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Occupational Profile of Poverty in Pakistan

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1. INTRODUCTION

The issue of poverty in Pakistan has its significance for sustainable development. Long run development is not possible without protecting the rights of the vulnerable groups and the participation of the entire population in the development process. A notable development in the last decade in Pakistan's economic scene has been the sharp pick up in the incidence of poverty. It can be attributed to several factor. The real GDP growth fell from 6 percent in the 1980s to 5 percent in the first half of the 1990s and declined further to just over 4 percent in the second half of the decade. The rate of inflation remained in single digits throughout the 1980s but had a rapid increase of 12 percent during the first half of the 1990s. It is significant to note that food prices generally rose more sharply than overall consumer price index. The unemployment rate increased by 2 percent in the 1990s as compared to in the 1980s reflecting the deceleration of labour absorption in the economy in response to the significant decrease in the economic growth during the nineties.

The policies adopted under the Structural Adjustment Programme, initiated in the late 1980s, have tended to increase the incidence of poverty. The tax burden on the poor over the ten years period has increased by 7 percent and those of the richest class decreased by 16 percent. During this period subsidies on agriculture inputs have withdrawn, development expenditure on social services reduced, and monetary expansion though high could not provide sufficient credit to private sector and as such impacted on output and employment [Amjad and Kemal (1997)].

To combat the menace of poverty, it is imperative to identify the roots of the problem first and then propose strategy to fight against poverty. For that labour market cannot be overlooked as it has strong linkages with poverty through workers activity. In the previous studies poverty has rarely been linked with labour market indicators. This fills the gap and develops linkages between poverty and labour market through examining incidence of poverty across workers occupation and employment status. The characteristic of the poor by occupational groups are also examined focusing on education, age and employment status. The present analysis is of crucial importance because many poverty alleviation programmes of the government are focused on certain population sub-groups.

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The structure of the paper is as follows. Section 2 gives an overview of data and methodology. The subsequent Section 3 provides data on decomposition of poverty across different occupational and employment status categories. Section 4 gives information about socio-demographic characteristics of the poor. Final Section summaries the results and outlines the policy implication.

2. METHODOLOGY AND DATA

A measure of poverty has three components: the measure used to indicate an individual's living standard, the cutoff point below which an individual is considered to be poor and the functional form which aggregates the various living standards of the poor into the poverty measure. The most commonly used indicator of an individual's living standard is the consumption expenditure of the household in which that individual resides within a certain time farm. It has generally been accepted that consumption expenditure is a better welfare indicator than income. The choice of a poverty line and a cardinal measurement of poverty are always debatable. Arif, *et al.* (2001) poverty line based on basic need approach is adopted as suitable poverty line. This cut-off points below which an individual is considered to be poor is per capita per month consumption expenditure of Rs 592 for Pakistan. This basket of 'basic needs' consists of food, clothing, housing, health, education, transportation and recreation.

Various measure of poverty will be considered aiming to embrace the range of possible value judgments on this issue. Foster, Greer and Thorbecke (1984) class of additive decomposable poverty measures is applied.

Data

This analysis is based on the micro data set generated by the 1996-97 Household Integrated Economic Survey (HIES) carried out by the Federal Bureau of Statistics [Pakistan (1997)]. It is the basic source for all most all studies conducted on poverty and income inequality.

To analyse poverty employed population ten years and above is classified according to the occupational categories. The economy is disaggregated into the following nine occupational groups.

- (1) Legislators senior Officials and Managers.
- (2) Professionals.
- (3) Clerks.
- (4) Technicians and Associated Professionals.
- (5) Service workers and shop and market sale workers.
- (6) Skilled agricultural and Fishery workers.
- (7) Craft and related trades workers.
- (8) Plant and machine Operators and assemblers; as production workers.
- (9) Elementary occupations; as labourers.

To examine the employment status of the labour force the employed population is divided in three groups.

- (1) Self-employed (employer are included).
- (2) Employee.
- (3) Unpaid family helper.

3. OCCUPATION AND INCIDENCE OF POVERTY

There is ample evidence that poverty, which declined rapidly in Pakistan in the 1980s, has returned in the 1990s but also this increasing trend continued at the end of the last decade [Amjad and Kemal (1997); Ali and Tahir (1999); Jafri (1999); Ahmad (1998); Qureshi and Arif (2001) and Arif, *et al.* (2001)]. Consequently large numbers of Pakistanis live below the poverty line. Poverty is not only relatively higher in rural area but also it is widespread across all groups of population. The present analysis highlights some of the issues of poverty in Pakistan.

The occupation of an individual is important in determining economic status. Table 1 contains information about the extent of poverty in the various occupational groups in 1996-97. The data in this table clearly illustrates the disparities in poverty incidence, depth and severity among the occupational groups. The highest disparity is found among the labourers, skilled agriculture and service workers occupation. Those employed population engaged in managerial occupation figured among the least poor as this sector has also lowest share in population. In terms of ranking in incidence of poverty the labourers, skilled agriculture, service and sale workers and trade workers have come respectively. The labourers involved in elementary occupations are precarious and contains a lot of disguised unemployment such as day labouring in agriculture, construction, trade and transport. The finding of the present study are similar to that of Jafri (1999) who found that in 1993-94 highest incidence of poverty was in labourers and in agriculture workers whereas lower level of poverty was seen in managerial, clerical and professionals workers.

Table 1 also presents data on the poverty gap and poverty severity across occupational groups. The poverty $gap(P_1)$ indicator takes into account the average consumption expenditure of the poor and its distance to the poverty-line. It is sensitive to the number of poor and how poor they are. The highest poverty gap is found among the labourers, service workers which is 7 to 8 percent in 1996-97. The minimum poverty gap is indicated in managerial, clerical, and professional groups where the level of poverty is also low as compared to other occupations. The poverty severity measure which is sensitive to the distribution of expenditure within the poor also indicates that labourers, agriculture workers and service workers have highest level of inequality among the poor.

The last two columns of Table 1 show distribution of the total employed sample by occupation and share of each occupation in the poor segment of the

Table 1

Data on Poverty by Occupation: 1996-97

Occupational	Incidence	Poverty Gap	FGT Index	Share of	Share in
Groups	(P0)	(P1)	(P2)	Population	Poverty
Professionals	20.3	3.6	1.1	5.6	3.6
Offi. and Mang.	1.5	0.3	0.1	1.2	0.1
Clerks	16.5	2.7	0.7	4.9	2.6
Technicians	20.4	3.7	1.0	13.0	8.4
Service	36.7	7.5	2.4	7.6	8.9
Skilled Agri	37.3	7.2	2.1	36.8	43.1
Trades	24.6	5.8	1.6	7.5	7.0
Production	25.5	4.7	1.3	5.8	4.6
Labourers	39.2	8.1	2.4	17.8	21.8
Total	31.7	6.2	1.8	100.0	100.0

Source: Computed from HIES 1996-97.

sample. Agriculture workers and labourers have highest share in the total sample population but the share of these two occupation in poor population is even greater. The concentration of poor is almost non-existent in officials and mangers as compared to its employment share.

Employment status, which is another important indicator of the labour market, is linked with poverty and occupation in Table 2. The self-employed category of the employed sample is relatively better in terms of poverty as compared other two categories, employee and unpaid family helpers. The incidence of poverty is higher among the unpaid family helper category.

Table 2 also looks at the poverty in occupation by employment status. Incidence of poverty is less for self-employed who are engaged in managerial, clerical, and professional categories. The highest incidence of poverty is found for labourers. Others occupational groups with self-employed status have also a significant level of incidence poverty. Wage employee has also a significant proportion of poverty except in managerial occupation. The finding shows that agriculture category has highest incidence of poverty for employee. This finding is similar to that of Arif, *et al.* (2001). The last category of unpaid family helper suggests highest incidence of poverty for labourers and services and agriculture workers.

Table 3 presents inequality in the percentage distribution of consumption expenditure in different occupational categories. It illustrates that bottom 20 percent of the employed population have 10.5 percent of consumption share while upper 20 percent employed population receive 37.6 percent of consumption expenditure. Disparity within occupation shows that the poorest agriculture workers and labourers poor have 10.7 percent and 10.9 percent expenditure share respectively. Although in managerial group poverty (1.5 percent) is negligible but its lowest 20 percent population receive minimum share of expenditure in all categories of occupation. It is

Table 2

Incidence of Poverty by Occupation and Employment Status, 1996-97

Occupational Groups	Self-employed*	Employee	Unpaid Family Helper
Professionals	15.7	20.3	15.4
Offi. and Mang.	0	1.2	0
Clerks	11.8	16.4	15.0
Technicians	21.7	20.9	14.3
Service	36.2	36.2	45.9
Skilled Workers	31.6	47.0	37.7
Trades	34.1	27.0	37.0
Production	30.8	22.6	31.5
Labourers	39.3	39.0	46.8
Total	29.3	31.8	35.1

Source: Computed from HIES 1996-97.

Table 3

Percentage Share of Consumption Expenditure and Poverty

	Incidence of	Share of Consumption Expenditure				
Occupational Groups	Poverty	Lowest 20%	Middle 60%	Highest 20%		
Professionals	20.3	9.3	50.2	40.5		
Adm. and Mang.	1.5	6.5	51.2	42.2		
Clerks	16.5	9.1	49.4	41.6		
Technicians	20.4	9.0	49.6	41.3		
Service	36.7	10.0	50.7	39.2		
Skilled Workers	37.3	10.7	52.5	36.8		
Trades	24.6	10.3	52.7	36.7		
Production	25.5	10.2	52.7	37.4		
Labourers	39.2	10.9	54.7	34.8		
Total	31.7*	10.5	51.9	37.6		

Source: Computed from HIES 1996-97.

interesting to note that over all poor employed population is 31.7 percent while total their consumption share is about 17 percent. It is also noted that middle 60 percent employed population receives about 49 percent to 54 percent share in consumption by different occupational groups. This table also shows that inequality is more pronounced within bottom 20 percent poor population by all occupational groups.

4. OCCUPATION, POVERTY, AND SCIO-DEMOGRAPHIC CHARACTERISTICS OF THE POOR

The socio-demographic characteristics of the poor as well as non-poor by occupational categories are presented in Tables 4–6. The aim is to find the major variables correlated to poverty in order to have a better understanding of who the poor are. The investigation is carried out in three sub sections, where age composition, education, and employment status, are analysed. In the overall

^{*}Employers are included in this category.

^{*17} percent consumption expenditure share.

employed sample, 12 percent are female, and only a small percentage of the female population is seen in both poor and non-poor.

Table 4 shows the age composition by occupational groups. An inverse U-shape patterns are observed in all occupational categories with regards to the age of the poor and non-poor population. The concentration of poverty increases with age, a result which is contrary to the life cycle effects of age. However the result is consistent with Havinga, *et al.* (1989) who observed the lowest share of poverty is in age group below 30 years. Qureshi and Arif (2001) also show that poverty increases steadily with age peak between 40 and 49 years of age. The statistics in Table 4 illustrates that the highest share of poverty is observed between the age group of 30 and 40 years for agriculture, trade and production groups. Professional, managers, technician, clerks, service workers and labourers are found most vulnerable between the age of 40 and 50 years. The distribution also indicates that most of the non-poor are in the age group of 31–40 years.

Educational attainment seems to influence the extent of poverty considerably. Its role is important in the labour market as those with higher levels of education have more chances to be employed and earnings are relatively higher. Table 5 illustrates the distribution of poor and non-poor occupational groups by education levels. It is demonstrated that the concentration of poverty is seen where there is no formal education as lack of education limits the employment opportunities. The distribution of poverty steadily declines with higher levels of educational attainment. These results are consistent with Qureshi and Arif (2001) and Nasir (2001) where highest concentration of poverty is found with minimum level of education. Those individuals who are in service, agriculture and labourer categories of occupation with no formal education are confronted with highest share of poverty. So the educational attainment of the population shows a close link with poverty. In professional, managerial and clerk categories the higher percentage of educated non-poor is found in B.A and above levels. These statistics also indicates that most of the poor are uneducated and work in service, agriculture and labourer occupation. This is another important linkage, which shed light on poverty problems through occupations.

Table 6 shows the comparison of poverty patterns based on working status and occupation categories. Analysing all the groups it is observed that highest share of wage employee (53.3 percent) is found both in poor and non-poor population. Self-employed represents (26.3 percent) of the poor and (29.4 percent) of the non-poor. FBS (2001) estimates also show that major proportion of paid employees are poor in 1998-99. While analysing the poverty by occupational groups, it is interesting to note that in agriculture where a high incidence of poverty is observed (37.3 percent) have high share of both poor and non-poor unpaid family helpers. It is also observed that a high proportion of professionals, clerks, service workers and labourers both poor and non-poor are concentrated in employee category. In contrast, self-employed has a small percentage of both poor and non-poor in professional, managerial and clerical occupation.

Table 4

Distribution of Poverty by Occupation and Age by Poverty Status, 1996-97

Occupational Groups		10 ⁺ -15	16-30	31-40	41-50	51-60	61+	Total
Professionals	Poor	0	0.8	32.7	49.4	14.4	2.7	100
	Non-poor	0	.1	43.8	39.7	14.1	2.7	100
Offi. and Mang.	Poor	0	25.0	0	50.0	25.0	0	100
	Non-poor	0	0	17.9	48.9	30.9	2.3	100
Clerks	Poor	0	1.6	36.2	48.1	14.1	0	100
	Non-poor	0	0.4	40.1	42.2	15.9	1.4	100
Technicians	Poor	0.7	6.2	32.7	37.7	19.8	2.9	100
	Non-poor	0.1	2.3	41.3	32.0	19.1	5.1	100
Service	Poor	0.6	4.2	35.2	38.4	18.9	2.6	100
	Non-poor	0.3	3.4	36.8	37.0	19.4	3.2	100
Skilled Agri.	Poor	1.2	10.2	35.3	30.8	18.4	4.1	100
	Non-poor	0.8	6.7	37.9	26.2	21.2	7.1	100
Trades	Poor	1.8	9.4	45.2	32.4	9.6	1.6	100
	Non-poor	0.2	4.9	56.2	24.1	12.4	2.2	100
Production	Poor	1.2	7.9	46.2	29.4	12.4	2.9	100
	Non-poor	0.3	4.6	50.7	28.8	13.8	1.9	100
Labourers	Poor	0.1	3.2	40.8	41.1	13.1	1.7	100
	Non-poor	0	2.0	45.7	33.2	16.8	2.3	100
Total	Poor	0.8	7.1	37.4	35.4	16.3	2.9	100
	Non-poor	0.3	3.9	42.0	31.2	18.3	4.3	100

Source: Computer from HIES, 1996-97.

Table 5

Distribution of Occupation and Education by Poverty Status, 1996-97

Occupational Group	ps	No Formal Education	Pre Primary and Primary	Middle	Matric	Intermediate	B.A.+	Total
Professionals	Poor	13.6	9.7	5.1	29.2	23.3	19.1	100
	Non-poor	3.5	3.4	2.8	25.0	21.9	43.3	100
Offi. and Mang.	Poor	25.0	0	25.0	25.0	0	25.0	100
	Non-poor	1.5	1.5	1.9	9.9	13.7	71.4	100
Clerks	Poor	15.7	15.1	11.4	33.5	13.5	10.8	100
	Non-poor	6.5	6.7	9.0	30.3	22.8	24.7	100
Technicians	Poor	51.8	25.8	10.6	9.3	2.0	0.5	100
	Non-poor	27.3	19.3	15.4	22.2	9.0	6.8	100
Service	Poor	61.3	20.8	8.4	7.1	1.1	1.2	100
	Non-poor	45.3	18.9	14.1	14.7	3.8	3.2	100
Skilled Agri.	Poor	78.7	13.7	4.0	2.7	0.7	0.2	100
_	Non-poor	68.3	15.0	6.6	6.5	1.8	1.9	100
Trades	Poor	58.3	27.5	8.4	4.9	0.6	0.2	100
	Non-poor	37.0	23.4	13.0	18.5	4.9	3.2	100
Production	Poor	53.2	25.6	12.1	7.1	1.8	0.3	100
	Non-poor	31.5	22.8	15.6	21.5	5.6	3.0	100
Labourers	Poor	68.9	19.8	6.9	3.7	0.4	0.2	100
	Non-poor	55.5	21.1	11.2	9.7	1.6	0.9	100
Total	Poor	66.3	18.1	6.5	6.0	1.9	1.3	100
	Non-poor	44.7	16.6	10.1	14.5	6.2	8.0	100

Source: Computer from HIES, 1996-97.

Table 6

Distribution of Occupation by Employment Status

				Unpaid Family	
Occupational Groups		Self-employed	Employees	Helper	Total
Professionals	Poor	3.1	96.1	0.81	100
	Non-poor	4.2	94.7	1.1	100
Off. and Mang.	Poor	0	100.0	0	100
	Non-poor	4.6	93.9	1.5	100
Clerks	Poor	1.1	97.8	1.1	100
	Non-poor	1.6	98.1	1.3	100
Technicians	Poor	64.0	24.8	11.2	100
	Non-poor	59.0	24.0	17.0	100
Service	Poor	11.7	82.2	6.0	100
	Non-poor	11.9	83.0	14.2	100
Skilled Agri.	Poor	32.3	26.9	39.8	100
	Non-poor	42.9	18.0	39.1	100
Trades	Poor	25.2	62.9	12.0	100
	Non-poor	20.4	70.9	8.6	100
Production	Poor	30.0	58.2	11.8	100
	Non-poor	23.0	68.2	8.8	100
Labourers	Poor	10.0	88.3	1.7	100
	Non-poor	9.9	88.7	1.3	100
Total	Poor	26.3	53.3	20.5	100
1	Non-poor	29.4	53.3	17.6	100

Source: Computed from HIES 1996-97.

5. CONCLUSIONS

The study is designed to examine occupational profile of poverty, as it is important in determining the economic status of an individual. The study has used the 1996-97 HIES. Standard indices, the head count measure, poverty gap and poverty severity are calculated by occupational categories. In order to estimate poverty consumption expenditure is used as a welfare indicator and Arif, *et al.* (2001) poverty line is used as threshold level below which an individual is considered as poor.

The empirical evidence indicates that there are wide variations in the incidence of poverty among different occupational groups. The highest disparity is found among those individuals who are labourer, skilled agriculture and service workers by occupation. The estimates of the poverty gap and poverty severity are substantially higher for these categories. Distribution of poor indicates that concentration of poverty is in skilled agriculture group. The highest incidence of poverty is observed among the unpaid family helpers. The percentage of poor population is also higher for the employee category as compared to the incidence of poverty in the self-employed category. It is demonstrated that the weight of poverty falls most heavily on those individual who are employee in agriculture and labourers. The inequality in consumption expenditure by occupation shows that bottom 20 percent have 10.5 percent expenditure share while top 20 percent have 37.2 percent expenditure share.

This level of inequality among all the employed population in different occupation is quite substantial. The lowest share of poverty is found in young employed population, thereafter it increases steadily with a peak between 31 and 50 years of age for different occupational categories. The study shows that a high percentage of poor have no formal education as lack of education limits the employment opportunities. While analysing the poverty by occupational groups and employment status, it is interesting to note that in agriculture where a high incidence of poverty is observed have high share of both poor and non-poor unpaid family helpers.

It can be concluded that poverty in Pakistan has strong correlation with different labour market indicators, suggesting that improvements in working conditions of the poor can bring them out of poverty.

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Comments

First of all I must congratulate the author on presenting a very good paper on a very good topic. There is no criticism of the paper. However, few suggestions/observations are presented to improve the quality of the paper. These suggestions are particularly meant to be for future similar studies.

- (1) In her paper the author utilises HIES 1996-97 data. It is suggested that since HIES 1998-99 data is available on tapes it would have been more appropriate to use that data instead of using HIES 1996-97. This is just a suggestion as it makes probably a very little difference (unless there are some other problems, particularly technical problems, related to 1996-97 data) if one uses 1996-97 or 1998-99 data.
- (2) The author uses nine occupational groups for her analysis. The nine groups classification is borrowed from the Statistics Division, Government of Pakistan, where total number of occupations in Pakistan have been classified into nine major occupations. Unfortunately, this classification in crude in the sense that many occupations or occupational groups have been lumped together into one major occupation without any logical reason. For example, under the major occupation of Professionals, whole sort of professionals are lumped together to include Physical, Mathematical Professionals, Physical, Mathematical and Engineering Professionals, Life Science and Health Professionals, and other professionals. There could be huge difference between the income level of various professionals e.g. professionals teaching in colleges and other educational instructions have meager incomes compared with doctors who make money not only in the form of salaries from government departments but also make huge earnings (much more than their official salaries) from their private practices in the afternoon till late night.
- (3) It is not only that divergent sub major occupations are put together to make one major occupation but also no consideration is given to the fact that lot of inequality or difference exists even with in a particular sub-major occupational group. For example, there is a lot of difference between earnings (which determine the incidence of poverty) of a bank clerk (particularly foreign bank clerk) and a typical clerk working in some government department (where there is no opportunity to make extra money in the form of bribes etc). For the future research it is suggested

- that professions/occupations in Pakistan may be divided in line with the division used by the developed countries i.e. starting from top managerial/professional class to managerial/professional class to white collar workers to blue collar to skilled workers to semi-skilled to unskilled workers etc.
- (4) There are some problems related to calculations. For example, in Table 1 incidence of poverty for professionals (20.3) is higher than even clerks (16.5) and this does not seem to be very reasonable. None of the professional group under the heading of professionals as categorised by the Statistics Division and described by the author could be poorer than the clerks we know in our country.
- (5) Table 2 shows that professionals not only include self-employed and employees but also unpaid family helpers. This again does not fit into normally understood meaning or definition of professionals. Moreover, these people do not fall into the professional category as described/categorised by the HIES 1996-97 or Statistics Division, Government of Pakistan.
- (6) There are few observations related to conclusions. With reference to Table 4 the author concludes that concentration of poverty increases with age. For example, highest share of poverty is shown between the age group of 30 and 40 years for agriculture, trade and production groups. Similarly, professionals, managers, technicians, clerks, services workers and labourers are found to be most vulnerable between the age of 40 and 50. Generally speaking age between 30 and 50 is high earning age as man's mental and physical faculties are at their peak. In any case the conclusion that concentration of poverty increases with age is not true for most of the professionals in general and government employees in particular. Because with the age one becomes more experienced therefore, get more salary/reward for his/her expertise. In fact some of the professionals become gold when they get old e.g. doctors, lawyers etc. They make/demand more money with the passage of time as they gain more experience in their respective fields.

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