

# Household Diversification: A Village Based Survey in India during the Pre-Covid and Covid 19 Pandemic Era

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## Abstract

This research focuses on household diversification in the rural economy. In the rural economy, household diversification is the norm. In rural households, very few people obtain all of their income from one source. Using data from a hamlet in southern India throughout the pre-pandemic (2012) and pandemic (2020) periods. According to a local poll, the majority of males work in the manufacturing industry. According to the majority of households, the pandemic has impacted rural workers' income and jobs. During the pre-pandemic and pandemic periods, mixed households (those with farm and non-farm jobs) were the most common. This article's authors examine the growing trend of household diversification. The number of mixed households is increasing as diversification increases. The current pandemic has impacted the income and employment of rural workers. Mixed households rely on their finances to survive during pandemics. There is marginal rise of depressed caste and dominant caste in mixed households during pandemic period

**Keywords**— House hold Diversification, Rural Economy, Tamil Nadu, Rural Workers

## INTRODUCTION

Household diversification is norm in the rural economy. Very few people get all their income from any one source in rural household. The multiple reason which prompt households and individuals to diversify asset, income and activities. There are various push factors such as lack of land, increasing family size, low income in agriculture etc. The second set of motives comprise of education, skills, high wages etc as basis for the push factors. Diversification in rural families are generally to survive and to improve their standards of living. The present covid19 pandemic has created the crisis in the Indian economy. It has brought the shift the labour force from urban and semi urban areas back to the villages. The corona virus crisis has created the reverse migration towards the rural parts of the country. The reverse migration has transformed the surplus labour from urban and semi-urban centres to back the villages. The large number of reverse migration has from

source states of Bihar, Uttar Pradesh and other parts of the India. The country has tremendous change in the urban working environment due to large influx of the labour from the rural India. The movement of the labour their has been large number of push and pull factors from rural and semi urban area of the country. Secondly the pandemic crisis has affected the informal rural economy. The informal economy has been affected most by the Covid-19 led lockdown. Over 122 million lost their jobs in lockdown according to CMIE Data. Indian Economy registered the negative growth of minus 23 of GDP in the first quarter of 2020-21. The country saw lakhs of migrants workers walking to their villages. Reverse migration was registered such a enormous number was registered in recent times. The lockdown has resulted in a severe crisis of livelihoods for informal workers in the countryside. With the announcement of the lockdown, a large number of informal workers

who were also migrants were out of work either temporarily or permanently. Micro, Small medium enterprises (MSMEs) were hardest affected by the crisis. The large numbers of MSMEs have been closed down due to the Covid-19 pandemics.

The present pandemic has affected the clusters located in Coimbatore, Tiruppur, Erode and Namakkal districts. The present crisis has not affected their margins but also their demand aspects. Workers in Clusters have been badly affected by the slowdown in form of job loss, cut in wages, temporary layoffs. Present study based on village located in near tiruchegodu town in Namakkal district. The Namakkal district finds an important place in the map of India because of its lorry building industry and other heavy weight vehicles like trucks, tractors, tankers and rig units. The Textiles and weaving industry is another important and fast growing industries in Namakkal district. Rasipuram, Tirchengodu, Pallipalayam, Komarapalayam and other surrounding places are known for weaving industries and they are expanding rapidly. The Namakkal finds the second place after Salem district in starch and sago production. Tapioca is a raw material for the sago industry. The present paper aims to study the Household diversification in Rural Tamil Nadu and compare the pre and pandemic period based on the evidences from the village survey.

### **Data and Methodology**

The main objective of the study to nature of diversification of individuals/household towards the non-farm sector based on pre survey (Nov-Dec 2012) and pandemic period (Nov-Dec 2020). A census type of survey was conducted in November to December 2012 and Also November to December 2020) Village Thirumangalam is which Tirchengodu taluk in Namakkal District is present in the western zone of agro-ecological zones. Thirumangalam village is 7 km away from taluk headquarters and 39 km from the Namakkal district headquarters. Tirchengodu is the nearest town from the village and it is known for small scale industries which comprise 37 spinning mills

and 10,000 power looms. Thirumangalam (dry village) is a revenue village situated in the western agro-ecological zone and wells and bore wells are a major source of irrigation. The western zone annual normal rainfall is 653.7 mm. In western zone Cauvery, Royal, Bhavani, uppar, sirvani and amaravathi are major rivers. The major crops are cholam, groundnut, cotton, pulses, and millets. Simple percentage analysis has been used in the study.

### **A brief profile of Namakkal District and Surveyed Village**

Textiles, commercial vehicles, auto components, railway coaches, power pumps, leather, cement, sugar, paper, autos, and knowledge-based industries such as IT and biotechnology are all prominent businesses in Tamil Nadu, India. The state is a major exporter of tanned skin and leather, leather, yarn, tea, coffee, spices, and technical items, among other things. Granite, lignite, and limestone are the state's primary minerals.

The Namakkal district is one of the 32 districts that make up Tamil Nadu. It was created in 1997 when the Salem district was split up. The district's geographical area is 3363.35 km<sup>2</sup>, and it lies between 11.00 and 11.360 north latitude and 77.280 and 78.300 east longitude. . Namakkal, Rasipuram, Tirchengodu, Paramathivelur, Kolli Hills, Sendamangalam, and Komarapalayam are the seven taluks that make up the district. It is bordered on the north by Salem, on the south by Karur, on the east by Trichy and Salem, and on the west by Erode. The northern half of Namakkal is mountainous, while the southern half is flat. Cauvery, Aiyar, Karipottanaaru, and Thirumanimutharu are the rivers that go through the district. The Cauvery River flows through the taluks of Paramathi and helps to irrigate the lands of Paramathi and Mohanur Blocks.

Because of its lorry manufacturing industry and other heavy-duty vehicles such as trucks, tractors, tankers, and rigs, the Namakkal district occupies a significant position on India's map. Another major and rapidly increasing business in Namakkal area is textiles and weaving. Weaving industries are well-known at Rasipuram, Tirchengodu, Pallipalayam,

Komarapalayam, and other nearby locations, and they are quickly increasing. In terms of starch and sago output, Namakkal is second behind Salem. The sago industry uses tapioca as a raw material.

According to the 2011 census, the district's total population is 17.26 lakhs. The district's rural population is 10.26 lakhs, and its urban population is 6.96 lakhs. The male population is 8.66 lakhs, and the female population is 8.54 lakhs. The population density is 506 square kilometres, and the sex ratio is 986. Paddy, Jowar, Bajra, Ragi, Millets, and other cereals are the main crops in the district. Private tube wells are the most common source of irrigation, followed by government canals and tanks. Agriculture and related activities employ about 52 percent of the workforce. In 2012-13, the annual rainfall was 793.4 m.m. Both the southwest and north-east monsoons bring rain to the region.

#### **Thirumangalam (Tirchengodu):**

Thirumangalam village is located 7 kilometres from the Namakkal district headquarters and 39 kilometres from the taluk headquarters. Tirchengodu, the village's closest town, is notable for its small-scale businesses, which include 37 spinning mills and 10,000 power looms. Thirumangalam (dry village) is a revenue village in the western agro-ecological zone, with wells and bore wells serving as the primary source of irrigation. There is an Anganwadi School, a government primary school, and a post office in the village. According to census statistics from 2001, the village had 92 households at the time of the survey, which had grown to 100 households by the time of the field survey in 2012, with 381 people.

#### **Conceptual Issues**

Diversification is defined as a transformation of households from agricultural to non-agricultural activities. Livelihood diversification is defined “as the process by which rural families construct a diverse portfolio of activities and social support capabilities in order to survive and to improve their standards of living”(Ellis 1998).Diversification may All the households have been classified into four groups i.e. farm

households, mixed households, non-farm households and others. The two villages have different structures in terms of households in farm and non-farm sector. Farm sector can be classified as agricultural labour and cultivator, while others are Mixed and Pure non-farm sector (NFS). The Mixed household can define if at least one member in the household participating in non-farm sector activities. And, the pure non farm households (NFS), by definition, do not depend upon the agricultural activities for a major source of income. In addition to above classification **Traditional or non-diversified household** –Traditional occupation is hereditary which includes agriculture activities, priest, toddy tapping, goat rearing, dhobi, barber, broomstick making etc. **Modern\ Diversified household**- Includes all activities except agriculture and traditional occupations such as mill workers, drivers, construction workers, mason, businessman etc.

#### **Pre-Pandemic and Pandemic Time Demographic Data of The Village**

According to the census data (2001), there have been 92 households within the village during the survey, which increased to 100 households by the time of field survey in 2012 with 381 of the population. There has been a rise in population from 320 in 2001 (as per census) to 381 in 2012 (as per field survey). The typical size of the household was 3.47 in census 2001 increased to 3.81 in 2012. In Covid-19 period there has been a rise in population from 381 to 392 in 2020.

Table 1 indicates the number of households and their sizes in each of the villages surveyed.

<b>Thirumangalam(village)</b>			
<b>Survey</b>	<b>No. of households</b>	<b>Total population</b>	<b>Average household size</b>
<b>census 2001</b>	92	320	3.47
<b>Field survey pre-covid(2012)</b>	100	381	3.81
<b>field survey post-</b>	98	392	4

covid(2020)			
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Source: field surveys in Dec 2012 ,Dec 2020 and Census of India 2001

In the village there are only two social groups namely; depressed caste and dominant caste. The members of dominating landholding castes Nattu Gounder constituted around 50 percent of the population while the members of other backward castes aside from Nattu Gounder constituted around 5-6 per cent of the population.

### Diversification in Pre and Pandemic Periods

Table 2 shows that in both the period around 70 per cent of the households are mixed households, who depend upon both farm and non-farm activities showing the importance of diversification for better livelihood and income. Interesting phenomenon in village there's decline within the household completely on remittances or pension etc, while there was only 4 percent of household depend upon the cultivation but during pandemic period saw rise within the household in cultivation.

*Table 2 Household Types in the Pre- and Pandemic Periods(in bracket in percentage)*

Household		Pre Pandemic Period(2012) HH no	Pandemic Period(2020) HH no
Farm sector	Cultivators	4 (4)	9(9.18)
	Agriculture Labour	13 (13)	12(12.24)
Mixed		69 (69)	69(70.4)
Pure Nonfarm		7 (7)	7(7.14)
others		7 (7)	1(1.02)
Total		100 (100)	98(100)

Source: Field survey, Dec 2012, Dec 2020

In India the share of the GDP has been declined sharply over the decades but share of the workforce(seasonal and marginal workforce remained high within the country. Along with the factors such decline in farm activities, high wages, education ,marriage etc also explanation for the migrants within the rural areas. Pandemic periods has created reverse migration within the rural areas which could cause rise the cultivators household in rural areas.

*Table 3 shows how categorised households are distributed through social classes(in bracket in percentage)*

Pre Period(2012)		Pandemic			Pandemic Period(2020)		
H	H	De pre sse d caste	Do mi nant caste	O th er cast es	De pre sse d caste	Do mi nant caste	O th er cast es
Fa rm sec tor	Cult ivat ors	1 (2.2 2)	10 (20 )	0	0	10(20)	0
	Agr icult ure labo rer s	13 (28.88)	0	0	11(23.40)	0	0
Mi xe d		27 (60)	34 (68 )	1 (2 0)	31(65.95)	37(74)	1(10 0)
Pu re no nfa rm		2 (4.4 4)	3 (6)	2 (4 0)	5(10.63)	2(4 )	0
oth ers		2 (4.4 4)	3 (6)	2 (4 0)	0	1(2 )	0
To tal		45 (100 0)	50 (100 0)	5 (10 0)	47(100 )	50(100 )	1(10 0)

Source: Field survey, Dec 2012, Dec 2020

The above table 3 presents the distribution of classified households across social groups. In thirumangalam village, the depressed caste and dominant caste households are the bulk. Among schedule caste households, around 60 per cent they're mixed households whereas another major share of 13 per cent is agriculture labour households. Only two households are into pure non-farm activities. Similarly, around 68 per cent of other caste households is mixed households during this village. There are not any agriculture labour households from this group but around 3 households are exclusively into non-farm activities.

In Pandemic Period there's marginally rise within the depressed caste 6 percent in mixed households. Interestingly there's rise in 6 percent in pure non-farm sector. There is marginal rise within the mixed household from 68 percent in 2012 to 74 percent in 2020. Overall there's marginally rise within the depressed and dominant caste in mixed household for survival strategy in pandemic period.

*Table 4 shows the essence of individual diversification(in bracket percentage)*

	Pre Pandemic Period(2012)			Pandemic Period(2020)		
Diversification	Male	Female	Total (persons)	Male	Female	Total (persons)
Non-diversified	50 (26.73%)	94 (48.45%)	144 (37.79%)	60 (30.30%)	48 (24.74%)	108 (27.55%)
Diversified	75 (40.10%)	8 (4.12%)	83 (21.78%)	90 (45.45%)	67 (34.53%)	157 (40.05%)
Others	62 (33.15%)	92 (47.42%)	154 (40.41%)	48 (24.24%)	79 (40.72%)	127 (32.39%)
Total	18	194	381	19	194	392

	7 (10.0)	(10 0)	(100 )	8 (10.0)	(10 0)	(100 )
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Sources: field survey Nov-Dec 2012, Nov-Dec 2020

Diversification is taken into account as transformation or process of agriculture or traditional activity to nonfarm activities. Non-diversified individuals can be considered sector which traditional or agriculture sector. These individuals generally depend on the farm or related activity for his or her livelihoods. Diversified Individuals they're generally persons shifted from traditional or farm sector to the nonfarm sector. Other household generally household depend on the remittances for his or her livelihood. They generally don't involve farm and nonfarm activities. They generally dependent population like housewives, students, small children, old persons, remittances and pensions. The high participation of the male population in diversified activities seems thanks to pushing factors than pull factors. In Thirumangalam, around 40 per cent of the male population is diversified. Likewise, the diversified females in Thirumangalam village are 4 percent of the entire females. The share of female participation in diversified activities is extremely less compare to male participation, implying the feminine population largely stays back in villages and farm sector in village. Though there's the emergence of varied industries in nearby towns which links rural population to urban activities (Papola 1992), it seems the shortage of irrigation facilities in farm sector pushing away the male population from farm sector while female population takes up farm activities. The income from just farm sector isn't enough for survival within the dry village. There has been diversification in pandemic period around 30 percent of male population remained in agriculture or traditional occupation. 45 percent of males are of non-farm sector. Interestingly 30 percent of females shifted to non-farm occupation from 2012 to 2020. The major factors lack of irrigation

facilities, decline household income and education for the transformation within the village. Recent pandemic led crisis has increase the poverty which could forcing the feminine workforce to seem for the roles in non-farm sector

### Rural Labor Markets and the Pandemic Crisis

Since the 1990s, the organised labour force in India has been decreasing, while unorganised labour has been increasing. COVID-19 is a pandemic capable of wreaking havoc on populations and economies. The current recession has impacted not only the country's urban but also rural labour markets. For many of the country's informal jobs, the lockdown has resulted in a major financial crisis.

Prior to the pandemic, a significant proportion of rural workers from villages migrated or commuted to towns and cities, where they worked primarily in sago factories, power looms, textile mills, and transportation services. With the declaration of the lockout in March and April, a significant number of informal workers who were also migrants found themselves unemployed, either temporarily or permanently.

*Table 5 shows the labour markets and employment relations in the Village (in bracket in percentage)*

sex	labour market		employment relations	activity		
	skilled	unskilled	casual	permanent	manufacturing	services
male	37 (88.09)	27 (81.81)	5 (83.33)	59 (84.28)	36 (90)	28 (77.77)
female	6 (13.95)	6 (18.18)	1 (16.66)	11 (15.71)	4 (10)	8 (22.22)
Total	43 (100)	33 (100)	6 (100)	70 (100)	40 (100)	36 (100)

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Sources: Primary Survey Nov-Dec 2020

Table 5 depicts that we have both skilled and unskilled labour in the village. The skilled labour force is trained or has some technical skills to work in the local garment, power loom, and sago factory industries. We still have lifetime arrangements with our employers in the bulk of our workforce. With 36 males and 4 females, we discover that manufacturing and services employ the majority of the workforce.

### Impact of the Covid 19-led pandemic crisis on livelihood

The pandemic crisis triggered by Covid-19 has wreaked havoc on farmers and rural workers, as well as causing major economic losses. The rural economy has been impacted by employment losses and non-wage payment. Informal employees have experienced persistent suffering in the form of job loss, whether temporary or permanent in nature. The pandemic has also prompted a reversal of rural migration.

The wage and job situation in the village economy, as well as the effect on livelihood, are shown in table 6. There is little agricultural activity in the study village because it lacks a perennial source of irrigation. Workers' livelihoods have been severely impacted by the current pandemic along with the lockdown. In the village, the majority of male workers do both skilled and unskilled jobs. Males play a greater role in both casual and permanent jobs. Females have more permanent employment relationships than males, with 11 females working full-time and only one working part-time. In the village, males prefer manufacturing jobs, while females prefer service-oriented jobs.

*Table 6 Wage and employment status, as well as their implications for livelihood(in bracket in percentage)*

sex	wage paid for 3 months			employment status for 3 months		
	fully paid	partial	no salary	on role	temporary	permanent
					layoff	layoff
male	10 (83.33)	35 (83.33)	19 (86.36)	7 (87.5)	42 (82.35)	15 (88.23)
female	2 (16.66)	7 (16.66)	3 (13.63)	1 (12.5)	9 (17.64)	2 (11.76)
Total	12 (100)	42 (100)	22 (100)	8 (100)	51 (100)	17 (100)
<b>Impact on Livelihood</b>						
sex	loss of employment & income		hunger & food shortage		impact on family	no impact
male	41 (82)		4 (80)		14 (93.33)	5 (83.33)
female	9 (18)		1 (20)		1 (6.66)	1 (16.66)
Total	50 (100)		5 (100)		15 (100)	6 (100)

**Source:**Primary Survey Nov Dec 2020

The village workers' employment and income were severely impacted by the Covid-19-led pandemic. Table 6 shows that the majority of employees (64 workers) have not earned a paycheck or have only received a portion of

their salary in the last three months (April, May and June). The majority of employees (51 workers) were laid off temporarily, and 17 workers were laid off permanently during the three-month period. The effect of livelihood has been investigated using a variety of criteria, including loss of income and jobs, hunger and food scarcity, impact on family income, and no impact. The majority of rural workers say it has affected their wages and jobs, as well as their family's income. Only a few rural workers say it has had no effect on their income. The rural economy's income and jobs have been impacted by the pandemic-induced lockdown.

### CONCLUSION:

The rural economic structure is changing. The proportion of households working in the agricultural sector is decreasing. About 70% of households are mixed households during the pre-pandemic and pandemic periods, relying on both farm and non-farm activities, demonstrating the importance of diversification for better livelihood and income. The Dominate caste community continues to dominate mixed households. During the pandemic era, the population of Depressed caste and Dominate caste in mixed households increased marginally. The increase of females in non-farm occupations over an 8-year period has been identified in the study as an interesting phenomenon. The majority of males work in the manufacturing sector, according to village survey. The pandemic has reportedly affected the income and jobs of rural workers, according to the majority of households. A large portion of the workforce was laid off, either temporarily or indefinitely. The majority of farming households are said to rely on government welfare services, while diversified households rely on their own savings.

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