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Research Paper

INTERNATIONAL MIGRATION AND EXTENT OF REMITTANCES: A CASE STUDY OF RURAL PUNJAB

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ABSTRACT

Punjab state has been one of the pioneer states of India for outmigration. The workforce of rural Punjab is looking for alternate employment opportunities both within and across the national boundaries. The overall objective of this paper is to collect and analyse the socio-economic variables that helps the rural workforce to decide for international migration other than subsistence agricultural and other employment avenues in the Punjab state. The regular earnings in terms of the remittances are responsible for the international migration from rural Punjab, as supported by the empirical evidences. The De facto heads of the households reveal that the outflow of workforce, i.e., international migration and the inflow of remittances have helped to break the vicious circle of poverty of these concerned households to a remarkable extent. Somehow, there is need to consider and focus on the mechanism of the outflow of workforce and inflow of remittances to eradicate poverty and mobilise the resources for the development of rural Punjab at both micro and macro level.

KEY WORDS: Rural Punjab, Land ownership, Socio- economic variables, Households

1. INTRODUCTION

International migration is the dimension that impacts the economic relations between developed and developing countries. More people live outside their country of origin today than at any time in history and the number of people who move across national boundaries, especially for better economic prospects, are expected to rise in future. It is also well recognized that migrant workers make huge contributions to economic and social development in both their host and home countries (Sasikumar and Hussain, 2008). The top migrant destination country is the United States, followed by the Russian Federation, Germany, Saudi Arabia, and Canada. The six Gulf cooperation council countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) have also seen a significant increase in migrant flows in the past few

years, mostly from South Asia and East Asia (World Bank, 2011). By 2010, migrants made up 87 per cent of total population of Qatar, 70 per cent in the UAE, 69 per cent in Kuwait, 39 per cent in Bahrain, 28 per cent in Oman and 28 per cent in Saudi Arabia (UNDESA, 2009). Asian migration to the Middle East has become more diverse over time. While many migrants remain low-skilled labourers, other has semi-skilled or skilled jobs as drivers, mechanics or building tradesman. Others went with professional or Para-professional qualifications (engineers, nurses and medical practitioners) (Castles, 2014). The overseas Indian community is the result of different waves of migration over hundreds of years driven by a variety of reasons – Mercantilism, colonialism and globalization (MOIA, 2007-08). Contemporary flows from India are of two kinds: the first is the emigration of highly skilled



professionals, workers and students migrating to developed countries, particularly to USA, UK, Canada, Australia and New Zealand. This flow started after Indian independence and gathered momentum with the emigration of IT professional in the 1990s. The second is the flow of unskilled and semi-skilled workers going mostly to the Gulf countries and Malaysia, following the oil boom in the Gulf countries. Recently, professionals, especially young IT professionals, migrate to the newly emerging destinations like continental Europe (Germany, France and Belgium), Australia, and East Asia (Japan and Singapore) (Sasikumar and Hussain, 2008, ILO, 2008).

The macroeconomic benefits of migration for the country of origin by reducing unemployment, easing labour market pressures, together with positive impact of remittances on foreign reserves and balance of payments, have invited increasing attention (MOIA, 2007-08). Migration creates efficiency gains when workers move to where they are more productive. These gains can be widely distributed: to the migrants as higher earnings, to their countries of origin through remittances, and to the destination countries through lower production costs (World Bank, 1995). Remittances, the portion of a migrant worker's earnings sent back from the destination of employment to the origin of the migrant, play a central role in the livelihood of many households (Samal, 2006). In many developing countries, remittances represent a significant proportion of their gross domestic product (GDP) as well as foreign exchange earnings (Rajan, 2011). At the aggregate levels, the remittances influence national reserves, foreign currency exchange and saving and credit ratios. Remittances also play a role in providing financial access to both migrants and remittances recipients (Orozco, 2013). For many economies, remittances represent a sizeable and stable source of funds that sometimes exceed official aid or financial inflows from foreign direct investment (BPM6, 2009). In 2010, worldwide remittances flows are estimated to have exceeded \$440 billion. From that amount, developing countries received \$325 billion, which represents an increase of 6 per cent from the 2009 level. The true size, including unrecorded flows through formal and informal channels, is believed to be significantly larger. In 2010, the top recipient countries of recorded remittances were India, China, Mexico, the Philippines, and France. As a share of GDP, however, smaller countries were the largest recipient in 2009 (World Bank, 2011). India remains the largest recipient country in the world, receiving almost \$70 billion remittances in

2012. In addition to a large number of unskilled migrants working mainly in Gulf Cooperation Council (GCC) countries, India also has a large skilled Diaspora sending money home. Flows to Bangladesh, Pakistan and Nepal have been particularly robust, helped by strong economic growth in GCC (World Bank, 2013). As a percentage of GDP, among South Asian countries, the top recipients of remittances, in 2012, are Nepal (25 per cent), Bangladesh (12 per cent), Sri Lanka (10 per cent), Pakistan (6 per cent) and India (4 per cent) (World Bank, 2014).

Interestingly, Indian Punjab state has remained an important source of international migration to other developed and developing countries. The immediate benefits of the migration of these human resources are the remittances that are being received by the rural households. These huge remittances affect the domestic economy to a large extent. The objective of this paper is to focus on the extent and composition of socio economic and demographic factors that support and motivate the international migration of the work seekers from rural Punjab and also the extent of remittances received by the households of these emigrants workers. This paper is arranged as follows. Introduction and brief review of literature has been given in the section one of the paper. The data base and methodology has been given in section two. Section three of the paper is based on the outflow of migrants and inflow of remittances to Indian economy in general and to the rural Punjab state in particular. The demographic profile of the emigrant workers based on various socioeconomic indicators has been given in section four. Section five describes the extent of the inflow of remittances to rural Punjab. The relationship and effect of various socio economic indicators on the size of remittances has been analysed in the section six and section seven concludes.

2. DATA BASE AND METHODOLOGY

In the absence of secondary sources of information, this paper is based on primary survey collected data from 201 emigrants' households, for the year 2010-11, spread over to three districts namely Gurdaspur, Ferozepur and Jalandhar of Punjab state with the help of a well structured questionnaire. Multistage stratified random sampling technique has been used to select the sample of total 201 households spread over to three selected districts chosen on the basis of the ranking of the districts respectively from Majha, Malwa and Doaba regions of Punjab state. From each district, three blocks have been chosen, one developed, one medium and less developed on the basis of socio economic indicators

(rural) published by the Economic and Statistical Organization, Government of Punjab. Total 27 villages (three from each block) have been selected on the basis of socio economic indicators collected from the village directory of Punjab. A multiple regression model has been estimated to examine the relationship and effect of various socio- economic household and migrants' variables on the size of remittances to migrants' households in rural Punjab.

3. OUTFLOW OF EMIGRANTS AND INFLOW OF REMITTANCE

It is important to collect the information and knowledge about the magnitude and patterns of international migration, however, the existing information based on international labour migration of India is partial and scanty. Data on unskilled migration, as provided by emigration clearance (MOIA, 2012-13), is the only available macro-level information. This information is available only in terms of state of origin of emigrants and the country of destination. There is no information related to gender-wise and age-wise differentials. However, the magnitude of migration from India is much larger than what is gathered by this data source (SasiKumar and Hussain, 2008). The information on the regional pattern of emigration from India is not easily available and has many limitations (Singh, 2006). The annual outflow from India, during 1990-2012, was to the countries where emigration clearance is required ECR and also from state wise figures of workers granted emigration clearance/ECR endorsement (Unpublished Thesis, Behl, 2015).

Focusing on Punjab state approximately 3 percent labours were granted emigration clearance in 1995, this ratio increased upto 4.83 percent in year 2010 and MOIA data set explores that in year 2012, 5.02 percent labour of Punjab state got the emigration clearance. Punjab state ranks seven in terms of the ratio of emigrants. The increase in this ratio supports that the Gulf countries of Middle East are popular among the labour force of Punjab. These oil rich countries in West Asia mainly attracted semi skilled and unskilled labour on a temporary circulating basis (Khadria, 2009).

In India, private transfers, which are termed as personal transfers by the IMF, are considered as remittances (RBI, 2013). Unlike the other form of remittances (local withdrawals, NRI gifts, etc.), family level remittances in India are captured by different sources and at different levels – local, national and global. The 64th round of the NSS on Migration (NSSO,

2010) is first of its kind of household survey to include specific questions on international remittances. Using data from the 64th round, the international remittances received by families can be estimated for a state and can then be aggregated to get an estimate of the national figure. The NSS figures for household remittances cover household consumer expenditure, say consumable goods, education and health, housing conditions, debt repayment (if any), any saving and investment. The NSS migration survey pegs annual international household remittance flows to nearly Rs. 17,000 crore or roughly \$4 billion in 2007-08 (NSSO, 2010: A-57, Table 14). Kerala, Punjab and Goa accounted for over 40 percent of international remittances and are among the top remittances dependent economies of the world. However, the average annual international household remittance received by a remittance receiving household in Punjab was 50 percent higher than one in Kerala, reflecting host country skill and wage differentials. More than three quarters of the flows to these two states went to rural households. Punjab, Goa and Kerala's heavy dependence on international remittance flows can be gauged by the 'total' international remittances to Net Domestic Product (NDP) ratio. The ratio was 12.9 percent in Punjab, 21.6 percent in Goa and as high as 35.3 percent in Kerala (Tumbe, 2011)

1. Brief Profile of Emigrants' :¹

Based on the National Family Health Survey (NFHS) conducted in 1992-93 for international migration from the most emigrating states of India; Kerala and Punjab, Nangia and Saha (n.d.) explored that by the mid 1980s India was the second largest supplier of manpower to the countries of Middle East as more than 90 percent of the migrants goes to the Middle East. Though unemployment is the prime reason for emigration from these states yet other factors, to name a few, say demographic expansion, agricultural stagnation, educational expansion and less growth of secondary and tertiary sectors are also there to boost international migration. The field survey of Punjab reveals that at the time of migration approximately 78 percent of the migrants belonging to various land sized categories and were generally of the age up to 30 years or below. This early migration of youth somehow signifies that preferences to work for longer durations in the international job markets. Thus international migration is supported by easy job opportunity in the international unskilled job market and this employment security somehow helps the young migrants to get easy and certain matrimonial alliances. The data reveals that in

the pre migration status of the households only 84.08 percent individuals were employed. The empirical results state that 52.66 percent were the wage workers or the salary workers and the 46.15 percent were the own account workers in their pre migration status. Among the landless workers, 76.19 percent workers were wage/salary workers followed by small (61.54 percent) and marginal (58.33 percent) land holding type households. In contrast to it, among the large land holding type households 85.71 percent workers were own account workers, followed by semi medium (73.08 percent) and medium (60.71 percent) land holding type households. Only 23.81 percent landless workers were the employers in their pre migration status.

In the post migration status, out of 201 migrant workers, 94.53 percent workers are the wage/salary workers. But still the ratio of salary workers among large land holding type households is low (80.95 percent). The maximum proportion for the wage/salary workers falls in marginal (100 percent) land holding type households, landless (97.26 percent) and then followed by small (96.15 percent), semi medium (96.15 percent) and medium (93.18 percent) land holding type households. Interestingly, all female migrant workers are the wage/salary workers. Only 5.47 percent of the total migrant workers are the own account workers. The highest proportion for this category belongs to the large (19.05 percent) land holding type households and the least among the landless (2.74 percent) households.

Agriculture being a seasonal industry, in their pre migration status, 14.20 percent migrant workers were the seasonal workers. The empirical analysis explores that 43.20 percent workers were the permanent/regular workers and large (71.43 percent) land holding type households had the maximum ratio of permanent workers. Up to 50 percent permanent workers were from marginal (33.33 percent), small (34.61 percent) and semi medium land type households and approximately one third of the landless workers were the permanent/ regular workers as per pre migration status. Among large land holding type households there was no temporary/contractual worker but among the marginal (50 percent) land holding type households and landless (58.73 percent) workers there was a good proportion of the temporary workers. In every type of land holding households, 10 percent to 30 percent seasonal workers have been found. 3.17 percent landless workers has also been reported as seasonal workers as they used to be employed either on other farmers' land or to be contract farmers.

According to post migration status, the ratio of casual labour is less than 1 percent. 56.72 percent emigrant workers are the permanent/regular workers and 42.78 percent are the temporary/contractual workers in the international job market. Among females 66.67 percent are the permanent/regular workers and only 33.33 percent are the temporary/contractual workers. Medium (70.45 percent) and large (61.90 percent) land holding emigrant workers are the permanent/regular workers whereas the emigrant workers from small (50 percent), semi medium (50 percent), landless (46.58 percent) households are the strugglers as they have been reported as temporary/contractual workers in the international unskilled job market.

The landless households and the marginal land holders across rural Punjab are somehow unable to meet the higher cost of international migration of their bread earners to the big and developed countries like USA, Australia and New Zealand. The reason being, these households remain unable to borrow the big amount against any fixed asset. Failing to fulfil this requirement, these households can finance only the international migration to the Middle-East countries. The transportation cost is very less for Middle East countries as compared to the transportation cost of the big countries. Also, the earning in these Middle-East countries is not always in terms of dollars. Due to low exchange rate of their international earnings (Dinar), here at local native areas, the returns are comparatively less but regular whereas, the households with medium and large land holdings are able to borrow the big amounts against their (fixed assets) land possession and definitely these households are able to meet the cost of migration to the developed countries. The developed countries provide higher returns in high amounts but on demand and on irregular intervals. Destination country also influences the extent of remittances to rural Punjab. The empirical evidence shows that 46.27 per cent of the total households reported the present destination country of their emigrant worker is middle-east and these middle-east countries are sending 34.73 per cent of total remittances to rural Punjab. 14.43 and 12.44 per cent households respectively reported Australia and Southern Europe, and 10.45 per cent households resided in North American countries and these countries were sending 14.99 per cent, 12.67 per cent and 15.65 per cent of the total remittances respectively. Only 5.47 per cent households reported Northern-Europe countries as destination and a reasonably good proportion of 12.4 per cent of the total remittances were received by these households.

4. EXTENT OF REMITTANCES IN RURAL PUNJAB

The empirical results reveal that 65.83 per cent of the total remittances are received by the male head of the households and 34.17 per cent of the total remittances are received by the female heads of the households in rural Punjab (For Tables, Unpublished Thesis, Behl, 2015).

More precisely, 39.30 per cent households are headed by the heads of age group 50-59 years and receiving 43.06 per cent of the remittances. 37.31 per cent heads of the households are of age 60 years and above and receive 33 per cent of the total remittances. Only upto 2 per cent of the remittances were received by the heads of age less than 30 years.

Approximately 40 percent households in rural Punjab are headed by illiterate households who have been receiving approximately 41 percent of the remittances and only 1 percent heads are educated beyond graduation level and they have been receiving less than one percent of the remittances in rural Punjab. 50.75 per cent households are of joint family structure who are receiving 52.98 per cent of the total remittances and 47.02 per cent of the total remittances are being received by nuclear families (49.25 per cent).

The inflow of remittances is also being influenced by the possession of land size and the monthly family income of the emigrants' households. 36.82 per cent of the total households have no land and these households have been receiving 25.10 per cent of the total remittances. In this category, in Jalandhar district, 64.06 per cent landless households are receiving approximate 40 per cent of the remittances. 12.7 per cent marginal landholder households of the Gurdaspur district are receiving 10.97 per cent of the remittances.

Approximately 10 per cent households in rural Punjab have no any other source of income except remittances and 7.84 per cent of the total remittances are received by these households. Individually, the ratio of the households with no other source of income is found higher in Jalandhar (12.5 per cent) district followed by Ferozepur (9.46 per cent) and Gurdaspur (6.35 per cent) districts, and more than 8 per cent of their remittances are received by Ferozepur and Jalandhar district followed by Gurdaspur with 6.15 per cent inflow of remittances.

The extent of remittances is also measured with the help of socio economic features of the emigrant workers. 95.96 per cent of the total remittances are sent

by the male (95.52 per cent) emigrant workers and only 4.04 per cent of the total remittances are sent by the female (4.48 per cent) emigrant workers across rural Punjab.

50 per cent of the total remittances are being sent by the migrants of age 30-49 years. 68.77 per cent of the remittances of Jalandhar district are being sent by the emigrant workers of this age category, and the least in this category are being sent by the emigrant workers of Ferozepur (36.01 per cent) district. In contrast to this fact, 60 per cent of the remittances are sent by the emigrants of Ferozepur district who are of age less than 30 years and in Jalandhar districts only 29 per cent remittances are sent by the emigrant workers of age less than 30 years. Marital status of the emigrant workers also signifies the extent of remittances in rural Punjab. 55.22 per cent of the households reported married emigrant workers who are sending 54.13 per cent of the total remittances back to their households.

The educational level of the emigrant workers influences the inflow of the remittances to the rural Punjab. 60.49 per cent of the total remittances are being sent by the emigrant workers who are beyond middle but up to secondary/senior secondary level. In both Ferozepur and Gurdaspur district this ratio is more than 60 per cent but in Jalandhar district 52.23 per cent of the remittances are sent by emigrant workers with this educational attainment. 1.99 per cent of the total households represent the emigrant workers with no formal education and these households receive 1.67 per cent of the total remittances. Only 1 per cent of total households have emigrant workers with education level of beyond graduation level and they are sending back 1.23 per cent of the total remittances. 5 per cent of the total remittances are received by 8.46 per cent of the total households who have emigrant workers with technical/vocational education below graduation level. Technical/vocational education includes ILETS, Diploma in ITI and Computers. 3.98 per cent of the households who reported their emigrant workers with technical/vocational education above graduation level receive 2.42 per cent of the total remittances. In both these categories, households of the Ferozepur districts receive the maximum proportion of 9.21 per cent and 3.72 per cent respectively of the remittances for these two categories of education.

Destination country also influences the extent of remittances to rural Punjab. 46.27 per cent of the total households reported the present destination country of their emigrant worker is middle-east and these middle-

east countries are sending 34.73 per cent of total remittances across rural Punjab. Gurdaspur district (55.56 per cent households) is receiving 57.37 per cent remittances from the middle-east countries which is the highest proportion among the three sampled districts. 50 per cent households in Jalandhar district reported their emigrant workers, currently working in various middle-east countries and these households are receiving 29.53 per cent of the remittances. Among other households, 14.43 per cent households reported Australia, 12.44 per cent households asserted for Southern Europe, 10.45 per cent households respondents to North American countries to be the present destination countries of their emigrant workers and these countries are sending 14.99 per cent, 12.67 per cent and 15.65 per cent of the total remittances respectively to these rural households. Only 5.47 per cent households reported Northern-Europe countries as the current destination of their emigrant workers but a reasonably good proportion of 12.4 per cent of the total remittances is received by these households across rural Punjab.

Duration of migration is also a good variable to measure the quantum of remittances. Empirical evidences explore that longer the duration of work in the international job market, higher is the ratios of remittances received by the emigrants' households. 34.67 per cent of total remittances are sent by the emigrant workers, as reported by 48.26 per cent of the households, whose duration of emigration is 2-5 years. Only 3.37 per cent of the remittances are reportedly sent by the emigrants whose duration of emigration is only up to 2 years. More than 20 per cent of the total remittances are sent by those emigrants whose duration of emigration is more than five years. In Jalandhar district, 14.06 per cent households reported the duration of their emigrant worker to be above 11 years and these households are receiving 38.15 per cent of the remittances which is the highest proportion among the three sampled districts.

94.53 per cent households have claimed that their emigrant workers are wage/salary earners at their current work places and 89.18 per cent of total remittances are sent by these wage/salary earners back to their households. 95.24 per cent households of Gurdaspur district receive 95.4 percent of the remittances from these wage/salary earner emigrant workers followed by 93.75 per cent households of Jalandhar districts and 94.59 per cent households of Ferozepur district (92.21 remittances and 82.84 per cent remittances respectively).

Only 5.47 per cent households have marked their emigrant workers to be the employers or own account workers at abroad and these employers are sending back 10.82 per cent of the remittances back to their families. Only 0.5 per cent of total emigrant workers have been reported to be casual workers at their place of destination and they are also contributing (0.15 per cent of remittances) to their families living behind.

The international migration from rural Punjab is materialized with the help of the debt and financial borrowings. 80.10 per cent of households have claimed these borrowings as a source to finance the international migration and in return 81.55 per cent of total remittances are received by these respective households. More than 80 per cent households opted for borrowing to finance the international migration of their workers in Ferozepur and Jalandhar districts and more than 80 per cent of their remittances are received by their respective households also. The popular sources of borrowings are money lenders, friends and relatives, Government institutions (Banks and Post Offices) who are financing this process directly or indirectly, at a defined rate of interest. In Ferozepur district, 47.3 per cent households have borrowed Rs. 1 lakh to 5 lakhs and 21.62 per cent households have borrowed Rs. 5 lakhs to 10 lakhs to make the emigration possible of their bread earners and remarkably these emigrant workers are sending respectively 45.54 per cent and 23.82 per cent remittances back to their supportive families. In Gurdaspur district, 34.92 per cent households have borrowed Rs. 50,000 to Rs. 1 lakh and 26.98 per cent households have borrowed 1 lakh to 5 lakh to make the emigration possible and in return these households of Gurdaspur district are receiving 34.27 per cent and 32.81 per cent remittances respectively. In Jalandhar district also, 39.06 per cent households have financed the emigration with the borrowings of Rs. 50,000 to Rs. 1 lakh and 20.31 per cent households are under debt of Rs. 1 lakh to Rs. 5 lakh and these households are also receiving 21 per cent and 41.73 per cent of remittances respectively. Up to 2 per cent of total households across rural Punjab are under debt of Rs. 10 lakh to Rs. 15 lakh and these households are receiving 2.64 per cent of total remittances.

The prime motive of sending back remittances for households under debt is to repay the debt and to make households free from the debt burden. 20.4 per cent of total sampled households are still under debt burden and 22.39 per cent households have partially paid back the debt amount. The landless households

are unable to borrow big amounts from the public institutions. These households are bound to borrow either from local money lenders at higher rate of interests. Due to the lack of fixed assets and non assurance of easy money back, these households are charged with higher interest rates. These households, in turn, make sure the emigration to the developing countries where there is easy and prior availability and assurance of the job in international job market.

International remittances flow in any economy either through formal channels or informal channels. The proper channel for these remittances is considered to be the formal channel say, Government institutions, like banks and post offices, private channels like money exchange systems and emigrant workers also send these remittances through their friends and relatives visiting to the domestic economy. Sometimes the help of the travel agent is also taken for this purpose. The collected data reveals that approximately 60 per cent of the total remittances are received by private money exchange systems of the neighbourhood surroundings of the sampled villages and blocks. These remittances are usually encased by the male members of the concerned households, though the female members of the households can accompany them. In Gurdaspur district, 72.19 per cent of the remittances are made available by these private money exchange system say western union and money exchange, followed by Ferozepur (62.63 per cent) and Jalandhar (46.54 per cent) districts.

In Jalandhar district, a considerable proportion of 36.83 per cent of district remittances are made available by the visiting friends and relatives of the emigrant

workers as this system is entirely free from the surcharged charged on the international currency. Emigrant workers and their respective household members prefer the government institutions for this purpose to a little extent. Not only the international currency but the remittances in kind are also received by the respective sampled households of rural Punjab. Approximately 43 percent of total sampled households receive 49.38 per cent remittances in cash along with the kind remittances. These kind remittances include electronics, cloths, gold, toys, mobile phones and wrist watches, torches and cosmetics, etc. In Ferozepur district 44.59 per cent households, in Jalandhar district 42.19 per cent households and in Gurdaspur district 41.27 per cent households receive remittances in kind along with the monetary inflow of remittances.

5. RELATIONSHIP AND EFFECT OF VARIOUS SOCIO- ECONOMIC HOUSEHOLD AND MIGRANTS' VARIABLES ON THE SIZE OF REMITTANCES

Our sample survey of rural Punjab allows us to estimate the extent of remittances received by the rural households. The descriptive overview of the distribution of the size of remittances in rural Punjab is now followed by the hypothesis of differences in means. This hypothesis is supported by the basic sample statistics and the assumption of homogeneity of variances.

Table 1 Mean differences in size of remittances in rupees in rural Punjab

Category	N	Total Remittances (In Rupees)	Mean Remittances	Standard Deviation	Standard Error of Mean	Skewness statistics	Kurtosis statistics
Name_District Ferozepur	74	1398250.00	18895.27	16882.65	1962.57	2.778 (0.279)	9.636 (0.552)
Gurdaspur	63	870200.00	13812.70	10258.62	1292.46	1.078 (0.302)	1.819 (0.595)
Jalandhar	64	1143000.00	17859.38	33132.55	4141.57	6.976 (0.299)	52.715 (0.590)
Total	201	3411450.00	16972.39	22073.03	1556.91		
Block_Category HDB	65	1147250.00	17650.00	16415.79	2036.13	3.398 (0.297)	13.686 (0.586)
MDB	71	1467000.00	20661.97	32507.89	3857.98	6.419 (0.285)	48.283 (0.563)
LDB	65	797200.00	12264.62	7692.11	954.09	0.534 (0.297)	-0.266 (0.586)
Total	201	3411450.00	16972.39	22073.03	1556.91		
Village_rank HDV	63	1179500.00	18722.22	17982.92	2265.63	2.650 (0.302)	8.676 (0.595)
MDV	66	1272250.00	19276.52	33334.79	4103.23	6.534 (0.295)	48.387 (0.582)
LDV	72	959700.00	13329.17	7186.05	846.88	0.146 (0.283)	-0.428 (0.559)
Total	201	3411450.00	16972.39	22073.03	1556.91		

Source: Field Survey

Figures in parentheses are Standard Errors.

The scientific testing of data asked to remove the outliers from the entire sample size (201), so that quality results should be brought out. Hence, the outliers, i. e., the extreme possibilities are taken out and the total sample size is reduced to 184 remittances receiving households for the further application of analysis of variance and the OLS model.

The analysis of variance applied on Gurdaspur, Ferozepur and Jalandhar districts show that there is significant difference (at 5% level) in the means of the average monthly size of remittances in rural Punjab. The Scheffe's Post hoc (multiple comparisons) test reveals that the significant difference in means of the average monthly remittances is found between Ferozepur and Jalandhar districts (at district level) at 5% level of significance.

Further, there is need to assess the socio economic variables that influence the size of remittances and the socio economic well being of the migrants households due to the remittances. As the existing literature on remittances explains that there is improvement of the social and economic status of the

households due to remittances. But there is requirement of the hypothesis testing especially at micro level in rural Punjab. The next level of paper is an attempt to test the hypothesis. The various pre migration and post migration socio economic variables related to the migrants themselves and their remittances receiving households are being analysed and tested.

The OLS model is applied to set a relationship between the remittances size and the various socio economic variables. The prime interest is to find out how average monthly remittances are related to the independent variables including total family members of the migrants' households, age and gender of the head of the household, landholding size, years of migration, post migration employment status of the emigrant and nature of employment, push and pull factors, sources of finance to support migration, sources of borrowings, total monthly household income (remittances not included), family type, destination countries including Middle East, North America, Australia and South Asian Countries, gender and marital status of emigrant and households having female children. The log of the size of the average monthly remittances has been taken up

as dependent variable in order to estimate the effect of various socio economic variables on it using OLS technique. Since the respondents are either the head of the household or any other family member of the migrants' household, there is no concrete information regarding the exact and accurate income of the emigrant worker at their destination countries. Hence, the above mentioned independent characteristics related to the pre and post migration status have been included in the model.

The model comes as,

$$Y = \beta_0 + \beta_1 X + u$$

Y = Log_e(Average monthly remittances in rupees)

X = vector of all the explanatory variables related to household and migrant' socio economic variables

u = error term

In order to determine the effect and relationship of various socio economic variables of migrants' and remittances receiving households, a multiple regression was carried out using OLS technique. The following table 2 shows the model in detail including the selected total sample size representing rural Punjab and taking Gurdaspur, Ferozepur, Jalandhar districts individually to determine the significance level of the independent variables on remittances.

Table: 2 OLS Estimates of relationship of size of remittances with various socio economic variables

Independent Variables	Gurdaspur	Ferozepur	Jalandhar	Total Sample
(Constant)	10.395 (1.050)	12.499 (1.013)	9.208 (.871)	10.874 (.481)
Gender of head of the households	.097 (.181)	-.044 (.201)	-.092 (.163)	-.039 (.094)
Age of head of the households	-.100 (.089)	-.307** (.116)	-.051 (.091)	-.142** (.050)
Total family members	.091* (.052)	-.063 (.048)	-.041 (.046)	-.007 (.026)
Size of land holding	.005 (.064)	-.007 (.054)	.227** (.075)	.050* (.029)
Total monthly income	.042 (.052)	.119** (.056)	-.069 (.074)	.049* (.028)
Gender of emigrant	-.017 (.370)	.045 (.404)	-.259 (.375)	-.065 (.187)
Age of emigrant	-.245 (.171)	-.247 (.150)	-.430** (.194)	-.192** (.084)
Marital status of emigrant	.128 (.195)	-.134 (.190)	.141 (.207)	.040 (.102)
Number of children	.174 (.220)	.239 (.216)	-.159 (.191)	.010 (.100)
Educational status of emigrant	-.100 (.098)	-.147** (.072)	.080 (.061)	-.056 (.035)
Push factors	-.015 (.015)	-.006 (.020)	.020 (.016)	-.004 (.009)
Pull factors	-.023 (.020)	-.020 (.022)	-.056** (.025)	-.016 (.011)
Duration of migration	-.037 (.080)	.150 (.104)	.291*** (.066)	.106** (.042)
Middle East countries	-.552** (.209)	-.317 (.236)	-.199 (.183)	-.212** (.105)
North American countries	-.124 (.358)	-.135 (.263)	.010 (.279)	.002 (.138)
Australian countries	.194 (.299)	.153 (.281)	-.158 (.237)	.177 (.139)
South East Asian countries	-1.006** (.483)	-.258 (.253)	.123 (.309)	-.200 (.155)
Employment status of emigrant	.307 (.375)	-.698** (.338)	.538* (.283)	-.196 (.164)

Nature of employment of emigrant	-.209* (.118)	-.213 (.180)	-.045 (.147)	-.110 (.073)
Debt status of household	-.332** (.151)	-.074 (.218)	-.186 (.190)	-.247** (.094)
Sources to finance	-.041 (.040)	-.041 (.030)	-.051* (.028)	-.051** (.016)
Sources of borrowings	.010 (.159)	.260 (.236)	-.017 (.211)	.106 (.100)
R ²	0.713	0.570	0.744	0.498
N	54	70	60	184
S.E.	0.37942	0.50141	0.40088	0.45884

*Significant at 10% level. **Significant at 5% level. ***Significant at 1% level.

Figures in Parentheses are Standard Errors.

Source: Field Survey

From the above regression of size of remittances on various pre and post migration; household and migrants' socio economic variables in three selected districts as well as total sample, it is observed that the age of the head of the household is found to be negatively significant at 5% level for total sample and for Ferozepur district. In Gurdaspur and Jalandhar district, this variable is found to be insignificant. The family size is found to be positively significant at 10% level only in Gurdaspur district not elsewhere. The landholding size by the emigrants households is found positively significant for total sample size (at 10% level) and in Jalandhar (at 5% level) district by hypothesis testing. The total monthly household income (remittances not included) is positively significant for total sample (at 10% level) and for Ferozepur (at 5% level) district. The age of the emigrant (as recorded at the time of survey) is negatively significant at 5% level for both total sample and Jalandhar district. This variable is again got to be insignificant for Gurdaspur and Ferozepur districts. The education level of the migrant himself is found to be significant (at 5% level) only for Ferozepur district and the pull factors are significant only in Jalandhar (at 5% level) district. The most significant variable is found to be years of migration in Jalandhar (at 1% level) district and for total sample (at 5% level). In Gurdaspur district and for the total sample, the various Middle East countries are found to be significant at 5% level, as the destination countries and in Gurdaspur district, the South Asian countries are also found to be significant (at 5% level) as destination countries. The post migration employment status is found insignificant for total sample and in Gurdaspur district but this variable is significant in both Ferozepur (at 5% level) and jalandhar (at 10% level) districts. The post migration nature of employment of migrant worker is statistically

significant only in Gurdaspur (at 10% level) district. As the post migration status and the nature of employment of the emigrant worker is reported by either of their family members, hence these results are based on those responses only not according to the emigrants' responses. The present debt status of the remittances receiving households is found to be significant at 5% level for Gurdaspur district and for total sample. These debts were borne either by the head of the household or by migrant himself, at the time of migration, to make the international migration possible. All the other sources utilized to finance the international migration are also quite significant at 5% level for total sample and for Jalandhar district at 10% level. The various other socio economic variables are found to be statistically insignificant by hypotheses testing but due to their theoretical importance those are added up in regression model. From this scientific testing of various variables it seems to focus on such studies in rural Punjab.

6. CONCLUSION

The paper is an attempt to analyse the extent of remittances sent by the migrant workers of rural Punjab. For this reason this paper includes various socio economic variables that motivates, supports and helps to make possible the international migration of the youth of rural Punjab to the international job markets with economic impact, say, with immediate and long term economic benefits reaped by the remittances receiving households and their family members. The various socio economic push and pull factors are the reasons for this international migration which results in employment opportunity in the international job markets and poverty eradication at the domestic front. The emphasis is given to the improvement of the quality of life and standard of living with the inflow mechanism of international remittances to the rural Punjab economy.

REFERENCES

1. Behl, Samita (2015), "International Migration, Remittances and Resource Allocation in Rural Households of Punjab", Unpublished Thesis, Department of Economics, Punjabi University, Patiala.
2. Castles, Stephen, Hein de Haas and Mark J. Miller (2014), "The Age of Migration: International Population Movements in The Modern World", Palgrave Macmillan, London.
3. Khadria, B. (2009) (eds.), "India Migration Report 2009: Past, Present and Future Outlook", International Migration and Diaspora Studies Project, JNU, New Delhi, India.
4. Ministry of Overseas Indian Affairs (2007-08), "Annual Report 2007-08", Government of India, N. Delhi.
5. Ministry of Overseas Indian Affairs (2012-13), "Annual Report 2012-13", Government of India, N. Delhi.
6. National Sample Survey Organization (2010b), "Employment and Unemployment Situation in India 2007-08", NSS Report no. 531, NSS 64th Round
7. NSSO (2010), "Migration in India: 2007-2008", NSS 64th Round (July 2007 – June 2008), National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India.
8. Orozco, Manuel (2013), "Remittances and Assets: Conceptual, Empirical and Policy Considerations and Tools", In *Maximizing the Development Impact of Remittances*, UNCTAD: Geneva.
9. Rajan, Irudaya S. (2011), "India", In *Migration, Remittances and Development in South Asia*, Sage Publications, N. Delhi: p. 39.
10. Rajan, Irudaya S. and Marie Percot (eds.) (2011), "Dynamics of Indian Migration: Historical and Current Perspectives", Routledge, New Delhi.
11. Reserve Bank of India (2013), "Remittances from Overseas Indians: Modes of Transfers, Transaction Cost and Time Taken", RBI Monthly Bulletin, December, Mumbai.
12. Samal, Chandan K. (2006), "Remittances and Sustainable Livelihoods in Semi-Arid Areas", *Asia-Pacific Development Journal*, 13(2): 73-92, December 2006.
13. SasiKumar, S.K. and ZakirHussain (2008), "Managing International Labour Migration from India: Policies and Perspectives", ILO, Sub regional Office for South Asia, New Delhi.
14. Singh, Bhupal (2006), "Cross-border Workers' Remittances: Transmission Channels and Measurement Issues in India", *Remittances Statistics: First Meeting of the Luxembourg Group*.
15. Tumbbe, Chinmay (2011), "Remittances In India: Facts And Issues", Indian Institute of Management, Bangalore, Working Paper No. 331.
16. UNDESA (2009), "Trends in International Migrant Stock: The 2008 Revision" (New York: United National Department of Economic and Social Affairs, Population Division) <http://esa.un.org/migration/index.asp?panel=1>, accessed on 1.12.15
17. World Bank (1995), "World Development Report 1995: Workers In An Integrating World", Published for World Bank, Oxford University Press: Oxford.
18. World Bank (2009), "International Transactions In Remittances: Guide For Compilers And Users", (RCG), International Monetary Fund (IMF).
19. World Bank (2011), "Migration and Remittances Fact Book 2011", Washington: D. C.
20. World Bank (2013), "Migration and Development Brief 20", Migration and Remittances Unit, Development Prospects Group, April 19.
21. World Bank (2014), "Migration and Development Brief 22", Migration and Remittances Team, Development Prospects Group.

Notes

¹For Tables, Behl, Samita (2015), "International Migration, Remittances and Resource Allocation in Rural Households of Punjab", Unpublished Thesis, Department of Economics, Punjabi University, Patiala.