

Part Two- Remittance Inflows, Growth, and Poverty- Effects of Overseas Migration on Household Consumption, Education, Health and Labour Supply in Pakistan

権利	Copyrights 日本貿易振興機構 (ジェトロ) アジア経済研究所 / Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO) http://www.ide.go.jp
シリーズタイトル(英)	ASEDP
シリーズ番号	70
journal or publication title	International labor Migration from South Asia
page range	[143]-179
year	2004
URL	http://hdl.handle.net/2344/00015935

EFFECTS OF OVERSEAS MIGRATION ON HOUSEHOLD CONSUMPTION, EDUCATION, HEALTH AND LABOUR SUPPLY IN PAKISTAN

G. M. Arif

I. INTRODUCTION

Pakistan has experienced during the last five and half decades major international migration inflows and outflows inspired by political, economic and familial motivations. The most significant economically motivated outflow was that of the labour migration to the Middle East, started in the mid-1970s in connection with the oil boom. Since the job market in the Middle East is highly volatile, the annual placement of Pakistani workers fluctuated considerably, peaking in 1977 at 139,900 and again in 1981 at 151,500. It then declined to only 57,800 in 1986. In the late 1990s, the placement increased steadily, reaching a record high level of 214,000 in 2003. The inflow of remittances fluctuated as well; increasing from only US\$ 578 million in 1976-77 to a peak of US\$ 2885 million in 1982-83, whereafter remittances decreased substantially to US\$ 914 in 1999-2000. The last two years witnessed a remarkable increase in the inflow of remittances, reaching to a new peak of US\$ 4191 in 2002-03 (Government of Pakistan, 2003). These remittances were equal to approximately half of the total export, and their contribution in foreign reserves of the country is also well documented.

Overseas migration and inflow of remittances have also brought a significant change in social and economic status of the remittance-receiving households. Burki (1991) has rightly drawn two conclusions about this change. First, the rise in the current incomes of these households means a significant permanent change in their economic and social status because even a low level of investment from the remittance money could increase their incomes permanently. There is strong empirical evidence that a substantial proportion of remittances in Pakistan is directed to investment (Arif, 1999; Batzlen, 1999). Second, remittances have enabled the households to meet their basic needs. This ability can improve human capital of the household members. The next generation should benefit even more. Improvements in health and education would further increase the long-term prospects of the families with migrants.

Several studies have been carried out in Pakistan to determine the social and economic consequences of labour migration to the Middle East. These studies are based on old and relatively small datasets. Thus, their conclusions could be misleading. For example, a common perception in the 1980s was that migrant households have little interest in education. But, the findings of the present study show that both school enrolment and completion rates were higher among the migrant families as compared to their non-migrant counterparts. The effect of overseas migration on health has not been examined in the previous studies. Migration could affect mortality through behavioural changes. Overseas migration can also affect the labour supply of non-migrant members of the remittance-receiving households (Rodriguez and Tiongson, 2001). There is no recent evidence on the effect of emigration on the labour supply. All these issues are

related to recent poverty reduction strategy of the Government of Pakistan. In this context, it is timely to analyse the relationship between migration and household consumption, education, health and labour supply.

This paper is designed to fill the abovementioned gaps in the existing literature on labour migration. It has used the 2000-01 Pakistan Socio-economic Survey (PSES) to examine the household-level effects of overseas migration, focussing on consumption, poverty, child schooling, infant and child mortality and labour force participation. The rest of the paper is organised as follows. Literature review is presented in the next section, followed by a discussion on data source in section III. Remittances and their determinants at the household-level are presented in section IV. Effects of migration on household consumption and poverty are discussed in section V. Child schooling and child mortality are examined in sections VI and VII respectively. The penultimate section shows the effects of overseas migration on labour force participation while the final section summarises the major findings.

II. LITERATURE REVIEW

This section presents a brief review of the major studies on overseas migration completed during the last two and half decades. It is worth reporting in the beginning that most of these studies are based either on secondary data set or in nature they are case studies dealing with small data sets. Only two major surveys, probably representative at the national level, were carried out in the 1980s. First, Pakistan Institute of Development Economics (PIDE) conducted a survey of emigrant, return migrant and non-migrant households in 1980 in collaboration with the World Bank (for detail see Gilani et al. 1981). The ILO/ARTEP carried out in 1986 a large survey from the households of migrants who had returned from abroad (for detail see Arif, 1995). The third major survey, named as the 1979 Population and Labour Force and Migration (PLM) survey focused mainly on internal migration. Only a small number of emigrant households could be covered in this survey.

The pioneer work on the impact of Middle East migration on the domestic economy carried out by Gilani *et al.* (1981) was based on the 1980 PIDE/World Bank Survey. They show that 62 percent of the remittances goes into current consumption, 22 percent into real estate purchase, 11.5 percent into real physical investment and 1.4 percent into financial investments. Based on these statistics, the study suggested recommendations regarding the manpower training and productive use of remittances. Steps were also suggested to increase the volume of remittances and to guarantee its channelling into productive uses. According to the 1986 ILO/ARTEP survey, investment rose to 30-35 percent (Amjad, 1989). It has therefore been argued that while remittances are not necessarily being used in the most economically efficient manner in Pakistan, investment level has risen over time (Shah and Arnold, 1983).

In a case study, Bilquees and Hamid (1981) examined the impact of male out-migration on women and children left behind. They show that while an increase in the incomes of emigrants tends to increase their welfare, there are certain factors such as neglect of children's education, excessive work load and frustration of the left behind which tends to decrease the welfare. They described that the number of school-going children up to class III is greater in the migrant sample (22.08 percent of males and 11.35 percent of females), compared to non-migrant's sample of 13.3 percent of males

and only 3.48 percent of females, beyond class III the position is reversed: 14.28 of males are going to school in the former group compared to 17.76 percent in the latter. This shows little interest in education as they feel they are going abroad sooner or later. However, among migrant households the decision-making by female has increased as compared to in the non-migrant households. In agricultural activities (land preparation) there is hardly any change in the aspect of implementation of decision. The migrant households were more sensitive about the education of their children including education for girls. A large number of migrant households have arranged tutors for their children.

Abbasi and Irfan (1986) used the 1979 PLM data for the comparison between migrant and non-migrant households in labour force participation, schooling of children and consumption pattern. They found lower female work participation in households with remittances than in households without remittances. However, enrolment rates were higher among children belonging to the migrant households than to children in non-migrant households. Similarly, the families of Middle East migrants reported an overall improvement in the ability to spend on a variety of items. A major fraction of remittances is being consumed and investment occurs predominantly in the form of the renovation or construction of houses. Naz (1988) analysed the socio-economic impact of male out-migration on the changing roles of women as member of a family and village community in particular and on the traditional village life in general. She conducted primary survey in village Sagri district Rawalpindi and made a case study of this village. Overall she found that overseas migration has a very positive impact on welfare and life style of the village.

Kazi (1989) focused among other issues on the reabsorption of workers returning from the Middle East. She shows that unemployment among these workers was high. It is likely that a significant number of workers were temporarily unemployed and could afford to take their time finding the right job. The negative repercussions of shrinking job opportunities in the economy have been most strongly felt by unskilled labourers. Sadeque (1989) shows that migration to the Middle East was arranged by private operators who frequently gyped prospective workers of huge sums of money and also defrauded the aspiring emigrants. The Middle East migration does not allow any scope for settling down in the countries of immigration. At the same time the number of female migrant workers has been nominal. Akbar (1990) surveyed 40 percent households of a village situated in Gilgit District to study the changing roles of females regarding the work in domestic organizations, and in the agricultural fields. The management of agricultural land in the absence of males has been successfully compensated by the mutual help through female networks.

Khan (1991) shows that emigration of labour migrants has lessened the impact of chronic unemployment and underemployment on Pakistan's economy. Migrant labour is estimated to have absorbed nearly one-third of the increase in the labour force during the Fifth Plan period 1978-83. The fact that 80 per cent of migrant labour is unskilled and semi-skilled has resulted in emigration being of enormous employment benefit to the country. As a result of losses to the Middle East, in certain occupations, such as carpenters, masons, electricians, plumbers, welders, mechanics and nurses, labour shortages arose in the early 1980s. However, a survey by the Manpower Division conducted in late 1985 found the productivity in most of the establishments surveyed only negligibly affected by labour shortages. The major factors hampering productivity were energy shortages, a lack of market demand and lack of finances (ILO, 1987).

Adams (1992) has shown from a survey of 727 households conducted during 1986-89 in three provinces in rural Pakistan that remittances have a neutral effect on income distribution, mainly because they are well distributed among different income groups. Burki (1988) has argued strongly that because of the impact of both agricultural development and foreign remittances in rural areas, Pakistan had far fewer poor people than had been estimated by most scholars working in the area. Naveed-i-Rahat (1990), an anthropologist, shows that the physical absence of male heads has changed the domestic organisation. Females have taken up some of the male roles, which are essential for social survival. In such households wives/mothers have become central figures due to their dual roles. These women not only bring up children but also discipline them with authority. They not only cook and serve food to other household members but also decide monetary matters.

Addleton (1992), a political scientist, used classical and structural approaches to understand the causes and consequences of migration from Pakistan to the Middle East. One of the major conclusions of the study was that the cumulative effect of hundreds of thousands of individual Pakistani workers successfully seeking work in the Middle East was to decisively direct Pakistan towards more decentralised and diffused modes of development and change. The study considers nationalisation of banks, life insurance companies, private schools, shipping and some of the heavy industries during the period 1971-77, and an aggressive appeal to Islam rather than socialism during the years 1977-88 to be the centralising measures of governments, which ruled the country between 1971 and 1988. Despite these strong measures, Addleton argues, appeals based on language, ethnicity and religious-sectarian differences became quite common. In his opinion, the failure of the centralising efforts was closely associated with the migration of Pakistani workers to the Middle East, which set in motion a process that was characterised by decentralised economic decision-making rather than by enhanced government control.

Shahnaz and Khan (1997) investigated the impact of male migration on market production and workloads of females, using household survey data collected from both migrant and non-migrant households in tehsil Kharian. The out migration has a great impact on household work because most of the migrants went abroad due to financial reasons so in the absence of males the females had to cope with the situation, and had full control over their household management and they decide independently what should be purchased for their remittances. From the study they concluded that with proper guidance, females in migrant families would definitely be in a position to invest remittances efficiently. Hussain (1997) discussed two aspects of return migration: its effect on technology transfer, which includes transfer of technoware, humanware, and infoware; and the re-employment of return migrants in the home economy. The data used in this study was collected directly from return migrants through a survey in all the seven districts of Azad Jammu and Kashmir. The study found linkage between technology transfer and re-employment of the return migrants and also indicated a high possibility of technology transfer through return migrants. The results show that longer duration in abroad is positively related with technology transfer, associated with the technoware. The self-employment pattern of migrants after return is closely linked with transfer of technoware. Abbasi (1998) used survey data of three villages to explore the dynamics of labour migration including occupation, length of stay abroad, income, remittances, investment, as well as social problems faced by the families left behind. He

shows that overseas employment adversely affected agriculture production. However, contribution in the form of foreign exchange served as powerful injection into the deteriorating economy and sent a current of new life in it. The study shows that housing of both migrant and return migrant households improved significantly due to huge spending from overseas remittances.

In a case study, Khan and Chaudhry (1997) explored the income generating activities of the women in migrant households of a small Punjabi village. The authors found that in terms of economic participation, the workload has decreased with the increase in remittances because the concerned women are no more compelled to continue working for income generation. It was also found that the decision-making power of women in migrant households far exceeded than in the non-migrant households. Mariam and Batzlen (1997) made an effort to supplement the scant literature on the impact of male out-migration on fertility rates of women and education of children who are left behind. The sample migrant households had on average higher number of children than non-migrant households. The authors attributed this difference to the reduction in infant mortality in migrant households due to their better resources and to improved financial conditions of migrants, which enabled them to fulfil their desire for more children. Thus the absence of men did not lead to a decline in fertility rates of women.

Shirazi *et al.* (1997) used the 1987-88 and 1990-91 Household Integrated Economic Survey (HIES) to determine poverty level in remittances receiving and not receiving households. They show that the incidence of poverty reduced by remittances, more or less, remained the same over the two data periods, whereas the poverty gap and FGT poverty measure showed a significant improvement in the later year 1990-91. The author concluded that the foreign remittances are decreasing. Therefore, it is a danger that poverty may increase if alternative appropriate policies are not introduced to control or reduce poverty. Mahmood (1997) argues that for a labour exporting country, the most compelling question is not only how best to maximize workers remittances but also how best to use them in the economy. He reviews migration related trade and investment policies in Pakistan that can play important role in utilisation of worker's remittances and in promoting international trade. To highlight these policies the author developed trade and investment relations with migration and remittances. He concludes that although a number of investment opportunities exist in Pakistan but they are not widely known to migrants. Some of the remittances have been invested in productive activities, but the bulk has contributed little if anything to the long-term development potential of Pakistan. The author suggests that there is a need to rethink about trade and investment strategies to draw maximum benefits from the on-going migration from the country, which remains substantial in its size and remittances.

A major study was carried out by Batzlen (1999). The major objective of this study was the identification of factors, which encourage investments, and employment generating effects of remittances in Pakistan in order to provide a better base for policy decisions. This study was based on the survey of 440 households randomly selected from Punjab, NWFP and AJK. The survey was conducted from November 1994 to October 1995. The study first examined "*Do migrants acquire new skills while abroad?*" According to the study's findings, they do. However, the assumption that positive effects on skill acquisition are generally attributed to migration must be denied. These effects have been overestimated, particularly in the earlier literature focusing on migration. However, in general, an adequate level of education and skills has a positive effect on

the acquisition of additional skills abroad. Educated and qualified migrants are in a relatively good position to learn new skills, particularly when entering jobs with higher requirements. Batzlen shows that the income out of remittances is generally seen as a temporary income to bridge an income gap, enabling households to cover their basic and even partly luxury needs. A continuous flow of remittances contributes to maintain and sustain the accumulated assets. Particularly from this point of view, a considerable positive impact on investment might be attributed to remittances. During the analysis it turned out that the remittances variable as the major income source showed the highest propensities to save and elasticities as compared to other income sources. Evidence from this study suggests that the use of informal channels for sending remittances to Pakistan has a negative impact on savings.

Arif and Irfan (1997) explored three issues related to post-migration occupational change of return migrants: the comparison with pre-migration and during-migration occupational compositions, the directions of occupational change, and the factors affecting these changes after return using the 1986 ILO/ARTEP Household Survey of Return Migrants. About half of the total employed sample, 44 percent, changed their pre-migration occupations upon return, mainly from production-service occupation to small business. The highest level of occupational change was observed in non-irrigated areas. The occupational change was strongly related to migrants' duration of stay in the Middle East, their ages at the time of return, and their level of educational attainment. The model specified for those who switched to business shows a pattern, which closely mirrors that of the models with occupational change, suggesting that occupational mobility experienced by returnees was mainly towards the business sector. However, the analysis shows that the effects of education and duration of stay abroad were negative for making the transition to agriculture, probably because of a strong preference of workers to be involved in business activities. Arif and Irfan (1997a) examined the inward and outward mobility of population during the last fifty years, and they found that every flow to a large extent has its own set of effects of the society and economy depending upon the permanence and process of settlement and the conditions of the economy. The importance of peace and economic stability in the surrounding countries emerges to be quite obvious for Pakistan. Illegal migration to Pakistan from surrounding countries is alleged to be quite substantial at present. To the extent Pakistan is caught up with phenomena of brain drain at larger scale than in the sixties, this may entail sacrifices from the economy and the society. There is a need to consider the imposition of user costs to the extent it recovers the entire amount invested in the education of qualified persons departing Pakistan.

Adams (1998) used the 5-year panel data from rural Pakistan to examine the direct, first-round effects of internal and external remittances on asset accumulation. The study has drawn three conclusions. First, most households do not own physical assets in any year. They are impatient, and they are either unable or unwilling to sacrifice present consumption for the sake of future asset accumulation. Second, the availability of remittance income helps to increase investment in rural areas by raising the marginal propensity to invest for migrant households. Third, not all remittance income has same influence on investment. External remittances have a much more important impact than internal remittances do on the accumulation of physical assets in rural Pakistan. Arif (1998) first compared unemployment rates among Pakistani migrants returned from the Middle East with those among non-migrants and then examined the reintegration patterns of returnees in the domestic labour market. The study utilised three data sets:

the 1980 PIDE/World Bank Survey of Return Migrant and Non-migrant Households, the 1986 ILO/ARTEP Survey of Return Migrant Households, and the 1991 Pakistan Integrated Household Survey. The results show that unemployment rates were much higher among return migrants than among non-migrants. This difference narrowed with the passage of time. But, even among those who had returned to Pakistan at least 18 months prior to the surveys, more than 10 percent of workers were unemployed. The multivariate analysis further showed that returnees, irrespective of period elapsed since their return, were more likely to be unemployed than non-migrants. With respect to the reintegration pattern of return migrants, the study revealed that variables indicating their human capital, such as occupation and pre-migration and during-migration work experience, appears to have greater influence on their post-return adjustment than variables related to economic positions, such as savings.

Lefebvre (1999) analysed the international labour migration from two Punjab villages in Pakistan with different forms of agriculture, in order to, on the one hand, determine the relations between the levels of their economic development and the necessity to take a job abroad, and, on the other hand, to determine the nature of the changes brought about by foreign remittances. Quantitatively, only a small percentage of the male population goes abroad. The pressure on land and on jobs available in the neighbouring cities is therefore still very strong. The departure to foreign countries of able-bodied men has not, so far, helped in the creation of new employment possibilities. Instead, Pakistan experiences a shortage of skilled personnel. The existence of supplementary economic resources in the form of foreign remittances does not lead to productive investment in agriculture or other economic sectors of the village, although the consumption of local goods has stimulated some domestic sectors of the economy, especially the construction sector. Even though some changes are in progress, the social life of the villages is still based upon traditional notions of social prestige, religious knowledge, and generosity towards fellow men and upon the concept of hierarchy between individuals. Arif (1999) examined the relationship between remittances and investment using the 1986 ILO/ARTEP survey of return migrant households. He shows that average monthly earnings of migrant workers differed widely across different occupational groups and across the duration of stay in the Middle East. The latter turned out to be the most important factor in determining the level of total earnings. The propensity of Pakistani workers to remit (i.e. the percentage of total earnings remitted) was remarkably high -78 percent. The majority of workers, even if their durations of stay abroad were long (more than six years), remitted about three-quarters of their earnings. This reflects the fact that migrants consider overseas employment to be an opportunity to acquire monetary reserves, although it also might reflect limited opportunities for spending in the Middle East. Migrants were able on average to send or bring home an amount (including consumer durables) equivalent to about five times what they would have received in Pakistan over the migration period. Migrants and their families did direct a considerable proportion of remittances into investment and savings. The success or failure of migrants and their families in directing remittances to investment and savings was determined by four factors; the process of recruitment, including the cost of migration and sources of its financing, pre-migration household economic position, the human capital of workers (education and skills) and marital status. The loans taken out by migrants and the fees paid by them to recruiting agents also played an important role in their success or failure in directing remittances to

investment and savings. The high cost of migration is likely to be associated with unlawful recruiting practices.

Arif and Shahnaz (2000) examined whether Pakistani workers in the Middle East learn new skills. The analysis utilized two household surveys of return migrants carried out in 1980 and 1986 to measure the levels and determinants of skills acquisition. The results derived from Brim's framework show that, despite the selectivity of Pakistani migrants, their motivation to learn skills, the favourable employment context abroad and the financial incentives to acquire new skills, only a limited group of workers learned new skills or upgraded their skills level during their stay in the Middle East. In addition, a substantial degree of de-skilling occurred, although half of the emigrants gained experience in the use of their pre-migration skills while abroad. The multivariate analysis regarding the determinants of skills acquisition shows that, first, the economic needs of the emigrants' families seemed largely responsible for pushing migrants to accept low skilled jobs in the Middle East. Second, the retention of previously acquired skills during overseas employment was positively associated with the legal process of emigration. It seems that although the legal migrants may not be permitted to upgrade their skill levels for a specific contract, the degree of de-skilling could be reduced by strictly enforcing the legal recruitment rules. Third, the effect of education on skills acquisition and de-skilling was similar; however, longer duration of stay (the Middle East labour market experience) enabled emigrants to upgrade their skills level while abroad.

The findings of the national seminar on the state of migration and multiculturalism in Pakistan, organized in 2003 by UNESCO with the collaboration of Islamabad Policy Research Institute (IPRI), show that Pakistan has as yet no defined policy on the integration of migrants (UNESCO/IPRI, 2003). It is for this reason that migrant workers, particularly women migrant workers frequently suffer from discrimination in terms of social status, wages and human security. Pakistan still has a large Afghan refugee population in the two provinces i.e. NWFP and Balochistan. The illegal migrants are also entering Pakistan in growing number. This calls for a concerted effort on the part of the Government of Pakistan to devise a suitable policy for migrant labour that takes into account the rights and interests of refugees/migrants, particularly women and children. A ratification of the Convention on the Rights of Migrants would be an important step in this direction, which as a next step would have an influence on the national legislation. In certain regions like Punjab, Pakistan presents assimilationist model for the integration of migrants; but in other areas like Sindh, cultural assimilation has taken place to a much less degree. This has led to ethnic and social conflicts, extremism and violence. These tendencies could be eliminated through the promotion of multiculturalism in ethnically and culturally diverse society of Pakistan.

It appears from this review that Pakistani migration to the Middle East seems to be beneficial to the individuals concerned, their families and the country. However, the studies reviewed are based either on data collected from few villages or data collected in the 1980s and 1990s. Moreover, several important issues such as effects of overseas migration on labour force participation of migrant household members, schooling of their children, health status and consumption patterns have not been examined extensively. This study has filled the gap by analysing all these issues using more recent datasets.

III. DATA SOURCES

As noted earlier, the 2000-01 PSES is the main data source used in this study. It is a panel data set, and its two rounds have been completed. Households covered during the Round I (1998-99) were revisited in Round II (2000-01). To make the PSES Round II representative, a sample of new households was also added. The universe of the Round I consisted of all urban and rural areas of the four provinces of Pakistan defined as such by 1981 population census excluding FATA, military restricted areas, and districts of Kohistan, Chitral, Malakand, and protected areas of NWFP. The population of the excluded areas constitutes about 4 per cent of the total population. The village list published by the population census organization in 1981 was taken as sampling frame for drawing the sample for rural areas. For urban areas the sampling frame developed by the Federal Bureau of Statistics (FBS) was used. In this frame each city/town has been divided into enumeration blocks of approximately 200 to 250 households. Cities having population of half a million or more were treated as self-representing cities (SRCs). Islamabad and Quetta, being federal and provincial capitals respectively, were also considered as the SRCs. The remaining urban population in each division of all the four provinces was grouped together to form a stratum. For rural sample, each district in Punjab, Sindh and NWFP was grouped together to form a stratum. For Balochistan province, a division was treated as a stratum.

Two stage stratified sample design was adopted for the PSES. Enumeration blocks in urban domain and Mouzas/Dehs/villages in rural domain were taken as primary sampling units (PSUs). Households within the sampled PSUs were taken as secondary sampling units (SSUs). Within a PSU a sample of 8 households from urban domain and 12 households from rural domain was selected. As noted earlier, households covered during the Round I of the PSES were revisited during the Round II carried out in 2000-01. Out of the total 3564 households, 2862 were successfully traced. The attrition rate for the second round of PSES was 20 percent. These households could not be interviewed because few households could not be traced and some households simply refused to be part of the panel; and it happens in all longitudinal surveys. Households that moved out of the sampled PSUs between the 1998-99 and 2000-01 period were not traced due to cost constraints. To make the PSES Round II data representative at the national as well as at the rural-urban level, 1170 new households were included in the sample by using the FBS sampling frame, making the total sample for Round II of the PSES 4021 households (2577 rural and 1444 urban) (Table 1).

TABLE 1. Distribution of the Total Sample Households with Their Rural-Urban and Provincial Breakdown 2000-01 PSES Round II

Province	Total	Rural	Urban
Punjab	2,318	1,610	708
Sindh	835	462	373
NWFP	500	310	190
Balochistan	368	195	173
Pakistan	4,021	2,577	1,296

Source: Arif and Bilquees (forthcoming).

The previous studies on migration were based on household surveys covering primarily migrant households. It was possible through these surveys to generate data on the amount of remittances received as well its uses. But the major limitation of these surveys was that a comparable group of non-migrant households could not be included in the survey design. The PSES is a multi-purpose survey that has included, three modules covering different migratory streams: in-migration, out-migration and return migration. While gathering data on previous or current place of work (residence) provision was made in these modules for covering the phenomenon of international migration. In the out-migration and return migration module a range of questions was included about the recent or past experience of overseas migration. About 250 households had at least one member with the experience of overseas employment. For the present analysis, these households are defined as migrant households whereas the rest of the sample is grouped as the non-migrant households. It is important to note that while the PSES provides data on occupation while abroad and flow of remittances, direct questions on the uses of these remittances were not asked. Rather comprehensive modules on household consumption, income, employment, credit, birth history of women in reproductive age and health were included in the survey questionnaires.

IV. FOREIGN REMITTANCES

Foreign remittances are the most attractive aspect of labour migration to the governments of labour-exporting countries and to individual migrants and their families. The analysis in this section is carried out at two levels. Firstly, the official remittances received through the formal banking channels that are reported regularly in Economic Surveys are examined focusing on very recent changes in the source countries. Secondly, using the PSES dataset, level of remittances and their determinants are examined. Investment made from the remittance money is also discussed briefly in this section.

A. Foreign Remittances: the Macro Situation

Table 2 presents data on the annual inflow of remittances through the formal channel. These remittances have become a very important source of foreign exchange, increasing from US\$ 578 million in 1977 to a peak of US\$ 2885 million in 1983, whereafter remittances decreased substantially to only US\$ 913.5 in 2000. The last two years witnessed a remarkable increase in the inflow of remittances, reaching to a new peak of US\$ 4190.73 in 2003. One argument about the recent increase in the official remittances is that the global situation has made it difficult to transfer money through informal sources. All money, which used to transfer through these sources, is now being remitted through the formal sources. According to indirect estimates, in the past an amount almost equal to the official remittances also found its way into Pakistan through informal channels (*hundi*). Following the steps taken globally after the September 11 event, the inflow of remittances through *hundi* system has largely been contained.

However, there are some more facts, which need to be highlighted. Middle East has been the major source for employment of Pakistani workers as well as inflow of remittances. Table 2 shows that between 1983 and 2001 period the share of Middle East in the total remittances has never been less than 65 percent. In 1983, this share was as

Effects of Overseas Migration on Household Consumption

high as 83 percent. Within the Middle East, Saudi Arabia had the largest share in remittances. However, the last two years have witnessed a sharp decline in the share of remittances came from the Middle East, particularly from Saudi Arabia. It is not correct to say that remittances from the Middle East have dropped sharply. Rather the fact is that remittances from the USA have increased remarkably during the last two years. In 2003, approximately one-third of the total remittance money was transferred from the USA. This is ever-highest share of the USA in the total remittances transferred to Pakistan (Figure 1). It is more realistic to say that after the September 11 event, several Pakistanis who held their savings in the USA decided to shift them Pakistan through official sources. Is the current level of remittances, more than US\$ 4 billion, sustainable? Interplay of several factors determines the level of total remittances. One recent positive development is that the placement of Pakistani workers in the Middle East market has increased sharply. Moreover, Pakistan has signed a MoU with Malaysia to export its labour at a large scale. This rise in emigration may give sustainability to the inflow of remittances.

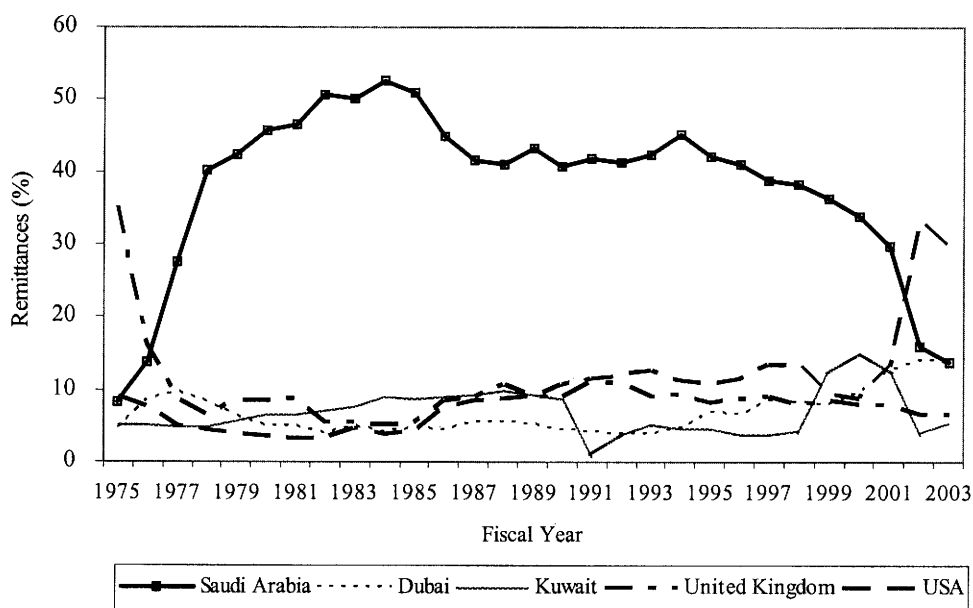
Mention of two more macro aspects of remittances is appropriate here. The first is the role of remittances in the balance of payment. In 1983, remittance money exceeds the value of the total merchandise export. It dipped to less than 20 percent in the 1990s. However, the inflow of remittances in 2003, was equal to approximately half of the total export. In 1982-83, remittances were 9 percent of the GNP. This ratio decreased to less than 2 percent in most years of the 1990s. But, it rose to about 6 percent in 2002-03. Obviously, the recent inflow of remittances has positive impact on foreign reserves of the country.

TABLE 2. Foreign Remittances for the Selected Years as % of Export and GNP

Fiscal Year	Total remittances (US\$million)	Remittances from the Middle East (% of total)	Remittances from Saudi Arabia (% of total)	Remittances as % Total Export	Remittances as % GNP
1977	577.72	75.7	27.5	50.6	3.7
1983	2,885.7	83.5	50.0	107.1	9.1
1986	2,595.3	77.9	44.8	84.5	7.5
1990	1,942.4	68.1	40.8	39.2	4.7
1994	1,093.4	65.7	45.2	16.1	2.1
1995	1,317.7	67.7	42.1	16.2	2.2
1996	1,227.3	66.8	41.0	14.1	2.0
1997	1,078.1	65.2	38.8	13.0	1.8
1998	1,237.7	67.9	38.4	14.3	2.0
1999	875.6	73.0	36.4	11.3	1.4
2000	913.5	74.6	33.9	10.7	1.5
2001	1,021.6	67.9	29.8	11.1	1.8
2002	2,340.8	45.7	16.1	25.6	3.8
2003	4,190.7	45.1	13.9	47.4	5.9

Source: Various Economic Surveys.

FIGURE 1. Percentage Distribution of Workers' Remittances by Country and Years.



Source: *Statistical Supplement to Economic Survey 2001-02, State Bank of Pakistan, Annual 2002-03.*

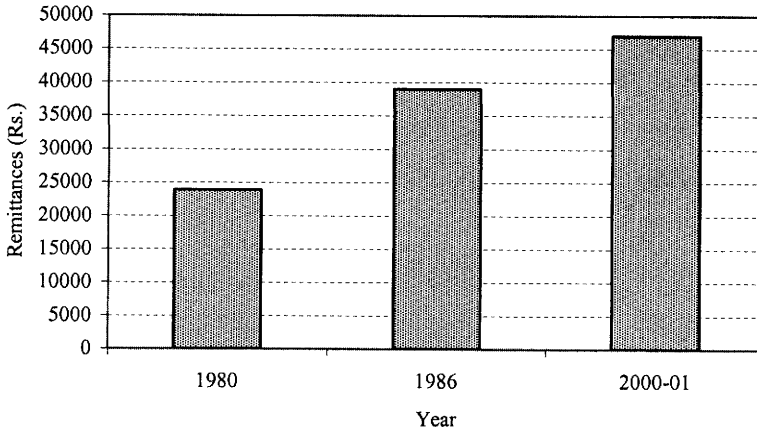
B. Workers' Remittances: a Household Level Analysis

The flow of remittances depends mainly on the savings available to the migrant once all his expenses are met from his earnings. A migrant's first decision with respect to the management of these savings is whether to remit home all his savings as he accumulates them, or to keep a proportion of them with him until he returns permanently. A number of factors are usually linked to this decision. For example, if migrants' families depend for their livelihood mainly on remittance income, it is likely that migrants will remit regularly a considerable proportion of their earnings. The inflow of remittances may be closely linked to the length of time since workers went abroad. Education may also affect migrants' decision to remit.

As was observed in the earlier studies, remittances were almost universally reported. It reflects the fact that migrants consider overseas employment to be an opportunity for lifetime investment. According to the 2000-01 PSES, migrant households received on average Rs 47,000 annually. It also appears from Figure 2 that the amount transferred annually has increased over time. The average annual remittances in 1980 PIDE/World Bank Survey were Rs. 23,900. The ILO/ARTEP survey carried out in 1986 reported the annual remittance per households as Rs. 39,000. In view of the high cost of overseas migration, which increased from Rs 10,000 in 1986 (see Arif 1995) to more than Rs 30,000, according to the 2000-01 PSES, this increase in the annual remittances in nominal terms in twenty years does not seem to be substantial. It is likely that wage structure in the Middle Eastern countries has become less conducive for

savings and remittances. There may some elements of exploitation of contract workers at the place of their employment.

FIGURE 2. Average Annual Remittances Received by Households in Different Period of Time.



Source: 2000-01 PSES; 1980 PIDE/World Bank; 1986 ILO/ARTEP.

Table 3 presents more data on remittances received by migrant households controlling for different socio-economic variables that can affect the decision to remit. It is likely that differences in remittances across different categories of migrants are to some extent due to differences in their durations of stay abroad. The average duration of stay of each category is therefore given in Table 3, which shows a positive relationship between average remittances and migrants' length of stay abroad. Migrants who went abroad before 1997 were able to transfer more than Rs.400,000 during their average stay of about 10 years while the more recent migrants who went abroad after 1997 were able to send back about Rs.166,000. Migrant's educational qualification has a positive influence on the total remittances. Although the average duration of stay abroad of highly qualified workers was to some extent lower than those of less educated workers, they remitted on average more amount than the latter. The qualified migrants are likely to be working as professionals and thus earning higher wages. In a short period of time they can save from these earnings and can remit their considerable proportion to relatives. Urban migrants remitted more on average than their rural counterparts, although there was no major difference in their duration of stay abroad (Table 3). Because of their relatively longer stay abroad, migrants in the Middle East remitted more money than their counterparts working in other parts of the world.

TABLE 3. Average Total Remittances Received by the Emigrant Households by Duration of Stay Abroad and Socio-Economic Variables

Socio-economic variables	Mean duration of stay abroad (years)	Average total remittances received (Rs)
Year of migration		
1997 and before	10.21	418,324
After 1997	2.00	166,056
Educational qualification of emigrants		
Primary	8.85	229,510
Middle	5.16	154,520
High	4.36	354,722
Place of residence in Pakistan		
Urban areas	6.27	328,214
Rural areas	5.89	242,036
Country of employment		
Middle East	6.56	309,735
Other countries	3.90	216,700
Total sample of emigrant households	6.21	288,781

Source: 2000-01 PSES.

To determine the independent effect of different socio-economic variables on remittances, a multivariate analysis was also carried out, using the OLS technique. Seven independent variables were entered into the model: earnings, age of the workers, age², marital status, education, duration of stay abroad and region of employment. Definitions of these variables and results are presented in Table 4. An adjusted R² value of 0.43 on a cross-section dataset indicates a good estimation and a large proportion of the total variance is explained by the regression model. As expected, earnings of the workers have a positive effect on the amount of remittances. Education that was positively related to remittances in bivariate analysis did not turn out to be statistically significant. Even the middle category of education was turned out to be negative and statistically significant. It is likely that the effect of education was captured by the occupation, which shows that production workers, who are usually less educated, were less likely to remit money than other workers including professionals, business and service workers. Duration of stay abroad and region of employment have positive effect on remittances. In short, interplay of factors determines the volume of remittances. In addition to earnings of workers, their duration of stay abroad, country of employment, and occupation while abroad are related with remittances. Significance of all these variables has some policy implications in terms of the training of potential workers and the bargaining of wages they would receive during their overseas employment.

Effects of Overseas Migration on Household Consumption

TABLE 4. OLS Estimates of Workers' Remittances

Variables	B	S.E
Constant	2.135	1.782
Log earning	0.650*	0.149
Age (years)	0.075	0.074
Age ²	-0.001	0.001
Married (=1)	0.715**	0.276
Education		
Primary	-	-
Middle	-0.590**	0.329
Matric	0.322	0.308
Occupation (production workers=1)	-0.031**	0.301
Duration of stay abroad	1.177*	0.273
Country of employment (Middle East=1)	0.815*	0.366
Place of residence (Urban=1)	0.296	0.311
R ²	0.43	

Source: 2000-01 PSES. * and ** show significance at 5 %, and 10% level respectively.

C. Remittances and Investment

As noted earlier, in the 2000-01 PSES, questions related to uses of remittances were not included in the survey questionnaire. This section is based on the work carried out by Arif (1999) using the 1986 ILO/ARTEP survey. Table 4 shows that on average 37 per cent of the remittances were directed to investment. Money saved by households during migration periods was about 31 per cent of the remittance money. Migrant families located in urban areas invested more of the remittance money they received than their rural counterparts. However, the proportion of remittances saved (35 per cent) was substantially greater among rural households than among urban households (25 per cent) (Table 5).

The proportion of remittances reported to be either invested or saved in the ILO survey was higher than indicated by the well-known results of the Gilani et al.'s study, which estimated that 35 percent of remittances were either invested or saved by migrant families (Gilani *et al.* (1981). The proportion directed to financial savings in the Gilani et al. study was in particular very low, only 1.4 per cent. The difference in proportions saved is too large to be discounted as a mere statistical artefact. It could be largely due to the relatively long stays abroad as reported by migrants in the ILO survey. In Gilani et al.'s study, there was an overrepresentation of migrants who had been abroad for less than one year, and within this category there was an overrepresentation of migrants who had been abroad for less than six months (Gilani *et al.* (1981). It seems that capacity to save increased over time as debts incurred in migrating abroad were repaid and demands for consumer durables were satisfied.

TABLE 5. Investments and Savings as Percentages of Remittances Transferred while Workers Were Abroad by Rural/Urban Areas

Geographical location/Annual income	Average remittances (000Rs)	Average investment (000Rs)	Average savings (000Rs)	Investment as % of remittances	Savings as % of remittances
Urban areas	145	62	36	42.8	24.8
Rural areas	115	38	41	33.0	35.6
Total	126	47	39	37.0	31.0

Source: Arif (1999).

The proportion of remittances directed to investment and savings by the ILO sample was similar to the result obtained from a survey of Sri Lankan return migrants from the Middle East conducted in 1984 which showed that more than half of remittance money was used on physical and financial investment (Athukorala, 1990). Results of a study based on the 1987-88 Pakistan Household Income and Expenditure Survey also indirectly support the ILO data (Malik and Sarwar, 1993). Batzlen (1999) carried out a survey from Pakistani migrants and non-migrant households in 1994-95, and his findings are not much different from that of Arif (1999). A similar conclusion based on the survey of rural households in Egypt was also drawn by Adams (1992): 'migrants do invest and that migrants actually exhibit a higher propensity to invest than their non-migrant counterparts'. It therefore can be concluded that the migrant families, who receive the remittance money, do not consider remittances to be part of their permanent incomes and tend to invest or save a considerable proportion of remittances received.

V. OVERSEAS MIGRATION, CONSUMPTION AND POVERTY REDUCTION

A. Consumption Pattern

The direct and immediate impact of remittances is on household consumption. Consumption pattern of migrant households has been thoroughly examined in the empirical research carried out particularly in the 1980s. However, the surveys on which these early studies were based did not include consumption modules, thus making it difficult to determine the actual levels and patterns of consumption expenditures for migrant as well as non-migrant households. The 2000-01 PSES contained a consumption module. Utilizing this module, an analysis of the consumption pattern for migrant and non-migrant households was carried out, and the results are presented in Tables 6 and 7. The per capita monthly expenditures are classified in Table 6 into food and non-food items. Per capita total expenditures have also been reported in this table. The non-food items consist of housing, clothing, education, health, transport and recreation. Expenditures on consumer durables are not included in the non-food expenditures.

Table 6 reveals several important dimensions of consumption patterns. First, the total per capita monthly expenditures of migrant households are at least 50 percent higher than the expenditures of their non-migrant counterparts. This difference was more pronounced in urban areas than in rural areas of the country. Second, compared to spending of 38 percent of the total expenditure on food items in migrant households, 46 percent were spent on food in non-migrant households, a result in the expected direction.

Effects of Overseas Migration on Household Consumption

Third, a large difference in spending between migrant and non-migrant households was found in non-food items. In rural areas, migrant households spent on average Rs.100 more on food than non-migrant households. But in the case of non-food items this difference was about Rs 260 per capita per month. In urban areas the difference between migrant and non-migrant households in spending on food was less Rs. 200 per capita per month, but for non-food items it was more than Rs. 600 per capita per month. This pattern of consumption clearly demonstrates that the remittance money has enabled migrant families to improve their quality of life by spending on, in addition to food, housing, clothing, education and health. This improvement in the quality of life would be beneficial for the members of these households for long period of time.

TABLE 6. Per Capita Monthly Food, Non-Food and Total Expenditure by Migration Status of the Sampled Households and Rural/Urban Areas (rupees)

Rural/urban areas/ migration status	Per capita monthly food expenditure		Per capita monthly non-food expenditure		Per capita monthly total expenditure	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Rural areas						
Migrant households	592	353	688	737	1,279	954
Non-migrant household	497	285	428	445	925	647
All households	503	291	443	471	946	673
Urban areas						
Migrant households	713	363	1,600	1,521	2,313	1,800
Non-migrant households	545	334	954	1,107	1,499	1,322
All households	557	339	999	1,151	1,557	1,376
All areas						
Migrants households	641	361	1,056	1,205	1,697	1,450
Non-migrant households	514	305	614	790	1,128	981
All households	522	310	641	828	1,163	1,025

Source: 2000-01 PSES.

Table 7 shows some more detail on the consumption pattern of migrant and non-migrant households. Whereas migrant households spent on average more on each food and non-food items given in the table, the difference in spending was more pronounced in certain items. On milk and vegetables, migrant households spent 22 to 28 percent more than non-migrant households. But, in the case of meat the spending of migrant households was 60 percent higher than the non-migrant households. In non-food items, the difference between migrant and non-migrant households was more pronounced in housing, health and education than in clothing. It is therefore hard to believe that education and health are not the priorities of migrant households for the use of remittance money. It has been determined in sections VI and VII that overseas migration has contributed significantly in increasing school enrolment of migrant household children as well as in improving health through reduction in infant and child mortality.

TABEL 7. Per Capita Monthly Expenditure on Selected Food and Non-Food Items by Migration Status of the Sampled Households (rupees)

Items	Migrant households	Non-migrant households	All households
Food items			
Milk and diary products	143	111	112
Meat	82	51	53
Fruit/vegetable	65	48	59
Non-food items			
Housing	288	179	186
Clothing	91	62	186
Health/education	126	81	83

Source: 2000-01 PSES.

B. Migration and Poverty Alleviation

The consumption pattern of migrant households influenced by the remittance money has pulled many migrant households out of poverty. In the past, particularly in the 1980s, the direct and multiplier impacts of migration were on the whole so directed, especially on domestic wages and employment as to have an overall favourable impact on poverty alleviation. Poverty levels significantly declined although other favourable developments such as high growth in agriculture and manufacturing during the same period also contributed in poverty reduction (Amjad, 1989). Pakistani migration to the Middle East offered the means to upward economic mobility as no other development in Pakistan's history has offered. Among several other factors, the decline in overseas migration and reduction in foreign remittances after the late 1980s have been considered among the major reasons for the return of poverty in the 1990s. Due to many external and internal favourable developments, overseas migration of Pakistani workers has increased in recent years. The inflow of remittances has reached to a new peak of US\$ 4 billion in 2002-03. It is yet to establish the effects of this ever-high level of remittances on poverty and income distribution at the macro level. It would only be possible when the new household-level data from the Pakistan Integrated Household Survey is available by the next year.

Using the 2000-01 PSES, an attempt has been made to compare poverty levels between migrant and non-migrant households. The poverty line estimated by Qureshi and Arif (2001) for the 1998-99 period was inflated to get the line for the 2000-01 period.¹ Table 8 presents the poverty data for rural and urban areas of the country. Overall, poverty was much lower, only 18 percent, among the migrant households than among the non-migrant households, about 40 percent. In urban areas, poverty was almost nonexistent among the migrant households while a quarter of non-migrant households were found below the poverty line. In rural areas, poverty level was much higher in non-migrant households than in migrant households. To see the independent effect of overseas migration on poverty alleviation, a multivariate analysis was also carried out where in addition to age, education, industrial status, house ownership and

¹ For detail on the computation of poverty, see Qureshi and Arif (2001).

Effects of Overseas Migration on Household Consumption

family size, and migration status of the households were entered into a logit model, using the dummy of being poor as the dependent variable.² Except age all these variables including the migration status turned to be statistically significant. The effect of migration on poverty was negative. Thus, migration has an independent and significant impact on the poverty reduction.

TABLE 8. Percent Households Poor by Their Migration Status and Rural/Urban Areas

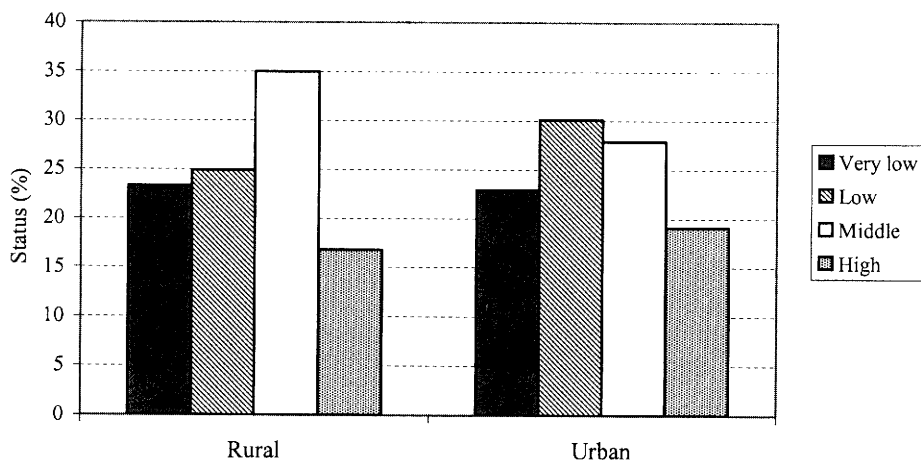
Rural/urban	Migrant households	Non-migrant households	All households
Rural areas	28.1	47.5	46.4
Urban areas	4.0	25.7	24.2
All areas	18.4	39.8	38.5

Source: 2000-01 PSES.

However, it can be argued that a large majority of overseas migrants, although mainly skilled and semi-skilled workers, did not come from the poorest strata of the population. Also the cost of migration, which is usually high, means that certain minimal resources have to be available to join the migration stream (Amjad, 1989). The issue of cost of migration and sources of funding the cost was examined by Arif (1995) in detail. On average, migrants spent Rs 10,000 to secure a job in the Middle East, although the cost varied across the countries of destination, being highest, Rs 12000, for Kuwait. More than half of the migrants either borrowed this amount or they sold some property. According the 2000-01 PSES, on average migrants spent Rs 32,000 for overseas employment. Again more than half of the migrant households depended on sources other than their household savings. Therefore, on the one hand, it is true that certain minimum resources need to be available to go abroad but, on the other hand, a large proportion of migrants did not have savings sufficient to secure overseas employment rather they used borrowed money which they have to return from their overseas savings. With respect to pre-migration economic status, Arif (1995) showed that approximately half the migrant sample was in low or very low economic status category before migration (Figure 3). Overseas employment provided all these poor households an opportunity to increase their economic status. In short, the direct effect of overseas migration on poverty alleviation seems to be substantial. Many poor families, which were able to go abroad for employment, escaped from poverty, probably in a short period of time.

² Results are not shown in the text. They are available on request.

FIGURE 3. Percentage Distribution of Return Migrant Households by Their Pre-Migration Economic Status and Rural/Urban Areas



Source: Arif (1995: Table 5.12).

VI. OVERSEAS MIGRATION AND CHILD SCHOOLING

Migration has exercised considerable influence on schooling of children belonging to migrant households. In Pakistan, few issues are important: school enrolment in primary schools is low, and children who enter in primary-level education do not necessarily complete their primary education. Only a small proportion of children join the middle and high-level schools. How does overseas migration affect enrolment at all these elementary and secondary levels? Many Asian countries have made significant progress towards achieving the targets of universal primary education. China has also set the goal at nine years of compulsory education and is already close to achieving it. Pakistan has made some progress in schooling. This progress, however, has in general been below the average for South Asian countries and below the average for the developing countries. In this scenario, it is important to carry out in-depth analyses to understand the role of migration in schooling.

A. School Enrolment

Table 9 shows the net enrolment rates (NER) at three educational levels: primary, middle and secondary (matriculation).³ The NER at the primary-level for the whole

³ The NER is the number of children attending a level of school divided by the number of children who ought to be attending that level. For primary-level, 5-9 years old children were used as the denominator while children currently enrolled in 1-5 classes were used as the numerator. For middle and matric levels, 10-13 years and 14-16 years old children were used for the calculation of NER. The middle level refers to 6 to 8 classes, and 9 to 10 classes are considered in Pakistan for the matric level.

Effects of Overseas Migration on Household Consumption

country, according to the 200-01 PSES, was 49 percent.⁴ Three major differences in the NER at the primary-level are evident from the table. Firstly, it is higher in urban areas than in rural areas. Secondly, there is a gender gap in the school enrolment in rural as well urban areas. Thirdly, the percentage children enrolled in primary schools was higher among migrant households than among non-migrant households. This relationship was true for both sexes as well for rural and urban areas of the country. It is worth noting that the gender gap persists within the migrant households. However, more recent interest in education goes beyond the primary-level enrolment, which is considered too low to provide the kind of skill labour force needed for rapid industrialization. Achieving higher productivity in industry and services will demand much more. Table 9 also sets out data on NER for middle and matric levels. The middle level NER at the national level was 18 percent in the PSES.⁵ There is a large difference between urban and rural areas, being the middle-level NER 28 and 12 percent respectively. As the primary-level, the enrolment at the middle-level was higher among males than among females. For children belonging to the migrant households, the middle-level enrolment was higher than for the non-migrant sample. This difference was found in rural as well urban areas. The middle-level enrolment was similar for male children in migrant and non-migrant households but for female children it was higher in the migrant households.

TABLE 9. Primary, Middle and Matric-Levels Net Enrolment Rates (NERs)
by Migration Status, Gender and Rural-Urban Areas.

Gender/rural- urban areas	Migrant households			Non-migrant households			All households		
	primary	middle	Matric	primary	middle	matric	primary	middle	matric
Male	62.2	18.9	22.9	49.4	19.6	16.9	50.0	19.6	17.3
Female	56.9	22.7	17.7	44.7	15.0	12.3	45.5	15.5	12.6
Rural areas	54.3	15.4	12.4	41.9	11.9	11.4	42.6	12.2	11.5
Urban areas	69.6	33.3	33.9	57.2	27.2	19.8	57.8	27.5	20.6
All children	59.4	20.9	19.9	47.1	17.4	14.7	47.8	17.6	15.0

Source: 2000-01 PSES.

In Pakistan, the matriculation-level education is important for higher education. It is also the basic requirement for entering into several categories of government jobs. Like the primary and middle levels, there was a large difference between rural and urban areas; the NER in urban area was 21 percent, almost double that of the corresponding rate in rural areas. Overall, boy's NER at matric level was higher than the girl's NER. There was also a strong positive relationship between matric level enrolment and migration status of the sampled households. In rural as well as urban areas, the metric-level enrolment was higher among children belonging to migrant households than among children of non-migrant households. This was the case for both male and female children (Table 9).

⁴ This figure is very close to the NER of 53 percent as shown in the 2001-02 Pakistan Integrated Household Survey (PIHS), the main data source used by the Government of Pakistan to monitoring the enrolment trends over time.

⁵ The corresponding percentage in the 2001-02 PIHS was also around 17 percent.

To determine the independent effect of overseas migration on enrolment, it is appropriate to carry out a multivariate analysis where factors other than migration could be added. For this purpose, the focus of the analysis has been on the primary-level enrolment. Children 5-12 years old were selected. The enrolment dummy, which values one for those enrolled in primary school (1-5 classes) and zero otherwise, was used as the dependent variable, and logistic regression technique was applied. The explanatory variables included in the models were age, age², gender, rural/urban dummy, parents' education, household income (log per capita expenditure), overseas remittances (dummy), family size, ownership of house and number of children 5-12 years old. Three models were estimated; model I is the full model since it includes the whole sample of 5-12 years old children while Models II and III are estimated separately for male and female children.

The results of the estimation are reported in Table 10. The probability of a child to enrol in a primary school increases with child's age, reaches a maximum, and then starts to taper off. Girls are less likely than boys to go to school. Those living in urban areas have a higher probability of school enrolment. All three levels of father's and mother's education have a positive effect on the school enrolment probability. Ownership of residential house also has a positive influence on the school enrolment. Children belonging to Sindh, NWFP and Balochistan provinces were less likely than their counterparts in Punjab to be enrolled in school.

The remittance dummy turned out to be statistically significant and positive for the total sample. In regression, log per capita consumption expenditure was also included, and its impact on enrolment was also statistically significant and positive. These findings are consistent with the results of Arif *et al.* (1999) who examined the impact of poverty and household income on enrolment. They argued that poverty exerts a significant negative influence on a child's probability to enrol in a primary school, and this impact was independent of household income. Two separate models for boys and girls were also estimated, and results are also presented in Table 10. These two models differ in following way. First, the dummy of urban was statistically significant only in female model, illustrating that urban households are keen to educate their girls. Overseas remittances became insignificant in the regression for boys. Remittances dummy was statistically significant only in female model. This shows that parents' decision to enrol boys in school is not significantly influenced by additional income, but girls' chances of attending school enhance with the availability of financial resources from abroad. Budget constraint of the household therefore is primarily binding for the school attendance of girls. Boys are not hit hard by this constraint. Significance of ownership of residential house only in female model has the same explanation.

The 2000-01 PSES also contains data on the completion of education at different levels. The importance of completion of the primary-level education has been recognised in the Millennium Development Goals, which say clearly that both boys and girls alike should be able to complete a full course of primary schooling. The PSES shows that children of migrant households were more likely than children belonging to non-migrant households to complete their primary-level education. Moreover, the effect of overseas migration (remittances) on the completion of primary-level education was more pronounced for females than for males, suggesting additional financial resources not only enhance the possibility for young girls to be enrolled in schools but also keeps them in the school for relatively longer period.

Effects of Overseas Migration on Household Consumption

TABLE 10. Logistic Regression Effects on Primary School Enrolment (odds ratios)

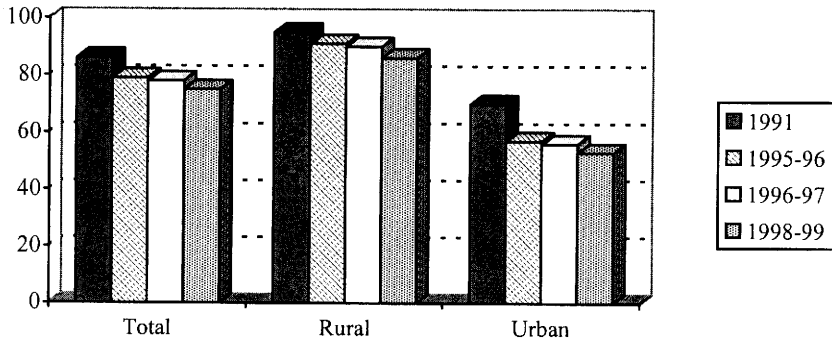
Correlates	Total (Model I)	Male (Model II)	Female (Model III)
Age	15.882*	16.504*	15.829*
Age ²	0.856*	0.857*	0.866*
Urban (=1)	1.440*	1.118	1.909
Family size	1.011	1.014	1.008
Male (=1)	1.537*	-	-
Log per capita expenditure	1.115*	1.136*	1.104*
Mother's education			
Primary	1.931*	1.979*	1.912*
Middle	1.836*	1.714*	2.021*
High	1.354*	1.317	1.393**
Father's education			
Primary	1.333*	1.472*	1.199
Middle	2.141*	2.090*	2.178*
High	2.438*	2.307*	2.616*
Ownership of house (yes=1)	1.186*	1.052	1.324*
Overseas Remittances (receiving=1)	1.445*	1.355	1.654*
Number of children 5-12 year old	0.977	0.999	0.956
Female headed household	1.027	0.950	1.175
Province			
Sindh	0.533*	0.595*	0.460*
NWFP	0.790*	0.904	0.685*
Balochistan	0.555*	0.626*	0.482*
Constant	0.000*	0.001*	0.001*

Source: 2000-01 PSES. *and ** show significance at 5 %, and 10% level respectively.

B. Overseas Migration and School Choice

From the Indian data, Zachariah *et al.* (2001) has recently shown that at the school level there has been a strong preference on the part of the emigrant households for English-medium schools compared with non-migrant households. Besides, preference of unaided private schools was highest among emigrant households and lowest among non-migrant households. They have also shown that migrant households spend, on average, more on tuition fees and private tuition than non-migrant households irrespective of type of school. In Pakistan, primary-level enrolment in absolute numbers has increased from about 11 million in 1990-91 to 20 million in 1999-2000. This increase in enrolment at the primary level has particularly been substantial in the private sector. The number of primary schools in this sector increased from about 11,000 in the early 1990s to approximately 15,000 in 1999-2000, leading to a rapid decline in enrolment in the government schools as a percentage of the total primary school enrolment (Figure 4). This decline was observed in both urban and rural areas, though it was more pronounced in the urban areas, where the share of government schools in total primary school enrolment fell from 70 percent in 1991 to 53 percent in 1998-99. In other words, approximately half of the total enrolment in urban areas was in private schools (for more detail, see Arif and Saqib, forthcoming).

FIGURE 4. Primary Level Enrolment in Government Schools as a Percentage of Total Primary Level Enrolment by Rural/Urban Areas, 1991, 1995-96, 1996-97 and 1998-99



Source: Arif and Saqib (forthcoming).

Table 11 presents some interesting results concerning school choice and overseas migration. The focus of the presented data is on primary education. There is a marked difference in school choice between the migrant and non-migrant households. Government schools have the main choice of children belonging to non-migrant households, approximately three-quarter of them go to public schools whereas among the children of migrant households 43 percent go to private schools. In urban areas, compared to only 39 percent of non-migrant household children, 56 percent of migrant household children are enrolled in private schools. Even in rural areas more than one-third (36 percent) of migrant household children were enrolled in private schools while the corresponding percentage was only 17 for the non-migrant household children. The medium of instruction in public schools is Urdu, the national language or Sindhi in Sindh Province. However, English is the medium of instruction in many private schools, particularly in urban areas. Migrant households have clear preference for schools where the medium of instruction is English (Table 11).

Why private schools have been the choice of migrant households? Private schools in Pakistan are usually considered better in terms of providing good quality of education. Based on children test in Mathematic, Urdu and General Knowledge enrolled in public, private and NGO schools, Arif and Saqib (forthcoming) show that the performance of children enrolled in private schools were in general better than the performance of children enrolled in public or NGO schools. Because of this difference, migrant households have probably made the choice to send their children in private schools, where tuition fee as well as other school related expenditures are higher than in public schools (Table 12). Overseas migration appears to have provided these households resources to afford relatively high cost of education in private schools. Based on the field observation of the author, it is also argued that areas with high overseas migration opened the possibility of establishing private schools.

To summarise, the present analysis clearly demonstrate the positive effect of overseas migration on school enrolment and completion of primary-level education. The overall relatively higher enrolment of children belonging to migrant households is not consistent with the findings of earlier studies which suggest that there is a disinterest in

Effects of Overseas Migration on Household Consumption

education among male children after certain grade and a decline in the number of male students pursuing higher education because of the incentive associated with emigration. The multivariate analyses show that the demand side factors, parent's education, household income and remittances affect positively the enrolment of children. Migrant households have clear preference for private schools where the medium of instruction is English. The economic benefits that parents expect from educating their children are likely to vary considerably according to their social, economic and cultural background. It is generally found that the higher the education of the parents, the higher the expectations of economic benefit, and the greater the demand for education for their children. Increase in the income of poor households may result in a significantly larger increase in enrolment rates.

TABLE 11. Percentage Distribution of Children Enrolled in Primary School by Type of School and Medium of Instruction by Migration Status of the Sampled Households

School type/medium	Rural areas			Urban areas			Total		
	Migrant	Non-migrant	All	Migrant	Non-migrant	All	Migrant	Non-migrant	All
School type									
Government	61.2	81.6	80.1	42.3	58.8	57.8	54.8	72.5	71.3
Private	36.0	16.9	18.4	56.3	39.2	40.2	42.9	25.8	27.0
Others	2.9	1.4	1.5	1.4	2.0	2.0	2.4	1.7	1.7
All	100	100	100	100	100	100	100	100	100
Medium of instruction in the school enrolled									
Urdu	85.6	74.9	75.7	52.1	63.8	63.1	79.3	70.5	70.7
English	12.2	9.2	9.4	45.1	26.6	27.7	23.3	16.2	16.7
Others	2.2	15.9	14.8	2.8	9.5	9.2	2.4	13.3	12.6
All	100	100	100	100	100	100	100	100	100

Source: 2000-01 PSES.

TABLE 12. Average Expenditure on Primary Schooling by School Type and Migration Status of the Sampled Households (Rs)

Fee/migration status	Government schools	Private schools	Other schools	All schools
Average monthly school fee				
Migrants	6.2	179.9	124.0	83.8
Non-migrants	9.1	140.8	47.7	43.8
All	9.0	145.0	54.9	46.5
Average monthly total school expenditure				
Migrants	64.4	284.4	199.0	162.3
Non-migrants	69.4	276.0	144.5	123.9
All	69.0	276.9	149.7	126.5

Source: 2000-01 PSES.

VII. OVERSEAS MIGRATION AND INFANT AND CHILD MORTALITY

Migration could affect mortality through behavioural changes. Migration brings in remittances, which increase wealth of the family, consequent improvement in education and nutrition of members of the households and greater use of hospital and modern health facilities during time of illness. These behavioural changes therefore tend to decrease mortality. How does overseas migration affect the health status of members of migrant households in Pakistan? No single study, according to our knowledge of the existing literature on overseas migration in Pakistan, has made a serious effort to see the relationship between migration and health. One probable reason could be that it requires a full range of demographic and health data in addition to information related to overseas migration. In the migration surveys health has never been the focus of inquiry while the demographic and health surveys have seldom collected data on overseas migration. In this context, the 2000-01 PSES provides a unique opportunity to examine the relationship between migration and health because in addition to having migration modules it has also included modules on birth history, health and consumption. Infant and child mortality rates are widely considered as good indicators of the overall health and socio-economic status of a country's population. Children mortality in Pakistan accounts for about three-fourths of the total deaths, and the reduction in infant and child mortality has been very slow, particularly during the last two decades. With respect to health this study has examined the question: Is there any role of overseas migration in the reduction of infant and child mortality?⁶

Before showing data on migration and infant and child mortality, a brief description on the historical trends of the latter seems appropriate here. Estimates of infant mortality based on the household surveys are available since the 1960s. These surveys show that IMR declined from 140 per 1000 in 1960s to 105 in the mid-1980s, declining further to 85 in the mid-1990s. As reported above, the pace of recent decline in infant mortality appears to be slow. For the more recent period, estimates of infant and child mortality are compared in Table 13 from the four different sources. According to the 2000-01 PSES, IMR was 77 per 1000 live birth. The 2000 Pakistan Demographic Survey (PDS) also showed the same figure. However, it is worth nothing that the PDS provides estimates for the year preceding the survey while the PSES estimates are based on relatively longer period, 10 years preceding the survey. Infant mortality was 85 and 82 respectively, according to Pakistan Reproductive Health and Fertility Survey (PRHFS) and 2001-02 Pakistan Integrated Household Survey (PIHS). It is beyond the scope of this study to determine the reliability of all these estimates that are based on different data sources. However, the differences can largely be attributed to differences in the reference period (Table 13). More importantly, the estimated rates of infant mortality appear to be in a narrow range of 77 to 85 per 1000 live births. Child mortality (1-4 years), according to PSES, was 19 per 1000 live births while the PRHFS recorded it

⁶ Infant Mortality Rate (IMR) refers to the number of deaths to children less than 12 months of age per 1,000 live births. The IMRs in the present analysis are estimated on the basis of total births occurred in the 10 years preceding the PSES. Child mortality is defined as the number of deaths to children 1 to four years of age per 1,000 live births. Estimates of child mortality in the analysis are based on births in the 10 years preceding the survey.

Effects of Overseas Migration on Household Consumption

as 20 per 1000 live births. Until recently infant mortality in Pakistan was higher for females than for males. This trend, according to both PSES and PRHFS, has reversed; female mortality in the latter is considerably lower than the former. Child mortality, however, remains relatively high among females. There may be still some gender related differences in health seeking behaviour.

TABLE 13. Infant and Child Mortality Rate

Source	Survey year	Reference period	Infant Mortality Rate			Child Mortality Rate		
			Total	Male	Female	Total	Male	Female
PSES	2000-01	1991-1999	77	79	75	19	16	24
PDS	2000	2000	77	-	-	-	-	-
PRHFS	2000-01	1997-1999	85	99	71	20	15	24
PIHS	2001-02		82	-	-	-	-	-

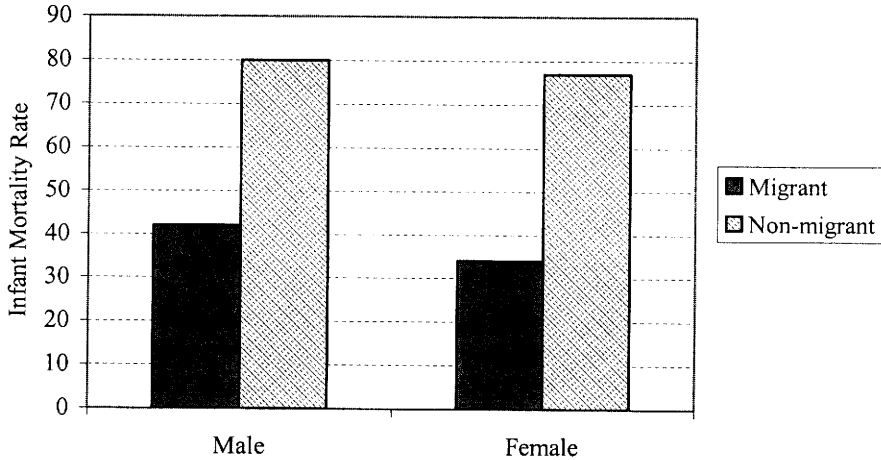
Table 14 presents data on infant and child mortality rates for children belonging to migrant as well as non-migrant households, controlling for rural and urban areas. Infant mortality was considerably lower among the children of migrant households compared to children of non-migrant households. This difference was as high as 29 deaths per 1000 live births. This negative impact of migration on child mortality was observed in urban as well as rural areas of the country. Table 14 further shows that child mortality was almost double in non-migrant households than that of children from the migrant households in both rural and urban areas of the country. Figure 5 presents data on infant mortality by gender and migration status of the sampled households. Results are in the right direction. The negative impact of migration on mortality was observed for male as well as female children. A close look at the Figure 5 shows that the effect of migration on female mortality was more profound than on male mortality. It appears that like education remittances particularly enable the respective family to make investment in female education, nutrition and health. In India, Zachariah *et al.* (2001) also found that infant mortality in households with emigrants was lower compared with households without emigrants. More Indian women in migrant households used private hospitals for childbirth than women in non-migrant households. In the case of Pakistan it is likely that migrant households in the case of illness of children use modern health facilities since they can afford the better treatment.

TABLE 14. Infant and Child Mortality by Migration Status and Rural-Urban Areas

Rural/urban areas	Infant Mortality Rates			Child Mortality rates		
	Migrant	Non-migrant	All	Migrant	Non-migrant	All
All areas	49	78	77	10	20	20
Rural areas	56	87	85	12	24	24
Urban areas	36	62	61	7	13	12

Source: 2000-01 PSES.

FIGURE 5. Infant Mortality Rates (per 000) by Gender and Migration Status of the Sampled Households



Source: 2000-01 PSES.

A. Correlates of Infant Mortality: A Multivariate Analysis

Cox's proportional hazards model for identification of covariates, which had a stronger relationship with the survival probabilities of the sampled children, was employed on the PSES data set.⁷ The explanatory variables were grouped into four categories: demographic factors, socio-economic factor, environmental factors and locational factors. Operational definitions of the explanatory variables used in the hazard model are given in Table 15 with results. Three models have been estimated. Model 1, which is the full model, includes all the sampled children. Models 2 and 3 are estimated by focusing on male and female children respectively. Results are expressed in the form of relative risk. Take first the full sample. Both gender and birth order did not show any significance with the risk of dying. Results show that the other two demographic variables included in the model, birth interval and survival status of the previous child, turned to be statistically significant. Children born at an interval to one year were at the greater risk of death compared to children born 3 to 4 years apart. Death of the previous child increases the risk of dying of the newly born child before his/her first birthday.

⁷ The general form of this model is: $h_x(t) = h_0(t) C_x$ where $h_0(t)$ denotes baseline hazard function, x denotes a set of characteristics, and C_x is a multiplier specific to persons. The model used takes into account the multiplicative effect of the explanatory variables on the hazards function and includes the censoring and the failures. In view of the non-negativity of h_x , the functional form used in the present study was the exponential: $h_x(t) = h_0(t) \exp(b_1x_1 + b_2x_2 + \dots + b_nx_n)$.

Effects of Overseas Migration on Household Consumption

TABLE 15. Relative Risk of Dying before the First Birthday: Proportional Hazard Models

Covariates	Model 1	Model 2	Model 3
Demographic Factors			
Child sex			
Birth order of child	1.063	1.085	1.008
1	-	-	-
2	1.038	1.105	0.951
3	1.090	0.982	1.180
4+	1.064	0.880	1.276
Birth Interval (previous child)			
First child	0.884	0.819	0.931
≤ 1 year	-	-	-
2 years	0.763*	0.662*	0.885
3 years	0.441*	0.409*	0.473*
4+ years	0.288*	0.281*	0.326*
Survival status of previous child (dead=1)	2.433*	2.480*	2.301*
Mother's age at the time of birth (years)	1.007	1.015	0.998
Socio-economic Factors			
Mother's Education			
No	-	-	-
Primary	1.183	1.075	1.238
Middle	0.850	1.140	0.567
Matric and higher	0.412*	0.538*	0.294*
Use of contraception (current use=1)	0.750*	0.693**	0.830
Women headed household (women=1)	1.093	0.878	1.367
Electricity connection (yes=1)	0.872	0.935	0.777
TV (yes =1)	1.080	0.811	1.662
Environmental Factors			
Piped water inside house (yes=1)	1.080	1.005	1.194
Toilet with any type of flush system (yes=1)	0.891*	0.741*	1.163
Locational Factors			
Place of residence (urban=1)	0.984	1.010	0.947
Province of residence			
Punjab	-	-	-
Sindh	0.861	0.965	0.738
NWFP	0.608**	0.566*	0.686
Balochistan	1.022	0.914	1.153
Migration status	0.766	1.112	0.450**

Source: 2000-01 PSES. * and ** show significance at 5 %, and 10% level respectively.

Children born to mothers who at the time of survey were using contraception were less likely to die than children born to mothers who either had never used family planning or who had used in the past. The higher number of infant deaths amongst the non-users can be explained by the greater number of children born at shorter birth interval with a greater risk of death. It is well established that the use of family planning

increases with the age of the mother, who have attained their desired family size. Mother's education is correlated with child survival. Children of mothers who had matriculated (10 years of schooling) were 0.41 times less likely to die than children whose mothers had no education. There was no statistically significant difference between infant mortality probabilities of mothers who had attended school up to middle level (8 years schooling) and those who received no education.

In Pakistan unhygienic living conditions are a major source of spreading infection diseases. Children are relatively more likely subgroup to be contacted by these infections in the neonatal period as well as the post-neonatal period. The variables used for measuring the household's hygienic environment were the type of toilet used, piped water inside the dwelling unit and garbage collection system. Only one variable, toilet with any type of flush system had an independent effect on child survival. In other words, association of child death with unhygienic living conditions was positive. Apparently in terms of child survival, sanitation seems to be more important than water supply.

In full model, migration did not show any significant effect on child mortality. But its effect on female model was negative and statistically significant. These findings are similar to the education models estimated in the previous section. Remittances seem to be particularly important for the health and education of female children. Additional financial resources have enabled migrant families to invest more on their female children and health.

VIII. OVERSEAS MIGRATION AND LABOUR MARKET PARTICIPATION

Rodriguez and Tiongson (2001) have recently shown from the experience of Philippines that international migration affects the labour supply of non-migrants in two ways. First, the effect depends on which tasks the migrant performed before departure. If overseas migrants were substitute of non-migrants in household production, migration would decrease the labour supply of non-migrant members in the local labour market. If migrants are complements in household production, then their departure causes an increase in the labour supply of non-migrants in the local labour market. Second, when migration occurs, non-migrant relatives receive remittances, which they perceive as additional non-labour income. An increase in non-labour income then reduces their participation in local labour markets. Given the large size of workers' remittances in Pakistan, a strong income effect is expected, with reduced labour supply of non-migrant members, particularly females. Statistics on labour force participation in Pakistan are reflective of the fact that although adult males of working ages exhibit a very high activity rate, the participation rates of females are in general very low. These statistics could be partly an artefact of the inadequate concepts used to measure female economic activity. Studies of female labour force participation provide evidence of negative income effect: women work out to sheer economic necessity and tend to withdraw from the labour force as family income improves (Abbasi and Irfan, 1986). In view of these studies, one could expect that an addition of remittances to family income would lead to lower participation of women.

Table 16 sets out on the labour force participation rates for males as well as females by the migration status of the sampled households, controlling for rural and urban areas. Since the PSES was carried out in 2000-01, comparable statistics from the

last Labour Force Survey (LFS) carried out in 2001-02 are also shown in this table. According to the LFS, 43.3 percent of total adult population (10 years and above) was in the labour force while the corresponding participation rate in the PSES was 46 percent. There were substantial differences between male and female in terms of their participation in the labour force. The LFS shows that more than 70 percent of the male population was in the labour force. Only 14 percent of females were active in the labour market. The PSES shows relatively low male participation, 66 percent, but substantially high participation of females in the labour market, 23 percent. This high female participation can largely be attributed to the use of female enumerators in the PSES. In the LFS, male enumerators collect information regarding female labour force participation usually from a male respondent. As expected, labour force participation of male as well as female was higher in rural areas than in urban areas.

The relationship between migration and work participation, shown in Table 16, suggests that the total as well as sex-specific activity rates were lower among workers belonging to migrant households than those of their counterparts living in non-migrant households. The differences were particularly substantial for females. Overall 16 percent of women in migrant households were economically active whereas in the non-migrant households approximately a quarter of the sampled women were active in the labour market. Moreover, Table 16 shows that these differences were more pronounced in rural areas than in urban areas. It thus appears that an addition of remittances to family income has led to lower participation of women in the labour market.

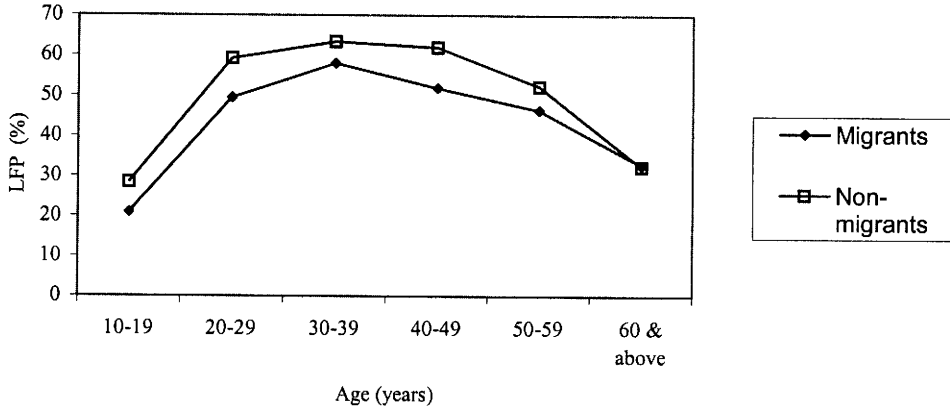
TABLE 16. Labour Force Participation Rates

Rural-urban/ Gender	2001-02	2000-01 PSES		
	Labour Force Survey: all households	All households	Migrants households	Non-migrant households
All areas	43.3	45.7	40.1	46.2
Male	70.3	66.4	64.2	66.5
Female	14.4	23.3	14.5	24.0
Rural areas	45.2	47.8	40.8	48.3
Male	72.2	67.2	65.2	67.3
Female	16.8	26.4	14.6	27.3
Urban areas	39.9	42.4	39.1	42.7
Male	66.9	65.0	62.6	65.2
Female	10.0	18.5	14.2	18.8

Source: 2000-01 PSES.

The age-sex labour force participation rates for migrants and non-migrants are shown in Figure 6. Two curves in this figure are fairly similar: the labour force participation rates are highest for the age group 30-39 for both migrants and non-migrants. However, the figure clearly shows that the participation rates for non-migrants are higher in all age groups than migrants, except the older persons, 60 years and above, where no real difference was found between persons belonging to migrant and non-migrant households. These differences maintained when the data was further controlled by gender (not shown in Figure 6).

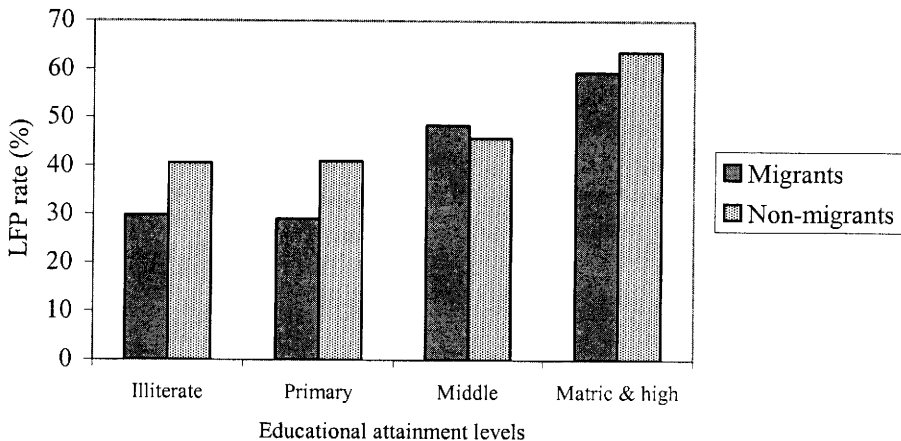
FIGURE 6. Age-Specific Labour Force Participation Rates by Migration Status of the Sampled Households.



Source: 2000-01 PSES.

Education is generally linked with participation in the labor market. Figure 7 presents labor force participation rates of the sampled individuals by the migration status controlling for educational attainment levels. One clear difference is across these levels: higher the level of educational attainment more the labour force participation rate. Thus education definitely enhances the possibility of being active in the labour market. The figure also shows that differences between persons belonging to migrant and non-migrant households largely persist even after controlling for their levels of educational attainment.

FIGURE 7. Education Specific Labour Force Participation Rates by Migration Status of the Sampled Households.



Source: 2000-01 PSES.

Effects of Overseas Migration on Household Consumption

Table 17 shows the results of a logit analysis, which identifies the effects of individual and family characteristics on the probability of participating in labour markets. We define participation in labour markets if individuals at the time of survey were employed or looking for employment. Results show that older individuals are likely to have higher labour force participation. Age profiles show the expected pattern of increasing participation up to a certain age and then decreasing participation after. Males are more likely than females to be active in the local labour market. Education has a positive impact on participation in the labour market. Among the family characteristics, headship affects labour force participation. In Pakistan males head approximately 94 percent of households. From a traditional perspective, men were more likely to assume the responsibility of providing for the family. Men therefore may be considered more productive in undertaking work outside the household, while women are left in charge of home production. Does having migrant relatives affect the behaviour of non-migrants? Overseas migration has a negative and significant impact on labour force participation. These findings are consistent with studies carried out elsewhere. For example, from the experience of Philippines, Rodríguez and Tiongson, (2001) show that international migrants reduce the labour supply of non-migrants (their labour force participation and their hours worked) who substitute income for more leisure. Therefore, the labour supplies of non-migrants and migrants are not separable. This represents an additional benefit of emigration that has not received enough attention in the literature.

TABLE 17. Logistic Regression Effects of Labour Force Participation

Correlates	All Sample	
	B	SE
Age	0.150	0.006*
Age ²	-0.002	0.000*
Sex (male=1)	2.675	0.041*
Marital Status (married=1)	-0.084	0.050
Education		
Illiterate	-	-
Primary	0.269	0.056*
Middle	0.199	0.065*
Matric	0.362	0.056*
Training	5.039	0.952*
Migration Status (migrant=1)	-0.477	0.074*
Family size	-0.22	0.004*
Constant	-3.093	0.113*
-2 Log likelihood Ratio	17390.847	

Source: 2000-01 PSES.

IX. CONCLUSIONS AND POLICY IMPLICATIONS

This paper has examined the effects of overseas migration on household consumption, poverty, child schooling, infant and child mortality and labour force participation. The analyses were based on the 2000-01 Pakistan Socio-Economic Survey. Migrant

households received on average Rs 47,000 annually during their average stay of more than 6 years. Comparison with the previous studies reveals that annual inflow of remittances has increased over time. But in view of the high cost of overseas migration, per worker inflow of remittances does not seem to be satisfactory. In addition to earnings of workers, duration of stay abroad, country of employment, and occupation while abroad were related to the amount of remittances received. Significance of these variables has policy implications in terms of training of the potential workers and bargaining of wages they receive during their overseas employment. Migrant households were able to direct a considerable proportion of the remittances to investment.

The total per capita monthly expenditures of migrant households were at least 50 percent higher than the expenditures of their non-migrant counterparts. This difference was more pronounced on non-food expenditures including housing, education and health. The direct effect of overseas migration on poverty alleviation seems to be substantial. Many poor families, which were able to go abroad for employment, escaped from poverty.

The analysis demonstrated the positive effect of overseas migration on child schooling. The demand side factors, parent's education, household income and remittances affect positively the enrolment of children. Increase in the income of poor households may result in a significantly larger increase in enrolment rates. Moreover, migrant households have clear preference for private schools where the medium of instruction is English. It is because the overseas migration has provided them resources to afford relatively high cost of education in private schools. Migration has probably contributed considerably in the expansion of private schools in the country. The negative impact of migration on infant and child mortality was observed for male as well as female children. In the multivariate, however, this effect was significant only in the female model. Remittances seem to be particularly important for the health and education of female children. Additional financial resources have enabled migrant families to invest more on their female children. The relationship between migration and work participation suggests that the total as well as sex-specific activity rates were lower among workers belonging to migrant households than those of their counterparts living in non-migrant households. These findings are consistent with studies carried out elsewhere.

It appears from the present analysis that in general migrant households have benefited from overseas migration. These households were more ready than non-migrants to seize opportunities to improve their economic situations and showed considerable courage in trying their luck in overseas. In general they were highly successful in their efforts. They almost certainly could not have achieved what they did without migrating abroad. If the rationale for development is for people to be able to fulfil their basic minimum needs and to improve their standards of living, most migrant households appear to have met these criteria.

Despite the general success of migrant households in improvement of their economic and social status, there is a need to increase workers' savings while abroad. They are working on low wages, which are likely to be associated with the recruiting practices. In Pakistan the assistance to migrate provided through government agencies and servicing institutions is minimal, and prospective migrants depend greatly on private recruiting agencies; irregularities are common. In the absence of any systematic surveillance of the recruiting process, the incidence of irregular migration may have increased over time. With these irregularities, it is hard to get reasonable wages. There is

a need to remove the irregularities in the recruiting process. More importantly, the skill level of Pakistanis working overseas is in general very low. During the last two and half decades no real change could be observed in the occupational structure of migrant workers. Serious efforts may be made to send abroad skilled workers. A more skilled and educated migrant is likely to be a more successful migrant. This does not mean encouraging the flight of professional, highly skilled and already wealthy workers. However, the promotion of pre-migration technical training courses seems likely to be important.

A major part of remittances is transferred while migrants are abroad and recipient households primarily use these monies. These households may not have information about investment opportunities. There is a need to develop a network in high-migration areas to provide investment-related information to migrants' families. In order to encourage migrant workers to use official channels to send home their remittances, Pakistani banks have opened their branches in the Middle East. These banks should introduce some schemes to enable workers to use their savings for productive investment in Pakistan. For example, workers who had foreign currency accounts for a certain period of time can be offered some credit to invest in the specified projects. Turkish banks had such schemes for migrants working in Germany.

REFERENCES

- Abbasi N. and M. Irfan. "Socio-economic Effects of International Migration on the Families Left Behind," in Fred Arnold and N.M. Shah (ed) *Asian Labor Migration: Pipeline to the Middle East*. Westview Special Studies in International Migration, London, 1986.
- Abbasi S. "An Investigation Into Socio Economic Impact of Foreign Remittances on the Families Left Behind." Unpublished M.A. Thesis, University of Agriculture, Faisalabad, 1998.
- Adams, Richard H. Jr. "The Effect of Migration and Remittances on Inequality in Rural Pakistan." *The Pakistan Development Review*, 1992, 31; 4, 1189-1206.
- Adams, Richard H. Jr. "Remittances, Investment, and Rural Asset Accumulation in Pakistan." *Economic Development and Cultural Change*, October, 1998.
- Addleton, J.S. *Undermining the Centre: The Gulf Migration and Pakistan*. Karachi: Oxford University Press, 1992.
- Akbar, Mehnaz. "The Impact of Male Out-migration on the Workload of Women." A thesis Department of Anthropology Quaid-e-Azam University, Islamabad, 1990.
- Amjad, R. (ed.) *To the Gulf and Back: Studies on the Economic Impact of the Asian Labour Migration*. UNDP/ILO/ARTEP, New Delhi, 1989.
- Arif, G.M. "International Contract Labour Migration and Reintegration of Return Migrants: the Experience of Pakistan." Unpublished PhD Thesis, the Australian National University, Canberra, 1995.
- Arif, G.M. "Reintegration of Pakistani Return Migrants from the Middle East in the Domestic Labour Market." *The Pakistan Development Review*, 1998, 37; 2, 99-124.
- Arif, G.M. "Remittances and Investment at the Household Level in Pakistan." Pakistan Institute of Development Economics, Islamabad. (Research Report No. 166), 1999.

- Arif, G.M. and M. Irfan. "Return Migration and Occupational Change: the Case of Pakistani Migrants Returned from the Middle East." *The Pakistan Development Review*, 1997, 36: 1, 1-37.
- Arif, G.M. and M. Irfan. "Population Mobility Across the Pakistani Border: Fifty Years Experience." *The Pakistan Development Review*, 1997a, 36: 4, 989-1009.
- Arif, G.M. Najam us Saqib and G. M. Zahid. "Poverty, Gender, and Primary School Enrolment in Pakistan." *The Pakistan Development Review*, 1999, 38: 4, 979-992.
- Arif, G.M. and Lubna Shahnaz. "Emigration and Skill Acquisition: an Evidence from the Two Surveys of Pakistani Migrants Returned from the Middle East." *Pakistan Economic and Social Review*, 2000, 38: 2, 215-240.
- Arif, G.M. and Faiz Bilquees. "Pakistan Socio-economic Survey II: Sample Design, Panel Attrition and Household Characteristics." MIMAP Technical paper series (forthcoming).
- Arif, G.M. and Najam us Saqib. "Production of Cognitive and Life Skills in Public, Private and NGO Schools in Pakistan." *The Pakistan Development Review* (forthcoming).
- Athukorala, P. "International Contract Migration and the Reintegration of Return Migrants: the Experience of Sri Lanka." *International Migration Review*, 1990, 24(2):323-345.
- Batzlen, Christof. *Migration and Development, Remittances and Investments in South Asia: A Case Study of Pakistan*. Peter Lang, Frankfurt am main, 1999.
- Bilquees, F. and S. Hamid. *Impact of International Migration on Women and Children Left Behind*. Pakistan Institute of Development Economics, Islamabad, 1981.
- Burki, S. J. "Poverty in Pakistan: Myth or Reality," in T. N. Srivansan and P. K. Bardhan (ed). *Rural Poverty in South Asia*, Columbia University Press, New York, 1988.
- Burki, S. J. "Migration from Pakistan to the Middle East," in G. D. Papademetriou and P. L. Martin (ed). *The Unsettled Relationships: Labor Migration and Economic Development*, London: Greenwood Press. pp.139-162, 1991.
- Gilani, I, F.M. Khan and M. Iqbal. "Labour Migration from Pakistan to the Middle East and its Impact on the Domestic Economy." Pakistan Institute of Development Economic, Islamabad. Research Report Series No. 126, 1981.
- Government of Pakistan (GoP). *Economic Survey*. Finance Division, Economic Adviser's Wing, Islamabad, 2003.
- Hussain, N. "Return Migration and Transfer of Technology." Paper presented at Regional Workshop on Return Migration and Long-term Economic Development in South Asia. May 26-28, 1997, Quaid-i-Azam University Islamabad, 1997.
- International Labour Organisation (ILO). *Labour Market Adjustment to Emigration in Pakistan. Asian and Pacific Skill Development Programme*, ILO, Islamabad, 1987.
- Kazi, S. "Domestic Impact of Overseas Migration: Pakistan," in Rashid Amjad (ed). *To the Gulf and Back: Studies on the Economic Impact of the Asian Labour Migration*. UNDP/ILO/ARTEP, New Delhi, 1989.
- Khan, S. and M. A. Chaudhry. "Impact of International Migration on Income Generation by Women in Migrant Households: A Case Study of a Small Punjabi Village." Paper presented in the Regional Workshop on Return Migration and Long-term Economic Development in South Asia. Islamabad, May 26-28, 1997, 1997.
- Khan, F.M. "Migrant Workers to the Arab World: the Experience of Pakistan," in G. Gunatilleke (ed) *Migration to the Arab World: the Experience of Returning Migrants*. United Nation University, Tokyo, 1991.
- Lefebvre, A. *Kinship, Honour and Money in Rural Pakistan: Subsistence Economy and the Effects of Internal Migration*. Richmond: Curzon Press, 1999.
- Mahmood, Z. "Foreign Trade and Investment Policies in the Context of Labour Migration from Pakistan." Paper presented at Regional Workshop on Return Migration and

Effects of Overseas Migration on Household Consumption

- Long-term Economic Development in South Asia, May 26-28. Quaid-i-Azam University Islamabad, 1997.
- Malik, J.S. and N. Sarwar. "Some Tests for Differences in Consumption Pattern: the Impact of Remittances using Household Income Expenditure Survey of Pakistan. 1987-1988." Paper presented at the ninth annual general meeting of Pakistan Society of Development Economists. Pakistan Institute of Development Economics, Islamabad, 1993.
- Mariam S. and C. Batzlen. "Impact on Migration on Fertility Rates and Children's Education: A Case Study of a village in Punjab." Paper presented at Regional Workshop on Return Migration and Long-term Economic Development in South Asia, May 26-28. Quaid-i-Azam University Islamabad, 1997.
- Naveed-i-Rahat. *Male Outmigration and Matri-Weighted Households: A Case Study of a Punjabi Village in Pakistan*. Delhi: Hindustan Publishing Corporation, 1990.
- Naz, S. Farch. "On Migration and Role of Women in the Absence of Males." A thesis Department of Anthropology Quaid-i-Azam University, Islamabad, 1988.
- Qureshi, S. K. and G. M. Arif. "The Poverty Profile of Pakistan." MIMAP Technical Paper Series No. 5 PIDE, Islamabad, 2001.
- Rodriguez, E. R. and E.R Tiongson. "Temporary Migration Overseas and Household Labour Supply: Evidence from Urban Philippines." *International Migration Review*, 2001, 35: 3, 709-725.
- Sadeque, Najma. "International Migration and Women: Pakistan." in *Trade in Domestic Helpers: Causes, Mechanisms and Consequences*. Kuala Lumpur: Asian and Pacific Development Centre, Malaysia, 1989.
- Shah, N.M. and F. Arnold. "Pakistani Workers in the Middle East: Volume, Trends and Consequences." *International Migration Review*, 1983, 17: 3, 410-424.
- Shahnaz, L. and A. Khan. "Impact of Male Out-migration on Decision Making: A Case Study of Selected Areas of Kharian." Paper presented at Regional Workshop on Return Migration and Long-term Economic Development in South Asia, May 26-28. Quaid-i-Azam University Islamabad, 1997.
- Shirazi, et al. "Overseas Migration, Remittances and Poverty Alleviation: Some Estimates for Pakistan." Paper presented at Regional Workshop on Return Migration and Long-term Economic Development in South Asia, May 26-28. Quaid-i-Azam University Islamabad, 1997.
- UNESCO/IPRI. Report of National Seminar on *the State of Migration and Multiculturalism in Pakistan*, Jointly organized by United Nations Educational, Scientific and Cultural Organization (UNESCO) and Islamabad Policy Research Institute (IPRI) Islamabad. (June 16-18, 2003) pp.1-204.
- Zachariah, K. C., E. T Mathew, and S. I. Rajan. "Social, Economic and Demographic Consequences of Migration on Kerala." *International Migration*, 2001, 39: 2, 43-71.