



A STUDY OF FACTOR INFLUENCING OF FARMERS INCOME STATUS -SPECIAL REFERENCE TO AMRAVATI DISTRICT

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Abstract:-

In the present study studied that the factor influencing of farmer income status special reference to Amravati district. The objective of this study is to study the various factor of related to demographic variable for the farmer influencing on the farmer income status respect to social category, age group, size of farm, crops pattern etc. Null hypothesis have been considered in the present study there is no significant influence between the various factor related to farmer on their income status. Descriptive research method respect to normative survey technique has been used in this study. population of this study is all farmer respect to various farm size, age group, crops pattern and social category wise etc in the district of Amravati Maharashtra state is the population of this study. Sample of this study is selected by simple random sampling method respect to cluster total 250 farmer have been selected for this study. Data collection by the self constructed questionnaire for farmer income status respect to various demographic variable analysis for this data through chi square, graphical representation, frequency distribution and percentage etc. finding of the study indicated that Community of farmer is significantly influence on their high, moderate and low income status. Age group of farmer is not significantly influence on their high, moderate and low income status. Size of farm is significantly influence on their high and moderate income status but the significantly influence on their low income status. Crops pattern of farmer is not significantly influence on their high income status but significantly influence on moderate and low income status.

Keywords: farmer income status , demographic variable analysis , high income status.

1.1 INTRODUCTION :

During last four decades, Indian agriculture witnessed significant change in the production pattern and new technological advancements but in the last decade it could not sustain its pace of development due to several institutional and non-farm price factors. Farming in India has been basically subsistence-oriented but due to increased commercialisation and advent of WTO farmers have started transforming their agriculture into a business proposition. However, there are several constraints that inhibit the growth of agriculture as a business enterprise. Besides, general constraints

facing agricultural development such as preponderance of marginal and small land holding, low income and purchasing power of the farmers, stagnating agricultural productivity, lack of credit, lack of capital formation, insufficient infrastructure, and lack of well developed marketing network, etc., entrepreneurial ability and behaviour of farmers substantially affect the adoption of new farm enterprises as well as technologies. Rapid changes in the society and policies have forced farmers to be more flexible and able to develop market oriented strategies, diversify their product portfolio, enhance their networks, develop effective partnerships, upgrade their knowledge systems, and improve their personal skills and competences to the changing external conditions. In this age of modern agriculture, the farmers need to search new ways to increase their incomes through diversifying their cropping system and adding new enterprises that allow them greater value creation. The nature of Indian agriculture indicates that resource base, especially land and water, for an average farmer has declined considerably mainly due to inappropriate and unscientific use of land and irrigation water. The prime land is being transferred to non-agricultural and industrial uses. Increasing demographic pressure has resulted into excessive exploitation of land and additional poor and degraded lands have been brought under cultivation resulting into low production. Besides, the agricultural productivity has stagnated and cost of inputs increased more than the prices of agricultural products. All these factors adversely affected the productivity and overall income of the farming community. Moreover, a few of the studies also have shown that the quality of human capital is an important factor in explaining rural household income (Solow 1957) and Nelson (1964). In general, investment in education allows people to adapt more easily to both social and technical changes in the economy. Okurut et al. (2002) analysed data in Uganda and found that the higher the educational attainment of the household head the wealthier the household, while the larger the household size the poorer the household. Smith (2007) in a study on the determinants of Soviet household income found that human capital and demographic factors were the main determinants of income. The well-educated, middle-aged and self-employed people had relatively comfortable incomes. The study also concluded that location had strong influence on household incomes. Similarly, in Mozambique, Bruck (2001) analysed the determinants of rural income and poverty and the coping strategies during the post-war period. Using a reduced form linear welfare function to estimate the impact of hypothesised variables including land, assets, social capital, war-effects, and village level endowments or characteristics—on indicators of household well-being, such as household consumption, the study indicated that a poverty trap existed in certain areas of the country. Nevertheless, households in the land-abundant northern parts of the country as well as those supplied with better social services were relatively richer (Bruck 2001). In Tanzania, studies have found that because agriculture is mainly labour intensive expansion in rural smallholder agricultural production depends upon a bigger labour force (Kamuzora & Gwalema, 1998; Kamuzora & Mkanta, 2000; Kamuzora, 2001). Inadequate infrastructure has also featured prominently in rural poverty studies. In Argentina, a study on the rural poor found that the principal causes of income and poverty were low education, poor health facilities and inadequate infrastructure (Verner, 2006). Combined together, these factors severely constrained household income. A few

of the studies have found that the availability of financial services is also as important explanatory variables affecting the income of the households. Kessy and Urio (2006) have shown that the provision of loans by micro-finance institutions boosted the livelihoods of poor households. The study also found that the lack of infrastructure, especially rural roads, was the main reason why micro-finance institutions failed to operate in rural areas.

1.2 OBJECTIVE OF THE STUDY :

1. To study the Community factor of farmer influence on farmer income status.
2. To study the age factor of farmer influence on farmer income status.
3. To study the level of education factor of farmer influence on farmer income status.
4. To study the size of farm factor of farmer influence on farmer income status.
5. To study the Crops factor of farmer influence on farmer income status.

1.3 HYPOTHESIS OF THE STUDY :

1. There is no significant influence between the Community factors of farmer on their income status.
2. There is no significant influence between the age factors of farmer on their income status.
3. There is no significant influence between the Educational factors of farmer on their income status.
4. There is no significant influence between the size of land factors of farmer on their income status.
5. There is no significant influence between the Crops factors of farmer on their income status.

1.4 SCOPE AND DE-LIMITATION OF THE STUDY :

This study studied in the farmer in Amravati district only. The information collected for this farmer only for his age factor, size of land factor, crops factor, community factor and income status only. Gender of the farmer, size of family, agriculture related support business, type of agriculture this factors has not been considered in this study.

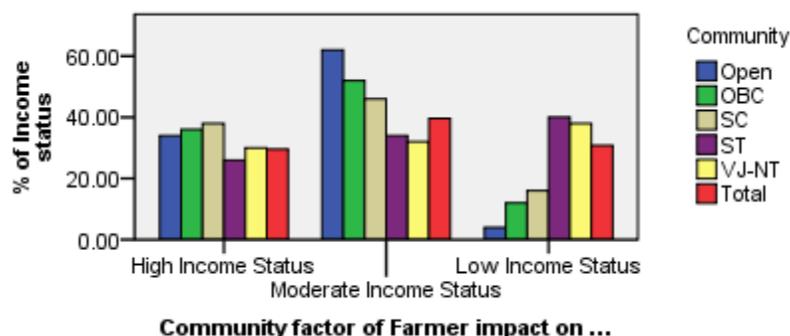
1.5 RESEARCH METHODOLOGY :

Normative Survey research method has been used in the present study. population of the study is all farmer in the district of Amravati. Sampling for this study have been use cluster sampling technique total sample size is 250 farmer respect to some demographic factor related to his income status. Data collection for this study for self constructed Questionnaire respect to closed question income status related information. Data has been collected respect to the objective of the study and it's analysis and interpretation for the statistical technique.

1.6 ANALYSIS AND INTERPRETATION OF DATA :

H0 -1 There is no significant influence between the Community factors of farmer on their income status.

Income status	Community of farmers					Chi-Square
	Open	OBC	SC	ST	VJ-NT	
High Income status	21 (34.00)	19 (36.00)	13 (38.00)	11 (26.00)	10 (30.00)	6.540
Moderate Income status	26 (62.00)	24 (52.00)	19 (46.00)	16 (34.00)	14 (32.00)	5.292
Low Income status	03 (04.00)	07 (12.00)	18 (16.00)	23 (40.00)	26 (38.00)	26.051
Total	50 (100%)	50 (100%)	50 (100%)	50 (100%)	50 (100%)	



From the above table shown that the social community factor of farmer influence on their high, moderate and low income status. High income status of farmer respect to various social category of farmer it's related calculated chi square value is 6.540 on the DF 4. This calculated chi square value is significant at 0.01 level of significant. It's means that various social category of farmer is significantly difference between their high income status. on the other hand social category wise distribution indicated that, 34.00% general social category farmer, 36.00% OBC category farmer, 38.00% SC category farmer, 26.00% ST category farmer and 30.00% VJ-NT category farmer income status is high. It's interpretation indicate that, maximum SC category farmer having high income status and minimum ST category farmer having high income status compare to other social category farmer belonging in high income status.

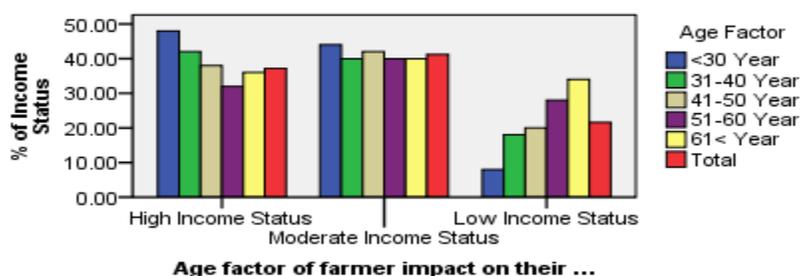
Moderate income status of farmer respect to various social category of farmer it's related calculated chi square value is 5.292 on the DF 4. This calculated chi square value is significant at 0.05 level of significant. It's means that various social category of farmer is significantly difference between their moderate income status. on the other hand social category wise distribution indicated that, 62.00% general social category farmer, 52.00% OBC category farmer, 46.00% SC category farmer, 34.00% ST category farmer and 32.00% VJ-NT category farmer belonging for the moderate income status. It's interpretation indicate that, maximum general category farmer having

moderate income status and minimum VJ-NT category farmer having moderate income status compare to other social category farmer belonging in moderate income status.

Low income status of farmer respect to various social category of farmer it's related calculated chi square value is 26.051 on the DF 4. This calculated chi square value is significant at 0.05 level of significant. It's means that various social category of farmer is significantly difference between their low income status. on the other hand social category wise distribution indicated that, 4.00% general social category farmer, 12.00% OBC category farmer, 16.00% SC category farmer, 40.00% ST category farmer and 38.00% VJ-NT category farmer belonging for the low income status. It's interpretation indicate that, maximum VJ-NT category farmer having low income status and minimum general category farmer having low income status compare to other social category farmer belonging in low income status.

H0 -2 There is no significant influence between the age factors of farmer on their income status.

Income status	Age factor of farmers					Chi-Square
	<30	31-40	41-50	51-60	61<	
High Income status	24 (48.00)	21 (42.00)	19 (38.00)	16 (32.00)	13 (26.00)	4.458
Moderate Income status	22 (44.00)	20 (40.00)	21 (42.00)	20 (40.00)	20 (40.00)	0.155
Low Income status	04 (08.00)	09 (18.00)	10 (20.00)	14 (28.00)	17 (34.00)	9.148
Total	50 (100%)	50 (100%)	50 (100%)	50 (100%)	50 (100%)	



From the above table shown that the age of the farmer influence on their high, moderate and low income status. High income status of farmer respect to various age factor it's related calculated chi square value is 4.458 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that various age factor of farmer is not significantly difference between their high income status. Farmer age wise high income status indicated that, 48.00% below 30 year age group farmer, 32.00% farmer have been include 31-40 age group, 38.00% farmer include 41-50 year age group, 32.00% farmer include 51-60 year age group and 26.00% farmer include above 61 year age group these age group farmer income status is high. It's indicate

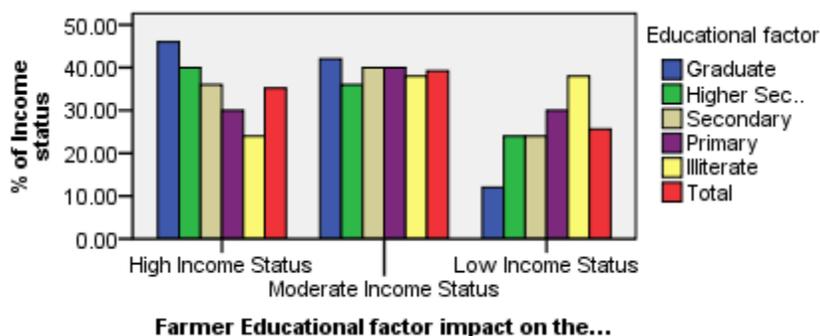
that, maximum below 30 year age group farmer belonging in high income status and minimum above 61 year age group farmer belonging in high income status compare to other age group of farmer belonging in high income status.

Moderate income status of farmer respect to various age factor it's related calculated chi square value is 0.155 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that various age factor of farmer is not significantly difference between their moderate income status. Farmer age wise moderate income status indicated that, 44.00% farmer belonging in below 30 year age group, 40.00% farmer have been include 31-40 age group, 42.00% farmer include 41-50 year age group, 40.00% farmer include 51-60 year age group and 40.00% farmer include above 61 year age group these age group farmer income status is moderate. It's indicate that, maximum below 30 year age group farmer belonging in moderate income status and minimum below 61 year age group farmer, 31-40 age group and 51-60 year age group farmer belonging in moderate income status compare to other age group of farmer belonging in moderate income status.

Low income status of farmer respect to various age factor it's related calculated chi square value is 9.14 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that various age factor of farmer belonging to low income status is not significantly difference between their low income status. Farmer age wise low income status indicated that, 8.00% farmer belonging in below 30 year age group, 18.00% farmer have been include 31-40 age group, 20.00% farmer include 41-50 year age group, 28.00% farmer include 51-60 year age group and 34.00% farmer include above 61 year age group these age group farmer income status is low. It's indicate that, maximum 51-60 year age group farmer belonging in low income status and minimum below 30 year age group farmer belonging in low income status compare to other age group of farmer belonging in low income status.

H0 -3 There is no significant influence between the Educational factors of farmer on their income status.

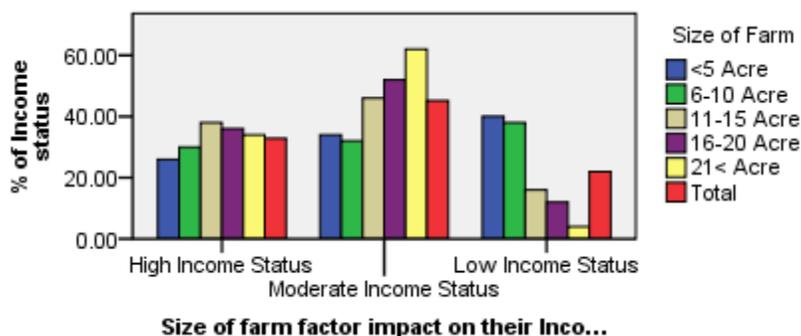
Income status	Educational factor of farmers					Chi-Square
	Graduate	Higher secondary	Secondary	Primary	Illiterate	
High Income	23 (46.00)	20 (40.00)	18 (36.00)	15 (30.00)	12 (24.00)	4.540
Moderate Income	21 (42.00)	18 (36.00)	20 (40.00)	20 (40.00)	19 (38.00)	0.265
Low Income	06 (12.00)	12 (24.00)	12 (24.00)	15 (30.00)	19 (38.00)	7.093
Total	50 (100%)	50 (100%)	50 (100%)	50 (100%)	50 (100%)	



From the above table shown that the Educational level of farmer influence on their high, moderate and low income status. High income status of farmer respect to various educational qualification it's related calculated chi square value is 4.440 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that graduate, higher secondary, secondary, primary and illiterate educational qualification of farmer is not significantly impact on their high income status. On the other hand moderate income status of farmer respect to various educational qualification it's related calculated chi square value is 0.265 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that graduate, higher secondary, secondary, primary and illiterate educational qualification of farmer is not significantly impact on their moderate income status. On the other way low income status of farmer respect to various educational qualification it's related calculated chi square value is 7.093 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that graduate, higher secondary, secondary, primary and illiterate educational qualification of farmer is not significantly impact on their low income status. Lastly conclude that, the high, moderate and low income status of farmer is not significantly impact on farmer income status.

H0 -4 There is no significant influence between the size of land factors of farmer on their income status.

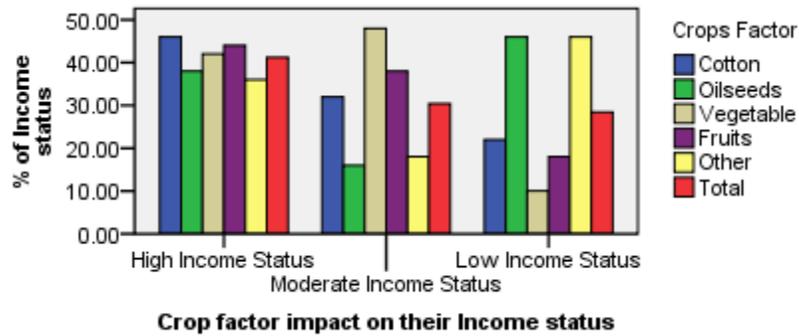
Income status	Size of land in Acre					Chi-Square
	<5	6-10	11-15	16-20	21<	
High Income status	13 (26.00)	15 (30.00)	19 (38.00)	18 (36.00)	17 (34.00)	4.117
Moderate Income status	17 (34.00)	16 (32.00)	23 (46.00)	26 (52.00)	31 (62.00)	6.955
Low Income status	20 (40.00)	19 (38.00)	08 (16.00)	06 (12.00)	02 (04.00)	23.636
Total	50 (100%)	50 (100%)	50 (100%)	50 (100%)	50 (100%)	



From the above table shown that the size of farm for farmer influence on their high, moderate and low income status. High income status of farmer respect to various size of farm it's related calculated chi square value is 4.177 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that below 5 acre farm, 6-10 acre farm, 11-15 acre farm, 16-20 acre farm and above 21 acre farm for farmer is not significantly impact on their high income status. Moderate income status of farmer respect to various size of farm it's related calculated chi square value is 6.955 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that below 5 acre farm, 6-10 acre farm, 11-15 acre farm, 16-20 acre farm and above 21 acre farm for farmer is not significantly impact on their moderate income status. Low income status of farmer respect to various size of farm it's related calculated chi square value is 23.636 on the DF 4. This calculated chi square value is significant at 0.01 level of significant. It's means that the size of farm for farmer is significantly impact on their low income status. Those farmer having 6-10 acre farm his low income status in effective compare to other farmer size of farm and above 21 acre farm having farmer it's low income status is poor compare to other size of farm for farmer.

H0 -5 There is no significant influence between the Crops factors of farmer on their income status.

Income status	Crops pattern					Chi-Square
	Cotton	Oilseeds	Vegetable	Fruits	Other	
High Income status	23 (46.00)	19 (38.00)	21 (42.00)	22 (44.00)	18 (36.00)	3.365
Moderate Income status	16 (32.00)	08 (16.00)	24 (48.00)	19 (38.00)	09 (18.00)	12.026
Low Income status	11 (22.00)	23 (46.00)	05 (10.00)	09 (18.00)	23 (46.00)	19.492
Total	50 (100%)	50 (100%)	50 (100%)	50 (100%)	50 (100%)	



From the above table shown that the crop pattern of farmer influence on their high, moderate and low income status. High income status of farmer respect to various crops pattern for farm it's related calculated chi square value is 3.365 on the DF 4. This calculated chi square value is not significant at 0.05 level of significant. It's means that the crops pattern of cotton, oilseeds, vegetable, fruits and other for the farmer in his farm is not significantly impact on their high income status. Moderate income status of farmer respect to various crops pattern in his farm it's related calculated chi square value is 12.026 on the DF 4. This calculated chi square value is significant at 0.05 level of significant. It's means that the those farmer use for the vegetable crops pattern in his farm his moderately income status percentage is high and those farmer his farm pattern use for other general crops his moderate income status percentage is low compare to other crops patter implement in the farm. Low income status of farmer respect to various crops pattern in his farm it's related calculated chi square value is 19.492 on the DF 4. This calculated chi square value is significant at 0.05 level of significant. It's means that the those farmer use for the oilseeds and other crops pattern in his farm his low income status percentage is high and those farmer his farm pattern use for vegetable his low income status percentage is poor compare to other crops patter implement in the farm.

1.7 RESULT :

- Community factor of farmer is significantly influence on farmer high, moderate and low income status. General category farmer high and moderate income status is effective compare to other community farmer.
- Age group of farmer is not significantly influence on their high, moderate and low income status. It's means that, age group wise distribution of farmer not effective on their high, moderate and low income status.
- Size of farm for farmer is not significantly influence on their high and moderate income status but the low income status of farmer significantly influence for the size of farm for farmer. Those farmer having below 5 acre farm his low income status is effectively compare to other size of farm for farmer.
- Crops pattern of farmer for his farm is not significantly influence on their high income status. But the moderate and low income status of farmer significantly influence on their crops pattern.

1.8 CONCLUSION :

For the above discussion conclude that, the community factor and age group factor of farmer is significantly influence on farmer high, moderate and low income status But the size of farm for farmer is significantly influence on farmer low income status on the other hand high and moderate income status of farmer is not significantly influence of the farmer farm size. Crops pattern of farmer is not significantly influence on their high income status but the crops patterns of farmer is significantly influence on their moderate and low income status.

BIBLIOGRAPHY :

1. Nelson, R.R. (1964). Aggregate production functions. *American Economic Review*.
2. Okurut, F.N., Odwee, J.A. & Adebua, A. (2002). Determinants of regional poverty in Uganda. African Economic Research Consortium (AERC) research paper No. 122. Nairobi, Kenya: AERC.
3. Olsen, W. (2005). Moral political economy: Four theoretical schools compared. Global Poverty Research Group working papers series No. 031.
4. Patterson, J.T. (2000). America's struggle against poverty in the twentieth century. Cambridge, MA: Harvard University Press.
5. National strategy for growth and reduction of poverty: Status report. Dar es Salaam: Creative Eye Ltd.
6. Poverty and Human Development Report.
7. Rodgers, H.R. (2000). American poverty in a new era of reform. New York: M.E. Sharpe.
8. Sen, K. & Palmer-Jones, R. (2004). It is where you are that matters: The spatial determinants of rural poverty in India. *Agricultural Economics*.
9. Smith, K. (2005). Determinants of Soviet household income. *The European Journal of Comparative Economics*.
10. Solow R.M. (1957). Technical change and the aggregate production function. *Review of Economics and Statistics*.
11. Son, N.T. (2006). Relationship between land-use change and rural income determinants: A case study of policy implication in Tri Ton, Vietnam. *Electronic Journal on Information Systems in Developing Countries*.
12. United Nations Development Program (UNDP). (2006). Human Development Report 2007/08 – Fighting climate change: Human solidarity in a divided world. New York: UNDP.
13. Verner, D. (2006). Rural poor in rich rural areas: Poverty in Argentina. World Bank policy research working paper No. 4096. Washington, D.C.
14. World Bank (2006). Tanzania: Sustaining and sharing economic growth. Country economic memorandum and poverty assessment. World Bank, Poverty Reduction and Economic Management Unit 2, African Region. Washington, D.C.: World Bank.