

## **EXTENT OF RURAL LIVELIHOOD DIVERSIFICATION: A CASE STUDY OF KHONOMA VILLAGE**

**Mr. Ifolungbe Chase**

Research Scholar, Department of Economics,  
Nagaland University, Lumami, Zunheboto, Nagaland

**Dr. Chandayya Makenni**

Assistant Professor, Department of Economics,  
Nagaland University, Lumami, Zunheboto, Nagaland

### **Abstract**

*Major portion of the population in Nagaland are in rural area and their economic activities are centered around the primary sector which mainly comprises of agricultural and allied activities. The livelihood diversification helps the rural economy is channelizing their income from multiple sources (both farm and non-farm). Reliance on farm activities alone does not meet the livelihood demand and there is a need for the rural economy to diversify to non-farm activities for employment and income. The present paper therefore is an attempt to study the rural livelihood diversification in Khonoma Village under Kohima district with the object to analyze the extent of diversification; relationship between age and diversification; and the diversification between men and women. It is a 30 sample study which uses the Simpson Diversity Index to study how diversified the rural livelihood is. The study finds 93% of the village engaged in agriculture, 70 % depends on agriculture for their livelihood, 73% engaged in livestock assets, 36.67% engaged in different labor activities and 16.67% in formal employment; Diversification is more advantageous for the age group 41 and above; and female respondents have higher diversity than male respondents.*

*Key Words: Rural Economy, Diversification, Farm, Non-farm*

### **Introduction**

Rural economy relies on a diverse array of activities. This aspect is taken account of by recent evolution of the concept of livelihood diversification as a survival strategy of the rural households in developing countries and to stabilize their incomes (Ellis, 1999). Access to the diverse form is influenced by a complex web of socio-economic as well as geographical environment in the concerned region (Datta and Singh, 2011).

Livelihood in broad aspect is what one does to sustain a living. The World Bank Dictionary edited by Barnhart (1995) defines livelihood as 'a means of living: what is needed to support life'. It is the interaction among human, resources, technology and environment in favor of human. Livelihood is a multi-dimensional concept based on the complex pattern of supporting life in a given ecosystem. According to Haan and Zoomers (2003), Livelihood is about individuals, households or group making a living, attempting to meet their various consumption and economic necessities, coping with uncertainties and responding to new opportunities.

Diversity at any one time and at all scales is one of the key features of rural livelihood system. It includes both farm and non-farm activities such as agriculture, forestry, fishing, handicrafts, blacksmith, carpentry, animal husbandry, trading, gathering common property resources, etc. Livelihood diversity means the ability to carry on with not just one but numerous activities hand-in-hand in order to sustain and add to the income of the household to raise the standard of living. When a rural household has a diverse sources of income earning activities, its chances of survival financially are better off than those households which have only one source (Ellis, 1999).

The concept of Livelihood Diversification describes a more complex and diverse strategies for living than what is meant by employment. Livelihood diversification refers to attempts made by individuals and households to add new portfolios in their income earning activities in order to sustain their livelihood or raise their living standard (Ezung, 2021). Livelihood diversification includes activities undertaken to generate income additional to that from the main household activity. Diversified activities make greater contribution to generate cash income for poorer household and it is a key strategy by which people try to make ends meet and improve their well-being. Rural livelihood is a complex structure (Mphande, 2016) and diversity of livelihood is an important feature for rural survival (Ellis, 1999). Diversities provide sustainability over time because they allow adaptation to changing circumstances (Ellis, 1999). Livelihood and earnings are influenced by the extent of diversification, occupational weightage of farm or non-farm sector, education, age pattern, etc. (Datta and Singh, 2011). Acharya (2006) is of the opinion that movement from rural to urban areas and to non-farm activities offer pathway to diversification and out of poverty.

The extent of diversification is not the same everywhere. While there are push and pull factors to diversification (Loison S A, 2015), it is found that the choices of activities are also influenced by the tradition and culture, as well as by the dueling places and nearness to resources (Zohora F T, 2001). It must also be understood that many livelihood diversification strategies are gender specific. Men are able to avail themselves of opportunities that are muscle-demand and those not open to women due to cultural constraints thereby reaping the benefits from activities skewed in favor of men, and against women. Conversely, women may also adopt strategies that are not easily available to men. Women dominate many of the non-farm activities which men think are income meager or gender-specific activities such as food processing and preparation, tailoring, vendors, etc.

**Determinants of Livelihood Diversification:** Factors that determine diversification include age, access to and level of education, size of the family, dependency ratio, access to and availability of land, assets, access to and availability of irrigation facility, access to credit and ability to borrow, distance from town, training/skill development, and membership to social groups (Khatun and Roy, 2012).

**Assets of livelihood strategies:** Assets while pursuing livelihood strategies include: human capital (the education, skills and health of household members); physical capital (e.g. farm equipment or a sewing machine); Social capital (the social network and

associations to which people belong); financial capital and its substitutes (savings, credit, cattle, etc); and natural capital (the natural resource base) (Ellis, 1999).

**Area and period of study:** Nagaland lies between 25°60' and 27°40'N latitude and 93°20' and 95°15'E longitude with geographical area of 16579 sq. Kmand connected to the main land India by a chicken-neck called the Silliguri-corridor. The state is a hilly region. Agriculture and allied are the main activities of the people especially in rural and there are varieties of farming practices in the state based on the geographical advantages. Thus, agricultural development is an integral part of rural development in the state.

Basically Nagaland is a rural and agrarian state (DuttaS K and Vizo K, 2006).A study on diversity in Nagaland by Ezung (2021) found rural households more diversified than urban households and those formally employed less diversified. Also household who claimed to be formally employed and cultivating their land side-by-side because of regular cash income and supply of food, have higher socio-economic status than the other occupational groups (Ao, 1993) The emerging occupations in rural sectors such as transportation, communication, health, education, infrastructure, export and marketing and connection between urban and the rural are seen a rising advantages for rural livelihood and diversifications (Suresh).

**Area of study:** Khonoma village comes under SechuZubza circle of Kohima district. Khonoma has a total population of 1943 and 424 households as per the 2011 census. Agricultural and allied are the main activities here.Khonomavillage is also known for its 'alder based' cultivation. Tourism, transportation, carpentry, stonemasons, groceries, etc. are other common livelihood activities of the people here.

**Period of study:** The study is done during 2024.

### Objectives

1. To examine the extent of diversification of livelihood activities in Khonoma Village.
2. To study the relation between Age and diversification.
3. To analyze the level of diversificationbetween male and female.

**Methodology:** The study is descriptive in nature.

**Sampling:** For the study, 30 Sample were taken using simple random sampling method. The Sample collected include 20 Female respondents and 10 male respondents. The response from each member is given due representation and importance.

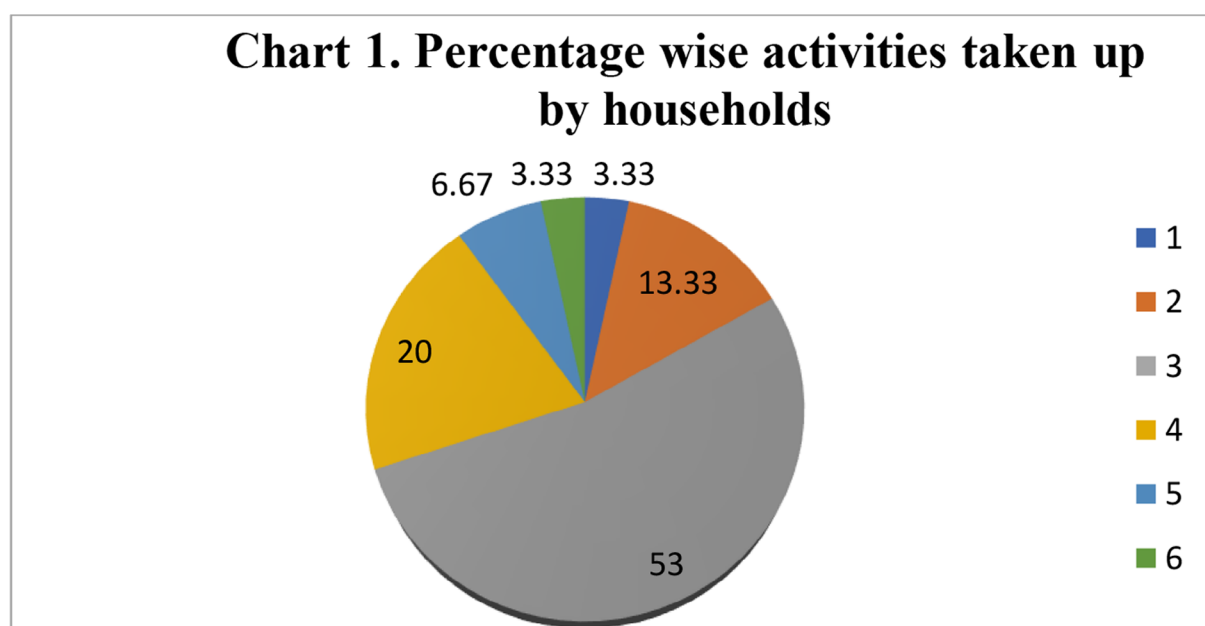
**Source of data:** The study is based on Primary data, collected using questionnaire, structured schedule and personal interview.

**Data analysis:** Average and percentage, and Simpson's Diversity Index are used to examine the extent of diversification in the study area.

### Livelihood activities

Tab. 1 Number of activities taken up by households for livelihood.

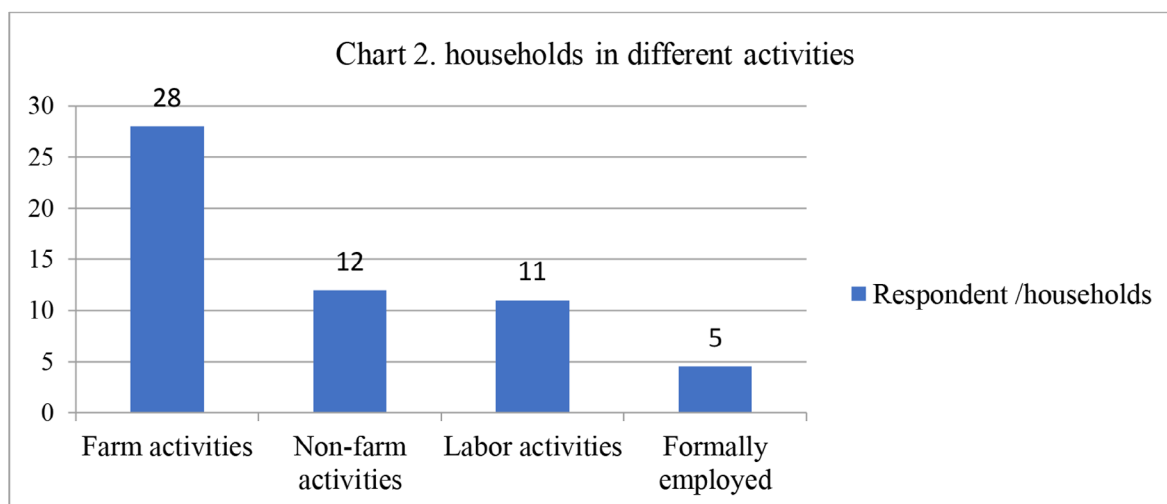
	Number of Activities taken up by households					
No. of activities	1	2	3	4	5	6
No. of households	1	4	16	6	2	1
percentage	3.33%	13.33%	53%	20%	6.67%	3.33%



From table no. 1, it can be observed that maximum households viz. 53% in the study area get their income from 3 sources and 20% of the households engage 4 activities. Only 3.33% each of the households get income from 1 source and 6 sources. The table shows that the activities in the village are slanted towards even distribution ranging 3 to 4 activities.

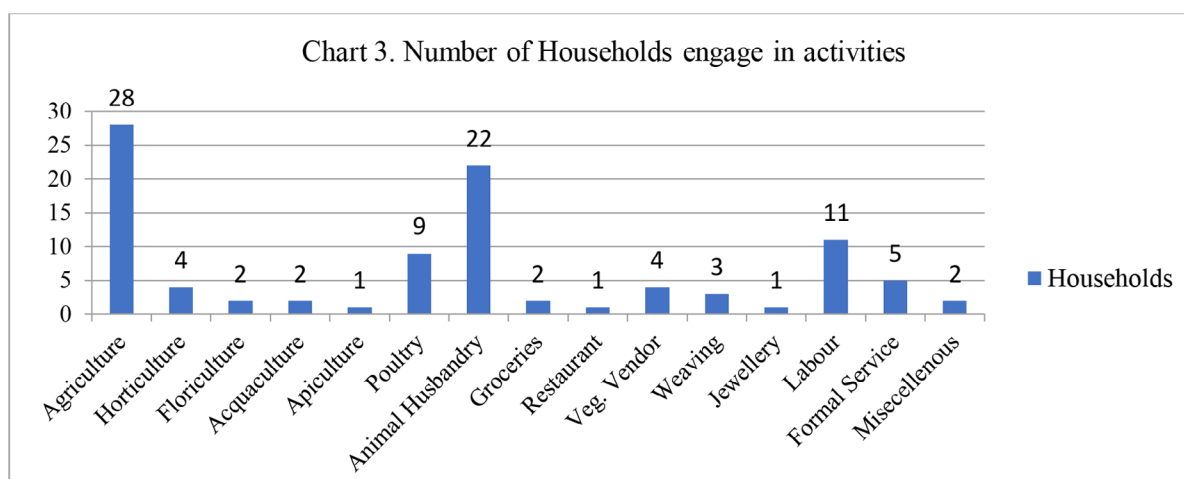
Tab. 2 Number of households engaged in different activities

Activities	Farm activities	Non-farm activities	Labor activities	Formal service sector
No. of households	28	12	11	5



Farm activities include such as Agriculture, horticulture, floriculture, aquaculture, Apiculture, poultry, animal husbandry. Non-farm activities include shops and groceries, eatery and restaurants, vegetable vendors, weaving, jewelry making, etc., Labor activities include farm labor, stone workers, wood and carpenters, etc. Formal service include employed either in government or private sector.

Table no. 2 depict that 28 households out of 30 are engaged in farm activities, which make 93.33% of the sample. 12 and 11 households are in non-farm and labor activities respectively. Least number is found engaged in formal service sector.



From the data collected it is observed that those families involve in formal service employment are less diversified with average holding of 2.6 activities. This is same case with the widowed having less working hands.

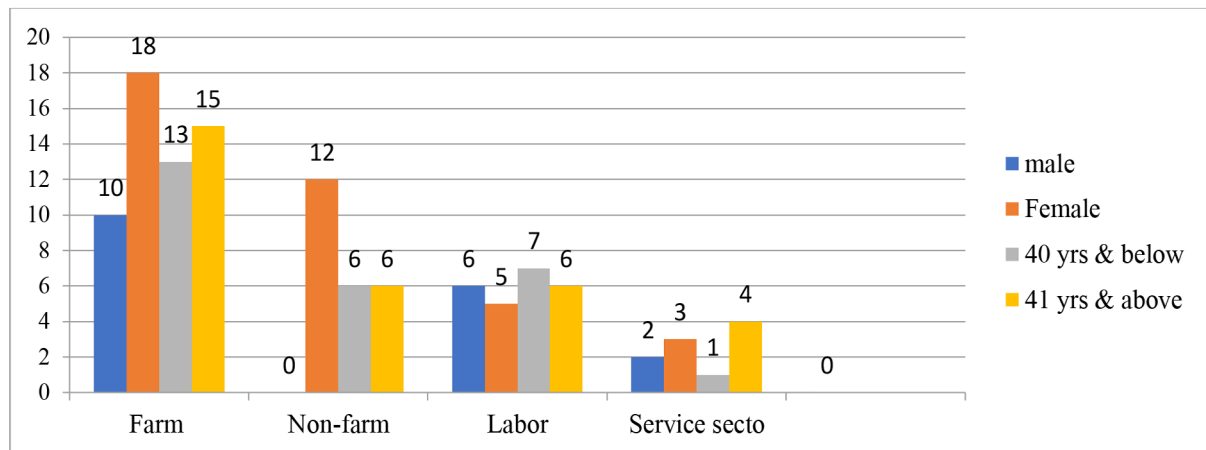
Among the different activities, 93 percent of the households are engage in Agriculture and 70 percent of the households depend on agriculture as main source of income. Agricultural include both Terrace and Jhum cultivation. 73 percent of the households have livestock as Asset which include Piggery, Cow and Mithun. 36.67 percent are engage in different Labor activities. Labor activities are more diversified for male. 16.67 percent households are in formal employment.

### Comparative analysis between different groups

Table no. 3 Comparison between gender and different age groups

	Farm activities	Non–farm activities	Labor activities	Service sector
Male	10	0	6	2
Female	18	12	5	3
40 yrs & below	13	6	7	1
41 yrs & above	15	6	6	4

Chart 4. Comparison between gender and different age groups



Of the 10 Male respondents, all the respondents are engage in farm activities and no respondent is engage in non-farm sector. 20 percent of the male respondents are in formal service sector. 18 females viz. 90 percent out of 20 female respondents are engage in farm sector, 60 percent in non-farm activities and 15 percent in Formal service. 60 percent of Male arein Labor activities against only 25 percent of Females in the same activities. The Simpson's Diversification Index (D) is used to examine the diversity of activities in the village.

$$D=1-\left(\frac{\sum n(n-1)}{N(N-1)}\right)$$

n = the total number of households in a particular activity.

N = the total number of households in all Activities.

The value of D ranges between 0 and 1. Higher the diversity, higher is the value of D and vice-versa. Lesser than 0.38 comes under less diversity, 0.38 – 0.63 comes in medium and 0.63 to 1 comes in high category.

Table no. 4 Extent of diversifications

Specification	Village	Male	Female	Age 20-40	41 years & Above
D value	0.67	0.60	0.67	0.68	0.70

Table 4 shows the diversity level of the different categories derived using SDI from table 1 and 3. It shows that activities are high diversified in the village. Female diversification is high whereas, diversification for male is medium. Also diversification is more in favor to age group above 40 years as compared to the group 40 years and below. The study also found young and active age groups are, than attaining high level diversification, more open to new ventures with specialization for earning higher income while the elderly are contended by the traditional activities (present livelihood activities) than to take up new ventures. The elderly feel more comfortable and attached to the simple living than amassing wealth.

Higher level of education and diversification do not show positive relationship. This could be because higher level of educational attainment rather leads to specialization. The average livelihood activities participation by graduate and above is only 2.33 activities while overall average of the whole population is 3.23 activities.

**Conclusion:** From the above study, it is found that majority of the rural are still engage in farm activities and are steadily moving towards diversification. The study and field work also found the rural moving towards farm market economy, producing not just for self consumption but also for sell in small quantities. However large scale market-oriented farming is still negligible. Households engage in formal employment are not so attracted to diversification because of the regular income. The study also found rural not free from problems such as ignorance of various government schemes, lack of market shed and ware houses, lack of training program, problem of inflation, etc. This paper conclude with suggestions, that the need for Government's role is still felt in the rural development especially in areas like providing trainings and skills for various activities, proper and honest government agencies mechanism especially to help access to subsidies and direct-transfer benefits to schemes, market shed and ware house facilities and developing win-win strategies.

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