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Socio-Economic Status Of Rural Labour And Marginal Farmer Households In The Border Area Of Punjab: Fazilka District

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Abstract

The mechanization of agriculture led to reduction in the share of agriculture sector in income and employment. The paper based on the empirical study has found the facts, which clearly show the deteriorating socio-economic status of the rural labour and marginal farmer households in the border district of Fazilka in Punjab. The average income of sampled respondents is insufficient to meet basic needs and improvement of their conditions of their houses. The housing conditions of rural labour households and marginal farmer households have been found to be dilapidated. The average size of houses among rual labour households have found to be insufficient as per their family size. The study also analyse the average annual income of rural labour and marginal farmer households. Which is insufficient ot meet their basic needs of their families. The paper finally concludes that Government should execute the existing social security schemes rather than announcing new schemes.

Keywords: Family Size, Age, Rooms, Income, Education.

JEL Code: D13, N55, Q12, Z13.

Introduction

India is a vast country with more than 24.49 crore households, where 10.35 crore have found to be under deprived (SECC, 2015) with inadequate housing facilities. India has been sharing International border with several states such as Bangladesh, Myamar, China, Pakistan, Nepal, Bhutan. Bhangladesh and Pakistan share both land as well as maritime borders, while Shri Lanka share only maritime border through Adam's bridge. India and Bangladesh share International boundaries of 4096.7 kilometres. India also shared International boundary with Pakistan of 554 k.m. The states of India have also been sharing International boundary with Pakistan such as Punjab, Rajasthan, Gujrat and Union Territory Jammu and Kashmir. The problems of rural development and agrarian crisis house have long been faced by the population of border area, which is mostly regarded as rural economy with both men and women being labour force. In rural areas, where 80 per cent of its population live in over half a million villages of various sizes, the housing stock is extremely inadequate. Although no exact estimates of the age of the existing housing stock are available, the fact that the majority of these are too old and

unfit for human habitation remains undisputed. The kutcha houses need constant repairs and their roofs specially are highly prone to fire hazards entailing considerable amount of strain on the villager both financially, and otherwise. The size of the houses is generally small. The number of rooms per house is less and the rooms are small in size. During the various Five Year Plans the allocation have been as follows—First Plan 18%; Second Plan 12%, Third Plan 6-7%; and in the Fourth Plan it was 4%. The allocations made in the Fifth Plan are also not very heartening. But the Fifth Plan at least aims at adopting a realistic time-frame for fulfilling some of the basic minimum needs such as rural water supply, house sites for landless agricultural labour and roads (Laxminarayan, 1977). In Punjab, due to mechanization, the reducing employment opportunities have been led to rise of non-farm employment opportunities (Gill and Ghuman, 2001). The house ownership of rural India has found to be 94.91 per cent among all rural and urban India households and 17.69 per cent among scheduled caste population, 48.56 per cent rural households with one or more deprivation criteria (SECC, 2011). The family size of rural labour and marginal farmer households have been found to be 4.75 and 4.87 of marginal farmers and rural labour households respectively. Their income is unable to meet their basic needs (Rupinder et.al., 2018). Kerala registered a very sharp decline in agriculture employment during 1990's. In the year 1999-2000 labour productivity is low (less than Rs.100 per head) in Bihar, Orissa, Himachal Pradesh, and Madhya Pradesh. This low labour productivity states are also associated with low agricultural wages during the respective year (Jha, 2007). The another study also revealed about the share of agriculture labour has reduced due to mechanization. The study also revealed that the association of dominant farmers fixed the wage rate for Paddy cultivation with their own decision which was always non-acceptable for poor rural labour. The study also revealed that marginal and small farmers also joined the army of agriculture or industrial labour to meet their daily needs, because insufficient land, high cost of agriculture operations, expensive technology forced them (Sukhpal, 2009). Over the decades, the share of agriculture sector has been declining in the national income, but majority of the share of rural employment is still dependent upon agriculture. The study also revealed that real wage rate of both agriculture and non-agriculture also increased. The wage difference in agriculture and non-agriculture sector also attracted the young labour force from agriculture sector to industrial sector. The shift of labour force towards industrial sector led to feminization of agriculture. The working culture towards women has been shifting more and re duced the quality of life (Chand and Srivastva, 2014). Another study about indebtedness of agricultural labour in Punjab by dividing it in three parts based on their agro-climatic conditions. The inequalities are sharper in case of the casual labour households than contractual ones. Other main finding of the study is that per household income is highest in the Central Plains (84736.33), followed by South-West region (Rs. 80219.39) and lowest in Shivalik Foothills regions. (75184.31) (Anupama et. el. 2017). The majority of the rural households in the Punjab belong to scheduled caste constituting 91.40 per cent, illiteracy among them is 78.80 per cent and 91.84 per cent households

live in the semi-pucca houses. The qualitative aspect of the problem is all the more depressing (Jyoti, 2019). The digitalization of economy and technology driven investment has been creating income and social inequality, which led to deterioration of the living conditions of informal casual workers, still are facing problems in earning subsistence income and are living with dilapidated house conditions. The decent house conditions such as proper area and conditions of house, sanitation, electricity and size of family always create potential among workers the prosperous future of India 2047 will not be achieved without the strong base of rural economy of India. In the light of the above, the study will focus on the literacy level, family size, size of the households, number of rooms earning status and conditions of the houses etc. of sampled rural labour and marginal farmer households from the Fazilka district with respect of following objectives.

Data Source and Methodology

Out of the total 22 districts of Punjab, six districts (Pathankot, Gurdaspur, Amritsar, Tarn Taran, Ferozpur and Fazilka) have been sharing boundary line with Pakistan. Punjab is divided in to three main regions i. e Majha, Malwa and Doaba region. For the study purpose only Majha and Malwa regions have been selected because Doaba region is very far away from boundary line of Pakistan. A multistage convenient sampling technique was used to select the ultimate respondents. The district being sample unit at first stage, all border blocks were selected sample unit at second stage, villages being at third stage and only rural labour households and marginal farmer households were the sample unit at fourth stage. From the above six district, only Fazilka district was selected for study purpose because it is famous for horticulture crops, cotton and unsuitable land for paddy which create constraints for marginal farmers for cultivating highly cost crops and monsoon insensitive crop cotton. Due to large scale of mechanization in agriculture it has reduced sief-sufficiency of the rural population. Further from the Fazilka District, all the development blocks (15 kilometers from boundary line as per the guidelines of Border Area Development Program) were selected. The selected blocks from Fazilka district such as Fazilka, Khuia Sarwar and Jalalabad were selected. From each block, one village selected randomly for study purpose. Further from each village, out of the total rural labour and marginal farmer households, 10 per cent households were selected and interviewed through well-structured questionnaires. The reference period of the study was August 2020. The sampling frame was used same as the National Statistical organization 76th round (Drinking water, Sanitation, Hygiene and Housing Conditions in India). The purpose of the study to analyse the main objectives. (i) To analyze and compare the literacy level, size of the households, status of earners of the rural labour and marginal farmer households in the border area of Punjab. (ii) To evaluate the conditions of the houses of rural labour and marginal farmer households in the border area of Punjab. (iii) To draw some policy implications. Standard statistical tools such as mean, proportions have been used while carrying tabular analysis. The suitable statistical techniques such as partial and multiple-correlation have also been used to support the findings.

Results and Discussion

Table 1. Mean Values of family Size between Rural Labourers and Marginal Farmers

Type	Sample Size	Mean
Rural labour households	60	4.90
Marginal farmer households	55	5.22

Source: Field Survey 2020-21.

The table 1 revealed about the size of the family has been playing potent role for the determination of economic profile of families. In the table three in respect of the district Fazilka, the average number of family members of rural labourers were observed to be 4.90 members per family as comparable to those of marginal farmer households. These facts also seems to be like another findings that the average size of the rural labour households and marginal farmers were found to be 4.84 and 4.75 respectively (Rupinder .et al.). Which indicates that people have started to preferred small size of family, which helps them to feed their children's properly and easy access to education, good health and their socialization.

Table 2. Mean Values of Rooms and Area of house per households

Type	Sample Size (n)	Mean
Rural labour	60	1.82
Marginal farmer	55	2.13
Area Of House (Marlas)		
Rural labour	60	4.6
Marginal farmer	55	5.8

Source: Field Survey 2020-21.

The table 2 illustrated about the Fazilka district, the average size of rooms of sampled rural labour households have been found 1.82 rooms per family as compared to sampled marginal farmer households i.e. 2.13 rooms per family. The marginal farmer households have also been found with an average size house area with 5.8 marlas as compared to rural labourers households, who have been living in houses with an average size of only 4.6 marlas. The facts seems that the average number of rooms in the houses of rural labourers have been tested to be significantly smaller than those of marginal farmer households. The inadequate number of their rooms of their houses shows that they have not sufficient income or savings to increase the number of their rooms as per their needs,

which are require for their families to live in decent conditions. They just try to fulfilled their basic needs for their families such as food, health, clothes etc.

Table 3. Educational Levels of Family Members and Type of the Respondents

Education	Rural Labour	Marginal Farmers	Overall
Illiterate	51 (17.35)	37 (12.89)	88 (15.15)
Primary	79 (26.87)	78 (27.18)	157 (27.02)
Middle	80 (27.21)	67 (23.34)	147 (25.30)
Matric	61 (20.75)	51 (17.77)	112 (19.28)
Plus Two	22 (7.48)	45 (15.68)	67 (11.53)
Graduation	1 (0.34)	7 (2.43)	8 (1.38)
Others	0 (0)	2 (0.70)	2 (0.34)
Total	294 (100)	287 (100)	581 (100)

Source: Field Survey 2020-21.

For the Fazilka District, the number of Graduates or above among marginal farmers (7) have been found to be substantially larger than that among rural labourers (1). It implies that the distributions of educational attainment of family members for Rural Labourers and Marginal Farmers were at gross variance with each other. The proportion of illiterate population among rural labour households (17.35 per cent) have been found to be larger as compared to marginal farmer (12.89 per cent) households. Further, the proportion of population among rural labour and marginal farmer households with qualification of primary level education have been found to be 26.87 and 27.18 per cent households and 27.31, 23.34 per cent with middle school (8th) education respectively. These facts indicated that their low level of income, mental stress, early working age and economic responsibilities might have led to the illiteracy, under vicious circle of poverty and low education level. These facts are similar to another study that 22.67 per cent marginal farm households and 32.06 rural labour households were uneducated. Among the literates, 16.02, 15.11, 23.34, and 14.81, 6.77 per cent households are with education qualification of Primary, Middle, Matric, Higher Education, Graduation and post-Graduation respectively and 32.06, 16.84, 18.29, 11.95, 8.02, 2.70, 0.07 per cent

households among rural labour households for the same qualification (Anupama et al., 2017).

Table 4. Distribution of Gross Income of Rural labour and Marginal Farmer Households (Rs.)

Sources of Income	Rural Labour Households	Marginal farmer Households
Agriculture Sector		
Contractual labour in agriculture sector	8909.5 (10.80)	0 (0.00)
Casual labour in agriculture sector	32533.66 (39.46)	0 (0.00)
From Crops –Wheat	0	47476.67 (23.65)
Paddy	0	28101.34 (13.99)
Basmati	0	27297.55 (13.60)
Milk and milk products	0	45039.26 (22.44)
Sub-total (A)	41443.16 (50.27)	147915 (73.68)
Gross Income from non-agriculture sector		
Construction sector	18270.85 (22.16)	11476.22 (5.72)
Brick-klin factory	4078.65 (4.95)	0 (0.00)
MGNREGA	1180.83 (1.43)	0 (0.00)
Pensions	4341.67 (5.27)	3109.09 (1.55)
Working as a drivers	6632.62 (8.04)	18629.15 (9.28)
PM-SAMHAN Nidhi Yojna	0 (0.00)	4500 (1.96)
Other sources	6499.32 (7.9)	15690.23 (7.82)
Sub-total (B)	41003.93 (49.73)	52832.26 (26.32)
Total (A+B)	82447.1 (100)	200747.3 (100)

Source: Field Survey 2020-21.

The level and sources in income always potent of the individuals to feed their families. The decent level of income of the families help in savings and family well-being. The above table analyse the level and pattern of the rural labour households and marginal farmer households in the border district of Fazilka. The absolute amount of gross income of the rural abour households have been found to be Rs. 82447.1, out of which Rs. 41443.16 from agriculture sector as a contractual and casual labour households and Rs. 41003.93 from non-agriculture sector. From the non-agriculture sector the construction sector play a vital role, followed by other sources, working as a drivers and so on. The other factors includes unskilled and semi-skilled works such as plumber, aluminium fitters, carpenters, small shop, priest etc. On the other contrary, The average annual income of the marginal farmer households have been found to be Rs. 200747.3, out of which 147915 from agriculture sector and Rs. 52832.26 from non-agriculture sector. The production of crops such as wheat, paddy, basmati and sale of milk and milk products have been found to be major sources of their gross income. On the other hand, the proportion of their gross income have also been analysed. For the rural labour households , both agriculture sector and non-agriculture sector play equally role for their income. Among the non-agriculture sector, the construction sector and other sources become a major sources of their income. Among the marginal farmer households, agriculture sector have found to be a major sources of their income. The 73.68 per cent of their gross income from the sale of their crops, sale of milk and milk products. The non-agriculture sector such as working as a driver and other sources also become a vital sources of their gross income. These facts seems to be similar with other study. The average annual gross income of rural labour and marginal farmer households was found to be Rs. 81452.17 and 139365.27 respectively (Sukhvir et. al.).

Table 12: Per Capita Income of Rural labour and Marginal Farmer Households

Sources of Income	Rural Labour Households	Marginal farmer Households
Agriculture sector	8579.42	30315.3
Non-agriculture sector	8545.86	10903.14
Overall total	17125.28	41218.44

Source: Table 11.

The per capita income play vital role in determining the status of the family, which further help, in saving, health, prosperity and human well-being of the people. The average family size of the rural labour households and marginal farmer households have been found to be 4.90 and 5.22 members per family respectively. The per capita income of the rural labour households have been Rs. 17125.28, out of which Rs. 8579.42 from agriculture sector and Rs. 8545.86 from non-agriculture sector respectively. It indicates that in terms of per capita income both agriculture and non-agriculture sector have been equally

important for rural labour households. On the other hand, the per capita income of the marginal farmer households have been found to be Rs. 41218.44, out of which Rs. 30315.3 and 10903.14 from agriculture and non –agriculture sector respectively. In terms of per capita income, the agriculture sector still dominate among marginal farmer households, because marginal farmer have their own land for their income sources. The per capita of marginal farmer households have been found to be 140.68 per cent more than per capita income of the rural labour households.

Part II: Identification of the Determinants of Per Capita Income

An attempt to identify the major determinants of per capita income, separately for Marginal Farmers and Rural Labourers. For this purpose, we have sought the help of Step-Up Multiple Linear Regression Analysis. The analysis was performed at both aggregated (i.e., for the entire sample) as well as at the disaggregated (i.e., for the different districts separately). In the analysis, per capita income was taken as the dependent variable, while a number of other variables viz., Type of Family (TPFM), (SZFM) Size of Family, Adult Males as a Percentage of the Family Size (ADMP), Earning Members as a Percentage of the Family Size (ERNP), Average Number of Years of Schooling of the head of the family (ANYS), Operational Land Holding (OPLD) and the Category (CTGR) to which the respondent belonged. It may be mentioned that the variable OPLD was considered only for Marginal Farmers (and not for Rural Labourers). Further, since the variable TPFM was binary and CTGR was multi-categorical (with 4 categories), we have therefore made use of dummy variables, as follows:

TPFM = 1, if the family is nuclear and = 0, otherwise;

DMC1 = 1, if the respondent is from the 1st Category and = 0, otherwise;

DMC2 = 1, if the respondent is from the 2nd Category and = 0, otherwise;

DMC3 = 1, if the respondent is from the 3rd Category and = 0, otherwise;

It may further be mentioned that at the disaggregated levels, since we did not necessarily have respondents from each of four categories; therefore, the dummy variables for categories were defined accordingly. For instance, with three categories, we have made use of only DMC1 and DMC2, etc. As per the Step-up iterative approach adopted, the dependent variable, viz., income was regressed upon that particular independent variable (other than the dummy variables for categories) was most strongly associated, as assessed through partial correlation coefficients, with it. For the estimated equation, coefficient of determination (R2), adjusted coefficient of determination, and Akaike's information criterion (AIC) was computed. In the next step, the independent variable (out of the remaining list of variables) was identified which again had the highest association with income. This variable was regarded as the newly entering variable, and a fresh line of regression of income jointly upon the two variables was re-estimated. The yardsticks

like R2, Adj. R2 and AIC were computed again. This iterative process was continued until and unless the minimum value of AIC was attained. The equation obtained at such a stage would provide us with the main determinants of income.In our analysis, we have presented such finally obtained optimum equations (both for marginal farmers and rural labourers) at the aggregated level as well as at the district levels. Prior to carrying out the regression analysis, we have tables on partial correlation coefficients (PCC) of income with each of the explanatory variables, which assisted us in deciding the relative importance of the variables to be considered in the analysis.

Determinants of Per Capita Income in **Fazilka District:**

(a) For Marginal Farmers

Table 13 Partial Correlation Coefficients of Income with Different Explanatory Variables

Quantity	**Explanatory Variable**								
	TPFM	**SZFM**	**ADMP**	**ERNP**	**ANYS**	**OPLD**	**DMC1**	**DMC2**	**DMC3**
PCC	0.101	-0.719	-0.048	0.021	0.055	0.289	-0.801	-0.749	-0.480
p-Value	0.495	< 0.002	0.7473	0.8886	0.712	0.0428	< 0.002	< 0.002	0.0002
Significance	NS	***	NS	NS	NS	*	***	***	***

*** Significant at 0.1% probability level; ** Significant at 1% probability level; NS Non-significant.

The table 13 revealed the SZFM, OPLD, DMC1, DMC2 and DMC3 were expressed to play a significant role in multiple linear regression and statistically non-significant variable were left out.

Table 14: Results Obtained through Step-Up Multiple Linear Regression Analysis

Variable	**Beta**	**SE(Beta)**	**t-val**	**p-val**	**Significance**
Intercept	133841.5	8341.1	16.046	< 0.001	***
SZFM	-7431.4	754.3	-9.852	< 0.001	***

OPLD	1676.0	702.7	2.385	0.0210	*
DMC1	-72236.5	7071.7	-10.215	< 0.001	***
DMC2	-56847.2	6626.7	-8.579	< 0.001	***
DMC3	-26991.3	6586.9	-4.098	0.0002	***

R2 = 0.941***; Adj R2 = 0.935; p < 0.001; AIC = 1138.21

*** Significant at 0.1% probability level; * Significant at 5% probability level; •

Significant at 10% probability level; NS Non-significant.

The table 14 shows the determinants of per capita income of sampled marginal farmer households in the border area of Fazilka district. The SZFM (size of the family), OPLD (operational land holiday) , DMC1, DMC2 and DMC3 played a significant role in per capita income of sampled marginal farmer households. The explanatory power of estimated regression model (R2 and adj R2) was as high as 0.941 and 0.935 respectively. It means that more than 94 percent variations is due to SZFM (size of the family, OPLD (operational land holiday), DMC1, DMC2 and DMC3. The variables SZFM, DMC1, DMC2 and DMC3 were tested at level of 0.1 per cent level of significance and OPLD are significant at 5 percent level of significance. Negative signs and very high significance of each of DMC1, DMC2 and DMC3 implied that family per capita income of the respondents of each of 1st, 2nd and 3rd categories were substantially lower in comparison to the respondents of the 4th category. Highly significant value of the intercept term implies that apart from the list of variables considered, there might be certain other important variables (not known to us), which might also be influencing per capita income of the respondents.

(b) For Rural Labourers

Table 15: Partial Correlation Coefficients of Income with Different Explanatory Variables

Quantity	**Explanatory Variable**						
	TPFM	**SZFM**	**ADMP**	**ERNP**	**ANYS**	**DMC1**	**DMC2**
PCC	-0.229	-0.666	0.056	-0.008	0.163	-0.856	-0.767
p-Value	0.0904	< 0.001	0.6888	0.9545	0.2351	< 0.001	< 0.001
Significance	NS	***	NS	NS	NS	***	***

*** Significant at 0.1% probability level; ** Significant at 1% probability level; NS Non-significant.

The table 15 revealed the SZFM, DMC1 and DMC2 were expressed to play a significant role in multiple linear regression and statistically non-significant variable were left out.

Table 16: Results Obtained through Step-Up Multiple Linear Regression Analysis

Variable	Beta	SE(Beta)	t-val	p-val	Significance
Intercept	55870.7	3370.3	16.577	< 0.001	***
TPFM	-3131.2	1836.3	-1.705	0.0938	.
SZFM	-3118.5	426.6	-7.31	< 0.001	***
DMC1	-24781.2	1630.7	-15.197	< 0.001	***
DMC2	-17240.6	1675.1	-10.292	< 0.001	***

R2 = 0.835***; Adj R2 = 0.823; p < 0.001; AIC = 1139.92

*** Significant at 0.1% probability level; * Significant at 5% probability level; • Significant at 10% probability level; NS Non-significant.

The table 16 represents the determinants of per capita income of sampled rural labour households. The TPFM (type of family), SZFM (size of the family) played a significant role in the per capita income of rural labour households. The explanatory variables of the estimated regression model (R2 and adjusted R2) was as high as 0.835 and 0.823 respectively. It means that the more 83 per cent variations in the per capita income is due to TPFM, SZFM, DMC1 and DMC2. The variables SZFM, DMC1 and DMC2 are significantat at 0.1 percent level of significance. Furthermore, the TPFM is significant at 10 per cent level of significance. Negative signs and very high significance of each of DMC1, DMC2 and DMC3 implied that family incomes of the respondents of each of 1st, 2nd and 3rd categories were substantially lower in comparison to the respondents of the 4th category. Highly significant value of the intercept term implies that apart from the list of variables considered, there might be certain other important variables (not known to us), which might also be influencing per capita income of the respondents.

Conclusion and Policy Implications

The mean age of the rural labour (39.53 years) and marginal farmer (43.73 years) households, indicates that the border area of the Fazilka district enjoys demographic dividend. The average annual income gross income of rural labour and marginal farmer

households have found to be Rs. 82447.1 and 200747.3 respectively. Which have been found to be insufficient to meet their daily and basic needs. The variables SZFM, DMC1, DMC2 and DMC3 were tested at level of 0.1 percent level of significance and OPLD are significant at 5 percent level of significance among sampled marginal farmer households. The variables SZFM, DMC1 and DMC2 are significantat at 0.1 percent level of significance. Furthermore, the TPFM is significant at 10 per cent level of significance among sampled rural labour households. The facts also show that the average size of members per family of the rural labour and marginal farmer households have been found to be 4.90 and 5.22 members per family respectively. The facts regarding small size of family seems to be awareness of the family planning. Now, its responsibility of the government to provide proper education, health facilities, sanitation and work for the women and promote the rural industry, cotton textile and food processing in the Fazilka District, because the Fazilka is famous for contribution to horticulture and crop of cotton. Government should provide employment opportunities to people at decent wage rate, agriculture allied activities such as fish farming, poultry farming and dairy farming and encourage the Self-Help Groups, Co-operative market in the rural economy. Further, the average size of the households of the sampled respondents had been found to be 4.6 and 5.8 marlas for the rural labour and marginal farmer households respectively, which is very small and might have led to deteriorate the quality of life, unhygienic conditions for their health and mental stress of the family. Among the total population, the proportion of the illiterate population have found to be 17.35 and 12.89 per cent among rural labour and marginal farmer households respectively. The majority of the sampled respondents have also been found to be with low education level up to primary, middle and matric level. The main reason behind their low level of education have been found to be economic reasons, absence of earners in the family and lack of awareness about education. The government and parents should encourage the children to have access to education so as to fulfil their aspirations of their life, which helps the families to uplift their economic status and improve their living standard.

References

Anupama et. al. 2017. Indebtedness and Poverty among Agricultural Labourers in Rural Punjab, ISBN 978-93-83437-35-1, Unistar Publications Patiala.

Government of India 2011. Socio-Economic Caste Census. https://secc.gov.in/

Government of India 2018. Drinking water, Sanitation, Hygiene and Housing Conditions in India, National Statistical Organization, NSS 76th Round, July 2018-December 2018. https://pib.gov.in

Dhaliwal, R.S. and Grewal, S.S. 1983. Levels of Living of Agricultural Labourers in Rural Punjab. Indian Journal of Labour Economics, **26:** 257-263.

https://punjab.global.ucsb.edu/sites/default/files/sitefiles/journals/volume12/no2/12.2.pdf

Jyoti, Kaur, G., Kaur. V., Dharampal, Singh, G. 2019. A Suvey of Dalit Women in Rural Punjab. ISBN 978-81-943985-3-0.

Laxminarayan 1977. Changing Conditions of Agricultural Labourers. Economic and Political Weekly, **12:** 1817-1820. https://www.epw.in/journal/1977/43/special-articles/changing-conditions-agricultural-labourer.html

Kaur, R., Kaur, S., Kaur, G., Uppal, A., and Singh, Gian 2018. Levels of living of Marginal Farmers and Agriculture Labourers in Rural Punjab. SLM Publishers ISBN Number- 978-81-937643-2-9.