

CHAPTER - III

METHODOLOGY

The methodology adopted in the present study on, “**Impact of Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGA) on Economic Conditions of Paniyan Tribal Population**” is presented and discussed under the following heads:

- 3.1 Selection of the topic
 - 3.1.1 Concept and definitions of Scheduled tribes
 - 3.1.2 Description of different types of Tribes
- 3.2 Background of MGNREGA
- 3.3 Theoretical Framework
- 3.4 Profile of the study area
- 3.5 Sample design
- 3.6 Sampling Technique
- 3.7 Concepts used
- 3.8 Tools of analysis

3.1. Selection of the topic:

3.1.1 Concept and Definition of the Scheduled Tribes

"Tribe" is derived from the Latin word "tribus," which means "one-third." India is noted for its diverse ethnic groups and tribes. Next to Africa, India has the world's second-largest community of tribal people. Scheduled Castes (SCs) make up about 16.6 percent of India's total population, while Scheduled Tribes (STs) make up about 8.6 percent (Census 2011). There are two classes of traditionally disadvantaged people in India's constitution. Scheduled Tribes have been known as "depressed groups" or "Adivasis" since 1850. (Original settlers). Poverty is a major impediment to India's growth because it has a negative impact on people's health, schooling, working conditions, life dignity, and housing. Specific interventions with preventive, curative, and remedial steps were launched during the tenth plan to improve the hygiene, knowledge,

infrastructure, and immunisation programmes, with an emphasis on forest villages and PTGs (Primitive Tribal Groups). The Scheduled Tribes of India are now illiterate, agrarian, resource-poor, malnourished, deprived, and marginalised. Their financial situation is still dire. The following are the forms in which Scheduled Tribes are defined:

- ❖ According to Gillin and Gillin (1950), a tribe is any group of pre-literate tribal people who share a similar general territory, speak a common language, and follow a common culture.
- ❖ According to Ghurye (1963), "The Scheduled Tribes are neither called the 'Aborigines', nor the 'Adivasis', nor are they treated as a category by themselves. By and large, they are treated together with the Scheduled Castes and further envisaged as one group of the Backward Classes."
- ❖ To Lewis (1968), "Ideally, tribal societies are small in scale, are restricted in the spatial and temporal range of their social, legal, and political relations, and possess a morality, a religion, and world-wide of corresponding dimensions. Characteristically too, tribal languages are unwritten, and hence, the extent of communication both in time and space is inevitably narrow. At the same time, tribal societies exhibit a remarkable economy of design and have a compactness and self-sufficiency lacking in modern society".
- ❖ Bardhan (1973) defines the tribe as "course of socio-cultural entity at a definite historical stage of development. It is a single, endogamous community with a cultural and psychological makeup."
- ❖ According to Krishnan (1985) tribe is "a social group of simple and kind, the members of which speak a common dialect, have a single government act together for common purposes and have a common name, a contiguous territory, a relatively uniform culture or way of life and a traditions of common descent."
- ❖ Tribe is described by Mair (2002) as "an autonomous political division of a community with a shared culture."
- ❖ According to Huntingford (2004) "A tribe is a group united by a common name in which the members take a pride by a common language, by a common territory, and by a feeling that all who do not share this name are outsiders, 'enemies' in fact".

- ❖ "A tribe is a group of people in a primitive or barbarous stage of evolution who acknowledge the authority of a chief and generally consider themselves as having a common ancestor," according to Oxford Dictionary (2016).
- ❖ Majumdar (2019) describes tribe as “a social group with territorial membership, endogamous with no specialisation of functions governed by tribal officers hereditary or otherwise, united in language or dialect recognising social distance with other tribes or castes, ruled by tribal officers hereditary or otherwise, united in language or dialect recognising social distance with other tribes or castes, ruled by tribal officers hereditary or otherwise, united in language or dialect recognising social distance with other tribes or castes.
- ❖ The Scheduled Tribes are the tribes or tribal communities, or parts of or entities within these tribes and tribal communities, which have been designated as such by the President by a public notification, according to Article 342 of the Constitution. As per the 2011 Census, the Scheduled Tribes make up 67.76 million people, or 8.08 percent of the total population. Scheduled Tribes are mostly found in forest and hilly areas throughout the country.

Factors responsible for the Backwardness of Scheduled Tribes

Some factors which are responsible for the backwardness of Scheduled Tribes are as follows

Migration: “Scheduled Tribes' livelihoods are mostly based on agriculture and the production of small forest products. They typically move to cities and other states to work as wage labourers or bonded labour at brick kilns in order to survive”.

Education: Children face extreme difficulty in coping with the school curriculum due to a lack of instructors and research resources, long distance, ill-timed classrooms, pessimistic attitudes of both parents and teachers, and low or zero female literacy rates, among other factors”.

Poor health facilities: Scheduled Tribes must rely on bicycling or walking to nearby Government clinics in the event of a major illness or emergency, since there is no plan to look after them seriously.

Lack of understanding and consciousness: Despite the fact that state and federal governments have launched a number of schemes and programmes aimed at reducing poverty among STs, they have been unable to improve the living standards due to their lack of knowledge and awareness of the numerous development schemes and programmes.

3.1.2 Description of different types of Tribes

According to 2011 Census, India's population is 1.21 billion, with more than 800 million people living in rural areas and 400 million in urban areas. Adivasis are India's Scheduled Tribes, with 622 Adivasi Communities speaking 325 languages in 645 districts and 105292 villages. About 57 percent of them have moved out of the forest, with just around 40 percent remaining in woodland areas. Tribes can be found all over India, including the Central Zone, Western Zone, North Eastern Zone, Southern Zone, Andaman and Nicobar Islands, and the Lakshadweep Islands, but they are mostly clustered in Central, Eastern, and North-Eastern India. Primitive Vulnerable Tribal Groups are around 75 tribal groups in India.

The Government of India has established six tribal communities in Tamil Nadu, out of 36 Scheduled Tribes, and dubbed them "Primitive Tribal Groups (PTG)" due to their pre-agriculture technologies, extremely low literacy, and subsistence economy. "Todas, Kotas, Kurumbas, Irulas, Paniyans, and Katunayakans are the six PTGs". All of these PTGs can be found in significant numbers in the Coimbatore and Nilgiri districts.

Scheduled Tribes

The estimated number of Scheduled Tribes in the Nilgris district is 32813 (2011), accounting for 4.46 percent of the district's total population. Todas, Kotas, Kurumbas, Irulas, Paniyas, Kattunaickans, and other Scheduled Tribes are prominent in the district.

Todas

Toda tribes are a Dravidian ethnic group; they live in the Nilgiri Mountains of the Indian state of Tamil Nadu. The Toda people are a small pastoral community who stay at the remote Nilgiri plateau of Southern India. Before the 18th century the Toda

coexisted regionally with different communities such as the Badaga, Kota and Kurumba in a free caste like network agency in which the Toda were the top rating.

Kurumbas

The Kurumbas of the Nilgiri district are unlike any other tribe. The Kurumbas, who live only in Nilgiri district, were declared Scheduled Tribes by the Indian government and were added to the list of Primitive Tribal Groups (PTGs). According to Luiz (1962), "it is likely that their name derived from the Tamil term "Kurumbo" (mischief) because in their savage state they were very stubborn and mischievous." The Kurumbas' youth do not agree with this comment. The Kurumbas settlement is known as mottam, which refers to a grouping of several huts within the jungle.

Kotas

The villages of the Kotas are situated on hills. They are not Todas, and there are no physical or lifestyle similarities between them. They are considered unclean by the Todas because they used to keep their homes filthy, devouring dead cattle and relishing fresh buffalo meat. The Kotas used to dwell on 'Kollimala,' a mountain in Mysore.

Panias (Paniyan)

Paniyans are one of Tamil Nadu's Primitive Tribal Groups (PTGs). The Paniyans, also known as Paniyas, live in the southern Indian states of Karnataka, Kerala, and Tamil Nadu. They are mostly found in the taluks of Gudalur and Pandalur in Tamil Nadu's Nilgiris district. According to the 2011 census, the paniyans in Nilgiris district have a total population of 9,824 people (4741 males and 5083 females). Paniyans are thought to be descendants of the Dravidian Tribes and the forefathers of Africans.

The paniyans are the most distinctive members of the Dravidian Tribe, which has been expanded by the admixture of Aryans, Scythians, and Mongoloid elements. Their initial occupation is thought to be farm labour, but they are also known for hunting wild animals with spears and nets. The majority of paniyans are found to be economically and educationally disadvantaged. They've been separated from the main stream of

production for a long time. The majority of them can be found in isolated hills and forests.

The paniyans were classified as primitive tribes in the Indian constitution and were given special rank and respect. Paniyans have maintained frequent interaction with residents of the nearby areas. As a result of this impact, certain changes in their cultures, attitudes, and behaviours occur. Industrialization and urbanisation have also had a major impact on the social development of India's primitive Paniyan Tribal Groups in Tamil Nadu.

Many paniyans' fashion, styles, eating habits, and socio-economic status have been affected by Urban Culture in recent years. It is dependent on the appearance, socioeconomic status, and living environment conditions of paniyans from one settlement to the next. In Tamil Nadu, the paniyans are mostly found in the Gudalur block of the Nilgiris district.

Irulas

Irular, Iruligaru, Iruliga, Iruvan, Villiar, KaduPoojaris, and other Tamil Nadu names for the Irula include Irular, Iruligaru, Iruliga, Iruvan, Villiar, and KaduPoojaris. The Irulas of the Nilgiris district tend to be referred to as Irulas. The name Irula is thought to have come from the Tamil word 'Irul,' which means 'darkness,' which may refer to their grim skin. The Irula are one of Tamil Nadu's six primitive tribal tribes, according to the Indian government. Irulas are found in four taluks in the Nilgiri District: Kundah, Kotagiri, Coonoor, and Udthagamandalam. In these taluks, they are found in 67 habitations.

3.2 Background of MGNREGA

The main aim of MGNREGA is to raise wage employment, with a secondary goal of increasing “natural resource management through initiatives that address systemic poverty causes like erosion, deforestation, and soil destruction”. Because of its effect on social security, livelihood security, and democratic governance, the MGNREGA has become a significant tool for sustainable growth in rural India. MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) is an Indian labour law and social

welfare programme aimed at guaranteeing the "freedom to work" for rural Indians. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was enacted as the National Rural Employment Guarantee Act (NREGA) on February 2, 2006, in 200 selected backward districts throughout India, and it was extended to an additional 130 districts on April 1, 2007. The remaining 285 districts were represented as of April 1, 2008. MGNREGA is unique in that it not only guarantees at least 100 days of work to qualified unskilled workers, but it also imposes an enforceable duty on the implementing machinery, including the state government, and empowers workers to negotiate. If no provision for jobs is made within 15 days of obtaining a job application from a prospective household, unemployment compensation will be charged (Gupta and Raipur 2015).

MGNREGA relies heavily on the participation of Panchayat institutions, which are three-tiered autonomous self-government units. The Panchayats are required to forecast labour demand, identify works and demarcate work sites, prioritise works, and prepare village/block/district level development plans in advance to ensure a continuous and seamless planning and execution of the wage employment system.

Registration of job seekers, issuance of job cards, receipts of employment applicants, allotment of workers, selection of work sites, preparation, allocation, and execution of works, payment of salaries, and the start of social audit, openness, and accountability checks at the grass-roots level are all handled by the Panchayats.

Salient features of MGNREGA are:

- I. Right based framework
- II. Time bound guarantee of employment
- III. Labour intensive work
- IV. Women empowerment
- V. Transparency and accountability
- VI. Adequate funding by central government

3.3 Theoretical Framework

The Oxford advanced learner's dictionary defines evolution as "the steady growth of something so that it becomes more advanced, better" (Oxford advanced learner's dictionary, 2000). Development is usually synonymous with terms like change, transformation, rise, and economic growth, and it refers to both development actions and plans working to create a more just environment for all people on a global scale. According to Peet (1999), growth essentially entails "improving the conditions of life." To him, growth is essentially an economic activity because economics is "information about the efficient use of capital in the production of the material necessities of existence." Furthermore, Peet (1999) described development as "the use of society's economic capital to improve the living conditions of the poorest people." As a result, growth involves a transfer of benefits to specific communities in order to change their lives. Growth, according to Peet (1999), is dynamic, involving environmental, economic, social, cultural, and political aspects that are all intertwined.

Seers (1969), has emphasised the importance of addressing three basic topics in order to determine whether a nation is developing such as "What has happened to poverty?" "What has happened to the unemployment rate?" "What has happened to inequality?" If a country can demonstrate a decrease in poverty, unemployment, and inequality, then it has progressed. However, it is impossible to argue that a nation is developing if it is experiencing economic growth but still experiencing a reduction in employment prospects.

Sen (1999) describes development as the ability to choose one's own path. He claims that growth "consists of the abolition of different forms of unfreedoms that leave citizens with few options and opportunities to exercise their reasoned agency". Poverty, oppression, poor educational conditions, widespread social injustice, neglect of public services, and restrictions imposed by totalitarian states (limited political rights) are the primary causes of unfreedoms (Sen, 1999). As a result, growth can only take place when people are relieved from both of these causes of unfreedom. The "constitutive role" of independence in development refers to the primary goal of development, while the "instrumental role" refers to the means of development. The importance of practical

freedom to enhance a high-quality life is the constitutive function of democracy. Fundamental skills such as the ability to read and write and participate in public life are examples of substantive freedoms which also covers malnutrition, cancer, and child mortality reduction (Sen 1999).

A person's capacity refers to many combinations of functions that he/she is capable of doing. Capability is therefore a kind of liberty: the substantive liberty to attain alternate functional combinations. In addition, the word "functioning" reflects the different things an individual can value doing or becoming. These functions can range from simple needs such as not being hungry to more advanced activities such as group involvement or personal circumstances such as self-respect.

Furthermore, according to Sen (1999), the instrumental position of freedom entails the following: (i) constitutional freedoms (ii) economic opportunities (iii) social opportunities (iv) openness assurances, and (v) protective protection. "Political freedoms" refers to the ability to exercise democratic rights such as freedom of expression, freedom to join political opposition, and free elections. In terms of economies and relative price fluctuations, "business services" refers to people's ability to use, generate, and share the available economic capital. It also takes into account the supply of funds and the degree to which money is distributed by the state to its people. Social opportunities mean public provision of the above-mentioned substantive protections, such as education and health care. The term "transparency assurance" refers to the degree of trust and accountability in a society, as well as its role in avoiding corruption and other financial misappropriation. Finally, "protective welfare" refers to the role of social safety nets in preventing further degradation of people's lives, such as fixed institutional provisions for unemployment compensation and legislative wages, such as public jobs for the unemployed. The foregoing right of protective protection is specifically linked to the MGNREGA, but other facets of the Act include democracy promotion, transparency (Social Audits), and financial means (income). The third freedom of social opportunity is indirectly aimed to be created by improving the rural economy as a whole, as well as at the individual level.

3.4 Profile of the study area

Tamil Nadu is one of the high-performing states that is on track to meet its target of providing 100 days of jobs to rural residents. Jeyaranjan (2011), TamilNadu has a higher percentage of women participating in MGNREGA (82 percent) than the national average. (Sudarshan 2010) Once upon a time, the Nilgris was a tribal area, a few indigenous groups have lived in the district's mountain areas, relying mostly on natural resources. Following the British encroachment on the hilly area in 1818, outsiders of various races marched into the mountain to mine the natural resources. The presence of Tamil culture can be seen in the district's southern areas. The influence of Malayali (Kerala) culture can be seen in the district's western areas. The Kannadiga (Karnataka) community has a presence in the northern regions. However, the district has become multi-cultural as a result of large-scale tourism from all over the country and the world, as well as migrant population from various parts of the country seeking work. The Todas, Kotas, Kurumbas, Irulas, and Badagas are the district's initial inhabitants. There were large scale settlers from all over India as the plantations expanded and the tourism industry grew. Parayans, Pallans, Chakkiliars, Vellalas, Nairs, Moppillaahs, Christians, Okkaligas, Lingayats, and Goudas were the major groups who came into the area. Currently, the area is home to a large number of neighbourhoods. The Todas, Kotas, Kurumbas, Irulas, Katunayakans, and Paniyans are aboriginal slaves of the soil who served as bonded labourers on rich land lords' farms, and Paniyans assisted them by working in spice plantations and rice cultivation. In the Nilgiris district, the primitive paniyan tribes' economy is dependent on agro-forestry.

The details on the tribal population in various status of India are shown in Table I

Table – I

State wise Scheduled Tribal population in India, 2011

State/ Code	UT	India/ State/ Union Territory	Scheduled Tribe population 2011		
			Total	Rural	Urban
		INDIA	104,281,034	93,819,162	10,461,872
1		Jammu & Kashmir	1,493,299	1,406,833	86,466
2		Himachal Pradesh	392,126	374,392	17,734
3		Punjab	NST	NST	NST
4		Chandigarh	NST	NST	NST
5		Uttarakhand	291,903	264,819	27,084
6		Haryana	NST	NST	NST
7		NCT of Delhi	NST	NST	NST
8		Rajasthan	9,238,534	8,693,123	545,411
9		Uttar Pradesh	1,134,273	1,031,076	103,197
10		Bihar	1,336,573	1,270,851	65,722
11		Sikkim	206,360	167,146	39,214
12		Arunachal Pradesh	951,821	789,846	161,975
13		Nagaland	1,710,973	1,306,838	404,135
14		Manipur	902,740	791,126	111,614
15		Mizoram	1,036,115	507,467	528,648
16		Tripura	1,166,813	1,117,566	49,247
17		Meghalaya	2,555,861	2,136,891	418,970
18		Assam	3,884,371	3,665,405	218,966
19		West Bengal	5,296,953	4,855,115	441,838
20		Jharkhand	8,645,042	7,868,150	776,892
21		Odisha	9,590,756	8,994,967	595,789
22		Chhattisgarh	7,822,902	7,231,082	591,820
23		Madhya Pradesh	15,316,784	14,276,874	1,039,910
24		Gujarat	8,917,174	8,021,848	895,326
25		Daman & Diu	15,363	7,617	7,746
26		D & N Haveli	178,564	150,944	27,620
27		Maharashtra	10,510,213	9,006,077	1,504,136
28		Andhra Pradesh	5,918,073	5,232,129	685,944
29		Karnataka	4,248,987	3,429,791	819,196
30		Goa	149,275	87,639	61,636
31		Lakshadweep	61,120	13,463	47,657
32		Kerala	484,839	433,092	51,747
33		Tamil Nadu	794,697	660,280	134,417
34		Puducherry	NST	NST	NST
35		A & N Islands	28,530	26,715	1,815

Source: Census 2011

Table - II
Tribal Population in Tamil Nadu, (Census 2011)

Rank	Tribal Communities	STs Population (in numbers)			Sex Ratio	Literacy Rate
		Total	Male	Female		
	All Schedule Tribes	7,94,697	4,01,068	3,93,629	981	47.23
1	Malayali	3,57,980	1,81,704	1,76,276	970	44.88
2	Irular	1,89,661	94,521	95,140	1,007	42.00
3	Kattunayakan	46,672	23,360	23,312	998	56.53
4	Kurumans	30,965	15,949	15,016	942	60.47
5	Malakkuravan	19,645	10,013	9,632	962	52.29
6	Uraly	12,986	6,491	6,495	1,001	40.10
7	Paniyan	10,134	4,898	5,236	1,069	42.02
8	Kondareddis	9,847	5,028	4,819	958	74.13
9	Malai Vedan	7,215	3,701	3,514	949	68.30
10	Kurumbas	6,823	3,380	3,443	1,019	54.16
11	Malasar	6,431	3,259	3,172	973	35.34
12	Kurichchan	6,100	3,181	2,919	918	62.75
13	Sholaga	5,965	3,066	2,899	946	36.61
14	Palliyar	5,288	2,643	2,645	1,001	37.97
15	Adiyan	4,426	2,247	2,179	970	35.13
16	Kanikaran, Kanikkar	3,837	1,879	1,958	1,042	72.30
17	Eravallan	2,871	1,438	1,433	997	44.37
18	Palliyan	2,252	1,146	1,106	965	43.61
19	Kaniyan, Kanyan	2,137	1,042	1,095	1,051	79.32
20	Toda	2,002	957	1,045	1,092	74.38
21	Malai Pandaram	1,439	710	729	1,027	62.96
22	Mudugar, Muduvan	1,250	661	589	891	53.28
23	Kammara	1,052	537	515	959	82.41
24	Kadar	650	325	325	1,000	67.38
25	Konda Kapus	521	265	256	966	76.58
26	Muthuvan	390	200	190	950	35.38
27	Kota	308	155	153	987	78.90
28	Palleyan	231	114	117	1,026	50.22
29	Mannan	211	99	112	1,131	79.62
30	Malayekandi	210	107	103	963	49.05
31	Malai Arayan	172	75	97	1,293	81.40
32	Aranadan	138	72	66	917	65.94
33	Koraga	101	61	40	656	60.40
34	Maha Malasar	77	43	34	791	62.34
35	Kudiya, Melakudi	66	36	30	833	65.15
36	Kochu Velan	7	4	3	750	71.43

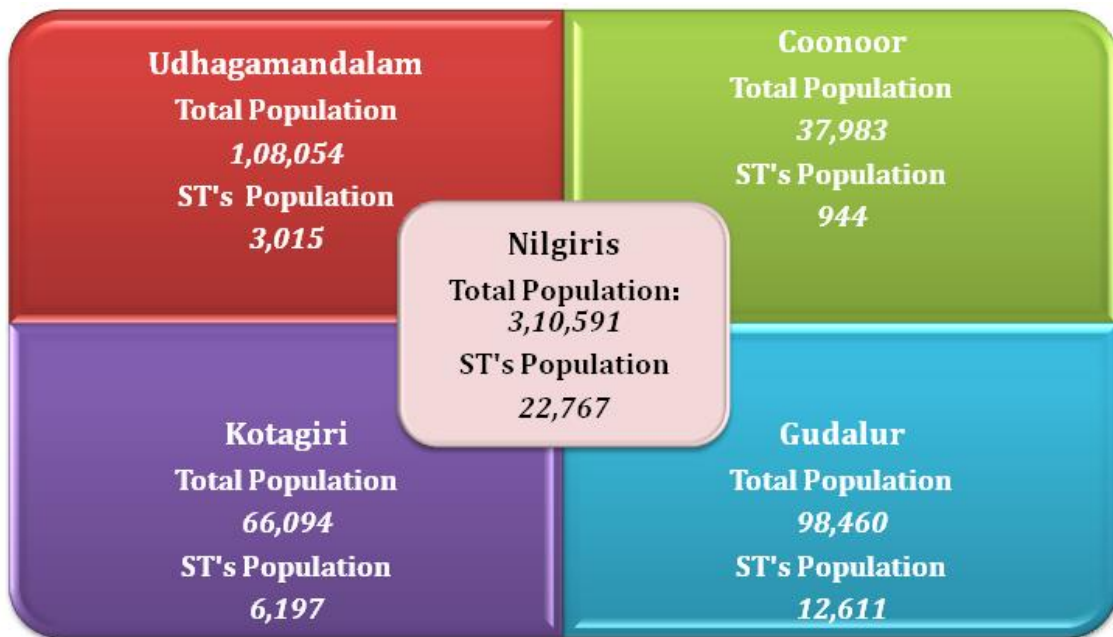
Source: Directorate of census operations 2011, Chennai.

The various types of scheduled tribes spreading all Tamil Nadu are shown in the above table – II

The details on the population of Nilgiri District is shown in Figure – I

Figure – 1

Detail of Nilgrs Population



Source: Census 2011

The Nilgiris district has 18 towns according to the 2011 census. There are four municipalities namely Udthagamandalam, Coonoor, Nelliyalam, and Gudalur. There are eleven Town Panchayats in all. Gudalur, Udthagamandalam, Kotagiri, and Coonoor are four Panchayat Unions (Community Development Blocks) that comprise 35 Village Panchayats and cater to the development of people in rural areas. Three State Legislative Assembly Constituencies are included in the district (Gudalur, Udthagamandalam and Coonoor). The Scheduled Castes have their own constituency in Coonoor. The districts are combined to form a single Parliamentary Constituency (The Nilgiris). Sections of the Mettupalayam, Avinashi, and Thondamuthur Parliament Constituencies are included in this district.

3.5 Sample Design

Gudalur is a municipality in Tamil Nadu's Nilgiris district. According to census India (2011), the Gudalur municipality has a population of 49,535 people, with 24,381 men and 25,154 women. It is located at 52 kilometers from Ooty, in the Nilgiris District's hilly terrain. It is situated at the intersection of the states of Tamil Nadu, Kerala, and Karnataka. Tea plantations, pepper and vegetable cultivation are major crops in the region's economy. Gudalur, as a satellite town between Ooty and Mysore, both tourist destinations, has the potential to develop into another town area

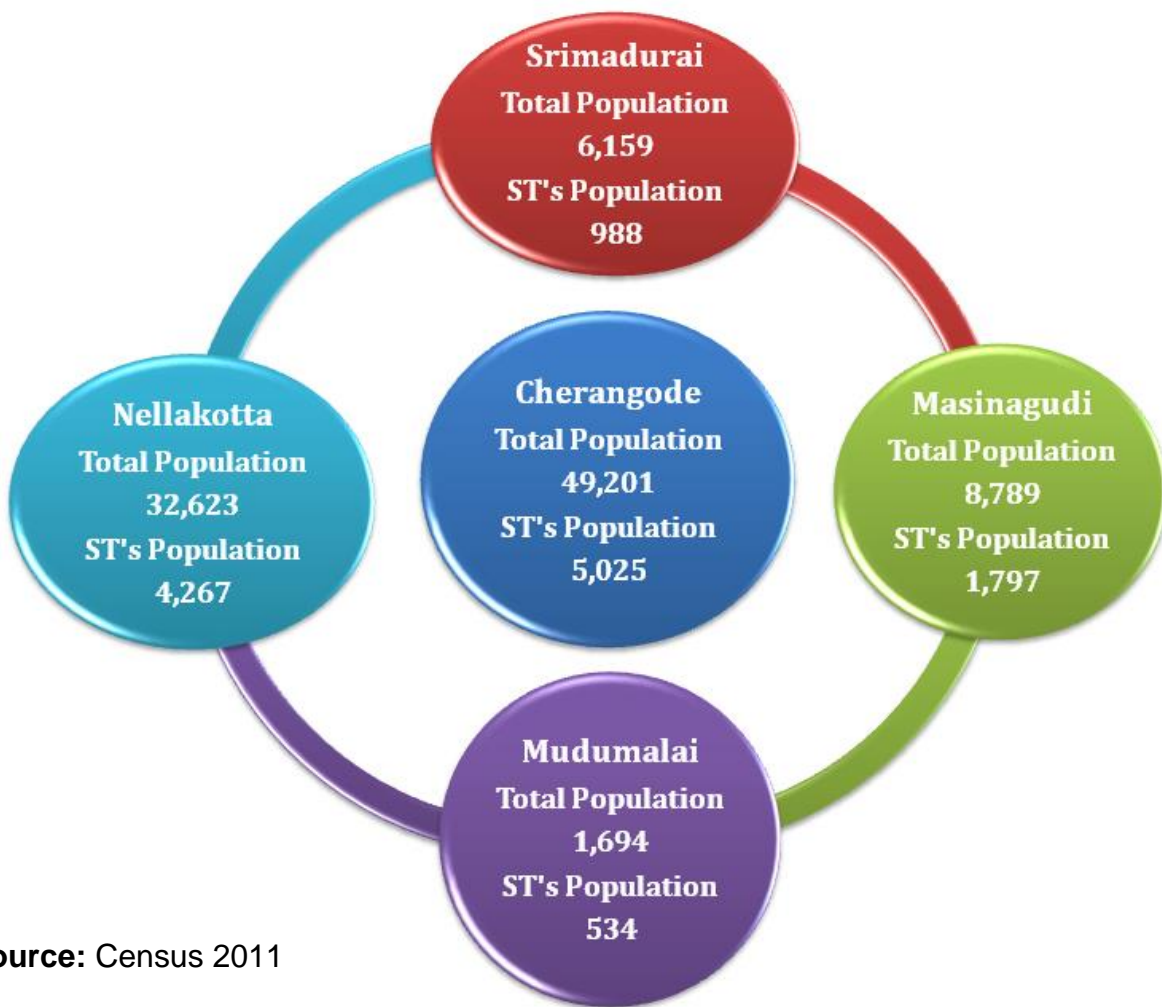
There were a total of 5,359 children under the age of six, including 2,719 boys and 2,640 girls. The Scheduled Castes and Tribes made up 27.66 percent and 3.65 percent of the population, respectively. The town's literacy rate was 79.48 percent, which was higher than the national average of 72.99 percent. There were 12101 households in the city. A total of 18,807 workers were present, including 551 cultivators, 1,759 main agricultural labourers, 206 household industries, 14,488 other workers, 1,803 marginal workers, 90 marginal cultivators, 278 marginal agricultural labourers, 119 marginal workers in household industries, and 1,316 other marginal workers. Gudalur sits at a height of around 3,500 feet (1,100 metres) above sea level. The average annual rainfall is 3000 mm. While the southwest monsoon (June to August) receives 75 percent of the moisture, the northeast monsoon (October to November) contributes just 15 percent of the overall rainfall, and only eight percent of the rains are

received during the northeast monsoon. The weather is mainly dry during January–March and the moisture content gradually increases thereon under the influence of southwest monsoon. The wind direction is mainly west and southwest. The town of Devala in Gudalur taluk is known as Cherrapunji of the south, because of the amount of rainfall it receives annually.

In Figure – 2 and 3 information on Scheduled Tribal population in Gudalur Panchayat and in various villages are shown

Figure – 2

Panchayat wise details of Scheduled Tribal population in Gudalur



Source: Census 2011

Figure – 3

Village wise details of Paniyan Tribal population in Gudalur



The details on the Paniyan population in Tamil Nadu and in various districts are shown in table – III

Table - III
District-wise Paniyan Tribal Population in Tamil Nadu, 2011

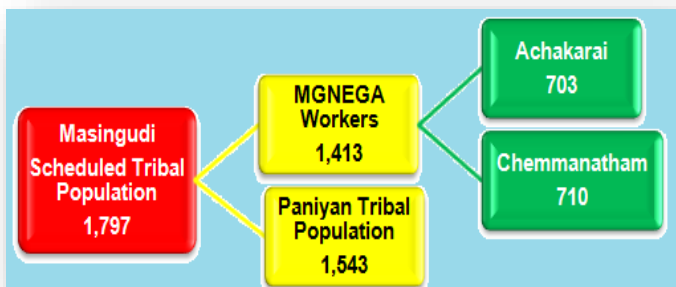
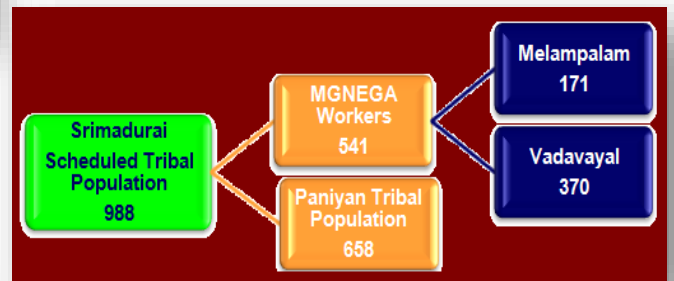
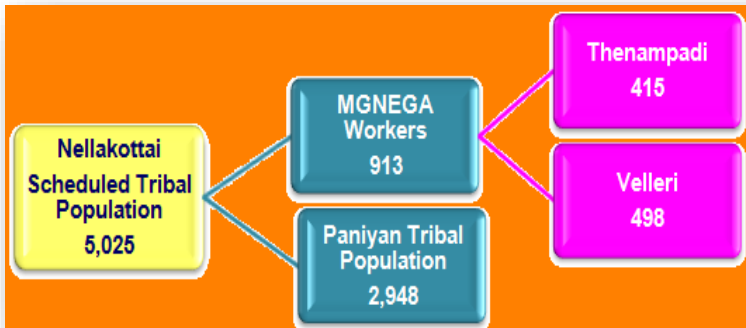
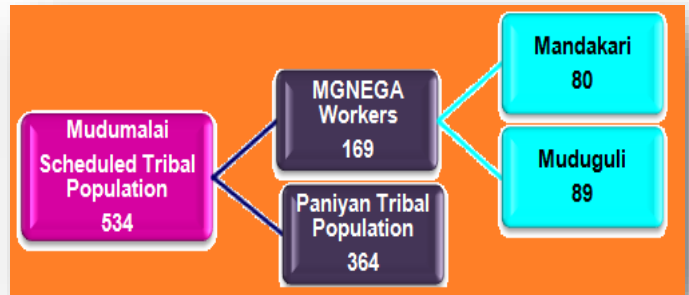
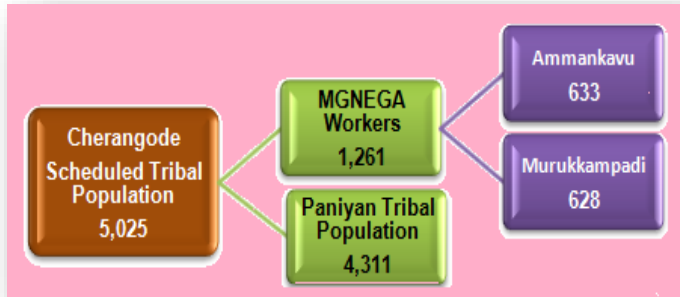
S.No	Name of the district of Tamil Nadu	Male	Female	Total
1	Thiruvallur	5	4	9
2	Chennai	26	31	57
3	Kancheepuram	12	8	20
4	Vellore	1	0	1
5	Salem	1	2	3
6	Erode	0	1	1
7	The Nilgiris	4,741	5,083	9,824
8	Dindigul	18	22	40
9	Karur	1	0	1
10	Tiruchirappalli	16	7	23
11	Perambalur	3	2	5
12	Ariyalur	2	2	4
13	Cuddalore	2	3	5
14	Nagapattinam	2	0	2
15	Thiruvarur	4	5	9
16	Thanjavur	7	7	14
17	Sivagangai	2	0	2
18	Madurai	14	17	31
19	Theni	13	14	27
20	Virudhunagar	3	4	7
21	Ramanathapuram	0	1	1
22	Thoothukkudi	3	4	7
23	Tirunelveli	5	1	6
24	Krishnagiri	3	3	6
25	Coimbatore	9	8	17
26	Tiruppur	5	7	12
Total		4,898	5,236	10,134

Source: Directorate of census operations, Chennai.

The table - II outlined that Paniyan tribes are spread over districts of Tamil Nadu except Thiruvannamalai, Dharmapuri, Namakkal, Pudukottai, Kanyakumari. 96.94 per cent of the Paniyans live in the Nilgiris district of Tamil Nadu and the remaining 3.06 per cent are spread in other districts of Tamil Nadu.

Figure - 4

Details on Paniyan Workers in MGNREGA among different Panchayats



3.6 Sampling Technique:

The tribal respondents for the study were chosen using a multistage random sampling technique. Gudalur block in Nilgiri district was chosen for the analysis in the first stage because Paniyan tribes are present in large number only in Gudalur Block. The total population and ST population of Gudalur were obtained from panchayat officials' records in the second stage. The records also revealed the names of five village panchayats in the Gudalur block. According to Panchayat administration details, Paniyan tribes were found in Ammankanuvu and Murukambadi villages in Cherangode Panchayat; in Mudumali and Muduguli in Mudumalai Panchayat; in Achakari and Chemmangidi in Masinagudi Panchayat; Thenampadi and Vadavayal. In these villages, MGNREGA workers who belonged to Paniyan community were found in large number. At the third stage, 15 percent of the Paniyan population in these villages who are participating in MGNREGA were chosen by following purposive sampling method. The selection criteria of the respondent were as follows: the respondents should be enrolled as active participant in MGNREGA; the sample respondent should be from only Paniyan tribe community, the prime location of the respondent should be from Gudalur block. Respondents who were MGNREGA participants were interviewed in the fourth stage using a pre-tested interview schedule. As a result, the researcher attempted to trace down the Paniyan community of these areas that worked on the MGNREGA scheme. A total of 645 MGNREGA workers were selected for the study.

Following a thorough analysis of the literature, the investigator devised an interview plan for data collection. The schedule was pre-tested with a small number of sample units. The questions were appropriately updated, and the final interview schedule included in the analysis is given in Annexure I. In-depth interviews and conversations were held with the respondents to extract details. The fieldwork was conducted during the period September to December 2019.

Ethical Considerations

The Ethical clearance application form contained the details and protocols of the research such as research title, aim, objectives, methodology, sample area, sample

size; questionnaire which was examined and ethical form approval letter were attached with the thesis. The study was ethically approved by the committee of Ethical clearance of Avinashilingam institute for home science and higher education for women, Coimbatore.

The present study is mainly confined to analyse the implications of Impact of programme – MGNREGA on overall socio – economic life activities of the beneficiaries after successful implementation of it in the selected Panchayat with reference to the knowledge and realisation of the scheme among the respondents, motivating factors for effective participation, effects of the scheme on their livelihood conditions, changes at village level in respect of promoting social inclusion and community assets, their health conditions and level of satisfaction by the respondents towards the Act.

3.7 Concepts used

Poverty: In the broadest meaning, poverty refers to a lack of basic needs. Basic food, housing, medical treatment, and protection are all considered essential based on common human dignity principles. What is a requirement for one person should not be a necessity for another. Needs should be proportional to what is possible and are dependent on social meaning and previous knowledge (Sen, 1999), and Valentine (1968) claimed that “the root of poverty is inequality.” Poverty is described as “relative deprivation” in slightly different terms. A social (relative) concept of poverty helps communities to be more flexible in dealing with urgent neighbourhood issues, while quantitative concepts allow for monitoring and comparison.

Inclusive Growth: Inclusive development is a philosophy that promotes equal opportunity for all economic participants as a result of economic expansion, with benefits accruing to all members of society. People will both contribute to and benefit from economic development through inclusive growth. Because of a growing fear that the gains of economic growth are not being spread equitably, sustainable growth as an economic development policy has get a lot of publicity.

MGNREGA: MGNREGA is a government-sponsored programme that is managed by the Panchayats and Rural Development Departments. To shield rural

households from poverty, guaranteed wage jobs should be provided. MGNREGA focuses on community assets in the form of utilities, such as highways, water storage and water recycling, drought proofing, including afforestation and tree planting, healthcare facilities, and so on, in addition to human, collective, or family-oriented benefits.

Tribe: A tribe is a tribal community that existed before the creation of states or outside of them, either historically or developmentally. They have a diverse cultural pattern, as well as a diverse economic situation and practices, which are mostly dependent on ecological and ethnic environments. The tribes' basic economic practices can be divided into the following categories. Pastoral, Shifting hill agriculture, handicrafts, cultivation, trade and commerce, and labor are all words that come to mind when thinking about food gathering. Their poor way of life, economic and social backwardness, low literacy, out-of-date production systems, lack of a value system, and sparse urban infrastructure are the features in backward tribal areas.

Paniyans: Paniyans are a group of people who are workers. Many Paniyans worked for low wages for local landowners in an ancient regime, with little to no freedom to work for others for higher wages. The bulk of the paniyans, however, broke away from their masters after independence and began working as informal farm labourers, bamboo and other tree cutters, and estate labourers. Regardless of whether they are bonded or not, the paniyans live in poverty on the whole. They can be found in Tamil Nadu's Gudalur block and Kerala. Paniyans were discovered to be subjected to a form of bonded labour.

Tribal Households:- A 'household' is typically a group of people who live together and eat their meals from the same kitchen, until work obligations prohibit them from doing so. A household's members can be related, unrelated, or a combination of both. If a group of unrelated people lives in a census house but may not eat from the same kitchen, they are not considered members of the same family. - of these individuals should be handled as if they were a different household. A shared kitchen is a crucial link in determining whether or not it is a home. One-person households, two-person households, and multi-person households are all possible.

Block: A block is a district sub-division. Within the Urban Development agency, cities have identical structures. Tehsils (also known as Taluks) are used by the land and revenue departments to keep track of land possession and charge land taxes in both urban and rural areas.

Census: Countries conduct a census once every 10 years. A population census is defined as "the total process of collecting, compiling, evaluating, analysing, and publishing or otherwise disseminating demographic, economic, and social data pertaining, at a specified time, to all persons in a country or in a well delineated part of a country." Censuses of population and housing are essential data gathering activities.

Population: A society is a separate category of people, whether it is a country or a group of people who share a similar characteristic of a population is the group of people from whom a statistical sample is taken for a research of statistics. As a result, a population may be described as a group of people who are linked by a common characteristics.

3.8 Tools of Analysis

The information gathered from respondents through an interview schedule was computerised and designed to produce logically coherent conclusions. The computerised data was tabulated and analysed using the SPSS package. Data was analysed using descriptive and inferential statistics such as basic frequency, Likert Scaling, Chi-square test, Garret Ranking, Multiple Regression, Paired T Test, Discriminant analysis, Path analysis, and Factor analysis.

a. Frequency Distribution

The frequency distribution depicts a summary of data separated into mutually exclusive classes and the number of instances in each class. It's a method of displaying unorganised data such as age, marital status, educational qualifications, type of house, monthly salary, savings, debt, type of job, and so on. Histograms, line graphs, bar charts, and pie charts are examples of diagrams that can be seen for frequency

distributions. The frequency distribution of the variables are determined using a simple percentage theorem, which is written as:

$$FD = \frac{F}{N} \times 100$$

Where

'F' denotes the number of respondents

'N' denotes the number of sample population

For both qualitative and quantitative results, these are used. In the current study, however, this distribution was primarily used to measure the demographic profile of the respondents.

b. Chi – Square Test

A chi-square (χ^2) statistic is a test that measures how a model compares to actual observed data. The data used in calculating a chi-square statistic must be random, raw, mutually exclusive, drawn from independent variables, and from a large sample.

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where

O = Observed value(s)

E = Expected value(s)

Chi-square tests are often used in hypothesis testing. The chi-square statistic compares the size any discrepancies between the expected results and the actual results, given the size of the sample and the number of variables in the relationship. For these tests, degrees of freedom are utilized to determine if a certain null hypothesis can be rejected based on the total number of variables and samples within the experiment. As like any other statistic, the larger the sample size, the more reliable the results.

c. Garret Ranking

Garrett's rating technique was used to rate the respondents' preferences based on various criteria. According to this process, respondents were asked to rate all variables, and the results of that rating were then translated into a score value using the following formula:

$$\text{Percent position} = 100 \frac{(R_{ij} - 0.5)}{N_j}$$

Where

R_{ij} = Rank given for the i^{th} variable by j^{th} respondents

N_j = Number of variable ranked by j^{th} respondents

The scores of each person are then applied for each factor and the total value of scores and mean values of scores are determined. The variables with the highest mean value are considered the most significant factors in the current analysis.

d. Multiple Regression Analysis

Regression analysis is a mathematical technique for examining the relation between two or more variables. It establishes a formula for calculating the effect of changes in one or more explanatory variables (also known as independent variables) on a target variable (known as the dependent variable). In the field of econometrics, which is concerned with the application of statistical and quantitative approaches to the study of economic results, regression analysis is commonly used.

The estimated multiple regression function is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10}$$

Where

Y = Total family income

X_1 = Age

X_2 = Amount of debt

X_3 = Education level

X_4 = Days of work (After programme)

X_5 = Food expenses (After programme)

X6 = Non food expenses (After programme)

X7 = Dependents (children below the age of 15)

X8 = Number of dependents (above 50 years)

X9 = Assets (After programme)

X10 = Type of Family

E = Error term

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9$ and β_{10} = Estimated multiple regression coefficient.

The multiple regression analysis was estimated using SPSS 16.0 version

e. Paired T Test:

The paired t test was used to see whether there was a noticeable difference in different parameters like expenses on food, clothing, housing, education, medical costs, transportation, finances, religious function, income, and work days before and after participating in the development programme (MGNREGA) by the tribal population.

f. Factor Analysis

Factor Analysis is a technique for analysing a dynamic action or character in order to determine the most relevant traits or factors to the respondents. The aim of factor analysis is to figure out how to respond to a large number of statements that are strongly correlated. If the answers to many statements are highly correlated, it is assumed that the argument is measuring an aspect that is similar to all of them. Only continuous variables (or) scales variables may be used in factor analysis.

A factor analysis is similar to regression analysis in that it attempts to 'best match' variables to a scatter diagram of data in such a manner that factors justify the variance associated with responses to each argument in order to investigate the main statements that influence respondents. Factor analysis is a technique for resolving a vast number of calculated variables/statements into new groups called influences. This method helps you to combine variables/statements into factors, and the resulting factors can be considered as new variables (latent variables), with their meaning extracted by adding the values of the initial variables that were grouped into the factors. Thus factor

analysis help to reduce the complexity of large number of observed variables into new (latent) variables which summarize the commonality of all the variables.

g. Liker's Scaling Technique

A Likert scale is a form of psychometric scale that is often used in studies that use questionnaires and interview schedules. It is the most commonly used approach to scaling responses in survey studies, to the point that the terms ranking scale and likert-type scale are often used interchangeably, despite the fact that the two are not identical. A Likert item is merely a comment that the respondent is expected to rate based on certain arbitrary or objective criteria; in most cases, the degree of consensus or disapproval is calculated. Since there are equivalent numbers of positive and negative positions, it is called symmetric or "balanced."

The format of a typical five – level Likert item, for example, could be:

- ❖ Strongly Agree
- ❖ Agree
- ❖ Neutral
- ❖ Disagree
- ❖ Strongly Disagree

h. Multiple Discriminant Analysis

To classify the workers of MGNREGA programme, as high saving group and low saving group, Multiple Discriminant analysis was carried out. The high and low savings groups were identified based on mean savings. If the saving of beneficiaries is above mean savings (Rs.1,745), they were classified as high saving group. If the saving of beneficiaries are below the mean savings, they were classified as low saving group. The factors such as age, family type, number of dependents, family income, non food expenses, debt repaid and expenses on livestock were hypothesized as the determinants of savings of beneficiaries of MGNREGA programme.

The form of the discriminant function specified in the study was

$$Z = L_1 X_1 + L_2 X_2 + L_3 X_3 + L_4 X_4 + L_5 X_5 + L_6 X_6 + L_7 X_7 + L_8 X_8 + \dots + U$$

Where Z = Discriminant Score

L₁ = Discriminant coefficient – constants

X₁ = Age

X₂ = Family Type

X₃ = Number of Dependents

X₄ = Family Income

X₅ = Food Expenses

X₆ = Non Food Expenses

X₇ = Repaid Debt Amount

X₈ = Expenses on Livestock

i. Path analysis using AMOS Graphics

Path analysis is a system of model that shows how a set of variables interact with one another. It has a lot in common with multiple regression analysis. In particular, it is a variation of multiple regression models, which are used by researchers to measure the causal relationship between sets of variables. The aim of path analysis is to provide estimates of the degree and importance of a hypothesised causal relationship between sets of variables using path diagrams. A path diagram is a diagram in which the variables are defined and arrows from one variable to another are drawn to suggest a causal association based on theory.

There are two kinds of consequences in the path model. The direct effect is the first, and the indirect effect is the second. The direct effect occurs where the exogenous variables have an arrow pointing through the dependent variables. It is assumed to be an indirect influence where an exogenous variable has an effect on the dependent variables by other exogenous variables. The actual and indirect effects are combined to see the overall influence of the exogenous variable. One element can have a direct impact, but it could also have an indirect impact.

Among the many measures of fit to evaluate the path models, five popular measures are: Chi – square (χ^2), nor med chi – square (χ^2/df), goodness of fit index (GFI), Tucker-Lewis Index (TLI), Root Mean – Square Error of Approximation (RMSEA) (Holmes – Smith 2000). However, all fit measures were used to evaluate goodness of fit of the models in this research.

Period of study:

The data collection was undertaken during the period of September 2019 to December 2019. The study focused on the impact of MGNREGA on Paniyan tribal population in Gudalur Block from Nilgiris District.

Figure – 5

District Map of Tamil Nadu



Figure – 6
Different Talks of Nilgiri District

