

A Changing Patterns of Livelihood of Tribes: A Case Study of Nagaland

**Medonuo Rulu & *Rahul

**Corresponding Author, International Institute for Population Sciences, Mumbai.

*Ph.D. Research Scholar, Department of Family & Generations, International Institute for Population Sciences, Mumbai.

Abstract

Land and forests have been closely linked to the tribal economy. However, the state's exploitation and devastation of land and forest, as well as industrialization and modern development practices, have had an impact on tribal people's lives and livelihoods. The present study is an attempt to examine changes in the traditional livelihood pattern in Nagaland's tribal domain using Indian Census data from 1981, 1911, and 2011. The study aims to show the changing trends in the livelihoods of Nagaland's Konyak, Ao, and Angami tribal groups by using simple statistical methods such as the percentage distribution of the main and marginal workers in cultivation, agricultural labour, household industry, and other working categories. The tribal economy of Nagaland has traditionally been built on agriculture, shifting, and wet terrace. Cultivation has shown a declining trend among the tribal people of the state over the last few decades. According to this study, tribal people in the state are switching away from traditional agricultural practices, such as shifting cultivation and wet-terrace farming, and toward other livelihood strategies, such as transportation and communications, retail sales and petty trades and businesses, service castor, and weaving.

Keywords: Rural Transformation, Agriculture, Workers, Livelihood, Household Industry.

Date of Submission: 07-10-2022

Date of Acceptance: 19-10-2022

I. INTRODUCTION

Nagaland is predominantly a hilly state with 16 administrative districts. All cultivation activities in the state are concentrated in kitchen gardens and jhum land. Shifting cultivation (or jhum) is a traditional farming method (of the Naga people) that typically involves cycles of burning and clearing forests, cropping for a short time, and subsequent abandonment of the site for vegetation regeneration (Ramakrishnan, 2007). Agriculture is done on the small patches using hand-held equipment like axes because mechanisation is not visible as the agricultural patches are in remote areas and hard to access in the hills (MART, 2011). In addition to growing paddy, farmers also rear livestock, including poultry and cattle. There has been a significant change in the cultural and social setting of the Naga people in Nagaland with the arrival of British people and Christian missionaries in the state (Chasie, 2005). The lives and livelihoods of individuals, especially tribal people, have been affected by modern development such as urbanisation, hydroelectricity projects, and infrastructure development.

Sectoral Transformation of the Indian Economy

As countries develop, they experience structural transformation in the sectors of the economy that contribute to economic growth. The structural transformation process in India has begun to happen since 1983 and seems to have quickened in the post-reform period, much prior to the 1991 reforms, due to the growth of service sector employment (Behra & Tiwari, 2011). Public infrastructure, industrial control, and reform and de-control are the three major phases of Indian economic development since Independence (Virmani, 1997). India's economy has always been based on the primary sector. Today, the Indian economy is in a transition phase, shifting primarily into the non-primary sector. Even though there has been a drastic change from an agricultural to a non-agricultural economy, rural residents still depend on agriculture for a living. While agriculture's share of India's economy has declined to less than 15% due to high growth rates in the industrial and service sectors, the importance of agriculture in India's economic and social fabric goes way beyond this indicator, as nearly three-quarters of India's families depend on rural incomes, the majority of India's poor reside in rural areas, and the country's food security is highly dependent on producing cereal crops as well as increasing its production (World Bank, 2012). The industry and service sector, which constitute more than 80 per cent of the gross value added (GVA) in the country, provides employment to 54 per cent of the workforce, and agriculture, which accounted for 18 per cent of GVA in 2019-20, retains 46 per cent of the workforce (Chand & Singh, 2022).

As per Census 2011, nearly 70% of India's population lives in rural areas, where agriculture is their main livelihood source. Some studies also show a negative trend toward agriculture in terms of a shift from farm-based jobs to non-farm-based due to considerable improvement in literacy, schooling, and attainment of higher education and skills and vocational education in India. On one hand, the size of the labour force in the country was 485.3 million in the year 2017-18, whereas on the another hand, there were more than 29 million people who were without jobs for a major part of the year in the same time period (NSSO, 2018-19; given in Chand and Singh, 2022). Further, data from NSSO (2006) showed that during 2004-05 and 2011-12, about 34 million farmers moved out of agriculture. There is an increase in the number of jobs created in industry and the service sector as compared to the agriculture sector. The period labour force survey report (PLFS, 2020) shows that industry and service sectors added 4.8 and 10.1 new jobs during 2018–19, respectively. Furthermore, the PLFS data also shows that the contribution of the agriculture sector to employment declined from 81 per cent in 1983 to 58 per cent in 2018. However, there was a drastic change in the workforce engaged in the agriculture sector in India during the post-economic reforms of 1991.

Transformation of the traditional economy of tribal peoples in India

The tribal population in India, though a numerically small minority, represents an enormous diversity of groups. They vary among themselves in respect of language and linguistic traits, the size of the population, and the dominant modes of making a livelihood, etc. (Government of India, 2014). In India, tribal people have been classified into various categories, such as Nomadic Tribes (NTs), Semi-Nomadic Tribes (SNTs), Denotified Tribes (DNTs), Particularly Vulnerable Tribal Groups (PVTGs) and Scheduled Tribes (STs). Traditional tribal economies were largely a combination of several types of activities. Land and forest bodies continue to be the epicentre of production which are owned and managed at several levels by the tribal people (Singh, 1994). Traditionally, the tribes in India have been living in the forest. However, they pursued an economy that was closer to nature and used indigenous technology. They were dependent upon the forest and other natural resources available in their habitat. According to Vidyarthi and Rai (1985), the traditional economic activities pursued by the tribes of India are (a) hunting; (b) hill-cultivation; (c) plain agriculture; (d) simple artisans; (e) pastoral and cattle-herding; (f) folk-artisans; and (c) agricultural and non-agricultural labour.

Over the decades, the tribal economy and their livelihood strategies have undergone substantial changes since the colonial rule in India. There are various factors that are responsible for the substantial changes in the traditional economy of tribal people, such as rapid deforestation, state control over natural resources, land alienation due to various developmental projects and extraction industries in the tribal domain (Sonowal, 2022). The shift in the tribal economy and the diversification of livelihood strategies among the tribal people have been corroborated in the report of the 'People of India' project of the Anthropological Survey of India in 1985. The report revealed that the number of communities practising hunting and gathering has declined by 24.08 per cent; trapping of birds and animals by 36.84 per cent; pastoral activities by 12.5 per cent; and shifting cultivation by 18.14 per cent due to factors such as ecological degradation. The report further stated that among tribal people, business has gone up by 77.46 percent, trade by 43.14 percent, and industry by 100 per cent (Government of India, 2014). There is a sharp rise in the number of Scheduled Tribes employed in government and private services, self-employment, etc. Historically, scheduled tribes had customary ownership over forests as well as land closer to their settlement. According to the 2011 Census, nearly 90% of the people from Scheduled Tribes in India lived in rural areas. In rural areas, a substantial proportion of the Schedule Tribes own very little land. Among them, 12.81 per cent of the households own only up to 0.002 hectares of land, and among the Scheduled Tribes, 63.16 per cent of households own 26.96 per cent of land. Tribal people are a vulnerable segment of Indian society that is not resilient enough to changing circumstances, so they have turned to new unskilled occupations such as daily wage labour in the agricultural sector. Land acquisition and displacement of the tribals in the process of development have proved to be a major cause of economic vulnerability among these people (Mehta & Singh, 2021). Some studies also show that the tribal people in the central belt of India have declining access to land and other resources resulting from land alienation and increased diversion of forest and other common mass property resources for developmental projects (Kailash, 2017). Non-settlement of community rights over tribal land and the state's acquisition of natural resources, which otherwise were the livelihood resources of tribal people, remains the major cause of tribal people becoming resource less (Sonowal, 2022). A study by Motkuri (2013) on the Scheduled Tribes of Andhra Pradesh shows that most of the STs are continuing to be in their traditional hereditary occupations, mostly in agriculture, as the principle source of livelihood, especially in rural areas where more than 85 per cent of the STs in the state, in 2009-10, were dependent upon agriculture. In the state of Nagaland, farmers have shifted from shifting cultivation to commercial farming, particularly the traditional small farmers, to get benefits from government schemes and to respond to market opportunities (Jamir, 2015).

Rural Transformation in the Tribal Domain in India

Rural transformation (RT) in general has been conceptualised as modernization, rural development, changes in economic structure, and the migration of the population from the farming sector to the non-farming sector of the economy (Majumdar, 2020). Rural transformation is a process of comprehensive change whereby rural societies: diversify their economies and reduce their reliance on agriculture; become dependent on distant places to trade and to acquire goods, services, and ideas; move from dispersed villages to towns (or rural-urban migration); and become culturally more similar to large urban agglomerations (Berdegue et al., 2014). The strength and stability of the Indian economy inevitably depend on rural development, since a large proportion of the country's population lives in rural areas. To develop the rural areas, where nearly 70 percent of the population was living in 2011, India's former president Dr. APJ Abdul Kalam prepared a new roadmap, which has been termed "Providing Urban Amenities in Rural Areas" (PURA). The concept of PURA consists of four connectivities; physical, electronic, knowledge and leading economic connectivity to enhance the prosperity of clusters of villages in the rural areas (Dwivedi, 2012). A decrease in the dependency of the primary sector, particularly on agriculture, and an increase in the dependency of the manufacturing and service sectors have been characteristics of rural transformation. In India, more than 65 per cent of the gross domestic product comes from urban areas, while the remaining 35 per cent comes from rural areas (Bhagat, 2012).

In India, out of the 104 million population of the Scheduled Tribes, nearly 90 per cent lived in rural areas in 2011. Traditionally, tribal people lived in and around the forest, and their lives and livelihoods were based on natural resources. A majority of tribal groups work in the primary sector and are heavily dependent on agriculture, either as cultivators or as agricultural labourers (Government of India, 2014). At the same time, a number of tribal groups have abandoned their traditional occupations, such as hunting and gathering, in favour of working as labourers on plantations, mines, and factories. Over 80 per cent of scheduled tribes work in the primary sector. The land, forest, and water of the tribal domain have been targeted by the government as well as non-government sectors through industrial and infrastructural developmental projects. Apart from development projects, various laws with regard to bio-diversity have also affected the traditional occupation of tribal communities. However, many tribal groups in India have shifted their occupations from traditional to non-traditional. Thus, the transformation in the traditional occupation of tribal people is not a positive sign of rural development since it has not improved the livelihood of tribal people. Some studies also observed a shift in the cropping pattern among the tribal people. In the Eastern Ghats of Srikakulam and Visakhapatnam in the state of Andhra Pradesh and Adilabad in Telangana, there is a paradigm shift in cropping pattern due to the available provisions from the government on seeds, pesticides, and fertilizers, etc. (Kukreti et al. 2016). Various infrastructure projects, whether basic and heavy industries or dam projects, undoubtedly aided in achieving goals such as power generation, flood control, and irrigation water supply to crop fields, but they also physically uprooted a sizable number of tribal groups, causing them to lose their homes, livelihoods, and shattered their culture and kinship linkages forged over centuries and generations (Mohanty, 2011). Until 1999, at least 24,124 hectares of land had been defrosted for the construction of dams, mines, roads, and railways and new industries in the state of Orissa (Behura and Panigrahi, 2006). In North-East India, land alienation has arisen mainly from development projects (Fernandes & Barbora, 2008). Thousands of people, particularly tribal and other marginalised communities in India, are being uprooted from their land every year in the name of development (Negi and Azeez, 2022). Due to the Bhakhra-Nangal Hydroelectricity project in Himachal Pradesh, about 375 villages and the old town of Bilaspur district were affected, necessitating the shifting of 7209 families from these villages and about 4000 people from towns (Rangachari, 2006).

The Tribal Domain of Nagaland

Nagaland was established on December 1, 1963, by the State of Nagaland Act, 1962. It was formed from the territories previously known as the Naga Hills-Tuensang Area (NHTA). Nagaland is primarily a tribal state, consisting of sixteen administrative districts populated by seventeen major tribes and other sub-tribes. Nagaland's tribal people, known as "Nagas," are predominantly of the Mongoloid race. The term "Naga" refers to a set of tribes and sub-tribes who share particular social, cultural, and linguistic traits (Venuh, 2004; Ghosh, 2020). In the state, tribal groupings are essentially categorised as (a) Naga tribes, (b) Non-Naga tribes, and (c) recently migrated communities (Singh, 1994). The Naga tribes in Nagaland are Angami, Ao, Chang, Chakhesang, Konyak, Khiamniungan, Lotha, Phom, Rengma, Sema, Pochury, Sangtam, Yimchunger, and Zeliang, while the non-Naga tribes are Garo, Kuki, Kachari, and Mikir. These six groups—Nepali, Bengali, Bihari, Muslims, Marwari, and Assamese—have recently migrated to Nagaland from the outside to perform a variety of tasks for the major Naga communities. In 2011, the overall population of the Scheduled Tribes was 1.71 million, which represented approximately 87 percent of the state's population. More than three-fourths of the Scheduled Tribes' population resided in rural areas. According to the list of tribes given by the Nagaland Government's Official State Portal, 17 major ethnic groups classified as scheduled tribes in the state formed

nearly 99 percent of the scheduled tribe's population. The Konyak, Sema/Sumi, Ao, Lotha, Chakhesang, and Angami tribes constitute more than two-thirds of the state's ST population (**Table 1**).

Table 1: Tribes and their Population in Nagaland (%), 2011					
Tribes	By Sex			By rural-urban	
	Persons	Male	Female	Rural	Urban
Konyak	12.01	12.11	11.90	14.60	5.62
Sema	11.94	11.49	12.43	13.05	9.23
Ao	11.45	11.09	11.85	10.09	14.81
Lotha	8.75	8.48	9.04	8.81	8.60
Chakhesang	7.83	7.65	8.02	8.72	5.62
Angami	7.16	6.75	7.61	6.72	8.25
Sangtam	3.79	3.72	3.86	3.85	3.65
Zeliang	3.78	3.70	3.87	4.27	2.60
Yimchaungre	3.38	3.32	3.45	3.89	2.13
Chang	3.25	3.24	3.25	3.34	3.03
Rengma	3.18	3.05	3.33	3.68	1.95
Khiemnungan	3.12	3.15	3.08	3.90	1.19
Phom	2.66	2.67	2.65	3.03	1.76
Pochury	1.11	1.09	1.13	1.48	0.19
Kuki	0.95	0.92	0.98	1.10	0.57
Kachari	0.66	0.64	0.68	0.78	0.37
Tikhir	0.38	0.38	0.38	0.46	0.18
Sub-total(17Tribes)	85.41	83.46	87.51	91.77	69.74
Total Scheduled Tribes	86.48	84.52	88.58	92.85	70.78
Total Population (Nagaland)	100.00 (1978502)	100.00 (1024649)	100.00 (953853)	100.00 (1407536)	100.00 (570966)

Sources: Official State Portal, Government of Nagaland & Census of India, 2011

The Domain of Agriculture in Nagaland

Land is crucial to understanding the social relations of indigenous or tribal communities as their way of life is closely connected to the land, which is central to their livelihood and identity (Ghosh, 2020). Nagaland is mostly an agricultural state, with agriculture employing more than 70% of the state's population (Government of Nagaland, 2008). Jhum cultivation (dry farming) has always been the major employment of people in rural areas since ancient times. Shifting cultivation practises in North-East India, particularly in Nagaland, are profoundly linked to the socio-economic and cultural diversity of the region (Talukdar & Thakuria, 2015). Later on, some tribal groups in the state learnt to practise terrace cultivation (wet farming) in sloppy hill areas where canal irrigation is possible from the rain-fed streams, at least during the rainy season (Government of Nagaland, 2011). Such wet-farming activities are confined to the tribes of Angami, Chakhesang, and Zeliang Nagas. At present, there is considerable regional variation in agricultural practises and outputs since farming is intensely dependent on climate, geography, and technology. Nowadays, Nagas take to floriculture, sericulture, horticulture, bee-keeping, handloom and handicraft, plantation, cottage and small-scale industries, adopting modern technologies for their livelihood. In the region of North-East India, environmental constraints and natural resources are the dominant factors affecting crop combination with a very low and unequal distribution of modern infrastructure and facilities (Seitinthang, 2014).

The Rationale of the Study

In accordance with the literature review in the preceding paragraph, people's reliance on agriculture is changing to non-agricultural sectors. However, research has shown that in the case of tribal domains, the shift has happened as a result of modern development processes, such as infrastructural and industrial growth in tribal regions. Rural transformation has been characterized by declining dependency on agriculture and, as a result, increased dependency on non-agricultural activities. Nagaland's economy has generally been agrarian, with more than 70% of the population engaged in this sector. As a result, agriculture is the primary source of income for the people of Nagaland. Since a huge part of the population relies on agriculture for a living, a significant proportion of them own very little agricultural land. Jhum cultivation (dry farming) has traditionally been the main occupation of people in rural areas, but certain tribes, such as the Angami, have learned to practise terrace cultivation (wet farming) on sloppy hillsides during the rainy season. Agriculture is the mainstay of Naga society, hence most of the state's festivities focus around it. The study aims to examine the changing pattern of livelihood of the Konyak, Ao, and Angami tribes in Nagaland based on the known findings from the studied literature.

The Objectives of the Study

The primary aim of the study is to explore the changing pattern of livelihood strategies of the tribal people from traditional agricultural to non-agricultural by using data from several rounds of the Indian Census.

II. SOURCE OF DATA & METHODS

The 2011 Census of India provides data pertaining to individual Scheduled Castes and Scheduled Tribes separately since the 1961 Census. The Census of India gives data on industrial classification of workers, age-sex structure, marital status, educational status, etc. for the state and district level for each tribe. Pre-independence, the Indian Census (prior to the 1931 census) collected and published information for each tribe and caste of India.

The required data to explore the changing pattern of livelihood strategies has been collected from the Census of India. Data from the 1981, 2001, and 2011 Census has been used for the three tribal communities: Konyak, Ao, and the Angami. These three tribal communities of Nagaland constitute more than one-third of the state's population (Census of India, 2011). The Konyak tribes predominantly live in the hilly areas of Mon district; the Ao live in the north-western part of the state in Mokokchung district; and the Angami tribes live in the south-western part of Nagaland in Kohima and Dimapur districts mainly.

The changing pattern of livelihood strategies over the last four censuses were assessed by calculating the percentages with the help of Microsoft Excel, and the results are present through tables over the years.

III. THE RESULTS

1. The Konyak tribal domain

The Konyak tribes, which constitute about 14% of the state ST's population (Census, 2011), have migrated to the district of Mon and the Tuensang from Burma through the north-eastern Patkai range (Singh, 1994). The Konyak are primarily a land-owning community whose primary occupation is agriculture, i.e., in the form of (*jhum*) shifting cultivation (ibid; 107). Terrace cultivation, small-scale business, service, and contract work are their main secondary occupations. As per the 2011 Census, the total population of Konyak was 2.37 lakh, of which nearly 97 per cent were living in the district of Mon in 2011. Agriculture is the main economic activity of the people living in Mon district, and paddy is the main crop. The traditional method of agriculture in the district is *jhum cultivation*, or the slash and burn method. Among the Konyak, there are different categories of land use, i.e., *jhum* land (used for shifting cultivation), terraced land, home gardens, forest, clan land, and land that is used for building houses (Ghosh, 2020). For this agricultural community, *jhum*, or shifting cultivation, is the preferred mode of farming, but due to the change in land ownership, this has led to changes in agriculture, though the method of *jhum* cultivation has not changed (Ibid; 124). The government has made consistent efforts to encourage *jhum* cultivators to adopt permanent cultivation on slopes through terracing (Sonowal, 2022). In view of the various demerits of *jhum* cultivation, the state government of Nagaland is encouraging small and marginal farmers to convert cultivable lands into terrace farming by providing monetary assistance (District Census Handbook, 2011).

Table 2 shows the percentage distribution of main cultivation to the total main workers of the Konyak tribe from the period 1981–2011. Data reveals that there has been a decline in the percentage of people engaged in cultivation as main workers over the last four census years. While nearly 95 per cent of the main Konyak workers were cultivators in the year of 1981, that number dropped to 83 per cent in 2011. The same kind of declining trend in the percent share of main cultivators has also been seen among the male and female workers separately over the same time period.

Table 2: Composition of Konyak main Cultivators, 1981-2011			
Census Years	% of cultivators within Main workers	% of male Main Cultivator	% of female Main Cultivator
1981	94.83	90.68	99.15
2001	87.64	84.41	91.93
2011	83.45	78.35	89.63

Source: Census of India, 1981-2011

Marginal cultivators among Konyak

The census data shows that among the Konyak tribes, there is a decline in the overall percentage share of marginal cultivators from 90.23% in 1981 to 69.91% in 2011. The decline in the share of marginal cultivation is seen among both male and female workers. Interestingly, the share of total marginal workers to total workers among Konyak has been increasing significantly since 1981; in 1981, there was less than 1% share of total marginal workers to total workers, which increased to 29% in 2011; a 29 percentage point increase in Nagaland over the last 40 years.

Census Years	Percentage of Marginal Cultivators among Konyak			% of total Marginal Workers to the total workers
	Marginal Cultivators to total Marginal workers	Male Marginal Cultivator	Female Marginal Cultivator	
1981	90.23	88.34	93.09	0.93
2001	78.09	75.38	80.09	17.48
2011	69.91	69.16	70.62	29.04

Source: Census of India, 1981-2011

The share of main workers engaged in other activities other than cultivating has increased from 9.77% in 1981 to 30.09% in 2011. Hence, the Konyak people are mainly engaged traditionally in shifting cultivation; hence, their participation in commercial agriculture is very small. In the agriculture sector, the main Konyak labourers were limited to 0.19% in 1981. With a marginal increase, it has been found that there were 2.87% of agricultural workers among the Konyak tribes in the census year 2011. Nevertheless, it is clearly visible from Table 4 that there is a steady increase in both males and females 'percentage share in this sector over the census years. While there is an overall 2.68% increase in agriculture labourers, this increase is 2.32% among males and 3.08% among females.

Census Years	Main Agricultural Labour to total Main workers	Male Main Agricultural workers	female Main Agricultural workers
1981	0.19	0.33	0.05
2001	2.12	2.31	1.87
2011	2.87	2.65	3.14

Source: Census of India, 1981-2011

Census Years	Marginal Agricultural Labour to total Main workers	Male Marginal Agricultural workers	Female Marginal Agricultural workers
1981	6.79	8.13	4.79
2001	11.70	12.61	11.04
2011	15.70	16.04	15.39

According to census data, the proportion of Konyak people working as agricultural labourers has increased by about 9% throughout the years. Table 5 shows that between 1981 and 2011, male Konyak increased by approximately 8% while female Konyak increased by nearly 11%. It shows an increase in the labour involvement of female marginal Konyak in agriculture.

Source: Census of India, 1981-2011

Changing patterns of livelihood strategies from agriculture to other sectors in the Konyak tribal domain

Census data over the last four census rounds has shown no significant growth in household industries in the domain of the Konyak tribe. Overall, there is a decline of 0.42 % from the 0.97% recorded in 1981 to 2011 (**Table 6**). This decline has predominantly occurred due to a decline in the main share of male main workers in the household industries, from 1.76% in 1981 to 0.58% and a decrease of 1.18%. On the other hand, **Table 6** shows a significant increase in the percentage share of main workers in other economic activities. These other economic activities include livestock, forestry, fishing, hunting, construction, trade and commerce, mining and quarrying, etc. Thus, this category of "other works" is a category of diverse economic activities pursued by the people belonging to the Konyak tribe. According to the data, the share of main workers in other economic activities increased by 9.12 points between 1981 and 2011, rising from 4.01% to 13.13%. The increase has been observed to be higher among males as compared to females.

Census Years	% share of Main workers in Household Industries(HHI) and Other activities among Konyak					
	Total workers in HHI	Males in HHI	Females in HHI	Total workers in Other works	Male in Other works	Females in Other works
1981	0.97	1.76	0.15	4.01	7.24	0.64
2001	1.50	1.44	1.59	8.73	11.84	4.61
2011	0.55	0.58	0.52	13.13	18.42	6.72

Source: Census of India, 1981-2011

Among the marginal workers of the Konyak tribal domain, there is a steady decline in the percent share of workers engaged in household industry (**Table 7**). Contrarily to the household industry, 'other works' as an industrial classification category has seen an increase in the percentage share of workers over the last four census decades from 1981 to 2011.

Census Years	% share of Main workers in Household Industries(HHI) and Other activities among Konyak					
	Total workers in HHI	Males in HHI	Females in HHI	Total workers in Other works	Male in Other works	Females in Other works
1981	1.06	0.71	1.60	1.91	2.83	0.53
2001	2.76	2.10	0.58	7.44	9.91	5.62
2011	2.30	1.84	2.74	12.08	12.96	11.26

Source: Census of India, 1981-2011

2. The tribal domain of Ao

The Ao are one of the major tribes of Nagaland, which constitutes 13.25% of the state's ST population (Census, 2011) and predominantly live in the district of Mokokchung. Agriculture is the main economic activity of the people of the district where more than three-fourths of the population depends directly or indirectly on cultivation and its allied activities (Venuh, 2004; District Census Handbook, 2011). Traditionally, agrarian activities have remained the primary occupation of the Ao tribe, though trade and labour nowadays have become subsidiary occupations (Singh, 1994). Shifting cultivation, or *jhum*, which is the most common land-use practise in Mokokchung district and the Ao tribes, has been perceived as primitive, unproductive, and destructive to the environment (Jamir, 2015). Paddy or rice is the main food grain produced by the Ao tribe. As per the 2011 Census, the population of the Ao tribe was 2.26 lakh, of which more than 60% lived in rural areas and nearly three-fourths of the Mokokchung district's population was made up of Ao people. The Census data for the Ao tribe shows a steady decline in the share of Ao people as main workers over the last four decades, between 1981

and 2011. **Table 8** shows that while nearly 71 per cent of Ao main workers were cultivators in 1981, it declined to 45.79% in 2011. A similar and corresponding decline in the percentage share among male and female main cultivators is seen among the Ao people. It indicates a shift in livelihood strategies from agriculture to non-agriculture among the Ao people. It is worthwhile to note that compared to males, a far greater percentage of Ao females are recorded as main cultivators.

Census Years	% of cultivators within Main workers	% of male Main Cultivator	% of female Main Cultivator
1981	71.19	58.38	86.77
2001	56.96	49.03	67.90
2011	45.79	40.95	52.42

Source: Census of India, 1981-2011

Like the Konyak people, the Ao people also experienced a sharp decline in the percentage share of marginal cultivators over the years. **Table 9** shows that female marginal cultivators fell from 85.34 percent in 1981 to 70.62% in 2011. And, in the case of male marginal cultivators, the percent share has declined from 88.34% in 1991 to 69.91% in 2011.

Census Years	Percentage of Marginal Cultivators among Ao			% of total Marginal Workers to the total workers
	Marginal Cultivators to total Marginal workers	Male Marginal Cultivator	Female Marginal Cultivator	
1981	91.04	93.36	88.31	1.23
2001	59.86	60.58	59.24	23.63
2011	33.29	30.22	35.61	18.89

Source: Census of India, 1981-2011

Main and Marginal Agricultural Labourers among Ao tribe

Table 10 shows that there is a significant increase in the percent share of main agriculture labourers in the Ao tribal domain from 1981 to 2011. It is clearly visible from the table that the share of main agriculture labourers among Ao has grown nine-fold during the last four census periods. In 1981, only 0.48% of the main workers were engaged as agricultural labourers, which increased to 4.17% in 2011. There has been a greater increase in the share of male main workers as compared to females among the people of the Ao tribe.

Census Years	Main Agricultural Labour to total Main workers	Male Main Agricultural workers	Female Main Agricultural workers
1981	0.48	0.62	0.30
2001	2.06	2.06	2.07
2011	4.17	4.52	3.69

Source: Census of India, 1981-2011

Like the main agricultural labourers of the Ao tribe, the share of marginal agricultural labourers has also recorded a substantial increase from nearly 2% in 1981 to 18% in 2011, an increase of 16.58 percentage

points during the last four decades (**Table 11**). Interestingly, contrary to the main agricultural labourers, among the marginal workers there is a higher percentage share of Ao women as marginal agricultural labourers.

Census Years	Marginal Agricultural Labour to total Main workers	Male Marginal Agricultural workers	Female Marginal Agricultural workers
1981	1.99	1.11	3.03
2001	13.66	12.18	14.93
2011	18.57	23.33	14.98

Source: Census of India, 1981-2011

Changing patterns of livelihood strategies from agriculture to other sectors in the Ao tribal domain

Table 12 shows the percentage share of the main workers of the Ao tribe in household industry and other economic activities from 1981 to 2011. The table shows a decline in the share of main workers in the household industry from 5.60% in 1981 to 2.42% in 2011; a decrease of 3.18 percentage points. On the other hand, people of the Ao tribe are engaging themselves more in other economic activities such as construction, livestock, other than household industries, trade and commerce, etc. The share of main workers in other economic activities was 22.73% in 1981, which increased to 47.61% in 2011. This increase is mainly driven by the main female workers of the Ao tribes since the increase is 29 percentage points among females as compared to 20 percentage points among males. Between the 1981 and 2011 census years, there was an increase of 24.89 percentage points in the overall share of main workers in the other industries other than agriculture as cultivators and labourers. It indicates a diversification of the livelihood strategies among the people of the Ao tribe, particularly among the females.

Census Years	% share of Main workers in Household Industries(HHI) and Other activities among Konyak					
	Total workers in HHI	Males in HHI	Females in HHI	Total workers in Other works	Male in Other works	Females in Other works
1981	5.60	8.92	1.57	22.73	32.08	11.35
2001	1.79	1.43	2.28	39.19	47.48	27.75
2011	2.42	1.63	3.52	47.61	52.91	40.38

Source: Census of India, 1981-2011

Table 13 shows the percentage distribution of marginal workers of the Ao tribe in the household industry and other occupations from 1981 to 2011. It is observed that the share of marginal workers in both household industry and other work has increased from 6.77% to 10.74% and from 0.20% to 37.40%, respectively, during the period 1981–2011.

Census Years	% share of Main workers in Household Industries(HHI) and Other activities among Ao					
	Total workers in HHI	Males in HHI	Females in HHI	Total workers in Other works	Male in Other works	Females in Other works
1981	6.77	5.54	8.23	0.20	0.00	0.43
2001	8.69	7.32	7.32	17.79	19.93	15.97
2011	10.74	7.10	13.49	37.40	39.36	35.92

Source: Census of India, 1981-2011

3. The Angami Tribe

The Angamis are the dominant Naga tribe of Nagaland, primarily in the districts of Kohima and Dimapur. In Nagaland, the Angami tribe is slightly more advanced in education, access to utilities, and ventures into urban lifeways than other studied tribes. Tengima is the original name of Angami, while the word 'Angami' is a distortion of the Manipuri word Gnamei. According to Hutton (1969; 335), the term Angami was used for a number of tribal groups, including the Chakroma, Tengima, Chakrima (or Chakrama), Kezami, and Memi (quoted by Singh, 1994; 63). The Angami are basically a landowning society that has traditionally been interested in agriculture, with agriculture employing approximately 52% of their population (Suri, 2006). Apart from agriculture, trade and business have always been appealing to individuals throughout the pre-colonial and colonial periods (Singh, 1994). Hunting, fishing, animal husbandry, weaving, and trading of local produce have all been major Angami livelihood occupations. Several studies have also shown that some Angami people work for the government. Purkayastha (2020) observed in his study that a substantial number of the Angami of Peducha village in Kohima district worked as teachers, in government, or in business.

Census Years	% of cultivators within Main workers	% of male Main Cultivator	% of female Main Cultivator
1981	75.96	62.42	90.22
2001	54.13	43.48	66.97
2011	46.31	36.62	56.91

Source: Census of India, 1981-2011

Table 14 shows a steady decline in the percentage of Angami tribe main cultivators over the last four census decades, totaling 29% between 1991 and 2011. The decline is more significant among females than among males, with women declining from 90% to almost 52%, a fall of more than 33 percentage points. This significant decline in Angami women cultivators implies that a section of Angami women are now engaging in economic activities other than agriculture.

Census Years	Percentage of Marginal Cultivators among Angami			% of total Marginal Workers to the total workers
	Marginal Cultivators to total Marginal workers	Male Marginal Cultivator	Female Marginal Cultivator	
1981	90.89	92.88	88.68	90.89
2001	61.31	58.03	63.07	61.31
2011	44.25	41.96	46.08	44.25

Source: Census of India, 1981-2011

Angami tribes, like the Konyak and the Ao tribes, have a declining trend among marginal cultivators. **Table 15** shows that the share of marginal cultivators among Angami total workers has decreased by 46 percentage points during the last four census decades. Males have had higher rates of decline than females. The percentage share of marginal workers was 90.89% in 1981 and 44.25% in 2011, showing that permanent occupations exceeded temporary occupations among Angami people.

Main Agricultural Labourers among Angami

As per Table 16, the Angami community comprised just 1.29% of all primary workers in 2011 as per data collected from the census for the Angami community as percentage share of main agricultural labourers. The percentage of female Angami who work as agricultural labourers is higher than the percentage of male Angami. The proportion of workers in agricultural sectors has grown over time, increasing from 0.12% in 1981 to 1.29% in 2011.

Census Years	Main Agricultural Labour to total Main workers	Male Main Agricultural workers	Female Main Agricultural workers
1981	0.12	0.15	0.09
2001	1.14	0.92	1.41
2011	1.29	1.25	1.35

Source: Census of India, 1981-2011

Marginal Agricultural Labourers among Angami

As per Table 17, the percentage share of marginal agricultural labourers in the Angami tribal domain is increasing unevenly. Based on table, there were 0.63% of marginal Angami workers employed as agricultural labourers in 1981, 13.39% in 2001, and 8.63% in 2011, indicating an overall increase of 8 percentage points over the period of four decades. More men than women have been observed this increase in the percentage of agricultural labourers.

Census Years	Marginal Agricultural Labour to total Main workers	Male Marginal Agricultural workers	Female Marginal Agricultural workers
1981	0.63	0.34	0.94
2001	13.39	13.25	13.47
2011	8.63	9.52	7.92

Source: Census of India, 1981-2011

Changing patterns of livelihood strategies from agriculture to other sectors in the Angami tribal domain

In the household industry sector, there has been an overall decrease of 4% of the main workers involved over the last four census decades (**Table 18**). This decrease in the percentage share of main workers involved in the household industry sector is primarily driven by the withdrawal of male workers from the industry. The proportion of males working in the household industry was 8.15% in 1981 and 1.10% in 2011. Contrarily, there is a significant increase in the percentage share of main workers among Angamis who are involved in economic activities other than cultivators, agricultural labourers, and household industry workers. It may be seen from the table that the overall share of Angami people engaged in other economic activities increased from 18.70% to 51.18% during the last four census decades, 1981–2011. A similar type of increasing trend has also been observed among both males and females, the main workers of the Angami tribe.

Census Years	% share of Main workers in Household Industries(HHI) and Other activities among Angami					
	Total workers in HHI	Males in HHI	Females in HHI	Total workers in Other works	Male in Other works	Females in Other works
1981	5.23	8.15	2.14	18.70	29.28	7.55
2001	1.62	1.40	1.89	43.10	54.20	29.73
2011	1.22	1.10	1.34	51.18	61.04	40.40

Source: Census of India, 1981-2011

In **Table 19**, a similar trend of a decrease in the share of main workers engaged in household industry and an increase in the share of main workers involved in other economic activities is also seen among the marginal workers of the Angami tribe, with a slightly lower percentage share in household industry and a slightly higher percentage share in "other works".

Census Years	% share of Main workers in Household Industries(HHI) and Other activities among Angami					
	Total workers in HHI	Males in HHI	Females in HHI	Total workers in Other works	Male in Other works	Females in Other works
1981	8.13	6.61	9.81	0.36	0.17	0.57
2001	7.30	5.13	8.46	15.34	15.99	14.99
2011	6.52	5.35	7.46	40.60	43.17	38.54

Source: Census of India, 1981-2011

IV. Discussion and Conclusion

The data from the last four rounds of the Indian Census has been discussed in the study, revealing a declining trend in the traditional occupations of agriculture among the tribes of Konyak, Ao, and Angami in Nagaland. As per the 2011 census, more than three-fourths of the workforce of the tribal domain were enumerated as main workers; the figure was 98 per cent in 1981. Importantly, data also revealed a clear declining trend in the share of main workers among all three tribes, while an increase in the share of marginal workers. Further, during this period, the highest declines have been observed among the main workers of Konyak tribes (i.e., 28 percent). In the Census of India, work has been defined as participation in any economic activity. A worker is defined as the main worker if she/he has worked more than 183 days in the reference year; otherwise, she/he is a marginal worker.

In contrast, those who have not worked anytime in the reference year are classified as non-workers, who are mainly students, housewives, pensioners, sick, and unemployed people. The proportion of non-workers to the total population among three tribes was nearly 52 per cent in 1981, which decreased to 48 per cent in 2011. However, one may say that more than half of the population of the Konyak, Angami, and Ao tribes were non-workers, as per the definition of the Census. Women are primarily engaged in homemaking, bearing, rearing children, and producing goods and services generally consumed at the household level. Therefore, as per the definition of work in the Census, women's work is not recognized at home as an economic activity (Bhagat, 2005). The study found a sharp decline in the share of main cultivators over the last four decades across the three tribes. The decline in the percentage share of cultivators among all three tribal domains has been found to be higher among the marginal workers compared to the main workers, primarily among the marginal workers of the Ao tribes. The marginal workers of the Ao tribe, who have left cultivation as their traditional main occupation, have adopted other economic activities such as trade, livestock, labour in agriculture, etc. While there has been a negative trend of increase among the cultivators of the tribes in the state, data shows a significant positive sign among the workers engaged as agricultural labourers and in other economic activities. Other works increased by 23 percentage points. However, data indicates that tribal people who have stopped cultivating their fields (or farming) as their main work have adopted other economic activities such as plantations, fishing, trade and commerce, transport and communication, and other government and private services. It is important to note here that tribal people of the state are shifting towards non-traditional livelihood strategies from traditional agricultural practises of shifting cultivation and wet-terrace farming. In the state of Nagaland, all cultivation activities are mostly in kitchen gardens and jhum land. The modern processes of development, large infrastructural projects, industrialization, and various laws related to bio-diversity have affected the lives and livelihoods of people, particularly tribal. The rich natural resources, i.e., land and forest, of Nagaland, which were once under the control of the Naga tribal groups, are fast becoming commercialized due to the intervention of the state (George & Yhome, 2008). As there is a shift from traditional agricultural practises to other non-agricultural practises in the tribal domain of the state, we recommend that people be provided institutional credit systems, irrigation facilities, and encouragement for mixed farming with the scientific and modern methods

References

- [1]. Behura N, Panigrahi N 2006. Tribals and the Indian Constitution: Functioning of the Fifth Schedule in Orissa. New Delhi: Rawat Publications.
- [2]. Behera, D. K., & Tiwari, M. (2011). Structural transformation in India: An econometric investigation. *Italian Economic J*, 56.
- [3]. Berdegue, J.A, Rosada, T. & Bebbington, A.J. (2014). *The Rural Transformation. International Development: Ideas, Experience, and Prospects.* Oxford: Oxford University Press.

- [4]. Bhagat, R.B. (2005). Census Categories and Gender Construction in India. Paper presented in XXVth IUSSP International Conference held in Tours, France, 18-23 July.
- [5]. Bhagat, R.B. (2012). A Turnaround in India's Urbanization. *Asia – Pacific Population Journal*.
- [6]. Census of India. (1981). Special Tables for Scheduled Tribes. Directorate of Census Operations, Nagaland.
- [7]. Chand, R. & Singh, J. (2022). Workforce Changes and Employment: Some Findings from PLFS Data Series. Niti Ayog Discussion Paper, Government of India, New Delhi.
- [8]. Chasie, C. (2005). Nagaland in Transition. *India International Centre Quarterly*. Vol. 32, No. 2/3, pp. 253-264.
- [9]. Fernandes, W. & Barbora, S. (2008). Land, People and Politics: Contest over Tribal Land in Northeast India. Guwahati: North Eastern Social Research Centre and Copenhagen: International Workgroup for Indigenous Affairs.
- [10]. George, J.& Yhome, K. (2008). Community Forest Management: A Case Study of Nagaland, India. *Governing Shared Resources: Connecting Local Experience to Global Challenges*, 12th Biennial Conference of the International Association for the Study of Commons, Cheltenham.
- [11]. Gosh, J. (2020). Land, Land Disputes and Livelihood: A study of the Konyak Nagas. North Eastern Social Research Centre, Guwahati.
- [12]. Government of Nagaland. (2008). Integrated Watershed Management Programme (IWMP). Department of Land Resources, Government of Nagaland.
- [13]. Government of Nagaland. (2011). Statistical Handbook of Nagaland. Directorate of Economics & Statistics, Government of Nagaland.
- [14]. Jamir, A. (2015). Shifting options: a case study of shifting cultivation in Mokokchung District in Nagaland, India. The Food and Agriculture Organization of the United Nations and International Work Group For Indigenous Affairs and Asia Indigenous Peoples Pact.
- [15]. Kailash, S. (2017). Erosion of Access to Resources, Poverty and Public Action in the Tribal Belt of Central India. *Sociological Bulletin*, Vol. 66, No. 1, pp 22-41.
- [16]. Kukreti, R., Kaushal, & Das, G. (2016). Study of Indigenous Agricultural Practices among the Tribals of Andhra Pradesh and Telangana – the Trajectory of Transition and Impacts on Livelihoods and Food Security, Centre for People's Forestry, Tarnaka, Secunderabad.
- [17]. Majumdar, K. (2020). Rural Transformation in India: Deagrarianization and the Transition from a Farming to Non-farming Economy. *Journal of Developing Societies*, 36(2), 182-205.
- [18]. MART. (2011). Livelihood Based Agri Business and Market Study in Nagaland. Submitted by MART, Noida, Sector 17.
- [19]. Mehta, B.S. & Singh, B. (2021). Employment and Livelihood among Tribal in India. *Journal of Anthropological Survey of India*.
- [20]. Mohanty, R. (2011). Impact of Development Project on the Displaced Tribals: A Case Study of a Development Project in Eastern India. Orissa Review.
- [21]. Motkuri, V. (2013). Stagnant Structure of Workforce among Schedules Tribes (STs) in Andhra Pradesh: A Macro view. Munich Personal RePEc Archive.
- [22]. Negi, D. P., & Azeez, E. A. (2022). Impacts of Development Induced Displacement on the Tribal Communities of India: An Integrative Review. *Asia-Pacific Social Science Review*, 22(2)
- [23]. .Purkayastha, N. (2020). Social Life of Angami Naga: A Study. *Journal of Arts, Humanities and Social Science*.
- [24]. Ramakrishnan, P. S. (2007). Traditional forest knowledge and sustainable forestry: A North-east India perspective. *Forest Ecology and Management*, 249 (1-2), 91-99.
- [25]. Rangachari, R. (2006). Bhakhra-Nangal Project: Socio-economic and Environmental Impacts. Water Resources Management Series, Oxford India Paperbacks, Oxford University Press, New Delhi.
- [26]. Seitinthang, L. (2014). Cropping pattern of Northeast India: an appraisal. *Am. Res. Thoughts*, 1(1), 488-498. Suri, R. (2006). *The Angami Nagas*. Mittal Publication, New Delhi, India.
- [27]. Singh, K. S. (1994). *People of India, Nagaland, Volume XXXIV*. Anthropological Survey of India.
- [28]. Sonowal, C.J. (2022). Changing Trends in Livelihood in Tribal Domain of Assam: An Analysis of Census data. *International Journal of Humanities and Social Science Invention*.
- [29]. Talukdar, N.C. & Thakuria, K. (2015). Microbial diversity of Indian Himalayan Regions: Jhum Agroecosystem of North East Himalaya. *Envis Newsletter on Himalayan Ecology*. Vol. 12 (4).
- [30]. Venuh, N. (2004). *Naga Society: Continuity and Change*. Maulana Abul Kalam Azad Institute of Asian Studies, Kolkata.
- [31]. Vidyarthi, L. P. & Rai, B.K. (1985). *The Tribal culture of India*. New Delhi: Concept Publishing Company.
- [32]. Virmani, A. (1997). *Economic development and Transition in India*. Tokyo Dialogue on Alternatives to the World Bank-IMF Approach to Reforms and Growth, Economic Planning Agency, Tokyo, Japan, November, 7.
- [33]. World Bank (2012) *India: Issues and Priorities for Agriculture*. (Available at: <https://www.worldbank.org/en/news/feature/2012/05/17/india-agriculture>).

**Medonuo Rulu, et. al. "A Changing Patterns of Livelihood of Tribes: A Case Study of Nagaland." *International Journal of Humanities and Social Science Invention (IJHSSI)*, vol. 11(10), 2022, pp 31-43. Journal DOI- 10.35629/7722