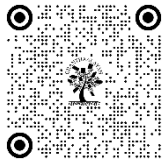


A STUDY OF INCOME AND EXPENDITURE PATTERN OF THE MOYON TRIBE OF MANIPUR

N. Parthar Moyon ¹✉, Dr. Mayanglambam Sarda Devi ²

¹ Research Scholar, Department of Economics, Manipur University, India

² MA Economics, PhD, Post Doctoral, Assistant Professor, Kakching Khunou College Manipur, India



DOI

[10.29121/shodhkosh.v5.i4.2024.5970](https://doi.org/10.29121/shodhkosh.v5.i4.2024.5970)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2024 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



ABSTRACT

Individuals' and households' income, savings, spending, and investment patterns are intimately linked and offer valuable insights into the financial behaviour of households. Household income comes from a variety of sources but usually consists of earnings, salaries, and money from employment, self-employment etc. Depending on the family size, age, and income level, household expenses can change. Savings are made for a variety of goals, including a home purchase, education, retirement, and emergency funds. It became imperative that households develop a savings habit. Examining the households' spending and income trends is required for this. The Moyon tribe of Manipur is one of the least studied and researched tribal group. The tribe is working to advance and catch up to the other communities. For this reason, a study of the tribe's income and spending patterns becomes crucial.

Keywords: Income, Expenditure, Savings, Tribe

1. INTRODUCTION

The idea of economic growth has emphasised gains in national income, production, investment, and per capita income. To operate a family effectively and raise their standard of living, a family needs a healthy income. Rich families lead luxurious lives, whereas impoverished families struggle to meet even their most basic needs, like food, clothing, shelter, education, and health care. This is because they have little income. A larger amount of the household income of impoverished families is spent on food. Because of this, they have less money for other necessities like clothing, housing, education, and health care, leaving them more susceptible to illness, starvation, illiteracy, high infant mortality rate etc. To attain economic development, it's critical to increase the income of all the people. The government's primary goal is to maximise the well-being for the greatest number of citizens. The welfare of a society is contingent upon not just income or consumption, but also on how it is distributed.

The Moyon tribe is one of the smallest tribes in Manipur. They lived in the southern part of Manipur in Chandel and Tengnoupal districts. There are very few studies on their economy. There is no scientific analysis of their economy. Despite being amongst one of the district's earliest educated tribes, the researcher's analysis of their socio-economic situation reveals discrepancies. The tribe's main issues include poverty, unemployment and low income. The goal of this study is to analyse the income and expenditure pattern of the Moyon households. It is anticipated that the study's findings

will offer recommendations and insights to the policymakers and solutions to the problem faced by this tribal group. It also reflects the level of income of the households. This will help to analyse the economic status of the people.

2. OBJECTIVES OF THIS PAPER ARE

- 1) To analyse the level of personal and household income of the Moyon people.
- 2) To Get Estimates on Individual and Household Expenditure in the Study Area.

3. METHOD OF THE STUDY

The study is based on primary data collected from a sample of households in the Moyon villages. The study covers various aspects of income and expenditure, including, level of income and expenditure patterns. The study covers 14 villages out of the 16 Moyon villages. The survey on this study is done for 305 subjects, around 48 per cent of the total Moyon households of Manipur. The relationship of economic status and level of income and expenditure are measured by an observed sample correlation coefficient (r) between the two traits of a sample. One tail student's t-distribution calculation was analysed in two approaches i.e. correlation t-value approach and p-value approach. The proportion of Monthly Personal and family income and expenditures are measured by using one sample Chi-square test (ordinal and nominal data). The categorical variables were analysed in two approaches i.e. critical value approach and the p-value approach.

4. DATA ANALYSIS AND FINDING

1) Relationship of Economic Status and level of Income and Expenditure of Moyon Households

Table 1 Percentage Comparison of Monthly Households' Income and Expenditure of Moyon Tribe

Income/expenditure Labels	Count of Personal income	Percentage	Count of Family Income	Percentage	Count of personal expenditure	Percentage	Count of family expenditure	Percentage
Less than Rs. 5000	123	40%	76	25%	228	75%	29	10%
Rs. 5000 - Rs. 10000	56	18%	47	15%	62	20%	65	21%
Rs. 10000 - Rs. 20000	28	9%	22	7%	8	3%	48	16%
Rs. 20000 - Rs. 30000	39	13%	38	12%	6	2%	69	23%
Rs. 30000 - Rs. 40000	28	9%	30	10%		0%	54	18%
Rs. 40000 - Rs. 50000	9	3%	27	9%	1	0%	30	10%
Rs. 50000 - Rs. 1 lakh	17	6%	34	11%		0%	10	3%
Rs. 1 lakh and above	5	2%	31	10%		0%		0%
Grand Total	305	100%	305	100%	305	100%	305	100%

Table No. 1 reveals that 40% of personal income and 25% of family income is less than Rs. 5000/-, 18% of personal income and 15% of family income is Rs. 5000 – Rs. 10000, 9% of personal income and 7% family income is Rs. 10000 – Rs. 20000, 13% of personal income and 12% family income is Rs. 20000 – Rs. 30000, 9% of personal income and 10% family income is Rs. 30000 – Rs. 40000, 3% of personal income and 9% family income are Rs. 40000 – Rs. 50000, 6% of personal income and 11% family income is Rs. 50000 – Rs. 1 lakh, 2% of personal income and 10% family income is Rs. 1 lakh – above. This shows the improvement of income on family income compared with personal income of the head of the household.

And, 75% of Personal expenditure and 10% of family expenditure is less than Rs. 5000/-, 20% of Personal expenditure and 21% of family expenditure is Rs. 5000 – Rs. 10000, 3% of Personal expenditure and 16% family

expenditure are Rs. 10000 – Rs. 20000, 2% of Personal expenditure and 23% of family expenditure is Rs. 20000 – Rs. 30000, 0% of Personal expenditure and 18% of family expenditure are Rs. 30000 – Rs. 40000, 0% of Personal expenditure and 10% family expenditure is Rs. 40000 – Rs. 50000, 0% of Personal expenditure and 3% family expenditure is Rs. 50000 – Rs. 1 lakh. There is no expenditure of Rs 1 lakh and above in both personal and family expenditure.

Table 2 Degree of Association Level Between Monthly Households' Income and Expenditure of Moyon

	<i>Personal income (per month)</i>	<i>Family Income (per month)</i>	<i>Monthly personal expenditure</i>
Family Income (per month)	0.717076126		
Monthly personal expenditure	0.568120327	0.548610276	
Monthly family expenditure	0.638764788	0.888108412	0.48

Table 3 One Tail Student's T-Distribution Calculation of Personal Income and Family Income Relationship of Moyon Tribe.

Coefficient r	N	T statistic	DF	p-value
0.717076126	305	17.90840903	303	2.00688E-49

The test of significance for an observed sample correlation coefficient (r) = 0.717076126 between the two traits of a sample the calculated t value = 17.908 is greater than the tabulated $t_{.05}(303) = 1.967824033$, it is highly significant at 5% level and the p -value 2.00688E-49 i.e. $0.0000002 < 0.05$ therefore null hypothesis H_0 is rejected. There is the relationship between personal income and family income.

Table 4 One tail student's t-distribution calculation of personal income and monthly personal expenditure relationship of Moyon tribe.

Coefficient r	N	T statistic	DF	p-value
0.568120327	305	12.016848	303	1.82355E-27

The test of significance for an observed sample correlation coefficient (r) = 0.568120327 between the two traits of a sample the calculated t value = 12.016 is greater than the tabulated $t_{.05}(303) = 1.967824033$, it is highly significant at 5% level and the p -value 1.82355E-27 i.e. $0.00000018 < 0.05$ therefore null hypothesis H_0 is rejected. There is the relationship between the Monthly Personal income and Personal expenditure.

Table 5 One tail student's t-distribution calculation of personal income and monthly family expenditure relationship of Moyon tribe.

Coefficient r	N	T statistic	DF	p-value
0.638764788	305	14.45136702	303	2.28004E-36

The test of significance for an observed sample correlation coefficient (r) = 0.638764788 between the two traits of a sample the calculated t value = 14.45136702 is greater than the tabulated $t_{.05}(303) = 1.967824033$, it is highly significant at 5% level and the p -value 2.28004E-36 i.e. $0.000000228 < 0.05$ therefore null hypothesis H_0 is rejected. There is the relationship between the Monthly Personal income and Monthly Family expenditure.

Table 6 One tail student's t-distribution calculation of family income and monthly personal expenditure relationship of Moyon tribe.

Coefficient r	N	T statistic	DF	p value
----------------------	----------	--------------------	-----------	----------------

0.548610276	305	11.42189991	303	2.28645E-25
-------------	-----	-------------	-----	-------------

The test of significance for an observed sample correlation coefficient (r) = 0.548610276 between the two traits of a sample the calculated t value = 11.42189991 is greater than the tabulated $t_{.05}(303) = 1.967824033$, it is highly significant at 5% level and the p -value 2.28645E-25 i.e. $0.000000228 < 0.05$ therefore null hypothesis H_0 is rejected. There is a relationship between the Monthly Family income and Monthly personal expenditure.

Table 7 One tail student's t-distribution calculation of family income and Monthly family expenditure relationship.

Coefficient r	N	T statistic	DF	p-value
0.888108412	305	33.63373632	303	2.6479E-104

The test of significance for an observed sample correlation coefficient (r) = 0.888108412 between the two traits of a sample the calculated t value = 33.63373632 is greater than the tabulated $t_{.05}(303) = 1.967824033$, it is highly significant at 5% level and the p -value 2.6479E-104 i.e. $0.000000264 < 0.05$ therefore null hypothesis H_0 is rejected. There is the relationship between the Monthly Family income and Monthly Family expenditure.

Table 8 One tail student's t-distribution calculation of Monthly personal and monthly family expenditure relationship.

Coefficient r	N	T statistic	DF	p-value
0.48361706	305	9.617807368	303	2.76891E-19

The test of significance for an observed sample correlation coefficient (r) = 0.48361706 between the two traits of a sample the calculated t value = 9.617807368 is greater than the tabulated $t_{.05}(303) = 1.967824033$, it is highly significant at 5% level and the p -value 2.76891E-19 i.e. $0.000000276 < 0.05$ therefore null hypothesis H_0 is rejected. There is a relationship between the Monthly personal expenditure and Monthly Family expenditure.

Table 9 Comparing the Proportion of Personal Income of the Head of a Family of the Moyon Tribe:

Monthly Personal income	Female	Male	Grand Total	Percentage
Less than Rs.5,000	33	90	123	40%
Rs. 5,000 – Rs.10,000	11	45	56	18%
Rs. 10,000 – Rs.20,000	11	17	28	9%
Rs. 20,000 – Rs.30,000	9	30	39	13%
Rs. 30,000 – Rs.40,000	5	23	28	9%
Rs. 40,000 – Rs.50,000	2	7	9	3%
Rs. 50,000 – Rs.1lakh	6	11	17	6%
Rs. 1 lakh and above		5	5	2%
Grand Total	77	228	305	100%

Table 11 indicates that 40% of the head of the family's Personal income condition is less than Rs. 5000, 18% of personal income is Rs. 5,000 – Rs.10,000, 9% of personal income is Rs. 10,000 – Rs.20,000, 13% personal income is Rs. 20,000 – Rs.30,000, 9% personal income condition is Rs. 30,000 – Rs.40,000, 3% personal income condition is Rs. 40,000 – Rs.50,000, 6% personal income condition is Rs. 50,000 – Rs.1lakh, and only 2% of total sample collected personal income condition is Rs. 1 lakh and above. It is graphically shown below in the figure.

Table 10 Proportion of monthly personal income: Critical value:

Monthly Personal income	Observation frequency (O)	Expected frequency (E)	(O-E)	(O-E) ²	(O-E) ² /E
Less than Rs.5,000	123	38.125	84.875	7203.76563	188.95123
Rs. 5,000 – Rs.10,000	56	38.125	17.875	319.515625	8.3807377
Rs. 10,000 – Rs.20,000	28	38.125	-10.125	102.515625	2.68893443
Rs. 20,000 – Rs.30,000	39	38.125	0.875	0.765625	0.02008197
Rs. 30,000 – Rs.40,000	28	38.125	-10.125	102.515625	2.68893443
Rs. 40,000 – Rs.50,000	9	38.125	-29.125	848.265625	22.2495902
Rs. 50,000 – Rs.1lakh	17	38.125	-21.125	446.265625	11.7053279
Rs. 1 lakh and above	5	38.125	-33.125	1097.26563	28.7807377
Total	305	305		Chi-square	265.465574

Degree of freedom (8-1) = 7, level of significance = 0.05, X² critical value = 14.067

N	Degree of freedom	X ²	alpha value	P value
305	7	265.4655738	0.05	9.0265E-53

Since the calculated Chi-square value of $X^2 = 265.465574$ is greater than the critical Chi-square tabulation value of (CV = 14.067), this is strong evidence to reject the null hypothesis the proportion of the monthly personal income of the head of the family is definitely difference at 0.05 level of significance. The p-value 9.0265E-53 means $0.000000090265 \leq .05$ reject the null hypothesis. There is strong evidence of difference in the proportion of monthly personal income of head of family. If we look at the actual frequencies in data table, less than Rs.5000 monthly personal income is greatest followed by Rs. 5,000 – Rs.10,000 in second greatest and the high-income group is the least. Most of the personal income levels are below the middle-income level. Personal Income status is very low for the Moyon tribe of Manipur.

2) Proportion of Family Income Associated with Moyon Tribe Households

Table 11 Level of household proportion to the family income

Monthly Family Income	Observation frequency (O)	Expected frequency (E)	(O-E)	(O-E) ²	(O-E) ² /E
Less than Rs.5,000	76	38.125	37.875	1434.515625	37.62663934
Rs. 5,000 – Rs.10,000	47	38.125	8.875	78.765625	2.065983607
Rs. 10,000 – Rs.20,000	22	38.125	-16.125	260.015625	6.820081967
Rs. 20,000 – Rs.30,000	38	38.125	-0.125	0.015625	0.000409836
Rs. 30,000 – Rs.40,000	30	38.125	-8.125	66.015625	1.731557377
Rs. 40,000 – Rs.50,000	27	38.125	-11.125	123.765625	3.246311475
Rs. 50,000 – Rs.1lakh	34	38.125	-4.125	17.015625	0.446311475
Rs. 1 lakh and above	31	38.125	-7.125	50.765625	1.331557377
Total	305	305		Chi-square	53.26885246

Degree of freedom 8-1 = 7, level of significance = 0.05, X² critical value = 14.067

Chi-Square test (associated with the level of monthly family income)

N	Degree of freedom	X ²	P value
305	7	53.26885246	9.56664E-09

Since the calculated Chi-square value of 53.26 is greater than the critical Chi-square tabulation value of X² (=14.067), this is strong evidence to reject the null hypothesis of not equal distribution of family income of Moyon tribe at 0.05 level

of significance. Therefore, it is inferred that there is no significant difference proportion of family income among the Moyon household hold, their family income is very low. The p-value $9.56664E-09$ means $0.00000009566 \leq .05$ rejects the null hypothesis. There is evidence of a difference in the proportion of Monthly family income concerning the Moyon tribes of Manipur. Most of the Personal income levels are below middle-income levels. Personal Income status is very low for the Moyon tribes of Manipur.

3) Proportion of Personal Household Expenditure Associated with Moyon Tribe

Table 12 Level of household's proportion to the personal expenditure

Monthly Family Income	Observation frequency (O)	Expected frequency (E)	(O-E)	(O-E) ²	(O-E) ² /E
Less than Rs.5,000	228	38.125	189.88	36052.5	945.6397541
Rs. 5,000 – Rs.10,000	62	38.125	23.875	570.016	14.95122951
Rs. 10,000 – Rs.20,000	8	38.125	-30.13	907.516	23.80368852
Rs. 20,000 – Rs.30,000	6	38.125	-32.13	1032.02	27.0692623
Rs. 30,000 – Rs.40,000	0	38.125	-38.13	1453.52	38.125
Rs. 40,000 – Rs.50,000	1	38.125	-37.13	1378.27	36.15122951
Rs. 50,000 – Rs.1lakh	0	38.125	-38.13	1453.52	38.125
Rs. 1 lakh and above	0	38.125	-38.13	1453.52	38.125
Total	305	305		Chi-square	1161.990164

Degree of freedom $8-1 = 7$, level of significance = 0.05, X² critical value = 14.067

Chi-Square test (associated with the level of monthly personal expenditure)

N	Degree of freedom	X ²	P value
305	7	1161.99	1.17E-246

Since the calculated Chi-square value of 1161.990164 is greater than the critical Chi-square tabulation value of X² (=14.067), this is strong evidence to reject the null hypothesis of not equal distribution of monthly personal expenditure of the Moyon tribe at 0.05 level of significance. Therefore, it is inferred that there is no significant difference in the proportion of personal expenditure among the Moyon household. The p-value $1.17E-246$ means $0.0000000001 \leq .05$ rejecting the null hypothesis. There is evidence of a difference in the proportion of monthly personal expenditure for the Moyon tribe of Manipur. Most of the personal expenditure levels are below the middle-income level. If we look at the actual frequencies in the data table, we see that monthly personal expenditure is greatest for the below Rs.5000 group.

5. CONCLUSION

The study from the data collected from 306 heads of the family regarding their individual and family income and expenditure revealed that the Moyons have less income. Most of the Personal income levels are below middle-income levels. Personal income status is very low for the Moyon tribe of Manipur. Family income is a little better and higher compared with the personal income of the head of the household. Personal expenditure of the people is very minimized with an expenditure level of less than Rs. 5000 accounting for 75% of the sample which means personal expenditure is maintained .20 % of the sample group has an expenditure level between Rs. 5000-Rs 10000, 3% between Rs.10000-Rs.20000 and 2% between Rs.20000-Rs.30000 which is the highest expenditure. There is no expenditure higher than that. Whereas family expenditure is highest at Rs.20000-Rs.30000 with 23%.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Chinir, Dr. Penny Rose FMA. (2021), Social Change Among the Moyon Tribe of Manipur, DBC Publications, Maram.
- E, Karthikeyan. (2017), A study on Household Income and Expenditure of Scheduled Tribe
International Journal of Management Research and Social Science (IJMRSS), Volume 4, Issue 3.
- J. Medhi, J. (1993), Statistical Methods: An Introductory Text, New Age International (P) Limited, Publishers.
- Kanji, Gopal K. (2006), 100 Statistical Tests, Third Edition, Sage Publications in association with Vistar Publications.
- Moyon, Solomon Nungchim & Singh, Naorem Sharat. (2022), Socio-Economic and Fertility Level of Chandel People in
Manipur, Rajesh Publications, New Delhi.
- Prakash, Verma J. (2000), A Textbook on Sports Statistics, Venus Publication.