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A study on demographic profile and discriminating factors influencing livelihood security among agricultural labourers in Karnataka

Mamathalakshmi N, Pushpa P, Jasmitha BG and Divyashree HN

Abstract

The study was conducted to know about demographic profile and livelihood security among agricultural labourers in Karnataka in three different agro climatic regions viz., rainfed, irrigated and plantation. The results revealed that 39.52 per cent of the agricultural labourers belonged to medium level of livelihood security which is tracked by 32.38 per cent and 28.10 per cent had high and low levels of livelihood security, respectively. With respect to profile of the respondents 35.24 per cent of them belonged to middle age group, 68.10 per cent had low education, 60.48 per cent had low land holding, 50.00 per cent had low livestock possession, 45.24 per cent belonged to OBC and general caste, 47.14 per cent had medium family size, 67.62 per cent enjoying nuclear family type, 47.14 per cent had medium dependency ratio and 43.81 per cent had medium adjustability. Further, majority of them belonged to low participation in developmental process (94.29%), medium farming system practiced (41.43%), low determination in work situation (34.28%), low savings (53.33%), medium indebtedness (46.19%), low training received (94.29%), low information seeking behaviour (38.58%), low self confidence (45.24%), medium risk orientation (47.15%), low scientific orientation (39.05%), low value orientation (36.67%), high social participation (36.67%), medium extension participation (57.62%), medium economic motivation (43.81%), low achievement motivation (40.95%), low deferred gratification (39.05%), medium innovative proneness (40.00%), medium cosmopolitanness (57.62%), medium mass media utilization (53.34%) and medium management orientation (45.24%). The statistic value Mahalanobis 'D²' calculated was 50.16 and 'F' ratio calculated was 36.92 which were found to be highly significant ($P < 0.01$) in pooled situation. The variables namely management orientation (45.97%), training received (23.00%), risk orientation (10.48%), indebtedness (7.28%), self confidence (3.95%), farming system practiced (3.93%), scientific orientation (3.07%), land holding (1.31%) and achievement motivation (1.04%) occupied first nine ranks (position) in discriminant function analysis.

Keywords: Livelihood security, agricultural labourers, discriminating factors, demographic profile

Introduction

Agricultural labourers constitute by far the largest segment in the unorganized sector. The avenues of stable and durable employment for them have been limited leading to inter-district and inter-state migration in search of better avenues of employment and wages. As per 2001 survey in India, in the total work force 27.50 per cent were male and 43.40 per cent were female agricultural labourers (33.2% by persons). In Karnataka, there were 23.70 per cent of male and 50.40 per cent of female agricultural labourers (34.4% by persons). Agricultural and allied sectors accounted for about 52.1 per cent of the total workforce in 2009–10. Several measures have been taken to protect the interests of the working class and uplift the condition of agricultural labourers. The very first legislation, the Minimum Wages Act (1948) was applied to the agricultural sector also. Many other existing labour laws are applicable and have direct bearing on agricultural labourers. The problems of agricultural labourers have been sought to be tackled through multi-dimensional course of action viz., improvement of infrastructural facilities, diversification to non-farm activities, skill improvement programmes, financial assistance to promote self-employment, optimizing the use of land resources etc., through a variety of rural development, employment generation and poverty alleviation programmes. All these efforts have not adequately protected the interests of agricultural labourers. The existing pathetic situation makes difficult for the agricultural labourers to obtain secured livelihood. Hence, the best way is to live with the situation and to find out the ways and means of getting secured livelihood of agricultural labourers. Keeping in view of these facts, the present study is planned with the following specific objectives.

1. To study the livelihood security level of agricultural labourers.
2. To know the profile characteristics of agricultural labourers.
3. To identify the discriminating factors influencing livelihood security of agricultural labourers.

Materials and Methods

For the study six districts viz., Kolar, Chickaballapur (Rainfed), Mandya, Mysore (Irrigated), Coorg and Chickamagalur (Plantation) were selected, as these districts represent rainfed, irrigated and plantation situation which is intended for making comparison. Thirty five agricultural labourers were selected from each district making total 210 respondents (Rainfed – 70, Irrigated – 70, Plantation situation – 70). The scale was developed for the study and used to quantify dependent variable (livelihood security). Twenty nine independent variables selected for the study was

quantified by using structured schedule and standardized scales. Personal interview method was followed to collect the data and appropriate statistical tests were used for analyzing the data for interpretation.

Results and Discussion

The results pertaining to the livelihood security level, profile of the respondents and discriminating the independent variables responsible for high and low livelihood security levels of agricultural labourers in pooled situation was presented here under.

Table 1: Distribution of Agricultural Labourers According to their Livelihood Security Level in Pooled Situation (n=210)

Livelihood Security	Number	Per cent	Mean	SD
Low (< 135.41 score)	59	28.10	143.52	16.23
Medium (135.41 to 151.63 score)	83	39.52		
High (>151.63 score)	68	32.38		



Fig 1: Classification of agricultural labourers based on livelihood security level in pooled situation

The critical look at the Table 1 and Fig 1 shows that 39.52 per cent of the agricultural labourers in pooled situation belonged to medium level of livelihood security which is tracked by 32.38 per cent and 28.10 per cent had high and low levels of livelihood security, respectively. This might be due to the reason that majority of the respondents depends on-farm and off-farm activities for their source of income. They are in a position to improve their livelihood in a better level in terms

of their Assets, economic efficiency, ecological security, social equitability, coping strategies and employment status hence, the present trend is observed. The findings of the study is supported by Anand Rathod (2007) [3], Basavaraj Biradar (2008) [4], Chandrani Saha (2008) [6], Biswarup Saha and Ram Bahal (2010) [5], Devarajaiah (2010) [7], Lavanya (2010) [11], Lakshmi Narayani *et al.* (2011) [9] and Savitha *et al.* (2011) [17].

Table 2: Profile Characteristics of Agricultural Labourers in Pooled Situation (n=210)

Sl. No.	Characteristics	No.	Per cent	Mean	SD
1.	Age				
	Young (< 38.26 years)	69	32.86	44.04	11.57
	Middle (38.26 to 49.82 years)	74	35.24		
	Old (> 49.82 years)	67	31.90		
2.	Education				
	Low (< 0.42 score)	143	68.10	2.30	3.76
	Medium (0.42 to 4.18 score)	13	6.19		
	High (> 4.18 score)	54	25.71		
3.	Land holding				
	Low (< 0.1 acres)	127	60.48	0.23	0.47
	Medium (0.1 to 0.46 acres)	39	18.57		
	High (> 0.46 acres)	44	20.95		
4.	Livestock Possession				
	Low (< 5,102.84 worth in ₹)	105	50.00	16088.10	21970.52
	Medium (5,102.84 to 27,073.36 worth in ₹)	51	24.29		

	High (> 27,073.36 worth in ₹)	54	25.71		
5.	Caste				
	SC (< 1.87 score)	79	37.62	2.56	1.39
	ST and category I (1.87 to 3.25 score)	36	17.14		
	OBC and general (> 3.25 score)	95	45.24		
6.	Family Size				
	Small (< 3.42 score)	69	32.86	4.44	2.04
	Medium (3.42 to 5.46 score)	99	47.14		
	Big (> 5.46 score)	42	20.00		
7.	Family Type				
	Nuclear Family	142	67.62	-	-
	Joint Family	68	32.38		
8.	Dependency Ratio				
	Low (< 38.3 per cent)	71	33.81	82.83	89.06
	Medium (38.3 to 127.36 per cent)	99	47.14		
	High (> 127.36 per cent)	40	19.05		
9.	Adjustability				
	Low (< 12.28 score)	55	26.19	13.20	1.84
	Medium (12.28 to 14.12 score)	92	43.81		
	High (> 14.12 score)	63	30.00		
10.	Participation in Developmental Programmes				
	Low (< 1.85 score)	198	94.29	2.15	0.61
	Medium (1.85 to 2.45 score)	4	01.90		
	High (> 2.45 score)	8	03.81		
11.	Farming System Practiced				
	Low intensity (< 8.07 score)	75	35.71	14.17	12.21
	Medium intensity (8.07 to 20.27 score)	87	41.43		
	High intensity (> 20.27 score)	48	22.86		
12.	Determination in Work Situation				
	Low (< 32.07 score)	72	34.28	34.75	5.37
	Medium (32.07 to 37.43 score)	69	32.86		
	High (> 37.43 score)	69	32.86		
13.	Savings				
	Low (< 1.12 score)	112	53.33	7.80	13.37
	Medium (1.12 to 14.48 score)	75	35.72		
	High (> 14.48 score)	23	10.95		
14.	Indebtedness				
	Low (< 7.42 score)	84	40.00	36.56	58.28
	Medium (7.42 to 65.7 score)	97	46.19		
	High (> 65.7 score)	29	13.81		
15.	Training Received				
	Low (< 1.84 score)	198	94.29	2.12	0.57
	Medium (1.84 to 2.4 score)	2	0.95		
	High (> 2.4 score)	10	04.76		
16.	Information Seeking Behaviour				
	Low (< 4.41 score)	81	38.58	6.00	3.19
	Medium (4.41 to 7.59 score)	64	30.48		
	High (> 7.59 score)	65	30.95		
17.	Self Confidence				
	Low (< 4.13 score)	95	45.24	4.89	1.52
	Medium (4.13 to 5.65 score)	44	20.95		
	High (> 5.65 score)	71	33.81		
18.	Risk Orientation				
	Low (< 8.75 score)	62	29.52	9.44	1.38
	Medium (8.75 to 10.13 score)	99	47.15		
	High (> 10.13 score)	49	23.33		
19.	Scientific Orientation				
	Low (< 5.10 score)	82	39.05	6.38	2.56
	Medium (5.10 to 7.66 score)	51	24.29		
	High (> 7.66 score)	77	36.67		
20.	Value Orientation				
	Low (< 14.43 score)	77	36.67	15.42	1.98
	Medium (14.43 to 16.41 score)	69	32.86		
	High (> 16.41 score)	64	30.47		
21.	Social Participation				
	Low (< 1.27 score)	76	36.19	2.05	1.57
	Medium (1.27 to 2.83 score)	57	27.14		

	High (> 2.83 score)	77	36.67		
22.	Extension Participation				
	Low (< 0.57 score)	52	24.76	1.03	0.92
	Medium (0.57 to 1.49 score)	121	57.62		
High (> 1.49 score)	37	17.62			
23.	Economic Motivation			19.78	3.64
	Low (< 17.96 score)	51	24.29		
	Medium (17.96 to 21.60 score)	92	43.81		
	High (> 21.60 score)	67	31.90		
24.	Achievement Motivation			19.32	6.28
	Low (< 16.18 score)	86	40.95		
	Medium (16.18 to 22.46 score)	55	26.19		
25.	Deferred Gratification			32.12	3.79
	Low (< 30.23 score)	82	39.05		
	Medium (30.23 to 34.01 score)	77	36.67		
26.	Innovative Proneness			35.11	2.84
	Low (< 33.69 score)	58	27.62		
	Medium (33.69 to 36.53 score)	84	40.00		
27.	Cosmopolitaness			9.61	2.00
	Low (< 8.61 score)	38	18.10		
	Medium (8.61 to 10.61 score)	121	57.62		
28.	Mass Media Utilization			1.99	1.23
	Low (< 1.38 score)	70	33.33		
	Medium (1.38 to 2.60 score)	112	53.34		
29.	Management Orientation			45.86	8.27
	Low (< 41.73 score)	63	30.00		
	Medium (41.73 to 49.99 score)	95	45.24		
	High (> 49.99 score)	52	24.76		

Table 2 depicts the profile characteristics of agricultural labourers in pooled situation. From the study it is pointed out that 35.24 per cent of the respondents belonged to middle age group followed by 32.86 per cent and 31.90 per cent young and old age groups, respectively. The results of the present study observed that 68.10 per cent of the agricultural labourers belonged to low education group subsequently high (25.71%) and medium (6.19%) education categories. As high as 60.48 per cent of the respondents possessed low land holding afterward 20.95 per cent and 18.57 per cent under high and medium land holding categories, respectively. An exactly fifty per cent of the respondents (50.00%) belonged to low category of livestock possession after that one fourth of them fell under high (25.71%) and medium (24.29%) livestock possession categories, respectively. The study noticed that 45.24 per cent of the respondents belonged to OBC and general caste subsequently SC (37.62%) and ST and category I (17.14%) caste groups. It is concluded that 47.14 per cent of the respondents belonged to medium family size followed by 32.86 per cent and 20.00 per cent under small and big family size groups, respectively. From the study it is documented that 67.62 per cent of the respondents belonged to nuclear family type and remaining 32.38 per cent of them fell under joint family type. The present study highlighted that 47.14 per cent of the respondents had medium dependency ratio afterward low (33.81%) and high (19.05%) dependency ratio. It is observed that 43.81 per cent of the agricultural labourers were fitted under medium adjustability group followed by 30.00 per cent and 26.19 per cent fell under high and low adjustability groups, respectively. The greatest part of the respondents (94.29%) had low participation in developmental programmes followed by 3.81 per cent and

1.90 per cent had high and medium levels of participation in developmental programmes, respectively. It is observed from the study that 41.43 per cent of the respondents belonged to medium intensity under farming system practiced followed by low (35.71%) and high (22.86%) intensity of farming system practiced. The study reveals that 34.28 per cent of the respondents had low determination in work situation subsequently equal percentage (32.86%) under medium and high levels of determination in work situation. The study points out that 53.33 per cent of the respondents had low savings followed by 35.72 per cent and 10.95 per cent had medium and high savings, respectively. The study revealed that 46.19 per cent of the respondents had medium indebtedness followed by 40.00 per cent and 13.81 per cent had low and high indebtedness, respectively. As high as 94.29 per cent of the respondents received low training exposure and remaining 4.76 per cent and 0.95 per cent had high and medium training exposure, respectively. The results of the study concluded that 38.58 per cent of the respondents had low information seeking behaviour followed by 30.95 per cent and 30.48 per cent had high and medium information seeking behaviour, respectively. The study accounted that 45.24 per cent of the respondents had low self-confidence subsequently 33.81 per cent and 20.95 per cent had high and medium self-confidence, respectively. It is understandable from the study that 47.15 per cent of the respondents had medium risk orientation subsequently low (29.52%) and high (23.33%) risk orientation categories. The study notifies that 39.05 per cent of the respondents had low scientific orientation followed by 36.67 per cent and 24.29 under high and medium scientific orientation categories, respectively. The study observed that 36.67 per cent fitted under low value

orientation group subsequently medium (32.86%) and high (30.47%) value orientation classes. From the study it is confirmed that 36.67 per cent of the respondents had high social participation followed by 36.19 per cent and 27.14 per cent had low and medium social participation, respectively. The study inferred that 57.62 per cent of the respondents fall under medium class of extension participation after that low (24.76%) and high (17.62%) classes of extension participation. The study discovered that 43.81 per cent of the respondents had medium economic motivation subsequently high (31.90%) and low (24.29%) economic motivation categories. The study conveyed that 40.95 per cent of the respondents belonged to low achievement motivation category which is followed by high (32.86%) and medium (26.19%) categories. From the study it is clear that 39.05 per cent of the respondents had low deferred gratification followed by 36.67 per cent and 24.28 per cent had medium and high deferred gratification, respectively. The study imparted that 40.00 per cent of the respondents had medium

innovative proneness subsequently 32.38 per cent and 27.62 per cent had high and low innovative proneness, respectively. A slightly more than half of the respondents (57.62%) belonged to medium cosmopolitanism group followed by 24.28 per cent and 18.10 per cent had high and low cosmopolitanism, respectively. The study stated that 53.34 per cent of the respondents had medium mass media utilization next low (33.33%) and high (13.33%) mass media utilization categories. The study result showed that 45.24 per cent of the respondents belonged to medium management orientation class which is followed by 30.00 per cent and 24.76 per cent under low and high management orientation categories, respectively. The present study findings are in line with the findings of Sharma *et al.* (2006), Anand Rathod (2007) [3], Chandrani Saha (2008) [6], Lakshmi Narayani (2009) [8], Rajula Shanthi (2009) [13], Achala Gakkhar *et al.* (2010) [1], Devarajaiah (2010) [7], Lavanya (2010) [11], Savitha *et al.* (2011) [17], Agnes Daney Angela *et al.* (2012) [2], Raksha *et al.* (2012) [14] and Rokonuzzaman (2013) [15].

Table 3: Discriminating the Independent Variables Responsible for High and Low Livelihood Security Levels of Agricultural Labourers in Pooled Situation (n=210)

Sl. No.	Order	Independent Variables	di	't' Value	Li	di×Li	% of the total	Rank
1.	X ₂₉	Management orientation	10.02	12.53**	3.31	33.17	45.97	I
2.	X ₁₅	Training received	10.12	9.63**	1.64	16.60	23.00	II
3.	X ₁₈	Risk orientation	18.00	7.61**	0.42	7.56	10.48	III
4.	X ₁₄	Indebtedness	8.34	5.31**	0.63	5.25	7.28	IV
5.	X ₁₇	Self confidence	2.26	3.65**	1.26	2.85	3.95	V
6.	X ₁₁	Farming system practiced	2.40	2.23*	1.18	2.83	3.93	VI
7.	X ₁₉	Scientific orientation	3.89	5.75**	0.57	2.22	3.07	VII
8.	X ₃	Land holding	2.36	8.04**	0.40	0.94	1.31	VIII
9.	X ₂₄	Achievement orientation	2.08	3.26**	0.36	0.75	1.04	IX
10.	X ₁₆	Information seeking orientation	1.02	5.24**	0.65	0.66	0.92	X
11.	X ₁₂	Determination in work situation	0.85	3.81**	0.62	0.53	0.73	XI
12.	X ₂₇	Cosmopolitanism	0.52	0.78NS	0.85	0.44	0.61	XII
13.	X ₂₃	Economic motivation	2.61	2.24*	0.16	0.42	0.58	XIII
14.	X ₁	Achievement motivation	1.62	1.84 NS	0.16	0.26	0.36	XIV
15.	X ₁₃	Savings	0.19	2.02*	0.75	0.14	0.20	XV
16.	X ₉	Adjustability	0.22	1.76 NS	0.40	0.09	0.12	XVI
17.	X ₂₀	Value orientation	0.26	1.53 NS	0.30	0.08	0.11	XVII
18.	X ₂₆	Innovative proneness	0.38	0.92 NS	0.17	0.06	0.09	XVIII
19.	X ₆	Family size	0.15	1.02 NS	0.08	0.01	0.02	XIX
20.	X ₅	Caste	0.10	2.02*	0.01	0.00	0.00	XX
21.	X ₂₅	Deferred gratification	0.70	1.04 NS	-0.01	-0.01	-0.01	XXI
22.	X ₂₂	Extension participation	0.62	1.76 NS	-0.02	-0.01	-0.02	XXII
23.	X ₈	Dependency ratio	0.64	3.28**	-0.08	-0.05	-0.07	XXIII
24.	X ₄	Livestock possession	2.20	1.52 NS	-0.04	-0.09	-0.12	XXIV
25.	X ₂₈	Mass media utilization	2.20	0.76 NS	-0.15	-0.33	-0.46	XXV
26.	X ₇	Family type	2.11	1.26 NS	-0.21	-0.44	-0.61	XXVI
27.	X ₂	Education	2.22	0.94 NS	-0.21	-0.47	-0.65	XXVII
28.	X ₂₁	Social participation	1.52	1.01 NS	-0.38	-0.58	-0.80	XXVIII
29.	X ₁₀	Participation in developmental process	1.50	1.52 NS	-0.62	-0.93	-1.29	XXIX

Note: di: Mean difference and Li: Discrimination function co-efficient **significant at 1 per cent *significant at 5 per cent NS-Non-significant D² = 50.16 F = 36.92**

Discriminant function analysis was employed to identify the independent variables which would discriminate between low and high levels of livelihood security of agricultural labourers in pooled situation and further to find out percentage contribution of individual independent variables to the total distance measured.

The results relating to the above analysis was presented in the Table 3. The statistic value Mahalanobis 'D²' and 'F' ratio calculated was 50.16 and 36.92, respectively. The 'F' ratio was found to be highly significant ($P < 0.01$). Hence, the distance between low and high levels of livelihood security

was significant. This implied that all the 29 independent variables together were useful in discriminating the agricultural labourers with low and high levels of livelihood security. This may be well explained by the reasons that the variables are selected based on the knowledge gained, review of literature and appropriateness of the variables to agricultural labourers. Hence, they are contributing to the livelihood security. The mean difference (di), coefficient of discriminant function (Li), product (di × Li) and percentage derived from the analysis were presented in the Table 3. Among the mean differences (di) obtained over 29

variables, the statistical significance were found in the case of 15 variables.

Totally 15 variables had significant relationship with the livelihood security. Out of 15 independent variables, 11 variables such as management orientation (X_{29}), training received (X_{15}), risk orientation (X_{18}), indebtedness (X_{14}), self confidence (X_{17}), scientific orientation (X_{19}), land holding (X_3), achievement orientation (X_{24}), information seeking orientation (X_{16}), determination in work situation (X_{12}) and dependency ratio (X_8) had significant relationship at 1 per cent level with the livelihood security levels of agricultural labourers. The other four variables *viz.*, farming system practiced (X_{11}), economic motivation (X_{23}), savings (X_{13}) and caste (X_5) had significant relationship (5 per cent level) with the livelihood security level of agricultural labourers.

It can be observed from the Table 3 that ranking of percentage of distance measured by important variables revealed that first nine ranks comprising of management orientation (45.97%), training received (23.00%), risk orientation (10.48%), indebtedness (7.28%), self confidence (3.95%), farming system practiced (3.93%), scientific orientation (3.07%), land holding (1.31%) and achievement motivation (1.04%) were found to be contributing to the optimum compared to other variables in discriminating the agricultural labourers with low and high livelihood security levels. The calculated discriminant scores ' Z_1 ' and ' Z_2 ' for low and high levels of livelihood security of agricultural labourers were 100.33 and 175.99, respectively. The critical value of discriminant scores (Z) for these two groups were 87.91.

Now, the developed discriminant function can be used to predict whether the agricultural labourers are likely to belong to low and high livelihood security levels. If the value of the discriminant score of selected agricultural labourers is less than a score of 87.91, it would be predicted that they would belong to low livelihood security and a score of 87.91 and more it would indicate a tendency that he would belong to high livelihood security. By this ' Z ' value and ' F ' value, it can be concluded that difference between low and high livelihood security groups is significant. Additionally, while computing discriminant function analysis the medium livelihood security group was ignored, taking only low and high livelihood security groups. Hence, it is quite natural to get this type of results. The studies of Lakshminarayan (1997), Saravanan (2003) and Prakashan (2004) supported the present study findings.

Overall the results indicated that the agricultural labourers had medium to high livelihood security level therefore, it is necessary to motivate them to diversify their income on other income generating activities and also build self confidence to take up self employment activities and small agro-based enterprises to ensure additional income thereby better livelihood security. Further, the respondents belonged to low category in case of education, participation in developmental programmes and training experience. This reflects that there is a need for organizing intensive educational activities, trainings, demonstrations, seminars, exhibitions, field days and field visits effectively and frequently and follow-up activities by concerned authority for achieving higher level of education, participation in developmental programmes and training experience. The training should focus on self employment oriented activities with limited land emphasizing on subsidiary enterprises. The information on latest technologies has to be provided to the agricultural labourers through educational programmes. The study enunciated that

self confidence, dependency ratio, training received and management orientation were the prime discriminating factors of livelihood security levels. Thus, government, developmental departments such as department of agriculture / horticulture, department of rural development, department of social welfare, co-operative societies and NGO's should focus their efforts towards amplification of these factors through their developmental programmes and schemes in order to ensure enhancement of agricultural labourers livelihood security. Further, developmental schemes to focus exclusively on agricultural labourers need to be design and implement.

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References

1. Achala Gakkhar, Kalla PN, Punam Tiwari. Agricultural extension and rural environment: focus on water resource influencing lives and livelihood. Indian Research Journal of Extension Education. 2010;10(1):8-11.
2. Agnes Daney Angela S, Sheela Immanuel, Ananthan PS. Fishers of stanley reservoir: An insight into their livelihood. Indian Research Journal of Extension Education. 2012;12(3):128-131.
3. Anand Rathod R. A study on sustainable livelihoods of lambani farmers in Hyderabad Karnataka. M. Sc. (Agri.) Thesis (Unpublished), University of Agricultural Sciences, Dharwad, 2007.
4. Basavaraj Biradar N. A study on impact of income generating activities on sustainable rural livelihoods of Karnataka Watershed Development Society (KAWAD) project beneficiaries. M. Sc. (Agri.) Thesis (Unpublished), University of Agricultural Sciences, Dharwad, 2008.
5. Biswarup Saha, Ram Bahal. Livelihood diversification pursued by farmers in West Bengal. Indian Research Journal of Extension Education. 2010;10(2):1-9.
6. Chandrani Saha. A study on sustainability of farming system and livelihood security among rural households in Tripura. M. Sc. (Agri.) Thesis (Unpublished), University of Agricultural Sciences, Bangalore, 2008.
7. Devarajaiah K. A study on livelihood diversification of small and marginal farmers in Kolar district of Karnataka. Ph. D. Thesis (Unpublished). The School of Agricultural Sciences Yashwantrao Chavan Maharashtra Open University, Nashik, Maharashtra, 2010.
8. Lakshmi Narayani S. A study on livelihood security of farmers in Virudhunagar district of Tamil Nadu. M. Sc. (Agri.) Thesis (Unpublished), University of Agricultural Sciences, Bangalore, 2009.
9. Lakshmi Narayani S, Anand TN, Narayana Gowda K, Shivamurthy M. Study on livelihood security of farmers in Virudhunagar district of Tamil Nadu. Mysore Journal of Agricultural Sciences. 2011;45(1):111-116.
10. Lakshminarayan MT. Adoption of sustainable farming practices by farmers – an analysis. Ph. D. Thesis (Unpublished), University of Agricultural Sciences, Bangalore, 1997.
11. Lavanya. Assessment of farming system efficiency in Theni district of Tamil Nadu. M. Sc. (Agri.) Thesis (Unpublished), University of Agricultural Sciences,

- Bangalore, 2010.
12. Prakashan CV. A study on performance of extension system in Kerala. M. Sc. (Agri.) Thesis (Unpublished), University of Agricultural Sciences, Bangalore, 2004.
 13. Rajula Shanthi T. Efficiency of women agricultural labourers in rice farming systems of Kerala and Tamil Nadu. Indian Research Journal of Extension Education. 2009;9(2):96-99.
 14. Raksha, Rita Goel, Lali Yadav. Constraints faced by rural women in procurement and utilization of credit facilities in Hisar district. Journal of Research ANGRAU. 2012;40(4):29-35.
 15. Rokonzaman M. Training Needs of Tribal People Regarding Income Generating Activities. Indian Research Journal Extension Education. 2013;13(2):10-16.
 16. Saravanan R. An analysis of public and private agricultural extension services in Karnataka state. Ph. D. Thesis (Unpublished), University of Agricultural Sciences, Bangalore, 2003.
 17. Savitha MG, Munidinamani SM, Dollu SS, Naik BK, Patil BL, Megeri SN. Livelihood systems for rural community in Chitradurga district of Karnataka state. Karnataka Journal of Agricultural Sciences. 2011;24(3):325-330.
 18. Sharma VK, Vashishtha SV, Dan Singh. Causes of indebtedness among the farmers. Indian Research Journal of Extension Education. 2006;6(3):1-3.