studies argue that ignoring gender dimensions hide the cost in terms of time, resource allocation and maintenance of human resources that results in miscalculation of the effects on women. For instance trade liberalisation policies lead to export led industrialisation and expansion of female employment. The rise in women's employment does not accompany by a reduction in their unpaid household work but squeezes women's leisure time. On the other hand men do very little household work. After market work they spent a large proportion of their time in leisure. The exclusion of non-market sectors hides the cost in terms of women workload, while exclusion of leisure from the model reduces flexibility of the supply of male labour more compared to female labour supply, which is already constrained by less leisure. So it is not possible to make inferences from the studies of particular sectors about the impact of economic reforms on women's earning,

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[34] For detail discussions of gender issues see Cagatay (1995), Elson (1995), Kabeer (2003) and Siddiqui, *et al.* (2003), Siddiqui, *et al.* (2001) etc.

employment opportunities, and well-being relative to men in the absence of linkages and feed backs among different sector i.e., between market and household economy and within the market sectors of economy [Fontana and Wood (2000)]. They should be analysed using gender aware models in the presence of all forward and backward linkages among different actors, factors and sectors, especially between paid and unpaid economies [World Bank (2001)]. Computable General Equilibrium models are considered the best to use for this type of analysis [Fontana and Wood (2000); Kabeer (2003)].[35]

The principle focus of this study is on the development of gendered computable general equilibrium model (GCGE) for Pakistan that captures gender dimensions of time allocation of men and women among market, household and leisure activities. Then model is used to simulate the impact of two types of macroeconomic shocks, trade liberalisation and fiscal adjustment on men and women.

The plan of the study is as follows. Section II briefly reviews existing literature on the subject. Section III gives an overview of employment by gender. Data and methodological issues in development of SAM and Gendered Computable General Equilibrium Model are discussed in Section IV. Section V discusses policy shocks and simulation results. Final section concludes the paper.

REVIEW OF LITERATURE

Earlier research has documented good as well as bad effects of economic reforms particularly on women such as contribution of export growth to the expansion of female employment opportunities [Siddiqui (2003); Kabeer (2003)], increase work load on women, rise in unemployment in the country etc. However, it is difficult to make inferences from these studies about the impact on well-being of women in the absence of linkages and feedback between market economy and household economy and within the market economy. Most recent empirical studies analysing gender dimensions of the impact of economic reforms integrated gender dimensions in CGE models to overcome existing shortcomings.

Fontana and Wood (2000) were the first[36] who called our attention to incorporate women's household work and leisure activities in economic analysis of trade liberalisation in CGE models. They constructed gendered social accounting matrix incorporating time use module in the social accounting matrix (SAM) which shows how much time (in hours) people spend on various tasks: market work and non-market work spent either on household activities or on leisure. Then gendered CGE model is developed using SAM data. The study elaborates technical issues in calculation and incorporation of social reproduction and leisure in SAM and CGE. The study shows that gender related rigidities can be introduced in labour market by keeping low elasticity of substitution between male and female labour especially in households production sector. The simulation results of the studies provide insights of the gendered economic outcomes of trade policies. Following

[35]Although a number of models exit like RMSM and Macro-Econometric Model. But is proffered over others for gender impact analysis because they need one year data. While other macro-econometric model need long series. Scarcity of gender related data is main hindrance in development of these models.

[36]Prior to Fontana and Wood (2000), as far as I know only one study–Evans, 1972–for Australia distinguishes between male and female labour in CGE model.

this study, Fontana (2001 for Bangladesh and 2002 for Zambia) extend the accounting framework to include a greater number of market activities differentiated by factor intensity, labour categories differentiated by both gender and level of education and households types. The main modification made to gender SAM here is that members of each type of household produce a particular kind of social reproduction and leisure reflecting each household education and gender composition. The studies reveal the truth that the effects are not same for all households. They differ by type of households, rich or poor. The difference in impact remains hidden when all households are assumed to be homogenous in Fontana and Wood (2000). The studies also show that the effects are not same of various policies changes, neither for all countries with same policy change.[37] The magnitude of the gender impact of policy change depends on the variation in key parameters, i.e., elasticity of substitution. The greater flexibility in gender roles in the non-market sphere (introduced by larger elasticity of substitution) reduces negative impact of a decline in the garment industry on women. Contrary to the results for Bangladesh, the abolition of tariff on manufactured imports causes smaller employment and wage gains for women than women in Zambia, while promotion of non-traditional agriculture exports benefits more to women in Zambia.

Fontana (2003) explicitly highlights that the differences in resource endowments, labour market characteristics and socio cultural norm shape the way in which trade expansion affects gender inequalities in the countries. The study suggests that trade liberalisation has more favourable effects on women in a labour abundant country like Bangladesh than in a resource abundant country like Zambia. The major conclusion that can be drawn from these studies is that in the absence of non-market activities the impact on women's employment and wages is not the same as in presence of the sectors accounting for household production and leisure. Fofana, *et al.* (2003) also show that impact of trade liberalisation on men and women depend on male participation in household work.

Prior to and after Fontana and Wood (2000) and Fontana (2001, 2002) most of the available SAMs with gender features limit the extensions to disaggregation of labour by gender or grouped households on the basis of male and female head of households, i.e., Evans (1972) Arndt, *et al. (*2003) for Mozambique and Anushree and Sangita (2003) for India. The study by Anushree and Sangita (2003) also distinguishes economy by male intensive formal sectors from female intensive informal sectors of the economy. In this set up, tariff reduction make women worse off as wages decline in informal sector of the economy after the shock.

Impact of economic reforms on women not only depends on education level and household type they belong to but also on closure the studies choose. In most of these studies investment and government consumption have been fixed at the base level in real term. Current account balance is also fixed at the base level. Therefore, outcomes are driven exclusively by the differences in the initial socioeconomic structure of the countries rather than by difference in behavioural parameters. These studies show that despite significant increase in female market

[37]For detail discussion see Fontana and Wood (2000), Fontana (2001, 2002, 2003).

participation, gender division of labour within the households remains fairly unequal. Women's level of education seems to be important determinants of the gender allocation of time. The results of the studies [Fontana (2001, 2002)] show that the differences in impacts are more marked for women and men with low education as wage differential by gender disappear at the high education level in both countries from different continents and from different culture. The studies show that higher substitution elasticity causes a marginally higher rise in total market participation of women with no education and women with secondary education compared to highly educated women.

Earlier CGE models for Pakistan developed for trade policy analysis [Siddiqui, *et al.* (1999); Siddiqui and Kemal (2002), etc.] on the basis of latest available SAM based on aggregate data for the year 1989-90 [Siddiqui and Iqbal (1999)]. The focus of these studies was on income distribution, poverty, inequality, and welfare. But no CGE model for Pakistan with gender features has been developed yet.

EMPLOYMENT

Women roughly half of the population of Pakistan overburdened by household work have low participation in labour market relative to men. In spite of large inflow[38] of females in labour market during the adjustment period,[39] their participation rate remains low compared to men's participation rate. There are many reasons for low rate of female participation, like marriage at early age, strong social and cultural influence on outside home movement of women, low human capital, and non-availability of suitable jobs. Besides, female participation is underestimated significantly, which is evident from LFS [Pakistan (1991)].

In 1991, Federal Bureau of Statistics of Pakistan revised data collection technique, which show that women participation rate in market is about 50 percent instead of 11.8 percent (calculated on the basis of old data). On the basis of revised data collection technique, the women who reported doing nothing were probed by asking further questions about the activities such as harvesting, sowing, picking cotton, drying seeds, maize and rice husking, engaged in livestock and poultry farming activities, construction work, collection of fire wood and cotton sticks, fetching water, making cloths, sewing, knitting, shopping, marketing and preparation of other goods and material for sale etc, If they are doing anyone of these activities they were included in the work force. Participation rate calculated on the basis of this definition is called 'Improved Female Participation Rate'. Comparison of participation rates on the basis of data collected with old technique and new technique shows that female participation rate rises to 52.8 percent from 11.8 percent in 1990-1 and to 37.7 percent from 14.4 percent in 2001-2 (see Table 1).

[38]A larger inflow of female into labour market resulted in higher unemployment rate, which has increased from 10 percent in 1990-91 to 17.3 percent in 2000 for females.

[39]Lim (1996) and Moser (1989) found this for other developing countries too.

Table 1

Labour Market Indicators by Gender (%)

Year	Labour Force Participation Rate (Refined)				Literacy Rate			Ratio of Women Wage to Men Wage*
	Women (OLD)	Women (New)	Men	Both	Women	Men	Both	
1984-5	8.68	–	77.1	44.2	–	–	–	–
1990-1	11.8	52.8	69.9	42.0	25.7	52.9	39.8	65.7
1994-5	11.4	39.8	69.1	41.3	28.6	57.0	43.3	
1999-0	13.7	39.2	70.4	42.8	33.3	59.0	46.5	60.5
2001-2	14.4	37.7	70.3	43.3	36.9	62.2	50.0	–

Source: Pakistan (Various issues) *Labour Force Surveys.*

– Not available.

* Ratio is calculated on the basis wages of labour based on data collected with old technique.

Over the period of market-led economic restructuring, the impact of SAP on women's employment is specified as declining share in manufacturing and increasing share in agriculture and services sector. Men's employment share rises only in services sector. Disaggregation of data by manufacturing industries reveals that the share of female employment during the adjustment period in export oriented industries, textile, rose to 78.5 percent in 1993-4 from 74.9 percent in 1990-1 [Siddiqui, *et al.* (2001)]. A more recent survey of export-oriented industries [textiles, sports, surgical instruments and fisheries] shows that more females are working as temporary/casual workers and they are concentrated in textile and garment industry mainly in stitching activities i.e., 86 percent of the total employed women [Siddiqui *et al*. (2003)]. This shows that female intensive sectors in Pakistan are export based industries.

Not only quantity, quality of labour is very important in determining employment status in the country. Though literacy rate has increased during the last two decades in Pakistan, but gender gap in education is still evident i.e., 37 percent literacy rate among females and 62 percent among males in 2002 (see Table 1). This indicates heterogeneity of labour force by gender and an important reason for women to be in low paid jobs.

Contrary to the rise in female-labour force and employment, their wages fell over the adjustment period and the gap between men and women wages has widened. Ratio of female wage to male wage has fallen from 65.7 percent in 1990-1 to 60.5 percent in 1999-2000 (see Table 1).[40] Besides structural factors like, gender segregation of job market by occupations and skills, under-representation of females in higher paying occupations and grades, which are result of economy wide disparities in education and training, 20 percent of wage differential is due to discrimination in labour market [Siddiqui and Siddiqui (1998)].

The division of labour is the most important single factor, which affects status of women in the country, directly and indirectly. Women perform disproportionately large amount of unpaid household work, cooking, cleaning, taking care of elders, collecting

[40]The ratio is calculated on the basis of wages of female labour reported on the basis of old technique. But ratio goes down further, when data for female labour participation based on revised technique is included. Because these women are employed in informal sector of the economy.

woods, fetching water etc. On average their work time is 13 percent larger than men's work time [UNDP (1995)]. Ignoring household sector not only underestimate women working hours and their contribution to the economy but also constrain them from attaining education and training. Contrary to women, men are major player in market economy; i.e., LFPR of men remains around 70 percent. They are involved in household production but time spent on these chores is very small. Siddiqui, *et al.* (2001) found that on average men spend about one hour in household production. Husbands of women participating in market activities spend relatively more time on domestic chores compared to those of non-working women.

DATA AND METHODOLOGICAL ISSUES IN THE DEVELOPMENT OF GENDERED COMPUTABLE GENERAL EQUILIBRIUM MODEL

The main concern in this study is to incorporate gender into CGE model for Pakistan to overcome existing shortcomings in the analysis gender dimensions of the impact of economic reforms. Like Fontana and Wood (2000), model is made gender aware in three steps: (1) disaggregating variables by gender, (2) incorporating non-market sectors, in addition to market work: household production and leisure, (3) relating values of the key parameters to the degree of gender inequalities in the country.

(a) Extension of SAM

Aggregate SAM with market economy is taken from Siddiqui and Iqbal (1999). Using Fontana and Wood (2000) methodology, it is made gender aware by distinguishing male and female labour in labour market and their wage income in household income. Two non-market sectors, household reproduction and leisure are added which are important for time use analysis. Labour use is measured in hours instead of persons, assuming all persons are involved in all activities.

Construction of the gendered SAM is not straightforward. Since 1990-1, labour force survey reports female labour force participation in two sections. The data collected on the basis of old technique shows that 3.4 million women are employed. This number increases to 15.5 million if we include data collected under revised data collection technique which reports women participation in activities such as harvesting, sowing, picking cotton, drying seeds, maize and rice husking, engaged in live stock and poultry farming activities, construction work, making cloths, sewing and knitting, shopping and marketing and preparation of goods at home which are available in the market.

Following SNA agreement, all activities are defined as productive which produce goods and services for sale, but also those, which produce goods and services for own consumption within household. But services used within a households for own consumption are defines as non-productive and but economic. Female labour engaged in harvesting, sowing, picking cotton, drying seeds, maize and rice husking, engaged in livestock and poultry farming activities is added to agriculture labour and treated as unpaid labour. Women work such as preparing meal for the members of household, cleaning, washing clothes, look after children and elder people, collecting wood, fetching water, washing and pressing clothes, caring of children or health care of ill persons, helping children to do homework or other educating activities, cleaning or arranging the

house or preparation of other goods are treated as household activities if they are working for their own family. If they are involved in these activities for other households and receiving cash or in kind, they are included in market activities and included in services sector of market economy. Construction is included in services sector. In agriculture and construction all female labour based on revised estimates is unpaid. But in other sectors if females are working for other households and receiving in cash or in kind, the value of this work is calculated on the basis of average wage of that sector for females and added to existing estimates of values added of that particular sector. To some extent these estimates shows estimates for black economy or informal economy, which does not appear in the national statistics of GDP (which is calculated on the basis of old female participation rate).

On the basis of new data and old data, female time of a day is allocated to market and non-market activities. But labour force surveys do not report working hours of men spent on non-market activities. Another survey conducted for Gender Planning Network [Siddiqui, *et al.* (2001)] reports work hours of men spent on non-market activities. Therefore, time use data is taken from Labour Force survey and Gender Planning Net Work Survey.[41] Former reports only women's working hours in household activities, while latter reports data for both.

Leisure is non-economic and non-productive, because it cannot be rendered for some one else [see Fontana and Wood (2000) for detail discussion on the topic]. Like Fontana and Wood (2000), minimum time used for personal care (sleeping, eating, personal hygiene etc.) is ten hours a day. This time is not included in SAM. After subtracting 10 hours from total of 24 hours we have 14 hours, which are used for market, household and leisure activities. It is assumed that time used in one activity cannot be used in other.[42] Subtracting time for market and household work from 14 hours a day, leisure is calculated, the time that can be used for sleeping and other leisure activities such as playing games or attending a party or watching movies, etc.

The value of these activities is calculated assuming that the cost of production is purely labour cost. Under this assumption this approach may be referred as─wage (per hour) *x* time (hours). Average wage rate for male and female in the market presents opportunity cost of their time used in non-market activities. Therefore work in non-market sectors is evaluated using average wage rate of men and women in market sectors and time used in these activities.[43] Incorporating above-mentioned information, a gendered social accounting matrix (GSAM) for Pakistan is constructed.

[41]This survey is conducted in three cities of Pakistan, Sialkot, Faisalabad and Karachi.

[42]This is strong assumption as women usually do 2 or 3 chores at a time such as women carrying children while washing cloths and cooking food. This may under estimate women's work. For example, activities such as cooking, housekeeping and looking after children are commonly under taken simultaneously. Pyatt (1990) points out it as informal character of non-market activity. He thinks that instead of disentangling these activities, they can be treated as joint product of time used in these activities.

[43]For detail see Fontana and Wood (2000, 2001, 2002) and Pyatt (1990, 1996). The problem of valuing outputs shifted to the problem of valuing inputs. Pyatt points out that the individuals for whom the opportunity cost of self-sufficiency exceeds price '*P*' will buy the good from market, but will not buy the surrogate if average opportunity cost is less than *P* (market price). They will depend on their own efforts. Two other methods are also widely discussed in literature: (1) Use of market price of goods produced at home, (2). Wage of specialised persons in these activities in the market for example for cooking food—chef's wage. Pyatt (1990) discusses pros and cons of various methods to measure household's production.

Table 2 shows that 51.9 percent of available men hours are allocated to market work, 10.7 percent to household work and 37.4 percent to leisure activities. On the other hand, women spend 37.7 percent, 42 percent and 20.3 percent time on these activities, respectively. Table shows long working-hours for a woman than a man. Women spend 79.7 percent of their available time in households and market work, while men spend 62.6 percent of their time in these activities.

Table 2

Time Allocation per Day by Gender among Market, Household, and Leisure Activities (%)

	Men	Women
Market	51.9	37.7
Household Work	10.7	42.0
Total Working Hours	62.6	79.7
Leisure	37.4	20.3
Total	100.0	100.0

Source: Gendered Social Accounting Matrix.

Table 3 presents structure of production in gendered SAM for the year 1989-90 with five market sectors, agriculture, textile, other manufacturing, services-1 and services-2. First four sectors are tradable sectors and services-2 is non-tradable sector. Two non-market sectors are 'Household Reproduction' and 'Leisure'. Tradable sectors produce goods for domestic and foreign market. Manufacturing sector is divided into two sectors; export oriented 'Textile' and import competing 'Other manufacturing'. Table 3 reveals that 61 percent of exports are from textile sector and 84 percent of total imports are 'other manufacturing sector'. Tariff is very low on agriculture and very high on manufacturing sector, while other traded sector 'service-1' is unprotected tradable sector with no tariff on its imports.

Table 3

Structure of Economy in Gendered Social Accounting Matrix for 1989-90 (%)

	Labour Hours		Wage Share			Import	Export
Sectors	Men	Women	Men	Women	GDP	Shares	Share
Agriculture	45.9	65.7	21.2	18.2	28.3	6.3	3.0
Other Manufacturing	6.3	1.0	15.56	4.6	13.9	1.7	60.9
Textile	5.7	21.9	6.2	29.8	6.0	83.6	18.7
Other Traded (Service-1)	25.7	5.9	17.0	12.0	28.2	8.3	17.4
Non-traded (Service-2)	16.4	5.4	40.1	35.3	23.6	–	–
All Market Sectors	**100**	**100**	**100**	**100**	**100.0**	**100**	**100**
Household Reproduction	22.2	67.4	22.2	67.4	8.7		
Leisure	77. 8	32.6	77.8	32.6	20.5		
Total Non-market Work	**100**	**100**	**100**	**100**	29.2		

Source: See text for detail for development of Gender Social Accounting Matrix. Women participation is based on new data.

Agriculture sector is the largest employer of women and men. They employ 65.7 percent and 45.9 percent of women and men, respectively. Table shows that within the manufacturing sector 21.9 percent of women labour time is used in export oriented sector, 'textile' and 1.0 percent in import competing sector 'Other Manufacturing'. Import competing sector is male-labour intensive employing 6.3 percent of their labour time. Excluding time for market work and ten hours per day as minimum time required for personal care for each, rest of time is used for household work and leisure activities. Data reveals that men spent 77.8 percent of this available time in leisure activities and 22.2 percent in household work compared to 67.4 percent and 32.6 percent of women's available time in these activities, respectively (see Table 3). Table also shows that men are receiving higher wages in import competing sectors relative to export oriented sectors. Therefore, they are concentrated in 'other manufacturing sector'. While women are concentrated in export oriented sectors and receiving lower wages compared to wages in import competing sector.

The structure of production reveals that the share of agriculture in GDP is 28.3 percent in 1989-90. Textile and other manufacturing sectors contribute to GDP 6 percent and 14 percent, respectively. Services sector contributes about 50 percent to GDP. If we include household production and leisure in GDP, then GDP increases by 29.2 percent.

(b) Computable General Equilibrium Model

Using methodology given in Fontana and Wood (2000) computable general equilibrium model for Pakistan is extended by incorporating gender features. Model contains six blocks of equations: foreign trade, income and saving, production, demand, prices, and market equilibrium. In addition to market sectors, it incorporates non-market activities such as household reproduction and leisure. Male and female in both, market and non-market activities distinguish labour. Therefore, primary factors of productions are male labour, female labour and capital. It is assumed that men and women are imperfect substitute. Female labour and male labour are aggregated into composite labour through CES (constant elasticity of substitution) function. The ratio of male and female labour depends on share parameter and varies with their wage rates, and can be substituted one for the other on the basis of elasticity of substitution. Like Fontana and Wood (2000), gender related rigidities are introduced through elasticity of substitution.

It is assumed that household consume three types of goods, market goods (C_i), home produce goods (C_H), and leisure (C_{LE}) and face two constraints, income and time. Household maximise utility subject to income and time constraints.

$$U = f(C_i, C_z) \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (1)$$

Where '*i*' stands for market goods and services, agriculture, textile, manufacturing, services-1 and services-2, and *z* stands for non-market services, Households social reproduction (*H*) and leisure (*LE*).

Household receive income from paid work of men and women, rent from capital, and receipts from other sources, government, firms and rest of the world. Total household income (Y_m) from market sector is defined as:

$$Y_H = f(Y_{Lm}, Y_{Lw}, Y_K, Y_O) \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (2)$$

Where Y_{Lm} and Y_{Lw} are labour income of men and women, respectively, from market activities. *Yk* is capital income. *Yo* is sum of transfers from government, firms and rest of the world (exogenous).

Total available time of 14 hours a day of an individual is allocated to market, household and leisure activities. Time used in different activities; market, home, and leisure is separable. Time constraint for individuals is as follows:

$$TL_s = TLSM_s + LH_s + LE_s \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (3)$$

Where s = men (m), women (w)

TL = Total available labour time in hours

$TLSM$ = Time used in the market

LH = Time used in household reproduction activities

LE = Leisure time.

Xz is production in non-market sphere of the economy, which does not use capital or intermediate inputs. *Xz* is produced with CES technology with men and women time input.

Let

$$XZ = CES(LZ_S) \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (4)$$

Where $Z = H$ and LE,

Assuming that reproduction and leisure sectors in the model behaves like market sectors. Labour productivity is same in the market and household activities. Greater rigidity in gender division of labour in household production than in market sectors is evident for earlier research [Fontana and Wood (2000)]. It is introduced by setting low substitution elasticity between male and female labour in reproduction than in market sectors (–0.3) in household reproduction and (–0.2) for leisure. Demand for labour in this production can be derived as in market production. Household consume all goods produced at home. So

$$XZ = CZ \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (5)$$

Where *XZ* and *CZ* are production and consumption of goods produced in non-market sector of the economy.

The price of these goods (*Pz*) is determined through the opportunity cost of labour used in its production. Thus total income of a household (Y_T) is defined as sum of receipts from market economy (*Ym*) and non-market economy (Y_Z) as follows:

$$Y_T = Y_m + Y_Z \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (6)$$

Where $Y_Z = \sum_{Z=H,LE} P_Z * C_Z$

Maximising Stone-Geary utility function

$$U_H = (C_H - \overline{C_H})^{\beta^H} (C_H - \overline{C_H})^{\beta^{LE}} \pi (C_i - \overline{C_i})^{\beta^i} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (7)$$

s.t constrains of total income Y_T in Equation 7 and time constraint of 14 hours in Equation 3. Demand for goods produced in market and non-market sectors are derived.

Equilibrium condition for labour: Total labour demand in the market production is equal to the total supply of labour from households to the market.

$$TLSM_S = \sum LM_{S,i} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (8)$$

Where $LM_{S,i}$ is demand for men and women labour in the market sectors and $TSLM_S$ is total labour supply to market sectors

Female wage and male wage are determined through demand and supply of their labour, respectively. Average wage in the market is determined in the following way.

$$W = \frac{[W_w * \sum LM_{w,i} + W_m * \sum LM_{m,i}]}{[LM_w + LM_m]} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (9)$$

Other characteristics of the model are as follows:

(a) Capital is immobile.
(b) Both type of labour, men and women, is mobile.
(c) Home produced goods are imperfect substitutes of market goods.
(d) Goods with same sectoral classification are different in qualities for domestic and foreign markets and have different prices.
(e) Imports and domestically produced goods are imperfect substitutes with separate prices.
(f) All households are aggregated into one group with disaggregated men and women labour income.

Model is solved using GAMS software. It is calibrated to the parameters calculated from gendered SAM constructed for this study and extraneous estimates of elasticities and run to produce base scenario.

Using this model, impact of trade liberalisation and stabilisation policies is simulated to analyses the gender impact of the macroeconomic shocks. Distinct closures are introduced for trade and fiscal reforms. For example, in simulations with trade liberalisation, first tariff on imports are reduced in presence of endogenously determined government revenue, which result in reduction in government revenue. In the next exercise, tax rate adjust to eliminate the impact of reduction in tariff rate on government revenue. For welfare analysis, government consumption and investment are fixed in real term. Thus change in household welfare indicates change in welfare of the country. If households are better off after the shock then the country as a whole is better off or vice versa.[44]

[44]In simulation 1, 2 and 4 welfare of households is measured by Equivalent variation. In these exercises government consumption and total investment are constant in real terms. A positive value indicates households as well as country as whole is better off after policy shock and negative value indicate that households as well as country is worse off. In the experiment with cut in government consumption (simulation 3), government consumption and investment are not constant. We have to take into account all changes to measure welfare of the country. A very rough measure of overall welfare is percentage change in the sum of private consumption, public consumption and total investment.

In the analysis of fiscal reforms, fiscal deficit is reduced by reducing government expenditure or increasing government revenue. In the model government budget constraint ($Sg = Yg–Cg$) is explicitly modelled and deficit is financed by domestic savings from household and firms and foreign savings (CAB) and rest of the saving is used for investment purposes. In the model an identity of saving and investment exists ($TI = Sh + SF + Sg + e*CAB$), where CAB (foreign savings) and nominal exchange rates are exogenous. Reduction in fiscal deficit releases resources for investment. In simulation with cut in government consumption expenditure, government consumption in real term also adjusts. In this exercise, welfare of the country is roughly measured by summing changes in government expenditure, household consumption expenditure and total investment goods. In simulation with increase in government revenue, tax rate and fiscal deficit adjust keeping government expenditure constant.

For poverty, first poverty line based on basic needs is estimated. It is estimated using micro households data from Households Integrated Economic Survey (HIES) for the year 1990-91. First food poverty line is determined by estimating a log linear function as follows.[45]

$$C = \alpha + \beta Log_e E$$

Where C is adult equivalent calorie intake per day and E is monthly food expenditure per adult equivalent. Basic food requirement is based on 2550 calories per adult equivalent per day. Non-food requirement is defined by taking average expenditure of other items of household 2-percentage point above and below food poverty line. The monetary value of poverty line is obtained by multiplying the quantity with their respective prices as follows

$$BNP = \sum C_{i0} * P_{c0}^{i}$$

Where BNP is monetary value of basic needs, C is the amount to satisfy basic need of good i and P^i_c is consumer price index of ith good in the base period '0'. Using basic need poverty line, *FGT* indices—$P\alpha$ class of additively decomposable poverty measures are calculated [Foster, *et al.* (1984)]. Indices brake down population into subgroups: population below poverty line and above poverty, estimate the gap between actual income and poverty line and severity of poverty. These indices are calculated using following equation

$$P\alpha = 1/n \sum\{(Z–Y)/Z\}.^{\alpha}$$

Where n is total number of households, Z is basic need poverty line based on basket of commodities required to satisfy basic needs, y is household income. $\alpha = 0$ for head count ratio, $\alpha = 1$ for poverty gap measure and $\alpha = 2$ measures severity of poverty. Prices are endogenously determined in the model. With change in prices and given quantity of basic needs, monetary value of poverty line is determined before and after the shock [for detail see Decaluwe, *et al.* (1999)][46] as follows:

$$\Delta BNP = \sum C_{i0} * Pc_{i1} - \sum C_{i0} * Pc_{i0}$$

Note: 0 indicates the base year and 1 indicates after the shock.

Poverty indicators are estimated using micro data in DAD programme [Duclos, *et al*. (2001)].

[45]For details, see Ercelawn (1990) and Ravallion (1994).

[46]However, poverty analysis approach differs from Decaluwe, *et al.* (1999) in some aspects, it uses actual distribution of micro data from HIES instead of assuming beta-distribution [Siddiqui and Kemal (2002)].

Changes in prices shift poverty line and the change in income of households' shifts distribution function (households by income bracket). These two changes determine the change in poverty as well as distribution of households by income groups. To see movement of households from one income bracket to another, the vector of simulated income is obtained by multiplying the base year income vector (taken from HIES-90-91) by the change in mean income of the group of household obtained after the policy shock. Using vectors of base year and post simulation income, density functions (percentage of households in various income brackets) are drawn before and after the shocks. The variations in density function with respect to base period show change in percentage of households within an income bracket and the gap between the rich and the poor before and after the shock.

SIMULATION RESULTS

(a) Trade Liberalisation

Since independence, manufacturing sector has been the most protected sector and agriculture the least protected sector. In early eighties, Pakistan has adopted trade liberalisation policies by reducing restrictions such as quotas and value limit and replace with tariff. Later policies directed more towards tariff rationalisation.

Here, trade liberalisation is introduced through tariff rationalisation. Magnitude of the imposed shocks is decided on the bases of historical evidence. Since 1990, tariff rates have been reduced on imports of agriculture, textile and other manufactured goods by 63 percent, 83 percent and 44 percent, respectively. This exercise reveals exclusively the impact of trade liberalisation through tariff reduction. The focus of the results is how economic reforms affect production activities leading to change in time allocation of men and women among market, household and leisure activities, which in turn affects wages, welfare, unemployment and poverty. It also discusses women wages relative to male wage and share of women wage income in total household's income as a symbol of empowerment.

(a1) *Tariff Reduction on Imports without Compensatory Measures*

A direct, first effect of reduction in tariff on imports is a drop in domestic prices of imports and a rise in volume of imports. This leads to many other indirect effects. For instance, consumers switch demand to imported goods from domestically produced goods of import competing sectors, as imported goods are relatively cheaper now.

Import competing sectors become relatively less profitable compared to export oriented sectors. These change boost production in textile and agriculture sectors (export oriented sector, 'Textile' is based on agriculture raw material), while import competing sector and non-traded sector (a larger proportion of non-traded sectors goes as intermediates to 'other manufacturing' sector) contract.

The change in structure of production leads to change in time allocation to market work and non-market work. Labour from import competing sectors and non-trading sectors move toward agriculture and textile. However, labour demand rises for both men and women in expanding sectors but not as much as drop in contracting sectors. Resultantly, aggregate demand for female in market sectors drops by very small amount,

0.5 percent but aggregate demand for male labour in market sectors fall by 2.2 percent (see Table 4).

Table 5 shows that market work declines for both, women and men, from 37.7 percent to 37.5 percent and from 51.9 percent to 50.8 percent, respectively. Household work does not change significantly. However, total working hours for both women and men decline from 79.7 and 62.6 percent to 79.5 and 61.6 percent, respectively. Resultantly, leisure of men and women rises. But the rise of men leisure time is larger than women leisure time, 2.8 percent for men compared to 1.0 percent for women (see Table 4).

Table 4

Simulation Results: Variation over Base Values

	Trade Liberalisation		Reduce Fiscal Deficit to 4 Percent of GDP by	
Sectors	Without Compensatory Measure	With Compensatory Measure	Reducing Government Expenditure	Increasing Government Revenue
Output				
Agriculture	8.01	–2.4	–0.75	0.44
Other Manufacturing	–3.96	–1.7	0.24	–0.43
Textile	5.43	5.78	0.34	–0.76
Other Traded Sector	0.1	–0.12	–0.12	–0.02
Non-traded Sector	–13.25	2.99	–0.77	–1.01
Time Allocation				
Women				
Agriculture	38.04	–12.29	–3.9	1.99
Other Manufacturing	–15.07	–7.31	0.3	–1.5
Textile	11.04	12.54	0.5	–1.86
Other Traded Sector	–2.03	–2.46	–1.1	–0.2
Non-traded Sector	–27.64	4.3	–2.0	–2.12
Total	–0.46	2.39	–1.4	–1.03
Household Production	–0.09	–1.49	0.7	0.54
Leisure	1.05	–1.34	1.2	0.80
Wages	0.06	1.35	1.42	–0.79
Men				
Agriculture	42.07	–10.55	–3.4	2.07
Other Manufacturing	–12.6	–5.48	0.8	–1.42
Textile	14.27	14.77	1.0	–1.79
Other Traded Sector	0.82	–0.53	–0.7	–0.12
Non-traded Sector	–25.53	6.36	–1.5	–2.04
Total	–2.24	0.28	–1.2	–0.73
Household Production	1.06	–0.72	0.9	0.57
Leisure	2.80	–0.18	1.5	0.85
Wages	–5.5	–2.5	0.4	–0.95
Welfare of Households	0.27	1.0	1.83	–0.52
Welfare of a Country	0.27	1.0	–0.53	–0.52

Table 5

Time Allocation among Market, Household, and Leisure Activities by Gender

		Trade Liberalisation		Reduce Fiscal Deficit to 4 Percent of GDP by	
	Base	Without Compensatory Measure	With Compensatory Measure	Reducing Government Expenditure	Increasing Government Revenue
Women					
Market	37.7	37.5	38.6	37.2	37.3
Households Work	42.0	42.0	41.4	42.3	42.2
Total Working Hours	79.7	79.5	80.0	79.5	79.6
Leisure	20.3	20.5	20.0	20.5	20.4
Total	100.0	100.0	100.0	100.0	100.0
Men					
Market	51.9	50.8	52.1	51.3	51.5
Household Work	10.7	10.8	10.6	10.8	10.8
Total Working Hours	62.6	61.6	62.7	62.1	62.3
Leisure	37.4	38.4	37.3	37.9	37.7
Total	100.0	100.0	100.0	100.0	100.0

Results show that male wage rate decline by 5.5 percent but female wage rate rises by a very small amount 0.1 percent that reduces gender wage gap after the policy shock. Equivalent Variation (EV) shows a little improvement in terms of welfare of household and of the country as a whole, i.e., 0.3 percent over the base run.

(a2) ***Tariff Reduction on Imports in Presence of Compensatory Measure (Adjustment in Taxes on Production)***

Since 1990, Pakistan has been introducing general sales tax (GST) on both imports and domestic production along with tariff reduction, which has been standardised at 15 percent. But on a few products it is as high as 20 percent. However, a large number of commodities and services are still exempted from sales tax reducing average tax on imports to 5.6 percent and on domestic production to 5 percent.

Trade liberalisation through tariff reduction results in loss in government revenue and constrains government expenditure or increase fiscal deficit. In the model private saving, firm's saving and foreign saving finance it. In this experiment, government revenue is fixed and tax rate on production adjusts to compensate for loss in government revenue. A direct, first effect of reduction in tariff on all imports is increase in taxes to compensate for loss in government revenue. The combined effect of tariff reduction and increase in sales tax reduce domestic prices but not as much as in the previous exercise. Change in relative prices boost production in textile and non-trading sectors 'service-2' by 5.8 percent and 3 percent, respectively (see Table 4). Output in 'other manufacturing' sector drops by 1.7 percent compared to 4 percent in previous exercise. The production in non-traded sector increases in this experiment for two reasons. One import competing sector does not contract as much as in previous exercise. Therefore, its demand as intermediate input does not decline as much as in previous exercise. Second, increase tax makes this sector more

profitable relative to other sectors. It boosts demand for labour in these sectors. Demand for female labour rises by 12.5 percent and 4.3 percent in textile and services-2 sectors, respectively. Demand for male labour rises by 14.8 percent and 6.4 percent in these sectors, respectively.

Trade liberalisation in presence of compensatory measure leads to a rise in aggregate demand for labour in the market sectors for women by 2.4 percent and for men by 0.3 percent. The increase in demand is fulfilled by increase supply of labour for both men and women from non-market sector; household social reproduction and leisure (see Table 4). Table shows that female labour in household production drops by 1.5 percent and in leisure 1.3 percent. On the other hand rise in demand for male labour in marketed sectors is fulfilled by increase supply of male labour from household production where demand for their labour reduced by 0.7 percent and their leisure time by 0.2 percent.

The results show that trade liberalisation in presence of increase in sales taxes leads to a rise in total working-hour increases for both men and women to 80 percent and 62.7 percent from 79.7 and 62.6 percent, respectively. The results suggest that impact trade liberalisation in presence of compensatory measure is not gender neutral. It over burden women as it reduces women's leisure time from 20.3 to 20 percent of total available time. On the other hand, men's leisure time reduces from 37.4 percent in a day to 37.3 percent.

Wage rate for women rises by 1.4 percent and for men drops by 2.5 percent. In result gender wage gap reduces after the policy shock. Equivalent Variation (EV) increases (by 1 percent), which shows households as well as country are better off after simulation in terms of income and consumption.

(b) Change in Fiscal Policies

Under the rubric of SAP, Pakistan is recommended to bring fiscal deficit to the level of 4 percent of GDP. Government tries to achieve the objective through additional resource mobilisation and expenditure restraint through austerity measure. In this set of experiments, chosen policy variables are total government expenditure and government revenue, which are used alternatively to reduce fiscal deficit using different closure rules.

(b1) ***Cut in Government Consumption to Bring Fiscal Deficit to 4 Percent of GDP***

In this exercise, government final consumption expenditure is reduced by 8 percent to bring fiscal deficit to 4 percent of GDP from 5.4 percent of GDP in the base year. It leads to reduction in government expenditure on service-1 and in service-2 by 8 percent. Price deflator for public consumption is kept fixed. Real government consumption adjusts. First impact is that fiscal deficit reduces. Reduction in fiscal deficit releases resources for investment and/or for private consumption, as household saving rate is determined endogenously. Thus there is a shift of resources from government consumption to investment and private consumption.

The relative change in prices shifts mobile factors of production, female and male labour, from services and agriculture sector to manufacturing. But aggregate demand for both male and female labour drops by 1.2 percent and 1.4 percent respectively in the market sectors (see Table 4). Household substitute household produced goods for market

goods. This leads to a rise in demand for female labour in household production by 0.7 percent and for male labour by 0.9 percent. Table 5 shows that after the shift from market to household economy, total working hours of women and men have reduced from 79.7 percent to 79.4 percent and from 62.6 percent to 62.1 percent, respectively.

The results also show that wage rate for men and women rises by 0.4 percent and 1.4 percent, respectively. Resultantly, the gap between male and female wage reduces after the shock. Households are better off as equivalent variation (EV) rises by 1.8 percent but at the expense of government consumption, which reduces by 8 percent. Aggregate change of (–0.5) percent in household consumption, investment and government consumption shows that country is worse off after the shock.

(b2) *Increase Government Revenue to Bring Fiscal Deficit to 4 Percent of GDP*

In this experiment, government revenue is increased by 7.5 percent to bring fiscal deficit to 4 percent of GDP and let tax rate to adjust. Resultantly, tax rate increases by 0.6 percent that lead to rise in domestic prices of domestically produced goods and imported goods that increase cost of living. These changes in policies have a big impact on household budgets.

Resources move towards agriculture sector where prices rise by higher percentage (where tax was very low in base period) than in manufacturing and services sectors. Demand for labour rises for both, women and men, in the expanding sector 'agriculture' and falls in all other sectors. Aggregate demand for labour drops by 1 percent and 0.7 percent for women and men in market sectors, respectively (see Table 4). In result, household income drops and household demand for household produced good rises as household substitute it for market goods. Demand for female labour rises for household production by 0.5 percent and demand for male labour by 0.6 percent. In this experiment, working hours for both men and women declines (see Table 5). Leisure of men rises more than women, 0.85 percent compared to 0.80 percent.

The results show that nominal wage rate for women fell by 0.8 percent and for men by 1.0 percent. In result gender wage gap reduces after the policy shock. Households as well as country's welfare reduce by 0.5 percent.

(c) Unemployment, Poverty, and Inequality

The objective of structural adjustment programme and stabilisation programme has been to improve efficiency, achieve higher level of output and reduce imbalances in the economies. The impact of these programme have significant implications for employment, poverty and income distribution. From the above discussion of the simulation results, it becomes clear that trade liberalisation in presence of compensatory measures change composition of employment and overburden women by increasing market work. Results also reveal that gender division of labour remains unequal in all exercises. But its implications for unemployment and poverty are not clear yet.

Although model is developed by allocating time to three types of activities, market, households and leisure. But impact on unemployment can be calculated indirectly outside the model assuming that any change in employment in market sector would add to or subtract from unemployed persons. Using average working hours (market) per day of an employed person in the market in the base year and change in total

working hours in the market after the shock, the change in number of employed persons is calculated. Table 6 shows that unemployment rate among women and men increases in all exercises except in exercise-2 'Trade Liberalisation in Presence of Compensatory Measures'. In this experiment, unemployment rate for women becomes negative after the shock implying that trade liberalisation in presence of compensatory measures generate a large number of employment opportunities for women. Unemployment among men also reduces to 2.3 percent from 2.6 percent in the base year (see Table 6).

F-G-T indices of poverty are estimated using micro household data[12]. Using percentage change in household income after each policy shock and vector of income in the base year from HIES, a new vector of income is determined. Using these vectors of income density functions are drawn (see Figure 1). The results show that after each simulation poverty line as well as density function shifts showing the change in percentage of households in each income group. Change in poverty line shifts poverty line and change in income shifts density function. Variations in density are drawn on the basis of shift in density function after the policy shocks. Figure 2 shows a movement of households from the higher income bracket (500 and 1000).

Table 6

Effects of Economic Reforms on Unemployment and Poverty

		Trade Liberalisation		Reduce Fiscal Deficit to 4 percent of GDP by	
Unemployment	Base	Without Compensatory Measure	With Compensatory Measure	Reducing Government Expenditure	Increasing Government Revenue
Women	9.7	12.1	–1.8	16.4	14.6
Men	2.6	4.6	2.3	3.7	3.3
Total Unemployment	3.6	5.8	2.1	5.4	4.8
Poverty					
Poverty Line	280.4	276.7	269.6	279.4	282.1
Head Count	30.0	30.1	29.6	30.6	31.2
Gap	6.6	6.6	6.5	68	6.9
Severity	2.1	2.1	2.1	2.2	2.2

Fig. 1. Density Function

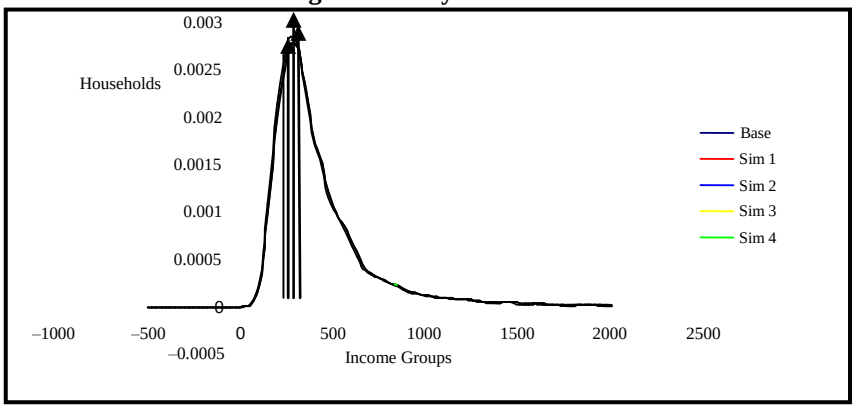
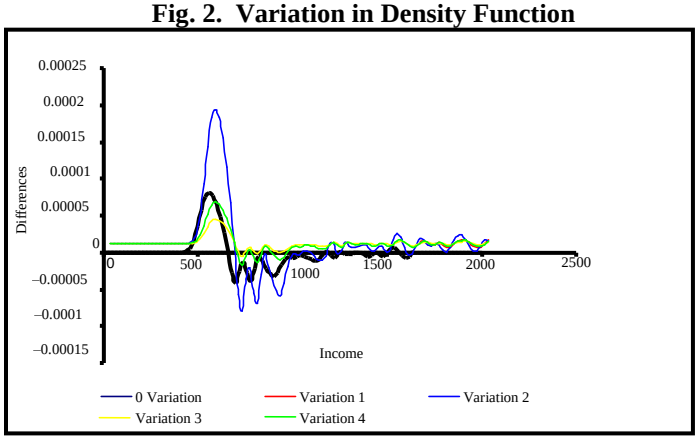


Fig. 2. Variation in Density Function



A few words for women empowerment: generally, women empowerment is linked with their income.[13] With the rise in women income, it is deduced that women is getting empowerment. Table 7 shows that women wage income relative to men wage income increases in all exercises except in exercise-4, where it reduces. The share of women wage income in total household income rises only in the second exercise 'Trade Liberalisation with compensatory measures. From this we conclude that women empowerment improve with the trade liberalisation in presence of compensatory measures as both indicators show improvement in women empowerment. But in depth analysis require including more variables than just income. This needs to be explored further.

Table 7

Women Empowerment Indicators (%)

Experiments		Women Wage Income/ Men Wage Income	Women Wage Income/ Household Wage Income
Base		11.3	3.5
Trade Liberalisation	Without Compensatory Measure	12.19	3.5
	With Compensatory Measure	12.00	3.7
Reduce Fiscal Deficit to 4 Percent of GDP by	Reducing Government Expenditure	11.40	3.5
	Increasing Government Revenue	11.1	3.5

CONCLUSION

In this paper, a gendered CGE model for Pakistan based on Gendered SAM is developed to analyse gender impact of economic reforms specifically for time allocation between market, household, and leisure by women and men. The study shows that trade

liberalisation with compensatory measure increase aggregate demand for female and male labour. However it suggests that impact of trade liberalisation must be evaluated not only through market-based criteria such as whether trade liberalisation maximises flows of goods and services and increase employment opportunities or not, but also include factors like unpaid household work and leisure to reveal the true cost of adjustment.

The paper investigating the role of men and women in the market and non-market economies concludes that trade liberalisation with compensatory measures over burden women. On the other hand it reduces gender wage gap. Results also shows that women empowerment improves more with trade liberalisation than in any other reform.

Policy-outcome with reference to unemployment, and poverty is that employment generation through trade liberalisation in presence of compensatory measures is the one way of reducing unemployment and income poverty. But in terms of workload on women, it is not beneficial for women. In all exercises, despite significant change in women employment in market, gender division of labour within the households remains unequal. Even the substitution between female and male leisure is allowed in the model. Therefore, it is not clear that women are worse off or better off with more work and income and less leisure.

REFERENCES

Arndt, C. & Tarp, F. (2003). Trade policy reform and the missing revenue: A gendered analysis for Mozambique. Paper presented at the 6th Annual Conference of Global Economic Analysis June 12-14, Scheveningen, The Netherlands.

Cagatay, N. (1995). Feminisation of the labour force: The effects of long term development and structural adjustment. *World Development, 23*(11), 1883–94.

Decaluwe, B., Patry, A., Savard, L., & Thorbecke, E. (1999). Poverty analysis within a general equilibrium framework. University Laval. (CREFA Working Papers No. 9909).

Duclos J. Y. & Araar, A. & Carl Fortin (2001). DAD-4: A software for distributional analysis/analyse distributive, MIMAP Programme, International Development Research Centre, Government of Canada and CREFA, University of Laval.

Elson, D. (1995). Gender awareness in modelling structural adjustment. *World Development, 23*(11), 1851–68.

Ercelawn, A. (1990). Absolute poverty in Pakistan: Poverty lines, incidence, intensity. Applied Economic Research Centre, University of Karachi. (Draft Paper.)

Evans, D. (1972) *A general equilibrium analysis of protection: The effects of protection in Australia*. Amsterdam: North Holland.

Fofana, I., Cockburn, J., & Decaluwe, B. (2003). *Modelling men and women work in a computable general equilibrium applied to Nepal*. Canada: University of Laval.

Fontana, M. (2001). Modelling the effects of trade on women: The case of Zambia. Institute of Development Studies, Brighton, Sussex, UK. (IDS Working Paper No. 139).

Fontana, M. (2002). Modelling the effects of trade and women: A closer look at Bangladesh. Institute of Development Studies, Brighton, Sussex, UK. (IDS Working Paper No. 139).

Fontana, M. (2003). Modelling the effects of trade on women, at work and at home: A comparative perspective. International Food Policy Research Institute Washington, D. C. USA. (TMD Discussion Paper No. 110).

Fontana, M. & Wood, A. (2000). Modelling the effects of the trade on women, at work and at home. *World Development, 28*(7), 1173–90.

Foster, J., Greer, J., & Thorbecke, E. (1984). A class of decomposable poverty measures. *Econometrica, 52*(3), 761–766.

Kabeer, N. (2003). Gender mainstreaming in poverty eradication and the millenniums development goals: A handbook for policy-makers and other stakeholders' commonwealth secretariat, IDRC, Canada.

Lim, L. (1996). *More and better jobs for women: An action guide*. Geneva: ILO.

Moser, C. O. N. (1989). Gender planning in the Third World: Meeting practical and strategic gender needs. *World Development, 17*(11), 1799–825.

Pakistan, Government of (1991). *Labour force survey*. Islamabad: Federal Bureau of Statistics.

Pakistan, Government of (Various Issues). *Labour force survey*. Islamabad: Federal Bureau of Statistics.

Pyatt, G. (1990). Accounting for time use. *Review of Income and Wealth Series, 36*(3,1), 33–52.

Pyatt, G. (1996). Accounting for income and wealth. Presented in Economic Research Seminars Series, ISS, The Hague, The Netherlands.

Ravallion, M. (1994). *Poverty comparisons*. Harwood Academic Publisher.

Sathar, Z. & Kazi, S. (1997). *Women's autonomy, livelihood and fertility: A case study of rural Punjab*. Islamabad: Pakistan Institute of Development Economics.

Siddiqui, R., Siddiqui, R., & Iqbal, Z. (1999). The impact of tariff reforms on income distribution in Pakistan: A CGE-based analysis. *The Pakistan Development Review, 38*(4), 789–804.

Siddiqui, R. & Kemal, A. R. (2002). *Remittances, trade liberalisation, and poverty in Pakistan: The role of excluded variables, in poverty change analysis*. DFID, UK.

Siddiqui, R. & Zafar, I. (1999). Salient features of social accounting matrix of Pakistan for 1989-90. Pakistan Institute of Development Economics, Islamabad, Pakistan. (MIMAP Technical Paper Series No. 1).

Siddiqui, R. & Zafar, I. (2001). Tariff reduction and functional income distribution in Pakistan: A CGE model. Pakistan Institute of Development Economics, Islamabad, Pakistan. (MIMAP Technical Paper Series No. 10).

Siddiqui, R. & Siddiqui, R. (1998). A decomposition of male-female earnings differentials. *The Pakistan Development Review, 37*(4), 885–98.

Siddiqui, R., Hameed, S., Siddiqui, R., Akhtar, N., and Soomro, G. Y. (2001). Gender dimensions of the impact of macroeconomic policies (A case study of Pakistan). Study prepared under the Project of Gender Planning Network.

Siddiqui, R., Hameed, S., Siddiqui, R. & Akhtar, N. (2003). Gender and adjustment policies: Evidence from Pakistan. In Swapna Mukhopadhyay and Ratna M. Sudershan (eds.) *Tracking gender equality under economic reforms, continuity and change in South Asia.* 153–95. Jointly published by IDRC, Canada and Kali for Women, India.

Sinha, A. N. Sangita (2003). Gender in a macroeconomic framework: A CGE model analysis. In Swapna Mukhopadhyay & Ratna M. Sudershan (eds.) *Tracking gender equality under economic reforms, continuity and change in South Asia.* 321–63, jointly published by IDRC, Canada and Kali for Women, India.

UNDP (1995). *Human development report*. New York and Oxford: Oxford University Press.

White, H. & Masset E. (2002). Child poverty in Vietnam: Using adult equivalence scales to estimate income-poverty for different age groups. Young Lives, An International Study of Childhood Poverty. (Working Paper No. 6).

World Bank (2001). Engendering development: Through gender equality in rights, resources, and voice. Washington, D.C. USA. (World Bank Policy Research Report).

Accommodating *Purdah* to the Workplace: Gender Relations in the Office Sector in Pakistan*

JASMIN MIRZA

INTRODUCTION

The participation rate of women in the labour force of Pakistan is one of the lowest worldwide. The crude labour force participation rate for women in urban areas is only 5.9 percent,[47] with 55.3 percent of their urban workforce engaged in informal sector activities [Pakistan (1998)]. Women in the urban economy have a heavy concentration at the top of the socio-economic hierarchy—35 percent of urban working women are "professionals, technicians and associate professionals"—, and in the informal sector, they perform home-based and low-paying piece-rate work, including crafts like sewing, crochet, and embroidery. Between these two poles women are only marginally represented, in the office sector. To date only 1.2 percent of the urban working women are engaged in clerical work [Pakistan (1998)].

Yet, the 1990s have witnessed an increasing number of urban women, particularly from the lower-middle-classes, entering occupations that have traditionally been the domain of men. They work as receptionists, secretaries, and telephone operators; as draftswomen, designers, and computer operators. Women from all sections of society, upper and upper-middle-class, can be seen at jobs that were nearly exclusively performed by men only a few years ago. Though still heavily concentrated in a few "female professions" (particularly teaching and practicing medicine), they have chosen new, unconventional careers like banking, marketing, or law. Lower-class women—though presently in very limited numbers—are switching from home-based piece-rate work to trading at Sunday bazaars, or hawking in upper-(middle-) class shopping areas. However, the most prominent changes in the gender structure of the urban labour market are presently being caused by the lower-middle-classes.

Lower-middle-class women, who are commonly not qualified enough to occupy positions of high social status, like teachers or doctors, but are too educated and well-off to remain confined as home-based workers in the informal sector, are

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[47] The crude labour force participation rate is defined as the percentage of persons in the labour force in respect to the total population. The refined labour force participation rate, which is 8.4 percent for women in urban Pakistan, is defined as the percentage of persons in the labour force in respect to the population 10 years of age and above.

usually not gainfully employed. Keeping women out of the labour market (and in *purdah*) has been a religious as well as social status symbol for the lower-middle-classes—the most conservative section of Pakistani society. The lower-middle-classes strictly adhere to what they perceive as "true Islamic values", and they have been most adaptive to the ongoing Islamisation processes and conservative Islamic politics as a whole [Rashid (1996:60ff); Kaushik (1993:183); for detailed discussions see Mirza (1999:33–43)].

The Islamic concept of *purdah* constitutes an important feature of the gender order of the lower-middle-classes. This is manifest in a far-reaching segregation of the life worlds of women and men, the gendered allocation of space in which the public sphere is perceived as a traditionally male space, the absence of concepts for social interaction between the sexes, and in a strong sexualisation of the life worlds of women and men and of gender relations outside the kinship system. Female employment is considered a disgrace, particularly in fields in which the mixing with male colleagues and the (male) public cannot be avoided, and is seen as a fall in social standing of the concerned family.[48]

Yet, it is particularly this section of society that has been hit hard by the deteriorating economic conditions. Inflation, taxes, withdrawal of price subsidies and price controls, together with stagnating wages and high unemployment have made it increasingly difficult for the men to maintain the standard of living of their families without supporting contribution to family income by women of the family. More and more lower-middle-class women therefore are entering the few occupations that are open to them; namely, technical and secretarial office jobs. Between 1980 and 1990 the number of women office workers rose twelve times.[49] At the beginning of the 1990s they were only about 3 percent of the office workers; and although no up-to- date statistics are available, women for some years now have become much more visible in offices. These women still constitute a very small minority and are hence regarded as "strange birds" among the (male) office workers as well as among the lower-middle-class women. Yet, their presence in the work world has altered the working environment in offices; a process of de-segregation has begun in which the gendered organisation of public (male) space as well as existing gender relations and gender constructs are being renegotiated and redefined.

THEORETICAL CONSIDERATIONS

The arguments for analysing gender relations in the office sector in urban Pakistan are based on the concept of "embeddedness" of economic action [Granovetter (1992)], an approach developed in the 1940s and 1950s by the anthropologist Polanyi (1978, 1992), which with the emergence of a "New Economic Sociology"[50] in the mid-1980s, is experiencing a significant revival. In contrast to neoclassical analysts, for whom

[48] The strong equation of female work with disgrace and a fall in social standing has also been pointed out by Shaheed (1989:26) in her study of lower-middle-class women in Kot Lakhpat, Lahore. On this point see also Alavi (1991:130).

[49] In 1980, only 1373 women were included in the category "office workers"; in 1990 their number was already 15877 (INBAS 1993:27).

[50] The term "New Economic Sociology" was originally coined by Mark Granovetter in the mideighties [Swedberg (1990:106ff)]. For a comparison of the Old and the New Economic Sociology see Granovetter (1992) and Swedberg (1990).

rationally motivated exchange dominates economic life, the New Economic Sociology stresses the social and cultural embeddedness of economic processes and institutions [Smelser and Swedberg (1994); Swedberg (1994)].

Numerous studies of markets that have been conducted in Western societies in the course of the resurgence of economic sociology have pointed out the embeddedness of economic action and processes [e.g., Callon (ed) (1998); Smelser and Swedberg (1994); Hirschman (1993); Swedberg (ed) (1993)]. However, only a few analyses concerning the embeddedness of markets in non-Western societies exist so far.[51] Similarly, not much attention has yet been given to the gender-specific aspects of embeddedness. These have remained absent from, or at best marginal to, the literature; and only in recent feminist works in economics first steps towards adding a gender perspective to the concept of embeddedness of economic action are being taken. It has, for instance, been pointed out by feminist economists that gender relations (and gender inequalities) are reflected in the market and influence the way economic processes take place [Cagatay (1995:1827f); Elson (1993:545); Elson (1995:1864)].

This study tries to look at the embeddedness of the market from a gender perspective ("gendered embeddedness"). It will be analysed how societal gender constructs and gender relations, *inter alia*, the lack of socially sanctioned modes of communication between the sexes, a strong sexualisation of gender relations particularly between unrelated men and women, and the ubiquitous "eveteasing" and harassment of women in public male spaces, mirror in the market; and how they affect the working conditions of female office workers, the gendered organisation of work and space inside the offices, and women's strategies to establish themselves in a traditionally male field of employment, namely, the office sector.

RESEARCH METHODS

The empirical data were collected during one year of field research in Lahore, Pakistan, in 1996 and 1997. The data collection was based on qualitative methods of empirical research. These included participatory observation, and in-depth interviews and informal conversations with working women, their colleagues and families, employers, and relevant experts. Initially, about 40 lower-middle-class women working in middle-level positions in the office sector—draftswomen, computer operators, designers, receptionists, secretaries, telephone operators, etc.—were interviewed. Of these, thirteen women—twelve women working in the private sector and one woman working in the public sector—were chosen as typical cases. Since the study aimed to focus on office workers who really worked in jobs at the middle-level, only women with qualifications between a secondary school (10th class) and college degree (14th class), including some formal or informal skill-oriented training below university level, were selected. The office workers' ages ranged between 20 and 45. Some of the women were married with children, but since it is still

[51] One exception is Dore's study (1994) about the sentiments of friendship and the sense of personal obligations that accrue between economic actors in Japan and their effects on the structure of the economy. The studies of Hamilton and Biggart (1992) and Fukuyama (1995) are also worth mentioning here. While Hamilton and Biggart, in their historical-comparative analysis of the structure of the economies in Japan, Taiwan and South Korea, point out the importance of culture and the state for the constitution of the economy, Fukuyama analyses the economic structures of different Western and Asian societies within their ethical, moral and cultural contexts.

common for female office workers to leave their jobs and return to the *chardivari* (i.e., the four walls of one's house) upon getting married, most of the women who were selected for this study were unmarried and in their early to mid-twenties.

These thirteen women were regularly visited at their workplaces and homes for interviews and informal conversation over a period of nearly one year. This qualitative design, in which relatively much time was devoted to the individual women, enabled a better understanding of the perspective of the women themselves, what they themselves considered important in their own life world and the problems and conflicts they faced as office workers. It also allowed the development of analytical categories based on these case studies and the contextualisation of the empirical findings.[52] Apart from the select group of 13 women, several of the other interviews conducted in the beginning of the field research have also found useful reference in the course of this study.[53]

GENDER RELATIONS IN THE OFFICE SECTOR

Across the offices under study gender relations showed an astonishing uniformity. Male colleagues commonly did not acknowledge work-related (de-sexualised) relationships between the sexes at the workplace. In the offices they had, often for the first time, the chance to come into contact with unrelated women; and they took advantage of this situation by trying to get close to their women colleagues and developing personal relations with them. Some common ways tried by men to come closer to women colleagues were approaching them unnecessarily under pretext of work-related issues, trying to involve them in needless small talk about personal matters, often in a low voice or when nobody else was around, inviting them to tea, lunch, etc., offering them a lift on the motorbike, indulging in immodest talk, making crude jokes, speaking loudly within women's earshot in order to attract their attention, or even directly asking them to become their girlfriends. Touching women while passing over things like pencils or a phone receiver, coming very near to women physically while passing by or talking to them, or staring at them furtively was also a common way to "establish contact".[54]

The worst behaviour toward women was exhibited by men who were connected to the office only weakly and temporarily; namely, clients, customers, and visitors. The shortness of the encounters, together with the lack of social control (which makes permanent office staff accountable for their behaviour, in however weak a manner) facilitated behaviour patterns men typically show toward unrelated women in public (male) spaces.[55]

[52] I am here drawing upon the grounded theory, which was originally developed as a qualitative research methodology by Anselm Strauss and Barney Glaser. A grounded theory is one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through the systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory and then prove it. Rather, one begins with an area of study, and what is relevant to that area is allowed to emerge. For further details about the grounded theory see Strauss and Corbin (1990); Strauss (1987); Strauss (1994).

[53] Some of the office workers I interviewed did not want their real names to be mentioned in this study. Therefore, a few names have been changed in order to provide these women with the anonymity they desired. Furthermore, the names of all offices were also changed.

[54] For similar findings see Macleod's study (1991) on female office workers in Cairo, Egypt.

[55] For more information about sexual harassment and violence against women in public spaces see Human Rights Commission of Pakistan (1999:215-223); Goodwin (1995); Human Rights Watch (1992); Haeri (1995).

Receptionists and telephone operators complained about the numerous "wrong calls" —as they called them. Clients and visitors who came to the office and saw them working there called them later, knowing that they would attend the phone; and would try to get them involved in a conversation or worse insist for appointment to meet them outside office:

> I get such phone calls. If some customer comes [to the office], then of course he has our phone number. He sees me working here and after he has left the office he phones me, 'I liked you and I would like you to be my [girl]friend', he will say. 'Let's meet outside'. 'Have lunch with me'. 'Have dinner with me' (Ghazal, receptionist, 25.05.1997, p. 5).

Women also faced difficulties with clients they had to deal with inside the offices. *Shazia* and her colleagues, *Shamzi* and *Farhat*, all designers at the publishing house Ali & Ali Communications, design book covers and magazines on the computer, and sometimes clients come to their workplaces to appraise and sanction the designs they have developed:

> Some clients come very close to us. Then we act in a disapproving manner—for example, we look at them, or stare at them, or try to give them the feeling that they should not stand here. Then they realise this themselves and retreat. And there are others who are not influenced by our behaviour, that we are staring at them or trying to indicate that they should not do that [i.e., come so close]; but our [male] executives are also caring. They react immediately and say, 'please sit down in our [visitors'] room. When they have done the work we will show it to you' (Shazia, designer, 03.01.1997, p. 7).

When women had to leave their office for work-related tasks, they were confronted with (sexualised) gender relations that characterise public male spaces. *Asieh*, a designer working at a small advertising agency, Rainbow Advertising, told me that her boss once took her to the printing press. Work inside the printing press, a traditionally male field of employment, was usually handled by the male employees or the boss himself; but on that particular day he took her along just to show her the procedures, how scanning and printing was done, and what a printing press looked like:

> There were a lot of men. They were all staring at me in a strange way, 'Where has this woman come from?', 'What kind of relationship does she have with this man?' [And this,] although he only took me to that place to show me how the work is done there. I did not like it. I said, 'I won't go there again; the men stare in a dirty manner' (Asieh, designer, 15.01.1997, p. 3).

Sexualised gender relations and men's persistent attempts to gradually stretch the boundaries in their daily interactions with office women were a structural phenomenon all women experienced as an integral part of their daily lives as office workers. The need to define the boundaries of male-female interaction at the workplace (and beyond) and not to give men the chance to extend these was therefore very frequently mentioned by the women:

> *"The [office] set-up depends on yourself. After five years of [working] experience I can say that it absolutely depends on you.…They [i.e., the men] do as you like. It*

is not true that nothing happens, but it depends on you and how you behave with others. You must conduct yourself in such a way that they cannot do anything except work. You should be mature enough not to give them any chance. And if you have only given someone the chance to get close to you once, then you cannot go back to the old relationship.…If there are no obstacles on your part, then problems can emerge. Therefore, one has to remain careful.…Everything depends on the girl. If she wants she can live in a very good [office] set- up….I think that men are all the same. If they get a chance they will definitely use it. I have seen this many times (Shagufta, software developer, 01.12.1996, p. 2ff.).

Female office workers used different strategies to renegotiate (public) space, and to desexualise and redefine gender relations at their workplaces; namely, they created social distance between male and female colleagues; they developed socially obligatory relationships; they integrated male colleagues into a fictive kinship system; and they created women's spaces inside the offices.

STRATEGIES OF WOMEN TO RENEGOTIATE GENDER RELATIONS AT THE WORKPLACE

Strategy One—"Creating Social Distance"

One common strategy women employed to renegotiate gender relations in the offices was to restrict all conversation with male colleagues to purely work-related issues, and be strict, even rude when they tried to talk unnecessarily or get closer to them in any other way. This way women created a social distance between themselves and their male colleagues in their daily interactions with them, as *Shaheen*, a software developer who works in the computer department of a private hospital, Red Crescent Hospital, and is responsible for the computerisation of the medical records; explains:

> I do not have public contact in my job, but people who work in the hospital come to me when they have problems with computerisation [of the medical records] or any questions. When they come, then I am friendly because they want to have something explained. But when I meet them on the floor or outside the hospital I am no longer friendly because I am not in a formal work-related situation. I try to ignore the person, say no more than 'hi, hello' while passing by. This way I create a distance. I also have a lot of talk on the telephone. That is more de-personalised than face-to-face conversation (Shaheen, software developer, 25.04.1997).

When employees working in other departments of the hospital enter the computer department, *Shaheen* does not greet or talk to them, nor does she even look in their direction. Even when male colleagues she knows enter her department she ignores them in order to demonstrate that she only establishes work-related relations. She never socialises with male colleagues, not even with those working with her in the computer department, for example, by having lunch or tea with them in the canteen, in order to avoid any unnecessary contact with the male staff. Once when I left Red Crescent Hospital together with *Shaheen* after finishing an interview with her there, we met a man outside the building who worked in a different department but knew *Shaheen* as he had contacted her a few times in connection with computer work. We were walking in a

narrow lane and the man, coming toward us, had to pass by very closely. Despite this she did not look in his direction; and greeted him only after he had greeted her. She kept looking in the other direction and thus avoided eye contact in order to maintain the social distance. *Shaheen*, explaining her behaviour toward her male colleagues told me:

> Sometimes your job requires you to be very polite. But the disadvantage of being too polite is that the men might misunderstand this. So you should remain balanced. If you are polite you should sometimes also be rude.…If you remain polite continuously, men will try to make close, personal contact with you (25.04.1997, p. 2).

Keeping male-female interactions at the workplace purely work-related was often a delicate balancing act: on the one hand, the woman must integrate into an office environment and a (male) team while at the same time remaining somewhat distant; on the other hand, she could become marginalised if she was too rude or strict with her male colleagues. *Shaheen*, for example, faced such a dilemma whenever there was a social gathering in her department. She could not always excuse herself from attending; yet she felt uncomfortable at these get-togethers, particularly during her first year at Red Crescent Hospital because at that time she was the only woman in her department. They brought her into situations which were not entirely work-related any longer, and which inevitably required a certain degree of frankness and informal talk with male colleagues. In offices, on special occasions like weddings or engagements, (male) colleagues often brought sweets and snacks and also invited the female colleagues to participate in a little get-together inside the office. These are friendly gestures, but they put women in a dilemma. If they accept the offer, men would be encouraged to make further advances, if they refuse the men would feel offended.

Strategy Two—"Developing Socially Obligatory Relationships"

Another strategy of women was to embed formal working relationships into social and socially-obligatory relationships. *Shazia*, for example, works in a large publishing house, Ali&Ali Communications. Only four or five women work in this office; and though *Shazia* spends her lunch break with two female colleagues, during the work hours she sits and works with a male colleague who is about her age. While the other two women work on the second floor—they are both responsible for the designing of book covers—*Shazia's* and her colleague's (*Asif's*) workplace is on the ground floor. They design the layout of magazines the agency publishes for local and multinational companies. *Shazia* has been able to turn her formal work-related relationship with *Asif* into a socially obligatory one by establishing informal social relations with his family, particularly his sisters:

> We [i.e., Asif and me] are the same age; we are friends. He and his sisters have become my friends, and they keep on phoning me. They even phone me when he is not here. They also phone me at home. Sometimes they come to the office to meet me.…I also phone them. Yesterday I phoned them to wish them happy Eid. He has two sisters and they have become my friends since his mother passed away.…[On that day] the whole office staff went there, and I met his sisters. And since then they have become my friends. Since then I also take more care of

him…, of course he is my good friend and for this reason he also cares for me (Shazia, designer, 20.04.1997, p. 2).

Embedding formal work relations with male colleagues with socially obligatory ones creates social control and prevents men from behaving disrespectfully. It helps the development of more intimate relations between male and female colleagues, which remain family-like and thus de-sexualised. In *Shazia's* case, her colleague even became protective toward her—a behaviour that is typically shown toward female relatives. He talked to (male) clients who came to discuss the layouts of the magazines with them and thus prevented them from having contact with her and thus saved her from exposure to male strangers that nevertheless was part of her duty.

It was also very common that female office workers introduced their family, particularly their fathers and brothers, to their colleagues and superiors. Male relatives dropped in from time to time for a chat, for example, when they were close by or when they came to pick up their daughter/sister, and met the (male) colleagues and superiors regularly on an informal basis. Thus by personalising relationships between their (male) colleagues and their family they prevented male colleagues from excesses women commonly experienced in public male spaces. This strategy is of course doubly beneficial as which keeping male excesses in check it also helped the women's families to overcome their hesitation in permitting women to work in an office environment with male strangers, and helped promote a liberal attitude toward working women. [see also Mirza (1999:140-146)].

Strategy Three—"Integrating Male Colleagues into a Fictive Kinship System"

Furthermore, women used kinship terms to address male colleagues in order to integrate the latter into a (fictive) kinship circle. It has already been pointed out elsewhere [Mirza (1999:60ff)] that in Pakistani society women's use of kinship terms for working male colleagues creates a vicarious sense of responsibility and respect in them for these women that they otherwise reserve for actual female relatives of theirs. It also helps overcome the norms of gender segregation; integrating *namahram* men—men whose kinship does not represent an impediment for marriage and with whom social interaction is therefore forbidden according to Islamic Law [Khatib-Chahidi (1993:114)]—into a fictive kinship system that permits social interaction and sharing the same physical space with them.[56] Fictive kinship terms, though, were only used in few of the offices under study. In most of the offices male colleagues and superiors were addressed by their first names, followed by the polite suffix, *sahib*. Women were addressed as 'miss', sometimes followed by the first name. Bosses were often addressed as 'sir' or 'madam'. Subordinates were called by their names; and after working together for a while, employees of equal status—men and women—also started to drop the terms '*sahib*' or

[56] This point has also been illustrated by Khatib-Chahidi (1993) in her study about recognised procedures for making namahram persons mahram—i.e., men and women between whom social interaction is permitted because their relationship prohibits marriage—in the Islamic Republic of Iran. This is achieved by fictive and temporary marriages which are legal according to Shia law and remain unconsummated. Marrying, for example, a new servant to one of the little children in the house—even if the "marriage partner" is not mature, and may not even know that he or she is married—makes this person legally mahram for all family members and therefore permits persons of the opposite sex to share the same physical space.

'miss' and just used their first names for addressing each other. Sometimes kinship terms were only used by one of the persons, as, for example, at the architectural office Unique Architects, where the three draftswomen, *Andeela*, *Farhana* and *Shazia*, addressed their boss as 'sir', while he addressed them '*beta*', or '*bete*' (i.e., daughter) when talking to them.

One reason why kinship terms are not commonly used among colleagues is the realisation by women that merely addressing unrelated men with kinship terms did not turn them into real relations with concomitant social implications. Fictive kinship is common in other social settings also such as among neighbours or families with close friendship ties [Mirza (1999:60ff)], but using kinship terms in an office environment as a public male space in order to manipulate men's conduct did not constitute a strong mechanism of social control:[57]

> Why should they see us as their sisters? If they treat us as their sisters then they won't be able to enjoy themselves [with us]. They do not like this and if I forget this and say, 'bhai' [i.e., brother]; I mean, I call someone, [for example,] 'Hassan bhai'; then he says, 'no, don't call me 'bhai', call me 'Hassan''. I mean, they do not let us call them 'bhai'. In the beginning when I was not experienced I used to say, 'you are all my brothers, everybody'. But then I felt that nobody is anybody's brother here. Apart from the blood relationship there are no brothers. By calling strangers brothers they do not become family members. You have to keep them in their boundaries (Kishwer, receptionist, 25.03.1997, p. 7ff).

Strategy Four—"Creating Women's Spaces"

In the public sphere we find many spaces for women that segregate them from men but, at the same time, do not prevent them from taking part in public life. Lachenmann (1993) describes these spaces as "parallel structures" (18), "women's spaces" and a "women's world" (7). Minces (1992:55f) uses the terms "parallel culture" of women, and Vagt speaks about a "dual public" (1992:50). Schools and colleges for girls with female staff and surgeries and hospitals with female doctors to treat female patients ensure gender segregation formally. But other informal spaces for women also exist in everyday life, such as separate enclosures at ceremonies like weddings, engagements and religious functions, or at funerals. At other public places like restaurants, ice-cream parlours and snackbars a corner of the space is often separated by a curtain or partition to reserve that for women's use. In public transport some of the front seats next to the driver that can be reached through a separate front door, are reserved for women. The public libraries offer segregated areas for women where they can sit and study. New spaces for women that enable them access to fields that are normally restricted to men have been developed during recent years, like the first public park for women in the town of Sobhodero [Der Spiegel (40/1993)].

[57] In her study on female factory workers in the garment industry in Bangladesh Dannecker comes to similar conclusions. In order to de-sexualise the workplace the factory workers tried to construct fictive kinship relations with their male colleagues and superiors by addressing them as *bhai* (brother) or *chacha* (uncle). However, attempts at de-sexualising the male-female interactions were not accepted by the male supervisors and co-workers, and their behaviour toward female workers did not reflect the respect implicitly underlying (fictive) kinship [Dannecker (1998:142ff)].

In the offices under study, too, women workers tried to maintain segregated spaces for themselves to create a physical distance with male colleagues. It also minimised interfaces for interaction with clients, customers, and visitors, viz., men, who were not part of the office staff.

In the offices under study women workers usually sat in corners, behind poles or partitions, or in backrooms where they were shielded from the gazes of their male colleagues as well as those of incoming customers. When men and women were not segregated physically, their workplaces were arranged in a way that they did not have to face each other but could work with their backs to each other or have seats side by side. Furthermore, there was usually sufficient space between them to allow men and women to be able to work without having physical closeness.

Spatial provisions for women were most pronounced in offices with employers belonging to the "conservative type".[58] Such spatial provisions were evident, for example, in the allocation of a separate room for female employees, as could be found at the small advertising agency, Creative Designers, in which one woman, *Sadia*, a designer, works. *Asif Sahib*, the owner of Creative Designers, told me,

> "Women sometimes get confused when a man sits too close to them; then they cannot work well, their speed slows down. Even if you let a girl stand next to me my work speed will slow down" (04.04.1997, p. 1ff).

Thus, *Asif Sahib* created enough space in his office so that men and women would be able to work at ease. He allocated one separate room to *Sadia*, and clients and visitors did not have access that, nor did most of the staff:

> *Sadia* is in our computer section. No man goes there and no man is supposed to go there either. There are only few staff members—one sweeper, me, my elder brother, and two men who work on the computer—who enter this room. No one is supposed to go into this room….We have made this [arrangement] very consciously, and usually the room remains closed. Men sit in the office; friends come [to visit them] and sit down. And from the beginning we established such a set-up. I do not like that a girl sits in the computer room, and all the guys start coming to the office only to glance at her (Asif Sahib, 05.04.1997, p. 15).

[58] During the research, three different kinds of employers/superiors could be identified; namely, a "Westernised type", a "conservative type", and a "mixed type". "Westernised type" employers had a (Westernised) upper- or upper-middle-class family background and had often studied or lived in a Western country for some years. Having a mixed working environment was not considered a problem or constraint in any way. These employers even had women among the highly-qualified employees who worked partially outside of their offices—architects who had to go to construction sites, designers who regularly visited clients to discuss the designs they developed, etc.—and it was not perceived as inappropriate to employ women for tasks which required such kind of public exposure. In the "conservative type" employer's life world gender segregation and purdah were much more ingrained. Although he did not oppose female employment in the office sector, he nevertheless tried to provide segregated working areas for his female staff so that the integration of women into the office remained in accordance with the gender order of society and his own (conservative) life world. The "mixed type" of employers did not provide segregated working areas for women, and they also deployed women in fields that required public contact and exposure. However, they were actually very conservative as far as their own family was concerned. Although they themselves recruited women and promoted a desegregated office environment, they were not in favour of their own female family members being employed; and being conservative at home did not stop such employers from making amorous advances toward women in public spaces or even their own female staff.

Women tried to create gander-specific spaces even in offices where no special provisions were made for female employees under a "Westernised type" of employer. For instance when *Tasneem* started to work as a draftswoman at Premier Architects, a medium-sized workplace, she had to share the room with other draftsmen. It was separated from the hallway by a glass wall through which she was visible to everyone all the time. And her workplace being in the middle of the room, she was constantly in view of all draftsmen working around her. But all this changed in couple of weeks. She was seated in the corner of another small room in the office. Here, no incoming visitor could notice her, and male colleagues only came in when they had to discuss work-related issues with her. When I asked her why her workplace had changed, she told me,

> I asked my boss to give me a proper workplace, not a workplace in the middle of the room. Now I sit in the corner of this room; this is much better because I am protected (01.04.1997).

A second example of women's efforts to create exclusive spaces is manifest in the computer department of Red Crescent Hospital. When I visited *Shaheen*, a software developer, for the first time in the fall of 1996 I found the workplaces of all employees fixed along the three walls of the department, and the staff was in full view of incoming persons. At that time *Shaheen*, who was the only female employee, preferred to work in a small backroom attached to the main one that no one except the computer staff entered. Later, partitions were placed in front of the workplaces so that the staff was no longer visible to people entering the department. Four employees now sat along the walls, left and right of the entrance, and two employees sat along the wall opposite to the entrance. Meanwhile, two more female employees had been recruited as *Shaheen's* assistants, and since two employees always sat at one big work desk with two computers, both women now sat together on the right side of the entrance along side two men. The women therefore placed another partition between themselves and their male colleagues. They felt that they could thus work undisturbed, without being observed by their male colleagues. Along the opposite wall, though, where four men worked, no partition was placed between the desks. Once when I went to Red Crescent Hospital to conduct an interview with *Shaheen*, I heard a loud argument going on in the computer department. One male employee, had removed the partition separating the male and female staff and had placed it behind his own workplace to provide privacy to the head of the department whose small office was behind his seat. The affected lady was arguing with the boss that she needed the partition more than he did. Although the boss was of a "Westernised type" she won and, triumphantly, once again placed the partition between her seat and the men's. *Shaheen*, being the third woman, and their senior, had her seat next to a male colleague but when one of the two female assistants quit her job, the other one left her workplace and started to sit next to *Shaheen*. This way, again, the women reorganised the space to avoid exposure to men.

The only exception to such a gendered organisation of space was in the case of receptionists/secretaries. They were expected to be visible to all, particularly clients and visitors entering the office; and their workplaces were positioned accordingly. It is interesting to note that even (some) "conservative type" employers had female secretarial workers in their offices without perceiving this as conflicting with their own conservative outlook. In an interview with the owner of the agency, Creative Designers, *Asif Sahib*, for

instance, stressed the importance of allocating a separate room to his female designer, *Sadia.* Yet, he did not consider the provision of spatial arrangements for *Sadia* inconsistent with the fact that he later employed a second female employee, a receptionist, for whom of course no spatial arrangements were made. On the contrary, she sat directly behind the entrance, visible to every incoming person; and she was also the first contact person for all people visiting or phoning the office.

When I raised this issue with the "conservative type" employers who had secretarial workers in their offices or planned to recruit women for secretarial positions, I found they had either not consciously thought about this inconsistency, or to them the trend of employing women in office jobs was too prevalent to allow for traditional concerns to come in the way.[59] When the latter was the case, they acknowledged that advantages of having women in secretarial positions outweighed whatever concerns they had for maintaining the gender norms.[60]

The presence of women's spaces inside offices manifested not only in a gendered organisation of space but also in a gender-specific allocation of work that was universal in the offices under study. Women did not generally perform tasks that required contact with the public, or even mobility outside office. This way, interfaces for communication between the sexes, particularly with men who were not immediate colleagues or part of the office staff, were reduced to a minimum. Most of the women in my sample did not have any contact with the public, and for the few who had such contact, it was restricted to a limited number of the company's clients or (male) staff members from other departments.

Many employers did not allocate work to women that required public contact and exposure. But even in offices with "Westernised" or "mixed" types of employers women avoided jobs that involved customer service or required them to leave their offices to do outside work. Instead, they preferred jobs in which the mixing of the sexes was minimal. *Zaheer Salam*, director of the well-known publishing house Ali & Ali Communications and a "Westernised type" employer, told me that he also recruited women for jobs which required public dealing. For him, the qualifications of a person, not the gender, were crucial in the assignment of tasks. Although a female designer—an upper-class woman with a five-year university education in Fine Arts at the exclusive National College of Arts—had formerly worked for the company, and had also been responsible for customer service, including visiting clients in their own offices, Mr *Salam* concluded that many women did not want to work in fields which required such public exposure:

[59] The experiences of employers with recruiting female office workers for middle-level positions were overwhelmingly positive. In the interviews the employers stressed that women worked harder and more concentrated than men; they were more sincere with their work and more trustworthy; and they were very punctual. Women did not disappear for hours during work time or the lunch break (as men did); they did not get personal visitors who kept them away from their work; and they did not take many casual leaves. The latter qualities of female office workers that were mentioned by employers are certainly linked to women's restricted mobility. While male employees can take their motorbikes and leave the office for half an hour or an hour at any time during the day, women cannot do the same. Furthermore, it is common that men get visitors in their offices—friends or relatives who drop in for a chat—while women cannot visit each other so easily. They remain in the office the whole day and do not leave their seats.

[60] This point brings back to mind an observation already made elsewhere [Mirza (1999:51ff.)] namely, that spatial arrangements for women in public (male) spaces in order to keep up gender segregation are only acknowledged and upheld by men as long as they do not cause financial or other personal disadvantages.

> When women apply here they often say, 'we do not want to do outside work but work inside [the office]'. Then I ask them, 'why did you study so much? You studied Marketing and Sales, so why don't you go to the market?' But they say, 'no, we don't want to go outside, we want to sit in the office and work there'… (Zaheer Salam, 05.06.1997, p. 10).

When *Shazia* joined Ali & Ali Communications as a designer she too made it clear from the very start that she did not want to do any work outside of the office. Thus, from the beginning her superiors knew that she could not be assigned duties that exposed her to male strangers. The designs *Shazia* and her male colleague *Asif* develop have to be presented at the clients' offices, but this task is taken over by *Asif*. *Shazia*, as well as her female colleagues, *Shamzi* and *Farhat*, remain in the office the whole day. Work is allocated to them by their supervisor, who also takes back the completed work and then tells them of suggested alterations. *Shazia* went to a client only once, and then too after she had phoned her parents and obtained their permission:

> I don't like to go out of the office in this way. I don't like to go to different places. From the beginning I felt that they can give me as much work as they'd like except for going to different places….Once I had to go, and I said that 'I won't go, I can stay here and work'; and I said that I don't have the permission from my family. It is true that I do not have the permission from my family, but I did not want to go either….I did not like it.…If there were two or three more girls with me, then it would be different….And when I go somewhere I do not know whether there will be girls or not. If I was the only girl I would get confused there. Therefore I do not like to go to different companies to visit clients (Shazia, designer, 20.04.1997, p. 4).

Even when male and female employees had the same skills and were recruited for the same positions, tasks requiring external duty were assigned to men. Women invariably remained inside, doing the same work their male colleagues did. In the two companies I visited that serviced computers, female employees servicing computers sat in a room even customers bringing equipment for repair could not enter. They handed the computers at the reception explaining the problem to the male staff who forwarded the computers to the women technicians. Male employees alone were sent out to check defective equipment at offices and residences.

Even when women were formally responsible for dealing with the public they, at least unofficially, handed over all work which involved contact with customers and clients to their male colleagues and only took over such tasks temporarily when no male colleague was available.

The illustrated gender-specific allocation of work did not apply to receptionists and secretaries, whose very work entailed helping visitors and answering phone calls.

DISCUSSION

This study has analysed how female employment in urban Pakistan is embedded in its societal context. It has shown that gender images and gender constructs inherent in the social order of Pakistani society, particularly the strong sexualisation of gender relations outside the kinship system and the ubiquitous harassment of women in public (male) spaces surface inside the office sector; they influence the work conditions of female

office workers, the gendered organisation of work and space inside the offices, and the scope of activities women can perform in their occupations. They use many strategies, derived from their own life world, to maneuver in the office sector, to appropriate public (male) space, and to renegotiate gender relations and gender constructs at the workplace. Female office workers try to create "women's spaces" in the offices and this way introduce the *purdah* system to the office environment. Thus, forms of *purdah*, especially in the shape of segregation, are introduced in the offices. But women are also initiating the redefinition of gender relations (for example, by developing "socially obligatory relationships" with male colleagues), and new gender constructs are developing at the workplace. Formerly unknown (de-sexualised) modes of communication between male and female colleagues are emerging, and gender relations that were formerly perceived as sexual ones *per se* are now opening up to renegotiations.

The analysis has further shown that the *purdah*-system—which is a central feature of the gender order of Pakistani society—is flexible and has many breaches, and *purdah*-rules can be redefined and adjusted to new situations. Therefore, the boundaries between male and female spaces, and gender relations as such, are constantly being (re)negotiated. During the economic transformation processes, new socio-economic opportunities are being created for women through which they are enlarging their room for maneuver, and trying to define ways to embed these new spaces in society at large [for Bangladesh see Dannecker (1998)].

In the current processes of societal transformation educational institutions and women's organisations can play a crucial role in facilitating women's entry into new, traditionally male fields of employment, by guiding women on how to accommodate themselves in occupations that have hitherto been exclusive male domains. The Technical Training Centre for Women, Lahore, a vocational training centre for lower-middle-class women that aims to provide school leavers with market oriented training for later employment in the office sector, can be named as one example. Instructing women in correct and proper office etiquette like how to talk to and work with male co-workers and how to handle harassment and indecent behaviour of men constitutes an integral part of the training. Women are taken on excursions to offices to see what an office environment looks like, how the work is done there and how men and women work together. Two internships that are a compulsory part of the training are also to prepare women for later employment. According to the teachers of the TTCW, students' responses after the internships are overwhelmingly positive because women lose their fear of facing male strangers and working in a male- dominated office environment.

Women's organisations and educational institutions that, apart from imparting market oriented training to women, also actively encourage women's entry into so called "male occupations" are still very few. Training results at the TTCW, however, show that women can be taught to cope with a male-dominated office environment and deal with existing (sexualised) gender relations and harassment in male spaces and that such education can positively influence women's decision to become gainfully employed in the office sector.

Just how far lower-middle-class women's entry into the work world will bring forward societal changes in gender relations and the gendered organisation of public space will depend on future economic trends, i.e., on the number of women who will be able to join the labour market, particularly the office sector, and to actively contribute to the current transformation processes of Pakistani society. However, the rapid integration

of lower-middle-class women into the urban labour market that can currently be seen is very likely to shake (and probably even transform) the existing gender order of society, especially by facilitating the development of new modes of communication between men and women in the office sector as well as in public spaces in general.

REFERENCES

Alavi, Hamza (1991). Pakistani women in a changing society. In Hastings Donnan & Pnina Werbner (eds.) *Economy and culture in Pakistan: Migrants and cities in a Muslim society*. New York: St. Martin's Press. 124–142.

Cagatay, Nilüfer, et al. (1995). Introduction. In Nilüfer Cagatay, et al. (eds.) *Gender, Adjustment and Macroeconomics. World Development (Special Issue*) *23*(11), 1827–1838.

Callon, Michel (ed.) (1998). *The laws of the market.* Oxford [*et al*.]: Blackwell [*et al*.].

Dannecker, Petra (1998). Between conformity and resistance: Women garment workers in Bangladesh. Faculty of Sociology, Bielefeld University, Germany. (Unpublished PhD. Thesis).

Der Spiegel (1993). Pakistan. *Jenseits des Teppichs*. Weekly Magazine, No. 40. Berlin.

Dore, Ronald (1992). Goodwill and the spirit of market capitalism. In Richard Swedberg and Mark Granovetter (eds.) *The sociology of economic life.* Boulder/Oxford: Westview. 159–180.

Elson, Diane (1993). Feministische Ansätze in der Entwicklungsökonomie. *Prokla, Zeitschrift für kritische Sozialwissenschaft* 23:4 529–550.

Elson, Diane (1995). Gender awareness in modelling structural adjustment. In Nilüfer Cagatay *et al*. (eds.) *Gender, adjustment and macroeconomics. World Development (Special Issue*) *23*(11), 1851–1868.

Fukuyama, Francis (1995) *Trust. The Social Virtues and the Creation of Prosperity*. New York: The Free Press.

Goodwin, Jane (1995). *Price of honour. Muslim women lift the veil of silence on the Islamic world.* Boston: Little Brown.

Granovetter, Mark (1992). The sociological and economic approaches to labour market analysis: A social structural view. In Richard Swedberg & Mark Granovetter (eds.) *The sociology of economic life.* Boulder/Oxford: Westview. 233–264.

Haeri, Shahla (1995). *The politics of dishonour: Rape and power in Pakistan.* In Mahnaz Afkhami (ed.) *Faith and freedom.* Women's Human Rights in the Muslim World. London: I.B. Tauris. 161–174.

Hamilton, Gary H. & Nicole Woolsey Biggart (1992). Market, culture, and authority: A comparative analysis of management and organisation in the Far East. In Richard Swedberg & Mark Granovetter (eds.) *The sociology of economic life.* Boulder/Oxford: Westview. 181–224.

Hirschman, Albert O. (1993). *Entwicklung, market und moral.* Abweichende Betrachtungen. Frankfurt/Main: Fischer.

Human Rights Commission of Pakistan (1999). *State of human rights in 1998*. Lahore: Human Rights Commission of Pakistan.

Human Rights Watch (1992). *Double jeopardy: Police abuse of women in Pakistan*. USA: Asia Watch and the Women's Right Project.

INBAS (Institut fuer berufliche Bildung, Arbeitsmark- und Sozialpolitik) (1993). Labour demand study for PAK-German technical training centre for women at Lahore, Pakistan. Unpublished Report, Frankfurt.

Kaushik, Surenda Nath (1993). *Politics of islamisation in Pakistan. A study of Zia Regime*. New Delhi: South Asian Publications.

Khatib-Chahidi, Jane (1993). Sexual prohibitions, shared space and "fictive" marriage in Shi'ite Iran. In Shirley Ardener (ed.) *Women and space: Ground rules and social maps*. Oxford: Berg. (2nd eds) 112–134.

Lachenmann, Gudrun (1993). Selbstorganisation sozialer Sicherheit von Frauen in Entwicklungslaendern. Sociology of Development Research Centre, Bielefeld University, Germany. (Working Paper No. 191).

Macleod, Arlene Elawe (1991). *Accommodating protest: Working women, the new veiling, and change in Cairo*. New York: Columbia University Press.

Minces, Juliette (1992). *Verschleiert–Frauen im Islam*. Reinbeck: Rowohlt.

Mirza, Jasmin (1999). Working women between *chaddor* and the market: A study of office workers in the Islamic Republic of Pakistan. Faculty of Sociology, Bielefeld University, Germany. (Unpublished Ph.D. Thesis).

Pakistan, Government of (1998). *Labour force survey 1996-97*. Karachi: Federal Bureau of Statistics, Statistics Division, The Manager of Publications.

Polanyi, Karl (1978). *The great transformation*. Politische und ökonomische Ursprünge von Gesellschaften und Wirtschaftssystemen. Wien: Suhrkamp.

Polanyi, Karl (1992). The economy as instituted process. In Richard Swedberg & Mark Granovetter Mark (eds.) *The sociology of economic life*. Boulder/Oxford: Westview.

Rashid, Abbas (1996). Pakistan: The politics of 'fundamentalism'. In Khawar Mumtaz & Kumar Rupesinge (eds.) *Internal conflicts in South Asia.* London: SAGE. 55–80.

Shaheed, Farida (1989). Purdah and poverty in Pakistan. In Haleh Afshar & Bina Agarwal (eds.) *Women, poverty and ideology in Asia: Contradictory pressures, uneasy solutions.* London: MacMillan. 17–41.

Smelser, Neil J. & Richard Swedberg (eds.) (1994). *The handbook of economic sociology*. Princeton: Princeton University Press.

Strauss, Anselm (1987). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.

Strauss, Anselm (1994). *Grundlagen qualitativer Sozialforschung: Datenanalyse und Theoriebildung in der empirischen soziologischen Forschung*. München: Fink.

Strauss, Anselm & Juliet Corbin (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. London: SAGE.

Swedberg, Richard (1990). *Economics and sociology: On redefining their boundaries. conversations with economists and sociologists.* Princeton: Princeton University Press.

Swedberg, Richard (ed.) (1993). *Explorations in economic sociology*. New York: Russel Sage Foundation.

Swedberg, Richard (1994). Markets as social structures. In Neil J. Smelser & Richard Swedberg (eds.) *The handbook of economic sociology*. Princeton: Princeton University Press. 255–282.

Vagt, Holger (1992). *Die Frau in Saudi-Arabien zwischen Tradition und Moderne*. Berlin: Klaus Schwarz.

The Cultural Context of Women's Productive Invisibility: A Case Study of a Pakistani Village*

TASSAWAR SAEED IBRAZ

This paper shows that women in Rajpur, a Punjabi village in Pakistan, participate substantially in activities that are productive and are geared directly or indirectly towards producing utilities of some kind. These utilities arc both income-generating and/or expenditure-saving. Women are extensively involved in many agricultural and livestock-tending operations, in addition to their involvement in other productive domains such as poultry-tending, processing of dairy products, and handicrafts. Whereas men are working in the city to earn extra cash, women too, are working in pursuit of the same goal. However, women's involvement in these activities remains relatively unrecognised within larger cultural pictures and has not resulted in elevating their status within society. Despite women's productive activities, they are largely projected as domestic and private beings and their roles as home-makers, mothers, and nurturers of children have come to be culturally emphasised to the exclusion of all others. The institutions of purdah and segregation of sexes which confine women and their activities to the private domains and permit men access to the public domains act as effective cultural devices in creating blinders to women's productive roles. This paper contends that the existing dominant cultural images of women and the invisibility of their productive dimensions reflect social values rather than social reality.

INTRODUCTION

A myth of female dependency clouds the perception of active productive roles of rural women in Pakistani society and male heads of the households are reported in national labour statistics as predominantly participating in the maintenance and economic survival of the family. For instance, according to the 1981 population census, unbelievably low labour force participation rates for females reported,[61] reflecting a gross underestimation of women's participation in agricultural and related activities. As a result, rural women in Pakistan have seldombeen targeted in rural development programme CS and meagre resources have been allocated for rural development projects aimed at them. This raises some very important questions for a country with a population of over 100 million, out of which approximately one-half of the population is female, and where about 70 percent of the people reside in the rural areas: Are women dominantly dependent on the income generated by men alone to run their households? To what extent do they contribute to the sustenance of the family and in what productive domestic and agricultural spheres of activity do

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[61] Rural Labour Force Participation Rates as reported by 1981 Census were 3.0 percent for females and 76.4 percent for males. Percentage of Labour Force by Occupation, by Sex in Pakistan in 1981 in the occupational category (agricultural, animal husbandry and forestry workers, fishermen and hunters) was reported to be 50.12 percent, out of which 48.80 were males and 1.33 were females. In rural areas, 64.21 percent males were reported to be involved in these occupations as opposed to only 1.76 percent females. (Source: Population Census of Pakistan 1981).

women participate? This raises the need to probe into some of the cultural reasons[62] associated with the undermining of women's productive dimensions and activities as these have a crucial link with the relatively low status accorded women *vis-à-vis* men in Pakistani society.

This paper based on extensive research in a Punjabi village in Pakistan attempts to explore answers to some of these questions. It tries to develop, firstly, an understanding of the nature of productive activities women perform within the household and on the farm. Secondly, it delineates some of the culturally conceived notions regarding women, which, despite their active participation in productive activities crucial for the sustenance of the family, make women and their work appear less onerous than men's in the cultural eyes and project them largely as bearers and caretakers of children, and as those who must be protected and provided for.

Productive work, in this study, is taken in its broadest sense as work that is directly or indirectly geared towards producing utilities of some kind. These utilities can be those that are either income-generating and/or expenditure-saving. In household production, for instance, churning milk is both income-generating and expenditure-saving. Butter and shortening that is processed at home not only meet the consumption needs of the household but are also sold to the villagers or in the market for cash. Similarly spinning cotton or jute is also termed productive—the yarn is used not only for weaving bed-spreads and sleeping-cots but may also be sold to others. At the farm, work related to harvesting and processing of crops is also viewed as productive. The processed crops, in addition to being consumed by the household itself, are also income generating when sold to others for cash, and, again, expenditure-saving if exchanged for other utilities.

The data used in this paper are based on fieldwork conducted in Rajpur—a barani (rain-irrigated) village in District Rawalpindi, located at a distance of approximately 40 kilometres southwest of the capital city, Islamabad. Information on the productive roles of women in agricultural and household activities, in addition to cultural perceptions regarding both males and females and their work, was collected using the techniques of participant observation and in-depth interviewing. Information was gathered through long-term residence in the village (1989—1990). Participant observation which continued throughout the research helped take part in the daily lives of the villagers in general and women in particular—to observe details of work and important events and develop a fuller understanding of the people. Twenty percent of the total number of households were observed[63] and interviewed. In-depth interviews were conducted with male and female heads of the representative households. Questions relating to contributions in agriculture, care of livestock, handicrafts, poultry-tending, and other essential activities relating to family subsistence, provision of food, generation of income, etc., were investigated. Other relevant information was collected through interviews with key informants and village influentials.

[62]Although the low recorded rates of female work participation in Pakistan have been attributed by various social scientists to inadequacies in census-taking techniques, such as definitional problems, conceptual biases of enumeration/enumerators, lack of access of male enumerators to female respondents, etc., cultural perceptions of work which identify men as the main bread-winners have also been identified as contributing largely to the invisibility and, hence, under-reporting of women's roles see Abbasi (1982); Afzal (1992) and Shah (1986).

[63]A total of thirty households were observed.

THEORETICAL FRAMEWORK

It has been stated that the relative status[64] of sexes is co-related with relative contribution to subsistence within the society. Ethnographic/cross-cultural studies regarding the division of labour between sexes have revealed that in societies where both men and women worked side by side in the production of subsistence goods, the relationship between them was relatively egalitarian—for instance, women in such societies had a certain degree of autonomy and decision-making power and were seen to be active in the political and public domains (Boserup, 1979; Engels 1972; Friedl 1975; Leacock 1981; Lee 1979). On the other hand, in societies where men monopolised production, they alone dominated all structures of power.[65] However, it has been conversely argued that women's participation in subsistence production alone does not automatically result in higher female status; a host of other factors (amongst these, to name a few, are the control over production and the access to tasks considered prestigious from a cultural point of view) contribute towards according a high status to women in society, (see Brown 1975; 1986: Ortner 1974; Reiter 1975; Rosaldo 1974; Sacks 1974 and Sanday 1975). Rosaldo, linking the undermined status of women in society to a sharp differentiation between the public and the private spheres of activity, argues that the opposition between the public and the private orientation of males and the domestic orientation of females (because of their biological roles of bearing children and hence caring for them) provides a necessary framework for an examination of male and female roles in society and permits one to isolate those interrelated factors that make women and their activities less culturally valued than men.[66] Thus, the confinement of women to the domestic sphere of activities in contrast to the access of men to the extra-domestic, economic, political, and military spheres of activity is a critical factor in understanding the asymmetrical cultural evaluations of men and women and, therefore, women's lack of social position in society. According to Ortner (1974), the three indicators of secondary cultural evaluations accorded women in a culture are: (1) elements of cultural ideology and informant's statements that explicitly devalue women, treating them, their roles, their tasks, and products as less prestigious than men and their activities; (2) symbolic devices such as attribution of defilement; and (3) social structural arrangements that exclude women from participating in some realm in which the highest powers of the society are felt to reside. These three types of data (which may or may not be related) are reflective of women's secondary status in a given society. In trying to decipher the deep-rooted logic of cultural thinking, which assumes that women and their roles are of a lesser value than men, Ortner asserts that women, on account of their physical, social, and psychological aspects are viewed by cultures as being closer to nature. Firstly, women's physiological, biological, and reproductive functions place them closer to nature in contrast to the physiology of men. Thus, because of women's prolonged bodily involvement in the functions of

[64] The term "status", as argued by some analysts, is too general. In this paper, "status" is held to signify the degree to which women have authority or power in the domestic and/or public domain (Sanday, 1975) and, borrowing from Stoler (1977), it is taken to mean female autonomy—as the extent to which women exercise control over their own lives, as well as returns from their labour *vis-à-vis* men.

[65] For more details, see Friedl (1975).

[66] For related perspectives, see De Beauvoir (1953); Chodorow (1979); Gilligan (1979).

childbirth, they are relatively constrained to take up the projects of culture; men being free of these physiological constraints are in a relatively advantageous position to take up these projects. They are, hence, considered as being closer to culture. Since culture has the ability to transform—to "socialise" and "culturalise" nature—it is therefore superior. This, according to Ortner, has led cultures to place a lower value on women. Secondly, women's physiological functions in turn place them in social roles that are considered to be of a lower cultural order than the roles men take. These social roles tend to constrain and limit the social movements of women, keeping them confined to the domestic, family, nursing, supervisory, and caretaking roles as mothers. Thirdly, women's social roles in turn give them a psyche (moulded to mothering functions) that makes them appear to bc closcr to nature. In sum, this nature/culture division accords women a second-class status *vis-à-vis* men.

Keeping within the framework of the public/private, nature/culture, and male/female dichotomy, this paper contends that the cultural projections of women primarily as mothers and nurturers of children and, hence, as those who need to be protected and provided for, are largely connected with the way cultures adapt certain interpretations about the true roles of both men and women in society and view them in certain well-defined masculine and feminine images. Cultures often create devices that lend credence to and help perpetuate the continuity of such interpretations and images. For instance, it is argued, that in village Rajpur, the institutions of purdah and segregation of sexes[67] divide the entire village space into two distinct public/male and private/female domains. These institutions act as effective cultural devices[68] in confining women and their productive activities within the private domain. Permeating all levels of society, they hamper women's access to other structures of power such as education, information, employment, and political participation on the one hand (Shaheed, 1992) and, on the other, emphasise upon their natural roles as private beings, and as nurturing mothers. In contrast, these institutions permit men access to the public/cultural domain—the domain of business, exchange, knowledge, and power. This, in effect, clouds the cultural perception of the productive roles women perform within the confines of the domestic/private spheres and makes men and their public roles appear as those of providers and hence of more value.

The following section of the paper outlines the intensive and extensive involvement of Rajpur women in activities that are productive and are crucial to the economic survival and sustenance of the family.

[67] Although the word "purdah" meaning "curtain", in its literal sense is understood as the veiling of women's faces and bodies underneath a cloak (burqa). In this study, drawing from Hannah Papanek's definition (1982), the word "purdah" is taken to mean a system of secluding women, restricting them from moving freely into public spaces and enforcing high standards of female modesty upon them.

The crucial element of purdah according to Papanek is its limitations on interaction between women and men outside certain well-defined categories. Caroll M. C. Pastner (1987), in her study of the status of women and property on a Balochistan oasis in Pakistan, talks about purdah in terms of physical seclusion which requires that women in a Muslim community be severely constrained from economic and other activities taking place outside the home. According to Pastner, one of the definitive features of ‚Muslim purdah is that social intercourse between men and women is delimited by the criterion of kinship. In this respect, social access and interaction between men and women is possible only if they are related through blood or marriage.

[68]Authors such as Azari (1983); Jefferey (1979); Mernissi (1987); and Papanek (1982) link female dependency and women's association to the domestic realm of activities to a cultural conception of sexuality and, hence, a prominent cultural concern for the sexual modesty of women. They argue that purdah and the segregation of sexes in a society limit women's physical mobility and social contacts and makes them generally dependent on and subordinate to the male members of the family.

TIIE PRODUCTIVE ACTIVITIES OF WOMEN IN RAJPUR

In Rajpur, as in other villages, land cultivation is a year-round activity. Wheat and pulses are the major crops grown. In addition, maize, barley, peanuts, oilseeds (mustard and taramira),[69] and melons are also grown. Wheat is by far the most important crop of the year and the best land is allocated for this crop. Similarly, pulses are also important and constitute part of the daily diet of the villagers. Maize, barley, and mustard are grown mainly as fodder crops. The production and processing of crops require substantial amounts of both time and labour and specialised activities in which women participate considerably alongside men.[70] However, there are some activities performed exclusively by men, some exclusively by women, and others jointly. Table 1 shows the distribution of male/female and joint activities in different stages of crop production and processing.

Table 1

Distribution of Male-Female and Joint Activities in Crop Production and Processing

Wheat		Maize		Pulses		Mustard/ Taramira/ Sesame Seed		Peanuts		Fodder Crops Millet/Barley	
Ploughing	EM	Ploughing	EM	Ploughing	EM	Ploughing	EM	Ploughing	EM	Ploughing	EM
Spreading Manure	MF	Spreading Manure	MF	Spreading Manure	MF	Spreading Manure	MF	Spreading Manure	MF	Spreading Manure	MF
Sowing	PM	Sowing	PM	Sowing	PM	Sowing	PM	Sowing	PM	Sowing	PM
Harvesting	MF	Harvesting	MF	Harvesting	MF	Harvesting	PF	Harvesting	MF	Harvesting	PF
Weeding	PF	Stacking	MF	Beating/ Separating Seeds	PF	Beating/ Separating Seeds	EF	Separating Shells	MF		
Threshing	MF	Peeling	MF	Winnowing	EF	Winnowing	EF	Threshing	MF		
Winnowing	EM	Threshing	MF	Packing/ Transporting	MF	Packing/ Transporting	MF	Removing Stubs	MF		
Packing/ Transporting	MF	Drying	PF	Sifting	EF	Trans. to Mills	EM	Packing/ Transporting	MF		
Collecting Chaff and Hay	MF	Winnowing at Home	EF	Storing	EF	Storing	EF	Roasting	EF		
Winnowing at Home	EF	Packing/ Transporting	MF	Trans. to City/Selling	EM	Trans. to City/Selling	EM	Storing	EF		
Storing	EF	Storing	EF					Trans. to City/Selling	EM		
Trans. to City/Selling	EM	Trans. to City/Selling	EM								

Source: Author's fieldwork.

Legend: EM Exclusively Male.
PM Predominantly Male.
MF Male Female.
PF Predominantly Female.
EF Exclusively Female.

[69]A plant whose seeds yield a pungent oil which is used for killing hair lice. *Taramira* is also used as fodder.

[70]All households in the village own land. As observed, women from all except two households were involved in agricultural activities on their farms. The two houses had leased out their land. However, because of the small size of land-holdings, leasing of land is not common.

The intensive participation of women in the production, harvesting, and processing of crops is productive in that it also saves money that would otherwise be spent in hiring labour. The processed crops not only meet the household consumption needs but are also income-generating when sold in the market for cash. Harvesting/peak agricultural activity substantially increases the work-load of women who not only have to shoulder the daily burden of housework but also have to provide meals for all those working in the field. Additional labour is often required at this time. Many young boys from within and neighbouring villages offer their services and work on other people's lands on a contractual basis. This contract docs not involve payment of money, but instead two full meals for each day of work. The meal usually consists of bread/rice and vegetable curry and occasionally beef curry. Although additional help also means additional work-load (in terms of cooking) for women, it nonetheless saves money that would otherwise be spent in hiring labour for cash (the cost of providing meals is much less as compared to hiring wage labour). Although it is not a common practice for women themselves to work for wages on others' lands, they do sometimes give a helping hand to their relatives, friends, and neighbours (in terms of additional cooking, baby-sitting, harvesting, and processing) as a goodwill gesture during the peak seasons.

Besides agriculture, women also make a significant contribution towards the caring of livestock, which forms an important part of the village economy and is vital for agricultural purposes and for sustenance.[71] Table 2 shows the distribution of male, female, and joint activities in livestock-tending.

Table 2

Distribution of Male, Female, and Joint Activities in Livestock-tending

Sr. No.	Activities Performed	Performed
1.	Grazing	EM
2.	Bathing	EM
3.	Milking	PM
4.	Harvesting Fodder	PF
5.	Chopping Fodder	MF
6.	Preparation of Cattle Feed	MF
7.	Feeding in Manger	MF
8.	Cleaning of Cattle Shed	EF
9.	Disposal of Dung	EF
10.	Heating Milk	EF
11.	Churning Milk	EF
12.	Processing Butter into Ghee	EF
13.	Selling Milk or Ghee within the Village	PF
14.	Selling Livestock within/outside the Village	PM

Source: Author's fieldwork.

Legend: EM Exclusively Male.
PM Predominantly Male.
MF Male Female.
EF Predominantly Female. EF Exclusively Female.

[71]See Freedman and Wai's (1988) *Gender and Development in Barani Areas of Pakistan*. The study documents in detail the intensive participation of women in crop production and livestock operations, and the income generated by women from the sale of livestock and its products in the barani villages of the Punjab and the North West Frontier Province.

As indicated in the table, the activities of grazing and bathing livestock are performed exclusively by men since these activities take place outside the compound of the house. Other activities related to livestock-tending fall primarily into the hands of women. Cows, sheep and goats are an important source of milk and meat. Milk, butter and *ghee* (clarified butter), apart from being consumed at home, are also sold within and outside the village to generate additional cash. Cow-dung is used as manure and is also mixed in mud to plaster floors, roofs, and courtyards and to make clay ovens. In addition, some women also raise goats/sheep for others on a contractual basis. This contract varies from household to household. In some case, women use the milk for daily consumption and the droppings as manure. The goat, when mature and ready to be sold, is returned to the owner. In most other cases, however, women are entitled to half the money at the time when the goat is sold for cash.

In addition to agriculture and livestock-tending, small items of utility and domestic use are made in almost every household in Rajpur. Girls are initiated into the arts of embroidery, sewing and stitching, and handicrafts such as weaving cots *azarbands*,[72] and *parandas*[73] at an early age. These form important items of a girl's dowry—made at home, they eliminate additional expenditure of buying these items from the market. Poultry is also raised by women on a small scale and is another good source of additional income. Eggs are both consumed within the home and sold to other villagers. Chicken meat is cooked on festive occasions for entertaining guests.

Numerous other activities which can be termed as productive are performed by women in addition to the ones explained above. These include collection of firewood, renovation and plastering of houses, construction of clay ovens, pickle and vermicelli making etc. These activities are productive in that they save money which would otherwise be spent in obtaining these items or services from outside.

Table 3 shows the sequence of productive and other activities performed in off-peak season (a day outside the peak sowing and harvesting season) in one of the households in Rajpur. This particular household comprises 4 members. Father, Raju, is a retired army soldier. He now takes care of his land and livestock together with his wife and two children, a son and a daughter. The size of his land-holding is approximately 2 acres. In addition to the land, Raju owns a pair of oxen, 2 cows, 4 goats, and 6 chickens.

The entire family works hard together to eke out a living. However, each person is responsible for performing specific tasks. Raju is mainly responsible for milking the cows, feeding the animals and taking them out for grazing on commercial pastures outside the village. His son, Jojo, helps his father with the care of the livestock but spends (l larger part of his daily time at school. Mother, Bano, is primarily incharge of the kitchen but also makes a significant contribution towards the care of the livestock. Her set of tasks include harvesting, chopping/preparing fodder for the animals, and cleaning the cattle shed. Daughter, Gufta, helps her mother a great deal with house and animal work. Physical constraints limit additional responsibilities which she will eventually take on as she gets older.

[72]A narrow cotton belt, used for tying trousers to the waist.
[73]A tape with three strands used for tying hair into braids.

Table 3

Sequence of Activities Performed during Off-Peak Season

Time	Mother 40 Yrs	Father 45 Yrs	Son 15 Yrs	Daughter 14 Yrs
5–7 a.m.	Wakes up. Goes to the field to defecate/toilet. Folds bedding. Kneads Flour. Lights oven. Makes tea.	Wakes up. Goes to the field to defecate/toilet. Milks cows. (P)	Wakes up. Goes to the field to defecate/toilet. Gets ready for school	Wakes up. Goes to the field to defecate/toilet. Sweeps court-yard. Cleans poultry shed. (P)
7–9 a.m.	Bakes bread. Serves breakfast. Eats breakfast. Feeds chicken. (P) Cleans cattle-shed. (P)	Eats breakfast. Prepares cattle feed. (P) Feeds cattle. (P)	Eats breakfast. Helps father in fodder preparation. (P) Goes to school.	Eats breakfast. Washes dishes. Sweeps rooms.
9–11 a.m.	Cleans cattle-shed. (P) Disposes cattle dung in the fields. (P) Goes to the field to harvest fodder (P) Pull out weeds (P)	Takes cattle for grazing. (P)	At school	Fetches water from the well. Accompanies mother to the fields. Harvests fodder. (P) Collects fire-wood. (P)
11 a.m. – 1 p.m.	Collects fire-wood (P) Carries home fodder and fire-wood. (P) Lights oven. Eats roti (baked bread). Chops fodder. (P)	Cattle grazing. (P)	At school.	Carries home fire-wood and fodder. (P) Makes tea. Eats roti. Washes dishes.
1–3 p.m.	Stacks fire-wood. (P) Cleans utensils.	Cattle grazing (P)	At school. Returns home.	Visits neighbours. Returns home. Feeds chicken. (P) Weaves Azarbands. (P)
3–5 p.m.	Lights oven. Makes tea. Prepares cattle-feed. (P) Cooks lentils. Kneads flour.	Returns home. Drinks tea. Rests.	Drinks tea. Goes out with friends.	Washes dishes. Fetches water.
5–7 p.m.	Bakes bread. Serves dinner. Unfolds bedding. Arranges sleeping cots.	Has dinner. Feeds cattle. (P) Milks cows. (P)	Has dinner. Helps father feed cattle. (P)	Has dinner. Washes dishes.
7–9 p.m.	Knits sweater. (P) Sleeps.	Sleeps.	Visits friends. Sleeps.	Weaves Azarband. (P) Sleeps.

Source: Author's fieldwork.

(P) = Productive work.

During off-peak seasons, both Bano and her daughter take some time off to relax. Chatting with friends, visiting relatives and neighbours, and resting are leisure activities, performed when more free time is available.

Peak agricultural season alters the daily household routine and increases considerably the work-load of all members of the household, including Bano and Gufta, leaving little or no time for relaxation and leisure. The following table (Table 4) shows the work schedule of Bano's household during the peak agricultural season.

Table 4

Sequence of Activities during Peak Agriculture Season

Time	Mother 40 Yrs	Father 45 Yrs	Son 15 Yrs	Daughter 14 Yrs
4–6 a.m.	Wakes up. Goes to the field to defecate/toilet. Folds bedding. Bakes bread. Makes tea.	Wakes up. Goes to the field to defecate/toilet. Milks cows. (P)	Wakes up. Goes to the field to defecate/toilet.	Wakes up. Goes to the field to defecate/toilet. Kneads flour. Lights oven. (P)
6–8 a.m.	Serves breakfast. Eats breakfast. Cleans cattle-shed. (P)	Eats breakfast. Prepares cattle feed. (P) Feeds cattle. (P) Goes to the fields.	Eats breakfast. Goes to school.	Eats breakfast. Sweeps court-yard. Cleans poultry shed. (P) Washes dishes. Fetches water.
8–10 a.m.	Disposes cow dung. (P) Goes to the field. Harvests wheat. (P)	Harvests wheat. (P)	At school	Feeds chicken. (P) Goes to the field to chop fodder. Chops fodder. (P)
10 a.m. – 12 noon	Harvest wheat. (P	Harvest wheat. (P)	At school.	Harvests wheat. (P)
12 noon – 2 p.m.	Carried home fodder. (P) Lights oven. Bakes bread. Carries bread and butter, milk to the fields for husband. Eats lunch.	Harvest wheat. (P) Eats lunch.	Returns home. Eats lunch	Carries home fodder. (P) Kneads flour. Eats lunch. Washes dishes.
2–4 p.m.	Harvest wheat. (P)	Harvests wheat. (P) Rests. Harvests wheat. (P) Harvests wheat. (P) Returns home.	Goes to the fields. Harvests wheat. (P)	Harvests wheat. (P)
4–6 p.m.	Rests. Harvests wheat. (P) Returns home. Prepares cattle-feed (P)	Harvests wheat. (P) Returns home.	Harvests wheat. (P)	Returns home. Fetches water. Cuts vegetables.
6–8 p.m.	Cooks vegetables. Bakes bread. Serves and eats dinner.	Feeds cattle. (P) Eats dinner.	Returns home. Eats dinner. Milks cows. (P)	Kneads flour. Lights oven. Eats dinner Washes dishes.
8–10 p.m.	Makes tea. Chats with neighbour. Sleeps.	Has tea. Sleeps.	Has tea. Sleeps.	Has tea. Sleeps.

Source: Author's fieldwork.

(P) = Productive work.

As indicated by the table, peak agricultural season requires both intensive labour and long working hours in the field. The day is started earlier than the normal schedule so that maximum time is devoted to agricultural operations. At the same time, daily chores have to be attended to as well. Father (Raju) requests his neighbour's ten year-old son to take the cattle out for grazing after school. This allows him to spend maximum time in the field. Jojo's labour is very crucial but he must also attend school, which starts and ends early

during the harvesting season. (Village schools often make such provisions during peak agricultural seasons to discourage absenteeism, which is otherwise quite common at such times). Upon returning home, Jojo helps his parents with agricultural work.

Mother Bano puts in 7-8 hours of harvesting work in the field in addition to attending to her daily chores such as cooking, cleaning, and livestock-tending. Raju puts in 9 hours of work in the field but is relieved of his responsibility of grazing the animals. Both Jojo and Gufta put in 4 hours of work each.

Despite the intensive involvement of women in the above-mentioned domains of work, they are viewed as playing insignificant roles in terms of providing sustenance to the family. The following section of the paper deals with some of the dominant cultural notions of women which are related to the undermining of their productive roles.

PUBLIC/PRIVATE, NATURE/CULTURE, MALE/FEMALE DOMAINS IN RAJPUR

The depiction of women as playing passive or insignificant roles, the overemphasis of their roles as mothers and wives, and an underestimation of their productive contributions are aspects not of their invisibility but distorted visibility. The problem, thus, lies not with the invisibility of women but in the distortions of their visibility and the assumption of their derived identity and status [Ardner (1986)].

In Rajpur, the dominant cultural perceptions regarding women revolve mainly around their biological attributes of reproduction. 'These attributes are not only seen as a rationalisation for the existing division of labour but are also seen as according a different psyche to women—one that is suited to performing roles centring around the home and family and requiring minimal interaction with the outside world. Women on account of these attributes are perceived predominantly as biologically vulnerable beings; as home-makers, producers and care-takers of children; and as those relatively deficient in the faculty of reasoning and intellect "*samhaj* and *aql*"—the two qualities thought to be of crucial importance in dealing effectively with the public world. Interestingly, views regarding women are in sharp contrast to those held regarding men who are culturally visible in such roles as the managers of women, of the outside world, and ones consequently ordained with the mental capacities to take charge and develop links with the public domain. The division of the village into distinct male/female domains substantiates these views and embeds them deeply into the cultural psyche. These domains are conceptually and ideally much more separated and distinct than what, in reality, appears to be. Although as pointed out in the paper, women work alongside men in many domains such as seasonal agricultural activities and day-to-day livestock-tending, yet these domains have a distinct division of labour within them. (There are some tasks performed exclusively by men while others exclusively by women.) The interesting aspect of this division is that it is based less on the physical differences of muscular strength between men and women but more on the way culture views their biology and biological propensities—for instance, women are barred from activities such as grazing and ploughing, not because they are thought to be lacking the physical strength to perform these activities but because it is believed that a woman's ploughing in the field alone and grazing animals away from the village compound, especially during late hours, makes her physically vulnerable, in terms of her natural, biological capacities of

conception and reproduction. Similarly women are barred from many other tasks such as winnowing wheat in the open (the process of winnowing inside the house is performed exclusively by women), climbing trees to pull down leaves or branches for fuel, which may draw attention of *unrelated* men and hence make women visible in their eyes. Girls from a young age are encouraged to take part in sports that are sedentary and in-doors and which do not draw the attention of males towards them, hence keeping their activities private. Boys, on the other hand, play rigorous games, mostly outside the compound of the house, This, often, is the preliminary step to future sex role differentiation and prescribing of male/female activities within the distinctive public/private spheres.

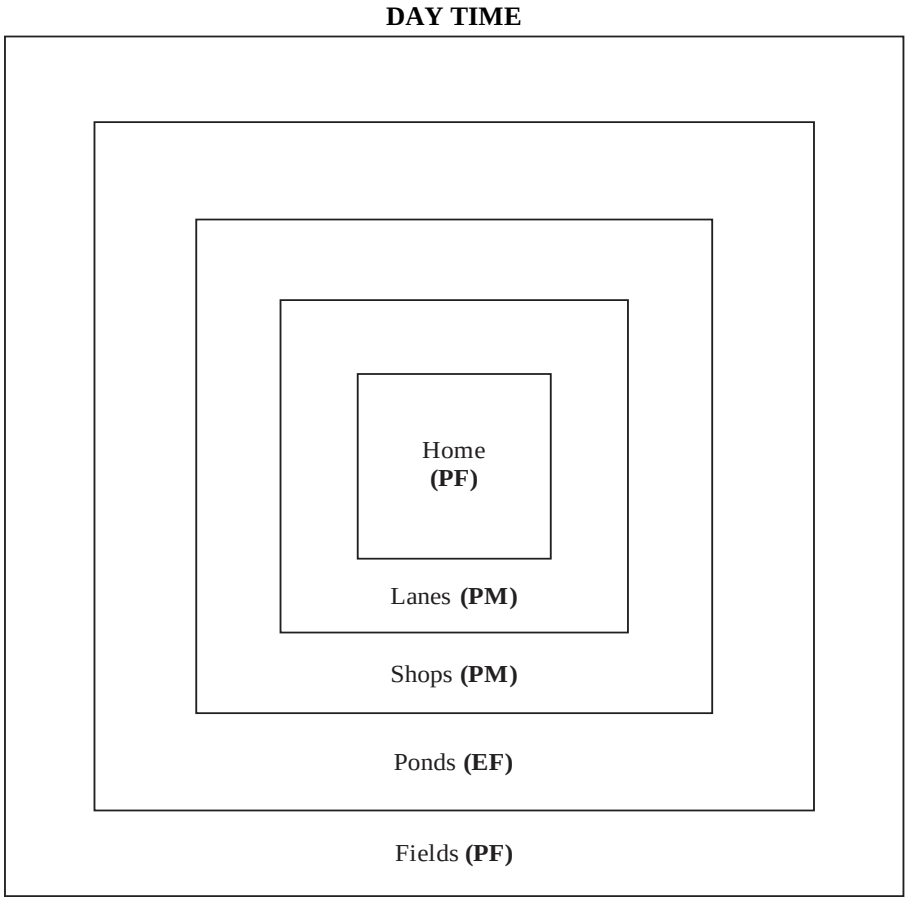
Since the female is considered as more vulnerable (to male advances), her social behaviour and activities are intricately tied to the "honour and shame" of the family (Ahmad, 1986; Mandelbaum, 1988; Vatuk, 1982). Guarding the vulnerability of women, hence, becomes an issue of immense concern to the villagers. They are expected to conform to certain codes/ideals of modesty, certain behaviour restrictions, especially in terms of their visibility in the public domains and in their interaction with *unrelated* males, in addition to performing only specific activities and work considered appropriate for them. The need for restricting women's mobility arises because, relatively, there are no restrictions on the mobility of men. So that the tow sexes will remain segregated and not freely interact, it is the mobility of women that must be restricted—it is widely believed that "man is the hunter and woman the prey".

The segregation of sexes which divides the village into the male and female space, gives it a public/private connotation. All male space is public while the female space is private. In this respect, the home and its compound represents the private domain, whereas the village streets, shops, etc., represent the public—the domain of men.

It is crucial to point out that while the connotation of the house remains purely private, as a place where the vulnerability of the females is well-protected, the village oscillates between the public and the private, depending upon the time of the day. Hence, space is used by both men and women at different times in different ways. Whereas streets remain public irrespective of time, agricultural fields take on a private connotation during the day-time, when women must perform their daily agricultural and livestock-tending activities, and they become public (and prohibited for women) again during the night. Since a majority of men step out of the village in the morning to work in the city or to graze cattle, women have more mobility within the village which permits them to perform their daily chores effectively. Similarly, the village ponds where women bathe and do their laundry take on a private connotation during the daylight hours but become public (accessible to men only) during the night. (All village ponds are for the use of women alone; men bathe in ponds outside the village.) A woman entering male spaces such as the streets, with a basket full of cow dung (to be disposed of in the fields) or a pot full of water (drawn from the village well) on her head, has a legitimate reason to do so during the day but is otherwise viewed as provocative and, hence, vulnerable. As the day turns into night, all space outside the compound of the house becomes restricted for women. However, certain concessions for legitimate outside activity are available despite restrictions—for instance, women are often seen going to the fields at night to defecate in groups of three to four. The formation of these female groups makes women appear more private and less vulnerable, neutralising the public connotation of space. This permits women to go about their business privately in the otherwise public spaces.

Figures 1 and 2 show the changing public/private connotation of the village. Women on the basis of their private and natural images are viewed as those "who look good within the house". The house, apart from having a private connotation, epitomises other meanings as well—a house is a place where one satisfies one's primary and material needs for shelter, food, rest, and sex. On the other hand, the public space, which is removed from the house, is where men satisfy their secondary/material and cultural needs such as social contacts, business and economic transactions, and entertainment.[74]

Fig. l. The Changing Public/Private, Male/Female Connotation of the Village during Different Times of the Day.

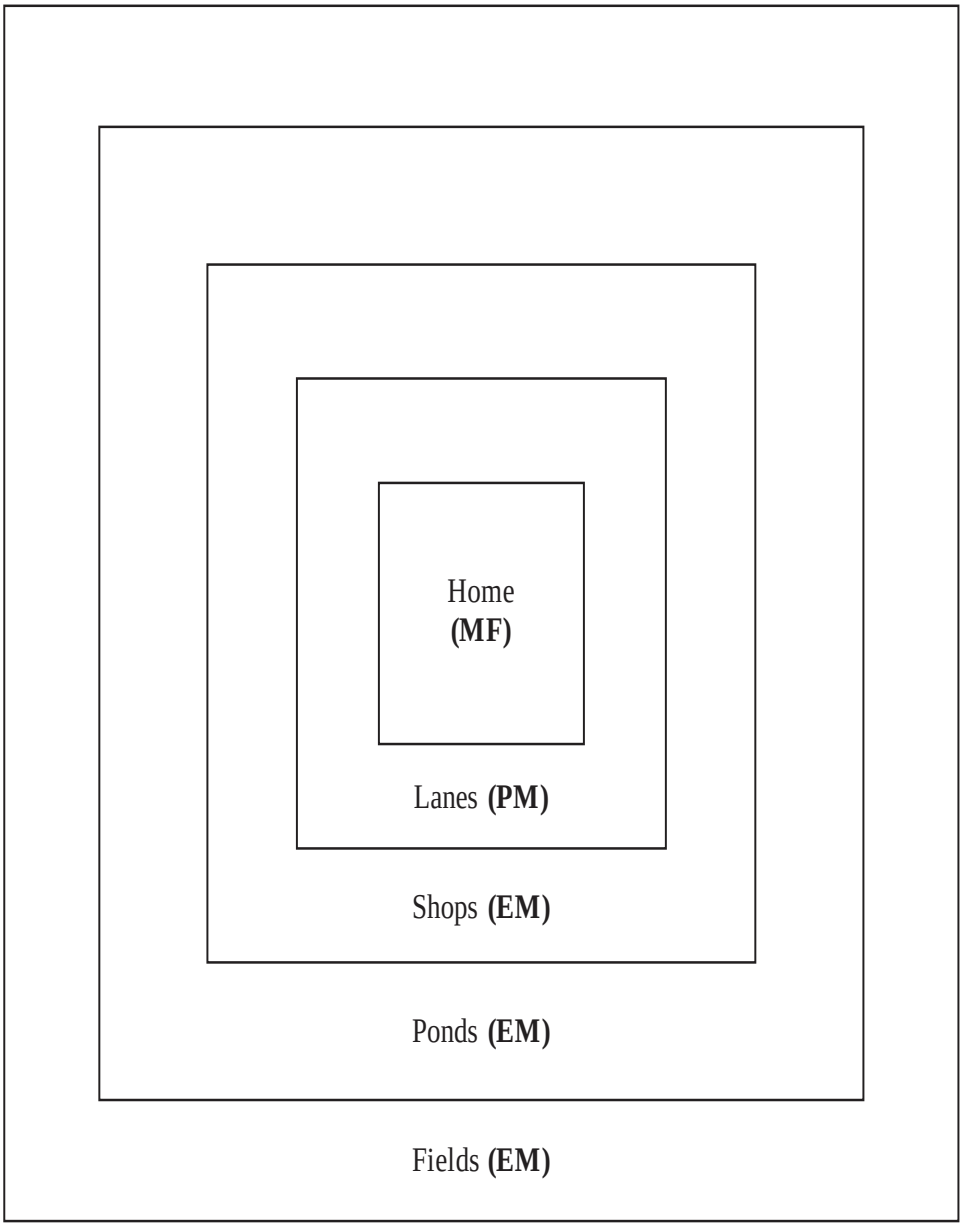


Source: Author's fieldwork.

Legend: EM Exclusively Male.
PM Predominantly Male.
MF Male Female.
PF Predominantly Female.
EF Exclusively Female.

[74]See Ali (1986) for some interesting parallels in her study of male and female spheres in a Pakistani village.

Fig. 2. The Changing Public/Private, Male/Female Connotation of the Village during Different Times of the Day.



Source: Author's fieldwork.

Legend: EM Exclusively.
Male PM Predominantly Male.
MF Female.
PF Predominantly Female.
EF Exclusively Female.

The house is a symbol of femininity where only females should be seen. The outside world represents the male world and, therefore, masculinity dictates that a man spend most of his time outside the house as doing otherwise subjects him to social ridicule and gives him a feminine image—the image of passivity. The house and the women, therefore, arc very much alike, as both satisfy the basic needs. The house is where one eats food—the women cook the food. The house is where the man comes to satisfy his needs for sex with his partner—the wife becomes the channel. Similarly, the house is where one comes after detaching oneself from the outside world of knowledge, public contact, and exchange—women are viewed as already detached from these domains.

This spatial division according to sex also reflects a certain allocation of power and is, thus, hierarchical—it is a division between those who hold power and authority and those who do not. Since men are permitted access to the public domain, working for wages is culturally perceived as a male prerogative and remains the domain of men *par excellence*. Not only that, all other domains involving any kind of financial transactions outside the domestic realm are also monopolised by men. Although women work alongside men in most of the processes involved in the production of crops, yet men take over as the crop is processed and made ready for sale, as they alone are permitted access to the world of business and exchange. Ironically both the credit and returns for the finished commodities go to the person who makes the sale. Although, as observed, women are involved extensively in activities relating to the care of livestock, they cannot buy or sell animals in the market. All monitory transactions are conducted by and amongst men and payment is made to the male heads of the households "even for work done by women" (Shaheed, 1992, p. v). Women are culturally constrained to confine production and productive activities within the private domain and not transgress these boundaries. Sale of utilities and contacts outside the domestic realm necessitates the presence of a male, since he is the only one who has access to the public world. Women do not have any more opportunities to earn cash other than the paltry amounts they earn from selling such items as eggs, milk, and handicrafts within the village.[75]

Risks associated with women's public interaction and activity, in terms of their physical vulnerability and the family's honour, further constrain women to the private domain, taking away from them the control over the utilities they produce and thrusting it into the hands of men. Women's economic subjugation contained in the lack of control over economic sources and restrictions on working for wages persuades them of the importance of men's work and of the trivialness of their own. The income men earn from the cities gives them an upper hand over women. Men, aware of the importance of their cash-earning privileges, use this as a tool to monopolise their worth and power in the household. This earning power makes men appear in the cultural picture as the only

[75] These items are sold on demand or whenever a need arises. There is no regular clientele for these items.

providers, and leads to the erroneous assumption that all females of the household are economically dependent on them.[76]

In addition, women are conditioned into finding gratification not in roles as earners but in their culturally idealised roles as mothers and bearers of children, and into considering the incompatibility of these roles with the public domain. Hence, women who *indulge* in work outside their houses and in other entrepreneurial activities involving public interaction are seen as performing activities which are in contradiction to what they must ideally personify—a home-maker, a good cook, and a devoted nurturing mother. Women are predominantly valorised in their natural functions and, at each stage of their lives, are viewed in terms of their biological propensities which have a specific role to fulfil. For instance, women are perceived as chaste daughters/sisters, fertile wives and nurturing mothers. Punishments and social rewards available to women are inextricably linked to their natural biological propensities. Marriage prospects of a girl are jeopardised if she does not come up to the culturally prescribed standards of chastity and modesty. Similarly, marriage is threatened if a wife is unable to fulfil her natural procreative roles as a mother. Motherhood is a prelude to future happiness. Proverbially, "Heaven lies under the feet of mothers"—that is, for those who have successfully fulfilled their natural child-bearing functions. Thus, a woman who engages in the public-sphere activities is one who, in the cultural thinking, is missing out or at least not carrying out effectively the activities that she must learn as part of her identity as a female.[77] Most importantly, in the cultural thinking, a woman engaging visibly in earning activities reflects negatively on the male head of the household, casting him as a poor provider. Masculinity which is understood in terms of the capacity to earn an income, as stated earlier, is thought to be the prerogative of men. Therefore, a man who lets the women of his household engage in outside economic activity is exposing his inability to provide effectively. Women's financial pursuits in visibly public domains are, therefore, viewed as an outcome of adverse economic conditions. Purdah and veiling and women's lack of involvement in economic activities come to be viewed as luxuries only the financially affluent can afford. These luxuries then become cultural ideals that men aspire for—for their women; as they reflect positively on their image as good earners and, hence, on their masculinity.

Because of women's biological propensities and fundamental, reproductive roles, they are perceived as effectively performing tasks and social roles centred around the family and home. The tasks assigned women, although important for the smooth functioning of the household, do not enhance their relative cultural worth. For instance, women may find gratification in their roles as home-makers, and may

[76]Women were culturally conditioned into thinking that the gains from working in the city were much more than working in the field and taking care of their livestock. The income of men working in the city for wages/salary (a large number were serving in the Pakistan Army) is comparatively steady (although not always greater) as compared to the income generated by the sale of livestock and agricultural produce. This further enhances the importance of men's work. In addition, natural calamities such as lack or excess of rain may effect the yield of crops. Similarly, unforeseen circumstances, such as death or occasional theft of livestock, also make income from the city more valuable.

[77]See Goddard (1987) for some interesting parallels in her study of working-class women in Naples.

even be in some respects mistresses of their compound, but this domestic power does not get translated into social power and prestige which the public sphere embodies. They remain responsible for tasks that are monotonous, repetitive, and keep them confined to their houses and villages, limiting their contacts within the kin group. Not only that, women in the cultural eyes are seen as incapable of dealing with the outside world—world which, according to men, requires intellect and reasoning (*aql* and *samhaj*),[78] the two qualities in which women are thought to be comparatively lacking. They are, hence, kept away from the public world "for their own good". Men, on the other hand, in their traditional, cultural images as *mijazi khuda* (worldly, imaginary gods) and *maliks* (masters), guardians, protectors and providers, and as those possessing greater *aql* are allowed not only to dominate women but also other structures of power outside the home.

Because of the above-mentioned dominant cultural images, males come to be culturally more valued. In this respect, the birth of a boy is a harbinger of happiness and an occasion of greater joy and celebration than the birth of a girl. A woman bearing sons is considered lucky and is viewed as one who is "blessed" and on whom God has been gracious. Although daughters are considered "good things" by their parents, a number of factors justify the parents' wish for a male child. These factors also account for the preferential treatment males are likely to receive in different kinship roles as sons, brothers, husbands, and fathers. This preferential treatment is often rationalised in terms of being God-ordained and is manifested in the celebration of the birth ceremony. *Aqiqa*, in which, according to the Islamic injunctions, it is incumbent upon the parents to sacrifice, in the name of God, two rams for a boy and only one for a girl. This practice has as its symbolic content certain ideas about maleness and femaleness which are collectively recognised and, in turn, embedded further and deeply into the minds of the actors. The practice, as reported by the respondents, conveys that the divine instruction of sacrificing two rams for a boys denotes that they are to become the future bread-winners of the family and a source of financial security. On the other hand, the sacrifice of one ram for a girl is understood as a financial concession granted to the parents by God, since the girl is to become nothing but a financial liability and is the one who is born with a "mouth to feed". The birth of a daughter adds considerably to the parents' financial concerns, especially regarding her dowry, which they will have to provide at the time of her marriage.[79] Daughters are referred as "*vehray de chiryan*", i.e., "birds of a courtyard", or as "*paraee*", those who belong to someone else. Another widely used term for daughters is *mizman/mehman*, guests. Such phrases, also widely used in Pakistani folk/wedding songs, signify the transience of their stay in their parents'

[78]Naqvi (1986), highlights some interesting views of western philosophers regarding women. Some of the views which Naqvi believes have an element of condescension towards women have come to be accepted as almost universal truths and have sunk into man's subconscious.

[79]One of my male respondents verbalised his concern about this issue in the following statement:

"Daughters are good things, if it had not been for their dowry—you know, this is the difference between sons and daughters. Sons fil up their parents' houses. They bring home money and, when they get married, their brides bring in dowry — and girls, they just empty their parents' houses, otherwise they are good things. If we did not have to give them dowry..."

house. They are like birds who flock into one's courtyard, peck on the grain and, having doing so, fly away, giving nothing in return—like guests who come for a visit and then go away to their respective destinations. Sons are considered "*apna*", "one's own" as opposed to "*paraya*" "someone else's". Furthermore, it is only sons who can perpetuate the lineage. Parents shudder at the thought of being labelled as "*autra*", tailless — without sons. Sons are also considered as a source of old-age protection and shelter, apart from providing financial security. Women with sons have a "place to go to" in their old age when they lose their husbands. Since daughters are given away and are "*paraee*", they are in no position to offer any kind of support to the aging parents. Having a son means that the "doors always remain open" for the parents in old age.

Despite the dominant cultural interpretations which cast women as dependent, domestic beings and as those ordained with the biology and, hence, the psyche to perform effectively the roles of mothering and nurturing children, the fact remains that men in reality are not the only "protectors and providers" within the household. Such interpretations foster a kind of blindness to those roles that do not fit into the cultural ideals, or are seen as jeopardising the traditional role recognition. It has been argued that in societies where the authority of males is embodied in the ability to provide for their families, women are more likely to be valorised in their dependent, natural, maternal, and care-taking roles. Thus, any economic endeavour on the part of the women will be seen as a Joss of male status and as an attack on the acknowledged allocation of power (Mernissi, 1987). In addition, such endeavours are likely to be viewed as the transcendence of females from the "natural" to the "cultural", from the "private" to the "public", and consequently from the subordinate to the powerful. As a result, the productive contributions of women are likely to be sifted through cultural blinders and only men projected in the larger cultural pictures as the main bread-winners, protectors, and providers.

CONCLUSION

In Pakistan, there remains a crucial need for reliable and accurate data on female labour force participation as well as on the nature of the activities performed by rural women. The recognition of women's work as essential to subsistence and as an increasingly critical factor in agricultural production is missing from the work of development planners (Rogers, 1979); agricultural and rural development programmes in the past have been directed predominantly towards men. This has resulted largely due to the lack of recognition and reporting of women's productive contributions. This paper has attempted to outline comprehensively the productive activities performed by women in a Pakistani village and provides baseline data regarding women's involvement in agriculture and livestock activities, which are crucial to the sustenance of the family.

Although this research does not account for regional or intra-regional variations (degree of proximity or isolation from towns or urban centres, restrictions and prevailing norms regarding women's mobility, etc.), which may be related in varying

degrees to the work of both men and women in rural areas, it suggests that knowledge about rural women and of their participation in both agricultural production and management is essential for the planning and implementation directed towards rural development. Misrepresentations and inadequacies of data regarding women, on which development planning is based, not only have a detrimental effect on women themselves, but also on the subsistence agricultural and livestock sectors in which women participate considerably. It is hoped that the information provided about the realities of women's lives and work will help raise consciousness about women as productive member of society, beyond the cultural projections of their reproductive and domestic roles.

REFERENCES

Abbasi, N. (1982). Problems of conceptualisation and measurement of rural women's work in Pakistan. Institute of Social Studies, The Hague, The Netherlands. (M.A. Thesis).

Afzal, M. (1992). Female labour force reporting in South Asia: Some issues. In Ashish Bose and M. K. Premi (eds.) *Population transition in South Asia.* New Delhi: B. P. Publishing Corporation.

Ahmad, A. S. (1986). Mor and tor: Binary and opposing models of pakhtun femalehood. In A. Ahmad (ed.) *Pakistan society: Islam, ethnicity and leadership in South Asia*. Karachi: Oxford University Press.

Ali, A. (1986). The male and female spheres in Karak. Islamabad: Quaid-i-Azam University. (MSc. Thesis).

Ardner, E. (1986). The problem of dominance. In E. Leacock Dubc and E. Ardncr (eds.) *Visibility and power.* Oxford University Press.

Azari, F. (ed.) (1983). Sexuality and woman's oppression in Iran. In *Women of Iran: The conflict with fundamentalist Islam*. Ithaca Press.

Boscrup, E. (1970). *Woman's role in economic development*. New York: St. Martin's Press.

Brown, J. K. (1975). Iroquois women: An ethnohistoric note. In R. Reiter (ed.) *Towards an anthropology of women*. New York: Monthly Review Press.

Chodorow, N. (1979). *The reproduction of mothering: Psychoanalysis and the sociology of gender*. Berkeley: University of California Press.

De Beauvoir, S. (1953). *The second sex*. New York: Originally published in French in 1949.

Engels, F. (1972) (Orig. 1984). *The origin of family, private property and the state*. New York: International Publishers.

Epstein, S. (1986). Socio-cultural and attitudinal factors affecting the status of women. In A. K. Gupta (ed.) *Women and society: The development perspective*. New Delhi: Criterion Publications.

Freedman, J. & Wai, L. (1988). *Gender and development in barani areas of Pakistan*. For Agriculture Canada.

Friedl, E. (ed.) (1975). *Women and men; An anthropologist's view*. Holt Reinhart and Winston.

Gilligan, C. (1979). Woman's place in man's life cycle. *Harvard Educational Review, 49*(4).

Goddard, V. (1987). Honour and shame: The control of women's sexuality and group identity in Naples. In Pat Caplan (ed.) *The cultural construction of sexuality*. London: Tavistock Publishers Limited.

Jefferey, P. (1979). *Frogs in a well: Indian women in purdah*. London: Zed Press.

Klein, H. G. & R. Nestvogel (1992). *Women in Pakistan: General conditions approaches and project proposals for the development of vocational qualification of women in the province of the Punjab*. Lahore: Vanguard Books Limited.

Leacock, E. (1981). *Myths of male dominance*. New York: Monthly Review Press.

Lee, R. B. (1979). *The !Kung san: Men women and work in a foraging society*. Cambridge and New York: Cambridge University Press.

Mandelbaum, D. G. (1988). *Women's seclusion and men's honour. Sex roles in North India. Bangladesh and Pakistan*. Tuscon: The University of Arizona Press.

Mernissi, F. (1987). *Beyond the veil: Male female dynamics in modern Muslim society*. Indianapolis: India University Press.

Naqvi, S. N. H. (1986). Foreword in N. Shah (ed.) *Pakistani women: A socioeconomic and demographic profile*. Islamabad: Pakistan Institute of Development Economics/Honolulu, Hawaii: East West Population Institute. pp. xxi—xxxv.

Ortner, S. (1974). Is female to male as nature is to culture. In M. Z. Rosaldo & L. Lamphere (eds.) *Woman, culture and society*. Stanford: Stanford University Press.

Papanek, H., and G. Minault (eds.) (1982). *Separate worlds: Studies of purdah in South Asia*. Delhi: Chanakya Publications.

Pastner, C. (1987). The status of women and property on a Balochistan Oasis in Pakistan. In L. Beck and N. Keddie (eds.) *Women in the Muslim world*. Harvard University Press.

Reiter, R. (ed.) (1975). *Towards an anthropology of women*. New York: Monthly Review Press.

Reiter, R. (ed.) (1975a). Men and women in South of France: Public and private domains. In *Towards an anthropology of women*. New York: Monthly Review Press.

Rogers, B. (1979). *The domestication of women: Discrimination in developing societies*. New York: St. Martin Press.

Rosaldo, M. Z. (1974). Woman, culture and society: A theoretical overview. In M. Z. Rosaldo & L. Lamphere (eds.).

Sacks, K. (1974). Engels revisited: Women, the organisation of production and private property. In M. Z. Rosaldo & L. Lamphere (eds.).

Sanday, P. (1975). Towards a theory of the status of women. *American Anthropologist, 75*.

Shah, N. (1986). *Pakistani women: A socioeconomic and demographic profile*. Honolulu: East West Population Institute.

Shaheed, F. (1992). *Preface in women in Pakistan: General conditions, approaches and project proposals for the development of vocational qualification of women in the province of the Punjab*. Lahore: Vanguard Books Limited.

Stoler, A. (1977). Class structure and female autonomy in rural Java. *Signs*, 3, 74—89.

Vatuk, S. (1982). Purdah revisited: A comparison of Hindu and Muslim interpretations of the cultural meaning of purdah in South Asia. In H. Papaneck & G. Minault (eds.) *Separate worlds: Studies of purdah in South Asia*. Dacca: Chanakya Publications.

The First Women Bank—Why and for Whom?*

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I. INTRODUCTION

The First Women Bank which commenced operations in December 1989, has over a period of one year, set up 10 branches in the big cities of the country. The name of the bank suggested that it would function on the same lines as the Grameen Bank of Bangladesh. It was widely believed that the Bank was meant to assist the very poor women in their economic uplift. However, with the exception of two branches (one in Gurumander, Karachi and the second in Sukkur), the branches of the bank have been set up in posh localities like Defence, Cantonment, Blue Area and Mall Roads. The expensive location and the expensive set-up of these banks has created the image that these banks are meant to cater for the rich, elite women, rather than the poor deserving women. The very poor earning women in low-income localities are totally unaware of this bank's existence because it has not been advertised to them through audio or video media. However they envied poor women in India who benefited from the credit schemes[80] for women, as shown on Indian television.

This paper attempts to look into the factors behind the establishment of the bank and its working strategy, to clarify, to whatever extent possible, the confusions or contradictions associated with this bank. Section II puts forward the various factors underlying the establishment of a separate bank for women in Pakistan. Section III describes the operational strategy of the bank with special focus on the nature of clientele and credit services of the bank. Section IV puts forward the conclusions and Section V gives some policy recommendations.

The paper is based on the published material made available by the bank i.e. the brochure of the bank (the first annual statement of the bank had not been published at the time of writing this paper), informal discussions with the bank staff, and personal observations of the author during the working hours of the bank. A written questionnaire based on the activities of the bank described in the brochure, was also submitted to the bank staff of the First Women Bank. However they preferred to talk informally rather than give concrete statistics in writing.

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[80] It may be pointed out here that in the very poor income groups televisions are important consumer durable. See Bilquees and Hamid (1989).

II. CRITERIA FOR THE ESTABLISHMENT OF THE FIRST WOMEN BANK

Originally the idea of a bank for women was floated in the 1988-89 budget speech of the caretaker Finance Minister. This announcement was made in combination with numerous measures aimed at the welfare of very poor women, widows and orphans. He hinted in his speech that the proposed banks would be based on the principle of the Grameen Bank of Bangladesh focusing mainly on very poor women.

However, in November 1989, the new Finance Minister of the elected government announced the establishment of the women's bank. He said, "The women in this country have often expressed difficulty in dealing with the banks. To alleviate their problems the government has, therefore, decided to establish a women's bank which will be manned and run by women themself. It will offer all kinds of banking services to its women customers and it will have branches all over the country". Regarding the operation of the bank in his post-budget press conference he said, "We have set it up for women and they would know how to handle it."

The brochure of the First Women Bank has described the criteria for the establishment of the bank as, "Among the priorities set forth by the Prime Minister for improving the socio-economic status of women in Pakistan major focus has been on making the women economically independent and for that purpose setting up financial institutions, controlled, managed and run by women was considered an imperative need of the time. As such the First Women Bank has emerged as a specialised financial institution with a specific objective of augmenting economic status of women by offering various traditional and non-traditional services. Therefore the bank is a mix of Development Finance Institution, a Commercial Bank and a Social Welfare Organisation".

These statements suggest that the establishment of this bank was more of a political gesture rather than a well-thought out project with well-defined priorities. Had the priorities been laid out and the target groups identified, the locations of the banks would have been different. The neglect of these factors implies that the relevant agencies like the Ministry for the Development of Women (which provides 10 percent of the equity capital and, has massive data on the poverty, work profiles and economic exploitation of the poor women), researcher and NGOs were not consulted.

III. OPERATIONAL STRATEGY

(a) Clientele of the Bank

According to the Bank brochure, "keeping in view the peculiar socio-economic, cultural, religious bindings and life-style in the country it was felt necessary to have a bank managed and run exclusively by women, but at the same time, in order to preserve the concept of non-discrimination on the basis of sex as enumerated in the country's constitution its clientele has been kept open to all with only a restriction that credit facilities are not extended to male or male-oriented business organisations".

This statement justifying the mixed clientele is contradictory on two grounds. First, the finance minister said that a separate bank was being set up for women because they were having difficulties with the banks. What are these difficulties to women taken to imply? Common sense suggests that it is more of the crowding of general public or

clients at the bank, rather than the bank staff only, which hinders their access to the banks especially of the poor illiterate women. Therefore, the separate bank would ease the mobility of the women to the bank. Of course with female staff they would be still more comfortable in their dealings. So a facility of a separate bank cannot be taken to imply *discrimination* as such. Second, again this is negated by the opening sentence of the statement that social, cultural, religious bindings and life-style required the establishment of a separate bank for women. Now the question arises whether preserving social, cultural, or religious values implies discrimination? Non-discrimination as implied here is totally absurd. Does this mean that the proposed separate university for women should be open for admission to male students to preserve the concept of non-discrimination as implied in the constitution? As a matter of fact, the bank clientele is being kept open to all to improve the liquidity of the bank which is essential for the economic viability of the bank. This is stated in the brochure of the bank, as well as by the staff of the bank in informal discussions.

Contrary to the argument of discrimination between the male and female customers, the State Bank of Pakistan is discriminating between male and female employees of other commercial banks and the First Women Bank, on two scores: First, the set-up of the First Women Bank is very "expensive" compared to other commercial banks which is also a factor attracting clientele. This difference in the set-up implies discrimination between its male and female employees in the same cadres of service. Second, in case of other commercial banks only the head offices are authorised to handle foreign currency, especially the issuance of foreign currency. However the branches of the First Women Bank at Islamabad and Lahore also issue foreign currency besides the head office at Karachi. This is not only discriminatory, it also exposes the staff of the Women Bank to the danger of fraud. The foreign currency accounts are mainly held by male clients and the staff of the Islamabad branch have talked about two attempts of fraud by male clients. This not only puts their job in jeopardy, they also have to face legal process, because the bank staff is equally held responsible in such cases.

(b) Deposit Taking

As a commercial bank the First Women Bank caters for deposits in the usual categories like other commercial banks. To ascertain if the establishment of the bank had mobilised savings by women, a few written questions were asked regarding the shares of current and fixed deposits between male and female account holders. The bank staff could only tell that the current and savings accounts were on a one to one ratio, which was not very useful information. The First Women Bank sources said they wished to raise the rate of profit on deposits and undercut on interest rates on loans, but the State Bank has refused permission. However the State Bank sources maintain that there is no restriction on any commercial bank in this regard, it all depends on the profitability of the bank. Since the Women Bank was running in losses therefore it could not afford to pay higher profits or lower the interest rates.

It is possible that the bank may be suffering losses, but then it may also be the result of official interference. For example, at the Islamabad branch of the Bank one lady marketing consultant was appointed from the top because she was well connected at the higher levels in the Ministry of Finance, on a "meagre" salary of six thousand rupees. Her

daily routine as observed during working hours of the bank was: Arrival around 11 a.m., had tea, smoked Dunhill in the air-conditioned hall, without any consideration of the inconvenience caused to colleagues. Then she made a few long-distance calls while the manager of the branch was out doing the job for her, and left around 1-o'-clock. In one particular month the net profit of the bank was six thousand rupees which was paid out as her salary. *This reflects the attitude of the authorities towards this institution*. Well connected women could take advantage of this institution at the expense of other women. So the suspicions that the bank is meant to serve only the elite women are not totally baseless but the question arises who is responsible for it. Obviously not the regular female staff of the Bank! Of course the said lady resigned after 6th August 1990.

(c) Credit Services

The brochure of the Bank describes the provision of easy and cheap credit as the most important attribute of the Bank's credit policy. The term cheap and easy refers to:

(a) Easy accessibility to source of credit; (b) Simplified procedure for applying for loan; (c) Quick decision and quick disbursement of credit; (d) Relaxation of collateral and equity requirements[81] in case of viable projects and where borrower is competent enough to make effective use of funds.

With regard to investment the Bank's major focus is on small-scale enterprises[82] or any other project identified by the prospective borrowers themselves.

Furthermore, as a part of its operational strategy the bank lists out a number of non-traditional services provided by the bank.

(a) Provides advisory and consultancy service in the matter of investments, and identifies viable projects (both in industrial and agricultural sectors) to would-be women entrepreneurs;
(b) Provides training facilities for developing technical and managerial skills of would-be women entrepreneurs both in urban and rural sectors;
(c) Identifies and develops markets both at national and international levels for products of women entrepreneurs; and
(d) Promotes artistic work of all nature of women by arranging exhibitions of their work in the bank's spacious branches in big cities and also by managing and sponsoring exhibitions of client's products in national and international industrial exhibitions. Let us consider these one by one.

With regard to the easy access to source of credit, in the light of discussion with regard to the locational policy of the banks and lack of publicity to the deserving groups a very simple question is: *easy accessibility to source of credit for whom*?

With regard to the Bank's focus on the investments in the informal sector with emphasis on small-scale enterprise, the bank was asked to give a broad classification of the projects identified by borrowers. Furthermore, whether the borrowers were advised on new or more viable projects. According to the bank staff the very low-income

[81]Within the framework of credit restriction imposed by the State Bank of Pakistan.

[82]Like Garment factories, Boutiques, Beauty parlours, Food-processing industries, Ladies Leather shoes and Hand-bags industries, Schools, Daycare Centres, Nursing Homes and Hospitals, Clinic and other small business coming within purview of cottage industries such as Embroidery, Knitting etc.

borrowers constituted about 40 percent of the borrowers. They were eligible for credit ranging between one to twenty-five thousand rupees at the rate of a 2 percent guarantee only. They invested mainly in small retail outlets like opening canteens, home-based groceries shops and cloth shops etc.

Another 40 percent of borrowers were classified as middle-income groups and 20 percent belonged to high-income groups. However, the bank staff said it was not important how and where the latter group invested, as long as they fulfilled the collateral requirements of the bank, which was essential for the economic viability of the bank.

This implies that the non-traditional services a, b and c are merely 'on paper'. Furthermore, if the bank provides non-traditional service ranked (d) it is not difficult to imagine what income groups it will be catering for.

IV. CONCLUSIONS

The location of the banks, expensive establishments and virtually no publicity amongst the deserving class of women shows that groups concerned and working on the problems of poor women were not consulted in the establishment of this institution set up in the name of women.

Contrary to the tall claims made in the brochure that the bank is a mix of development financial institution and a social welfare organization, the First Women Bank is merely another commercial bank in the name of women but not only for women.

Amongst the female clientele eligible for credit the women from high-income groups who can meet all collateral requirements would tend to benefit more than the poor women. Furthermore, the locations of the bank branches make them inaccessible to the deserving women.

Under the present system it seems the bank would end up establishing "top few women entrepreneurs", at the expense of the majority of poor and deserving women.

V. RECOMMENDATIONS

The bank has to define its priorities very clearly. Is it only a commercial bank? or does it also aim to be a development institution, focusing on very poor deserving women to alleviate their economic exploitation despite hard work? As a development institution, *which it should be*, it has to publicise itself effectively through radio, television, NGOs and extension workers to reach the deserving groups. On the other hand, if the government chooses to run it as a commercial bank only, then it may be more appropriate to establish separate segregated counters for women in all the existing commercial banks rather than run these expensive ones set up by the Women Bank.

As a development institution the bank should define the target group for its credit services, and this target group should get preference over those who "assure the commercial viability of the bank".

Credit for the women with high incomes should be made *conditional*. These women should be eligible for credit from the First Women Bank if they invest into ventures which would generate more employment for women. This will have a two-fold impact (a) more female employment opportunities would be created if they agree to invest in such ventures; (b) if they do not more money will be available to give out credit to the lower and middle income groups.

The issue of commercial viability is important but in the case of the First Women Bank, it has to be taken as an experiment or test case and treated on the lines of "*infant industry argument*". This means the limits of commercial viability have to be lowered for a period like granting tax holidays to new industries. In other words this venture has to be subsidised to enable it to take roots and grow up in the right direction.

In the end I would like to point out that it is not too early to criticize the state of affairs at the First Women Bank, as pointed out by the discussant of the paper. Considering the performance of the Ministry for the Development of Women about which very few people know what its objectives were and what it is doing? I guess this is the time to highlight the problems of the First Women Bank so that they can be rectified before they get out of hand.

REFERENCE

Bilquees, Faiz & S. Hamid (1989). A socio-economic profile of poor women in katchi abadis. Islamabad: Pakistan Institute of Development Economics. (Report of a Survey in Rawalpindi).

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