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Analisis of human capital of small and marginal farm families

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Abstract
Agriculture and allied activities support livelihoods of nearly 58 per cent of India's rural population. Livelihood is defined as a set of activities, involving securing water, food, fodder, medicine, shelter, clothing and the capacity to acquire above necessities working either individually or as a group by using endowments (both human and material) for meeting the requirements of the self and his/her household on a sustainable basis with dignity. The study was conducted in two districts of Hisar division namely Bhiwani and Hisar by random selection and by selecting one block from each selected district and two villages from each of the selected block at random. From the selected four villages a sample of 300 respondents i.e. 75 small and marginal farm families from each village was drawn at random to explore livelihood capabilities of rural farm families in Hisar Division. Regarding human capital, in majority (56.34%) of the households less than two members were economically active, majority (60.33%) of farm family members did not attend any vocational training and 64.0 per cent of farm family's members possessed good knowledge regarding their occupation.

Keywords: Agriculture, livelihood, capital, farm families

Introduction
Agriculture and agricultural land are extremely important to millions of rural farm households, as well as to the national economy. Indian agriculture is dominated by marginal and small farmers (80% of farming households) owning less than 1 ha of land. About 52 per cent of India's population is greatly dependent for their livelihoods on agriculture and allied activities. The word "livelihood" originates from the word "live". The simple dictionary definition of livelihood is a "means of living". Livelihood synthesizes all human activities including five core assets: physical capital (housing, vehicles, agricultural machines, communication facilities, transport infrastructure, irrigation works, electricity, markets, clinics, schools, bridges etc.), natural capital (forest, land, water, flora, fauna, pasture, biodiversity etc.), financial capital (cash assets, remittances, savings, livestock, income levels, variability over time, access to credit, debt levels etc.), human capital (education, knowledge, labour availability, household size, skills, health etc.) and social capital (rights or claims, friends, kin, support from trade or professional associations, families, communities, committees, businesses, voluntary organizations, political claims etc.) upon which the livelihoods are built. The households utilize these assets in their productive activities in order to create income and satisfy their consumption needs, maintain their asset levels and invest in their future activities (Ellis and Freeman, 2009) [2].
There are four principal ways of acquiring livelihoods by the rural households. First is the production-based livelihood. A large proportion of the small and marginal farmers gain livelihoods through production on small pieces of land. For these households, availability or access to inputs and improved methods of production are quite critical for their livelihoods. Second is the labour-based livelihood. Third is the exchange or market based livelihood. The fourth set of livelihoods is transfer-based entitlements. Without any income-earning asset or able-bodied person to work depend for their household's livelihoods on transfers from the government or other social organizations (Acharya, 2006) [1]. So, the study was conducted with the objective to explore livelihood capabilities of rural farm families in Hisar division.

Methodology
The study was conducted in Hisar division of Haryana state. Hisar division comprises of Hisar, Sirsa, Fatehabad, Jind and Bhiwani district.

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Out of which, two districts i.e. Bhiwani and Hisar were selected randomly. One block from each district viz., Barwala block from Hisar district and Bawani khera block from Bhiwani district, were selected randomly. From selected two blocks, four villages (two from each block) *Barsi* and *Alkhpura* from Bawani khera and *Matlauda* and *Sandlana* from Barwala were selected randomly. From the selected villages a sample of 75 small and marginal farm families was drawn randomly. Thus a total of 300 respondents were selected randomly. Data was collected with the help of pre - structured interview schedule by the investigator from head of household of farm families. Statistical tools frequency, percentages, weighted mean scores, ranking and correlation Coefficient were applied for data analysis.

Results and Discussion
Table 1 presents the socio-personal profile of the respondents. It is clear from the Table 1 that majority of the respondents in Bhiwani district (81.33%) and in Hisar district (75.33%) belonged to 35-50 years age group followed by below 35 years (10.67% and 12.67% respectively).
As regards head of the household, majority of the houses were headed by male members in both the districts i.e. 93.33 per cent in Bhiwani and 90.67 per cent in Hisar district. Very little number of houses was headed by female members of household.

Table 1: Socio-personal profile of the respondents

S. No	Variables	Bhiwani (n= 150)		Hisar (n=150)		Total (n=300)	
		f	%	f	%	f	%
1.	Age						
	Below 35 years	16	10.67	19	12.67	35	11.67
	35-50 years	122	81.33	113	75.33	235	78.33
	Above 50 years	12	08.00	18	12.00	30	10.00
2.	Head of household						
	Male	140	93.33	136	90.67	276	92.00
	Female	10	06.67	14	09.33	24	08.00
3	Education						
	Illiterate	24	16.00	18	12.00	42	14.00
	Upto primary	41	27.33	27	18.00	68	22.67
	Upto Secondary	55	36.67	41	27.33	96	32.00
	Graduate & above	30	20.00	64	42.67	94	31.33
4.	Occupation of respondents						
	Labour	0	0.0	7	04.67	7	02.33
	Farming	119	79.33	91	60.67	210	70.00
	Service	21	14.00	48	32.00	69	23.00
	Business/caste occupation	10	06.67	4	02.67	14	04.67
5.	Caste						
	SC/ST	14	09.33	11	07.33	25	08.34
	OBC	90	60.00	82	54.67	172	57.33
	General	46	30.67	57	38.00	103	34.33
6.	Marital status						
	Married	127	84.66	132	88.00	259	86.33
	Unmarried	19	12.67	11	07.33	30	10.00
	Widow/widower	4	02.67	7	04.67	11	03.67
7.	Type of family						
	Nuclear	96	64.00	107	71.33	203	67.67
	Joint	54	36.00	43	28.67	97	32.33
8.	Family size						
	Small (upto 4 members)	16	10.67	24	16.00	40	13.33
	Medium (5-6 members)	102	68.00	107	71.33	209	69.67
	Large (more than 6 members)	32	21.33	19	12.67	51	17.00

As regards education of respondents, in Bhiwani district 36.67 per cent of the respondents were educated upto secondary followed by upto primary (27.33%), graduate and above (20.00%) and illiterate (16.00%). Whereas, in Hisar district 42.67 per cent of the respondents were graduate and above followed by upto secondary (27.33%), upto primary (18.00%) and illiterate (12.00%).
Majority of the respondents (79.33%) reported farming as their main occupation followed by service (14.00%) and only 06.67 per cent of the respondents had business/caste occupation as their main occupation in Bhiwani district. Whereas, in Hisar district 60.67 per cent of the respondents had farming as their main occupation followed by service (32.00%) and labour (04.67%), only 02.67 per cent of respondents' occupation was business/caste occupation. Pratap *et al.* (2014) [3] reported that agriculture continues to be important sector in Indian economy and crop production has

been found to be the biggest source of income for farm households.
With regards to caste of the respondents, it can be seen from Table 1 that more than half of the farm families in aggregate sample (57.33%) belonged to OBC caste category followed by general caste (34.33%) and remaining 08.34 per cent belonged to SC/ST caste category.
Data regarding marital status of the respondents, Table 1 show that about 86.33 per cent of them were married, only 10.00 per cent were unmarried and the incidence of the widow/ widower was 03.67 per cent in entire study area.
Majority of the respondents (67.67%) belonged to nuclear families, while 32.33 per cent of the respondents were having joint family system in total.
Family size wise distribution of the respondents depict that majority of them (69.67 %) had medium family size, while

17.00 per cent of them had small family size and 13.00 per cent of respondents hailed from large family size.

Data presented in Table 2 showed human capital of farm families revealed that majority of farm families members in both Bhiwani and Hisar districts were 25-50 year of age (61.43% and 56.58% respectively) followed by below 25 year (27.64% & 30.37% respectively) and above 50 year (10.93% and 12.96% respectively) and similar results were observed in pooled sample.

It is apparent from the Table 2 that in Bhiwani district, little more than half (51.33%) of the households where less than two members were economically active followed by 3-4 members (46.00%) and in few families (02.67%) more than 4 members were economically active. Whereas, in Hisar district 61.33 per cent of farm families reported less than two members engages in economic activity followed by 3-4 members (28.67%) and more than 4 members (10.00%).

Data regarding disabled members in aggregate sample shows that a good percentage (96.33%) of farm families reported that they did not have any disabled member. And very few families had one (03.33%) or two (0.33%) disabled members.

Regarding migration of family members to earn wages, data elucidates that in more than half (55.33%) of the families, less than two members migrated to earn wages followed by no members (36.67%) and more than two members (08.00%) in Bhiwani district, whereas in Hisar district, families with no member were migrates at all were 66 per cent followed by less than two members (29.33%) and more than two members (04.67%) respectively.

Table 2: Human capitals of farm families

S. No	Variables	Bhiwani (n=150)		Hisar (n=150)		Total (n=300)	
		f	(%)	f	(%)	f	(%)
1.	Age of members in the household	(n=796)		(n=764)		(n=1560)	
	Below 25 year	220	27.64	232	30.37	452	28.97
	25 -50 years	489	61.43	433	56.68	922	59.10
	Above 50 years	87	10.93	99	12.95	186	11.93
2.	Economically active members						
	≤ 2 members	77	51.33	92	61.33	169	56.34
	3-4 members	69	46.00	43	28.67	112	37.33
	> 4 members	4	02.67	15	10.00	19	06.33
3.	Disabled members in the family						
	No member	146	97.33	143	95.33	289	96.34
	One	4	02.67	6	04.00	10	03.33
	Two	-	-	1	0.67	1	0.33
4.	Family members migrate to earn wages						
	≤ 2 members	83	55.33	44	29.33	127	42.33
	>2 members	12	08.00	7	04.67	19	06.34
	No member	55	36.67	99	66.00	154	51.33
5.	Members died below 40 years						
	≤ 2 members	12	08.00	23	15.33	35	11.67
	>2 members	3	02.00	-	-	3	01.00
	No member	135	90.00	127	84.67	262	87.33
6.	Family education status						
	Low (up to 3)	29	19.33	38	25.33	67	22.33
	Medium (4-5)	75	50.00	81	54.00	156	52.00
	High (above 5)	46	30.67	31	20.67	77	25.67
7.	Vocational training received by family members						
	≤ 2 training	36	24.00	43	28.67	79	26.33
	>2 training	19	12.67	21	14.00	40	13.34
	No training	95	63.33	86	57.33	181	60.33
8.	Duration of training	(n=55)		(n=64)		(n=119)	
	0-6 months	14	25.46	22	34.37	36	30.25
	7-12 months	21	38.18	29	45.32	50	42.01
	Above 1 year	20	36.36	13	20.31	33	27.74
9.	Traditional skills possessed						
	Highly skilled	22	14.67	37	24.66	59	19.67
	Somewhat skilled	87	58.00	61	40.67	148	49.33
	Less skilled	41	27.33	52	34.67	93	31.00
10.	Occupational knowledge						
	Excellent	32	21.33	23	15.33	55	18.33
	Good	101	67.33	91	60.67	192	64.00
	Poor	17	11.33	36	24.00	53	17.67

Table 2 further unveils that in 87.33 per cent of farm families, no member had died below the age of 40 years.

Data regarding family education of the respondents in Table 2 indicate that in Bhiwani district half of the farm families (50.00%) were having medium family education status followed by high and low family education status (30.67% and 19.33% respectively), whereas, in Hisar district, little more than half of the families (54.00%) were having medium family education status followed by low and high family education status (25.33% and 20.67% respectively).

As regards vocational training, majority (63.33%) of farm family members never did not attend any vocational training followed 24.00 per cent of families were attended less than two vocational training and 12.67 per cent family members

attended more than two training in Bhiwani district. In Hisar district, more than half of the families (57.33%) members never attend any vocational training followed by less than two training (28.67%) and attended more than two vocational training (14.00%). Similar trends were also observed in pooled sample.

As regards training duration, data clearly points out that a considerable percentage of respondents (42.01%) attend vocational training of 7-12 months of duration followed by 0-6 months (30.25%) and above one year (27.73%) in total.

Table 2 also shows data regarding possession of traditional skills, a considerable percentage (58.00%) of family members were somewhat skilled followed by less skilled (27.33%) and highly skilled (14.67%) in Bhiwani district. In case of Hisar district, a good percentage of family members (40.67%) were somewhat skilled followed by less skilled (34.66%) and highly skilled (24.67%).

The finding regarding occupational knowledge of family members in both the study area reveals that majority (67.33% or 69.67%) of family members in Bhiwani and Hisar districts had good knowledge regarding their occupation. Rani (2013) also highlighted that one sub-component i.e. skills (25.0) was rated below 30 points among rural households of Haryana.

Conclusion
On the basis of findings of the study, it may be concluded that majority of the respondents belonged to 35 – 50 years of age group, did farming, having nuclear families with medium family size. Majority of farm families' members belonged to 25 to 50 years of age, less than 2 members were economically active with good health and longevity. But very few members received vocational training, possessed somewhat traditional skill and good occupational knowledge.

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