



Impact on Disaster Management during COVID-19 in Tamil Nadu

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Abstract: This study looks at the macroeconomic effects of COVID-19 on Tamil Nadu's economy from the first shutdown period. The lockdown was implemented to stop the coronavirus from spreading. The lockdown was progressively lifted by the Tamil Nadu state government; however, confinement zones were not included. Numerous research has looked into how COVID-19 may affect the Indian economy. To investigate the regional perspective, there are, however, few research. This study investigates the economic impact of the COVID-19 on Tamil Nadu. This analysis is based on secondary data that was collected from the Centre for Monitoring Indian Economy.

Keywords: COVID-19, Lockdown, Income, Migrant Workers, Tamil Nadu

I. Introduction

The COVID-19-induced lockdowns have disrupted people's livelihoods in both developed and underdeveloped nations. India's prime minister announced a state of emergency on March 23, 2020. As a result, the nation's economic operations were destroyed, having an impact on the 1.3 billion people who call it home. The National Statistics Agency has released its predictions for the first quarter's Gross Domestic Product (GDP), which show a negative economic growth of 23 per cent. In addition, the construction industry experienced a 50 per cent decrease in growth, followed by the service sector (47 per cent), and the manufacturing sector (39 per cent). Agriculture and related industries, on the other hand, are growing at a rate of 3 per cent. Agriculture policy specialists provide a number of theories to explain the agricultural sector's resilience, including the pandemic's timing, early public policy responses, and the development of infrastructure for social transfers, among others.

There are five sections to this paper. The paper's introduction offers information on Tamil Nadu's economy in the present. The volume of COVID-19 cases in Tamil Nadu is the subject of the paper's second section. The economic effects of the shutdown in Tamil Nadu are discussed in the third section of the report. The state government's initiatives are covered in the paper's fourth section, and challenges to policy actions are covered in the fifth section.

II. Current Economic Situation in Tamil Nadu

There are 7,21,47,030 people living in the 1,30,058 square kilometer state of Tamil Nadu. The state's population density is 555 people per square kilometer. From 2001 to 2011, the population increased by 15.61% annually. In 2018–19, Tamil Nadu's State Gross Domestic Product (SGDP) was Rs. 15,07,91,798 crore; the service sector contributed the most, at 52.23 percent, followed by industry (32.98) and agriculture (12.78 per cent). The manufacturing sector (19.74%) makes the largest contribution to SGDP in the disaggregated study (Tamil Nadu, 2019). Automobiles, electronics, engineering, clothing, textiles, leather, pharmaceuticals, chemicals, paper industries, etc. are a few of the key manufacturing sectors. According to the Annual Survey of Industries, Tamil Nadu is home to 37,220 factories, which employ 24,08,282 people. Real estate, home ownership, and professional services make up 17.96% of the state's GDP, with trade, hotel, and restaurant (12.61%), agriculture, forestry, and fishing (12.40%), trade repair and service (11.16%), and construction making up the remaining percentages (11.14 per cent). However, according to the 2011 Census, Tamil Nadu's workforce engaged in agriculture is approximately 42.1%, while the sector's share of the SGDP has shifted to 12.78%. (Census of India, 2011).

Cultivators make up 12.9% of the agricultural workforce, while agricultural labourers make up 29.2%. 4.2% of home employees are employed in the industrial sector, and 53.7% are employed in other occupations. As a result, main workers make up 85% of the entire workforce, while marginal workers make up 15%. The governments' declarations of partial or complete lockdowns have brought about an unprecedented level of social and economic distress among the population of the world. At a time when India's GDP was already declining and unemployment was soaring, the public health crisis occurred (Dev and Sengupta, 2020). According to the Periodic Labour Force Survey, Tamil Nadu has a greater unemployment rate than the rest of India. In Tamil Nadu, the rate of rural unemployment is about 6.4%, whereas the rate of urban unemployment is higher at 6.7%. In contrast, urban unemployment in India is 7.7 percent, while rural unemployment is 5.0%. In Tamil Nadu, the unemployment rate for rural men is 7.0%, compared to 5.5% for rural women. In contrast, the rural unemployment rate for men in India is 5.6% while it is only 3.5% for women. Throughout Tamil Nadu, the male urban unemployment rate is 6.0%, compared to 7.1% in India. In a similar vein, Tamil Nadu's urban female unemployment rate is 8.4%, whereas India's is 9.9%. (PLFS, 2018). One of the states that has significantly lessened poverty than the rest of the nation is Tamil Nadu. According to the Mixed Recall Period, poverty in Tamil Nadu was 11.3% in 2011–12, compared to 21.9% nationwide (Tamil Nadu, 2018). Tamil Nadu's education and health outcomes are superior than those of the rest of India in terms of the Human Development Index. According to the 2011 Census, Tamil Nadu has an 80.09 percent literacy rate, with males having an average literacy rate of 86.77 percent and females having an average literacy rate of 73.44 percent (Census of India, 2011). Tamil Nadu has better health indices than the rest of India. In comparison to the rest of India, Tamil Nadu has a birth rate of 14.7 per 1,000 people. Tamil Nadu has a death rate of 6.5 per 1,000 people whereas India has a death rate of 6.2 per 1,000. Tamil Nadu has a 15 per thousand newborn death rate whereas India has a 32 per thousand infant mortality rate. Tamil Nadu had a higher life expectancy at birth than the rest of India. Males in Tamil Nadu had a life expectancy at birth of 69.9 years, while females had a life expectancy of 73.7 years.

In India, the average lifespan was 69.0 years, with males having a 67.8-year average and females having a 70.4-year average (Human Development, 2017). In 2017–18, there were 2,927 primary health centers in urban regions compared to 1,806 primary health centers in rural areas (Directorate of Family Welfare in Tamil Nadu, 2020).

III. Tamil Nadu's overall COVID-19 case count and mortality rate

In India, the first case of COVID-19 was reported on January 30, 2020, while the first case in Tamil Nadu was reported on March 7, 2020. Next to Maharashtra, Tamil Nadu reported the second-highest rate of positive cases. Table 1 lists the total number of positive COVID-19 cases for men, females, and transgender people in Tamil Nadu from April 2020 to March 2021. Over this time, there have been more cases reported. In April 2020, it was 2,323, and in March 2021, it reached 8,86,673. In the gender study, males had the highest percentage of positive cases during the early phase, which decreased during this period. On the other hand, although it was low in the beginning, the proportion of females increased over time. While just 33.15 percent of women tested positive for COVID-19 in April 2020, 66.85 percent of men did. However, the ratio of men to women in March 2021 was 40.0% for women and 60.38 percent for men.

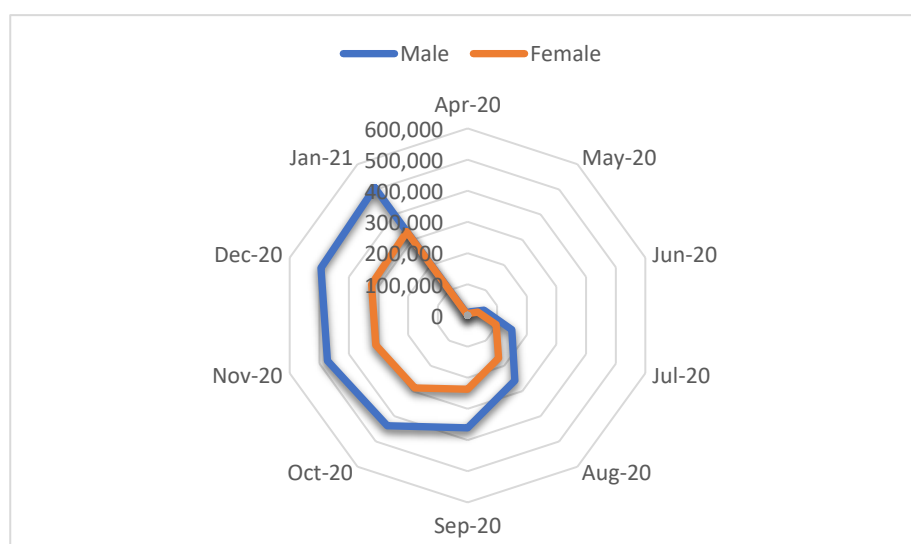


Fig 1:- Positive COVID-19 Cases in Tamil Nadu [5]

In the initial stage, the number of discharged cases were low but still slightly higher than 50 percent positive cases. In April 2020, there were 54.15 per cent discharge cases which improved to 96.77 per cent in March 2021. The death rate of positive cases indicates that the absolute number has increased over this period. The number of death cases were 27 in April 2020 which increased to 12,719 in March 2021.

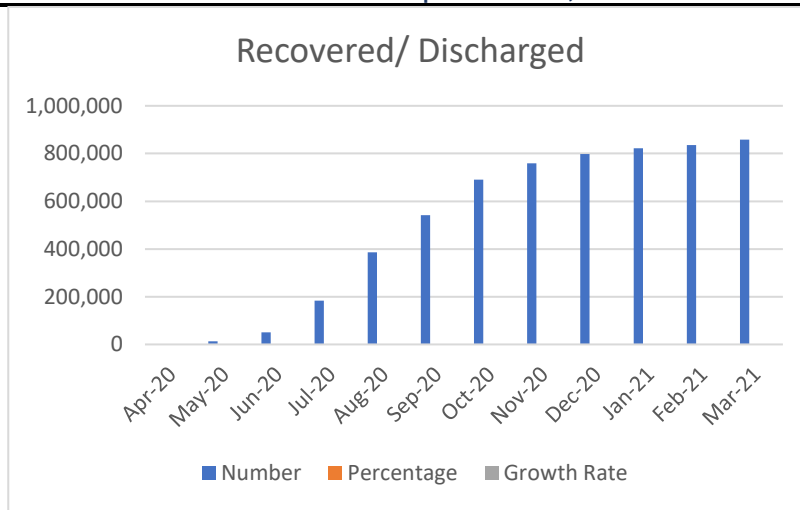


Fig 2: - COVID-19 Recovered Cases [5]

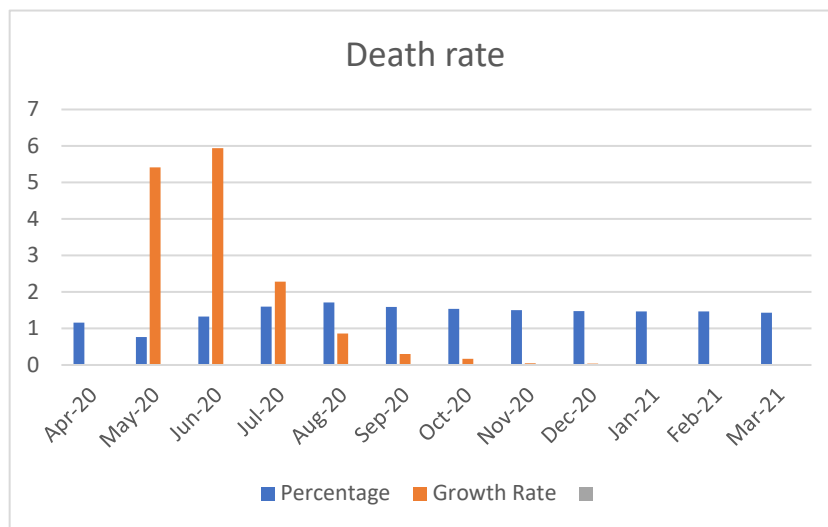


Fig 3: - COVID-19 Death Cases [5]

Testing is a crucial tool in the fight against disease transmission. There are 237 COVID-19 testing locations in Tamil Nadu, including 67 public locations and 170 private locations (Health and Family Welfare, 2020). In comparison to other Indian states, Tamil Nadu has the most testing facilities and the most tests have been administered there. The number of samples examined and the quantity of positive instances are displayed in Table 3. As a result of more samples being examined, there are also more positive instances, according to Census of India 2011 data. There were 2,354 COVID-19 tests performed in March 2020, while 124 occurrences of positive results were recorded. The testing facilities and sample collection were accelerated by the state administration. In March 2021, there were 1,95,95,368 tests performed, and there were 8,86,673 positive results.

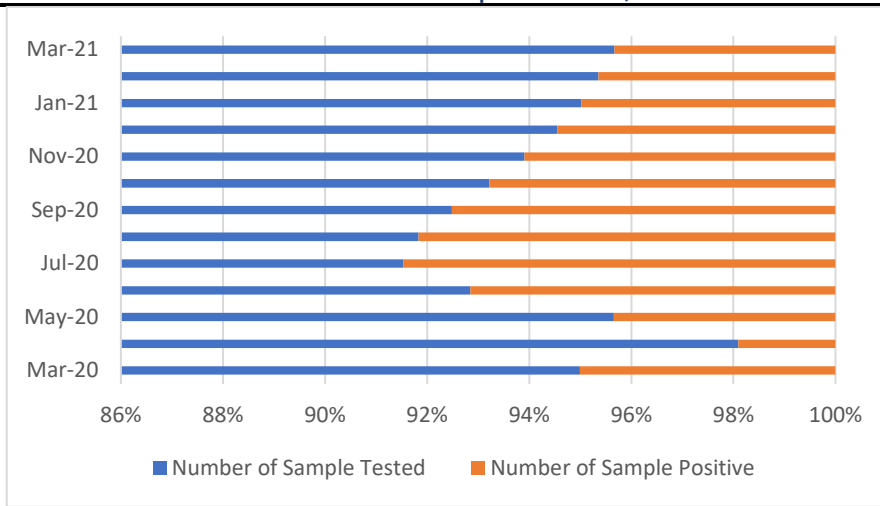


Fig 4: - Samples Tested and Number of Positive Samples in Tamil Nadu [5]

IV. Lockdown and Its Effects on the Economy of Tamil Nadu

On March 25, 2020, the government of India declared its first lockdown. The union government then declared three additional lockdowns. Lockdown was implemented in four phases: from 25 March 2020 to 14 April 2020, from 15 April 2020 to 3 May 2020, from 4 May 2020 to 17 May 2020, and from 18 May 2020 to 31 May 2020. All economic activity was fully stopped throughout these several lockdown phases, which had a negative impact on economic growth. All facets of society had tremendous economic difficulties as a result of the lockdowns. Numerous initiatives to boost India's economic growth were announced by the union government and various state governments. There was terror among migrant labourers in India as a result of this unintended lockout. Urban migrant workers are unskilled labourers who typically perform contract or casual employment in hotels, restaurants, manufacturing facilities, and construction sites. This lockout caused all manufacturing and building to stop, which quickly increased unemployment in India. While the pandemic has affected livelihoods throughout India's socioeconomic strata, individuals in the unorganized sector, which employs 86% of the country's workforce, have been severely hurt as they fight to meet their basic necessities while avoiding infection, have been hit the hardest. According to the Centre Monitoring Indian Economy (CMIE), Tamil Nadu's unemployment rate was 8.8% in March 2020 before sharply rising to 23.5% in April 2020, 21.7% in May 2020, and then slightly declining to 33.2% in May 2020, 12.2% in June 2020, 6.8% in July 2020, 2.6% in August 2020, and 3.0% in March 2021. Tamil Nadu saw a greater jobless rate than the rest of India during the lockdown. However, as lockdowns were relaxed, the jobless rate progressively decreased. Tamil Nadu had a greater unemployment rate than the rest of India during the lockdown. In Tamil Nadu, the unemployment rate was 49.8% in April 2020, compared to 23.5% for all of India. The unemployment rate was greater in May and June 2020 than it was across all of India.

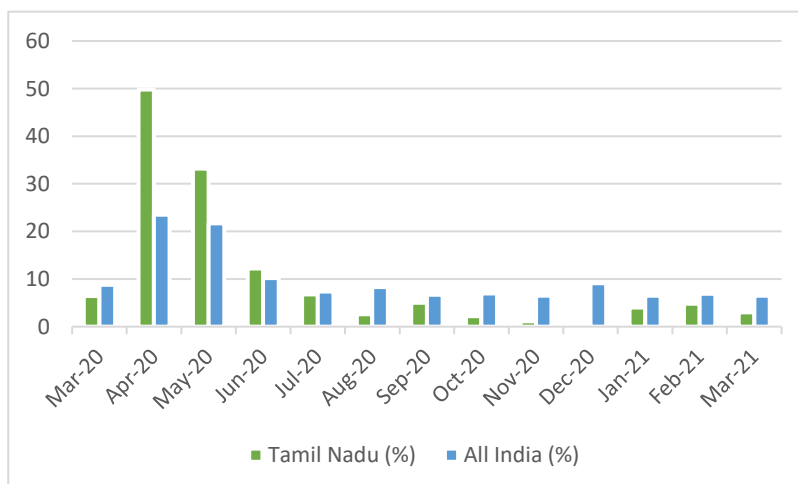


Fig 5: - Unemployment Rate in Tamil Nadu and India [5]

Three important industries in Tamil Nadu—Micro, Small, and Medium-Sized Enterprises (MSMEs), Construction, and Restaurant and Hotel Industry—have been directly impacted by the lockdowns. Tamil Nadu has 12.89 lakh micro, small,

and medium-sized businesses that are officially registered, making up 15.07 percent of all such businesses nationwide. There are almost 20.13 lakh entrepreneurs who have registered. Around 128.91 lakh people are employed by micro, small, and medium-sized businesses, which received a total investment of Rs. 2,23,783.75 crore in 2019. Textile, electronics, engineering, automotive accessories, leather items, chemicals, plastic, clothing, and jewellery are the main micro, small, and medium-sized businesses. The majority of micro, small, and medium-sized businesses are concentrated in Tamil Nadu's northern and western regions. The districts of Chennai, Kancheepuram, Thiruvallur, and Vellore make up the northern industrial cluster. 71% of the micro, small, and medium-sized businesses are located in this north and western industrial cluster. In comparison, Chennai and Kancheepuram alone account for 17.5% and 7.45% of all micro, small, and medium-sized businesses, respectively, in the northern regions (Tamil Nadu, 2019). All industries, including micro, small, and medium-sized firms, have been devastated by the COVID-19 outbreak. The unproven lockdowns choked off the economic activity of micro, small, and medium-sized businesses, resulting in unfavorable shocks like a lack of obtaining raw materials, a decline in production, a delay in the delivery of finished goods, and a lack of workers to work in the manufacturing process. A decline in working-class income is one of the many repercussions, along with job loss, decreased revenue creation, and decreased sales. In order to safeguard micro, small, and medium-sized businesses, the government has principally adopted emergency stimulus and preventive measures. These include subsidies to solve cash flow concerns, employment preservation through a variety of schemes, and business procedures.

In addition to this, Kancheepuram and Chennai are home to the majority of the world's software giants as well as the Hyundai, Ford, Nissan, and Enfield automakers. The engineering and textile sectors make up 5.93% of the micro, small, and medium-sized businesses in Thiruvallur. 2.4% of all businesses are micro, tiny, or medium-sized, and Vellore is well renowned for its leather industry. 37.6% of all micro, small, and medium-sized businesses are located in the western region. The western industrial cluster is made up of the cities of Coimbatore, Tiruppur, Erode, Salem, Karur, and Krishnagiri. The Coimbatore district and Tiruppur each have 11.5 percent and 10.5 percent, respectively, of Tamil Nadu's micro, small, and medium-sized businesses. These western belts of small, medium-sized firms are home to the knitwear, cotton, and handloom industries. All sorts of labour, including skilled, semi-skilled, and unskilled labour, are present in various manufacturing sectors. Contractual and temporary workers make up the majority of the labour force. Both inside Tamil Nadu and in other states, this labour is migrant in character. These workers could also leave for Andhra Pradesh, Odisha, Uttar Pradesh, Jharkhand, Chhattisgarh, Bihar, West Bengal, and Assam, among other places. Additionally, the Goods and Service Tax and the demonetization of currency had caused harm to the sector of micro, small, and medium-sized businesses. This lockdown worsened, harming micro, small, and medium-sized businesses. Many workers lost their jobs, which also meant that they lost their income. They were consequently forced to hunger. The Tamil Nadu government offered free distribution of food and grocery items to ration card holders during the lockdown, however this was unsuccessful because the vast majority of migrant workers lacked ration cards. The second major employment providing sector in Tamil Nadu is construction sector and the share of construction to the state's gross domestic product is 11 per cent. This sector observes unskilled labour. Construction activities in Chennai fully depend on migrant labour. Generally, non-Tamil migrant construction workers are used public road construction activities including construction of bridges, business, and commercial complex establishments. Tamil migrant workers are used in individual houses and small business establishments. Major causes for exhausting north Indian labour in the construction activities are low wages and long working hours. The domestic workers' study indicates that workers are in a bad situation since they lack a guaranteed source of income during the lockdown and a unified front to seek government social security and other benefits. Only a small portion of them engage in sporadic, irregular work, leaving the majority to fend for themselves. Tamil workers make between Rs. 700 and Rs. 900, and migrant labourers are paid between Rs. 400 and Rs. 600. Tamil labourers only put in 8 hours of work each day compared to north Indian employees' 15 hours. Without compensation, the migrant workers were compelled to return to their villages. Additionally, construction employees went back to their hometowns to work in agriculture. The underemployment and unemployment rates in Tamil Nadu's rural areas increased as a result of this process (Wire, 2020). Micro, small, and medium-sized businesses in the north and west heavily rely on migrant labour. There are 10,76,506 non-Tamil migrant workers in Tamil Nadu, and according to the district-by-district distribution of migrant labour, Kancheepuram district has 2.23 lakh (20.9%), Chennai has 1.94 lakh (18.2%), Thiruvallur has 1.3 lakh (12.2%), Coimbatore has 1.29 lakh (12.1%), Tiruppur has 96.248 thousand (9%), and Krishnagiri has 84.987. (7.9 per cent). In Tamil Nadu, the manufacturing sector employs 2.88 lakh people, followed by the textile industry with 1.5 lakh, the construction industry with 1.21 lakh, the hotel and restaurant industry with 98.03 thousand, and small business establishments with 18,000 people. Among the 94.235 thousand, 83.280 thousand are employed in service activities, 43.294 thousand in security, 39.328 thousand in transportation, and 21.208 thousand in the bricks industry and hawking. All migrant employees lost their jobs during the lockdown, and several of them claimed that their wages for March and April 2020 were not paid. Additionally, during the five lockdown days, migrant labourers in the special economic zones worked without pay for a total of 40 days. Some firms made their employees live in makeshift huts devoid of the necessities. As a result of migrant workers being compelled to return to their native towns or homes, labour shortages in manufacturing facilities developed. The hotel and restaurant sector contributes the third-largest portion of Tamil Nadu's GDP and employment. As a result of the lockdown, hotels and restaurants were closed. The agricultural industry's whole supply chain has broken down because of a lack of transportation. On the one hand, the lack of inputs prevented the farmers from carrying out their farming operations. On the other side, the lack of transportation prevented the sale of agricultural products that had been harvested. Finally, the lockdown had a significant negative impact on the manufacturing, service, and agricultural sectors of the Tamil Nadu economy.

V. Governmental Actions

5.1 Relief Package to All Ration Card Holders and Differently Abled People

All holders of ration cards would receive a financial aid package totaling Rs. 3,280 crores from the Tamil Nadu government. For April, May, and June of 2020, it included free of 20 kilograms of rice, 1 kilogram of sugar, 1 kilogram of dhal, and 1 kilogram of cooking oil. Around 2 crore ration card holders in Tamil Nadu used this advantage, which was made available to practically all of them. A financial support of Rs. 1,500 was given to those with disabilities. Additionally, the COVID-19 programme of the Indian government offered monetary assistance to families as part of the social assistance package, considerably assisting vulnerable small- and marginal-farmer families. But the real question is whether all families received enough money from the Tamil Nadu government's cash assistance.

5.2 Providing Relief to Unorganized Workers

The state government of Tamil Nadu also offered financial support to unorganized workers in the amount of Rs. 1,000, which was a significant financial package. In Tamil Nadu, there are now 17 different varieties of unorganized welfare boards. In Tamil Nadu, there are 14.07 lakh unorganized employees, of which 2 lakhs are construction workers. During the COVID-19 period, concerns about health care access, domestic violence in homes, and other issues have also increased among informal domestic women workers. Unfortunately, social security law—which includes statutes like the Employees State Insurance Act of 1948, the Workman's Compensation Act of 1923, the Building and Construction Workers Act of 1996, the Industrial Disputes Act of 1947, and others—is ineffective for employees in the informal sector in this case. These statutes only concern themselves with various forms of social security and welfare assistance for workers in the organized sector. Even while some have contended that these criteria also apply to the unorganized sector, the truth is that just 8% of India's 459 million workers are covered by the existing law. Only the employees who are members of the Tamil Nadu Informal Workers Welfare Board are eligible for this benefit in this case. Additionally, it appears that informal workers' economies and health have been negatively impacted during the COVID-19 period since they lack social security.

5.3 Relief package for small and medium-sized businesses

The COVID-19 relief and development scheme was unveiled by the Tamil Nadu government. Around 2,000 micro, small, and medium-sized businesses that have gotten loans from the Tamil Nadu Industrial Investment Corporation are helped by this programme (TIIC). 200 crore rupees would be used to carry out the plan. Most micro, small, and medium-sized businesses found it challenging to secure finance and promote their goods during COVID-19. The government must develop policies for the recovery of the micro, small, and medium enterprises sector because the COVID-19 period has had a significant negative impact on the production, employment, and income of small and medium enterprises.

5.4 Agricultural Communities' Relief Package

Additionally, Tamil Nadu had imposed a three-month suspension (through June 30, 2020) on the payment of certain fees for the following categories: payment of wealth tax and water tax to local authorities, as well as the return of payments on crop loans, house loans, etc. The COVID-19 relief findings show that removing credit restrictions and increasing agricultural input spending were both influenced by the fungibility of money gained through government transfer packages. Farmers that took advantage of the Pradhan Mantri Garib Kalyan Yojana programme spent a lot more money on fertilizers, insecticides, and seeds. The distribution of cash transfers proved that emergency aid packages had reached India's most helpless citizens.

5.5 Economic Challenges in Tamil Nadu

There has been a severe financial crisis in Tamil Nadu. Therefore, it uses two methods to increase revenue: first, it opens liquor stores, and second, it raises the price of gasoline. Alcohol is often sold for about 90 crore per day. Revenue from alcohol in 2018–19 was Rs. 31,157.83 crore. The first day's sales after shutdown were roughly Rs 170 crore. The Tamil Nadu government set a sales goal of Rs. 33,000 crore for this year 2021 and came close to achieving it in May. The price hikes for gasoline and diesel served as the second source of income. The Value Added Tax (VAT) on gasoline and diesel raised to Rs. 3.25 and Rs. 2.50 as of midnight on May 3, 2020. This resulted in monthly revenue growth of 250 crore. Because this value-added tax is not covered by the GST, food costs have increased, especially for vegetables. The government of Tamil Nadu sought to relieve financial strain and save 750 crore. This was accomplished by outlawing new positions, which increased the unemployment rate for educated workers. Additionally, all government employees and pensioners were subject to a ban on dearness allowance and earned leave payments. It decreased the working classes' purchasing power. Additionally, the retirement age for government workers was raised from 58 to 59 years old. The state government's inability to settle pension benefits was the cause of the raising age restriction.

VI. Conclusion

Increased testing capacity, recommendations for universal mask use, and social isolation should all be combined to prevent COVID-19. Above all, India needs to be well-equipped to handle any epidemic that might arise in the future. In Tamil Nadu, 8,86,673 persons contracted COVID-19 between April 2020 and March 2021. 12,619 of them passed away. Throughout the COVID-19 period, Tamil Nadu's financial situation progressively deteriorated. While the remainder of Tamil Nadu's agricultural and service industries have only suffered mild effects, the industrial sector has been severely impacted. These can be difficult to fix. Tamil Nadu had a greater unemployment rate than the rest of India during the lockdown.

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