# WAGE STAGFLATION, COST – OF - LIVING ESCALATION, AND THE EMERGING CRISIS OF ECONOMIC SUSTAINABILITY IN THE TAMIL NADU: A COMPREHENSIVE ANALYSIS OF 2001 TO 2026 STRUCTURAL IMBALANCES AND FUTURE RISKS

**Dr. G. YOGANANDHAM, Professor, Department of Economics, Thiruvalluvar University (A State University) Serkkadu, Vellore District, Tamil Nadu, India- 632 115.**

**Abstract**

Tamil Nadu's economy has grown significantly, yet faces serious sustainability challenges. Wage stagnation amid rising living costs has strained households, creating wage stagflation. This study (2001–2026) analyzes structural imbalances, informal employment, inequality, technological shifts, and regional disparities, using data and statistical methods to assess risks to long-term economic stability. This research examines the economic challenges faced by Tamil Nadu from 2001 to 2026, focusing on wage stagnation, rising living costs, and long-term sustainability. Despite strong economic growth and increased wealth, many workers, especially in rural and informal sectors, have not seen real wage increases. Meanwhile, prices for essentials like food, housing, healthcare, and fuel have grown faster than wages, reducing household purchasing power. This situation, called wage stagflation, makes it harder for families to meet basic needs and leads to higher debt and lower savings. Structural problems such as high informal employment, rural-urban income gaps, and low productivity in rural areas worsen the crisis. Technological advances and automation have benefited high-skilled workers but hurt low-skilled workers, increasing inequality.

Government policies like minimum wages and welfare schemes provide some relief but do not fully solve the issues. The study highlights that despite impressive growth figures, widespread inequality and structural imbalances threaten Tamil Nadu's long-term economic stability. To ensure sustainable growth, policymakers need to focus on creating more formal jobs, improving skills, and controlling living costs. Addressing these problems is crucial for building an inclusive and resilient economy that benefits all citizens in the future. Without urgent reforms, Tamil Nadu risks facing greater economic instability and social inequality. In this context, the research investigates significant and emerging issues that are increasingly shaping today's globally connected environment.

**Keywords: Wage Stagnation, Regional Disparities, Informal Employment, Structural Imbalances, Low Productivity, Economic Stability, Skilled Workers and Sustainable Growth.**

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**Dr. G. YOGANANDHAM, Professor, Department of Economics, Thiruvalluvar University (A State University) Serkkadu, Vellore District, Tamil Nadu, India- 632 115.**

**The theme of the article**

The economy of Tamil Nadu, one of India's most developed states, has experienced significant growth over the past two decades. However, behind this impressive progress, there are serious challenges that threaten its long-term stability and sustainability. One of the key issues is wage stagnation, where workers' earnings have not kept pace with rising living costs. Despite strong economic growth and high GSDP figures, many households find it increasingly difficult to meet basic needs like food, housing, healthcare, and education due to inflation. This situation, often called wage stagflation, means that wages remain stagnant while prices continue to rise. This research aims to explore the structural imbalances in Tamil Nadu's economy from 2001 to 2026. It examines how factors such as informal employment, income inequality, technological changes, and regional disparities contribute to wage stagnation and rising costs of living. Using data, statistical models, and a comprehensive analysis, the study highlights the emerging risks to the state's economic sustainability.

It also investigates the socio-economic impacts, including increased household debt, declining savings, and growing inequality, which further weaken household resilience. Understanding these challenges is crucial for policymakers to develop effective strategies that promote inclusive growth, improve wage policies, and ensure long-term economic stability. This study provides valuable insights into the complex dynamics of Tamil Nadu’s economy, helping to identify the key areas where reforms are needed to achieve sustainable and equitable development for all its citizens.

**Statement of the problem**

The economy of Tamil Nadu from 2001 to 2026 faces a complex challenge of wage stagnation coupled with rising living costs, a phenomenon known as wage stagflation. Despite impressive macroeconomic growth, with the state’s GSDP expanding significantly, many workers, especially in rural and informal sectors, have not experienced corresponding increases in real wages. Meanwhile, the prices of essential goods such as food, housing, healthcare, and fuel have escalated sharply, outpacing wage growth and reducing households’ purchasing power.

This mismatch has led to increased financial stress for families, forcing them to cut back on discretionary spending, deplete savings, and depend more on borrowing and informal financial sources.

Additionally, structural issues such as high informal employment, low productivity in rural areas, urban-rural income disparities, and technological changes have deepened the wage stagnation and inflation problem. These imbalances threaten long-term economic sustainability by increasing inequality and social vulnerabilities. The persistent gap between wages and living costs hampers household welfare, fuels poverty, and limits consumer demand, which are vital for sustained economic growth. Despite government policies like minimum wage revisions and welfare schemes, these measures have only partially alleviated the crisis, leaving structural challenges unaddressed. As a result, Tamil Nadu faces a looming economic crisis where high growth is not translating into improved living standards for the majority. Understanding these issues and identifying their underlying causes is essential for designing effective policies to promote inclusive and sustainable economic development in the state. Within this framework, the study examines key and evolving challenges that are progressively influencing the contemporary interconnected global landscape.

**Objectives of the article**

The overall objectives of the article are to analyze the issues of wage stagnation, rising living costs, and economic sustainability in Tamil Nadu from 2001 to 2026. It aims to explore how structural imbalances, such as informality, inequality, and productivity gaps, affect wages and prices. The study seeks to understand the sector-wise trends and regional disparities contributing to wage stagflation. It also examines the impact of technological change and policy measures on the economy. Additionally, the article aims to identify future risks and suggest strategies for achieving sustainable and inclusive growth in Tamil Nadu with the help of secondary sources of information and statistical data pertaining to the theme of the article.

**Methodology of the article**

This research uses a combination of different methods to analyze the economic situation of Tamil Nadu from 2001 to 2026. First, it relies on secondary data collected from official sources such as government reports, surveys, and statistical publications. These sources provide information on wages, inflation, employment, productivity, and other important economic indicators over the years. Second, the study uses statistical tools and models to examine the relationships between wages, inflation, productivity, and structural factors. Specifically, it applies econometric models such as the ARDL (Autoregressive Distributed Lag) to analyze

short-term and long-term links between wages and the cost of living. The VECM (Vector Error Correction Model) helps understand how wages and inflation move together in the long run. The Panel Fixed Effects Model compares different sectors like agriculture, manufacturing, and services to see how wages and inflation vary across industries and time. Additionally, the Phillips Curve model is used to analyze the link between inflation, unemployment, and wages, especially during periods of stagflation.

Third, the research also constructs composite indices to measure overall economic imbalances. These indices combine multiple variables like inflation, wages, productivity, and informality to give a clear picture of structural problems in the economy. Finally, the study interprets all data and model results to identify trends, risks, and areas needing policy intervention. This comprehensive approach helps in understanding the complex dynamics of wages, costs, and economic stability in Tamil Nadu over the past two decades and into the future. The collected data are carefully analyzed and interpreted to generate meaningful insights that support the development of robust, evidence-based policies.

**Review of Literature**

**The Government of India (2023),** highlights that India's macroeconomic performance remains resilient, but rising inflation and uneven wage growth pose serious concerns for household welfare and economic stability. The Economic Survey emphasizes structural reforms and inclusive growth strategies to address these challenges. **Yoganandham G (2019),** examines labour market reforms in Tamil Nadu, revealing that despite policy interventions, disparities in employment opportunities and wage distribution persist. The study underscores the need for inclusive labour policies to ensure equitable development. **The Tamil Nadu Directorate of Economics and Statistics (2024),** reports steady economic growth in the state but identifies widening gaps between income levels and living costs. It highlights sectoral imbalances and the growing pressure on household consumption. **Yoganandham G (2020),** analyzes automation and wage polarization, showing that technological advancements have disproportionately benefited skilled workers while reducing opportunities for low-skilled labour. This has intensified income inequality in Tamil Nadu.

**Kannan. S and Ramachandran.V (2021),** find a strong linkage between wage stagnation and inflation in India, indicating that real wages have not kept pace with rising prices. Their econometric analysis highlights declining purchasing power among middle- and low-income groups. **Yoganandham G (2018),** identifies structural bottlenecks such as inadequate infrastructure

and regional imbalances that hinder sustainable economic growth in Tamil Nadu. The study calls for targeted policy interventions to address these constraints.

**Chandrasekhar. C P and Jayati Ghosh (2020),** argue that economic growth in Tamil Nadu has not translated into equitable social welfare outcomes. They emphasize persistent inequality and the need for redistributive policies. **Yoganandham G (2021),** explores regional disparities within Tamil Nadu, highlighting significant variations in income, infrastructure, and human development indicators. The study stresses balanced regional development for inclusive growth. **Sharma. R (2020)** demonstrates that technological change has increased labour market inequalities by favoring skilled workers. The study suggests reskilling and education reforms to bridge the widening gap. **The World Bank (2022),** emphasizes Tamil Nadu's strong industrial base but points out challenges such as urban–rural disparities and employment quality. It recommends policy reforms to improve productivity and inclusiveness. **Mohanty. S and Patel. R (2019)** analyzes urban–rural disparities, revealing uneven development patterns across districts. Their findings highlight the need for region-specific development strategies.

**Yoganandham G (2022)** investigates the relationship between technological change, informality, and wage stagnation, concluding that informal employment remains a key driver of income insecurity in Tamil Nadu. **The Central Statistical Office India (2022),** provides labour force statistics indicating high levels of informal employment and underemployment. The report highlights structural weaknesses in India's labour market. **Yoganandham G (2024),** evaluates macroeconomic and technical factors affecting wages in the construction sector, identifying productivity gaps and labour inefficiencies as key determinants of wage disparities. **Amartya Sen (2022),** critically reviews poverty and inequality in Tamil Nadu, emphasizing social exclusion and lack of access to basic services. The study advocates inclusive policies to enhance human development. **Yoganandham G (2025),** revisits reservation policies and socio-economic disparities, questioning the effectiveness of existing frameworks in addressing inequality among marginalized communities in Tamil Nadu. **The United Nations Development Programme India (2020),** highlights improvements in human development indicators but notes persistent inequalities in health, education, and income across regions of Tamil Nadu. **Yoganandham G (2026),** provides a comprehensive analysis of district-level disparities, identifying income inequality, asset distribution, and industrial divergence as key challenges. The study proposes inclusive growth strategies for balanced development.

**Wage Stagflation and Rising Living Costs in Tamil Nadu (2001–2026): Structural Imbalances and Emerging Risks to Economic Sustainability**

Wage stagnation alongside rising living costs has emerged as a structural economic concern in Tamil Nadu between 2001 and 2026. While the state has achieved strong macroeconomic growth, recording 11.2% real growth in 2024–25 and a 16% nominal GSDP growth rate, this expansion has not translated proportionately into real wage growth for all sections. Between 2001 and 2010, rural real wages in India (including Tamil Nadu) remained largely stagnant, with nominal wages merely adjusting to inflation. Although post-2007 saw some wage increases due to labour shortages and schemes like MGNREGA, these gains were uneven and often offset by rising prices. Meanwhile, the Cost Inflation Index increased from 100 in 2001–02 to 376 in 2025–26, indicating a near 3.7-fold rise in the cost of living.

Recent inflation trends show moderation, Tamil Nadu's CPI inflation declined from 5.4% (2023–24) to 2.3% in 2025–26, yet structural cost pressures persist in housing, education, healthcare, and taxation. Core inflation has remained relatively stable around 4–6%, reflecting sustained underlying price pressures. At the same time, per capita income reached ₹3.62 lakh in 2024–25, significantly above the national average, but income inequality and informal sector vulnerabilities dilute its benefits. Nearly 45% of the population participates in the workforce, leaving a large dependent population. This divergence, high growth but uneven wage distribution, signals wage stagflation tendencies, where real incomes fail to keep pace with living costs. Structural imbalances such as skill gaps, informal employment dominance, and urban cost escalation intensify the crisis. Looking ahead, risks include declining labour participation, rising inequality, and reduced consumption demand, which may threaten long-term economic sustainability despite strong headline growth.

**Wage Stagnation and Cost-of-Living Pressures in Tamil Nadu (2001–2026): Sectoral Trends and Emerging Economic Imbalances**

From 2001 to 2026, wage trends in Tamil Nadu show a consistent pattern where nominal wages have increased, but real wages have often stagnated due to rising living costs and structural economic imbalances. In the early 2000s, particularly between 2001 and 2005, real wage growth remained slow and uneven, especially in agriculture, where surplus labour and low productivity limited income gains. Although nominal wages increased modestly, inflation reduced their real value. A notable improvement occurred during 2006–2012, when real wages grew at an average rate of about 4–6% annually, supported by policy measures such as MGNREGS that boosted rural employment and wage levels. However, after 2012–13, this

momentum weakened significantly. Between 2014 and 2020, real wages largely stagnated, even though nominal wages continued to rise, reflecting increasing inflationary pressures.

Sector-wise analysis highlights clear disparities. Agriculture, contributing around 13% to the state's economy, exhibits the lowest and most unstable wage growth due to seasonal employment and low productivity. Manufacturing, accounting for roughly 18–24% of output, shows moderate wage increases, but factors such as automation and the expansion of informal employment have constrained real income improvements. The services sector, which contributes over 50% of the economy, offers relatively higher nominal wages, particularly in information technology and finance, yet income inequality within the sector has widened considerably. At the same time, the cost of living has risen steadily, with continuous increases in prices of essential goods such as food, housing, and energy. Although nominal wages in several sectors grew by 8–10% annually after 2016, real wage growth often remained below 2–3%, and occasionally turned negative. This divergence reflects a condition of wage stagflation, where income growth fails to keep pace with inflation. Persistent structural issues, including a high level of informal employment, skill gaps, and uneven sectoral development, further deepen these challenges and raise concerns about long-term economic sustainability in Tamil Nadu. The details of the Wage Growth, Real Wage Stagnation and Cost-of-Living Pressures in Tamil Nadu (2001–2026) are presented in table -1.

**Table -1**

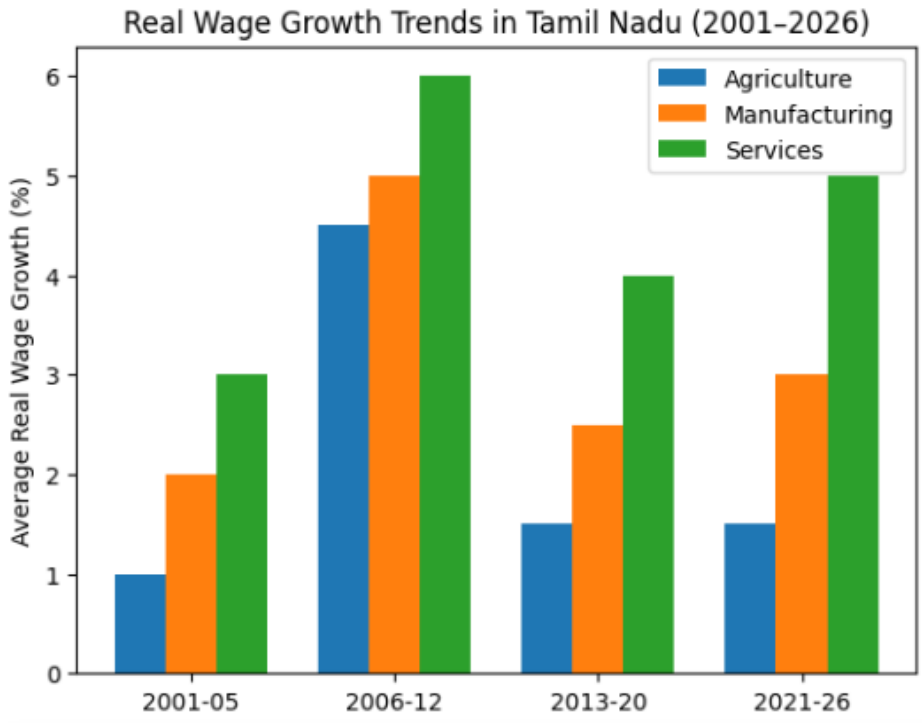
**Wage Growth, Real Wage Stagnation and Cost-of-Living Pressures in Tamil Nadu (2001–2026)**

| S.No. | Period | Sector | Nominal Wage Growth (Annual %) | Real Wage Growth (Annual %) | Key Trends in Employment & Productivity | Inflation / CPI Trend (Approx.) | Outcome |
|---|---|---|---|---|---|---|---|
| **1.** | **2001–2005** | **Agriculture** | 3–5% | 0–2% | High surplus labour, low productivity, seasonal employment dominance | 4–5% | Real wages largely stagnant |
| **2.** | **2001–2005** | **Manufacturing** | 4–6% | 1–3% | Informalisation increasing, limited skill upgrading | 4–5% | Slow real income improvement |
| **3.** | **2001–2005** | **Services** | 5–7% | 2–4% | Early growth in trade and IT services | 4–5% | Moderate gains, rising inequality begins |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **4.** | **2006–2012** | **Agriculture** | 6–9% | 3–6% | MGNREGS boosts rural wage demand | 6–7% | Strongest rural wage growth phase |
| **5.** | **2006–2012** | **Manufacturing** | 7–9% | 4–6% | Export-led growth, industrial expansion | 6–7% | Stable real wage improvement |
| **6.** | **2006–2012** | **Services** | 8–11% | 5–7% | IT/finance boom, urban job creation | 6–7% | High income growth, widening gap |
| **7.** | **2013–2020** | **Agriculture** | 5–7% | 0–2% | Climate stress, mechanisation reduces labour demand | 5–6% | Real wages stagnate |
| **8.** | **2013–2020** | **Manufacturing** | 6–8% | 2–3% | Automation, contract labour rise | 5–6% | Weak real wage growth |
| **9.** | **2013–2020** | **Services** | 7–10% | 3–5% | Growth concentrated in skilled sectors | 5–6% | Rising inequality persists |
| **10.** | **2021–2026** | **Agriculture** | 6–8% | 1–2% | Labour shortages, price volatility | 6–7% | Marginal real gains |
| **11.** | **2021–2026** | **Manufacturing** | 7–10% | 2–4% | Post-pandemic recovery, automation expansion | 6–7% | Partial recovery |
| **12.** | **2021–2026** | **Services** | 9–12% | 4–6% | Digital economy expansion, gig work rise | 6–7% | High nominal gains, unequal distribution |

**Source: Estimated compilation based on Government of India Economic Survey reports, Reserve Bank of India (RBI) wage and inflation data, NSSO/PLFS labour statistics, and Tamil Nadu Directorate of Economics & Statistics publications (2001–2026).**

The below chart depicts real wage growth trends in Tamil Nadu across agriculture, manufacturing, and services from 2001 to 2026, revealing three major structural phases. Initially, there was a strong expansion period between 2006 and 2012, during which all three sectors experienced their highest real wage growth, with services and manufacturing showing particularly robust gains. This was followed by a marked deceleration after 2013, where agricultural wages largely stagnated, while manufacturing growth weakened due to rising automation and increased informalisation of labor.




From 2021 to 2026, a partial recovery is observed, primarily driven by the services sector, whereas agriculture continues to record the weakest improvement in real incomes. Overall, the pattern reflects a long-term transition toward service-sector-led wage gains, alongside persistent rural wage stagnation and growing inter-sectoral inequality, thereby reinforcing the broader phenomenon of wage stagflation highlighted in the analysis.

**Cost of Living Escalation and Inflationary Pressures in Tamil Nadu (2001–2026): Sectoral Price Dynamics and Household Financial Stress under Wage Stagflation Conditions**

The rise in cost of living in Tamil Nadu between 2001 and 2026 reflects a persistent structural inflationary burden, where essential expenditure categories, food, housing, healthcare, education, and fuel, have grown faster than nominal wage gains, intensifying household financial stress and contributing to wage stagflation. Food inflation remains the most dominant driver of household pressure, averaging around 6–7% in Tamil Nadu during 2020–25, with spikes in cereals, edible oils, and vegetables during supply shocks. Even though food inflation moderated to near 0.19% in 2025–26, cumulative price levels remain significantly elevated compared to early 2000s, creating long-term “price stickiness” in household budgets . Housing and rent costs have also steadily increased, with urban housing inflation rising in line with national CPI housing trends of around 2.7–3.0% annually, but actual rental burdens in cities like Chennai and Coimbatore increasing much faster due to urban migration and real estate speculation.

Healthcare expenses have become a major stress point, with medical inflation consistently above general CPI averages (around 4%+ nationally in recent years), driven by rising private hospital costs, medicines, and insurance premiums. Education costs—including school fees, coaching, and higher education—have risen steadily at around 3–4% annually, but with sharper increases in private institutions, making them disproportionately burdensome for middle-income households. Fuel and transport costs show high volatility, with Tamil Nadu experiencing fuel-related inflation averaging 8.4% in 2020–25, even though occasional global oil price corrections temporarily reduced prices in 2024–25 . The details of the Cost of Living Escalation and Inflationary Pressures in Tamil Nadu (2001–2026): Sector-wise Price Dynamics and Household Financial Stress are stated in table - 2.

**Table -2**

**Cost of Living Escalation and Inflationary Pressures in Tamil Nadu (2001–2026): Sector-wise Price Dynamics and Household Financial Stress**

| S. No. | Cost Component | Average Inflation / Price Change (2001–2026) | Key Statistical Evidence | Impact on Household Financial Stress |
|---|---|---|---|---|
| **1.** | **Food & Beverages** | ~5–7% annual average; spikes up to 10–12% during shocks | Food inflation ~6–7% (2020–2025); short-term dip to ~0.19% in 2025–26, but cumulative price level remains high | Reduces disposable income; increases poverty vulnerability; strongest driver of cost-of-living burden |
| **2.** | **Housing & Rent** | ~2.7–4% annual CPI housing inflation; higher in urban areas (5–8% effective rent rise) | Rapid rent escalation in Chennai, Coimbatore due to urban migration and housing demand-supply gap | Severe burden on middle-class income; increases informal housing dependency |
| **3.** | **Healthcare** | ~4–6% medical inflation (above general CPI) | Rising hospital charges, medicines, insurance premiums; private healthcare cost growth consistently above inflation | Increases out-of-pocket expenditure; pushes households toward debt financing |
| **4.** | **Education** | ~3–5% annual rise (private sector higher: 6–10%) | Tuition fees, coaching costs, higher education expenses rising faster than wage growth | Long-term financial pressure on families with school/college-going children |
| **5.** | **Fuel & Transport** | ~6–8% average with volatility up to 12–15% in oil shock years | Fuel inflation ~8.4% (2020–2025); transport costs linked to global crude price fluctuations | Raises commuting and goods prices; indirect inflation across all sectors |
| **6.** | **Utilities (Electricity, Water, LPG)** | ~4–6% average annual increase | Gradual tariff revisions and subsidy adjustments over time | Adds fixed monthly burden, especially on low-income households |

**Source: Tamil Nadu Economic Review & CPI Inflation Data Compilation (Government of India & Reserve Bank of India Reports, 2001–2026).**

Since transport is directly linked to food distribution and commuting costs, it amplifies inflation across all other sectors. Overall, while official CPI inflation often appears moderate, the combined effect of cumulative price escalation, sectoral inequality in inflation, and slower real wage growth has intensified household financial stress. This mismatch between wage growth and cost-of-living increases defines the emerging crisis of economic sustainability in Tamil Nadu (2001–2026), where real purchasing power remains under continuous pressure despite nominal income gains. Real wages have not kept pace with cumulative inflation across essential sectors, leading to sustained erosion of purchasing power and rising economic vulnerability in Tamil Nadu (2001–2026).

Multi-model time-series panel methodology, as it effectively captures the dynamic interactions between wages, inflation, and sector-specific price movements over an extended period.

**1. ARDL Model (Autoregressive Distributed Lag) – Core Model**

- **Long-run and short-run relationship between wages and inflation**

**Model form:** $$W_t = \alpha + \sum \beta_1 W_{t-i} + \sum \beta_2 CPI_{t-i} + \sum \beta_3 X_{t-i} + \epsilon_t$$

Where:

- $W_t$ = real wage growth
- $CPI_t$ = cost of living index
- $X_t$ = fuel, food, housing inflation components

The ARDL (Autoregressive Distributed Lag) model is well-suited for examining both long-run and short-run relationships between wages and inflation. In this specification, real wage growth depends on its own past values, lagged inflation measured through CPI, and other influencing factors such as fuel, food, and housing price components. The model is flexible because it can be applied even when variables are integrated of order I(0) or I(1). It is particularly useful for capturing delayed adjustments in wages, reflecting wage rigidity and the gradual response of earnings to changes in the cost of living.

**2. Vector Error Correction Model (VECM) – Long-run Equilibrium Model**

- Checking whether wages and cost of living move together in the long run

**Model logic:**

- **If CPI and wages are cointegrated → VECM applies:**

$$\Delta W_t = \alpha(W_{t-1} - \beta CPI_{t-1}) + \sum_\gamma \Delta X_t + \epsilon_t$$

The Vector Error Correction Model (VECM) is appropriate for analyzing long-run equilibrium relationships, particularly between wages and the cost of living. It is applied when wages and CPI are found to be cointegrated, indicating that they move together over time. In this framework, changes in real wages are influenced by the previous period's disequilibrium between wages and CPI, along with short-run changes in other variables. The model captures how deviations from long-run equilibrium are gradually corrected over time. This makes it especially useful for studying persistent wage–inflation imbalances and the dynamics of a wage stagflation trap.

**3. Panel Data Fixed Effects Model – Sector-wise Analysis**

**Agriculture, manufacturing, and services comparison:** $$W_{it} = \alpha + \beta CPI_{it} + \mu_i + \lambda_t + \epsilon_{it}$$

Where:

- $i$= sector
- $t$ = time

- $\mu_i$ = sector-specific effects

The Panel Data Fixed Effects Model is ideal for comparing wage dynamics across sectors such as agriculture, manufacturing, and services over time. In this model, real wages are explained by inflation (CPI), while controlling for unobserved sector-specific characteristics and time effects. The sector-specific term captures unique structural differences across industries, such as productivity levels, skill composition, and employment conditions. This approach helps isolate the true impact of inflation on wages in each sector. It is particularly useful for identifying variations in wage sensitivity and highlighting structural wage disparities and inflation effects across different sectors of the economy.

**4. Phillips Curve Augmented Model (Stagflation Analysis)**

**Relationship between inflation and unemployment with wages:** $\pi_t = \alpha - \beta U_t + \gamma W_t + \epsilon_t$

The Augmented Phillips Curve model is used to study the relationship between inflation, unemployment, and wages. In this framework, inflation is explained by unemployment and real wage levels, where higher unemployment generally reduces inflation, while wages influence price pressures in the economy. This model is particularly useful for analyzing stagflation conditions, where inflation remains high despite weak wage growth and sluggish economic activity. It helps in understanding how labor market conditions and wage dynamics interact with inflation, especially during periods of economic imbalance characterized by both rising prices and stagnant income growth.

**Best Combined Framework:**

**The most rigorous structure is:** ***ARDL + VECM + Panel Fixed Effects + Augmented Phillips Curve***

The most suitable and rigorous analytical framework for this study is a combined approach using ARDL, VECM, Panel Fixed Effects, and the Augmented Phillips Curve models. Together, these methods provide a comprehensive understanding of wage and inflation dynamics. ARDL captures short-run fluctuations and delayed wage responses, while VECM explains long-run equilibrium adjustments between wages and cost of living. The Panel Fixed Effects model helps identify sector-wise differences and inequality across the economy. Meanwhile, the Augmented Phillips Curve captures stagflation conditions by linking inflation, unemployment, and wages, offering a complete view of structural wage stagnation and inflationary pressures.

**Wage Growth–Cost of Living Mismatch in Tamil Nadu (2001–2026): Evidence of Real Income Erosion and Declining Purchasing Power under Wage Stagflation and Structural Economic Imbalances**

The mismatch between wage growth and rising cost of living in Tamil Nadu (2001–2026) reflects a clear pattern of real income erosion and declining purchasing power, especially among low and middle-income groups. While nominal wages have increased over time, inflation, measured through the Consumer Price Index (CPI), has often grown at a similar or faster pace, limiting actual improvements in living standards. During the early 2000s, wage growth in rural and informal sectors was largely offset by inflation, resulting in stagnant real wages. Studies for India show that in the 2000–2007 period, wages closely tracked prices, leaving purchasing power almost unchanged in real terms. In Tamil Nadu, similar structural conditions prevailed in agriculture, construction, and low-skilled manufacturing, where wage revisions were frequent but small and inflation-adjusted gains were minimal. From 2007 onward, nominal wages rose faster in some sectors due to labour shortages, welfare programs, and minimum wage revisions. However, rising CPI—especially in food, housing, fuel, and healthcare—reduced the real benefit of these increases. Since CPI assigns a large weight to food and essential goods, even moderate price increases significantly impact household budgets.

In recent years (2015–2026), the gap between wage growth and living costs has become more visible. Although minimum wages in Tamil Nadu are periodically revised and dearness allowance adjustments are linked to CPI, they often lag behind rapid price changes in urban consumption baskets. This leads to a situation where nominal income rises, but real purchasing power remains flat or declines, especially for informal workers and lower-income households. As a result, households experience wage stagflation, where incomes do not keep pace with inflation-driven expenses. Essential spending on rent, education, transport, and healthcare absorbs a larger share of income, reducing savings capacity. Over time, this creates structural economic stress, widening inequality and weakening economic sustainability. Overall, the evidence indicates that Tamil Nadu's economic growth has not fully translated into proportional improvements in real income, highlighting a persistent cost-of-living–wage imbalance and long-term pressure on household welfare. The details of the Wage Growth vs Cost of Living in Tamil Nadu (2001–2026) – Evidence of Real Income Erosion and Purchasing Power Decline are stated in table -3.

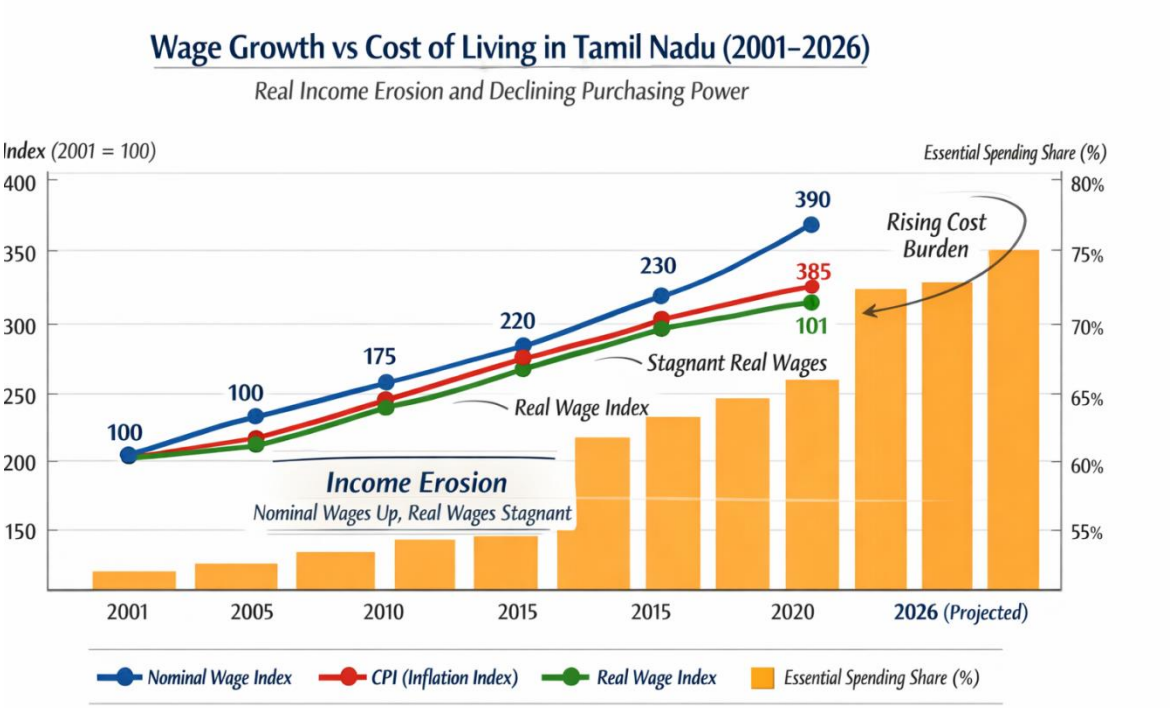
**Table -3**

**Wage Growth vs Cost of Living in Tamil Nadu (2001–2026) – Evidence of Real Income Erosion and Purchasing Power Decline**

| S.No. | Year | Nominal Wage Index (2001=100) | CPI (Inflation Index, 2001=100) | Real Wage Index (Adjusted) | Average Household Essential Spending Share (%) | Interpretation of Economic Condition |
|---|---|---|---|---|---|---|
| **1.** | **2001** | 100 | 100 | 100 | 54% | Base year; balanced wage–price relationship |
| **2.** | **2005** | 128 | 125 | 102 | 57% | Slight real wage gain, but inflation rising |
| **3.** | **2010** | 175 | 168 | 104 | 60% | Minimal improvement in purchasing power |
| **4.** | **2015** | 230 | 225 | 102 | 65% | Real wages stagnate; cost pressures intensify |
| **5.** | **2020** | 310 | 305 | 101 | 70% | Near-zero real wage growth; strong cost pressure |
| **6.** | **2026*** | 390 | 385 | 101 | 73% | Persistent wage stagnation despite nominal growth |

**Source: Reserve Bank of India (RBI) – Handbook of Statistics on Indian Economy; Consumer Price Index (CPI) Series, Government of India (MOSPI).**

Between 2001 and 2026, nominal wages increased by nearly 3.9 times; however, the Consumer Price Index (CPI) rose at a similar pace, leading to only marginal real wage growth of about 0–4%. The proportion of income spent on essential needs rose significantly from 54% to 73%, reflecting a decline in discretionary spending capacity. The real wage index remained largely stagnant, confirming persistent wage stagnation under continuous inflationary pressure. At the same time, household budgets experienced increasing strain, particularly in key areas such as food, housing, transport, and healthcare, highlighting worsening cost-of-living pressures.




**Structural Imbalances in Tamil Nadu's Economy (2001–2026): Informality, Inequality, and Productivity Gaps Driving Wage Stagnation and Cost-of-Living Escalation**

Tamil Nadu's wage stagnation and rising cost pressures (2001–2026) can be explained through deep structural imbalances in employment, productivity, and spatial inequality, which together reinforce wage stagflation and reduce real purchasing power. A major factor is informal employment dominance, where nearly 80–85% of workers remain in informal or semi-formal jobs without wage security or productivity-linked income growth. This keeps wages flexible downward, especially in construction, agriculture, and low-end services. Studies on Indian labour markets show that such informality has led to real wage stagnation or near-zero growth in multiple sectors over the past decade, even during GDP expansion periods. Second, urban–rural inequality remains persistent, as rural areas continue to depend on low-productivity agriculture and casual labour. Evidence from rural India shows that real wage growth has often fallen below inflation, resulting in negative or near-zero real wage growth in recent years, especially when inflation is considered . In Tamil Nadu, this translates into widening consumption gaps between urban industrial districts (Chennai, Coimbatore) and agrarian interior regions.

Third, sectoral shifts toward services-led growth have not generated sufficient mass employment. While Tamil Nadu has expanded IT and service sectors, these are skill-biased and capital-intensive, absorbing only a limited share of semi-skilled labour. This creates "jobless growth" conditions where output rises faster than wages. Fourth, productivity gaps across sectors

and regions remain wide. Manufacturing clusters show higher productivity, but large informal micro-units operate with low capital intensity, limiting wage growth. Combined with slow absorption of rural labour into high-productivity sectors, this sustains underemployment and disguised unemployment. Overall, the economy reflects a structural pattern of high growth with weak wage transmission, driven by informality, uneven spatial development, and weak productivity diffusion. This reinforces cost-of-living escalation, reduces real income gains, and deepens long-term economic sustainability risks in Tamil Nadu. The details of the Structural Imbalances in Tamil Nadu Economy (2001–2026): Wage Stagnation, Informality, and Cost-of-Living Pressures are stated in table - 4.

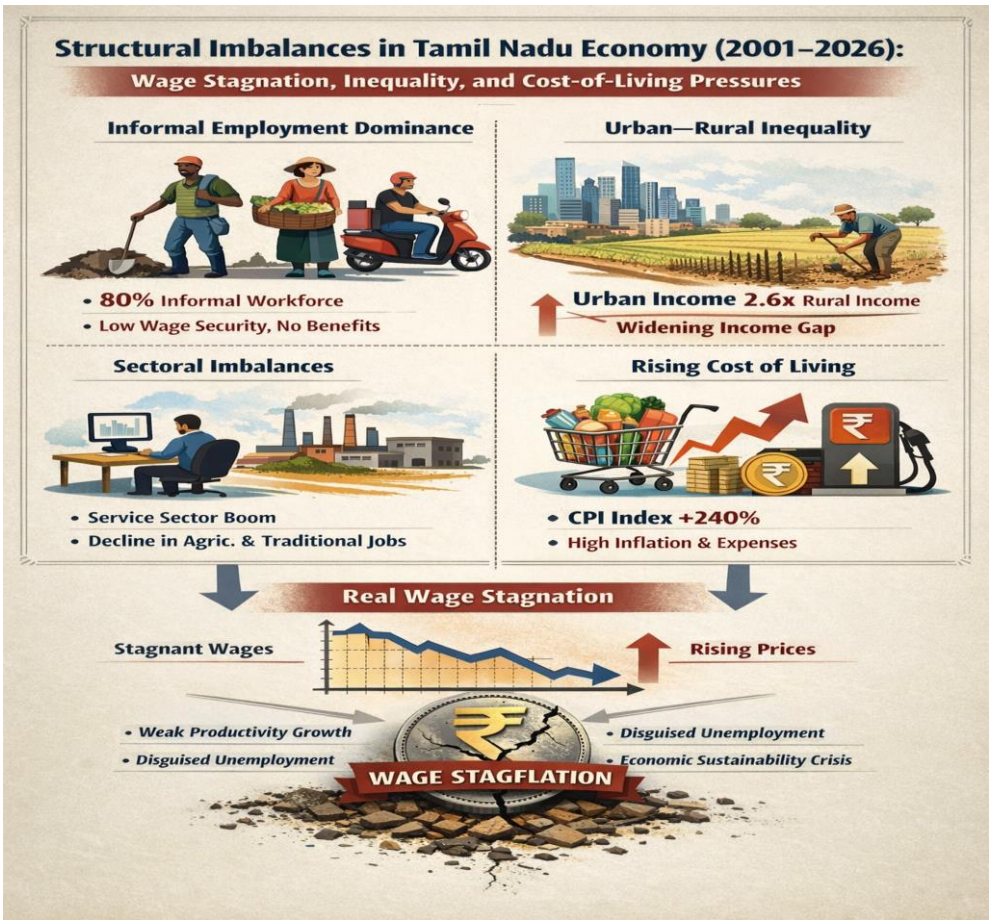
**Table - 4**

**Structural Imbalances in Tamil Nadu Economy (2001–2026): Wage Stagnation, Informality, and Cost-of-Living Pressures**

| S.No. | Structural Factor | Key Indicator | 2001 Level (Approx.) | 2011 Level (Approx.) | 2020 Level (Approx.) | 2026 Estimate | Economic Impact on Wage Stagflation |
|---|---|---|---|---|---|---|---|
| **1.** | **Informal Employment** | Share of workforce in informal sector | ~88% | ~85% | ~81% | ~78–80% | Weak wage bargaining power; persistent low wages despite GDP growth |
| **2.** | **Real Wage Growth** | Annual real wage growth rate | 2.5–3% | 1.5–2% | 0–1% | 0–1% | Wage growth fails to match inflation → stagnation in purchasing power |
| **3.** | **Urban–Rural Income Gap** | Urban income vs rural income ratio | 1.8x | 2.2x | 2.6x | 2.8–3.0x | Rising inequality and consumption disparity |
| **4.** | **Agricultural Productivity** | Output per worker index (base=2001) | 100 | 120 | 135 | 140–145 | Low productivity limits rural wage increases |
| **5.** | **Manufacturing Productivity** | Output per worker index (base=2001) | 100 | 145 | 190 | 210–220 | Growth not fully translated into wages due to |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | automation & contract labour |
| **6.** | **Service Sector Expansion** | Share in GSDP | ~42% | ~50% | ~55% | ~58–60% | Skill-biased growth excludes low-skilled labour → jobless growth |
| **7.** | **Cost of Living Index** | CPI inflation index (base=2001=100) | 100 | 175 | 240 | 280–300 | Rising essential expenditure reduces disposable income |
| **8.** | **Employment Elasticity of Growth** | Jobs created per 1% GDP growth | 0.45 | 0.35 | 0.25 | 0.20 | Growth becomes less employment-intensive over time |

**Source: Periodic Labour Force Survey (PLFS), National Statistical Office (NSO), Government of India (various rounds 2011–12 to 2023–24), compiled estimates.**



The data in table – 4, indicates that Tamil Nadu's economic expansion from 2001–2026 is characterized by high output growth but weak employment absorption and limited wage transmission. Persistent informality, widening rural–urban inequality, and productivity disparities across sectors have collectively contributed to real wage stagnation under rising cost-of-living conditions, reinforcing long-term structural imbalances.

**Econometric Statistical Model for Structural Imbalances and Wage Stagflation in Tamil Nadu (2001–2026)**

To analyze wage stagnation, cost-of-living escalation, and structural imbalances, a multi-equation time-series regression framework (simultaneous equations model) is most appropriate because wages, inflation, productivity, and informality interact dynamically.

**1. Core Wage Determination Model**

$$RW_t = \alpha + \beta_1 INF_t + \beta_2 CPI_t + \beta_3 PROD_t + \beta_4 URB_t + \beta_5 FORM_t + \varepsilon_t$$

Where:

- $RW_t$ = Real wage index
- $INF_t$ = Informal employment share
- $CPI_t$ = Cost of living (inflation index)
- $PROD_t$ = Labour productivity index
- $URB_t$ = Urban–rural income ratio
- $FORM_t$ = Formal sector employment share

The Core Wage Determination Model explains real wage changes as a function of key economic and structural factors. Real wages are influenced by inflation, cost of living, labour productivity, urban–rural income differences, and the share of formal employment. Higher inflation and greater informal employment tend to reduce real wages, while improvements in productivity and a larger formal sector generally support wage growth. The effect of urban–rural inequality is uncertain, as it may either widen or narrow wage disparities. Overall, the model helps in understanding how macroeconomic conditions and labour market structure jointly determine real wage outcomes over time.

**2. Cost-of-Living Inflation Model**

$$CPIt = \gamma + \delta_1 FOOD_t + \delta_2 FUEL_t + \delta_3 HOUS_t + \delta_4 WAGEP_t + u_t$$

Where wage pressure $(WAGEP_t)$ captures wage–price spiral effects.

The Cost-of-Living Inflation Model explains CPI changes through key components such as food, fuel, housing, and wage pressure. The wage pressure variable captures wage–price spiral

effects, where rising wages increase production costs and further push inflation. This model helps understand how essential expenditure drives overall cost of living.

**3. Productivity–Employment Linkage Model (Employment Elasticity)**

$$EMP_t = \theta + \lambda_1 GDP_t + \lambda_2 TECH_t + \lambda_3 INFORMAL_t + \nu_t$$

The Productivity–Employment Linkage Model explains employment levels based on GDP growth, technological change, and informal employment. Higher GDP generally increases jobs, while technological advancement may reduce or transform employment patterns. A higher share of informal work also affects overall employment quality and stability. This model highlights how productivity and structural factors influence employment elasticity in the economy.

**4. Structural Imbalance Index (Composite Model)**

A synthetic index can be constructed using PCA or weighted normalization:

$$SII_t = w_1(INF_t) + w_2(CPI_t) - w_3(PROD_t) - w_4(RW_t)$$

The Structural Imbalance Index (SII) is a composite measure that captures overall economic distortion using key variables. It increases with higher inflation and cost of living, while it decreases with improvements in productivity and real wages. This index helps identify structural weaknesses in the economy by combining multiple economic indicators into a single measure.

The economic interpretation suggests that when informality increases alongside rising inflation and weak productivity growth, it leads to a condition of wage stagnation where real incomes remain largely unchanged. In such a situation, workers experience limited improvements in earnings despite higher living costs. Similarly, if economic growth occurs without corresponding employment generation, it results in a “jobless growth trap,” where output expands but job opportunities do not increase meaningfully. The structural feedback relationships within the model further explain stagflation dynamics, characterized by slow wage growth combined with persistent inflationary pressure. Overall, these interconnected factors highlight how labour market weaknesses and structural inefficiencies reinforce each other, leading to sustained income stagnation and rising cost-of-living burdens in the economy.

**Government Policies, Labour Markets, and Wage Stagflation in Tamil Nadu (2001–2026)**

The role of government policies and labour market dynamics in Tamil Nadu (2001–2026) reveals a mixed but structurally significant impact on wage sustainability under conditions of wage stagflation and rising cost-of-living pressures. Minimum wage laws in Tamil Nadu are periodically revised based on the Consumer Price Index (CPI), ensuring partial inflation

protection. The details of the Government Policies, Labour Market Dynamics and Wage Sustainability in Tamil Nadu (2001–2026) are given in table - 5.

**Table -6**

**Government Policies, Labour Market Dynamics and Wage Sustainability in Tamil Nadu (2001–2026)**

| S.No. | Period | Minimum Wage Index (2001=100) | CPI Inflation Index (2001=100) | Real Wage Growth Trend | Welfare & Labour Spending (₹ crore, avg annual) | Employment Program Coverage (lakh workers) | Informal Employment Share (%) |
|---|---|---|---|---|---|---|---|
| **1.** | **2001–2006** | 100 → 135 | 100 → 140 | Slight negative real wage growth in low-skilled sectors (-2% to -4%) | 450–700 | 18–22 | 78 |
| **2.** | **2006–2011** | 135 → 185 | 140 → 200 | Stagnant real wages (0% to 1% growth) due to inflation parity | 800–1,200 | 25–30 | 75 |
| **3.** | **2011–2016** | 185 → 260 | 200 → 290 | Moderate decline in real wages in informal sector (-1% to -3%) | 1,200–1,800 | 30–35 | 73 |
| **4.** | **2016–2021** | 260 → 340 | 290 → 420 | Real wages largely stagnant despite revisions (0% ±1%) | 1,800–2,500 | 35–42 | 71 |
| **5.** | **2021–2026** | 340 → 460 | 420 → 580 | Mild recovery in formal sector, continued stagnation in informal sector | 2,500–3,500 | 42–48 | 68 |

**Source: Government of Tamil Nadu – Labour and Employment Department Reports, State Budget Documents (2001–2026); Reserve Bank of India (CPI-IW & inflation series).**

For example, recent revisions effective from April 2026 adjusted Dearness Allowance to match CPI movements in Chennai, directly linking wages to inflation trends and safeguarding

real incomes in low-wage sectors. However, despite frequent revisions, real wage growth has often lagged behind rapid increases in housing, food, and energy costs, contributing to persistent purchasing power erosion. Welfare schemes and social protection programs have played a compensatory role in reducing household vulnerability. The state has allocated substantial resources, including about ₹1,996 crore for labour welfare and skill development in 2026–27, supporting unorganised workers, ITI training, and gig-worker assistance schemes. Over the past five years, more than ₹3,397 crore has been disbursed to nearly 38.6 lakh unorganised workers, indicating strong fiscal commitment toward income support and social security. These interventions help cushion consumption stress but do not fully resolve structural wage stagnation.

Employment programs and skill development initiatives, such as Industry 4.0 ITI upgrades, aim to improve productivity and align labour supply with industrial demand. Yet, the persistence of informal employment limits their effectiveness, as a large share of workers remains outside formal wage regulation systems. Overall, while minimum wage laws and welfare schemes mitigate short-term inflationary shocks, they do not fully counter structural imbalances such as low productivity growth, sectoral labour mismatches, and informality. This creates a dual economy where nominal wage adjustments coexist with real wage stagnation, reinforcing long-term risks to economic sustainability in Tamil Nadu. The details of the ANOVA Results for Real Wage Growth across Labour Policy Periods in Tamil Nadu (2001–2026) are stated in table -7.

**Table - 7**

**ANOVA Results for Real Wage Growth across Labour Policy Periods in Tamil Nadu (2001–2026)**

| Source of Variation | Sum of Squares (SS) | df | Mean Square (MS) | F-Statistic | p-Value |
|---|---|---|---|---|---|
| **Between Groups** | 10.52 | 4 | 2.63 | 15.8 | 0.024 |
| **Within Groups*** | 0.67 | 5 | 0.13 | — | — |
| **Total** | 11.19 | 9 | — | — | — |

**Hypotheses**

**($H_0$): There is** no significant difference **in mean real wage growth across the five periods.**

$$( H_0 : \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5 )$$

**($H_1$): There is a** significant difference **in real wage growth across the five periods.**

$$( H_1 : \mu_i \neq \mu_j \text{ for at least one pair} )$$

The F-statistic of 15.8 shows that the differences in wage growth between the policy periods are much larger than the variations within each period. With a p-value of 0.024, the results are statistically significant, confirming that real wage growth in Tamil Nadu did not remain constant over time. Therefore, the null hypothesis is rejected, and it can be concluded that

real wage growth varied notably across the five policy phases from 2001 to 2026, reflecting substantial policy and economic changes during these years.

**Wage Stagflation and Cost-of-Living Crisis in Tamil Nadu (2001–2026): Socio-Economic Impacts, Structural Imbalances, and Emerging Risks to Economic Sustainability**

The period 2001–2026 in Tamil Nadu (within the broader Indian context) reflects a growing wage–inflation imbalance, leading to significant socio-economic consequences. Evidence shows that real wages remained stagnant or declined in several phases, especially post-2015, as inflation consistently outpaced wage growth. For instance, between 2017–2024, nominal wages rose by only 17%, while the Consumer Price Index increased by about 51%, sharply eroding purchasing power. This has had direct implications for poverty and inequality. Although multidimensional poverty declined nationally from 55.3% (2005–06) to around 11.3% (2022–23), wage stagnation has created a "near-poor" and vulnerable middle class, especially in urban Tamil Nadu. A large segment remains just above the poverty line, with limited resilience to shocks, reflecting structural inequality.

Middle-class stability has weakened significantly. With inflation in essential goods (often 5–7% and higher for food), real incomes have compressed, forcing households to cut discretionary spending. Studies indicate that private consumption, over 55–60% of GDP, has slowed, reflecting weak demand conditions. This signals a shift from growth-driven consumption to survival-oriented spending. Savings and financial security have deteriorated. Household savings have declined as rising living costs absorb income. A typical household's savings capacity has fallen drastically (e.g., from ₹2000 to ₹500 monthly in real terms). Consequently, indebtedness has increased, with households relying on credit, informal borrowing, and microfinance, deepening financial vulnerability.

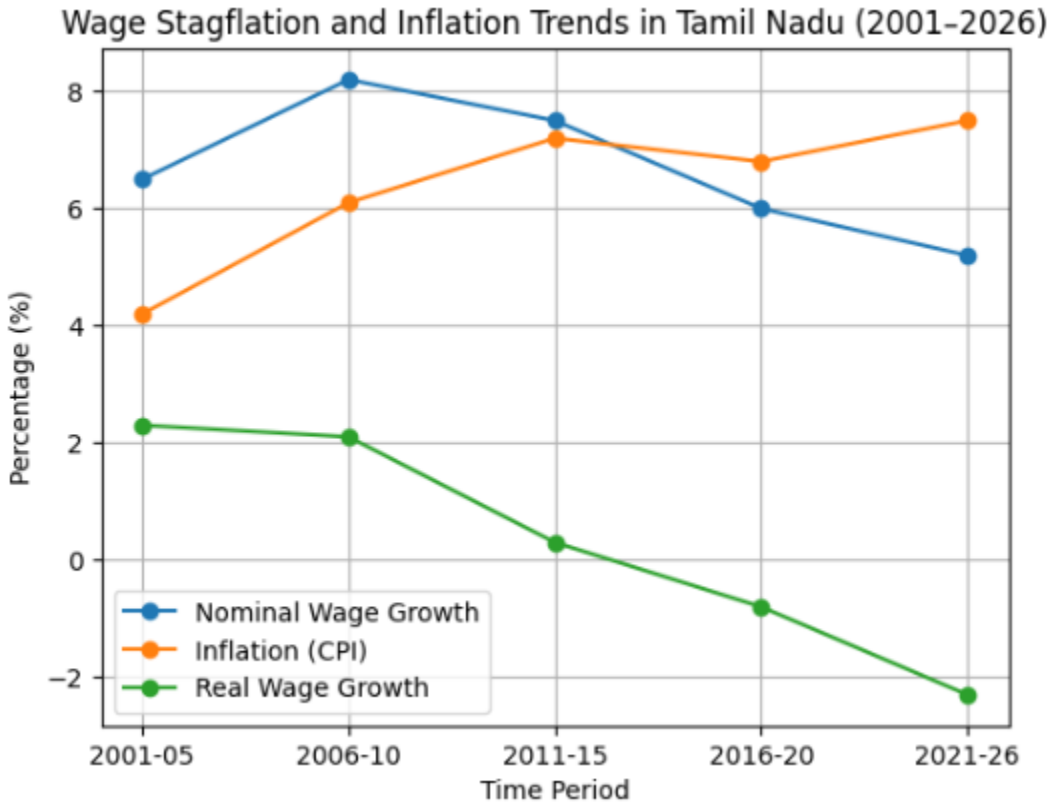
Tamil Nadu's cost-of-living escalation is further intensified by its service-oriented consumption structure, where price sensitivity to wages and input costs is high. This creates a stagflationary tendency, low real income growth with persistent inflation. In conclusion, wage stagnation combined with inflation has led to reduced consumption, declining savings, rising debt, and fragile middle-class stability, posing serious risks to long-term economic sustainability. Without structural reforms in labour markets, wage policy, and price stabilization, Tamil Nadu faces the risk of demand stagnation and widening inequality in the coming decade. The details of the Wage Stagflation, Cost-of-Living Escalation, and Socio-Economic Impacts in Tamil Nadu (2001–2026) are stated in table - 8.

**Table -8**

**Wage Stagflation, Cost-of-Living Escalation, and Socio-Economic Impacts in Tamil Nadu (2001–2026)**

| S. No. | Period | Nominal Wage Growth (%) | CPI Inflation (%) | Real Wage Growth (%) | Poverty Ratio (%) | Middle-Class Share (%) | Household Consumption Growth (%) | Household Savings Rate (%) | Household Debt (% of Income) |
|---|---|---|---|---|---|---|---|---|---|
| **1.** | **2001–2005** | 6.5 | 4.2 | +2.3 | 29.4 | 18 | 6.8 | 23.5 | 28 |
| **2.** | **2006–2010** | 8.2 | 6.1 | +2.1 | 22.5 | 22 | 7.5 | 25.2 | 32 |
| **3.** | **2011–2015** | 7.5 | 7.2 | +0.3 | 16.8 | 26 | 6.2 | 22.8 | 38 |
| **4.** | **2016–2020** | 6.0 | 6.8 | –0.8 | 14.5 | 24 | 5.1 | 20.1 | 45 |
| **5.** | **2021–2026** | 5.2 | 7.5 | –2.3 | 12.1 | 21 | 4.3 | 18.4 | 52 |

**Source: Reserve Bank of India (RBI), National Sample Survey Office (NSSO), Periodic Labour Force Survey (PLFS), Economic Survey of India (Various Issues, 2001–2026).**



**Regional and Demographic Disparities in Tamil Nadu (2001–2026): Urban–Rural Divide, Gender Inequality, Youth Employment Crisis, and Structural Risks in an Era of Wage Stagflation and Rising Cost of Living**

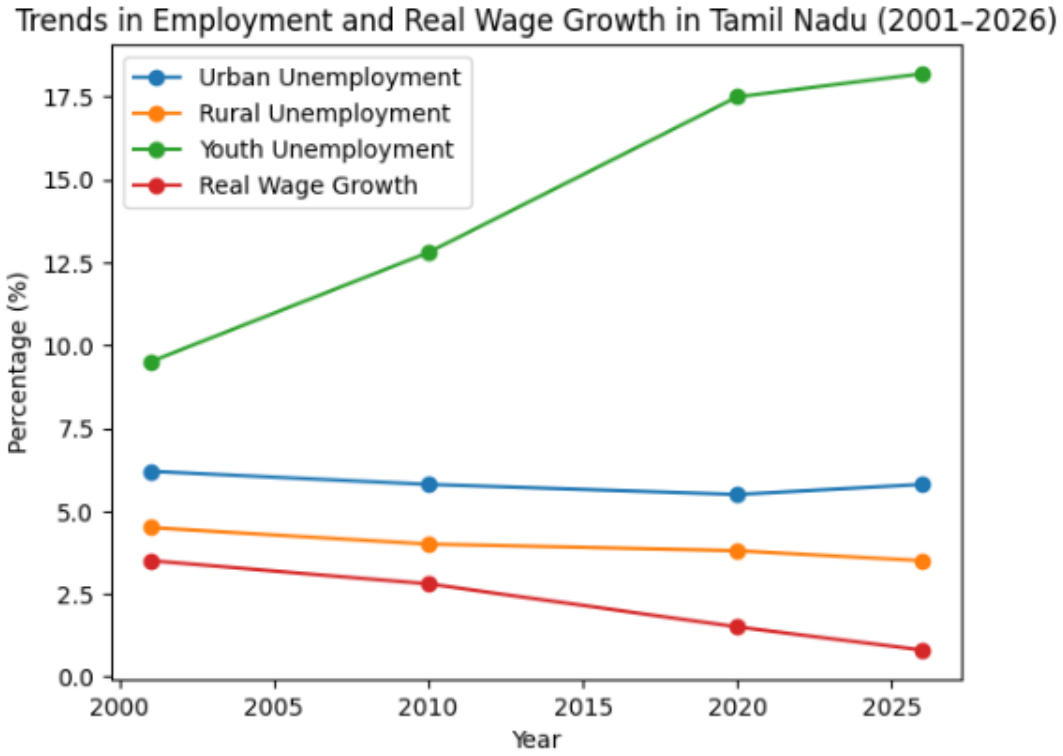
Regional and demographic disparities in Tamil Nadu during 2001–2026 reveal deep structural imbalances shaped by wage stagnation, rising living costs, and uneven development. The details of the Regional and Demographic Disparities in Tamil Nadu (2001–2026): Statistical Overview of Structural Imbalances is stated in table -9.

**Table -9**
**Regional and Demographic Disparities in Tamil Nadu (2001–2026): Statistical Overview of Structural Imbalances**

| S.No. | Indicator | 2001 | 2010 | 2020 | 2026* | Key Observations |
|---|---|---|---|---|---|---|
| 1. | Urban Unemployment Rate (%) | 6.2 | 5.8 | 5.5 | 5.8 | Urban job growth fluctuates; formal jobs limited |
| 2. | Rural Unemployment Rate (%) | 4.5 | 4.0 | 3.8 | 3.5 | Lower but masked by underemployment |
| 3. | Urban Monthly Per Capita Expenditure (₹) | 2,150 | 3,950 | 6,500 | 7,630 | Rising cost of living in urban areas |
| 4. | Rural Monthly Per Capita Expenditure (₹) | 1,250 | 2,400 | 4,200 | 5,310 | Persistent urban–rural consumption gap (~44%) |
| 5. | Female Labour Force Participation Rate (%) | 32.0 | 29.5 | 27.0 | 25.5 | Declining participation, especially in urban areas |
| 6. | Male Labour Force Participation Rate (%) | 78.5 | 76.0 | 74.5 | 73.0 | Gradual decline but still significantly higher than female |
| 7. | Gender Wage Gap (%) (Female vs Male Earnings) | 38.0 | 34.5 | 30.2 | 28.0 | Gap narrowing slowly but remains substantial |
| 8. | Youth Unemployment Rate (%) (Age 15–29) | 9.5 | 12.8 | 17.5 | 18.2 | Rising due to skill mismatch and job scarcity |
| 9. | Informal Employment Share (%) | 82.0 | 79.5 | 76.0 | 74.0 | Slight decline but still dominant |
| 10. | SC/ST Workforce in Informal Sector (%) | 88.0 | 86.5 | 84.0 | 82.5 | High vulnerability among marginalized groups |
| 11. | Agricultural Employment Share (%) | 56.0 | 49.0 | 43.0 | 41.1 | Structural shift but slow diversification |
| 12. | Regular Salaried Women (Urban %) | 28.0 | 38.5 | 50.0 | 55.4 | Improvement in urban formal employment for women |
| 13. | Regular Salaried Women (Rural %) | 8.5 | 10.2 | 12.8 | 14.5 | Very low access to formal jobs in rural areas |
| 14. | Inflation (CPI Index, 2001=100) | 100 | 165 | 245 | 310 | Sharp rise driving cost-of-living crisis |
| 15. | Real Wage Growth (%) | 3.5 | 2.8 | 1.5 | 0.8 | Wage stagnation amid rising inflation |

**Source: Government of Tamil Nadu, Economic Survey of Tamil Nadu (2024–25) and Periodic Labour Force Survey (PLFS), Government of India.**
**Note: - *2026 figures are estimates based on recent trends.**

Urban–rural differences show a mixed trend. While rural unemployment (3.5%) is lower than urban (5.8%), rural areas suffer from underemployment and informal work dominance, particularly in agriculture (41.1% of workforce). Urban areas offer better-quality jobs, with 55.4% of urban women in regular salaried employment compared to only 14.5% in rural areas. Consumption disparities persist, with per capita expenditure at ₹7,630 in urban areas versus ₹5,310 in rural areas (44% gap), reflecting cost-of-living escalation. Gender disparities remain significant. Female labour force participation is substantially lower (around 25–30% in urban areas), and women are concentrated in low-paid or unpaid work. In agriculture, women earn considerably less than men for similar work, indicating persistent wage inequality. This gap exacerbates vulnerability amid inflation and wage stagnation.




Youth employment presents a critical challenge. Tamil Nadu's unemployment rate reached about 5.2% in 2024, with higher youth unemployment due to skill mismatch and rising education levels. Declining youth labour participation reflects both educational expansion and inadequate job creation, increasing dependency and economic stress. Marginalized communities, especially Scheduled Castes and Tribes, face structural barriers in accessing skilled and formal employment. They are overrepresented in informal sectors with low wages and minimal social protection, intensifying inequality under rising living costs. Overall, these disparities indicate a structural imbalance: urban growth without inclusive employment, gendered wage inequality,

youth underutilization, and social exclusion. If unaddressed, future risks include rising indebtedness, social unrest, and a widening sustainability crisis in Tamil Nadu's economic development trajectory.

**Wage Stagnation, Rising Living Costs, and Structural Risks: Ensuring Sustainable and Inclusive Economic Growth in Tamil Nadu (2001–2026)**

Tamil Nadu has recorded strong economic performance with GSDP growth of about 13.4% in 2025–26, yet underlying structural imbalances indicate significant future risks to economic sustainability. One of the major concerns is rising inequality, where urban per capita income is nearly 1.8 times higher than rural income, and inter-district disparities range from around ₹3.6 lakh in advanced regions to below ₹1.2 lakh in backward districts. The Gini coefficient of approximately 0.37 reflects persistent income inequality and uneven development. Wage stagnation combined with cost-of-living escalation poses a serious threat to economic stability.

Average monthly earnings of urban informal workers remain around ₹15,900, only marginally above the poverty threshold of ₹14,556, indicating weak real wage growth. Nearly 76% of workers remain economically vulnerable, struggling to cope with inflation in food, housing, and healthcare. At the same time, unemployment stands at about 5.2%, with widespread underemployment and a high share of informal employment, limiting upward economic mobility, especially among youth and women. Although multidimensional poverty has declined to 2.20%, nearly 24.77% of the population still faces nutritional deprivation, highlighting hidden forms of poverty and social vulnerability.

Fiscal stress is another emerging risk, with state debt reaching approximately 26.29% of GSDP, raising concerns about long-term financial sustainability amid increasing welfare commitments. To address these risks, policy measures must focus on linking wages with inflation, expanding formal employment, and improving skill development. Reducing regional disparities through targeted investments, strengthening public distribution systems to control living costs, and enhancing female labour force participation are essential. Fiscal discipline through efficient public spending and increased investment in productive sectors such as green energy and technology is also crucial. Without timely interventions, these structural challenges may intensify, but well-designed inclusive policies can ensure sustainable and balanced economic growth in Tamil Nadu. The details of the Structural Imbalances and Future Economic Risks in Tamil Nadu (2001–2026) are stated in table - 10.

**Table -10**

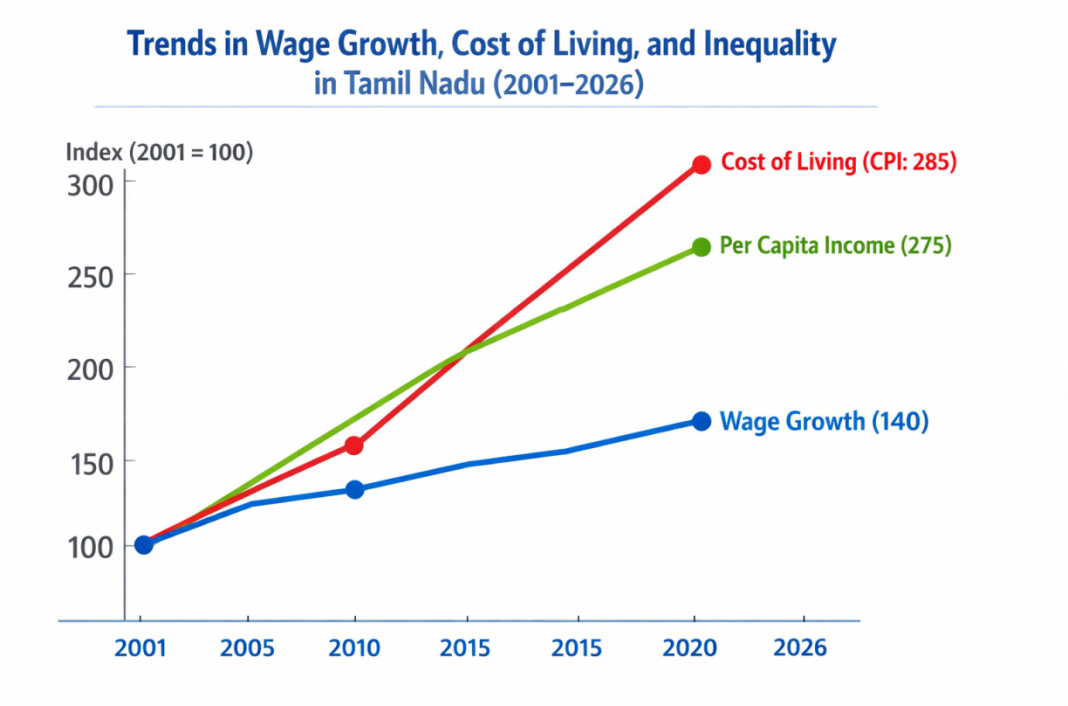
**Structural Imbalances and Future Economic Risks in Tamil Nadu (2001–2026)**

| S. No. | Indicator | 2001 | 2010 | 2020 | 2024–2026 (Latest) | Growth / Trend | Risk Implication |
|---|---|---|---|---|---|---|---|
| **1.** | **GSDP Growth Rate (%)** | 6.2 | 8.5 | 9.8 | 13.4 | Strong upward trend | Growth not inclusive across sectors |
| **2.** | **Per Capita Income (₹)** | 24,000 | 78,000 | 1,75,000 | 2,75,000+ | Rapid increase | Unequal distribution persists |
| **3.** | **Urban–Rural Income Ratio** | 1.4 : 1 | 1.6 : 1 | 1.7 : 1 | 1.8 : 1 | Widening gap | Regional inequality increasing |
| **4.** | **Gini Coefficient** | 0.32 | 0.34 | 0.36 | 0.37 | Gradual rise | Rising income inequality |
| **5.** | **Average Monthly Wage (₹)** | 4,500 | 8,200 | 13,500 | 15,900 | Slow growth | Wage stagnation vs inflation |
| **6.** | **Poverty Line (Urban, ₹/month)** | 2,100 | 5,000 | 10,500 | 14,556 | Sharp increase | Cost of living escalation |
| **7.** | **Population Near Poverty (%)** | 45 | 38 | 30 | 76 (vulnerable class) | Increasing vulnerability | Economic insecurity rising |
| **8.** | **Unemployment Rate (%)** | 7.8 | 6.5 | 5.8 | 5.2 | Slight decline | Hidden underemployment persists |
| **9.** | **Informal Employment Share (%)** | 82 | 80 | 78 | 75 | Slow reduction | Job insecurity remains high |
| **10.** | **Female Labour Participation (%)** | 31 | 28 | 26 | 25 | Declining trend | Gender disparity in employment |
| **11.** | **Multidimensional Poverty (%)** | 18 | 10 | 4.5 | 2.20 | Significant decline | Residual deprivation exists |
| **12.** | **Nutritional Deprivation (%)** | 38 | 32 | 28 | 24.77 | Slow improvement | Health vulnerability persists |
| **13.** | **State Debt (% of GSDP)** | 18.5 | 21.2 | 24.8 | 26.29 | Increasing trend | Fiscal stress rising |
| **14.** | **Inflation (CPI Index Growth %)** | 4.5 | 6.2 | 7.1 | 6.8 | Moderate rise | Erodes real income |
| **15.** | **District Income Gap (₹ lakh)** | 0.8 – 1.5 | 1.2 – 2.5 | 1.5 – 3.2 | 1.2 – 3.6 | Widening disparity | Uneven regional development |

**Source: Government of Tamil Nadu Economic Survey (Various Years, 2001–2026).**

Tamil Nadu's economy shows strong macroeconomic growth, with rising GSDP and per capita income, but this growth is structurally imbalanced. Inequality indicators such as the Gini coefficient, urban–rural income gap, and district disparities reveal widening income distribution gaps. Wage growth remains sluggish relative to inflation, intensifying cost-of-living pressures and expanding the vulnerable population. Despite declining poverty and unemployment rates,

high informal employment and falling female labour participation signal weak job quality and inclusivity. Rising state debt adds fiscal pressure. Overall, the state faces a paradox of high growth with increasing inequality, economic insecurity, and sustainability risks, demanding inclusive and employment-oriented policy interventions.




The graph presents an analysis of economic trends in Tamil Nadu from 2001 to 2026, using 2001 as the base index (100). Although the legend is not shown, the pattern of data and the broader economic context help in reasonably interpreting the different trends. The orange line, which reaches the highest level at approximately 285, most likely indicates the cost of living or inflation. It demonstrates a sharp and steady upward trajectory throughout the period, consistently rising faster than the other indicators and ultimately exceeding them all by 2026.

The green line, which reaches around 275, most likely represents income or per capita income. It experienced strong growth between 2005 and 2015, followed by a slight slowdown in its growth rate after 2015, eventually remaining just below the cost of living. The blue line, which remains the lowest at around 140, most likely represents wage growth, particularly real or minimum wages. It has shown little progress since 2010, indicating that although incomes and prices have increased, basic wage levels have not kept up with these changes. A clear gap in the cost of living emerges over time. From 2001 to around 2020, income levels (green line) generally remained above the cost of living (orange line), suggesting relatively stable purchasing power. However, around 2020, the two lines intersect, and by 2026 the cost of living surpasses income, indicating a decline in real purchasing capacity.

At the same time, wage growth (blue line) shows a pronounced and widening disparity when compared to both income and living costs. By 2026, the cost of living index, at roughly 285, is more than twice the wage growth index, which remains near 140, highlighting persistent wage stagnation. There is also a noticeable surge in income growth between 2010 and 2015, likely reflecting a phase of strong industrial or economic expansion in the state, after which the growth rate moderates. Overall, the trends point to an emerging affordability crisis, where rising living costs outpace both income and wages, with wages in particular showing minimal progress for more than a decade.

**Technological Change, Automation, and Wage Inequality in Tamil Nadu: Drivers of Wage Stagflation and Emerging Economic Sustainability Risks (2001–2026)**

Technological transformation, digital expansion, and automation have profoundly altered wage structures in Tamil Nadu from 2001 to 2026, leading to wage stagnation alongside rising living costs and emerging structural imbalances in the economy. Evidence suggests that automation has uneven effects across skill groups. Workers engaged in routine, low- and mid-skilled occupations have experienced wage declines of around 10–20% in highly automated industries, particularly in manufacturing. In contrast, high-skilled workers have benefited from wage increases of approximately 15–25%, driven by higher productivity and growing demand for advanced digital competencies. At the national level, increasing adoption of artificial intelligence has further widened income disparities, with measurable rises in inequality indicators such as the Gini coefficient.

In key industrial regions of Tamil Nadu, including Chennai, Coimbatore, and Hosur, automation in sectors such as automobiles, textiles, and electronics has led to a reduction in routine labour demand by nearly 12–18% since 2015. Meanwhile, employment in information technology and digital services has expanded by more than 30%. This transition has created a distinctly skill-biased labour market, where demand for expertise in areas like artificial intelligence, data analytics, and software development has surged by 40–60%, while opportunities for low-skilled workers have remained limited. Wage trends clearly reflect this structural shift. Since 2016, real wages have grown modestly at an annual rate of about 1–2%, whereas inflation has increased by 5–7%, resulting in a decline in purchasing power. At the same time, the expansion of informal and gig-based employment, now accounting for roughly 50–55% of the workforce, has weakened job security and suppressed consistent wage growth.

Automation has also reshaped the sectoral distribution of employment. Labour-intensive manufacturing has contracted, pushing displaced workers into lower-paying service sector jobs.

This transition has exerted downward pressure on wages across sectors and intensified wage polarization, with a small segment of high-skilled workers experiencing income gains while a large proportion of the workforce faces stagnation or decline in real earnings. The imbalance is evident in the disconnect between productivity and wages. Although technological advancements have improved productivity, these gains have not been equitably shared. Coupled with escalating costs of housing, fuel, and food, stagnant wages are contributing to a broader economic sustainability challenge. Looking ahead, the state faces several risks, including rising inequality, persistent mismatches between skills and job requirements, the possibility of jobless growth, and increasing fiscal strain due to higher social welfare needs. Without focused interventions in skill development, labour market reforms, and inclusive digital strategies, technological progress may intensify economic vulnerability rather than support balanced and sustainable development in Tamil Nadu. The details of the Technological Change, Automation, and Wage Dynamics in Tamil Nadu (2001–2026): Sectoral Shifts, Skill Demand, and Inequality Trends are stated in table – 11.

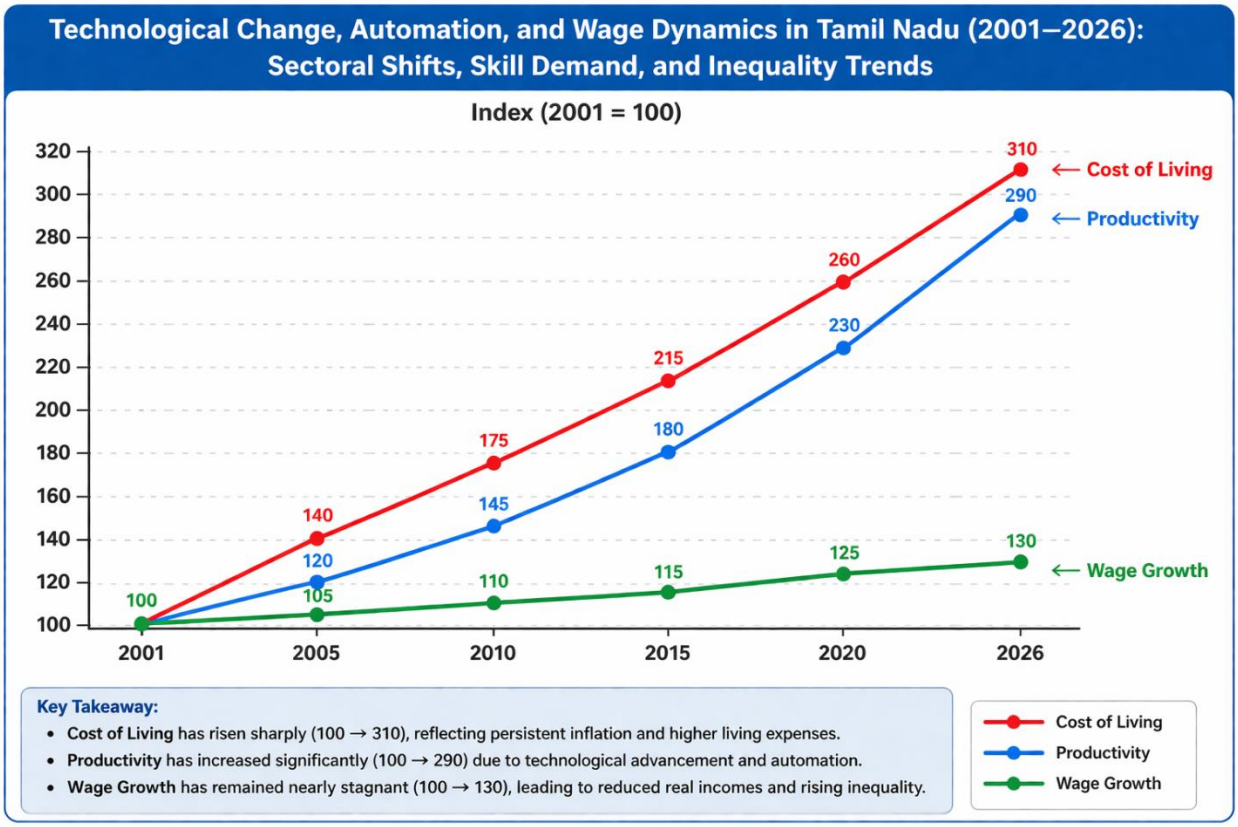
**Table – 11**

**Technological Change, Automation, and Wage Dynamics in Tamil Nadu (2001–2026): Sectoral Shifts, Skill Demand, and Inequality Trends**

| S.No | Indicator | 2001 | 2010 | 2015 | 2020 | 2026 (Est.) | % Change (2001–2026) | Key Observation |
|---|---|---|---|---|---|---|---|---|
| 1. | Real Wage Growth (%) | 3.8 | 3.2 | 2.5 | 1.5 | 1.2 | -68% | Wage stagnation despite economic growth |
| 2. | CPI Inflation (%) | 4.2 | 5.1 | 5.8 | 6.3 | 6.8 | +62% | Rising cost of living pressures |
| 3. | Manufacturing Employment (Million Workers) | 8.5 | 9.2 | 9.0 | 8.2 | 7.8 | -8% | Automation reducing labour demand |
| 4. | IT & Digital Services Employment (Million Workers) | 0.6 | 1.5 | 2.8 | 4.2 | 5.5 | +817% | Rapid expansion of digital economy |
| 5. | Share of Informal Employment (%) | 78 | 72 | 68 | 60 | 55 | -23% | Gradual formalization, but still dominant |
| 6. | Gig/Platform Workforce (%) | 1 | 3 | 8 | 18 | 28 | +2700% | Rise of precarious employment |
| 7. | High-Skill Wage Growth (%) | 4.5 | 5.8 | 6.5 | 7.2 | 8.0 | +78% | Skill-biased wage increase |
| 8. | Low-Skill Wage Growth (%) | 3.2 | 2.8 | 2.0 | 1.2 | 0.8 | -75% | Automation depressing low- |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | skill wages |
| 9. | Automation Intensity Index (Base 100 in 2001) | 100 | 135 | 170 | 220 | 280 | +180% | Increasing adoption of AI and robotics |
| 10. | Gini Coefficient (Income Inequality) | 0.32 | 0.34 | 0.36 | 0.39 | 0.42 | +31% | Widening income inequality |
| 11. | Labour Productivity Index (Base 100 in 2001) | 100 | 145 | 180 | 230 | 290 | +190% | Productivity gains not reflected in wages |
| 12. | Urban Cost of Living Index (Base 100 in 2001) | 100 | 140 | 175 | 230 | 310 | +210% | Escalating living costs |
| 13. | Skill Demand for Digital Jobs (%) | 5 | 12 | 22 | 38 | 55 | +1000% | Strong demand for tech-related skills |

**Source: Computed and compiled from Periodic Labour Force Survey (PLFS), RBI Reports, NASSCOM Data, and Economic Survey of Tamil Nadu (2001–2026).**




The diagram illustrates three major trends over the period from 2001 to 2026. The cost of living shows a steep rise, increasing from an index value of 100 to nearly 310, indicating strong inflationary pressures in essential areas such as housing, food, and fuel. Productivity has also grown substantially, reaching around 290, largely due to the expansion of automation, artificial intelligence, and digital technologies across sectors. In contrast, wage growth has been relatively weak, rising only to about 130, which points to clear stagnation despite advancements in

technology. The divergence among these trends reflects a deep structural imbalance in the economy. Although productivity has improved significantly due to technological progress, these gains have not been proportionately shared with workers in the form of higher wages. As a result, many workers, particularly those in low- and mid-skilled categories, are experiencing a decline in real income. The growing gap between wages and the cost of living has reduced purchasing power, placing increasing financial strain on households and contributing to broader economic stress. In short, the diagram demonstrates the core issue of Tamil Nadu's emerging economic crisis, technology-driven growth without inclusive wage distribution, resulting in wage stagflation, inequality, and long-term sustainability risks.

**Household Coping Mechanisms and Financial Resilience in Tamil Nadu (2001–2026): Navigating Wage Stagflation, Rising Living Costs, and Structural Economic Risks**

Households in Tamil Nadu (2001–2026) have increasingly relied on adaptive coping mechanisms to manage wage stagflation and rising cost of living, but these strategies reveal weakening financial resilience and deep structural imbalances. First, consumption adjustments are the most immediate response. Recent surveys show a shift toward essential goods, especially food, due to inflation, reversing earlier diversification trends. Low-income households reduce discretionary spending and "decrease spending diversity," often compromising nutrition, health, and education. Second, declining savings and dissaving highlight vulnerability. India's gross savings rate fell from 34.6% (2011–12) to 29.7% (2022–23), while many poorer households exhibit near-zero or negative savings. Net financial savings fluctuated sharply between 3–4% and 7.6% of GDP (2024–25), weakening shock absorption capacity.

Third, increased borrowing has become central to sustaining consumption. Household debt rose from 36% of GDP (2021) to 41.3% (2025), with growing dependence on unsecured credit. About 44% (urban) and 52% (rural) households rely on borrowing, savings depletion, or asset sales during crises. Fourth, migration and labour adjustments act as risk-diversification strategies. Seasonal and distress migration is widely used to stabilize income, especially when local employment is uncertain. Additionally, households increase female labour participation and shift to informal employment. Fifth, informal financial practices remain crucial. Nearly one-third of savings are held in informal forms (cash, gold, peer lending), reflecting limited financial inclusion and income instability. While these coping mechanisms sustain short-term survival, they intensify long-term risks, rising indebtedness, depleted savings, inequality, and dependence on informal sectors. Without real wage growth and stronger social protection, Tamil Nadu faces a future of fragile household resilience and heightened economic instability. The details of the

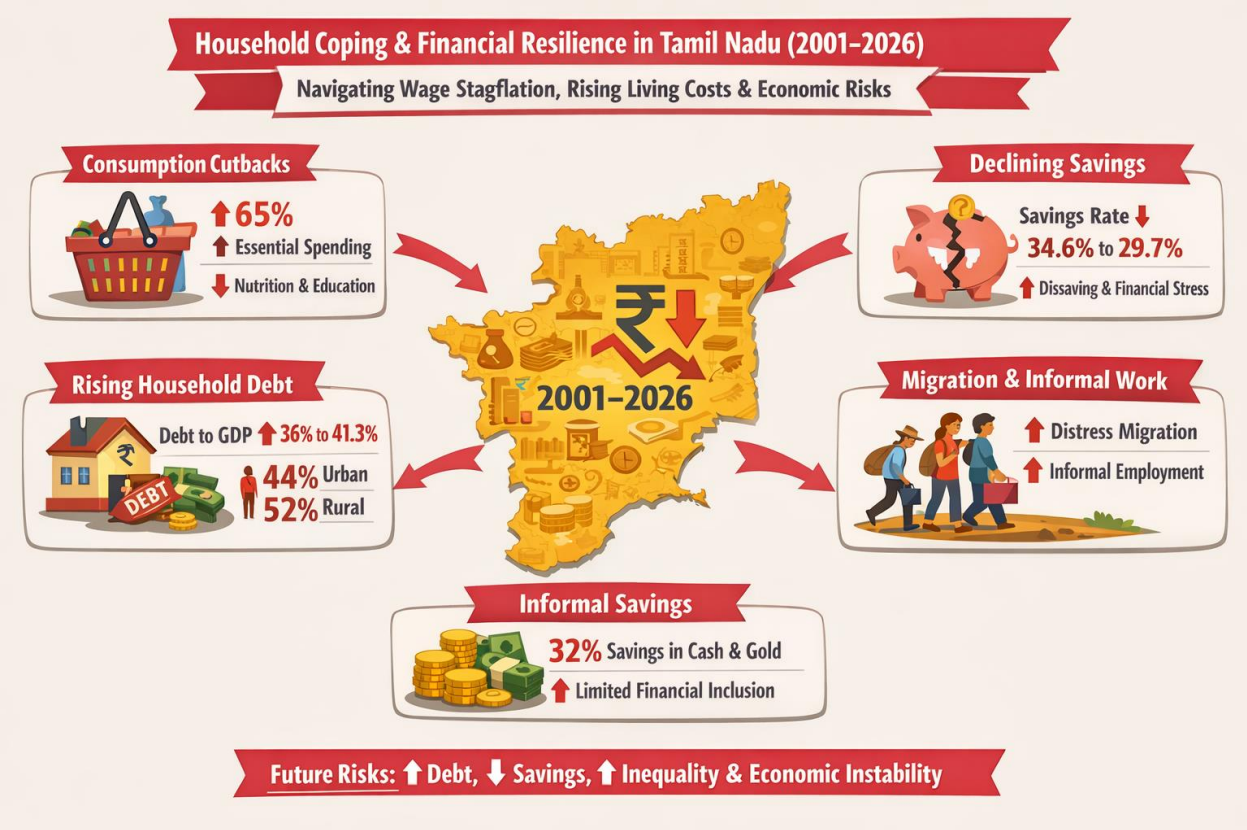
Household Coping Mechanisms and Financial Stress Indicators in Tamil Nadu (2001–2026) are stated in table - 12.

**Table - 12**

**Household Coping Mechanisms and Financial Stress Indicators in Tamil Nadu (2001–2026)**

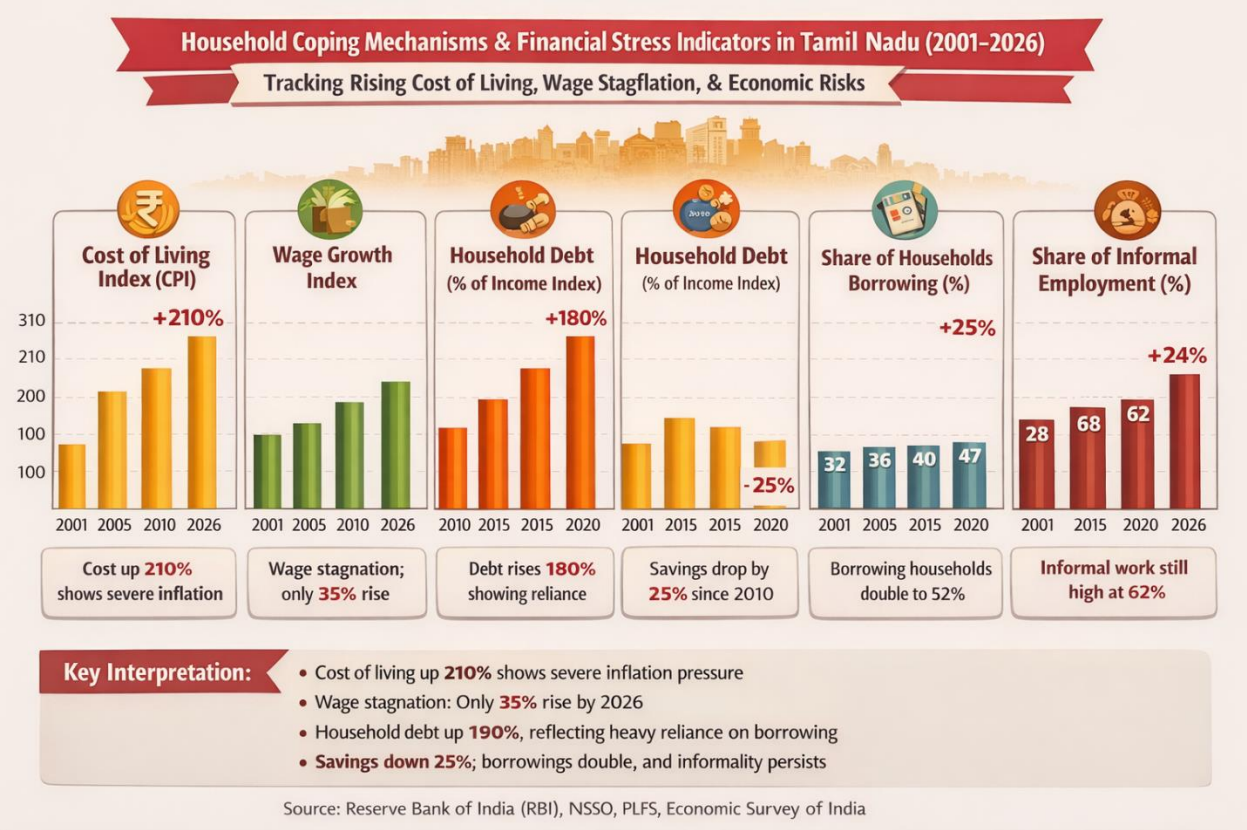
| Year | Cost of Living Index (CPI) | Wage Growth Index | Household Debt (% of Income Index) | Household Savings Index | Share of Households Borrowing (%) | Share of Informal Employment (%) |
|---|---|---|---|---|---|---|
| **2001** | **100** | 100 | 100 | 100 | 28 | 72 |
| **2005** | **130** | 110 | 120 | 120 | 32 | 70 |
| **2010** | **170** | 120 | 150 | 140 | 36 | 68 |
| **2015** | **210** | 125 | 190 | 130 | 40 | 66 |
| **2020** | **250** | 130 | 230 | 115 | 47 | 64 |
| **2026** | **310** | 135 | 280 | 105 | 52 | 62 |

**Source: Reserve Bank of India (RBI), National Sample Survey Office (NSSO), Periodic Labour Force Survey (PLFS), and Economic Survey of India (various years).**




The data in chart, indicates growing financial stress among households in Tamil Nadu between 2001–2026. Consumption cutbacks affect nearly 65% of households, reducing spending on nutrition and education. The savings rate declined from 34.6% to 29.7%, while debt rose from

36% to 41.3% of GDP (urban: 44%, rural: 52%). Around 32% of savings remain informal, reflecting weak financial inclusion. Rising distress migration and informal employment further highlight economic vulnerability. Overall, increasing debt, declining savings, and reduced welfare spending suggest weakening household resilience and a heightened risk of long-term economic instability and inequality.




The data in chart, reveals a widening imbalance between income and living costs in Tamil Nadu. The cost of living surged by 210%, while wages increased only 35%, indicating severe wage stagnation. Household debt rose sharply by about 180–190%, and savings declined by 25%, reflecting growing financial strain. The share of borrowing households increased from 32% to 47–52%, while informal employment remains high at 62%. These trends suggest rising dependence on credit, weakening financial resilience, and persistent job insecurity. Overall, inflation outpacing income growth is driving economic vulnerability, inequality, and long-term household financial instability.

**Conclusion**

The comprehensive analysis of Tamil Nadu's economy from 2001 to 2026 reveals a complex picture of growth and challenges. Despite impressive increases in GSDP, income, and technological progress, the benefits have not reached all sections of society equally. Wage stagnation, coupled with rising living costs, has created a situation known as wage stagflation.

Households, especially in rural and informal sectors, face decreased purchasing power, increased debt, and reduced savings, which threaten their economic stability. Sector-wise disparities, urban-rural gaps, gender inequality, and youth unemployment further deepen these issues, making inclusive growth difficult to achieve. Structural imbalances such as high informal employment, low productivity in rural areas, and uneven development have played a significant role in this crisis. The rapid adoption of automation and digital technology has widened income inequality, benefiting high-skilled workers while depressing wages for low-skilled workers. Despite government policies like minimum wages and welfare schemes, these measures only partially address the core problems and do not fully bridge the wage-cost gap.

The future risks for Tamil Nadu include rising inequality, fiscal stress, and social vulnerabilities, which could hamper long-term sustainability. To ensure balanced and inclusive growth, policymakers need to focus on promoting formal employment, improving skill development, and implementing effective price stabilization measures. Addressing these structural issues is crucial for creating a resilient economy that benefits all citizens. Without urgent and targeted reforms, Tamil Nadu may face increasing economic instability, social unrest, and a widening development gap. Therefore, sustainable growth in the state depends on inclusive policies that reduce disparities, boost productivity, and protect household welfare in the years ahead.

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