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Examining factors inducing Rural-Urban migration in Sindh

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Abstract:

Migration is harder to define and frequently poorly documented, one of the challenges towards study of migration are nature of its interdisciplinary linkages and, its historical context; it has involved contributions from economic and social historians and historical geographers as well as population specialists. Migration also has important social and cultural effects on patterns of languages religion, and literacy. In the Pakistan, migration has been a constant factor related with the development. This paper largely probes into migration of rural dwellers to urban centers in Pakistan. The paper examines various parameters such as, place of origin of migrants; population growth rates in the place of origin; public policies to curb population; unemployment; lack of health and education facilities and lawlessness. The findings are based upon the scientific methodology of randomly selecting study units. The process involves selection of statistically representative samples of respondents stratified by geographical distribution.

Keywords: In and Out Migration; Interdisciplinary Linkages; Population; Growth Rates.

1. Introduction:

It is argued that the increase in population puts substantial pressure on resources such as agricultural land; environment; socioeconomic fabric; infra structure; education; health and etc. Consequently, people are forced to migrate from rural areas to urban centers. This paper mainly aims at pin pointing some of those factors for to devise a realistic policy frame-work in future. The paper is divided into three parts. Part one provides consolidated review and justification of this research. Part two explains research methods. Part Two presents study results and findings. Part three summaries those results into key conclusions and recommendations.

2. Study Background:

In the past, as today, migration was an important demographic, social, economic and cultural process linking communities, regions and nations. In pre-industrial Britain migration affected every one, regardless of whether they were movers or settlers, for it determined the make up of every community by adding or subtracting people. It was an important element in social and economic change but could sometimes have a conservative aspect, helping to maintain a traditional economy and a conservative society. Yet its significance is easily under estimated of the three basic demographic variables: fertility, mortality and migration, out of which migration is the hardest to measure. Births and deaths are specific events, often well-recorded. Migration, by contrast, is harder to define and frequently poorly documented. It is an imprecise variable (Abassi Nasreen 1987).

The study of migration is inter-disciplinary and, in an historical context, it has involved contributions from economic and social historian and historical geographers as well as population specialists.

(Lee, 1966), defined migration as residential change of a permanent or semi-permanent nature. Whereas, some authors i.e. (Jones, 1990; Devine 1979; and Johnson, 1971)

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have restricted this term to changes of residence involving complete readjustment by the individual with a change of job, friends and neighbors. Yet others i.e. (Poolely and Cruz 1995); have specified types of movement which do, or do not, constitute migration for example, movements of temporary and seasonal labor, such as harvest workers and wage earners. In this, towns are also omitted and this is known as residential re-location of those wage earners. Nevertheless, the movement of seasonal workers has been considered a key element of migration in pre-industrial societies by many historians (Lucassen, 1987).

People in Pakistan have been moving in migratory waves from place of origin to places for higher economic incentives since its inception. The migration of people in Pakistan started with the moving of millions of people from India into Pakistan. As the population in Pakistan swelled with the movement of people, the masses also started an internal migration from the rural areas to the urban with the hope of a better economic life (Parveen 1993). There could be many reasons for people to move from one place to another. The volume of migration in Pakistan can be divided into three parts namely migration from outside Pakistan, internal migration within each province and inter province migration within the country. This paper largely focuses upon the second part i.e. internal migration within each province in Pakistan.

4. Research Methods:

This study is based upon scientific methodology of randomly selecting study units. The process involves selection of statistically representative samples of respondents stratified by geographical distribution. (i.e. Districts). The sample selection procedure is carefully planned and envisages achieving all study related objectives. Following are the steps that were involved in finalizing the study methodology. Table 1 shows six sample districts and proportionately selected respondents in each district.

Table 1. Sample Selection by District Population (Weighting Methods).

S. No	Study Universe	Population 000s in Nos	Weighting in %	Sample size in Nos
1	Sukkur	908	12	240
2	Khairpur	1547	20	400
3	Nawabshah	1072	14	280
4	Larkana	1927	25	500
5	Jacababad	1426	18	360
6	Shikarpur	880	11	220
7	All	7760	100	2000

Source: Population Census Organization, Government of Pakistan, 1998.

5. Study Results:

5.1 Population Planning

In early (2000), the population of Pakistan was estimated to be 145.5 million, making it the sixth most populous country in the world. Its land area, however, ranks thirty-second among nations. Pakistan has about 2 percent of the world's population living on less than 0.7 percent of the world's land. The population growth rate is among the world's highest, officially estimated at 3.1 percent per year, but privately thought to be closer to 3.3 percent per year by many planners involved in population programs. Pakistan's population will be doubling in next thirty years (Population Association of Pakistan, 2002).

Nasreen 1987 reported that half of Pakistan's population is below the age of fifteen; nearly a third is below the age of nine. For cultural reasons, enumerating the precise number of females has been difficult--and estimates of the percentage of females in the population range from 47.5 percent in the (1981)

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of his earnings to the family left behind and returns to the village to work at peak agricultural seasons. Even married migrants usually leave their families in the village when they first migrate. The decision to bring wife and children to the city is thus a milestone in the migration process.

Table 2. Percent adapting family planning methods

Reasons	(N = 2000 figure in %)		
	Male	Female	Both
Need No Children	7	5	6
Need More Sons	19	10	15
Need More Daughters	8	4	6
Need More Children	4	3	4
Don't know The FP Center	4	3	4
Due to Side Effect	8	5	6
Unable to Become Pregnant	2	4	2
Opposite of Religion	24	25	25
Due to opposition of Family Member	11	21	16
FP center is away	3	4	3
Not available at Medical or General Store	2	4	3
Any other Reason	7	5	6
Not Replied	1	7	4
Total	100	100	100

Source: - Survey data
Note: Not significant at 95 percent CI

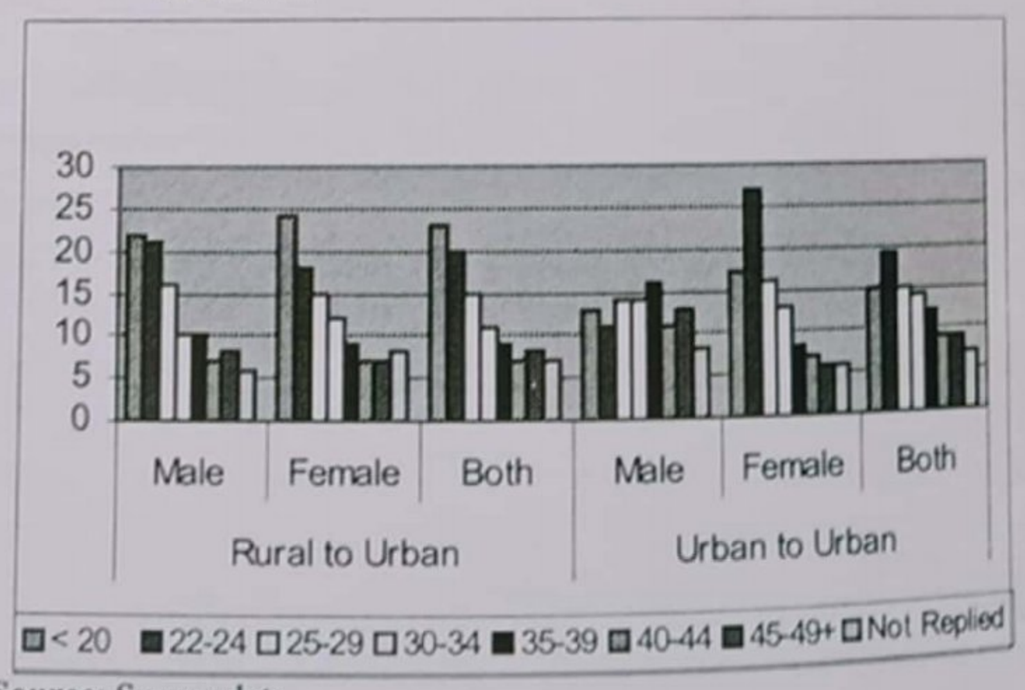
Table 2 indicates that there is a lack of awareness among the sample respondents about family planning methods and its benefits in relation to household betterment and stability.

For example, the concept of "few children for economically healthy family" is non existent. About 19 percent of total respondents reported that they did not require family planning methods since they wanted boy, more boys who could help them in future to perform economic activities. On the whole, it was observed that even though there were some facilities such as the family planning centers but there was little effort on the part of respondents to recognize the services offered to them by those centers. In addition there were also some religious concerns that were exploited by local religious clergies. For example, 25 percent respondents reported that family planning was against the Islamic Tradition and Culture.

5.4 In and Out Migration

The figures 2 and 3 show percentage of migrants to Sukkur and Larkana divisions. The data is provided by age and gender distributions of respondents. Overall one can notice a mix trend among migrants by age distribution from rural to urban places. However, one can clearly notice that those who fall under economic age of 20-34 significantly immigrate to urban as well as within urban to urban centers. These age groups primarily migrate to different centers for the sake of jobs/employment. It was noticed that age group beyond 50 years were reluctant to leave their home/original/native places.

Fig. 2. In and out migration trends by gender division.

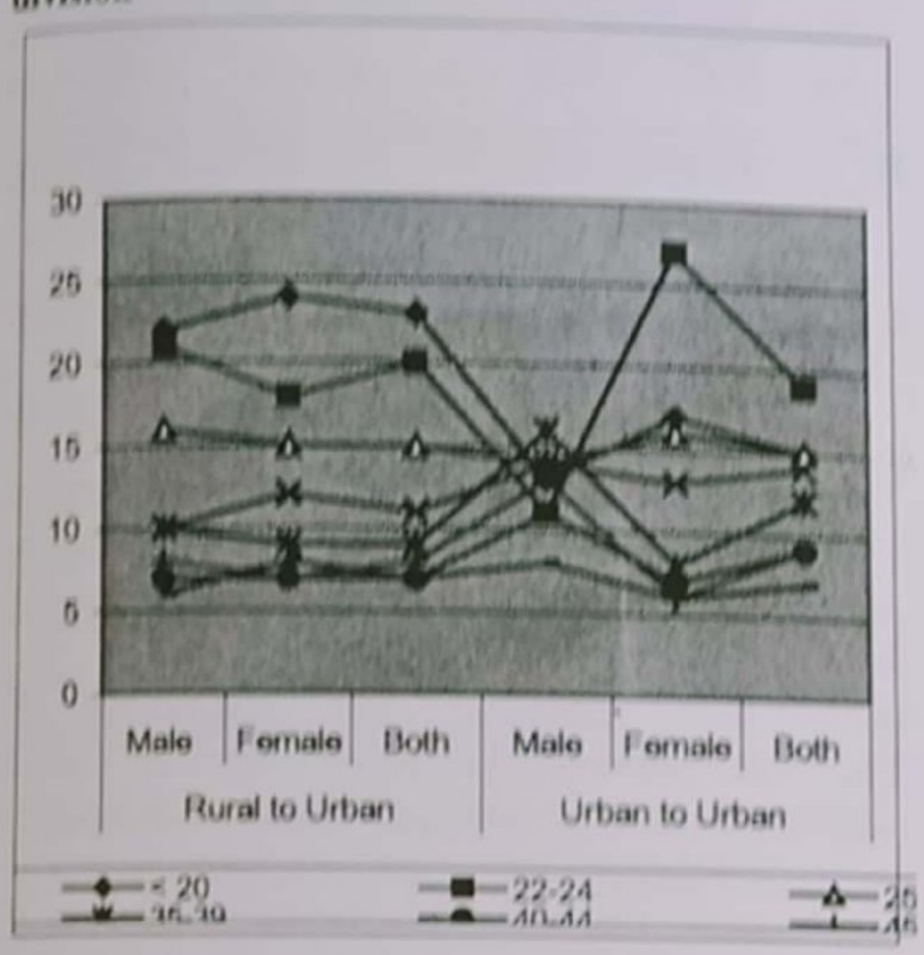


Source: Survey data
Note: Variations are not Significant differences at 95 Percent CI.

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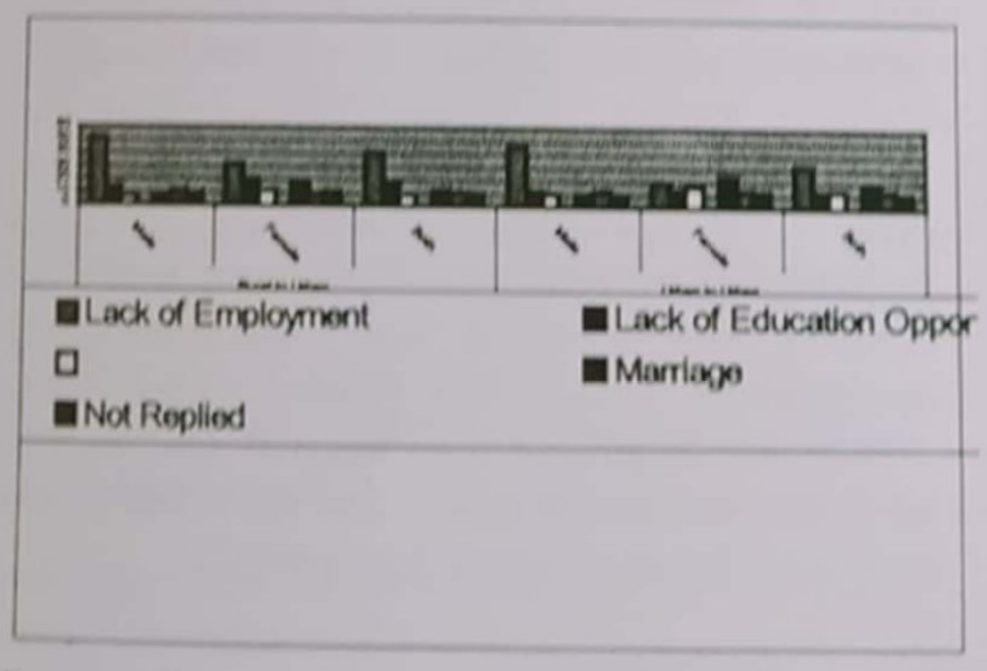
Fig. 3. In and out migration trends by gender division



Source: Survey data

Note: Variations are not significant differences at 95 Percent CI.

Fig. 4. Factors influencing migration trends



Source: Survey data

Note: Coefficient of variations show that lack of employment is a significant factor among male population that induces migration to urban areas (Values are significant at 95 percent CI).

The above figures show that the proportion of old age migrants was not significant. Those who opted for migration irrespective whether it was from rural to urban or urban to urban explained that agriculture became less productive; this did not create job opportunities; besides recent droughts in Sindh for past many years also forced several families to leave agricultural activities and adopt other economic activities for the livelihood.

Data reveals that lack of the employment opportunities in the place of respondent's origin was the major cause of migration. 17 percent respondents reported that they opted for migration from rural to urban largely for seeking education. Similarly 13 percent reported that their migration from one urban center to other was again to seek higher education. Further, 9 percent left the place of origin due to lawlessness, they moved from rural to urban places. 12 percent opted for migration due to marriage arrangements. Figure 4 highlights key factors that influenced sample respondents to migrate to urban centers.

5.5 Testing Net Increases in the Rate of Migration - Regression Model[1]

[1]See http://www.statsoft.com/textbook/stmulreg.html

The net increase in the rate of migration is tested using influencing factors. In this regard, the factors have been identified as income levels of migrants, Age, levels of education & employment.

$Y: b_1 + b_2 IM + b_3 Age + b_4 EM + b_5 JM + \mu_i$

Yi = ith observation of migration to urban areas

b_1 = Intercept

bj = Slope coefficient, J= 2,3.....b5

IM= Income of Migrant

Age = Age of Migrant

EM = Education levels of Migrants (dummy)

0 = literate

1 = illiterate

JM = Levels of Employment Opportunities (dummy)

0 = Yes

1 = No

μi = disturbance term

5.5.1 Ordinary Least Squares Estimation[2]

[2] http://www.statsoft.com/textbook/stmulreg.html

Dependant variable is y 2000 observations used for estimation from 1 to 2000.

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Multiple Regress Analysis- Results

5.5.2 Diagnostic Tests[3]

[3]http://www.statsoft.com/textbook/stmulreg.html

Repressor	Coefficie--nt	Standard Error	T- Ratio (P. Value)
Interceptor	6.4123	.3867	15.0273 (.001)
IM	.7386	.3241	2.4132 (.032)
Age	2.4532	.4923	4.3812 (.000)
EM	.6032	.3640	2.1634 (.031)
JM	4.3293	.3640	11.1632 (.000)

Test Statistics		LM Version	F Version
A:	Serial correlation	chi – sq (1)=2.4932(.105)	F(1,2000) =2.4439 (.412)
B:	Functional Form	chi – sq (1)=6.1492(.006)	F(1,2000)=6.1 421(.007)
C:	Normality	chi – sq (2)=5.9230(.040)	Not applicable
D:	Heterosceda sticity	chi – sq (1)=3.1021(.113	F(1,...) 2.3104 (.113)

R-Squared	.76421	F-Statistics	F (5,2000) 143.106 (.000)
R-Bar Squared	.76411	S.E of Regression	1.9283
Residual Sum of squares S.D of dependant	1289.2	Mean of dependant variable	7.9234
Variable	3.9286		
D-W Statistics	1.7520		

A: language Multiper test residual serial correlation squared residuals on Squared fitted values.

B: Ramsey's RESET test using the square of the fitted values.

C: Based on a test of skew ness and Kurtosis of residuals.

D: Based on the regression of A.

The OLSEs show that 76 percent of the variation in Y can be explained by the explanatory variables. T-ratios for all independent variables are significant at 5 percent. Based on coefficient 2.4532 & T-ratio 4.2872 per income levels of migrants, it may be concluded that the incidence of migration are significantly explained by levels of income & the extent of employment opportunity available in the native place. Model shows T-Ratio at 15.027; highly significant at the 95 percent CI. Prob-value (.000) for the F-Statistics is a very strong evidence that minimum one or more than one of independent variables influence the dependent variable further, $R^2 = 0.76421$ with F-Statistics having P-value (.000) confirms that R^2 is very unlikely to have arisen by chance if there was no relationship between the dependent & independent variables. Diagnostic tests also confirm that there is no significant serial coefficient D.W is 1.7520. Finally, with P- value .113 in the diagnostic tests suggest that there is no hetroscedasticity, given that the value is less than the critical values at 5 percent CI.

6. Conclusions:

This paper concludes that the relationship examined through ordinary least square estimations confirms those factors such as the population increase; age of migrant; education; income patterns are major influential factors inducing migration from rural areas of Sindh to urban areas. The study shows the movement is largely based upon exploring opportunities for higher economic incentives by the respondents. Research confirms that there has been too much pressure on urban centers, the process of urbanization has been very rapid in urban slums, and consequently, deteriorating

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living standard of people is common. Survey data shows huge gap between the wages earned by the urban rural workers. For example urban construction workers in urban areas i.e. Rs.350/day significantly earn higher than the rural wage worker doing same work in the rural areas. (i. e. Rs.200/day).

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