

Entrepreneurial Contribution Towards Income Generation in Nagaland

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Abstract: Entrepreneurs play a crucial role in an economy as an engine of economic and social development. The study tries to understand the role of entrepreneurs towards income generation based on primary data collected from two hundred respondents (200 units) using structured questionnaire from three districts of Nagaland- Kohima, Wokha and Mokokchung. The data were analysed using regression and correlation analysis to establish the relationship between units of enterprises and income generation. The study reveals that there is a statistically significant relationship between enterprise and income. Furthermore, it is also found that retail enterprises contribute the highest in terms of income generation. Promoting entrepreneurship in the state is crucial for fostering growth and development, while also helping to address the challenges of unemployment and income inequality.

Keywords: *Entrepreneurship, Entrepreneurs, Income Generation, Nagaland*

I. Introduction

Entrepreneurs are an important agent of growth for an economy as they are vital contributors to the growth of the economy. According to Schumpeter, "the rate of economic progress of a nation depends upon the distribution of entrepreneurial talent in the population." Entrepreneurs are not just persons of interests but are important faculties of an economy playing key roles in creating entrepreneurial activities leading to generation of income and employment in the economy they created. Entrepreneurial activity drives economic growth and job creation (Baumol, 1996; Mair & Marti, 2009; Schumpeter, 1934). Entrepreneurs positively impacts economics progress by creating more dynamics thereby opening more income and employment generation opportunities in the economy (Weber, 1904; Adejumo, 2001; & Morris & Lewis, 1991). Audretsch (2003, p. 5) states that "Entrepreneurship has become the engine of economic and social development throughout the world."

Entrepreneurship plays an important role in the development of an economy, in terms of generation of income and employment opportunities; introduction of innovation and creativity; expansion of market and optimization of resource allocation and initiation of change in the political, social and economic patterns of the economy. Entrepreneurship opens up opportunities for the entrepreneur to earn decent source of income and create employment.

Entrepreneurial activities have been found to be capable of making positive impacts on the economy of a nation and the quality of life of the people (Adejumo, 2000). Studies have established its positive relationship with stimulation of economic growth; employment generation; and empowerment of the disadvantaged segment of the population, which include women and the poor (Oluremi and Gbenga, 2011). Based on its central role in economic development, respective governments, NGOs, community based organizations and other stake holders should promote its development in order to reap its full benefits.

With the ever growing population in Nagaland and the inability of the government to provide gainful employment to the unemployed younger population, many individuals have either voluntarily or by compulsion have started to venture out into entrepreneurship as a means to self-employment and job creation in the economy. Therefore, in recent years entrepreneurship development in Nagaland have been given much attention and various programmes and policies have been initiated by the State Government, NGOs and other organisations to encourage the young population to take up entrepreneurship and to enhance entrepreneurial skills through structured training and institutional measures. This paper makes an attempt to study the contribution of entrepreneurs towards income generation in Nagaland with reference to the districts of Wokha and Kohima.

II. Material and Methods

Area of the study

The State of Nagaland was formally inaugurated on December 1st, 1963, as the 16th State of the Indian Union. Nagaland is bordered by the state of Assam to the west, Arunachal Pradesh and Assam to the north, Myanmar to the east, and Manipur to the south¹. It is located at 98 and 96 degrees east longitude and 26.6 and 27.4

degrees latitude north. Kohima is the capital of Nagaland and Dimapur is the largest city. It covers an area of 16,579 square kilometers (6,401 sq mi) with a population of 1,980,602 per the 2011 Census of India, making it one of the smallest states of India. The Gross State Domestic Product (GSDP) of Nagaland was about ₹12,065 crore (US\$1.8 billion) in 2011-12. Agriculture

¹ Government of Nagaland: *About Nagaland*. Available at (online): www.nagaland.gov.in/portal/portal/StatePortal/AboutNagaland/NagalandInfo

is the main occupation of Nagaland with about 70 percent of the total population engaged in agriculture.² It is inhabited by 16 major tribes viz- Angami, Ao, Chakhesang, Chang, Kachari, Khamniungan,

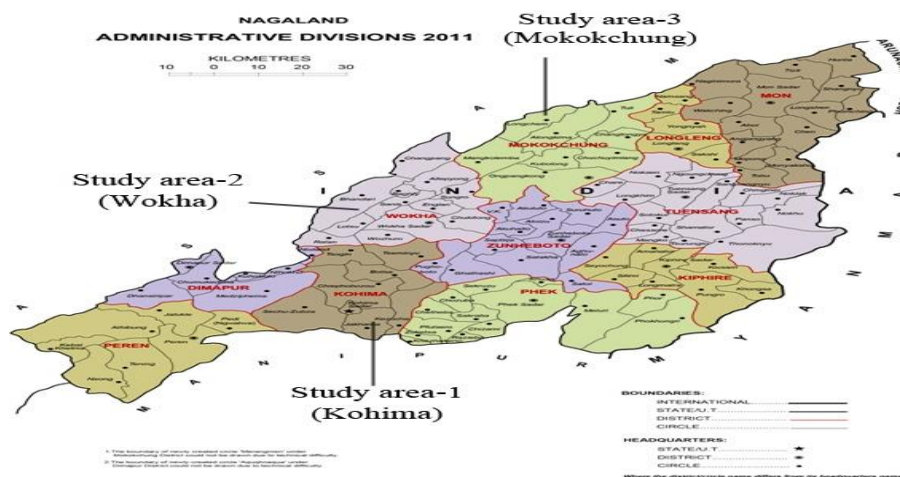


Fig No-1

Konyak, Kuki, Lotha, Phom, Pochury, Rengma, Sangtam, Sumi, Yimchunger and Zeme-Liangmai (Zeliang). The state of Nagaland has 11 administrative districts viz- Dimapur, Kohima, Kiphire, Longleng, Mokokchung, Mon, Noklak, Peren, Phek, Tuensang, Wokha and Zunheboto. Out of these, three districts were selected for the study viz- Kohima, Wokha and Mokokchung and data were collected from these three districts between 2015-16.

The present study is based on primary data collected from two hundred respondents (200 units) using structured questionnaire through a random sampling method from three districts of Nagaland- Kohima, Wokha and Mokokchung. The data were analysed using regression and correlation analysis to establish the relationship between units of enterprises and income generation.

Sample and Sampling Technique

The study is based on both primary and secondary sources of data. Data is collected from the three districts viz- Kohima, Wokha and Mokokchung using a structured questionnaire and also through in-depth personal interviews with the respondents. Secondary data is collected from both published and unpublished sources like books, journals, government reports both national and state, statistical handbooks (various issues) and various other reliable sources.

The primary data was collected through a random sampling method. A total of 200 respondents were given questionnaire in the three districts. Out of which 63 entrepreneurs were from Kohima, 71 entrepreneurs were from Wokha and 68 entrepreneurs were from Mokokchung districts were randomly selected.

Data Analysis

Mean: Mean is the average value of the total set of observations. It is obtained by dividing the sum of the values of observations by the total number of observations.

It is expressed as:

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n}$$

Standard Deviation (SD): Standard Deviation is the square root of the average of the squared deviations from the arithmetic mean of a set of observations. Standard Deviation measures the degree of dispersion. The smaller the value of Standard Deviation the greater is the degree of uniformity of the observation. Standard deviation is denoted by the Greek letter σ (read as *sigma*)³.

²En.wikipedia.org. (2018). *Nagaland*. [online] Available at: <https://en.wikipedia.org/wiki/Nagaland#Economy> (Accessed 2 Aug. 2018).

³ Monga, G. S (2008), *Mathematics and Statistics for Economics*, New Delhi, Vikas Publishing House PVT Ltd.

It is mathematically expressed as:

$$\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \bar{x})^2}.$$

III. Results and Discussion

Table: 1 District wise distribution of Income Generation

District	Units	Total	Average
Wokha	71	7273500 (34.78)	102443.66
Kohima	66	6838667 (32.70)	103616.16
Mokokchung	63	6800500 (32.52)	107944.44
Overall	200	20912667 (100.00)	104563.33

Notes: Figure in parenthesis indicates percentage

In the table above it is observed that the overall income of the 200 units is Rs 20912667. The average of each units is Rs 104563.33. In Wokha districts the total income is Rs 7273500 for the 71 units and it contributes about 34.78 percent of the overall income at an average of 102443.66 per unit. Mokokchung district recorded a total of

Table: 2 Types of Enterprises and Income Generation

Types of Enterprises	Units	Total	Average
Retail	109	12539000 (59.96)	115036.70
Printing	17	1334500 (6.38)	78500.00
Hotel and Restaurant	24	1830000 (8.75)	76250.00
Handicraft	12	870000 (4.16)	72500.00
Workshop	10	915167 (4.38)	91516.67
Steel Fabrication	7	605000 (2.89)	86428.57
Stone Quarry	21	2819000 (13.48)	134238.10
Overall	200	20912667 (100.00)	104563.33

Notes: Figure in parenthesis indicates percentage

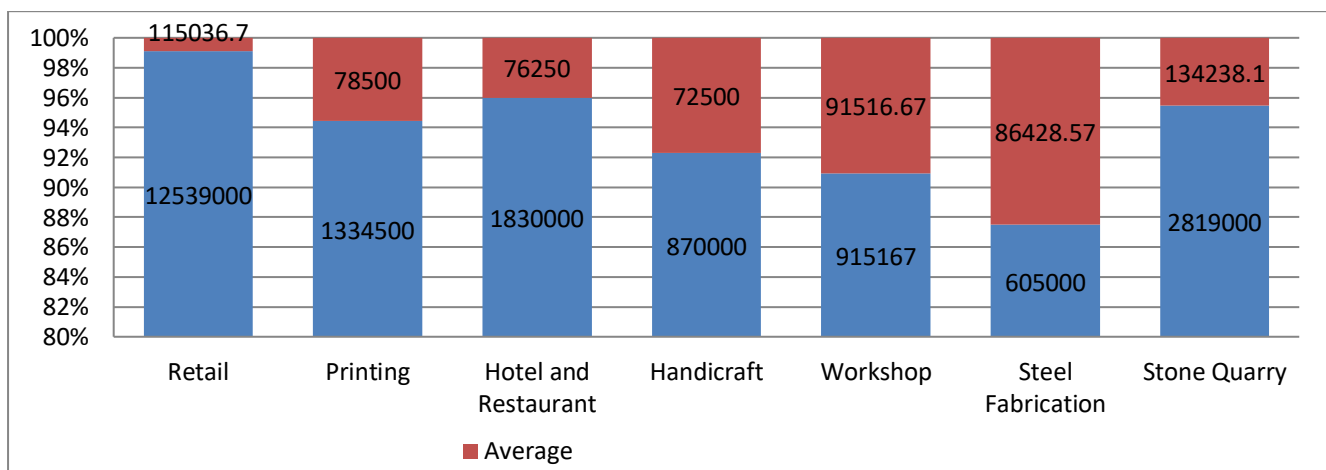


Fig. No: 2 Types of Enterprises and Income Generation

Rs 76250.00. The handicraft enterprise which is of about 12 units in total has a share of about Rs 870000 (4.16) with an average of Rs 72500.00. Workshop enterprises which is of about 10 units in total has a share of about Rs 915167 (4.38) with an average of Rs 91516.67. The steel fabrication enterprises which is of about 7 units in total has a share of about Rs 605000 (2.89) with an average of Rs 86428.57 and the stone quarry enterprises which is of about 21 units in total has a share of about Rs 2819000 (13.48) with an average of Rs 134238.10.

Table: 3 Regression and Correlation analysis between enterprise and income-Overall

	Coefficient	Std. Error	t-stats	p-value	Correlation
Intercept	-4.068	0.483	-8.418	0.000	0.98
Enterprise	0.857	0.077	11.072	0.000*	

Notes: *Significant level is 0.05

The Correlation coefficient 'r' reveals that there is a very high positive correlation ($r = 0.98$) between units of enterprise and income.

The *Regression Equation* between Enterprise (X) and Income (Y) is:

$$Y = -4.068 + 0.857X.$$

The regression coefficient for enterprise is 0.857 which indicates that the total income will be affected by 0.857 per unit. The p-values is less than 0.05, therefore the relationship between enterprises and income is statistically significant. It indicates that enterprise has a positive impact on income.

Table: 4 Regression and Correlation Analysis between Enterprise and Income-Wokha

	Coefficient	Std. Error	t-stats	p-value	Correlation
Intercept	-292669.327	145572.119	-2.010	0.101	0.98
Enterprise	115163.877	9405.041	12.245	0.000*	

Note: *significant level is 0.05

The Correlation coefficient 'r' shows that there is a very high positive correlation ($r = 0.98$) between units of enterprise and income. The *Regression Equation* between Enterprise (X) and Income (Y) is: $Y = -292669.327 + 115163.877X$.

The regression equation shows that the coefficient for enterprise is 115163.877. This indicates that an increase by a unit in the enterprise will have a positive impact on the Total income by 115163.877 times. The p-values is less than 0.05 as the estimated t-value is greater than the table value, therefore the relationship between enterprise and income is statistically significant. It indicates that enterprise have positive impact on income generation in Wokha.

Table: 5 Regression and Correlation Analysis between Enterprise and Income-Kohima

	Coefficient	Std. Error	t-stats	p-value	Correlation
Intercept	-102759.197	61078.948	-1.682	0.143	0.99
Enterprise	99516.266	4056.186	24.534	0.000*	

Note: *significant level is 0.05

The Correlation coefficient 'r' shows that there is a high positive correlation ($r = 0.86$) between units of enterprise and income. The *Regression Equation* between Enterprise (X) and Income (Y) is:

$$Y = -102759.197 + 99516.266X.$$

The regression equation shows that the coefficient for enterprise is 99516.266 this shows that increase

in enterprise will have a positive change in the Total income by 99516.266 times. The p-value is less than 0.05 as the estimated t-value is greater than the table value. Therefore, the relationship between enterprise and income is found to be statistically significant.

Table: 6 Regression and Correlation Analysis between Enterprise and Income-Mokokchung

	Coefficient	Std Error	t-stats	p-value	Correlation
Intercept	-230431.754	94936.880	-2.427	0.051	0.98
Enterprise	119973.874	8144.514	14.731	0.000*	

Note: *significant level is 0.05.

The Correlation coefficient 'r' is found to be positive ($r = 0.98$). The *Regression Equation* between Enterprise (X) and Income (Y) is:

The regression equation shows that the coefficient for enterprise is 119973.874 which shows that with every unit increase in enterprise the average change in total income will be positively effected

IV. Conclusion

Increase in entrepreneurial activities increases the probability of enhancing income generation thereby raising livelihood and standard of living in an economy (Adejumo,2000). The above study shows that there is a high positive correlation between enterprises and income generation as the 'r' is found to be 0.98 for all the three districts. This is also confirmed by the p-value as it is less than 0.05 which makes the estimated *t-value* is greater than the table value therefore the relationship between enterprise and income is found to be statistically significant. It is also found that retail enterprises contribute the highest in terms of income generation in Nagaland. Thus, this clearly indicated that promoting entrepreneurship in the state is crucial for the fostering economic growth, which will further help address the crisis of unemployment and income inequality in the state.

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