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Contents

Editorial

Gains on Paper, Losses in Reality: Sixteenth Finance Commission and Kerala

India's fiscal federalism has always been a terrain of productive tension. The Finance Commission - a constitutional instrument of that tension - has, across fifteen incarnations, navigated the competing claims of equity and efficiency, need and performance, unity and diversity, with commendable care. The Sixteenth Finance Commission (hereafter SFC), whose report was tabled in Parliament on 1 February 2026, arrives at a peculiarly consequential moment: India is in the throes of a developmental ambition of becoming a developed economy - Vision India 2047 - that demands accelerated growth, massive investment, and the active participation of every state. Against that backdrop, this editorial offers a critical assessment of what the SFC means for Kerala - and, by extension, for the larger questions it raises about the kind of fiscal federalism that a developing India needs.

The Arithmetic of Deception: What Kerala Actually Receives

On the face of it, Kerala appears to be a gainer: its inter-se share in horizontal devolution has increased from 1.925% under the 15th Finance Commission to 2.382% - a rise of 0.457 percentage points, restoring the state roughly to its 13th Finance Commission share. The introduction of 'Contribution to National GDP' as a new criterion with a 10% weight, which rewards economic productivity, has benefited the relatively high-income southern states. GIFT's analysis, however, revealed that there has been a big slip between the cup and the lips. The gross devolution gain for Kerala, measured against what it would have received at the old 1.925% share of the same divisible pool, amounts to approximately ?42,583 crore over the five-year period.

Against this must be set the losses. The SFC has discontinued post-devolution revenue deficit grants - under which Kerala received ?37,814 crore during the previous award period, the largest such grant to any state. State-specific and sector-specific grants, which yielded ?2,412 crore over the 15th Finance Commission period, have also been discontinued. The net arithmetic is laid out in Table 1.

Table 1. Net gain for Kerala from the 16th Finance Commission's Tax Devolution.

Item	Rs.crore (5-year period)	Annual impact
+ Gross gain: higher inter-se devolution	+ Rs.42,583	+Rs.8,517
- Revenue Deficit Grants forfeited	- Rs.37,814	- Rs.7,563
- State/sector-specific grants forfeited	- Rs.2,412	-RS.482
NET REAL GAIN (16th FC vs 15th FC)	Rs.2,357	RS.471

Source: GIFT estimates.

It is evident that ?471 crore per year is the true net improvement the SFC has delivered. Against a structural revenue gap that exceeds ?27,000 crore annually, and a committed expenditure ratio that has now reached 69% of revenue receipts (salaries, wages, pensions, and interest consuming nearly seven out of every ten rupees the state collects), this is not a gain. It is a rounding error dressed as federal generosity.

The cesses and surcharges problem compounds the picture further. Excluded from the divisible pool, these levies rose from 9.5% of the Union's gross tax revenues in 2013-14 to 14.8% in 2023-24 (PRS India, 2026). The SFC declined to cap them, declined to include non-tax revenues in a broadened resource-sharing framework, and declined to raise the vertical share from 41% to the 50% demanded by 18 out of 28 states. By retaining 41% of a divisible pool that is itself shrinking relative to gross fiscal flows, the Commission has maintained a status quo that its predecessor already acknowledged as problematic.

The Uncompensated Fiscal Spillovers

The deeper problem lies not in the arithmetic of any single award period but in the conceptual framework within which Finance Commissions have historically assessed states' needs and contributions. The SFC is no exception. To understand why, it is necessary to invoke a principle that is foundational in fiscal federalism theory yet entirely absent from Indian Finance Commission methodology: fiscal spillovers articulated by Oates.

Wallace Oates (1972), in his seminal work on fiscal federalism, demonstrated that when a subnational government invests in goods or services whose benefits spill over to other jurisdictions, for example public health, education, environmental protection, and infrastructure, it systematically under-provides those goods relative to the socially optimal level, because it bears the full cost of provision while capturing only a fraction of the benefits. The welfare-maximising remedy, as Oates showed, is an inter-governmental transfer from the benefiting jurisdictions to the investing jurisdiction - a Pigouvian subsidy for the positive externality. Without such a correction, the subnational entity that invests in spillover-generating public goods is penalised fiscally as its own fiscal balance deteriorates.

This is not an abstract theoretical possibility. It is Kerala's lived fiscal history. Kerala's public investment in education and health - sustained over decades through a unique public-private partnership model that combined state funding with community participation - has generated human capital of a quality that has migrated to 183 of the world's 197 countries and to virtually every other Indian state. As the Kerala Migration Survey led by Irudaya Rajan (GIFT, 2024) documents, 2.2 million Keralites working abroad sent home approximately ?2.16 lakh crore in 2023 - constituting approximately 23% of India's total remittances on just 2.76% of India's population. Those remittances help India build its foreign exchange reserves and improve its current account balance: an unmistakable fiscal benefit to the Union. An estimated 2 million skilled Keralites working in other Indian states contribute to those states' productivity and growth: an unmistakable developmental benefit to receiving states. Yet no Finance Commission has ever designed a criterion that compensates Kerala for these spillovers. Instead, it has been blamed for high committed expenditure on the one hand while successive Commissions have watched Kerala's share in the divisible pool slide - from 3.9% in the 10th Finance Commission to 1.925% in the 15th - even as the spillovers Kerala generates have grown larger. To its credit, the 15th Finance Commission was realistic when it provided the highest revenue deficit grant to Kerala among all states.

The SFC's discontinuation of revenue deficit grants, far from correcting this asymmetry, deepens it. The ?37,814 crore Kerala received under the 15th Finance Commission's RDG was the fiscal federal system's sole, partial, and imperfect acknowledgement that Kerala's revenue deficit is structurally different from other states' deficits - that it is, in Oates's (1972) terms, the fiscal shadow of an uncompensated positive externality. Removing it without replacing it with an equivalent mechanism is not fiscal discipline. It is fiscal punishment for a developmental choice that has benefited the entire nation.

The FRBM Fallacy: Applying Sovereign Rules to Non-Sovereign Actors

The SFC's fiscal discipline agenda - a strict 3% GSDP ceiling on state deficits, the discontinuation of off-budget borrowings, and no additional reform-linked borrowing space - is more stringent than either of its two predecessors. It is also, in its application to Indian states, conceptually misconceived in a way that deserves direct intellectual challenge. The 3% fiscal deficit rule has its roots in the developed economies for whom the prime concern is stability. The fallacy of adapting the same for developing countries with a focus on growth with stability, without adequate analytical and empirical analysis, is an indication of serious intellectual deficit.

India's fiscal framework applies sovereign fiscal rules to governments that are structurally, constitutionally, and fiscally non-sovereign. This is not a marginal technical point. It is, as Lahiri (2000) observed, the central structural tension of India's intergovernmental fiscal architecture. A sovereign government - the Union of India being the relevant reference - has constitutional authority to levy income tax, corporation tax, customs duties, and excise; can issue currency; has unlimited access to capital markets; and manages its own monetary environment. Indian states have none of these freedoms. They cannot levy any of these taxes, while the introduction of the Goods and Services Tax has led to an unprecedented erosion of their fiscal autonomy. On average, over 50% of the revenue receipts of states depend critically on Union transfers over which they have zero discretion - and which can deviate sharply from Finance Commission projections. Expenditure commitments of the states are also often beyond their control. When the Union alters Centrally Sponsored Scheme cost-sharing ratios - as the proposed restructuring of MGNREGS from approximately 90:10 to 60:40 illustrates - states face immediate, non-discretionary expenditure increases with no compensating revenue transfer and no adjustment in their FRBM ceilings. The fiscal rule misattributes a federal governance problem as state fiscal indiscipline (Rao & Singh, 2007).

The structural incomparability is empirically visible through an analysis of own-source revenue across states. Bihar raises 27.7% of its revenue from own sources; Manipur raises 9.8% (RBI, 2024). Kerala, even at a comparatively high 72.8% own revenue ratio (adjusted for lottery gross receipts, as required by the CAG Kerala Audit Report, 2024), faces committed expenditure consuming approximately 70% of its revenue receipts - leaving genuinely limited discretionary fiscal space. The North-Eastern states face the starkest condition: Arunachal Pradesh, Nagaland, and Manipur raise only 13-14% of revenue from own sources, with 86-87% arriving as central transfers. For these states, the fiscal deficit is determined overwhelmingly by the Union's transfer decisions, not by subnational fiscal choices. To hold them to the same 3% GSDP deficit ceiling as Maharashtra (75.1% own revenue) or Karnataka (75.7%) is not equity. It is the formal equality that produces substantively unequal outcomes.

Isaac et al. (2019) show how the FRBM framework compresses the fiscal space of states at precisely the moments - economic downturns, revenue shortfalls, central transfer reductions - when developmental spending is most needed. The SFC's decision to apply its tightest-ever deficit ceiling, with no additional reform-linked borrowing space and no unfunded mandate adjustment mechanism, compounds this structural injustice.

The application of the same fiscal deficit ceiling to a sovereign government and to a constitutionally constrained subnational entity is not merely inequitable - it is analytically incoherent. As the growth literature since Nelson (1956) has established, a developing economy constrained by low domestic savings can escape the low-level equilibrium trap only through borrowing for investment. The moot question is not the quantum of borrowing but the quality of its deployment. A state that borrows to invest in education and health - generating returns that accrue to the national economy, as Kerala does - is fiscally more virtuous than a state that borrows for current consumption within its 3% ceiling. The SFC's single-number rule cannot distinguish between these cases, and its mechanical application penalises the former.

What India needs - and what Vision India 2047 (Vikasit Bharat) demands - is not the prevailing Fiscal Responsibility and Budget Management (FRBM) Act but something more genuinely developmental. The need of the hour is to articulate, based on the golden rule of public finance (Musgrave, 1939), a Fiscal Responsibility of Borrowing Utilisation (FRBU) Act which ensures that every rupee borrowed is invested to ensure a return higher than the cost of borrowing. Equally importantly, capital expenditure on education and health should be exempt from deficit calculations for states that can demonstrate the developmental spillovers those investments generate; and borrowing ceilings should be linked to investment returns rather than to an arbitrarily inherited percentage of GSDP. The institutions of Indian fiscal federalism must co-evolve with the developmental context they are designed to serve (Freeman & Perez, 1988). The SFC's fiscal discipline agenda represents, in this respect, a costly inertia that is bound to make institutions a stumbling block to development - which India cannot afford any more.

The Knowledge Investment Blind Spot

India's fiscal classification system carries forward an industrial-era conception of capital into a 21st century knowledge economy. Under India's budget classification, capital expenditure means spending that creates tangible fixed assets. Spending on a highway bridge is capital expenditure. Spending on AI-driven public health surveillance, open-source digital public infrastructure, or scientific research is largely classified as revenue expenditure - consumed in the period of spending, subject to the zero revenue deficit constraint, and outside the scope of borrowing-financed investment. This is analytically untenable.

The System of National Accounts 2008 - jointly published by the United Nations, IMF, OECD, and World Bank - reclassified R&D expenditure from intermediate consumption to gross fixed capital formation, recognising that R&D creates durable knowledge assets with multi-period productive returns (United Nations et al., 2009). For reasons that remain unexplained, India's budget classification has not followed suit. India's gross expenditure on R&D declined from 0.86% of GDP in 2008-09 to 0.64% in 2020-21 - far below the government's own 2% target (Department of Science and Technology, 2022). As the Seventh Kerala Public Expenditure Review Committee (Government of Kerala, 2025) observed, this creates a paradox for development-oriented states: the more a state invests in long-term growth through innovation, education, and health, the more it is penalised under deficit-based fiscal rules.

For Kerala, whose developmental model is founded precisely on investments in human capital and knowledge infrastructure - the investments that produce the engineers, doctors, nurses, and IT professionals who work across India and the world - this classification blind spot is not peripheral. It is central to the structural fiscal injustice the SFC perpetuates. The SFC's discontinuation of RDGs, combined with strict deficit ceilings that treat education and health expenditure as current consumption rather than capital formation, structurally obstructs the very investments that have made Kerala's developmental model nationally and globally significant.

What was Missed Out?

The deeper question is whether India's fiscal federal architecture - as reproduced by the SFC - is adequate for the ambition of Vision India 2047 - Vikasit Bharat. Several structurally transformative measures were available to the SFC but were not taken.

The official request by 18 states for raising the share of states in the divisible pool from 41% to 50% was ignored by the Commission, on the grounds of the Union's growing revenue requirements. The divisible pool has been hollowed out by cesses and surcharges that rose from 9.5% to 14.8% of gross tax revenues in a decade. Capping this ratio, or including non-tax revenues (the Union's dividend income alone has risen from ?1 lakh crore in 2023 to an estimated ?3.25 lakh crore in 2026) in a broadened sharing framework, was available to the Commission. It was not done - reflecting a concern for the fiscal health of the Union that was conspicuously absent when the constitutionally provided revenue deficit grant for states was discontinued without replacement.

The horizontal devolution formula still lacks any mechanism to measure and compensate for developmental spillovers of the kind Oates (1972) identified and Kerala's experience illustrates. The new GDP contribution criterion is a partial acknowledgement of economic performance, but it does not capture remittances, ecological services, or public health investments that generate inter-jurisdictional benefits. An Index of State-level Contribution to Indian Development (ISCID), as proposed in GIFT's submission to the SFC (GIFT, 2025), would have provided such a mechanism. It was not adopted.

The constitutionally provided revenue deficit grant - whatever its imperfections as an instrument - was the one mechanism that partially compensated for structural fiscal asymmetries among states. It has been discontinued without replacement. States such as Kerala, whose deficits were structurally determined, are now treated identically to states that received RDGs because of fiscal slippage - a category Kerala does not belong to. The institutional penalty for developmental success could not be more clearly written.

The relationship between fiscal rules and development investment remains unaddressed. An FRBM framework that excludes R&D, education, and health capital expenditure from the deficit calculation - for states that can demonstrate developmental spillovers - would have been both analytically defensible and developmentally appropriate. It was not proposed. There are also serious issues with finances for the local self-governments and disaster management which are reserved for discussion elsewhere.

The Way Forward for Kerala

This editorial has argued that the SFC's report, read honestly, delivers Kerala a net gain of ?471 crore per year - a rounding error against the scale of its structural fiscal challenge. More fundamentally, it misapplies sovereign fiscal rules to a non-sovereign actor, and fails to compensate for the developmental spillovers that Oates's (1972) theorem has long prescribed as the basis for inter-governmental transfer.

None of this means Kerala can wait for the fiscal federal framework to reform itself. Hence the relevance of a New Deal for a Resurgent Kerala (GIFT, 2026), built on the recognition that the SFC award, as it stands, is a structural setback - and that the state must therefore close the gap left by the withdrawal of revenue deficit grants primarily through its own fiscal efforts. This calls for invigorating the production base and making the economy more vibrant. A vibrant economy is a precondition for a strong treasury. At the same time, there is an imperative to work with other states to ensure that India's fiscal federal relationship is more equitable than it is today.

Vision India 2047 requires, as the political leadership of the country has acknowledged, that India grows when the states grow. States grow when the fiscal federal architecture enables them to invest in their developmental strengths rather than penalising them for doing so. This is an imperative in the current geopolitical context, which acts as a drag on India's growth prospects. The SFC has not built that architecture. While the intellectual task of designing it falls on the academic community, the political task of demanding it rests with state governments.

■

Prof. K J Joseph

References

CAG of India. (2024). Audit report on state finances, Kerala 2023-24. Office of the Comptroller and Auditor General of India.

Department of Science and Technology, Government of India. (2022). Research and development statistics at a glance 2022-23. Ministry of Science and Technology.

Freeman, C., & Perez, C. (1988). Structural crises of adjustment: Business cycles and investment behaviour. In G. Dosi, C. Freeman, R. Nelson, G. Silverberg, & L. Soete (Eds.), Technical change and economic theory (pp. 38-66). Pinter.

GIFT. (2024). Kerala migration survey 2024 (S. Irudaya Rajan, Principal Investigator). Gulati Institute of Finance and Taxation.

GIFT. (2025). Submission to the Sixteenth Finance Commission. Gulati Institute of Finance and Taxation.

GIFT. (2026). New deal for a resurgent Kerala, Gulati Institute of Finance and Taxation.

Government of Kerala. (2025). First report of the Seventh Kerala Public Expenditure Review Committee. Government of Kerala (Chairman K J Joseph).

Isaac, T. M. T., Chakraborty, L., & Mohan, R. (2019). Challenges to Indian fiscal federalism. LeftWord Books.

Joseph, K. J. (2026). Reimagining fiscal architecture for a transforming India: From curative consolidation to preventive developmental finance (Mimeo GIFT)

Joseph, K. J., & Anithakumary, L. (2023). India's GST paradigm and the trajectory of fiscal federalism: An analysis with special reference to Kerala. The India Economic Journal, 71(1). https://doi.org/10.1177/0019466222114

Lahiri, A. K. (2000). Sub-national public finance in India. Economic and Political Weekly, 35(16), 1539-1549.

Musgrave, R. A. (1939). The nature of budgetary balance and the case for a capital budget. American Economic Review, 29(2), 260-271.

Nelson, R. R. (1956). A theory of the low-level equilibrium trap in underdeveloped economies. American Economic Review, 46(5), 894-908.

NITI Aayog. (2024). Vision for Viksit Bharat @ 2047: An approach paper. Government of India.

Oates, W. E. (1972). Fiscal federalism. Harcourt Brace Jovanovich.

PRS India. (2026). Report summary: 16th Finance Commission for 2026-31. PRS Legislative Research.

Rao, M. G., & Singh, N. (2007). The political economy of India's fiscal federal system and its reform. Publius: The Journal of Federalism, 37(1), 26-44. https://doi.org/10.1093/publius/pjl023

Reserve Bank of India. (2024). State finances: A study of budgets 2024-25. RBI.

Sixteenth Finance Commission. (2026). Report for 2026-31. Government of India.

United Nations, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, & World Bank. (2009). System of national accounts 2008. United Nations. https://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf

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A comparative analysis of working environments of IT professionals in Kerala

Dhanya M, Smitha V.P

Abstract

The Information Technology (IT) sector has emerged as a major contributor to Kerala's socio-economic development. While Kerala's private IT industry has rapidly grown with technology parks, startups and global delivery centres, the public sector has also been enhancing IT adoption in governance and service delivery. This study compares IT professionals across these two distinct work environments to understand differences in demographics, job roles, work conditions, remuneration, career growth, motivation, challenges, and satisfaction. Kerala's IT professionals in both the public and private sectors play crucial roles in the state's digital ecosystem. While the private sector excels in innovation and financial incentives, the public sector provides job security and stable work environments. A balanced approach combining the strengths of both sectors could lead to an optimized professional experience.

Keywords: *work environment, job satisfaction, work-life balance, public and private sector, health issues*

1. Introduction

India is the world's largest source of destination for the IT industry, and this has placed India at the top on the global map. The IT industry has helped India transform from a rural and agriculture-based economy to a knowledge-based economy. The flourishing Indian economy has contributed much to maintaining the IT sector's competitive nature in the global market. Also, IT has become a major reason for attracting foreign funds into the domestic market. Because of the increasing activities of high-quality nature in this sector, India became a home for IT professionals. Due to the cost-effective and efficient nature of Indian IT services, it becomes highly profitable for foreign companies to conduct their business in India. In the case of India, IT offers a lot of opportunities for its young population. The establishment of the Techno Park in Thiruvananthapuram has further escalated the growth of the IT industry. It is one of India's first Technology parks, and it is the largest IT park in Asia in terms of built-up area. It is home to 355 IT companies. It employs more than 47,100 IT professionals. Thiruvananthapuram, which contributes nearly 80 percent of the software exports from the state, is considered to be the Silicon Valley of Kerala. The city has huge prospects for the growth of the IT sector as it has recently been declared as a future 'smart city' by the Government of India. In this context, the researcher has selected Thiruvananthapuram as the area of the study.

2. Objectives

- To examine the socio- economic background of IT professionals in Thiruvananthapuram
- To analyse the satisfaction level of IT professionals in both the public and private sector in Thiruvananthapuram.

3. Data source and method

The collection of data from IT professionals was a difficult task. The researcher has decided to collect data from IT professionals working both in public and private sectors to understand whether significant differences exist in the quality of work depending on the nature of ownership. Collecting information from employees in the private sector was particularly difficult. The researcher approached many private firms to collect information. As the present study is based on the Decent Work framework, management of all private firms refused to grant permission to meet their employees and conduct interviews. The researcher found it difficult to collect data from IT professionals working in the public sector, also because most of the institutions were reluctant to permit questions regarding Decent Work indicators, as they thought that it might affect their reputation. Therefore, the researcher is left with no other option than the snowball sampling. Snowball sampling is a non-probability sampling method in which, when we get one respondent, the respondent gives information about other respondents, and it progresses as a chain. The process was completed until the survey was conducted among 150 employees from the public sector and 150 employees from the private sector. Therefore, the study is based on data collected from 300 IT professionals in the Thiruvananthapuram district. The majority of the respondents belonging to the public sector are working in institutions like Keltron, CDIT, Kerala State IT Mission, Information Kerala Mission, and respondents belonging to the private sector are working in various IT firms in and around Techno Park, Thiruvananthapuram. The study focuses on the dimensions of employment of IT employees based on the Decent Work Indicators. Each of these indicators, like rights at work, gender equity, social protection and promotion of social dialogue, is significantly relevant to the IT sector. The investigator adopted these indicators as the variables of the study.

When the researcher considered different IT destinations in Kerala, it is found that Thiruvananthapuram has many peculiarities as compared to other IT destinations. Thiruvananthapuram, the capital city of Kerala, is a well-known academic hub. The establishment of Techno Park has accelerated the growth of Thiruvananthapuram as an IT destination. Techno Park ranks first in the Information Technology parks in Asia in terms of total built up area. There are 470 IT firms in Techno Park like Oracle, Infosys, TCS etc which generate employment opportunities to more than 70,000 professionals. Thiruvananthapuram also ranks first in the number of work seekers in general and technical categories in 2016. The total number of work seekers in Thiruvananthapuram district is 5.2 lakhs, of which 3.2 lakhs are women and 1.96 lakhs are men. With the emergence of Techno Park and its recent expansion, IT has become major solution for the problem of unemployment in and around Thiruvananthapuram. Thiruvananthapuram, which contributes nearly 80 percent software exports from the state, is considered to be the Silicon Valley of Kerala. The city has huge prospects for the growth of IT sector as it has recently been declared as a future 'smart city' by Government of India. In this context, the researcher has selected Thiruvananthapuram as the area of the study.

4. Results and discussion

4.1 Social and economic background of the IT professionals in Kerala

Socio-economic features, along with the working and living environment, are the crucial contributory factors of physical and mental health of individuals. It throws light on parental education, parental occupation, family income and employees' background etc. This helps the researcher to analyze how much the professionals get support from family and how much they struggled to come into this position.

4.1.1 Gender- wise Classification of the IT Employees

Gender composition of the population is one of the primary demographic characteristics of human population. The population of Kerala is 3.34 crores, of which 1.60 crores were males and 1.74 crores are females. The sex ratio for Kerala is 1084 females per 1000 Males and in Thiruvananthapuram district, it is 1088.The study shows that the male employees dominate in this sector, which is quite different from the gender composition of Kerala (Table-1).

Table 1 : Gender- wise classification of the IT professionals

Gender	Public	Private	Total
Male	68 (45.30)	97 (64.70)	165 (55.00)
Female	82 (54.70)	53 (35.30)	135 (45.00)
Total	150	150	300

Source: Sample Survey

Note: Figures in brackets show percentages

Table 1 shows that out of the 300 professionals surveyed for the study, men outnumber women. Men form 55 percent of the sample whereas women form 45 per cent of the sample. But, there are differences between the gender composition in public and private firms. In public firms, women are greater than men and vice versa in private firms.

4.1.2 Age wise classification of professionals

Age has supreme importance in identifying an individual's ability to perform various tasks of life.The age of the IT professionals is important as it reflects their capacity to work. A peculiar feature of IT industry has been employment of a labour force from relatively younger age group (Table-2).

Table 2 : Age wise classification of professionals

Age Group	Public	Private	Total
20-30	59 (39.33)	126 (84.00)	185 (61.67)
30-40	74 (49.33)	22 (14.67)	96 (32.00)
40-50	11 (7.34)	2 (1.33)	13 (4.33)
Above 50	6 (4.00)	0 (0.00)	6 (2.00)
Total	150 (100)	150 (100)	300 (100)

Source: Sample Survey
Note: Figures in brackets show percentages

Table 2 shows the age- wise classification of professionals and it reveals that most of the professionals are in the age group of 20 to 30 years old. In public IT firms, the highest percentages of professionals are from the age group of 30 to 40 years but in private sector, majority of the sample (84percent) is in the age group of 20-30 years. This means that private sector needs more young and fresh professionals than public sector. In public sector, there is age bar for working but in private even though there is no age limit, most of the respondents belong to the age group of 20-40. The study reveals that the IT sector is limited to young people.

The IT sector in India is dominated by young professionals due to rapid expansion of the digital economy, high demand for technical skills among recent graduates, preference of IT companies for adaptable and technologically updated employees and better employment opportunities for youth in private-sector technology firms

4.1.3 Marital status of IT professionals

Marital status refers to whether an employee is single, married, divorced, widowed or separated. In IT sector, the professionals belong to the younger age groups and a large number of them are single (Table -3).

Table 3 : Distribution of the sample by marital status

Marital Status	Public	Private	Total
Single	41 (27.33)	107 (71.34)	148 (49.34)
Married	100 (66.67)	41 (27.33)	141 (47.00)
Widow(er)	4 (2.67)	0 (0)	4 (1.33)
Divorced	1 (0.66)	0 (0)	1 (0.33)
Separated	4 (2.67)	2 (1.33)	6 (2.00)
Total	150 (100)	150 (100)	300 (100)

Source: Sample Survey

Note: Figures in brackets show percentages

Table 3 reveals the number and proportion of employees on the basis of their marital status. Almost 50 percent of the sample respondents are single and 47 percent of IT professionals are married. It can be seen that in public sector, married people are more compared to those who are single. The public sector has 66.67 percent of the married professionals whereas the proportion of single employees is just 27.33 percent. In private, reverse is the case. Single professionals are greater (71.34 percent) compared to married ones (27.33 percent).

4.1.4 Religion wise distribution of IT professionals

The religious backgrounds of the IT professionals are shown in Table 4

Table 4 : Religion wise Distribution of IT Professionals

Religious group	Nature of Firm		Total
	Public	Private	
Hindu	111 (74.00)	97 (64.67)	208 (69.34)
Christian	22 (14.67)	30 (20.00)	52 (17.33)
Muslim	17 (11.33)	22 (14.67)	39 (13.00)
Others (specify)	0 (0)	1 (0.66)	1 (0.33)
Total	150 (100)	150 (100)	300 (100)

Source: Sample Survey

Note: Figures in brackets show percentages

As Table 4 shows, almost 70 percent of the professionals are Hindus. While Christians form 17.33 percent and Muslims form 13 percent of the sample. Representation of Christians and Muslims is higher in Private sector than in Private sector.

4.1.5 Social Class Categorization

In the primitive Indian society, occupation and income were caste based. Majority of people in the lower social strata still continue to be poor and under privileged. The SCs, STs and other Backward Communities (OBCs) are the socially and economically marginalized groups of Indian population suffering from the worst form of social exclusion (Table-5).

Table 5 : Number and Proportion of Employees by the nature of appointment

Social Group	Nature of Firm		Total
	Public	Private	
General	65 (43.34)	70 (46.67)	135 (45)
OBC	68 (45.33)	69 (46)	137 (45.67)
SC/ST	17 (11.33)	11 (7.33)	28 (9.33)
Total	150 (100)	150 (100)	300 (100)

Source: Sample Survey
Note: Figures in brackets show percentages

Based on Table 5, in terms of social groups, Other Backward Castes (OBC) are greater in number, though General category employees are close by. While OBC consists of 45.67 percent of the sample, the General Category accounts for 45 percentage- just a difference of 0.67 per cent. Scheduled Caste (SC) and Scheduled Tribe (ST) combined forms 9.33 percent of the sample. It may be seen that in private companies, both OBC and General are almost same in number. In both types of companies, SC/ST group comes at the bottom. Compared to Public sector, the share of SC/ST in Private sector is 7.33 percent which is not too low compared to Kerala statistics.

4.1.6 Employees by Place of Residence

Place of residence where an individual resides is an important indicator of a social position of a person. Rural-urban background of an employee is very important for the study. Generally in IT sector, most of the professionals are from urban background (Table-6).

Table 6: Number and Proportion of Employees by the nature of appointment

Nature of Company	Residence		Total
	Rural	Urban	
Public	87 (58)	63 (63)	150 (100)
Private	78 (52)	72 (48)	150 (100)
Total	165 (55)	135 (45)	300 (100)

Source: Sample Survey
Note: Figures in brackets show percentages

As per the Table 6, people who are from rural areas are greater than in the urban areas. Almost 55 per cent of the total respondents are from rural areas. This is true for both public and private companies. IT sector is considered to be urban biased, but this study shows that both in public and private sectors, more employees are from rural areas and this trend shows that there is no digital divide in the state and both rural and urban develop at the same time.

4.1.7 The Nature of School Education

There are higher number of schools in aided sector (55 percent) than the Government sector (36 percent) and only 9 percent in Unaided sector in Kerala (Economic Review, 2016). Now there is a change in the attitude of the people in Kerala, most of the people prefer aided or unaided schools. With the development of IT sector in Kerala, there is a structural change in the attitude of the people and most professionals are from aided/ unaided schools (Table-7).

Table 7 : Number and Proportion of Employees by the nature of school education

Nature of School	Nature of Ownership		Total
Education	Public	Private	
Government	77 (51.33)	38 (25.33)	115 (38.33)
Aided	70 (46.67)	108 (72)	178 (59.33)
Unaided	3 (2)	4 (2.67)	7 (2.34)
Total	150 (100)	150 (100)	300 (100)

Source: Sample Survey, 2016
Note: Figures in brackets shows percentages

It can be seen that in the public sector, people who are educated in Government schools account for the significant majority. But in the case of private sector, people who are educated in Aided schools claim a majority. In the public sector, 51.33 percent of the employees are educated in Government schools, 46.67 percent are from aided schools, and just 2 per cent from private schools. As in the case of private sector, 72 percent of employees are from the aided sector, 25.33 per cent from the government sector, and 2.67 per cent from the unaided. It is clear from the Table 4.10 that in both categories, the proportion of unaided school-educated people is very minimal.

4.1.8 Mode of Appointment

Mode of appointment can be divided into Permanent and Contract.

Table 8 : Number and Proportion of Employees by the nature of appointment

Mode of Appointment	Nature of Firm		Total
	Public	Private	
Permanent	36 (24.00)	46 (30.67)	82 (27.33)
Contract	114 (76.00)	104 (69.33)	218 (72.67)
Total	150 (100)	150 (100)	300 (100)

Source: Sample Survey, 2016
Note: Figures in brackets shows percentages

Table 8 shows another peculiar feature of IT sector employment in India. It may be seen that in both public and private firms majority are employed on contract basis. The proportion of employees on contract basis is higher in public sector firms as compared to the private sector firms.76 percent is the value for public whereas the corresponding value for private is 69.33 percent. On the overall, contractual professionals account for 72.67 percent of the sample.

4.1.9 Education and Employment

Education and employment are closely related. The respondents had different educational qualifications and are employed in different categories of job in the IT sector.The study included IT employees from different organisational levels. The respondents were not limited to subordinate staff alone; managerial employees were also included in the sample. The participants consisted of trainees,programmer, Analysts,technical analysts,and project head.Including employees from varied job positions helped capture differences in work responsibilities, working hours, decision-making roles, and work-life balance experiences across organisational hierarchies (Table 9).

As shown in the above Table, almost 37percent of Graduates are employed as Technical Analyst and a few are working as either Trainees or Programmers. Almost 31 percent of the B Tech holders are working as Programmers and 26 percent are working as Technical Analysts. The analysis shows that B Tech holders are employed in almost all categories of IT field. Most of the professionals with an M Tech degree (42 percent) are working as Project Head. The study revealed that even though engineers and M

Table 9 : Cross Tab between Education and Employment

Education	Employment								
	Trainee	Programmer	IT Analyst	Network Engineer	Technical Analyst	Technical Asst	Project Head	Software Eng	Project developer
Diploma	18.47	18.47	7.76		36.27		11.27		
BA/ B Sc/ B Com	26.88	22.08	4.38	4.38	36.88			7.38	
B Tech	12.60	30.8	10.8	9.00	26.20		4.4	6.2	
MA/ M Sc/ M Com	30.56	16.38	6.88	11.52	21.02		6.82	6.82	
MBA	18.91	9.82	14.42	32.62	9.81	14.42			
MCA/ M Sc Computer Science6.24	24.73	13.93	11.43	13.63	4.73	20.63	4.73		
M.Tech	7.143	7.143		7.141	12.143	17.141	42.14	7.141	

Source: Sample Survey

CA holders are employed in all strata of IT field, majority of people with M Tech or additional qualifications are employed as Project heads. Result suggests that even though IT sector offers employment opportunities to all categories of educated people, highly qualified people are also engaged in lower strata of job hierarchy. The study revealed that most of the surveyed professionals are from younger age group.

The study observed a higher proportion of young professionals in the private IT sector. This trend can be understood in the context of the rapid expansion of the IT industry, which largely recruits fresh graduates and young skilled workers with technical expertise and adaptability to changing technologies. Existing literature also supports this pattern, highlighting that the private IT sector generally prefers younger employees due to factors such as flexibility, technological adaptability, longer working hours, and lower organisational costs associated with entry-level recruitment.

4.1.10 Experience of IT Professionals

Work experience is an important factor in determining the employability of people. As the IT industry is a newly emerging industry, it has a comparatively younger workforce than other industries. As the respondents belong to younger age, their experience is comparatively low. Work experience profile of professionals from the collected data is presented in Table 10.

Table 10 : Experience of the IT Professionals

Experience (Years)	Public	Private	Total
Less than 1 year	16.43	32.66	24.54
1-5 Years	42.14	52.67	47.41
6 - 10 years	26.43	12.67	19.55
11-15 years	13.57	0.67	7.12
16 & above	1.43	1.33	1.38
Total	100	100	100

Source: Sample Survey

Table 10 reveals that the most of the IT professionals (47.41 percent) are of 1-5 years of experience (42.14 percentage in private sector and 52.67 percent in private sector). In private sector, 85.34 percent of professionals have less than 5 years of experience, whereas 14.26 percent of professionals have more than 6 years of experience in that particular sector. But in public sector 41.43 percent of professionals have more than 6 years of work experience.

4.1.11 Monthly Income of the Professionals

Data collected from a sample of 300 IT professionals showed that most of the sample respondents received an income of less than 20,000. In Public sector, nearly 87% of persons received an income below Rs.40,000 per month and in Private sector, it is 84%. Evidence from the sample respondents suggests that, in terms of the first component (income of employees) of adequate earning and productive work, employment in IT exhibiting a deficit in Decent Work. Other components are related to whether individuals have a chance for self- development in work and get income through training and up gradation of technical skills (Table -11).

Table 11 : Monthly Income of the Professionals

Income Level	Public	Cumulative frequency	Private	Cumulative frequency	Total
Less than 20000	85 (56.66)	85 (56.66)	60 (40.00)	60 (40.00)	145 (48.33)
20001-40000	46 (30.67)	131 (87.33)	66 (44.00)	126 (84.00)	257 (85.67)
40001-60000	12 (8.00)	143 (95.33)	16 (11.00)	142 (95.00)	285 (95.00)
60001-80000	4 (2.67)	147 (98.00)	1 (0.67)	143 (95.67)	290 (96.67)
80001-100000	2 (1.33)	149 (99.33)	4 (2.50)	147 (98.17)	296 (98.67)
Above 100000	1 (0.67)	150 (100)	3 (1.83)	150 (100)	300 (100)

Source: Sample Survey

Note: Figures in brackets show percentages

4.1.12 Effect of Longer Working hours

The average hours spent by IT employees may vary in both sectors. In private IT sector employees work longer hours than in Public. In private, employees spent an average 9.12 hours per day while in public, it was comparatively lower i.e., 7.71 hours. Average hours of work per day for the sample of 300 IT professionals is 8.41 hrs which exceeds the working norm of 8 hours. Employment in IT sector is in the form of project completion which is time bound and since majority of the market is US based, the nature of work requires different time zones and to make both the parties constantly in touch with each other, 'flexi time work ' was introduced in IT sector. Often project deadlines cause work pressures and professionals overstay in office to complete the work. Thus long working hours, overstays, weekend works, work on religious or public holidays are common in this sector. Reasons for overstay can be due to voluntary reasons or involuntary reasons. Personal interest, ambition, or dedications are the voluntary reasons for longer working hours. Involuntary reasons are deadline pressures, extra income or directions from team leaders etc.

Even though, the reasons for overtime work are more or less same for public and private employees, its effect varies remarkably between these two groups of work force. The effects of overwork in IT sector are shown in Table 12.

Table 12 : Effects of Overstay (percentage)

Effects of Overstay	Nature of Ownership		
	Public	Private	Over all
Deterioration in physical and mental health	52.56	56.18	54.37
Disturbance in work-life balance	26.46	27.06	26.76
Reduced productivity	14.86	8.08	11.47
Excessive work pressures	6.12	8.68	7.4
Total	100	100	100

Source:Sample Survey

It is clear from Table 12 that deterioration in physical and mental health is the major effect of overstaying in office. Almost 55 percent of employees suffer from this problem. This is higher in the private sector (56.18%) than the corresponding value in public sector (52.56%). Apart from the deterioration in physical and mental health, disturbance in work-life balance is another major issue in IT sector. The harmful effects of overtime work are more evident in the case of private employees as compared to public employees.

4.1.13 Work Life Balance

Work-life balance has become a serious issue. There is a drastic change in the nature of work and work environment, and this creates an imbalance in work-life. This leads to dissatisfaction and disappointment among employees, and it will negatively affect their mental and physical well-being as well as their career development. Since the employees have to work for long hours at the workplace, they get less time to spend with their families. Due to these imbalances, most highly qualified women quit their jobs after starting a family.

4.1.13.1 Details of Work-life Balance

Work-life balance denotes the maintenance of perfect balance between individual life and professional life that may lead to job satisfaction and excellence in job (Table-13).

Table13 : Work life balance (Percentage)

Work Life Balance	Public			Private			Over all
	Male	Female	Total	Male	Female	Total	
Longer working hours and flexi time work	26.61	32.09	58.70	41.01	22.41	63.41	90.41
Health problems due to nature of work	42.44	51.18	93.62	39.07	21.35	60.42	123.83
Absence of workers Union	15.33	18.48	33.81	58.35	31.88	90.23	78.93
Night Shifts	8.16	9.84	18.00	24.77	13.53	38.30	37.15
Lack of socializing with relatives, friends etc.	19.97	24.09	44.06	55.95	30.57	86.52	87,32
Lack of recreations	17.94	21.63	39.57	56.93	31.11	88.04	63.81

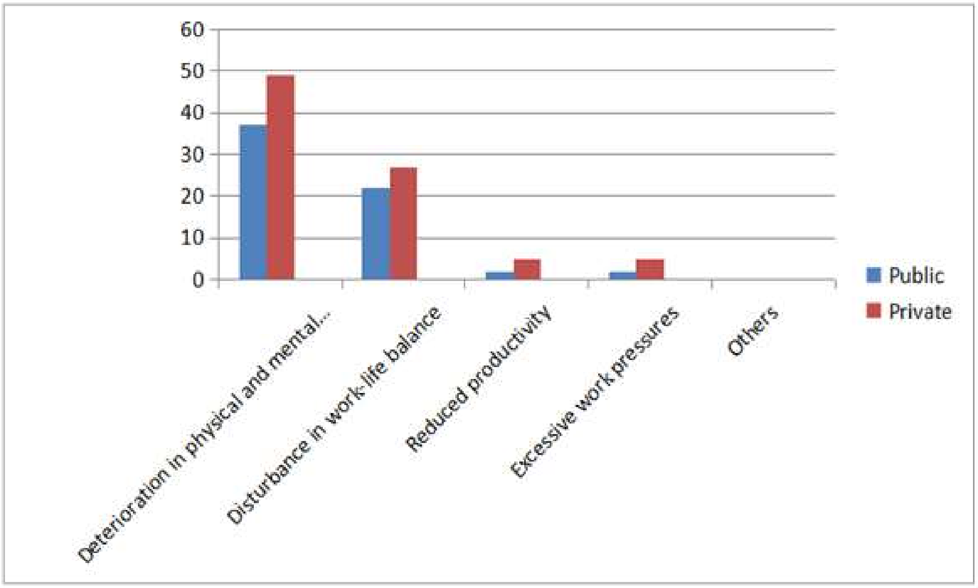
Source:Sample Survey

Table 13 shows the work-life balance of IT professionals. It is important to note that more than 60 percent of IT professionals reported that they have health problems due to the nature of work and they also have long working hours and flexible work time. Also, they are of the opinion that lack of socialization and recreation, and the absence of a trade union, also affect their work-life balance. 93.62 percent of persons have some health problems due to the nature of work in the public sector, whereas the corresponding figure in the private sector is 60.42 percent. This is due to the reason that the majority of professionals in the public sector are in the age group of above 30 years. Almost 80 percent of the respondents opined that there is discrimination in the workplace. The proportion of people who said 'yes' to discrimination in the workplace. While 60.7 per cent of employees in private firms said they face discrimination, in the public sector, it is 19.1 per cent. The study revealed that married employees may experience higher work-family conflict than unmarried employees. Employees from nuclear families may face different pressures compared to joint-family households. Work-life balance is not merely an individual issue but is deeply connected to gender roles, family structures, workplace culture, and social expectations. Unequal division of labour increases stress levels among women employees and affects their work-life balance. Working mothers often face additional pressures related to childcare, elder care, and family expectations, making it difficult to balance professional and personal responsibilities effectively. The social reproduction of labour perspective highlights how unpaid domestic responsibilities disproportionately affect women professionals, contributing to higher stress levels and greater work-life challenges compared to men.

4.1.13.2 Effect of Longer Working hours

According to the IT professionals in the sample, long working hours lead to deterioration in their physical and mental health and disturbances in work-life balance. Even though, the reasons for overtime work are more or less same for public and private employees, their effect varies remarkably between these two groups of work force. The harmful effects of overtime work are more evident in the case of private employees as compared to public employees. Almost half of the private employees suffer from deterioration of physical and mental health as against 37 percent in the case of public employees. The problem of work life balance is the second major effect of long work duration and its extent is more or less same among public and private employee categories. The effect of longer working hours is explained in Figure-1.

Figure 1 : Effects of Overstay



Source: Sample Survey

Conclusion

Different types of health problems, slow career progress, inadequate earnings, no overtime remuneration are the basic problems faced by the most of the workers in public sector. But in private sector, the problems can be categorized as long working hours, inadequate earnings, monotonous work, tight deadlines, job stress, too much work pressure, work life imbalance, job insecurity and health problems . It can be found in the light of this study that all the problems listed above are due to the lack of decency in IT sector. Since IT industry is an emerging promising industry, many youngsters are attracted to this sector. Hence, it is mandatory to provide good working conditions for the promising youth to save them from over exploitation and insecurity. It is also the responsibility of the State to ensure the basic rights for our young generation. This necessitates the urgent implementation of these indicators in this sector. In this context, this study has proven itself as an immensely significant one. Even though, many employees are working on contract basis, public IT sector is comparatively better than private IT sector in the analysis based on Decent Work.

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References

Agarwal.(2005). Women in the Digital Era: A Case Study of Career Patterns of Women Professionals in Information Technology, Review of Development and Change, 10(2), 152-166.

Arora & Surendrakumar. (2006). The Indian Software Industry: The Human

Capital Story, Working paper No. 249, Indian Institute of management Bangalore.Heinz School of Public Policy and Management, Carnegie Mellon University,Pittsburgh.

Banerjee. (2005). Knowledge Workers and Information Technology: Re-living Early English Industrial Revolution. The Indian Journal of Labour Economic,48(4), 777-787.

Beegom, Bushra. (2012). Stress Experienced by Women Managers in Kerala: A Sociological Analysis. ISDA Journal, 22(3), 233-251.

Bhangoo and Sinbgh.(2008). Changing trade Union Scenario and new economic environment in India: A Study of Re-organised Punjab (1967-2006). The Indian Journal of Labour Economics, 51(4),1027-1038.

Bhattacharyya & Nath. (2013). Gender Inclusivity in Information Communication Technology: Some Policy Indications. International Journal of Humanities and Social Science Invention, 2(6), 61-65.

Ghai (2003). Decent work :concepts and Indicators, International Labour Review, 142(2),113-45 Government of Kerala - GOK. (2017). Kerala Economic Review, Kerala State Planning Board, Thiruvananthapuram, Kerala, Vol.1,p.168.

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Do MSME clusters outlive policy support? Rethinking post-formation sustainability.

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Abstract

Cluster-based development in India has been widely used to strengthen micro, small and medium enterprises (MSMEs) through shared infrastructure and institutional support, particularly under schemes such as the MSE-CDP. However, policy and academic attention have largely centred on cluster formation and short-term outcomes, with limited understanding of what happens once funding and facilitation phases conclude.

This conceptual paper asks whether MSME clusters outlive policy support and argues that cluster success should be assessed not only through formation metrics but through long-term continuity, governance and adaptive capacity. Viewing clusters as evolving socio-economic systems, it highlights the gap between policy lifecycles and cluster lifecycles and draws attention to key factors influencing sustainability, including governance continuity, market integration, innovation capability and stakeholder engagement. The paper calls for greater emphasis on post-formation support and ongoing assessment to ensure clusters remain viable beyond funding cycles and to encourage further empirical inquiry into cluster sustainability.

Keywords: *MSME clusters; cluster sustainability; post-formation support; MSE-CDP; regional development.*

1. Introduction

Rapid economic growth in emerging economies like India has been accompanied by uneven patterns of industrialisation and regional development. Investment and employment remain spatially concentrated across select regions and sectors, contributing to persistent disparities in local economic outcomes. In this context, cluster-based development has gained policy relevance as a means of strengthening local production systems and addressing spatial imbalances in industrial growth (Chakraborty, 2021). A cluster is a collective tactic to address challenges faced by small entrepreneurs. In recent years, there has been a significant focus on clusters in economic development, particularly in developing countries, as they are acknowledged as potential drivers of enterprise development and innovation (UNIDO, 2013).

We have met business owners who are enthusiastic to innovate, scale up, or create a competitive advantage to face competition, but are struggling due to a lack of financial resources or capital. However, when they seek funds, they face major hurdles, which include banks demanding collateral, investors doubting repayment capacity, and the scale of investment required for infrastructure or technology going beyond what a single small enterprise can manage. Because of these limitations, many entrepreneurs remain small, and as a country, we end up importing innovative products instead of producing them here. This not only slows our economic development but also makes us consumers of others' growth. We strongly believe the government introduced the cluster model to address this challenge precisely. These types of interventions not only improve the competitiveness of individual enterprises but also contribute to the overall economic development of the country (Abdelmoula, 2024). By associating legally as a group, entrepreneurs can access common facilities such as infrastructure, advanced testing labs, machinery, and skilled human resources, which are funded largely by government grants Ministry of MSME issue grants to eligible clusters to about 95% of the total project cost, which does not need to be paid back and does not account for a cluster's liability (Ministry of MSME, 2022). This reduces their costs, lowers their risks, and enables them to price products competitively in both domestic and global markets. At the same time, the evolution and sustainability of such clusters depend not only on structural conditions but also on the agency of firms, entrepreneurs and supporting institutions that shape how clusters emerge, stabilise and transform over time (Trippl et al., 2015).

We see clusters as not just any manufacturing unit, they include a group of homogeneous business enterprises, government departments, and society that interact to form a living ecosystem. From our perspective, the "reality" of a cluster goes far beyond its physical infrastructure. It is like a forest ecosystem. At the same time, the MSME Ministry, Central Government, State Government, the Special Purpose Vehicle, and society at large become part of this system.This makes clusters far more multifaceted than individual enterprises. They involve public funds, government oversight, collective decision-making through a Section 8 SPV company, and the dynamics of entrepreneurs from the same industry but running different organizations.

2. Literature review

Clusters are basically geographic concentrations of interconnected organizations in a particular field. They manufacture complementary products and foster innovation through proximity to sophisticated buyers, suppliers, and institutions. That is when companies share geographic, cultural, and institutional proximity; they gain unique advantages such as easier access, stronger relationships, richer information, and stronger incentives, which are benefits usually hard to achieve when they are far apart (Porter, 1998). The sustainability of clusters cannot be measured only by counting how many have been sanctioned or how much funding has been disbursed. What matters is whether they are actually delivering value, whether they are helping entrepreneurs grow, whether the government sees real development in terms of productivity and competitiveness, and whether society benefits through employment and improved revenue (Das, 2008).

As mentioned above, that clusters are not liable to pay the grant issued by the Ministry of MSME, does not mean they can operate as they like; it is the responsibility of the cluster members to ensure that these projects are sustained in the long run, meaningfully and as promised. From the side of entrepreneurs who are members of SPV, we need to capture whether they feel cluster membership is truly beneficial, whether it improves their innovation capacity, reduces costs, or opens new markets. From the government's side, we must look at whether the scheme meets its policy objectives, such as employment generation, exports, and sustainable growth, and whether these clusters are operating seriously to fulfil the real objective for which they are formed, which is the value that they can give back to the government. From the society's side, we need to explore whether clusters provide jobs, improve workers' welfare, and contribute to long-term development for the economy as a whole. Quantitative data such as production growth, cost reduction, revenue generation, profit, global market development, and employment opportunities are significant as well.

Cluster promotion is grounded in the understanding that competitiveness increasingly arises from networks of interconnected firms and institutions rather than isolated enterprises (Wolman & Hincapie, 2015). Cluster-oriented policies strengthen shared infrastructure, enable knowledge spillovers and improve market access, thereby enhancing collective efficiency and aligning policy support with the collaborative nature of modern economic competition.

The Micro and Small Enterprises Cluster Development Programme (MSE-CDP) represents one of the most prominent policy mechanisms through which cluster-based industrialisation has been pursued in India. Through support for common infrastructure, technology upgradation and institutional facilitation, the programme aims to enhance productivity and competitiveness of enterprises operating within geographically proximate industrial concentrations.

However, the policy and scholarly discourse surrounding cluster development have largely focused on cluster formation, infrastructure creation and early operationalisation. Since its launch in 2003, the cluster development programme in India has drawn significant academic and policy attention as a strategic intervention for enhancing the productivity and competitiveness of micro and small enterprises. It is evident from the literature that extant research highlights the various dimensions like the effectiveness of the Cluster Development Programme in upgrading productivity (Unnisa & Amulya, 2016), the role of Special Purpose Vehicles (SPVs) and academia-industry linkages in capacity building (Nath, 2020), regional variations in adoption and performance (Sharma & Kohli, 2019), and the potential of clusters to drive rural entrepreneurship and women's empowerment (Manna & Mistri, 2020; Bhaskaran, 2020) etc.

Lot of research works have come up with findings that clusters generate benefits such as economies of scale, technology adoption, improved market access, employment generation, and networking opportunities (Rawat, Mittal, & Aggarwal, 2017). Global contributions, such as Porter's (1998) framework on clusters as engines of competitiveness, Giuliani's (2005) insights on absorptive capacity, and Morrison and Rabellotti's (2009) discussion on uneven knowledge flows, have enriched the Indian cluster development discourse.

Inspite of these contributions, much attention has been given towards short- to medium-term outcomes of the Cluster development that were largely measured in terms of tangible indicators like turnover, machinery adoption, or export orientation. Hardly any study critically examined the long-term sustainability of these clusters once policy funding phases out, or how organizational culture, leadership, and stakeholder readiness shape cluster resilience. This gap becomes the focal point because cluster policies are typically designed for a specific duration but the economic and social benefits are expected to go far beyond government intervention.

Cluster theory offers important insights for policy but provides limited clarity on how governments can effectively build or sustain cluster dynamics in practice. While public interventions may attempt to fill gaps in supply chains, support collective assets and foster collaboration, the interconnectedness and spillover effects that underpin cluster benefits are difficult to engineer directly and often yield modest gains. Scholars note that cluster advantages, though real, can be small and uneven, and that policy outcomes depend heavily on local conditions, institutional coordination and the provision of broader public goods such as infrastructure, skills and networking platforms. Consequently, cluster-based development policy is best understood not as a tool for creating clusters from scratch or "picking winners," but as an approach that strengthens existing agglomerations by supporting collaboration, information exchange, shared services and enabling conditions for long-term competitiveness (Wolman & Hincapie, 2015).

Metrics of success often include the number of clusters established, investments mobilised and facilities created. Such indicators provide limited insight into the long-term sustainability of clusters once the policy and funding lifecycle concludes. Clusters, by their nature, evolve over extended periods and require sustained coordination, governance and institutional support. Without mechanisms for continuous assessment and mentoring, clusters may experience a decline in participation, weakened institutional structures or reduced collective action after initial support phases end.

Literature reveals that while the policy-led cluster model has been studied in detail, the there are few other blind spots too that were not addressed of which the major ones are

1. Viability of clusters beyond policy lifespans: Limited research has been carried out on how clusters sustain competitiveness and collaboration once government support ends.
2. Readiness and Resilience Factors: Few studies adopt a multi-level readiness framework (individual, group, organizational, ecosystem) to examine why some clusters adapt and thrive while others do not. The most significant gap lies in the lack of a sustainability assessment in cluster development research. While clusters are celebrated as drivers of competitiveness, the long-term resilience of clusters remains underdeveloped. Most existing research captures "input-output" relationships without adequately exploring the institutional and cultural underpinnings that explain why some clusters endure and others decline (Barney, 1986).

This gap is highly relevant in India, where many clusters demonstrate early success during initial stages when they receive government support in terms of capital for their establishment but struggle later on with decision-making, trust building, inclusivity concerns, and competitiveness once external funding stops. They concentrate on just formation but not post-establishment. The gap also connects with inclusivity concerns, as knowledge flows and benefits often concentrate in a few firms only, leaving others behind (Giuliani, 2005; Morrison & Rabellotti, 2009).

This raises a critical question for both policy and research: do MSME clusters outlive policy support? More specifically, how can cluster sustainability be conceptualised beyond formation and initial funding phases? The absence of systematic post-formation monitoring and evaluation frameworks creates a gap between policy intent and long-term outcomes. This gap is particularly relevant in regional economies such as Kerala, where MSMEs form the backbone of local production systems and cluster-based development is expected to generate sustained economic and employment benefits. Clusters evolve over time, emerging, transforming and sometimes declining or disappearing (Martin & Sunley, 2011).

3. Theoretical foundations

3.1 Cluster theory and collective efficiency

Cluster theory emphasises the benefits of geographic concentration of interconnected firms, suppliers and supporting institutions. Spatial proximity facilitates knowledge spillovers, shared labour markets and collaborative innovation. Collective efficiency emerges from both passive externalities and active cooperation among firms. However, sustaining these benefits over time requires ongoing coordination and institutional support. Clusters are defined as a geographical agglomeration of competing and related industries; and where there is evidence of improved performance such as growth and profitability arising from the agglomeration of firms in a region (Kuah, 2002). It acknowledges that self-interest is a primary motive for collaboration, while propensity to collaborate increases with the complexity of problems.

3.2 Stakeholder theory and cluster governance

Clusters can be conceptualised as multi-stakeholder systems involving firms, government agencies, financial institutions, industry associations and knowledge organisations. Stakeholder theory highlights the importance of aligning interests and fostering trust among actors. Sustainable clusters require governance structures that enable continuous coordination, joint decision-making and conflict resolution. Without sustained stakeholder engagement, collective initiatives may weaken over time.

Analyses of cluster evolution must recognise the role of human agency across different stages of development, as the emergence, growth and transformation of clusters are shaped not only by structural conditions but also by the actions of entrepreneurs, firm leaders and institutional actors. Such agency influences how clusters adapt, sustain collaboration and respond to changing economic contexts, underscoring the importance of leadership and coordinated action in long-term cluster sustainability (Trippl et al., 2015).

Stakeholder theory offers a useful lens for addressing complex organisational challenges by recognising that effective decision-making must balance value creation, relationship management and considerations of fairness. This perspective is particularly relevant in public sector contexts, where multiple stakeholders, competing interests and diverse goals often create tensions that require careful coordination and negotiation (Sarturi et al., 2022).

3.3 Institutional perspective

Institutional theory underscores the role of formal and informal structures in shaping economic activity. Clusters formed through policy interventions may initially rely on external facilitation and funding. Over time, sustainability requires the development of internal governance mechanisms and institutional embeddedness. The transition from policy-driven coordination to self-governance represents a critical phase in cluster evolution.Much of the existing research in institutional theory has concentrated on large organisations, with comparatively limited attention to small and medium enterprises and how they navigate complex institutional environments. SMEs often operate with constrained resources and face greater exposure to external pressures, making their responses to regulatory, market and social expectations distinct from those of larger firms. Despite the relevance of institutional influences for smaller enterprises, there remains a lack of comprehensive understanding of how institutional conditions shape their strategic behaviour and adaptive responses (Balzano et al., 2025).

3.4 Sustainability lens

Sustainability in cluster contexts extends beyond economic performance to include institutional continuity, network resilience and adaptive capacity. Clusters must develop mechanisms for learning, innovation and market adaptation. Sustainability therefore, involves both structural and relational dimensions. Sustainability can be understood as the capacity of a system to endure and remain viable over time. In broader terms, it reflects efforts to maintain or improve desirable conditions while strengthening the ability to adapt and respond to changing circumstances. It also involves balancing social, economic and environmental objectives in ways that support long-term resilience and continuity. Sustainability can be understood as the capacity of a system to endure and remain viable over time. In broader terms, it reflects efforts to maintain or improve desirable conditions while strengthening the ability to adapt and respond to changing circumstances. It also involves balancing social, economic and environmental objectives in ways that support long-term resilience and continuity (Lis et al., 2023).

4. Cluster policy and the MSE-CDP lifecycle gap

The MSE-CDP provides a structured approach to cluster formation through diagnostic assessment, infrastructure support and institutional facilitation. While these interventions are essential for initiating cluster activity, they are typically time-bound. Evaluation frameworks often focus on outputs generated during the project period rather than long-term outcomes.

This creates a lifecycle gap between formation and sustainability. Key questions emerge: How is cluster success defined beyond infrastructure utilisation? Who evaluates clusters after the scheme concludes? Do clusters maintain collective initiatives and governance structures? Are there mechanisms for continuous mentoring and support? The absence of longitudinal metrics and assessment systems limits the ability to evaluate cluster sustainability.

5. Clusters and SDG-Linked regional development

Clusters play a significant role in advancing regional economic development and align with broader sustainable development objectives. By promoting local employment, industrial diversification and innovation, clusters contribute to inclusive growth. However, their contribution to sustainable development depends on their longevity and adaptive capacity. Clusters that dissolve after initial support fail to generate sustained benefits. Therefore, integrating lifecycle-based assessment into cluster policy is essential for achieving long-term development outcomes. This perspective aligns closely with **SDG 9 (Industry, Innovation and Infrastructure),** as sustained and well-governed clusters can strengthen local industrial ecosystems, support innovation diffusion and enable shared infrastructure that enhances long-term productivity and resilience.

6. Post-Formation cluster sustainability model

Building on the emerging emphasis in cluster research on a cluster "life cycle," this paper adopts a conceptual position that views cluster development as a dynamic and evolving process rather than a one-time policy intervention (Martin & Sunley, 2011). While many policy frameworks treat cluster formation as the primary outcome, the long-term sustainability of clusters depends on their ability to transition from externally supported arrangements to internally embedded and adaptive systems. In this view, cluster sustainability can be understood as a continuum shaped by governance evolution, institutional embeddedness and the strengthening of collective capabilities over time. Having said that, complex systems models of cluster evolution are as yet very undeveloped (Martin & Sunley, 2011).

Building on this gap, the present paper conceptually outlines cluster evolution across five interrelated stages-formation, activation, stabilisation, sustainability and transformation. These stages are proposed as an analytical heuristic rather than a fixed linear sequence, intended to capture the evolving nature of cluster dynamics and the shifting forms of support required across different phases of development.

Formation refers to the policy-driven establishment of clusters through diagnostic studies, infrastructure creation and institutional facilitation. During this phase, government agencies and implementing institutions play a dominant role in coordinating stakeholders and mobilising resources.

Activation involves the initial operationalisation of shared infrastructure and the emergence of collective activities such as joint procurement, skill development and market engagement. The effectiveness of this stage depends on the degree to which firms participate in collective initiatives and develop trust-based relationships.

Stabilisation occurs when cluster routines, governance mechanisms and institutional arrangements begin to consolidate. Special purpose vehicles or cluster associations assume greater responsibility for coordination. However, this phase remains vulnerable to disruptions if leadership continuity and stakeholder engagement are weak.

Sustainability represents a stage in which clusters demonstrate the capacity for self-governance, financial viability and market integration. Collective initiatives continue beyond policy support, and clusters develop internal mechanisms for coordination and innovation. Sustainability does not imply independence from public institutions but rather a shift toward collaborative governance.

Transformation refers to the ability of clusters to adapt to changing technological, market and policy environments. Clusters that reach this stage exhibit innovation capability, network expansion and diversification. Transformation reflects long-term resilience and the ability to generate sustained regional economic impact.

The lifecycle perspective highlights that cluster sustainability is not guaranteed by formation alone. Each stage requires distinct forms of governance and institutional support. Policy frameworks that focus exclusively on formation risk neglect the critical transitions required for long-term viability.

Dimensions of sustainability

- Cluster sustainability can be conceptualised across five interrelated dimensions that together shape long-term performance.
- Governance continuity refers to the persistence of coordination mechanisms, leadership structures and decision-making processes beyond the project lifecycle.
- Market integration involves the ability of clusters to establish stable demand linkages, access new markets and respond to competitive pressures.
- Innovation capability reflects the extent to which clusters adopt new technologies, processes and products.
- Financial viability refers to the capacity of cluster institutions to generate resources for maintenance, upgrading and collective activities.
- Stakeholder engagement encompasses the ongoing participation of firms, government agencies, financial institutions and knowledge organisations.

Challenges

While governance continuity, market integration and institutional embeddedness are central to cluster sustainability, the capacity of cluster actors to adapt and learn collectively also shapes long-term outcomes. From an absorptive capacity perspective, clusters depend on the ability of firms and supporting institutions to recognise the value of new knowledge, assimilate it and apply it within shared production and market contexts. In many MSME-dominated clusters, such capacities remain uneven and often rely on continued facilitation through training institutions, intermediaries and policy support. Where absorptive capacity is weak, shared infrastructure may remain underutilised, innovation adoption may be slow and collective initiatives may decline once external facilitation is withdrawn (Cohen & Levinthal, 1990; Zahra & George, 2002).

At the same time, transitions from externally supported coordination to internally sustained collaboration can encounter forms of innovation resistance. Firms may hesitate to participate in joint initiatives, adopt new technologies or invest in shared governance structures due to uncertainty, perceived risks or limited short-term incentives. Such resistance can hinder the development of trust-based collaboration and slow the consolidation of cluster-level capabilities. Without continued mentoring, facilitation and trust-building mechanisms, clusters may struggle to move from project-based cooperation to embedded collective action (Talke & Heidenreich, 2014).

These dynamics suggest that cluster sustainability is not determined solely by infrastructure provision or financial support but also by the behavioural readiness and learning capacity of participating firms and institutions. Sustained engagement, knowledge exchange and institutional support are therefore critical in enabling clusters to transition from externally driven coordination to adaptive and self-sustaining systems.

Evolving role of government

A central proposition of this paper is that the role of government in cluster development must evolve across the lifecycle. Traditional policy approaches position the government primarily as a funder and infrastructure provider during the formation stage. However, long-term sustainability requires a broader conception of governance.

During the formation phase, government agencies function as creators and coordinators, facilitating diagnostic studies, infrastructure development and institutional formation. In the activation stage, the role shifts toward facilitation, supporting capacity building and stakeholder coordination.

As clusters move toward stabilisation, government involvement should transition toward assessment and monitoring. This includes evaluating the effectiveness of governance structures, participation levels and market engagement. Continuous assessment can identify early signs of decline or fragmentation and enable corrective interventions.

In the sustainability phase, government roles should emphasise mentoring and enabling rather than direct control. This may involve supporting leadership development, facilitating market linkages and enabling access to innovation networks. The objective is not to perpetuate dependency but to strengthen adaptive capacity.

To operationalise this evolving role, the paper proposes the concept of a continuous cluster health monitoring system. Such a system would track indicators across governance, market performance, innovation and participation. Rather than one-time evaluations, periodic assessments would provide insights into cluster trajectories and inform policy adjustments.

Possible indicators include:

- member retention and participation rates
- frequency of collective initiatives
- utilisation of shared facilities
- revenue growth and market diversification
- adoption of new technologies
- institutional activity levels

These indicators would enable policymakers to move from formation-centric metrics toward lifecycle-based evaluation. Continuous monitoring could support targeted interventions, mentoring and policy redesign aimed at enhancing long-term sustainability.

MSE clusters' ability to last doesn't come from a few separate causes. It is where structural enablers (like how institutions work, how SPVs work, and funding support) and social-organizational traits (like trust, teamwork, leadership, and inclusion) meet.

7. Implications and scope

This paper seeks to address both academic and policy concerns surrounding the MSE-CDP by shifting attention from short-term cluster formation outcomes to long-term sustainability and resilience. From an academic perspective, it contributes to cluster literature by foregrounding issues such as governance continuity, organisational readiness, inclusivity and leadership, and by integrating people- and organisation-centred perspectives into discussions of cluster development. From a policy and industry standpoint, the continued public investment in cluster programmes underscores the need to better understand how clusters function beyond funding cycles and how targeted support can strengthen non-performing or vulnerable clusters. For practitioners, the discussion highlights the importance of governance mechanisms, collaborative networks and innovation-oriented practices in sustaining competitiveness. Overall, the paper offers a conceptual reflection that encourages further empirical inquiry into how clusters evolve, endure and generate long-term regional development outcomes beyond initial policy support.

8. Conclusion

Cluster-based development has been widely used to enhance the competitiveness of MSMEs in regional economies, yet policy attention remains heavily focused on cluster formation and initial infrastructure creation. This paper argues that such a formation-centric approach is insufficient for understanding the long-term contribution of clusters to regional development. By viewing clusters as evolving socio-economic systems embedded in institutional and stakeholder networks, it emphasises that sustainability depends on governance continuity, market integration, innovation capacity and sustained engagement beyond the funding lifecycle. The paper highlights the need to reposition the role of government from a one-time facilitator of formation to an ongoing enabler that supports coordination, periodic assessment and adaptive capacity. From a regional economic perspective, clusters should be evaluated not by how many are created but by how many endure, adapt and continue generating value over time. A lifecycle-oriented understanding of cluster development thus offers a more meaningful basis for assessing the effectiveness of cluster-based policy and for guiding future research on cluster trajectories and sustainability.

■

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References

Abdelmoula, N. T. (2024). *Promoting and Developing Industrial Organic Clusters in Egypt Case Study of Damietta Furniture Cluster* (Master's thesis, The American University in Cairo (Egypt)).

Abdin, M. J., & Rahman, S. (2015). Cluster development models: A review and research agenda. *Journal of Small Business and Enterprise Development,* 22(3), 493-512.

Akdere, M. (2005). Social capital theory and implications for human resource development. *Singapore Management Review,* 27(2), 1-25.

Balzano, M., Marzi, G., & Turzo, T. (2025). SMEs and institutional theory: major inroads and opportunities ahead. *Management Decision*, 63(13), 1-27.

Barney, J. B. (1986). Organizational culture: can it be a source of sustained competitive advantage?. *Academy of management review,* 11(3), 656-665.

Bhaskaran, S. (2020). Women's empowerment through cluster development: Evidence from the garment industry in India. *International Journal of Gender and Entrepreneurship,* 12(4), 367-384.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152.

Das, K. (2008). *Fostering competitive clusters in Asia: towards an inclusive policy perspective.* Chiba: Institute of Developing Economies.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of management Review,* 20(1), 65-91.

Giuliani, E. (2005). Cluster absorptive capacity: why do some clusters forge ahead and others lag behind?. *European urban and regional studies,* 12(3), 269-288.

Giuliani, E. (2005). The structure of cluster knowledge networks: Uneven and selective, not pervasive and collective. *DRUID Working Paper.*

Kuah, A. T. H. (2002). Cluster theory and practice: Advantages for the small business locating in a vibrant cluster. In *Proceedings of the 25th ISBA National Small Firms Policy and Research Conference* (pp. 206-228). Huddersfield University Business School

Lis, A. M., Rozkwitalska, M., & Lis, A. (2023). Sustainability objectives and collaboration lifecycle in cluster organizations. *Quality & Quantity,* 57(5), 4049-4068.

Lockett, A., Thompson, S., & Morgenstern, U. (2009). The development of the resource?based view of the firm: A critical appraisal. *International journal of management reviews,* 11(1), 9-28.

Mahajan, R., Lim, W. M., Sareen, M., Kumar, S., & Panwar, R. (2023). Stakeholder theory. *Journal of Business Research, 1*66, 114104.

Manna, S., & Mistri, T. (2020). MSME clusters and rural industrialization: A study of Bankura district. *Journal of Rural Development,* 39(2), 234-251.

Martin, R., & Sunley, P. (2011). Conceptualizing cluster evolution: Beyond the life cycle model? *Regional Studies*, 45(10), 1299-1318. https://doi.org/10.1080/00343404.2011.622263

Ministry of Micro, Small and Medium Enterprises. (2023). MSE-CDP *scheme guidelines.* Government of India. Retrieved from https://msme.gov.in

Ministry of MSME. (2022). *Guidelines of Micro & Small Enterprises - Cluster Development Programme (MSE-CDP).* Government of India.

Morrison, A., & Rabellotti, R. (2009). Knowledge and information networks in an Italian wine cluster. *European Planning Studies,* 17(7), 983-1006.

Motoyama, Y. (2008). What was new about the cluster theory? What could it answer and what could it not answer?. *Economic development quarterly,* 22(4), 353-363.

Nath, R. (2020). Industry-academia linkages and cluster competitiveness: A case study of Kolkata's fan cluster. *Asian Journal of Innovation and Policy,* 9(1), 57-72.

National Productivity Council. (2019). *Evaluation study of Micro & Small Enterprises Cluster Development Programme (MSE-CDP).* New Delhi.

Nishii, L. H., & Rich, R. E. (2013). Creating inclusive climates in diverse organizations. Diversity at work: The practice of inclusion, 330-363.

Porter, M. E. (1998). Clusters and competition. *On competition,* 7, 91.

Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review,* 76(6), 77-90.

Porter, Michael E. "Clusters and the New Economics of Competition." Harvard Business Review 76, no. 6 (November-December 1998): 77-90.

Rawat, D. S., Mittal, A., & Aggarwal, P. (2017). MSME clusters in India: Identifying success factors. *FICCI Report on MSMEs.*

Sarturi, G., Barakat, S. R., & Gomes, R. C. (2025). Stakeholder theory in the public sector domain: A bibliometric analysis and future research agenda. *Review of Policy Research,* 42(3), 736-756.

Sharma, S., & Kohli, V. (2019). Regional variations in MSME cluster performance in India. *Economic and Political Weekly,* 54(23), 45-53.

Talke, K., & Heidenreich, S. (2014). How to overcome pro-change bias: Incorporating passive and active innovation resistance in innovation decision models. *Journal of Product Innovation Management,* 31(5), 894-907.

Trippl, M., Grillitsch, M., Isaksen, A., & Sinozic, T. (2015). Perspectives on cluster evolution: Critical review and future research issues. *European Planning Studies,* 23(10), 2028-2044.

Trippl, M., Grillitsch, M., Isaksen, A., & Sinozic, T. (2015). Perspectives on cluster evolution: Critical review and future research issues. *European Planning Studies*, 23(10), 2028-2044. https://doi.org/10.1080/09654313.2015.1052780

Unnisa, A., & Amulya, M. (2016). Effectiveness of MSME cluster development programme: A case study. *International Journal of Applied Research,* 2(8), 595-600.

Wohlleben, P. (2016). *The hidden life of trees: What they feel, how they communicate.* Greystone Books.

Wolman, H., & Hincapie, D. (2015). Clusters and cluster-based development policy. Economic Development Quarterly, 29(2), 135-149. https://doi.org/10.1177/0891242414566529

Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of management review, 2*7(2), 185-203.

Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185-203.

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Chit fund transactions in parambil kadav, Kozhikode: understanding its functioning as the catalyst for women's empowerment

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Abstract

This study investigates the role of Kuri transactions in empowering Keralite women. Research questions guiding this inquiry: What perceptions exist around Kuri transactions among Keralite women? Do Kuri transactions alleviate financial burdens and enhance economic empowerment? Can these transactions strengthen social connections and solidarity?. The study used a qualitative research design utilizing surveys and thematic analysis. Data analysis examined 50 Kuri transaction participants (66% women, 34% men) from Kozhikode, Kerala, revealing demographic insights: 53% aged 31-50, 38% employed and 40% women literate. According to content analysis, men generally used Kuri cash for profitable endeavours like businesses and education. Women primarily set aside money for luxuries. Kuri transactions served as an unofficial banking system that allowed users to access large sums of money (Rs.50,000 to Rs.1 lakh) for necessities and save modest sums each month. The reduction of financial load (52%), financial savings (25%), social ties (8%), and economic empowerment (15%) were the main drivers of involvement. Kuri transactions promote economic solidarity among women. This study addresses the knowledge gap in empirical research on Kuri transactions' impact on women's empowerment in Kerala, contributing insights for policymakers and stakeholders.

Keywords: *Kuri transactions, women's empowerment, economic solidarity, Kerala, financial inclusion.*

1. Introduction

1.1 Context

Kerala has long been recognised as one of India's most socially advanced regions, often compared with developed countries because of its high literacy rates and strong welfare systems. A key reason behind this achievement is the widespread presence of informal financial groups that function outside the formal banking structure. These community-based systems offer people easy ways to save and borrow money. Among them, the Kuri fund transaction system stands out as one of the most important and enduring features of the state's financial and social life. A Kuri, also known as a Chit or Chitty, is a collective savings arrangement in which a group of people contribute a fixed amount of money at regular intervals to form a common pool. The organiser is usually a woman who brings together family members or neighbours and follows a commonly accepted set of rules. The entire system runs on trust and mutual support, allowing participants to obtain lump sums of money that they might otherwise find difficult to access.

For instance, a Kuri with a target of one lakh rupees may involve ten members who each contribute ten thousand rupees to the organiser. A smaller Kuri of twenty thousand rupees may include twenty members who each contribute one thousand rupees every month. The pooled money is distributed each month through a lottery or a bidding process until all members have received their share. This simple structure provides timely financial support to many households and has become especially important for women in Kerala. The locality selected for this study is Parambil Kadav in Kozhikode district. Data provided by GeoIQ in 2020 for the nearby Parambil Bazar locality shows a population of around four thousand two hundred and forty-one people within an area of one point two square kilometres. This results in a population density of about three thousand five hundred and thirty-eight people per square kilometre. Such figures indicate a relatively dense semi urban or suburban region within Kozhikode.

Although the Kuri system plays a major role in Kerala's microfinance culture, there is still limited empirical research that explores its effects at the level of specific communities. Most earlier studies have focused on its historical background or the general workings of Kuri groups. They rarely investigate how the system influences particular localities or how it shapes the lives of women in those areas. This research attempts to fill that gap by examining the impact of Kuri transactions in the community of Parambil Kadav. While it is widely known that women often lead these groups and rely heavily on their social networks to run them, there is still a lack of detailed analysis on how Kuri functions as a direct force for women's economic and social empowerment. Because it is informal and rooted in personal relationships, the Kuri system provides a valuable framework for understanding financial inclusion and social solidarity among women from different economic backgrounds in Kerala.

1.2 Research questions

This study is guided by the following questions:

1. What are the perceptions of Keralite women in Parambil Kadav regarding their participation in Kuri transactions
2. Do Kuri transactions help to reduce financial stress and improve the economic empowerment of women in this community
3. Do Kuri transactions strengthen social relationships and collective support among the women who take part in them

1.3 Originality

This study contributes to existing knowledge by offering community specific evidence on the impact of the Kuri system, with a particular focus on women's empowerment. The findings provide useful insights for policymakers and stakeholders who wish to build on informal financial networks as a means of promoting social development and financial inclusion. The rest of this thesis is organised as follows. Section two reviews the literature on Kuri, microfinance, and women's empowerment. Section three explains the methodology, including the qualitative design, participant details, and the approach used for data analysis. Section four presents the results, including demographic patterns and the ways in which funds are utilised. Section five discusses these findings in relation to the research questions. Section six concludes the study with a summary and suggestions for future research.

2. Literature review

The Kuri, also known as the Chit Fund, is a vital part of Kerala's socio?economic fabric and plays a key role in the informal financial sector. It functions as a collective savings scheme where members contribute a fixed amount to a common pool, and the pooled money is distributed to participants through periodic draws. This traditional system stands out for its simplicity, reliance on trust, and flexibility, making it accessible to people who are often left out of formal banking channels. Historical studies, such as the work by M.A. Valsa, have traced the evolution of Kuri companies and their significant influence on the socio?economic transformation of regions like Trichur from 1891 to 1975. Other research, for example by N.I. Qureshi, has examined Kuri funds as an "old?age fund collection technique," offering case?study insights into how the system functions. These works show that the Kuri is more than a financial mechanism; it is a social institution built on community ties, neighborhood relationships, and kinship networks.

Financial inclusion is understood as ensuring that vulnerable groups, especially the poor and women, have affordable access to appropriate financial products and services. In Kerala, the Kuri system acts as an unofficial banking network. Unlike formal banks that demand collateral, extensive paperwork, and rigid repayment schedules, Kuri participation hinges on social capital and trust. Participants pool money to obtain large sums (such as Rs.50,000 to Rs.1 lakh) for major needs while also enabling modest monthly savings. This dual role meets both emergency liquidity needs and long?term saving goals for low? and middle?income individuals, providing a crucial financial safety net for communities grappling with poverty and unemployment, many of whom are classified as Below Poverty Line (BPL). Social empowerment refers to a woman's increased ability to engage in social networks, make household decisions, and earn community respect.

Since Kuri transactions are inherently social, they both rely on and reinforce these ties. The system fosters economic solidarity, particularly among women who form the core membership, encouraging interaction and relationship building. While existing literature covers the macro?historical and functional aspects of Kuri funds, there is a noticeable gap regarding its impact in specific localities. This paper fills that gap by focusing on the Parambil Kadav community in Kozhikode. By conducting a comparative study that includes both male and female participants, the research offers detailed, granular insights into the localized effects of Kuri and provides empirical analysis of its role in promoting women's economic and social empowerment within a clearly defined community context. This location?specific focus, combined with a detailed examination of gendered financial behavior, contributes a fresh perspective to the literature on informal microfinance in Kerala.

3. Methodology

This study used a qualitative research design while also incorporating quantitative elements drawn from survey responses. This blended approach was selected in order to understand the deeper experiences and perceptions of Kuri participants and to measure the demographic patterns and usage behaviours found within the community. The intention was to conduct a comparative analysis of how Kuri transactions influence both male and female participants. The research was carried out in the community of Parambil Kadav in Kozhikode, Kerala. This location was chosen because earlier studies have not provided detailed empirical evidence about how the Kuri system functions in specific and clearly defined local areas. Focusing on a single community allowed the study to gather detailed data that reflects the social and economic conditions of the locality, including the influence of kinship networks and neighbourhood interactions.

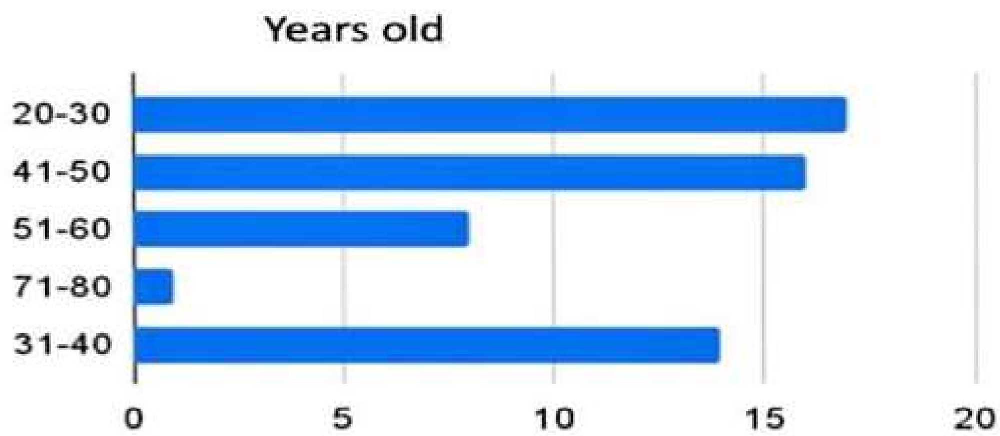
The population for this study consisted of individuals who were actively involved in Kuri transactions either as organizers or as members. A total of fifty eight individuals participated in the survey and submitted complete responses. According to the abstract, sixty six percent of the participants were women and thirty four percent were men. Including participants of both genders was important for comparing how men and women differ in their financial experiences and decision making within the Kuri system. Data were collected using a structured survey that was created through FormsApp. The survey link was shared with Kuri organizers and members in the area. This method ensured that a suitable number of participants could be reached and that the data collected would be consistent and organized. The survey included both categorical questions related to demographics and open ended questions that explored personal experiences and perceptions. This reflects the study's combined use of quantitative and qualitative methods.

The survey gathered information across several main areas. Demographic data included age, religion, caste, education, literacy, and economic status such as APL or BPL classification. Kuri related data included target amounts, the frequency of participation, and the different areas in which Kuri funds were used. Perception related data explored feelings of financial security, the effect of Kuri on personal relationships, and the role of Kuri in building social networks. The analysis of the data used descriptive statistics for demographic information and for the frequency of different responses. Raw counts and percentages were calculated to provide a clear understanding of age distribution, religious groups, caste representation, and the socioeconomic status of the participants. Charts and graphs were used to present these findings in a clear and visually accessible manner.

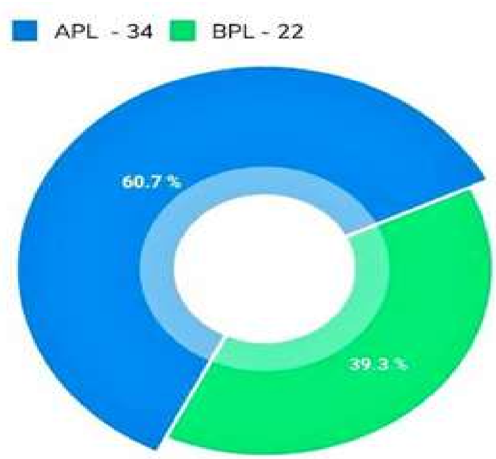
Content analysis was used to study how participants allocated their Kuri funds. Through this method, the research identified an important difference between genders. Men tended to use Kuri money for income generating purposes such as business activities and education. Women, on the other hand, often spent their Kuri funds on household needs and personal items. Thematic analysis was used to interpret responses related to financial security and social benefits. The qualitative data were grouped into themes such as reduction of financial pressure, savings, formation of social connections, and feelings of economic empowerment. These themes reflect the main reasons participants chose to engage in Kuri transactions. Although the full sample included fifty eight respondents, the abstract focuses on a final filtered group of fifty participants for the core findings. This filtered data set includes details such as fifty three percent of the participants being between the ages of thirty one and fifty, fifty six percent belonging to BPL households, thirty eight percent identifying as Muslim, and fifty four percent identifying as Hindu. The analysis presented in the following sections brings together the complete data set in order to provide a full and accurate understanding of the impact of the Kuri system on this community.

4. Results and analysis

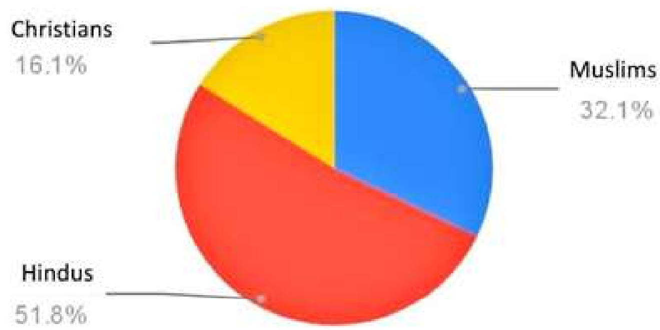
The Kuri fund system in Parambil Kadav attracts a lot of participation from specific age and socioeconomic groups. The sample was mostly women, making up 66% of participants, while men accounted for 34%. (Fig-1).



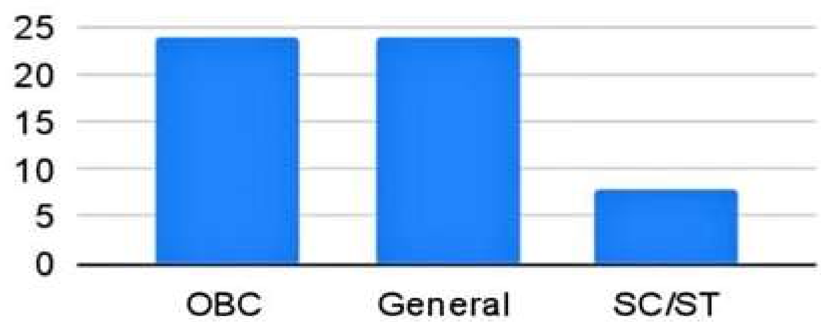
Looking at age, the biggest portion (30%) falls in the 20?30 years range, showing that younger community members are actively using the system. Middle?aged cohorts (31?40 years at 25% and 41?50 years at 28%) are also well represented, indicating that Kuri is popular across different life stages. Literacy is exceptionally high, with 94.6% of participants reporting that they are literate. Many have solid educational backgrounds (26.8% with undergraduate degrees and 19.6% with postgraduate degrees), which suggests they have the capacity to understand the terms and management of this informal financial scheme. A key finding is the strong presence of financially vulnerable groups. About 56% of participants belong to the Below Poverty Line (BPL) category, while 44% are Above Poverty Line (APL). This difference highlights Kuri's role as a crucial financial tool for low?income families (Fig -2).



Occupationally, the mix is diverse: 46.4% work in the private sector, 32.1% in the government sector, and 39.3% reported being unemployed - a figure that lines up with the high BPL share, showing heavy reliance on Kuri for liquidity when jobs are scarce. Community representation shows Hindus at 51.8%, Muslims at 32.1%, and Christians at 16.1% (Fig - 3).



Caste distribution is balanced, with OBC and General categories each making up about 42.9% of the sample (Fig - 4).



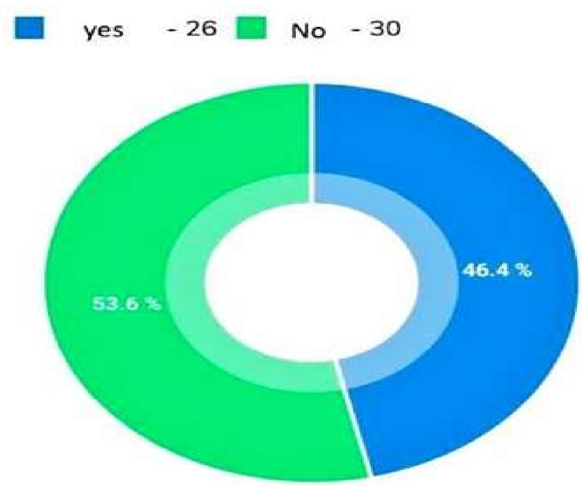
The way participants use the lump sum amount they receive from the Kuri is central to understanding how the system supports empowerment. The choices they make show a clear focus on immediate household needs and reveal an important gender based difference between spending for consumption and spending for investment. When participants were asked about the main areas in which they used their Kuri funds, the responses highlighted a strong preference for essential expenses and savings. Household expenses formed the largest category at 39.3 percent, showing that Kuri plays a major role in helping families manage their domestic budgets and meet significant financial needs within the home (Fig - 5).

Options	%	Count
Luxuries	17.9	10
Savings	19.6	11
Education	10.7	6
Marriage	12.5	7
Household expenses	39.3	22

Savings appeared as the second most important category at 19.6 percent, which demonstrates that Kuri works effectively as a disciplined form of forced saving. Spending on luxuries accounted for 17.9 percent, indicating that some participants also used the funds to improve their quality of life. Meanwhile, investments in social capital, such as marriage expenses, stood at 12.5 percent, and investments in human capital, such as education, made up 10.7 percent of the total allocations. The main purpose of the Kuri system is to reduce financial stress, and the findings of the study strongly support this. In the survey, 58.9 percent of the participants said that they felt financially secure because of their involvement in Kuri (Fig - 6).

Many explained that the system offers timely help during difficult moments and gives them access to substantial amounts of money, often ranging from fifty thousand to one lakh, which allows them to meet major essential expenses. The key reasons for joining a Kuri were measured as follows. A reduction of financial pressure was the leading motivation at 52 percent. This was followed by the desire to save money at 25 percent and the wish to achieve economic empowerment at 15 percent. The strong emphasis on reducing financial stress, reflected in the 52 percent figure, shows that the Kuri system plays an important role as a risk management tool for families with low income.

In the study, 28 participants said they had developed good relationships with fellow members. At the same time, 22 participants mentioned they didn't really know other members well, and six reported having poor relationships, showing that social experiences vary quite a bit. The aim of widening social networks was only partly achieved. While 46.4% of participants reported that they made new contacts, a slightly larger share (53.6%) said their network stayed limited to family and close neighbors. This indicates that the Kuri system works well for strengthening existing, tight community ties (solidarity) but is less effective at creating broader, new social capital beyond the immediate locality(Fig - 7).



A notable limitation that emerged was the question of fairness and trust. Some participants raised concerns that the Kuri organizer might be manipulating the draw to favor their own family or close associates. Such doubts undermine the trust that is central to the scheme.

5. Discussions

Kuri strengthens bonds among neighbors and relatives, although it does not always lead to wider social capital formation or help participants cross larger social boundaries. The high participation of individuals who fall under the Below Poverty Line category at 56 percent and the significant number of unemployed participants at 39.3 percent show that Kuri directly addresses the issue of financial exclusion. Acting as an unofficial banking system, it fills the gap left by formal institutions that often demand collateral, extensive paperwork, and fixed repayment schedules that do not match the unstable incomes of poor households. The main reason for joining a Kuri, which is the reduction of financial burden at 52 percent, confirms that the system works primarily as a tool for managing financial risk and providing quick access to liquidity. This is especially important for women, who frequently shoulder the responsibility of managing sudden financial pressures within the home.

The opportunity to receive a large lump sum of money, often between fifty thousand and one lakh, at short notice provides an essential safety cushion for many families. This explains why 58.9 percent of participants reported feeling financially secure through their involvement in Kuri. The most striking finding in this study relates to the gender based pattern in how Kuri funds are used. The data show that male participants are more likely to spend the amount on productive activities such as business ventures or education, whereas female participants tend to spend the money on consumption related needs such as household items or luxury goods. This difference is crucial for understanding what empowerment really looks like in this context.

Kuri does succeed in giving women access to capital, which is an important first step toward empowerment. Yet the way the money is eventually used reveals an important limitation. In many social and cultural settings, the money that women receive is seen as belonging to the entire household, while the money that men use is viewed as an investment in their personal growth. As a result, when women receive the lump sum, it is often used for immediate family needs, child related expenses, and household consumption rather than for building long term personal wealth. Even the category labeled as spending on luxuries may actually include socially expected purchases or items that enhance the family's status, rather than expenses meant purely for personal enjoyment. This finding shows an empowerment paradox: women gain the ability to manage the family's liquidity and smooth consumption, which improves household welfare, yet they often remain constrained from achieving individual economic independence through investment.

True economic empowerment, as defined in the literature, means having the power to allocate resources toward ventures that generate future income and strengthen a woman's bargaining position within the home and community. Only 15% of participants listed "economic empowerment" as their main motivation, compared to 52% who cited reducing financial load. This suggests that for many, Kuri is seen more as a survival strategy than a path to self?actualization. By keeping interactions limited to family and neighbors, Kuri reinforces existing boundaries and may limit women's mobility and access to opportunities beyond their local ward. Consequently, there is a clear need for external interventions that connect these groups to broader community or commercial networks.

In sum, the Kuri fund in Parambil Kadav serves as a highly effective platform for initial financial inclusion and social stability. It successfully addresses the need for timely, large?scale capital among low?income populations, especially women, and fosters crucial economic solidarity. However, its potential to become a true catalyst for comprehensive women's empowerment is significantly diluted by two main structural factors. Prevailing social norms prioritize household consumption over women's productive investment, restricting the scope of empowerment. The inherent risk and limitations of the trust?based system, including lack of guaranteed transparency and limited external network building, further hinder progress. The thesis adds value by empirically quantifying these localized constraints. Going forward, interventions should focus not only on providing the tool (Kuri) but also on reshaping the environment in which it operates, primarily through education and external linkage programs.

6. Conclusion

This research set out to examine how the Kuri fund transaction system functions as a force for the empowerment of women within the specific social and economic setting of Parambil Kadav in Kozhikode. Using a mixed method approach, the study brought together measurable data and interpretive insights to answer the three guiding research questions. The findings reveal a complex picture of the Kuri system and its dual role in the community. Financial inclusion and risk reduction form the strongest contributions of Kuri. The study clearly shows that Kuri plays an essential role in addressing financial exclusion for a large part of the population, especially the 56 percent of participants who fall under the Below Poverty Line category. Because the system is flexible and rooted in trust, low income women are able to access large amounts of money when they need it most. This is a major reason why many participants reported that Kuri helps reduce their financial burden, which stands at 52 percent of the responses. These results confirm that Kuri operates as an important unofficial banking system and as a crucial mechanism for managing financial risk in household life.

This research also fills the identified gap in the existing literature regarding the absence of detailed, location specific studies on informal financial systems in Kerala. By presenting fine grained data from Parambil Kadav, the study moves beyond broad historical accounts and offers a clear, contemporary view of how Kuri influences real people at the community level. Going forward, policy and development efforts should not simply concentrate on increasing access to credit, because Kuri already performs this function effectively. Instead, the focus must shift towards building the capacity of women to invest productively. Empowerment requires not only access to capital but also the ability to use that capital in ways that increase long term economic security. Encouraging investment skills, improving financial literacy, and creating support structures for women led enterprises are essential steps for transforming Kuri based access to money into genuine and sustainable empowerment.

Programs that aim for financial inclusion should be paired with thorough training in small business management, asset building, and long?term financial planning, specially crafted to help women direct capital toward productive assets. The strong bonding capital that already exists is a valuable resource that government schemes like Kudumbashree can tap into. By creating intentional links between Kuri groups and external resources such as skill development centers, micro?enterprise loan programs, or market connections, the system can be nudged to develop the crucial bridging social capital needed for genuine social mobility. The current study's insights are limited because they come from a single location, Parambil Kadav, and rely on cross?sectional, self?reported data. A single?location study cannot capture regional variations in Kuri practices, and subjective data may introduce social desirability bias, possibly inflating the positive social outcomes reported. To address this, further qualitative research should be conducted, using methods like in?depth interviews and focus group discussions, which would provide richer context to understand the decision?making processes behind fund allocation.

A relative study Involving Kuri participants from different socioeconomic strata (urban vs. rural) or distinct cultural regions within Kerala would test how well the Parambil Kadav findings apply elsewhere, especially regarding the persistence of the gendered allocation gap. In conclusion, the Parambil Kadav Kuri fund transaction shows the strong community?based resilience and financial ingenuity of Keralite women. While it acts as an essential safety net, its full potential as a driver for true economic independence is not yet realized. Turning this system into a comprehensive empowerment tool calls for a nuanced policy approach that respects its informal structure while strategically intervening to tackle the deep?seated societal constraints on women's financial autonomy.

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References

Ardener, S., & Burman, S. (Eds.). (1995). Money-go-rounds: The importance of rotating savings and credit associations for women. Berg Publishers.

Bhatia, N. (2019). Financial Inclusion Empowers Women: A Study of Kudumbashree Programme in Kerala. Journal of Exclusion Studies, 9(1), 86-98.

Chakraborty, P. (2023). Financial Inclusion and Women Empowerment: A Study on Kudumbashree Mission in Kerala. International Journal of Case Studies in Business, IT, and Education (IJCSBE), 7(1), 194-206.

Dhanya, V., & Sivakumar, P. (2010). Micro Finance for Self Reliant Women: A Case Study of Kudumbashree in Thiruvananthapuram District, Kerala. (MPRA Paper No. 25337).

Eapen, M., & Kodoth, P. (2003). Family Structure, Women's Education and Work: Re-examining the High Status of Women in Kerala. (Working Paper No. 341). Centre for Development Studies, Thiruvananthapuram.

Qureshi, N. I. (n.d.). An old-age fund collection technique: a case study on Kuri funds.

Valsa, M. A. (n.d.). A historical outline of kuri companies and its impact on the socio-economic transformation of Trichur (1891-1975).

Venugopal, V. (2022). Women Empowerment Through Kudumbashree: A Study with Special Reference to Thrissur District. International Journal of Research and Analytical Reviews (IJRAR), 9(2), 718-723.

Zachariah, K. C., & Rajan, S. I. (2012). Kerala's Gulf Connection: Emigration, Remittances and their Macroeconomic Impact 1972-2011. Orient Blackswan.

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Kerala's Plantation Crisis: Informality, Marginalisation and Labour Resistance

Joice Varghese

Abstract

This paper critically examines the paradox of informality within Kerala's plantation sector, focusing on the historical and contemporary experiences of tea and rubber plantation workers. Although plantations fall under the purview of organized sector with formal labour laws such as the Plantations Labour Act (1951), systemic neglect, weak enforcement, and political-corporate collusion have resulted in widespread denial of basic rights, including adequate housing, healthcare, and fair wages. The study highlights the socio-economic marginalization of Tamil Dalit workers in tea estates, whose conditions remain colonial in nature. In contrast, rubber plantation workers-primarily smallholders-experience relatively better autonomy and housing conditions, though they too are vulnerable to commodity price fluctuations. The research underscores gendered exploitation, with women disproportionately concentrated in low-wage roles and excluded from leadership positions. Trade unions, once vehicles for labour rights, have often failed to represent workers due to co-option by management and political interests. The paper uses the 2015 Munnar women's strike as a critical case of autonomous labour resistance, challenging both employer hegemony and union inaction. Through this analysis, the paper argues that despite formal classification, plantation labour in Kerala remains deeply informalized, and calls for urgent structural reforms in labour governance, collective bargaining, and socio-economic protections.

Keywords: *Plantation Labour, Informality, Plantation Labour Act, Labour Rights, Trade Unions, Labour Resistance, State Intervention.*

1. Introduction

Plantations are expansive tracts of land dedicated primarily to the cultivation of a single commercial crop. This specialized mode of production thus significantly distinguishes the nature of labour in plantations from that in conventional agricultural settings. Agricultural labour is typically seasonal, with demand concentrated around specific phases such as sowing and harvesting during the kharif and rabi seasons. Following these periods, labourers are often released from employment and re-enter the broader labour market as wage workers. In contrast, employment in plantations-such as those producing tea or rubber-is generally long-term and continuous, rather than seasonal. Consequently, plantation workers experience a degree of relative job security when compared to their counterparts in traditional agriculture. However, this relative stability does not necessarily translate into improved working or living conditions. Hence it may be understood as a coercive institution designed to establish and sustain a hierarchical class structure, wherein a workforce is systematically organized under the authority of overseers and managers who act as intermediaries between laborers and owners. (Bhoumik, Sharith 1980). Furthermore, plantation labour has historically been marked by exploitative systems such as bonded labour and slavery. Notable examples include the forced migration and enslavement of African populations in American tobacco plantations and the relocation of Tamil communities to work under oppressive conditions in Sri Lankan tea plantations. These practices highlight the distinct socio-economic and historical dimensions that set plantation labour apart from general agricultural labour.

Historical and structural origins of the plantation economy in Kerala

The origins of the plantation sector in Kerala can be traced back to the pre-independence era, emerging as a direct consequence of colonial rule in India (Ravi Raman, 1986). The former princely state of Travancore was among the earliest regions in Kerala to witness the establishment of plantation estates, beginning in the late 1860s. The institutional interventions of the British administration played a pivotal role in facilitating the development of the plantation economy in the region (Umadevi, 1989). Various institutional factors-including the state, familial structures, and caste dynamics-contributed significantly to the sector's expansion. Key governmental initiatives, such as the allocation of land under favourable terms and the encouragement of labour migration, were instrumental in the growth and consolidation of the plantation industry in Kerala during the 19th century.The plantation sector in Kerala serves as a vital source of livelihood for approximately 1.4 million families (Economic Review, 2016). Among the various plantation crops, rubber accounts for the highest employment generation. In its initial phase, rubber cultivation was predominantly concentrated in the districts of Idukki, Kottayam, and Pathanamthitta. The declining profitability of traditional crops such as rice and coconut, coupled with the rising market value of rubber, prompted a significant shift among farmers toward rubber cultivation, leading to its widespread expansion across the state. Despite the expansion of the sector, the socio-economic conditions of the workers remain precarious. Compliance with the Plantations Labour Act of 1951, which mandates the supply of essential amenities for plantation workers, remains inadequate, with many plantations failing to meet the stipulated standards.

The legal framework: The plantations labour act (1951)

The Plantations Labour Act 1951 (PLA) represents a significant legislative framework aimed at enhancing the living conditions of plantation workers, who often reside in geographically isolated areas with limited access to essential services.(Government of India, 1951). Recognizing the vulnerability of such workers, the Act mandates employers to provide a range of basic amenities, including housing for workers and their families, sanitation and safe drinking water within labour settlements, subsidized canteen facilities, crèches, primary educational institutions, and healthcare services, including access to specialized treatment through group medical hospitals. Despite these provisions, implementation remains largely inadequate.(Bhowmik, 2015).While plantation associations frequently contend that the obligations imposed by the Act constitute a financial burden, the failure to enforce these standards is primarily attributed to the apathy of both state governments and plantation management (Vishwanathan M, 2023). As a result, the intended welfare benefits outlined in the legislation often remain unfulfilled in practice.

According to the provisions of the Plantations Labour Act (PLA), plantation management is required to convert at least eight percent of workers' housing into permanent structures annually, with regular maintenance and repairs. However, in practice, these standards are rarely met, and many dwellings remain in a state of disrepair, lacking proper structural integrity. The Act also mandates the provision of separate sanitation facilities for men and women; yet, in many plantations, such facilities are either absent or inadequate, leading workers to rely on public water sources or streams for bathing and other needs.With regard to potable water, the situation remains similarly deficient. A significant number of houses lack water pipelines, and where pipelines do exist, water supply is often irregular, with availability limited to once a week or even once every two weeks(Bhowmik. S K, 2011). The PLA also requires the establishment of primary schools within plantation estates; nevertheless, these schools frequently suffer from severe resource shortages. In many cases, they are inadequately staffed, with a single teacher responsible for instructing all four primary grades, thereby compromising the quality of education provided to the children of plantation workers. Wages and the timely provision of rations are critical determinants of the living conditions of plantation workers. However, in many plantations, both wages and rations are frequently delayed, often being disbursed on a weekly or fortnightly basis, with payments commonly postponed by one to two weeks. In instances where workers report no significant issues, it typically indicates that they are receiving their wages and rations more regularly in comparison to workers in other plantations. This relative improvement, however, should not be interpreted as an indication of satisfactory living standards. Despite payments, these workers often continue to reside in substandard, dilapidated housing with limited or no access to essential services such as potable water and other basic amenities.Critics argue that the implementation of the Act has created an environment where state authority is significantly weakened in areas governed by its provisions. Decision-making regarding key aspects of workers' welfare-such as housing, healthcare, education, and wages-remains concentrated in the hands of plantation-owning entities. In such contexts, the state's capacity to intervene is minimal. This has led to the characterization of certain plantation companies, including prominent corporate groups such as Tata, as functioning effectively as a "state within a state" within Kerala's plantation regions, wielding considerable socio-economic and administrative control. (Konikkara A, 2020).

Living conditions of the workers in the plantation Sector:

Wages

Wages constitute a critical determinant of the living conditions of plantation workers. In the context of tea plantations, wage levels are relatively low compared to those earned by casual or other unskilled labourers. Following a landmark strike by the women workers of Kannan Devan Tea Plantations in Munnar, the daily wage in Kerala was raised to ?301. (The Hindu, 2015) The strike was notable not only for its success in achieving a wage increase but also for the solidarity expressed by the state government in support of the workers' demands. However, despite appearing substantial, this wage remains modest in the broader context of Kerala's labour market, where the prevailing daily wage in many sectors exceeds Rs.500. (Economic Review, 2022) The relatively higher wage levels in Kerala have led to an influx of migrant workers from eastern states like West Bengal and Assam, who seek employment not only in plantations but also in sectors such as construction and hospitality

Caste, ethnicity and marginalisation

The majority of tea plantation labourers in Kerala belong to Dalit communities, and their historical landlessness has been a key factor in sustaining their generational engagement in plantation work. Despite their long-standing settlement in the region, these workers have remained largely invisible in Kerala's mainstream political discourse, a marginalization closely tied to their socio-economic and caste-based positioning (Raj Jayaseelan, 2018)Their status as socially and politically peripheral actors has significantly hindered efforts to organize collective resistance or effectively communicate their demands to the state. Although many of these workers are Tamilspeaking individuals who have resided in Kerala for generations, they continue to be perceived as outsiders. This perception has acted as a barrier to their political mobilization and access to institutional support.The term "Pandi", commonly used in local parlance to describe Tamil workers, carries racially and culturally derogatory connotations (Konikkara A, 2020). This intersection of caste, ethnicity, and socio-economic marginalization has contributed to the persistent exclusion of plantation workers from both public recognition and policy attention.

The Pettimudi landslide in Idukki District of Kerala tragically exposed the hazardous and inadequate living conditions provided by plantation companies for their labour force, bringing renewed attention to the urgent need to recognize plantation workers' right to secure housing, land ownership, and a life of dignity. (Konikkara A, 2020)Labourers and their families are often confined to overcrowded, one-room dwellings-many of which date back to the colonial period-irrespective of household size. These settlements, emblematic of caste-based occupational segregation, remain structurally and socially oppressive and the conditional nature of housing, which is tied exclusively to active employment within the plantation further aggravates the misery of the workers. When younger generations, seeking alternate employment in areas such as hospitality or other professions aligned with their education, choose not to join the plantation workforce, companies frequently issue eviction notices to their families. This practice ignores the deep historical roots of these communities, many of whom were originally brought as bonded labourers nearly two centuries ago and have since lived on these lands for generations.Consequently, their status is marked by a persistent precarity, with no secure claim to the land they have long inhabited.

Rubber versus tea: A comparative labour analysis

However, the nature of labour relations in Kerala's rubber plantation sector differs significantly from the more exploitative dynamics observed in the tea plantation industry.According to data from the Department of Scientific and Industrial Research (DSIR), under the Ministry of Science and Technology, Kerala accounts for over 90 percent of India's natural rubber production. The state has a total cultivated area of approximately 3.84 lakh hectares, yielding an annual output of around 3.70 lakh tonnes of rubber. The sector supports the livelihoods of an estimated 10 lakh rubber growers and provides employment to approximately 3.5 lakh workers.In contrast to tea plantations, which typically comprise large landholdings, rubber plantations are generally smaller in scale. The ownership structure of rubber plantations in Kerala is categorized into two distinct groups-small and large growers-based on landholding size as defined by the Rubber Act Rules of 1947, (Rajasenan D, 2010) Under this classification, individuals or entities owning up to 10 hectares (24.7 acres) are designated as small growers, while those possessing more than 10 hectares are identified as large growers. Notably, approximately 93 percent of the total rubber plantations in the state fall within the smallholder category, collectively accounting for nearly 85 percent of overall rubber production. For the financial year 2024-25, the projected national figures for natural rubber indicate a production of 8.75 lakh tonnes against a significantly higher estimated consumption of 14.25 lakh tonnes, highlighting a considerable supply-demand gap.

Rubber plantation workers, particularly in Kerala, experience comparatively better living standards than their counterparts employed in tea plantations.A key distinction lies in residential arrangements: rubber plantation workers do not reside on plantation premises but instead live in their own homes, which are typically in significantly better condition than the deteriorated and overcrowded accommodations associated with tea plantations.Rubber cultivation is generally not characterized as a labour-intensive plantation activity (Vijayan D et al, 2024). The demand for labour is primarily concentrated during the initial three to four years of sapling growth, when intensive care and maintenance are required. However, once the trees reach maturity, the labour requirement significantly declines. At the mature stage, the principallabour activity is tapping and demands a certain level of technical skill for which there is often a shortage of skilled workers. Workers typically make incisions in the bark during the early morning or evening hours, ensuring that the cuts are of sufficient depth to extract latex without causing damage to the tree. This procedure must be repeated on a regular basis for each tree, requiring both precision and consistency. (Rajasenan D, 2010).However rubber, once regarded as Kerala's principal cash crop, has experienced a significant decline in value over the past decade. The declining market prices for rubber have rendered the maintenance of such labour-intensive operations economically unviable for many plantation owners. (Gupta P, 2023)

According to data from the Rubber Board of India,Kerala, which accounts for over 90 percent of India's rubber production, has seen a marked decline in output. National rubber production peaked in 2013 at approximately 9.13 lakhtonnes. This was followed by a steep decline, with production dropping to 5.62 lakhtonnes by 2016. (Chandran A, 2024). Although there has been a gradual recovery in output in subsequent years, current production levels continue to fall significantly short of the 2013 peak.During periods when rubber prices were high-reaching up to Rs.250 per kilogram-wage rates for tappers ranged from Rs.2 to Rs.3 per tree. Given that a typical tapper can tap approximately 350-400 trees per day, this period was economically favorable for labourers as well.Fluctuations in commodity prices have a direct impact on labour dynamics within the sector, with the recent decline in rubber prices, wages have also decreased significantly, with tappers now willing to work for as little as ?1.50 per tree. Despite this, many smallholders have opted to either perform the tapping themselves or cease tapping activities, deeming them economically unviable at current price levels, resulting in a significant loss of employment opportunities (Joseph G, 2015).

A considerable number of plantations are now being abandoned or converted to alternative crops. This decision has had a direct and adverse impact on tappers, who now face employment insecurity and are compelled to seek alternative sources of income. If the current situation persists, it poses a serious threat not only to the plantation sector but also to the broader socio-economic fabric of Kerala. The decline in rubber prices has already affected household consumption patterns across the state. In response, the state government introduced a procurement scheme aimed at purchasing rubber at a higher price to support farmers. However, this intervention has had limited impact in alleviating the financial distress faced by growers. The fall in rubber prices has been largely attributed to the unregulated import of natural rubber and the global decline in synthetic rubber prices, itself a consequence of the crash in international crude oil prices. (Joseph G, 2015) Various stakeholders, including the state government, the Planters' Association, and worker representatives, have called upon the central government to take immediate action. Key demands include raising import duties on natural rubber, restricting imports through selected ports, and providing direct financial support to farmers through the Central Government's Price Stabilization Fund. Without prompt and effective intervention, the livelihoods of a large number of farmers and plantation workers remain at considerable risk.

Gendered dimensions of plantation labour

Women have historically played a significant role in plantation labour, largely due to the relatively unskilled nature of the work. They constitute approximately 50 percent of the total workforce in the plantation sector. Women's participation in plantation labour can be partly attributed to the geographical location of many plantations, which are often situated in remote, difficult terrains with low population density. Consequently, a substantial workforce has been recruited from more densely populated areas, leading to the migration of entire families and the subsequent employment of women in plantations. The nature of plantation work, which generally requires minimal technical expertise, has facilitated the inclusion of women, who are also perceived as a lower-cost labour force. However, women are predominantly concentrated in lower-tier positions, with minimal representation in supervisory or managerial roles. This limited upward mobility is often linked to lower educational attainment among women. (Rajasenan D, 2010). A 2009 study by the National Productivity Council titled "Globalization and Gender"-which examined sectors such as plantations, food processing, textiles, handicrafts, and fisheries-highlights the persistence of gender-based wage disparities across industries, regions, and locations, despite the broader economic transformations brought about by globalization. The report notes that while women's incomes and economic participation have increased, these gains have not translated into substantial improvements in key areas such as real empowerment, equitable sharing of domestic responsibilities, equal pay for equal work, or gender parity in occupational roles. The study further observes that men have disproportionately benefited from globalization, relative to women.Additionally, a 2009 report by the Ministry of Labour reveals that only 38.9 percent of cardamom plantations provided maternity benefits to women workers, underscoring the continued inadequacy of social protections and gender-sensitive labour policies in the plantation sector.

Trade unions and the politics of representation

The functioning of trade unions within the plantation sector reveals significant limitations, particularly in terms of their responsiveness to the conditions of workers. Trade union activity is largely concentrated in the tea plantation sector, while in rubber plantations it is minimal or absent. This discrepancy is primarily due to the less labour-intensive nature of rubber cultivation, which involves smaller workforces and more individualized labour arrangements. Despite the presence of trade unions in most tea plantations, their effectiveness remains questionable. (Xaxa V, 2019). Trade unions, originally established to safeguard labour rights, are now facing a legitimacy crisis. In the context of neoliberal economic reforms, which have intensified pressures on workers, unions have largely remained passive. In Kerala it is alleged that trade union leaders have reportedly accepted incentives such as permanent housing and bonuses, leading to compromised representation. In Munnar, Kerala, it is alleged that a political-corporate nexus has reportedly emerged between plantation companies and certain political factions. (Konikkara A, 2020). Notably, there have been instances where offices of some political parties are situated on land owned or controlled by corporate entities such as the Tata Group. This close association between political parties-including their affiliated trade unions-and plantation management has raised concerns. As a result, when plantation workers engage in protest or attempt to assert their rights, they often receive little to no support from these political or union bodies, whose allegiance may be compromised by their entanglement with corporate interests. This dynamic significantly undermines the workers' capacity for independent mobilization and weakens collective bargaining within the sector.

However, in a notable shift, women workers in Kerala's tea plantations, particularly in Munnar, mobilized independently without trade union support and succeeded in securing improved wages and working conditions. The strike organized by the women workers of Kannan Devan Hills Plantations, owned by the Tata Group, represents a significant and unique moment in the history of labour mobilization within Kerala's plantation sector. (Deeksha J, 2025) The protest was initiated by female workers demanding an increase in the minimum daily wage to ?500 and a 20 percent bonus, citing the disparity between their wages and the prevailing rates for casual labour in the state, which exceed ?700 per day. Operating under the banner Pembilai Orumai (Women's Unity), thousands of women led the movement independently, deliberately excluding trade union involvement to prevent external interference. The strike garnered widespread public support, with prominent political figures, including veteran CPI (M) leader V.S. Achuthanandan, expressing solidarity. Lasting nine days, the strike concluded successfully when the plantation management agreed to provide the 20 percent bonus. The state government, acting as a mediator, facilitated the resolution and committed to raising the wage issue in the subsequent meeting of the Plantation Labour Committee.

This movement served as a catalyst for broader labour unrest in the state's plantation sector. Drawing inspiration from the Munnar struggle, plantation workers across Kerala launched a mass agitation demanding an increase in their daily wages to ?500. The movement expanded to include nearly 3 lakh workers and effectively paralyzed plantation operations across the state (Philip S, 2015) In response to earlier criticisms of their inaction, trade unions became actively involved in supporting the workers' cause. The 17-day strike concluded successfully after six rounds of negotiations, during which the Plantation Labour Committee-comprising representatives from trade unions, the state government, and plantation management-agreed to a substantial wage revision across all plantation sectors. These collective actions mark a significant victory for workers' rights and underscore the power of organized labour in effecting change. They also highlight the importance of collective bargaining as a tool for challenging exploitative labour practices and reinforcing worker agency in the face of entrenched capitalist structures. Their grassroots movement underscored the growing disconnect between formal labour unions and the workforce they are intended to represent. The Munnar plantation struggle serves as a case in point, illustrating how traditional trade unions failed to advocate for worker grievances, thereby compelling women workers to organize autonomously. It also underscores the urgent need for trade unions to reorient their role toward genuine worker representation and to resist the influence of capital interests in order to remain relevant in the contemporary labour landscape.

State and management responses

Plantation managements have consistently demonstrated reluctance in addressing the legitimate demands of workers, primarily prioritizing profit maximization. Their approach is typically guided by the rationale that lower wages result in higher profitability. Consequently, there is little concern for the harsh and often inhumane living conditions faced by plantation labourers. Employers frequently justify their resistance to wage increases by citing the depressed market prices of commodities such as rubber and tea, arguing that higher labour costs would render their operations financially unviable. In defense of their position, managements also claims to provide social security benefits including health care, education, insurance, and housing. (Vishwanathan M, 2023) However, as previously discussed, many of these provisions-particularly housing-are either inadequate or poorly maintained, rendering such claims largely symbolic. In Kerala, the relatively high prevailing wage rates and the broader socio-economic context have compelled managements to adopt a somewhat more restrained stance, though largely under pressure rather than out of genuine concern for labour welfare.

Governmental responses to the plight of plantation workers have varied across states, often reflecting broader political and economic considerations. In many states successive governments have shown minimal commitment to addressing systemic labour deprivation. In many instances, authorities have denied the existence of starvation or malnutrition among workers and portrayed marginal wage increases as significant policy achievements, despite the continued marginalization of workers' rights.(Bhowmik S K, 2015)In Kerala however the picture is mixed where the state government in some instances has played a more proactive role, particularly during the labour agitations in Munnar. Recognizing the legitimacy of workers' demands, the government engaged constructively in negotiations and facilitated positive outcomes. Nonetheless, the state responses are often characterized by a general ambivalence-balancing the need to maintain capital investment with the political imperative of retaining worker support, particularly during election cycles. In the lead-up to the 2016 Kerala Legislative Assembly elections, the Left Democratic Front (LDF) introduced a comprehensive 35-point action plan as part of its electoral manifesto. Among its key policy commitments was a targeted intervention in the plantation sector, wherein the alliance pledged to initiate stringent measures against large-scale plantation owners found to be in unlawful possession of land, including encroachments on government property. The manifesto further asserted that any reclaimed land would be repurposed for public use and redistributed among the landless. However, four years into its tenure, the LDF government has demonstrated a conspicuous reluctance to implement this aspect of its policy agenda (Konikkara A, 2020) As such, government intervention frequently oscillates between passive observation and strategic engagement, depending on regional political dynamics and socio-economic pressures.

Conclusion and policy recommendations

There is a clear and urgent need to improve the conditions of plantation workers in Kerala. Despite constituting one of the largest segments of organized employment in the private sector, plantation workers continue to endure substandard living conditions that remain largely unchanged since the colonial era. Many reside in overcrowded, one-room dwellings lacking access to basic amenities such as potable water, sanitation, and other essential services, resulting in a life marked by deprivation and indignity. It is imperative that plantation workers across the country draw inspiration from the successful mobilization led by the women workers of Munnar in Kerala. Their collective action serves as a powerful model for asserting labour rights and challenging systemic neglect. A coordinated, nationwide movement is necessary for workers to effectively advocate for improved wages, housing, health care, and education.

Governments, rather than adopting a passive or indifferent stance, must take active responsibility in addressing the structural deficiencies that persist in the plantation sector. This includes investing in the improvement of workers' living conditions, ensuring access to quality education, and enforcing existing labour welfare legislation. At the same time, plantation managements must assume the role of socially responsible employers by upholding workers' rights and committing to the provision of humane and equitable working and living conditions.

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References

Ashokan A K (2024). Rubber cultivators in Kerala shift jobs over inadequate support on prices & finances, *The Hindustan Times*

Bhowmik, S. K. (2011). Ethnicity and isolation: Marginalization of tea plantation workers. Race/Ethnicity: Multidisciplinary Global Contexts, 4(2), 235-253.

Bhowmik, S. K. (2015). Living conditions of tea plantation workers. *Economic and Political Weekly,* 50(46-47), 29-32.

Bhowmik, Sharit Kumar (1980), "The Plantation as a Social System", *Economic and Political Weekly* 15(36), pp. 1524-1527

Chandran A (2024). Natural rubber price hit an all-time high of Rs.244 in domestic market, *The New Indian Express*

Deeksha J (2025). How Kerala's Trade Unions have Failed Women. The Scroll

Government of India. (1951). The Plantations Labour Act, 1951. Ministry of Law and Justice.

https://www.thehindu.com/opinion/editorial/editorial-on-strike-by-plantation-workers-lessons-from-an-agitation/article7766517.ece https://www.thehindubusinessline.com/economy/agri-business/kerala-plantation-workers-end-stir/article64340744.ece

Gupta P (2023). India attempts to revive its dwindling rubber industry, BBC

Joseph G. (2015). Rubber prices continue slump as tapping halts at large plantations, Business Standard

Konikkara A. (2020). Pettimudi landslide highlights how Kerala's private plantation empire exploits Dalit workers, The Caravan

Philip S (2015). Kerala's Plantation Workers' Strike: Poor Pay and Strong Union, *The Indian Express*

Raj Jayaseelan (2018). The Plantation Labour and the Performance of Identity: Categorical Oppression in the South Indian Tea Belt, Tata Institute of Social Science

Rajasenan, D. (2010). Livelihood and employment of workers in rubber and spice plantations. National Research Programme on Plantation Development.

Ravi Raman, K (1986), "Plantation Labour - Revisit Required", Economic and Political Weekly 21(22), pp. 960-962.

Tea Board of India. (2018). Annual Report 2017-18. Ministry of Commerce and Industry

Umadevi, S (1989), Plantation Economics of the Third World, Himalaya Publishing House, Delhi

Ushadevi, T. J., & Jayachandran, V. N. (2001). Socio-economic profile of rubber tappers in the small holding sector. *A study at kanjirappally panchayath. Final Report. A project of Kerala Research Programme on Local Level Development (KRPLLD). Thiruvananthapuram: Centre for Development Studies.*

Vijayan, D., Girindran, R., Sam, A.S. et al.(2024). The large-scale expansion of rubber plantations in southern India: major impacts and the changing nature of drivers. Environ Monit Assess 196, 356

Vishwanathan M (2023). On verge of closure, plantations seek government support, *The New Indian Express*

Xaxa V (2019). Need for Restructuring the Tea Plantation System in India, Economic and Political Weekly, Vol. 54, Issue No. 45, 16 Nov, 2019

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Invisible Healthcare Costs and Catastrophic Health Expenditure among Differently Abled Households in Kerala: A Public Finance Perspective

Niveditha Krishnan

Abstract

This study examines invisible healthcare costs and catastrophic health expenditure among differently abled households in Kerala from a public finance perspective. The article analyses out-of-pocket healthcare expenditure, financial vulnerability, welfare interventions, public healthcare support, and policy gaps in disability healthcare financing. Both direct and indirect healthcare costs are examined to understand the hidden economic burden experienced by vulnerable households.

The study identifies medicines, transportation expenditure, rehabilitation costs, and hospitalisation expenses as major contributors to household healthcare spending. The findings indicate that many families depend on borrowing, distress financing, and savings depletion to manage healthcare costs. Existing welfare programmes and insurance schemes provide only partial financial protection because several disability-related expenses remain outside insurance coverage.

The article argues that stronger government intervention, disability-sensitive budgeting, expanded insurance coverage, and improved public healthcare support are necessary to reduce financial vulnerability among differently abled households. The study concludes that inclusive healthcare financing and social protection policies are essential for ensuring healthcare justice and economic security in Kerala.

Keywords: *Disability, Healthcare Expenditure, Kerala, Public Finance, Out-of-Pocket Expenditure, Catastrophic Health Expenditure, Social Protection*

1. Introduction

Health is one of the most important indicators of human development and social well-being. Access to affordable healthcare services is essential for ensuring economic security, social inclusion, and quality of life. In Kerala, the healthcare sector has achieved remarkable progress in areas such as literacy, life expectancy, maternal healthcare, and public health infrastructure. The state is often celebrated for its "Kerala Model" of development, which places strong emphasis on social welfare and human development.

Despite these achievements, healthcare expenditure has emerged as a major concern among vulnerable households in Kerala. Differently abled individuals and their families experience severe economic hardship due to increasing healthcare costs. Disability creates multidimensional challenges that affect not only individuals but also their families, employment opportunities, and overall economic stability.

Differently abled individuals often require continuous medical treatment, rehabilitation services, physiotherapy, assistive devices, transportation support, and long-term medicines. Unlike ordinary healthcare expenditure, disability-related healthcare costs are recurring and unavoidable. Consequently, households are forced to spend a substantial share of their income on healthcare needs.

When healthcare expenditure becomes excessively high and affects the ability of households to maintain minimum living standards, it is referred to as catastrophic health expenditure. Families may borrow money, sell assets, use savings, reduce food consumption, or postpone educational expenditure in order to manage healthcare costs. Such financial stress negatively affects long-term economic security and social well-being.

In Kerala, a large proportion of healthcare costs is financed through out-of-pocket expenditure. Although public healthcare services and welfare programmes exist, many differently abled households continue to depend heavily on private healthcare institutions due to inadequate specialised services in public hospitals. This dependence significantly increases the financial burden.

The issue of healthcare expenditure among differently abled households is highly important from a public finance perspective. Public finance includes government expenditure, welfare policies, taxation, and budgeting mechanisms intended to reduce inequality and improve social welfare. Healthcare financing is a central responsibility of the welfare state because healthcare access is closely linked with social justice and human rights.

This article attempts to analyse invisible healthcare costs and catastrophic health expenditure among differently abled households in Kerala and examine the issue through a public finance perspective.

Review of Literature

Literature review is an essential component of academic research because it helps identify research gaps, conceptual frameworks, and existing findings related to the study topic. Previous studies on healthcare financing and disability economics indicate that differently abled households experience greater financial vulnerability compared to non-disabled households.

Several studies have examined healthcare expenditure and financial vulnerability among disabled populations. Research in health economics indicates that households with disabled members experience significantly higher healthcare expenditure compared to non-disabled households.

Studies conducted in India show that out-of-pocket expenditure continues to remain high despite the expansion of public healthcare services. Medicines, diagnostic tests, transportation expenditure, and rehabilitation costs contribute substantially to the household healthcare burden.

Research on disability economics highlights that disability not only increases healthcare needs but also reduces employment opportunities and household income. Consequently, differently abled households are more vulnerable to poverty and economic insecurity.

Studies conducted in Kerala indicate that although public healthcare infrastructure is relatively better than that of many Indian states, private healthcare dependence remains high. Families frequently seek treatment from private hospitals due to a lack of specialised healthcare facilities in nearby public institutions.

International studies on catastrophic health expenditure also demonstrate that vulnerable groups such as disabled individuals, elderly persons, and low-income households are more likely to experience financial distress due to healthcare spending.

Existing literature further emphasises the importance of public finance interventions such as health insurance, disability pensions, rehabilitation support, and inclusive healthcare financing in reducing healthcare inequality.

However, limited studies specifically examine invisible healthcare costs and catastrophic expenditure among differently abled households in Kerala from a public finance perspective. Therefore, this study attempts to address this research gap.

Objectives of the Study

The present study attempts to examine the financial burden experienced by differently abled households in Kerala with special reference to invisible healthcare costs and catastrophic health expenditure.

The major objectives of the study are:

1. To analyse healthcare expenditure patterns among differently abled households in Kerala.
2. To examine invisible healthcare costs and catastrophic health expenditure.

3. To study the role of public finance and welfare interventions in reducing financial burden.
4. To identify policy gaps in disability healthcare financing.
5. To suggest policy measures for improving healthcare accessibility and financial protection.

Research Methodology

The methodology section explains the methods and procedures adopted for conducting the study. It includes details regarding data sources, sampling methods, sample size, and statistical tools used for analysis.

The study is analytical and descriptive in nature. Both primary and secondary data sources are used for analysis.

Secondary data are collected from Kerala Economic Review, National Sample Survey reports, Census of India, National Health Accounts, government budget documents, and reports from the Ministry of Health and Family Welfare.

Primary data are collected from differently abled households in selected municipalities such as Chalakudy and Irinjalakuda in Thrissur district. A structured questionnaire was used to collect information regarding healthcare expenditure, income levels, hospitalisation costs, transportation expenditure, rehabilitation services, insurance coverage, and welfare support.

Sampling Method

The study adopted purposive sampling methods.

Sample Size

Approximately 100 differently abled households were selected for detailed analysis.

Statistical Tools

- Percentage analysis
- Average expenditure analysis
- Cross-tabulation
- Correlation analysis
- Graphical representation

Disability Scenario in Kerala

Kerala has a significantly differently-abled population requiring continuous healthcare and social support. According to Census data and government reports, the differently abled population in Kerala includes individuals with locomotor disabilities, hearing impairments, visual disabilities, intellectual disabilities, and multiple disabilities (Table-1). .

Table 1: Disability Population in Kerala

Category	Population
Total Disabled Population	7,93,937
Male	4,15,000
Female	3,78,937
Rural Population	5,10,000
Urban Population	2,83,937

Source: Census of India and Kerala Economic Review.

The table indicates that a large proportion of differently abled individuals reside in rural areas where healthcare accessibility is relatively limited.

The increasing prevalence of chronic diseases, an ageing population, and rising healthcare utilisation have intensified healthcare expenditure among differently abled households in Kerala.

Healthcare Expenditure Pattern among Differently Abled Households

Healthcare expenditure among differently abled households includes both direct and indirect costs.

Direct expenditure includes medicines, hospitalisation, consultation fees, physiotherapy charges, and diagnostic tests. Indirect expenditure includes transportation costs, caregiver expenses, income loss, nutritional support, and accommodation expenses during treatment (Table-2).

Table 2 : Major Components of Healthcare Expenditure

Type of Expenditure	Average Monthly Expense
Medicines	Rs. 3000
Transportation	Rs. 1500
Rehabilitation	Rs. 2500
Hospitalisation	Rs. 5000
Assistive Devices	Rs. 2000
Caregiver Support	Rs. 1800

The table shows that medicine expenditure and hospitalisation costs constitute the largest share of healthcare spending.

Transportation expenditure is particularly high among rural households because specialised healthcare facilities are concentrated mainly in urban centres.

Invisible Healthcare Costs

Invisible healthcare costs refer to hidden expenses that are often excluded from formal healthcare expenditure calculations. These costs significantly affect household welfare and economic security.

Invisible costs include:

- Transportation expenditure
- Income loss
- Caregiver burden
- Rehabilitation costs
- Nutritional support
- Accommodation during treatment
- Time loss due to repeated hospital visits

Many differently abled households experience severe financial strain due to these hidden costs. In several cases, one family member may reduce or discontinue employment in order to provide caregiving support.

Women are particularly affected because caregiving responsibilities often fall upon them. Consequently, invisible healthcare costs contribute to reduced labour force participation and increased gender inequality.

Out-of-Pocket Healthcare Expenditure

Out-of-pocket expenditure refers to direct payments made by households for healthcare services at the time of treatment.

Despite Kerala's relatively better public healthcare infrastructure, out-of-pocket healthcare expenditure remains high among differently abled households (Table-3).

Table 3: Source of Healthcare Financing

Source of Financing	Percentage
Savings	30%
Borrowing	45%
Insurance	15%
Government Assistance	10%

The table indicates that a majority of households depend on borrowing and savings to manage healthcare expenditure.

The limited role of insurance and government assistance highlights the inadequacy of financial protection mechanisms.

Public Finance Perspective

Public finance plays an important role in reducing healthcare inequality and ensuring social protection.

The Kerala government has implemented several welfare schemes intended to support differently abled individuals and vulnerable households.

Major welfare interventions include:

- Disability pensions
- Karunya Health Scheme
- Ayushman Bharat
- Social security pensions
- Free medicines in public hospitals
- Rehabilitation support programmes

Table 4: Awareness and Utilisation of Welfare Schemes

Welfare Scheme	Percentage of Beneficiaries
Disability Pension	70%
Karunya Scheme	25%
Ayushman Bharat	30%
Free Medicine Support	40%

Although several welfare schemes exist, many households continue to experience severe financial burden due to inadequate coverage and implementation gaps.

Insurance programmes often fail to cover outpatient treatment, transportation costs, rehabilitation services, and assistive devices.

Public versus Private Healthcare Expenditure

Differently abled households frequently depend on private healthcare institutions because specialised services may not always be available in public hospitals (Table-5).

Table 5: Public and Private Healthcare Utilisation

Type of Institution	Percentage
Government Hospitals	40%
Private Hospitals	60%

The table indicates greater dependence on private healthcare institutions despite higher treatment costs.

Private healthcare expenditure significantly increases the out-of-pocket healthcare burden among households.

Catastrophic Health Expenditure and Financial Distress

Catastrophic health expenditure occurs when healthcare spending exceeds household financial capacity and affects living standards.

Many differently abled households experience financial distress due to recurring healthcare expenditures (Table - 6)..

Table 6: Financial Coping Mechanisms

Coping Mechanism	Percentage
Borrowing Money	45%
Using Savings	25%
Selling Assets	20%
Delaying Treatment	10%

The table indicates that borrowing and savings depletion are major coping mechanisms adopted by households.

Such financial stress negatively affects nutrition, education, and long-term household welfare.

Policy Gaps and Challenges

Despite Kerala's welfare-oriented development model, several policy gaps continue to affect healthcare financing among differently abled households.

One major challenge is the lack of disability-sensitive budgeting. Public expenditure often focuses on general healthcare services without adequately recognising the specific healthcare needs of differently abled individuals.

Another challenge is the concentration of specialised healthcare facilities in urban areas. Rural households experience higher transportation costs and reduced accessibility.

Insurance coverage for rehabilitation services, outpatient treatment, and assistive devices also remains limited.

Lack of awareness regarding welfare schemes and bureaucratic delays in accessing benefits further increase financial hardship among vulnerable households.

Suggestions and Policy Recommendations

Reducing catastrophic health expenditure among differently abled households requires stronger public finance interventions and inclusive healthcare policies.

Government hospitals should strengthen rehabilitation centres, physiotherapy services, and disability healthcare support at district and taluk levels.

Health insurance schemes should include outpatient treatment, rehabilitation services, transportation support, assistive devices, and caregiver assistance.

Kerala should introduce disability-sensitive budgeting mechanisms to ensure better allocation of resources for disability healthcare and social protection.

Improving rural healthcare accessibility through mobile clinics, telemedicine, and decentralised rehabilitation centres can reduce transportation burden.

Financial assistance programmes such as disability pensions and medicine subsidies should also be strengthened.

Greater awareness regarding welfare schemes and simplified procedures for accessing benefits is necessary to improve healthcare accessibility.

Conclusion

The findings of the study clearly indicate that differently abled households in Kerala experience a severe financial burden due to rising healthcare expenditure and inadequate financial protection mechanisms.

Invisible healthcare costs and catastrophic health expenditure among differently abled households represent serious challenges to inclusive development and social justice in Kerala.

Despite significant progress in healthcare infrastructure and welfare policies, many differently abled households continue to experience severe financial vulnerability due to rising healthcare expenditure.

From a public finance perspective, healthcare financing should focus on equity, accessibility, and social protection. Reducing out-of-pocket expenditure and strengthening welfare interventions are essential for ensuring healthcare justice.

A comprehensive disability-sensitive healthcare financing framework integrating rehabilitation services, social security support, inclusive insurance coverage, and improved public healthcare infrastructure is necessary for improving the economic security and quality of life of differently abled households in Kerala.

Inclusive healthcare policies and stronger public investment can play a crucial role in reducing financial inequality and ensuring sustainable social development.

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References

Census of India. (2011). *Data on disability.* Office of the Registrar General & Census Commissioner, India.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex. *University of Chicago Legal Forum,* 139-167.

Government of Kerala. (2022). *Economic review* 2021-22. State Planning Board.

National Sample Survey Office. (2019). *Persons with disabilities in India* (NSS 76th Round). Ministry of Statistics and Programme Implementation.

Sen, A. (1999). *Development as freedom.* Oxford University Press.

World Health Organization. (2011). *World report on disability.* WHO Press.

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The impact of global price and exchange rate fluctuations on domestic gold price: An empirical study

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Abstract

Gold plays an important role in India's economy, serving as both a cultural symbol and a financial asset. It is also considered a safe haven. This paper examines the factors driving domestic gold prices, focusing on foreign market prices and the USD/INR exchange rate from 1995 to 2024. The study uses a multiple linear regression model to examine how these factors affect changes in the gold price. The analysis shows that gold prices are quite volatile, with a high average and a high standard deviation. The results suggest that foreign prices and exchange rates have a bigger impact on domestic gold prices than other factors. There is a strong link between domestic gold prices and international trends. The model's high R2 value (0.998) shows that currency movements are a key factor. Overall, the findings suggest that global gold prices and exchange rate movements significantly affect gold prices in India.

Keywords: *Exchange Rate, Foreign Market, Gold Prices.*

1. Introduction

Gold is important in India's economy, acting as both a cultural symbol and a financial asset. It is valued in households for tradition and prosperity, and also seen as a safe investment during uncertain times. India is one of the largest consumers and importers of gold, making up almost a quarter of global demand (World Gold Council, 2023). Since most gold is imported, domestic prices are very sensitive to changes in global markets and currency values.

Both international and domestic factors affect gold prices in India. Globally, gold is priced in U.S. dollars and responds to changes in demand, supply, monetary policies in developed countries, and geopolitical risks. Changes in the USD/INR exchange rate directly affect domestic gold prices. When the rupee weakens against the dollar, import costs rise, raising domestic prices even if global prices remain unchanged. This pattern has been seen during times of currency volatility, such as the Asian financial crisis (1997-1998), the global financial crisis (2008), and rupee depreciation in 2013 and 2018.

In India, gold is seen as a safe-haven investment, meaning it is trusted during times of financial uncertainty. When inflation rises or the stock market is volatile, investors often turn to gold. Studies show that gold typically moves in the opposite direction of stocks and bonds, making it useful for diversifying a portfolio (Baur & Lucey, 2010). Although inflation can influence gold prices, research suggests its effect in India is limited. Global price changes and exchange rates have a bigger impact (Singh & Joshi, 2017).

Gold prices in India have been unstable for the past 30 years. Even when inflation was steady, gold prices fluctuated significantly, underscoring the influence of broader market trends. In 2008, many investors bought gold, which pushed prices up both globally and in India. The same thing happened during the COVID-19 pandemic, reinforcing gold's reputation as a safe asset.

As global financial markets become more connected, the link between international and domestic gold markets grows stronger. Events such as U.S. Federal Reserve rate hikes, trade disputes, and geopolitical tensions can significantly affect global gold prices. Since India depends on gold imports, these changes also impact domestic prices. Understanding how global price changes and exchange rate shifts affect local markets is important for governments, investors, and financial institutions. This study examines how global gold prices and exchange rates have influenced domestic gold prices in India from 1995 to 2024, using multiple linear regression (MLR). The findings show that domestic prices are closely tied to global prices, with the world market playing a major role in India's gold industry. Covering nearly thirty years, this research adds to earlier studies by confirming the strong influence of global prices and exchange rates, while showing that inflation is less important. These insights can help policymakers stabilise gold markets, guide investors seeking diversification, and assist financial institutions in managing price risk. The study offers a global perspective on the changing dynamics of India's gold market.

2. Objectives

- To find out the relationship between global gold prices and domestic gold prices in India from 1995 to 2024.
- To identify the effect of exchange rate fluctuations (USD/INR) on price stability in the domestic gold market.
- To know the impact of external market dynamics and exchange rate volatility on the domestic gold market.

Statement of the problem:

India is a key participant in the gold market. Domestic gold prices are highly sensitive to exchange rates and global market movements. Existing literature has predominantly examined short-term. India plays a major role in the gold market. Domestic gold prices react strongly to changes in exchange rates and global market trends. Most previous research has focused on short periods or only a few factors. This study fills a gap by examining the long-term effects of international gold prices and the USD/INR exchange rate on domestic prices. Price swings create uncertainty for households, investors, and policymakers, so it is important to understand both the extent to which these external factors influence prices and the ways in which they do so. The U.S. determines the price of crude oil and the exchange rate (USD). However, international factors do not affect gold prices in India. He used data from credible sources to reach this conclusion. Dubey (2014) studied gold price trends and influencing variables in India. His paper focused on the rise in gold prices in India between 2004 and 2013. Empirical evidence indicates a strong positive correlation between the CPI rate and gold prices in our country. Gireesh et al. (2015) explored the link between India's gold price and the exchange rate. They used the Johansen co-integration test to examine this relationship for 2005-2013. The study found that the US dollar's exchange rate has a significant impact on Indian gold prices. Gold prices fluctuate with changes in the value of the US dollar. Guntur Archana Raju (2016) examined how inflation affected gold prices in China, India, and the United States. The research found a short-term correlation between inflation and gold prices. It also found cointegration between these two. The study used co-integration and gold prices as variables. It used Granger causality, VECM, and unit root tests. Nisarga M. et al. (2023) studied various factors influencing gold prices in India. The study shows that many economic, political, and global factors affect gold prices. It examined gold prices in relation to the BSE Sensex, crude oil, inflation, exchange rates, and repo rates. The study used descriptive and regression analysis. The findings revealed a strong correlation between variables. The study highlights how changes in the repo rate affect gold prices. It also found that the BSE Sensex, inflation, and interest rate are interconnected. The authors declared no competing interests. Yi Bai (2024) examined six-month-ahead gold price forecasts amid rising investor demand. Predicting gold prices helps investors develop strategies and reduce risk. Data from 2020 to 2024 was used to predict price trends. The researcher used the Autoregressive Integrated Moving Average (ARIMA) model to forecast. Results show that price changes little and residuals remain near-diagonal, matching historical predictions. The conclusion is that gold investment is rising, and investors can follow the gold price trend.

Research Gap

Earlier research on domestic gold prices often used short time frames and considered only a few factors. There is a lack of detailed, long-term analysis covering the period from 1995 to 2024. Not enough focus has been given to how foreign market prices influence domestic gold prices. This study aims to fill these gaps by examining how external market changes affect domestic gold price trends.

Methodology:

This study takes a quantitative approach to explore how global gold prices and the USD/INR exchange rate affect gold prices in India. It looks at historical data to understand how changes in foreign markets have shaped domestic prices. The research uses secondary data from trusted sources like the RBI Handbook of Statistics, the World Bank, and the IMF. Both descriptive statistics and multiple regression analysis are used. The data covers the years 1995 to 2024.

Major Determinants of Gold Price:

Dependent variable

Domestic Gold price: The price of gold in India is the main variable studied. Gold is important both culturally and economically, serving as an investment and a symbol of prosperity. Its price is shaped by both international and local factors. The global price, set in US dollars, is the main driver, but the exchange rate between the Indian Rupee and the dollar also plays a key role. When the rupee weakens, gold imports become more expensive, raising local prices. High demand during festivals and weddings also affects gold prices.

Independent variables

Exchange Rate: The exchange rate shows how much the Indian Rupee (INR) is worth relative to other currencies, such as the US Dollar. India uses a floating exchange rate, so the rupee's value changes based on supply and demand in the foreign exchange market. The exchange rate is an important economic measure, directly affecting import costs and export competitiveness. Economic growth, interest rates, and trade balance can all cause the rupee to rise or fall against other currencies.

International rate: This refers to the main global factors that affect gold prices, especially the international gold price and the INR/USD exchange rate. The international gold price, typically quoted in US dollars per ounce, is influenced by global demand, supply, geopolitical events, and economic trends. Changes in this price directly affect domestic gold prices, as India imports much of its gold. The exchange rate between the rupee and the dollar also matters: if the rupee falls, gold becomes more expensive in India, even if global prices remain unchanged. These factors together constitute the 'international rate,' a key predictor of domestic gold price changes.

Results and Discussions

This analysis examines gold prices in both domestic and foreign markets, as well as the exchange rate (rupees per US dollar), from 1995 to 2024. Between 1995 and 2024, domestic gold prices in India rose from ?4,957 to ?75,842, while international prices went from ?4,188 to ?70,315. This shows that domestic prices closely followed global trends but remained higher because India relies on imports, faces customs and other taxes, and has strong household demand. As the rupee weakened from ?31.37/USD in 1995-96 to ?82.60/USD in 2024-25, these effects intensified, with global price changes having a greater impact on the Indian market. For example, in 2012-13, when the rupee dropped to ?46.67/USD, domestic gold prices rose to ?30,163, compared to the international price of ?28,919. During the COVID-19 pandemic in 2020-21, the rupee at ?70.42/USD led to domestic prices of ?48,723, while international prices were ?43,541. These patterns show that gold in India serves as both a global commodity and a safe-haven asset during crises such as the 2008 financial crisis, the 2012-13-rupee crisis, and the 2020 pandemic. Overall, international prices set the base, while a weaker rupee amplifies price increases, making the domestic gold market highly sensitive to both global and local economic changes (Table-1)

Table 1: Descriptive statistics of the Domestic Gold Price and influence of global factors (1995-2024)

Particulars	N	Minimum	Maximum	Mean	Std. Deviation
Domestic Gold price	30	4268.17	75841.87	22513.907	19390.77479
International Price	30	3775.92	70315.41	20637.44	17423.68974
Exchange rate	30	31.3742	82.5993	52.83716	14.30485

Source: Calculated values

Gold prices in India fluctuated significantly during this period, ranging from ?4,268.17 to ?75,841.87. The average price was ?22,513.91, showing a steady upward trend over time (SD = 19,390.77). This high standard deviation indicates that gold prices were highly volatile, influenced by currency fluctuations and government policies in global markets. The foreign exchange rate ranged from ?31.37 to ?82.60, with an average of ?52.84/USD (SD = 14.30). There is a strong link between domestic and foreign gold prices, as the average global price was ?20,637.44, close to the domestic average (SD = 17,423.69). These large deviations highlight how gold prices are affected by economic uncertainty, geopolitical risks, and global demand. The long-term decline in the rupee against the dollar also played a role, with a moderate but important effect on domestic gold prices.

Table 2: Coefficient of Variation

Variables	Coefficient of Variation (CV)	Levels of Variability	Interpretation of Homogeneity
Domestic Gold Price	0.8613	High Variability	Low Homogeneity
Foreign Market Price	0.8443	High Variability	Low Homogeneity
Exchange Rate	0.2707	Low Variability	High Homogeneity

Source: Calculated values

The table presents the coefficient of variation (CV) for the domestic gold price, the foreign market price, and the exchange rate, showing how stable or variable each was over time. The domestic gold price had a CV of 0.8613, indicating it was highly variable and fluctuated significantly relative to its average. This suggests that the domestic gold market was influenced by unpredictable economic factors. The foreign market price had a similar CV of 0.8443, indicating high volatility driven by global supply and demand, inflation, and investment trends. In contrast, the exchange rate had a much lower CV of 0.2707, indicating it was more stable and changed less over the period. This stability means that changes in domestic gold prices were more likely driven by international market trends than by large shifts in the exchange rate. Overall, both domestic and foreign gold prices were quite sensitive to market changes, while the exchange rate was more stable.

Table 4: Correlation Matrix

	Domestic Price	Foreign Market Price (at ? Per 10 Grms)	Exchange Rate
Domestic Price	1		
Foreign Market Price (at ? Per 10 Grms)	0.998754027	1	
Exchange Rate	0.917385432	0.910308434	1

Source: Calculated values

There is an extremely strong positive correlation, almost +1.0 (0.998), between domestic and international gold prices (in Rupees per 10 grams). This means that when international prices rise, domestic prices usually rise by a similar amount, and the same holds in reverse. The correlation between the exchange rate and the domestic gold price is also strong (r = 0.917), indicating that when the exchange rate rises, domestic gold prices tend to rise as well. Similarly, a higher exchange rate leads to higher international prices when converted to rupees. This makes sense because a higher exchange rate (more rupees per US dollar) increases the rupee price of gold, which is priced internationally in another currency. Calculated **values**

Domestic Gold Price = -2855.31 + 1.0629(Global Price) + 64.9627(Exchange Rate)

The negative intercept means that if both the global price and the exchange rate were zero, the domestic gold price would be negative, but this is merely a statistical result and not meaningful in practice. The main point is that these variables are the main factors affecting gold prices. The results show that for every one-unit increase in the international gold price (Rs. per 10 grams), the domestic price rises by 1.06 units. This effect is highly significant (t = 44.86, p = 0.000), showing that domestic gold prices closely follow global trends. For every one-rupee increase in the exchange rate (? per USD), the domestic gold price goes up by about ?65 (p = 0.0327, coefficient = 64.96). While this effect is not as strong as that of global prices, it is still statistically significant. The model fits the data very well, explaining 99.8% of the variation in domestic gold prices ($R^2 = 0.9979$, Adj. $R^2 = 0.9977$), and its overall significance is confirmed by the F-statistic (6424.637) and p-value (0.000).

Impact on Indian Economy:

Gold is one of the most popular purchases in India, and the country is a leading importer of gold. When gold prices rise, it affects the trade balance because higher imports mean more spending in foreign currency, potentially widening the current account deficit. Central banks, jewellery makers, and exporters are also affected, as higher gold prices raise production costs and reduce their competitiveness abroad. As gold prices keep rising, they influence the economy by affecting inflation expectations, which can pressure the RBI to change its monetary policy. The RBI might raise interest rates to control inflation, leading to higher borrowing costs for businesses and consumers and possibly slowing economic growth. Many Indian households prefer to invest in gold during uncertain times, but higher prices mean people may have to spend more of their savings on gold, leaving less for other needs and reducing overall consumption. Gold is also important in cultural events, especially weddings, where high prices can force families to adjust their spending. Rising prices make it harder for lower-income families to buy gold, while wealthier families are less affected. Higher gold prices can also influence the value of other financial instruments, as gold's safe-haven status may increase demand for products like gold ETFs and mutual funds. As demand for gold rises, investors may shift their portfolios, affecting other asset classes.

Recent trend in gold price fluctuations resulting from war

On February 28, the United States and Israel attacked Iran following threats from President Trump. After Ayatollah Ali Khamenei was killed, Iran responded by attacking U.S. military bases in Israel and targeting energy and civilian infrastructure in the Gulf states. These events created geopolitical tension and uncertainty in global markets. As a result, financial markets reacted sharply, especially for commodities like gold, which is seen as a safe-haven asset during crises. According to the India Bullion and Jewellers Association Limited, gold prices were very high at the start of March 2026, reaching about ?1,67,471 per 10 grams. This spike occurred right after the war began on February 28, 2026, indicating that gold was seen as a safe-haven asset amid geopolitical tensions. After this initial jump, gold prices fell steadily in the first half of March as more people sold than bought. At the same time, high interest rates and a strong dollar made gold less attractive, driving prices lower. From mid to late March, gold prices continued to fluctuate, reflecting ongoing market uncertainty. At the end of March, prices rose slightly, suggesting that some investors returned to gold amid continued uncertainty and concerns about a prolonged conflict. However, this increase was smaller than the initial spike. Overall, gold prices in March 2026 first rose sharply, then fell, became volatile, and ended with a small increase. While war often pushes gold prices higher, in this case, factors such as a liquidity crunch, profit-taking, high interest rates, and a strong currency led gold prices to behave differently than expected.

Suggestions:

- Singapore offers incentives for retail investors to participate in financial markets rather than rely on gold as a safe haven. Likewise, diversifying investment options, such as bonds, mutual funds, and savings schemes, will reduce excessive demand for gold during periods of economic uncertainty.

- Given gold's price sensitivity to global markets and exchange rates, the government should promote gold bonds and digital gold to curb physical gold demand.
- Broaden financial literacy programs to focus public attention on other financial instruments instead of gold.
- licensing, restrictions, and monitoring of gold inflows can help stabilise domestic market conditions, e.g. like China.
- Upcoming research needs to compare developing vs developed countries to gain valuable insights into shaping policies.

Conclusion:

This research examined how international factors, especially the global gold price and the exchange rate (rupees per US dollar), affect the domestic gold price in India from 1995 to 2024. The analysis clearly shows a strong, positive, and statistically significant link, supporting the idea that global economic factors mainly shape domestic gold prices. The results confirm that international influences are the main drivers of domestic gold prices. The model's high accuracy suggests that policymakers, investors, and the public should focus on the international gold price and the rupee-dollar exchange rate to understand and predict domestic price changes. This means that local supply and demand are less important than global price movements and currency values.

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References

Baur, D. G., & McDermott, T. K. (2010). Is gold a safe haven? International evidence. *Journal of Banking & Finance,* 34(8), 1886-1898. https://doi.org/10.1016/j.jbankfin.2009.12.008

Board of Governors of the Federal Reserve System (U.S.). (n.d.). *Indian rupees to U.S. dollar spot exchange rate (EXINUS).* Federal Reserve Bank of St. Louis. https://fred.stlouisfed.org/series/EXINUS

Chandra Shekar, B. M., & Ravikumar, B. V. (2024). An empirical study on the relationship between stock market performance and gold prices in India. *International Journal of Research in Finance and Management,* 7(2), 391-395.

Nisarga, M., & Marisetty, N. (2023). A study on the impact of various factors on the gold price in India. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.4587897

Nisarga, M., & Marisetty, N. (n.d.). *Study on the impact of various factors on the gold price in India.* REVA Business School, REVA University.

Reserve Bank of India. (n.d.). *Database on Indian economy (DBIE).* https://data.rbi.org.in

Reserve Bank of India. (n.d.). *RBI publications.* https://m.rbi.org.in/Scripts/PublicationsView.aspx?id=23212

Sharma, S. (2018). Determinants of gold prices in India. *International Journal of Research and Analytical Reviews,* 5(4), 909-914.

Trabelsi, N., Gozgor, G., Tiwari, A. K., & Hammoudeh, S. (2021). Effects of gold price on Bombay Stock Exchange sectoral indices: New evidence for portfolio risk management. *Research in International Business and Finance, 55,* Article 101316. https://doi.org/10.1016/j.ribaf.2020.101316

World Bank. (n.d.). *World development indicators.* World Bank DataBank. https://databank.worldbank.org

Yi, B. (2024). *Research on gold price prediction based on the ARIMA model.* ResearchGate. https://www.researchgate.net/publication/383924529

Kerala Economy
Vol.7 No. 1 January - March 2026

Kerala Budget: A Budget for the State's New Normal

Nirmal Roy V P, Anitha Kumary L and Sumalatha B S

Kerala's Finance Minister unveiled the Budget for 2026-27, describing it as a "new normal" for the state. This description fits, as Kerala adapts to grow under stricter fiscal regulations, reduced Central transfers, global imbalances, and increasing social responsibilities while maintaining development priorities. Despite challenges, the government has increased its revenue sources with tax revenue estimated at Rs.1.28 lakh crore, and non-tax revenue at Rs. 15,435 crore. The estimated revenue receipt is 20 percent higher than the previous year budget estimate.

Fiscal position improved

The revenue deficit of Rs.34,586 crore, has to be seen in the context of ever increasing constraints led by the fiscal responsibility acts, rather than fiscal stress of the state. Due to the recent imposition of stricter fiscal responsibility limits, the expansion of government spending has been curtailed. The debt-to-GDP ratio has decreased from 38.4 percent in 2021 to 33.4 percent, indicating a trend towards stability. The estimated revenue deficit for 2026-27 is lower than the revised estimate of Rs. 36,889 crore for 2025-26. Regarding the fiscal deficit, it is projected to be Rs. 55,419 crore, slightly higher than the revised estimate. In terms of GSDP, the fiscal deficit for 2026-27 stands at 3.8 percent, which is marginally (0.3%) above the FRBM limit. The government could potentially keep it within 3.5 percent by boosting its own revenue through arrear collection and improved efficiency in 2026-27. The government's focus on state finances is evident in Kerala, where only 25% of the total revenue receipts are derived from the Central share, while the State independently generates 75% of its revenue. This scenario contrasts with the national average, where states typically receive more than 50% of their total revenue receipts from the Central share.

The primary expectation for this budget is however on the greater devolution through increased tax share and grants-in-aid from the 16th Finance Commission. If Commission transfers fall short of expectations, there will be heightened responsibility to boost revenue collection to meet rising expenditure needs, including capital expenditure. The average annual expenditure during the current government's five years stands at Rs.1,69,547 crore. Within constraints, the budget safeguards Kerala's legacy in the social sector. While critics might see this as motivated by upcoming

Assembly elections in May 2026, the focus on welfare is embedded in structural realities. The budget reaffirms Kerala's commitment to decentralisation. Following 7th State Finance Commission recommendations, allocations to local governments through General-Purpose, Maintenance, and Development funds have increased. The budget has accepted Commission recommendation such as the Local Board of Finance for Local Governments for enhancing revenue and exploring capital markets to support local development. If implemented carefully, this could strengthen local governments' financial independence.

Elderly friendly budget

Presented as India's first "elderly budget," it responds to Kerala's growing ageing population. Higher pensions, increased allocations for women, health, and welfare programmes reflect the state's changing demographic profile.

Welfare oriented budget

This budget aims to focus on welfare while also being supportive of women, children, and the elderly. There are numerous initiatives designed to empower women and create job opportunities for them in Kerala. Making undergraduate education free for students in arts and science colleges is a step towards promoting Kerala's Knowledge Economy Mission. Increasing the honorarium for Asha and Anganwadi workers is a positive development. Government employees benefit from the assurance of a pension and pay revision. Acknowledging the challenges faced by gig workers, the establishment of gig hubs with modern amenities, funded with Rs. 20 crore, is a commendable initiative. The welfare pension has been raised from Rs. 1600 to Rs. 2000 per month. All these measures have been implemented without placing any additional financial burden on the public.

Wider insurance protection

The proposal to provide group accident and life insurance coverage for unorganized sector workers, including members of the Haritha Karma Sena, auto rickshaw and taxi workers, and lottery workers, along with extending the Medisep scheme to public sector, autonomous institution, and cooperative sector employees and retirees, implies a significant enhancement of social security measures. This initiative reflects the government's commitment to expanding welfare benefits to vulnerable and informal workforce segments, potentially improving their financial protection and access to healthcare services. It also suggests a move toward greater inclusivity in social insurance schemes, which may contribute to improved livelihoods and social stability among these groups.

Infrastructure initiatives

The budget also highlighted the significant use of the off-budget arm, KIIFB, through which the Pinarayi government has made substantial investments in infrastructure, including land acquisition, the development of hill highways, coastal highways, the Wayanad tunnel road, IT parks, cultural complexes, schools, colleges, cancer centers, hospital buildings, and a zoological park. To date, KIIFB has expended Rs. 38,535 crore, with Rs. 28,036.04 crore spent during the current government's tenure, while 1,216 projects amounting to Rs. 96,554.53 crore are approved in totality. The Finance Minister also reiterated the government's welcoming attitude towards private sector participation in infrastructure development by emphasizing the importance placed on Vizhinjam port. For the expansion of Vizhinjam port, it is estimated that the Adani group will invest Rs. 10,000 crore over the next five years in connection with the second, third, and fourth phases of development. Additionally, it is estimated that at least Rs. 30,000 crore will be invested in allied development sectors outside the port by the central and state governments and private agencies.

The 2026-27 Kerala Budget balances fiscal prudence with social welfare, navigating constraints while sustaining development priorities. By increasing revenue generation and maintaining social sector expenditure, the state shows commitment to financial stability. The budget prioritizes welfare measures, addressing demographic shifts through enhanced pensions, social security, and support for vulnerable groups, including women, gig workers, and unorganized sector employees. The focus on decentralization and local government empowerment, with infrastructure investments, signals a forward-looking approach to development. This budget demonstrates Kerala's resolve to adapt to economic challenges while safeguarding its social legacy and promoting equitable growth.

(This article is the reproduction of the article titled 'Kerala Budget: A Budget for the State's New Normal' published in Businessline on 02 February 2026).

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(Dr.Nirmal Roy V P is Assistant Professor, Smt.Anitha Kumary L, Visiting Faculty and Dr. Sumalatha B S, Assistant Professor, Gulati Institute of Finance and Taxation).

Kerala Economy
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Union Budget's Fiscal Consolidation drive may hit Growth momentum

Anitha Kumary L, Sumalatha B S and Nirmal Roy V P

The Union Budget 2026-27 emphasized the need for fiscal consolidation, targeting a reduction of the Debt-to-GDP ratio to 50 percent, plus or minus 1 percent, by 2030. The Debt-to-GDP ratio is estimated at 55.6 percent of GDP in 2026-27. There is no decline projected in the revenue deficit, which is estimated at 1.5 percent of GDP, the same level as the previous year. The fiscal deficit is estimated at 4.4 percent in 2025-26 and 4.3 percent in 2026-27. The irony is that fiscal consolidation is being pursued by cutting the total expenditure by 5%. No significant growth momentum is expected with only a 10.9 percent growth in capital expenditure. In terms of GDP, there is no corresponding increase in capital expenditure.

Only a marginal increase is seen in the Union Government's revenue expenditure, rising from Rs.3,944,255 crore in the 2025-26 Revised Estimates to Rs.4,125,494 crore in the 2026-27 Budget Estimates, a growth rate of 4.5 percent. There is only a marginal absolute increase in the transfers towards Centrally Sponsored Schemes (CSS), rising from Rs.541,850 crore in the 2025-26 Budget Estimates to Rs.548,798 crore in 2026-27, an increase of only 1.28 percent. Similarly, Finance Commission grants have declined from Rs.132,378 crore in the 2025-26 Budget Estimates to Rs.129,397 crore in the 2026-27 Budget Estimates.

Marginal rise in Receipts

On the revenue side, only a marginal increase is seen in revenue receipts, from Rs.3,430,409 crore in the 2025-26 Budget Estimates to Rs.3,533,150 crore in the 2026-27 Budget Estimates (2.99%). Revenue receipts have declined from 13% of GDP in the 2023-24 Actual to 10.7% in the 2024-25 Revised Estimates. It is interesting to note that there is no estimate of GST compensation cess collection, and the budget is silent about the future of the GST compensation cess. The states' share in revenue has fallen from Rs.1,422,444 crore in the 2025-26 Budget Estimates to Rs.1,392,971 crore in the 2025-26 Revised Estimates, a decline of -2.07 percent. For the year 2026-27, the estimated tax share to states is Rs.1,526,255 crore, which is only 7.3 percent higher than the previous year, even after considering the 16th FC tax devolution. The Centre's tax share to states amounts to only 34.65 percent instead of the mandated 41 percent.

Additionally, a reduction in non-tax revenue is noted, falling from Rs.667,662 crore in the 2025-26 Revised Estimates to Rs.666,228 crore in the 2026-27 Budget Estimates (-0.21%). The Government has not announced any steps to increase non-tax revenue collection or for additional resource mobilization. Subsidies have also been reduced in the Budget 2026-27. This is evident in the allocation for Urea Subsidy and Nutrient-Based Subsidy. Urea subsidy is reduced to Rs.116,805 crore in the 2026-27 Budget Estimates from Rs.126,475 crore in the 2025-26 Revised Estimates.

Promising announcements in the Budget 2026-27 include a focus on India's Semiconductor Mission (ISM) 2.0, a scheme for rare earth magnets, development of waterways, and the setting up of a National Institute of Hospitality to bridge academia, industry, and government. Announcements in the pharma sector and exemptions in customs duty on certain medicines are a welcome step. Amplifying the potential of cities to deliver the economic power of agglomerations, with a particular focus on Tier II, Tier III, and temple towns, are positive steps.

Finance panel's Horizontal and Vertical Devolution

The 16th Finance Commission recommends retaining the states' share in the divisible pool at its present level of 41 percent. For horizontal devolution, there is a change in the criteria and weights from the 15th Finance Commission: Population (17.5%), Demographic Performance (10%), Area (10%), Forest (10%), Per Capita GSDP-Distance (42.5%), and Contribution to GDP (10%). The major changes in the criteria are the inclusion of 'Contribution to GDP' (10%) and 'Demographic Performance' (10%) by each state.

With regard to the Revenue Deficit Grant (RDG), the 16th FC has categorically stated: ""fundamental problem with recurrent revenue deficit grants across successive FCs typically exemplifies the problem of time inconsistency where fiscal policies that appear optimal ex ante by the FCs are not adhered to ex post by the States once expectations of central assistance are internalized. When States anticipate that shortfalls in their revenue account will be compensated through RDGs, the incentive to undertake difficult but necessary fiscal reforms such as rationalizing subsidies, improving tax administration, or curbing revenue expenditures weakens. Over time, this softens fiscal discipline and embeds dependency rather than resilience. Therefore, in continuation of the diminishing trend of the revenue deficit grants recommended by FC 15, which reduce to near zero level by 2025 26, we do not recommend any revenue deficit grants to States. We also do not recommend any sector specific or State specific grants".

16th FC and Kerala

With the change in devolution criteria and weights by the 16th FC, Kerala's horizontal share of tax has increased from 1.92 percent to 2.382 percent, an increase of 0.462

percent. Though this has a positive fiscal implication on Kerala's tax share, the abolition of the Revenue Deficit Grant will have a severe impact on the state, resulting in a decline of more than Rs.50,000 crore in its overall share of resources. Therefore, the mild increase in the Centre's share of tax to Kerala (from 1.92% to 2.382%) will not at all commensurate with the fall in revenue due to the absence of the Revenue Deficit Grant.

(*This article is the reproduction of the article titled 'Budget's Fiscal consolidation drive may hit Growth momentum' published in Business line on 06 February 2026).*

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GST Updates

Vidya V Devan and Shency Mathew

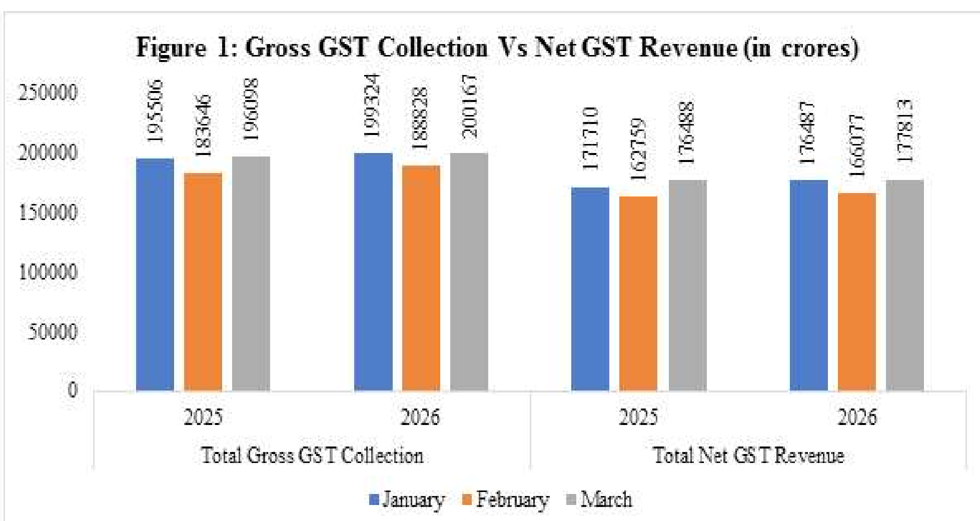
The overview of GST Developments in the First Quarter of 2026: Indicators of a Stabilised Tax Framework

Part A
GST collections and revenue during January, February and March 2026

GST in India

Figure 1 presents a comparison of Gross GST collections and Net GST revenue for January, February, and March in 2025 and 2026. The gross GST collection exhibits a similar trend in both the years 2025 and 2026, with a slight dip in February followed by an increase.

In the case of net GST revenue, although the overall trend remains similar, the absolute growth in March 2026 is quite small when compared with March 2025. It was Rs. 1.76 crore in March 2025, and increased to just Rs. 1.77 crores in March 2026.



Source: GST Portal

The growth rate of GST collections and revenue, as shown in Table 1, indicates a slight improvement in March following the negative growth recorded in February.

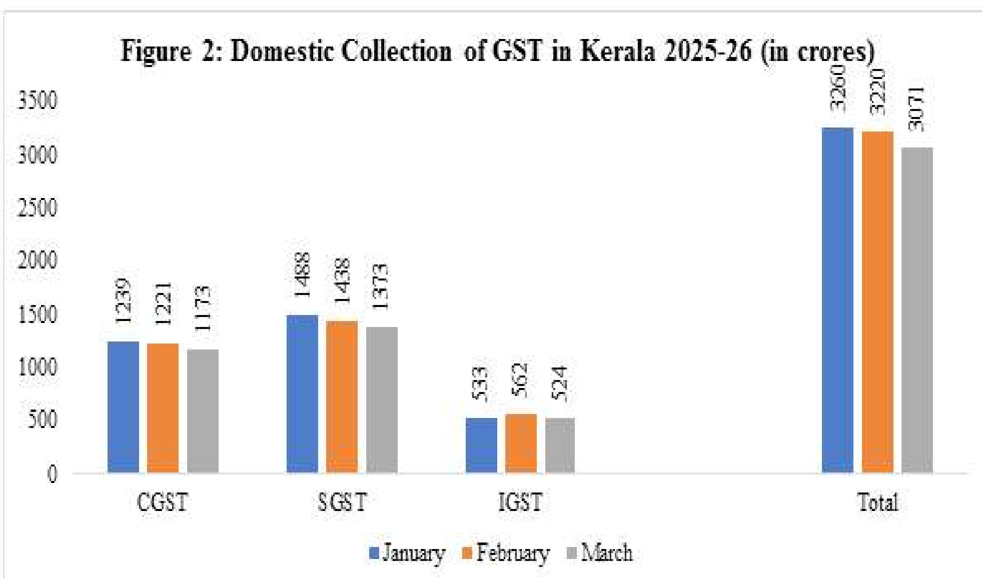
Table 1: Growth of GST (in %)

	Total Gross GST Revenue		Total Net GST Revenue	
	2025	2026	2025	2026
January	10.5	11.3	11.2	17.8
February	-6.1	-5.3	-5.2	-5.9
March	6.8	6.0	8.4	7.1

Source: calculated based on the data available from the GST portal?

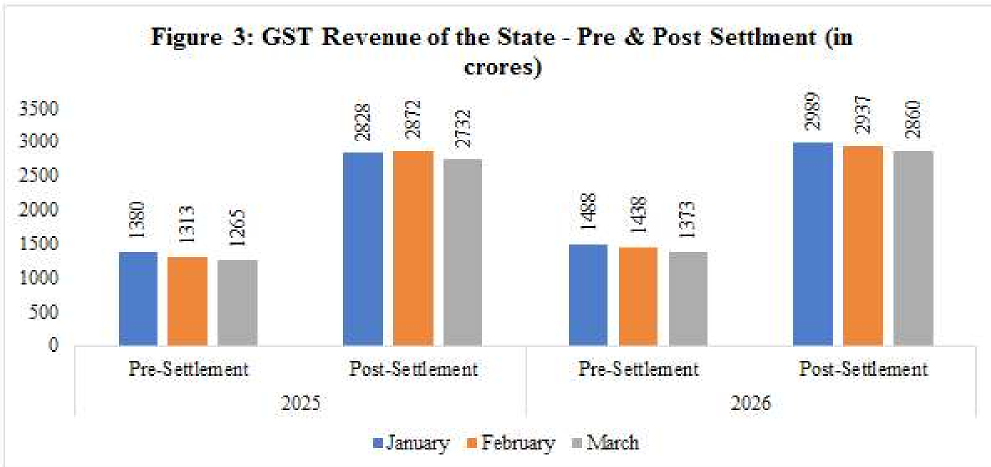
GST in Kerala

The gross GST collection from Kerala, shown in Figure 2, indicates that the GST collection is continuously declining from January to March 2026. Kerala experiences a decline of 40 crores in GST collection from January to February, and further reports a decline of 149 crores from February to March 2026. The collection of CGST and SGST shows the same pattern from January to March.



Source: Same as Figure 1

Interestingly, Kerala's post-settlement GST revenue, as shown in Figure 3, improved in January 2026 compared to January 2025, but then declined steadily through March 2026.



Source: Same as Figure 1

Part B
Advisories and amendments through the Union Finance Act 2026

Advisories

Advisory on Filing Opt-In Declaration for Specified Premises, 2025 dated January 5, 2026

The advisory introduces an online mechanism on the GST Portal enabling suppliers of hotel accommodation services to declare their premises as "specified premises" through Annexure VII (for existing registered taxpayers opting for a subsequent financial year) and Annexure VIII (for new applicants, to be filed within 15 days of ARN generation). This facility is not available to composition taxpayers, TDS/TCS registrants, SEZ units/developers, casual taxpayers, or cancelled registrations, though suspended taxpayers are permitted to file. It also outlines the procedural aspects of filing, including a limit of 10 premises per declaration, generation of ARN and separate reference numbers, availability of download options, and provides that the opt-in once exercised will continue for subsequent years unless an opt-out is made through Annexure IX.

Rs.88.74 crore incurred on awareness and outreach activities under the GST Bachat Utsav campaign.

An amount of ?88.74 crore was spent on advertising and promotional activities under the GST Bachat Utsav campaign, which was launched to raise public awareness about GST rate rationalisation undertaken in the 56th GST Council meeting held on 3 September 2025. Following these changes, the Central Board of Indirect Taxes and Customs (CBIC) undertook price monitoring of essential commodities, including packaged food items and medicines, before and after 22 September 2025 to ensure that the benefits of reduced tax rates were passed on to consumers. The Government also engaged with trade associations and relevant ministries to encourage businesses to transfer these benefits to end users. Awareness efforts were disseminated through print and social media, while FAQs were made available on the CBIC website. Consumers were further advised to lodge complaints through the National Consumer Helpline or the INGRAM portal in cases where benefits were not passed on. Field-level feedback suggests that the intended benefits largely reached consumers.

Filing of GSTR-1 Before GSTR-3B Made Mandatory

Several reforms have been introduced to streamline GST compliance and simplify return filing processes. These include the facility to file NIL returns via SMS and the implementation of e-invoicing from 1 August 2023, which enables automatic population of invoice details in GSTR-1 and facilitates GSTR-3B filing. From 1 October 2022, filing of GSTR-1 prior to GSTR-3B has been made mandatory to ensure accurate reporting of tax liability and input tax credit (ITC). Further enhancements include the launch of GSTR-1A in August 2024 for making amendments to return data and the introduction of the Invoice Management System (IMS) to help recipients verify supplier invoices and ease ITC reconciliation. Compliance enforcement measures, such as suspension of registration for continuous non-filing and restriction on e-way bill generation, promote timely filing. To ease the burden on small taxpayers, options like the Quarterly Return Monthly Payment (QRMP) scheme and the composition scheme are available, along with support from CGST offices and GST help centres for taxpayers, including MSMEs.

Facility for Withdrawal from Rule 14A advisory dated Feb 21st, 2026

GSTN has introduced an online facility enabling eligible taxpayers registered under Rule 14A of the CGST Rules to opt out by filing Form GST REG-32 on the GST Portal. Active taxpayers can apply by navigating through the registration services, providing reasons for withdrawal, and completing Aadhaar authentication for the primary authorised signatory and at least one promoter or partner. The application can be filed only after furnishing the prescribed returns-either a minimum of three months' returns (before 1 April 2026) or one tax period (on or after that date), along with all pending returns since registration. Upon submission, authentication must be completed within 15 days, failing which the application will not proceed. During the processing period, amendments and cancellation requests are restricted. Once withdrawal is approved through Form GST REG-33, the taxpayer may, from the succeeding month, furnish details of supplies to registered persons where the output tax liability exceeds ?2.5 lakhs.

Advisory regarding confirmation of "Tax Liability Breakup, As Applicable" in GSTR-3B-reg dated Mar 16th, 2026

1. In terms of the provisions of Section 50 of the Central Goods and Services Tax (CGST) Act, 2017, interest is payable where the tax liability pertaining to a previous tax period is discharged in a subsequent tax period. Accordingly, the tab "Tax Liability Breakup, As Applicable" in Form GSTR-3B is meant to capture the tax liability relating to supplies of previous tax periods which are being reported and discharged in the current tax period.

2. From the February 2026 tax period onwards, the GST Portal auto-populates the "Tax Liability Breakup, As Applicable" in GSTR-3B on the basis of the document dates of supplies reported in GSTR-1 / GSTR-1A / IFF, where such supplies pertain to any previous tax period but the corresponding tax liability is being discharged in the current period's GSTR-3B.

3. Accordingly, from the February 2026 tax period, after offsetting the liability in GSTR-3B, taxpayers are required to click on the "Tax Liability Breakup, As Applicable" tab available on the payment page and confirm the breakup of tax liability by clicking the "SAVE" button or edit the same, if required.

4. Once the breakup of tax liability is confirmed and saved, the taxpayer will be able to proceed with filing Form GSTR-3B using EVC or DSC.

5. Feedback has been received that this confirmation should be mandatory only in cases where supplies pertaining to previous tax periods have been reported in the current tax period. However, the confirmation is presently being required in all cases, including where the liability relates only to the current tax period. The feedback is acknowledged by GSTN and the same is under resolution.

6. Meanwhile, taxpayers are requested to kindly open the "Tax Liability Breakup, As Applicable" tab on the payment page and click "SAVE" within the tab for filing during the current reform cycle. Thereafter, filing of Form GSTR-3B can be completed normally.

Taxpayers are requested to kindly follow the above interim procedure till the issue is resolved on the portal.

Amendments through the Union Finance Act 2026

Central Goods and Services Tax

Section 15 - In the Central Goods and Services Tax Act, 2017, in section 15, in subsection (3), for clause (b), the following clause shall be substituted, namely:-- "(b) after the supply has been effected, if for such discount, a credit note has been issued by the supplier and input tax credit as is attributable to such discount has been reversed by the recipient of the supply, in accordance with the provisions of section 34.".

Section 34 - In section 34 of the Central Goods and Services Tax Act, in subsection (1), after the words "both supplied are found to be deficient", the words, brackets, letter and figures "or where a discount referred to in clause (b) of sub-section (3) of section 15 is given" shall be inserted.

Section 54 - In section 54 of the Central Goods and Services Tax Act,-- (a) in sub-section (6), after the words "supply of goods or services or both", the words, brackets and figures "or of unutilised input tax credit allowed under clause (ii) of the first proviso to sub-section (3)" shall be inserted; (b) in sub-section (14), after the words, brackets and figures "subsection (5) or sub-section (6)", the words ", other than cases where refund of tax is claimed on account of goods exported out of India with payment of tax," shall be inserted.

Section 101A - In section 101A of the Central Goods and Services Tax Act, after sub-section (1), the following sub-section shall be inserted, namely:--

"(1A) Notwithstanding anything contained in sub-section (1), till the National Appellate Authority is constituted under that sub-section, the Government, may on the recommendations of the Council, by notification, empower any existing Authority constituted under any law for the time being in force to hear appeals made under section 101B and in such case,-- (a) the provisions of sub-sections (2) to (13) shall not apply; and

(b) any reference to the National Appellate Authority under this Chapter shall be construed as a reference to such Authority. Explanation.-- For the purposes of this sub-section, the expression "existing Authority" shall include a Tribunal."

Integrated Goods and Services Tax

Section 13 - In section 13 of the Integrated Goods and Services Tax Act, 2017, in sub-section (8), clause (b) shall be omitted.

Postal exports made eligible for Duty Drawback, RoDTEP and RoSCTL benefits from 15 January 2026 to promote MSME e-exports.

Postal exports made through the electronic mode have been made eligible for incentives under the Duty Drawback, RoDTEP and RoSCTL schemes with effect from 15 January 2026, aimed at promoting MSME-led e-exports. In this regard, CBIC amended the Postal Export (Electronic Declaration and Processing) Regulations, 2022 and issued Notification No. 07/2026-Customs (N.T.) along with Circular No. 01/2026-Customs, laying down the operational framework and procedures for claiming these benefits on goods exported through the postal channel.

More stabilised GST

The absence of notifications issued by the Central Board of Indirect Taxes and Customs till March 2026 indicates a significant phase of stability in the GST regime. This reflects how the system has matured and evolved since its introduction in 2017, moving away from frequent changes and adjustments that characterised the initial years. The relatively quiet in terms of notifications suggests that the legal and procedural framework has now largely settled, reducing the need for constant interventions. Overall, this development highlights that GST in India has come a long way from its early implementation phase and is now operating with greater consistency, predictability, and administrative confidence.

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(Dr. Vidya V Devan is Assistant Professor and Dr. Shency Mathew is Research Associate, Gulati Institute of Finance and Taxation, Thiruvananthapuram).

New Studies on Kerala

Young Scholars' Forum, GIFT
Led by Manju Preman, Vandanan S and Jubairiya P M

Investment, Finance, and Financial Institutions

Other Articles

1. Sodaran, K., & Athullya. (2026). The role of Kerala Bank in advancing financial inclusion: An analysis of cooperative banking development in Kerala. SSRN.

The paper analyses the institutional consolidation of cooperative banks under Kerala Bank between 2019 and 2025 and evaluates its impact on deposit mobilization, digital payments, financial outreach, and inclusive development. It argues that the strengthening of Kerala Bank contributed to Kerala's broader social-development model by improving access to banking and financial services, while also identifying persistent challenges such as governance issues, technology adoption gaps, and rising NPAs in weaker cooperative societies. The study recommends stronger supervision, financial literacy initiatives, digital onboarding, and performance-based reforms to improve the effectiveness of cooperative banking in supporting inclusive and sustainable economic development in Kerala.

2. P. T., R. (2026). Impact of digital accounting systems adoption on financial performance and transparency among SMEs in Kerala

The paper examines how the adoption of Digital Accounting Systems (DAS) affects the financial performance and transparency of SMEs in Kerala. Using survey-based quantitative analysis, the study finds strong positive relationships between digital accounting adoption, improved transparency in financial reporting, and better business performance outcomes. The research argues that digitalisation of accounting practices enhances operational efficiency, accountability, and decision-making capacity among SMEs. It further recommends that policymakers and business-support institutions promote accounting digitalisation through training, awareness, and technological support initiatives to strengthen Kerala's SME ecosystem and financial management practices.

3. Sabu, A., (2026). Econometric investigation of sectoral contributions to remittance inflows in Kerala using the VECM framework. Discover Global Society, 4, Article 34.

This research examines how remittance inflows contribute to Kerala's economic development through different sectors such as agriculture, industry, and services. Using the Vector Error Correction Model (VECM), the study analyzes both long-term and short-term relationships between remittances and sectoral growth. The findings reveal that remittances significantly influence Kerala's economy, particularly through the agricultural and industrial sectors. The paper emphasizes the importance of channeling remittance income into productive investments rather than consumption alone. It also highlights Kerala's unique dependence on migration-driven financial inflows within the broader Indian economy. Overall, the study contributes to understanding remittance-led regional economic development.

4. Sharma, M., & Royit, A. (2026). FinTech's role in enhancing financial inclusion and e-governance.

This study examines how FinTech innovations contribute to improving financial inclusion and strengthening e-governance systems. The paper highlights how technologies such as digital wallets, mobile money, biometric authentication, and e-KYC reduce barriers faced by low-income and rural populations in accessing financial services. It also discusses how digital Government-to-Person (G2P) payment systems enhance transparency, efficiency, and accountability in welfare distribution and tax collection. The research finds that FinTech adoption lowers transaction costs, expands financial access, and reduces corruption in public service delivery. The study concludes that supportive regulations and investments in digital literacy are necessary to maximize the benefits of FinTech for inclusive and effective governance.

Society and Culture

Book Chapter

1. Adhikary, S., Das, J., Das, P., & Elakodical, M. P. (2026). India's diversity and business.

India's Diversity and Business explores how India's vast cultural, linguistic, regional, religious, and economic diversity shapes its business environment. The book discusses how businesses must adapt their strategies to different consumer preferences, workforce dynamics, and regional market conditions. It highlights the opportunities created by diversity, such as innovation, market expansion, and inclusive growth, while also addressing challenges like social tensions and regional inequalities. The authors emphasize the importance of diversity management in organizations to improve productivity and competitiveness. Overall, the book presents diversity as both a social reality and a strategic business factor in India's evolving economy.

Other articles

1. Arunlal, K., & Srinivas, C. S. (2026). Governmentality and Malayalam cinema in the 20th century.

This paper examines how Malayalam cinema reflects and critiques Kerala's social, political, and cultural transformations in the postcolonial period. Drawing from theories of governmentality and modernity, the book explores how cinema represented institutions such as education, healthcare, migration, and family structures in shaping the "modern Malayali subject." It particularly focuses on the impact of liberalization and Gulf migration on Kerala society during the 1980s-2000s. Through analyses of popular melodramas like *Thaalavattam, Varavelpu*, and *Arabikkatha,* the authors show how films captured tensions between modernization, cultural identity, and social change. The book argues that Malayalam cinema serves as a key site for understanding Kerala's developmental history and collective social imagination.

2. Mathew, S., & Thomas, S. (2026). Kinship, language and cultural identity: An analysis of kinship terms in Hermann Gundert's A Malayalam-English Dictionary. ISHAL PAITHRKAM, 86-95.

The study analyses kinship terminology in A Malayalam-English Dictionary by Hermann Gundert to explore the relationship between language, kinship, and cultural identity in nineteenth-century Kerala. The article argues that Gundert's dictionary functioned not only as a linguistic resource but also as an ethnographic record documenting Kerala's plural social structure, including matrilineal and patrilineal traditions, caste relations, regional linguistic variation, and multilingual cultural exchange. By examining the historical meanings and transformations of kinship terms, the study demonstrates how language encoded social hierarchy, community identity, and cultural values. The paper further positions Gundert's lexicographic work as an early form of sociolinguistic inquiry that reveals the deep interconnections between Malayalam language development and Kerala's cultural history.

3. Manoj, P. K., & Aithal, P. S. (2026). The intersection of tribal arts and ecotourism: A catalyst for sustainable development in Kerala, India. ShodhKosh: Journal of Visual and Performing Arts, 7(10s)

The study explores how tribal art forms contribute to ecotourism and sustainable development in biodiversity-rich regions of Kerala such as Wayanad, Idukki, Parambikulam, and Vazhachal. Using a mixed-methods approach, the paper analyses the role of tribal dances, rituals, handicrafts, and cultural performances in enhancing ecotourism while generating livelihood opportunities for indigenous communities. The findings suggest that participation in ecotourism activities significantly increases seasonal household incomes for tribal artisans, although commercialization also creates risks of cultural commodification and "staged authenticity." To address these concerns, the study proposes a Cultural Sustainability Index (CSI) framework along with a decentralized ICT-enabled direct-to-consumer model aimed at reducing economic leakage and preserving the authenticity of tribal cultural heritage. The paper highlights the importance of integrating indigenous knowledge systems and cultural preservation into Kerala's sustainable tourism and regional development strategies.

4. Al-Hudawi, M. J. A., & Ahmad, K. (2026). Community institutions and minority resilience among Muslims in Kerala. Hamdard Islamicus, 49(1).

The article examines the institutional foundations that have enabled Muslim communities in Kerala to preserve their religious identity and social cohesion within a pluralistic social environment. The study argues that Kerala's Muslims maintained strong religiosity and communal resilience not through major reinterpretations of Islamic law, but through the development of locally rooted community institutions such as the Mahal system of self-governance, Q??? institutions, religious educational networks, scholarly associations, and community leadership structures. Drawing on secondary literature and field observations, the paper highlights how these institutions contributed to socio-economic stability, peaceful coexistence, and continuity of religious traditions over centuries. The study positions Kerala's experience as an alternative model to contemporary minority jurisprudence debates and emphasizes the continuing importance of community-based institutional frameworks in sustaining minority resilience within non-Muslim majority societies.

Agriculture and Rural Economy

Scopus Indexed

1. Alphonso, R., Arumugam, T. D., & Cheela, V. R. S. (2026). Integrated environmental and economic trade-offs in rice cultivation in emerging economies using a life cycle approach. Discover Environment, 4, 47

The study by R. Alphonso, T. D. Arumugam, and V. R. S. Cheela analyses the environmental and economic trade-offs associated with rice cultivation across different Indian agro-climatic regions, including Kerala, using an integrated Life Cycle Assessment (LCA) and Life Cycle Cost Analysis (LCCA) framework. The research identifies key sustainability challenges such as greenhouse gas emissions, water stress, ecotoxicity from chemical inputs, and rising production costs linked to imported sustainable alternatives. The study further highlights a major trade-off between reducing mechanisation to lower carbon emissions and the resulting increase in labour intensity and production costs. By comparing rice production systems across multiple states, the paper demonstrates the need for region-specific policy interventions, balanced subsidy reforms, improved access to sustainable agricultural inputs, and stronger environmental regulation. The findings contribute to broader debates on sustainable agriculture, climate resilience, rural employment, and equitable development in emerging economies

2. Sreedaya, G. S., Smitha, S., Mathew, R., Patil, S. S., Sreelakshmi, K., Aswathi, K. R., Chinchu, V. S., Gopika, S., & Shalini, J. R. (2026). Key catalysts and constraints of urban agriculture for sustainable food systems: A case study of Thiruvananthapuram, India. Plant Science Today, 13(sp1)

The study examines the major catalysts and constraints influencing urban agriculture in Thiruvananthapuram city, Kerala, using a mixed-methods approach involving surveys and focus group discussions with urban farmers. The findings show that urban agriculture contributes significantly to sustainable food systems through socio-economic benefits, ecosystem services, and improvements in physical and psychological well-being. Among these, fitness and well-being emerged as the strongest motivating factors, with participants highlighting mental health benefits and reduction in lifestyle-related disorders. The study also identifies several barriers to the expansion of urban agriculture, including limited access to timely information, weak extension support, shortage of agricultural inputs, poor soil fertility, and rising labour and input costs. The research concludes that strengthening institutional support, improving extension services, and promoting sustainable urban farming policies are essential for enhancing food security, environmental sustainability, and urban resilience in Kerala.

Other articles

1. Meena, D., Thasnimol, F., Jain, D. K., Kumari, D., & Vijayan, A. (2026). Economic analysis of sugarcane cultivation in Kerala, India. Journal of Scientific Research and Reports, 32(2), 533-543.

The study by Deepak Meena and co-authors analyses the economics and resource-use efficiency of sugarcane cultivation in Kerala using data collected from 120 farmers through multi-stage random sampling. The findings show that sugarcane cultivation is profitable, with a benefit-cost ratio of 1.27 and positive net returns at cost C2. However, the study also reveals that hired human labour constitutes a major share of production costs, accounting for more than half of total cultivation expenses. Using a Cobb-Douglas production function, the research identifies that inputs such as setts, fertilizers, and human labour significantly contribute to production outcomes. The resource-use efficiency analysis further indicates overutilization of organic manure and labour, alongside underutilization of chemical fertilizers, machine labour, and quality planting materials. The study highlights the need for better input allocation and mechanisation strategies to improve productivity and profitability in Kerala's sugarcane sector.

2.Amaljith, V. J., & Sunil, V. G. (2026). Exploring farmer-ranked constraints affecting Kole paddy productivity: A study from Thrissur district of Kerala, India. Archives of Current Research International, 26(1), 42-50.

The study investigates the major constraints affecting the productivity of Kole paddy cultivation in Thrissur district, Kerala. Using data collected from 120 farmers across selected Padasekharams and applying Garrett's ranking technique, the study identifies climate change-induced extreme weather events as the most critical challenge affecting production stability. Other major constraints include rising input costs, pest and disease outbreaks, labour shortages, delayed subsidy disbursement, inadequate mechanisation, and weak irrigation and drainage infrastructure. The research also highlights institutional weaknesses such as poor coordination among departments and limited farmer awareness of government support schemes. The study concludes that improving the sustainability and productivity of Kole farming requires integrated policy interventions combining climate-resilient agricultural practices, institutional reforms, technological support, and better rural infrastructure.

3. Jestas, J., Sangeetha, K. G., & Anupama, S. (2026). Farmer preparedness and constraints for agribusiness opportunities at Vizhinjam International Seaport, Kerala. Indian Journal of Extension Education, 62(1), 200-204

The study examines the preparedness of farmers in Thiruvananthapuram district to utilize emerging agribusiness opportunities linked to the Vizhinjam International Seaport. Using survey data from 100 farmers along with focus group discussions and expert consultations, the research identifies and ranks the major constraints affecting participation in port-led agribusiness activities. The findings reveal that institutional and policy-related barriers, including frequent policy changes and inadequate export-extension support, are the most significant obstacles to farmer readiness. Additional challenges include fragmented markets, weak farmer producer organizations, labour shortages, digital divides, and land fragmentation. The study concludes that governance and systemic constraints play a more decisive role than farm-level issues in shaping export preparedness. It recommends stable policies, ICT-enabled extension services, stronger farmer collectives, and targeted capacity-building programmes to integrate smallholder farmers more effectively into global agricultural value chains through the Vizhinjam port project.

4.Anupama, S., Sangeetha, K. G., & Thomas, A. (2026). Constraints affecting the adoption of low-carbon agricultural technologies in Kerala. Indian Journal of Extension Education, 62(1), 221-225

The study investigates the major constraints affecting the adoption of low-carbon agricultural technologies among farmers in Kerala. Conducted across the districts of Thiruvananthapuram, Ernakulam, and Kasaragod, the research identifies unpredictable weather conditions, labour shortages, and high input costs as the most severe barriers to adopting climate-friendly farming practices. The study further highlights market and economic challenges, including inadequate marketing facilities and limited access to inputs, as important obstacles limiting farmers' willingness to shift toward sustainable agriculture. Interestingly, knowledge and awareness-related factors were ranked relatively lower, suggesting that awareness alone is insufficient without addressing deeper structural and financial barriers. The research concludes that district-specific extension strategies combined with broader state-level policy support are necessary to accelerate Kerala's transition toward carbon-neutral and sustainable agriculture.

5. Devi, V. & Anitha, V. (2026). Unveiling the economics of garlic cultivation in Kerala: A comprehensive investigation in Kanthalloor. International Journal of Social Science and Economic Research, 11(3).

This study explores the economic aspects of garlic cultivation in Kanthalloor, a major agricultural region in Kerala. The paper discusses the significance of agriculture in Kerala's economy and highlights garlic as a high-value crop with strong market demand and medicinal importance. It examines the cultivation practices, production requirements, and profitability associated with garlic farming. The study also emphasizes the economic benefits for farmers, including low input costs, long storage life, and high returns on investment. Additionally, the research considers the broader contribution of garlic cultivation to rural livelihoods and agricultural diversification in Kerala. Overall, the article presents garlic farming as a sustainable and economically viable agricultural activity.

Labour

Scopus Indexed

1. Rajan, S. I., & Akhil, C. S. (2026). Recruitment Costs of Migrant Workers. In Indians in the United States of America (pp. 257-274).

The study analyses the recruitment costs incurred by migrant workers from Kerala using data from the Kerala Recruitment Cost Survey 2023. Focusing on the Sustainable Development Goal indicator related to fair migration costs, the study finds that migrant workers bear substantial financial burdens before overseas employment, with median recruitment expenses exceeding two months of salary. Travel costs and private recruitment agency fees emerge as the largest components of expenditure, while less-educated and lower-income migrants face disproportionately higher burdens. The study further shows that although social networks remain the dominant recruitment channel, dependence on private agencies and informal intermediaries significantly increases costs and vulnerability. The findings highlight structural inequalities within labour migration systems and call for stronger regulation of recruitment practices, better migrant protection policies, and more transparent migration governance frameworks.

2.Kurian, S. A., & Ajayaghosh, D. (2026). How a flexible mindset unlocks work-life balance and mindfulness: Insights from Kerala's bank managers. In R. El Khoury (Ed.), Empowering business through technology: Innovations shaping our future (Studies in Systems, Decision and Control, Vol. 620)

The study examines how a flexible mindset mediates the relationship between mindfulness and work-life balance among commercial bank managers in Kerala. Using a mixed-methods approach involving interviews with managers and survey data from 200 respondents, the study analyses psychological and organisational dimensions of employee well-being in the banking sector. Structural equation modelling reveals that a flexible mindset fully mediates the relationship between mindfulness and work-life balance, suggesting that adaptive thinking patterns are essential for managing workplace stress and maintaining personal well-being in a rapidly changing banking environment marked by mergers, privatisation, and organisational transformation. The study contributes to discussions on human resource management, workplace mental health, and organisational sustainability in Kerala's banking sector and recommends managerial strategies to improve employee resilience and productivity.

Book Chapter

1. Rahman, A., & Ansari, P. A. (2026). COVID-19 and its effects on Gulf returnees in India: A case study of Kerala. In A. Rahman & M. Suhail (Eds.), Migration, diaspora and transnationalism (International Perspectives on Migration).

The chapter examines the socio-economic impacts of the COVID-19 pandemic on Gulf return migrants in Kerala, focusing on their post-return vulnerabilities and challenges. The study highlights how migrant workers, who previously formed a crucial pillar of Kerala's economy through remittances and overseas employment, became economically and socially marginalized after returning during the pandemic. Based on a study of 500 participants from Malappuram and Ernakulam districts, the research reveals that many returnees, particularly those employed in informal sectors in Gulf countries, lacked social protection, labour rights awareness, and institutional support. The chapter argues that despite Kerala's widely praised pandemic response, return migrants struggled with unemployment, social exclusion, reintegration difficulties, and weakened social networks. By situating the experiences of Gulf returnees within broader discussions on migration, labour precarity, and transnational vulnerability, the study highlights the need for stronger rehabilitation policies, labour protections, and reintegration frameworks for migrant workers in Kerala

Other articles

1.Anandhu, P. S., & Sadath, A. C. (2026). Structure of labour market in coir spinning and its implications for workers' welfare: Evidence from Kerala (Post-print hal-05459865). HAL.

The study examines labour-market conditions in Kerala's traditional coir spinning industry, focusing on how labour-market imperfections affect workers' welfare. Using panel data from 40 coir primary societies in Alappuzha district between 2010 and 2024, the paper estimates labour supply elasticity to assess the degree of monopsony power in the sector. The findings reveal that labour supply remains relatively inelastic, indicating limited worker bargaining power and restricted mobility. Even after correcting for endogeneity through 2SLS estimation, the results continue to show structural constraints and monopsonistic tendencies within the industry. The study concludes that the persistence of such labour-market conditions adversely affects worker welfare and highlights the need for policy measures aimed at improving wage structures, labour mobility, and social protection for workers in Kerala's traditional rural industries.

2. Jana, R., & Srivastava, A. K. (2026). Rural job loss and livelihood challenges during the COVID-19 crisis. Mansarovar Global University.

This article examines the impact of the COVID-19 pandemic on rural employment and livelihoods in India. It highlights how lockdowns, market disruptions, and migration reversals caused significant job losses among agricultural workers, informal labourers, and small-scale rural workers. The study discusses the economic hardships faced by rural households, including reduced income, food insecurity, and growing debt burdens. It also evaluates government relief measures such as employment schemes, food distribution, and cash transfers, noting the limitations in implementation. The paper emphasizes the structural weaknesses of rural labour markets and calls for stronger social protection systems, diversified employment opportunities, and sustainable rural development strategies.

Gender and Social Inclusion

Scopus Indexed

1.T., Chandra, P., & Filal, F. (2026). Kudumbashree's Lunch Bell project and digital solidarity economy in Kerala, India. Internet Policy Review, 15(1) huppilikkat, A. A

The study examines the Kudumbashree Lunch Bell project, a platform-based meal delivery initiative launched in Kerala in 2024, as an example of a digitally enabled solidarity economy. Using qualitative methods such as interviews, participant observation, policy analysis, and app walkthroughs, the paper analyses how state-supported digital platforms can promote feminist economic principles and gender-inclusive entrepreneurship. The study argues that the project challenges the gendered paradox in which women predominantly perform unpaid domestic cooking but remain marginalised from commercial food entrepreneurship. Although the initiative operates within a state-designed framework, the research finds that it adopts a reflexive and gender-sensitive approach to labour organisation within the digital economy. The paper concludes that state-supported digital solidarity models like Lunch Bell demonstrate the potential for combining digital innovation, women's economic empowerment, and social justice within Kerala's development framework.

2. Gopalakrishnapillai, R., & Natarajan, V. (2026). Feminization of labor and women workers of Kerala's handloom sector. Asian Women, 42(1), 168-182.

The study examines the feminization of labour in Kerala's handloom industry, where women constitute nearly 78 percent of the workforce. Drawing on field research from major handloom clusters in Kerala, the paper analyses how gendered labour structures shape the experiences of women weavers within traditional industries. The study finds that despite their central contribution to production and cultural preservation, women workers face insecure earnings, weak social protection, ageing workforce challenges, and vulnerabilities linked to informalization. At the same time, women actively negotiate these structural constraints through everyday forms of agency and survival strategies while balancing productive and domestic responsibilities. By situating Kerala's handloom sector within broader debates on feminized labour and inequality in the Global South, the article highlights the persistence of gendered hierarchies in labour markets and calls attention to the need for stronger social justice and labour protections for women workers.

3. Krishnan, N. (2026). The intersection of disability and caste in Kerala: A public economics perspective. Kerala Economy, 7(1), 60-66.

This paper explores how disability and caste intersect to create compounded social and economic disadvantages in Kerala. Using data from the Census of India, NSS, PLFS, and Kerala government reports, the study examines inequalities in healthcare, education, employment, and social protection among disabled individuals from Scheduled Castes and Scheduled Tribes. Although Kerala is known for its strong social development indicators, the paper argues that caste continues to shape the lived experiences of persons with disabilities. Drawing on intersectionality theory and Amartya Sen's Capability Approach, the study highlights the limitations of existing disability policies that overlook caste-based inequalities. The paper concludes by recommending more inclusive and caste-sensitive public policies for equitable development.

Book Chapter

1. Raseena, C. (2026). Social problems of tribal women in Kerela. LEXARCHEUS PUBLICATIONS

Social Problems of Tribal Women in Kerela examines the historical, social, and economic conditions of tribal communities in Kerala, with special attention to the experiences of tribal women. The book discusses how indigenous communities in regions such as Wayanad, Idukki, and Attappady have historically faced marginalization due to colonial land policies, social exclusion, and development disparities. It highlights the intersection of gender and tribal identity, showing how tribal women experience multiple layers of disadvantage in areas such as education, healthcare, land rights, and employment. The work also explores the cultural diversity among Kerala's tribal communities and the challenges posed by modernization and state policies. Overall, the book provides a socio-historical understanding of tribal women's struggles and their place within Kerala's development discourse.

Other Articles

1.Thomas, M. K., & Reshma, V. (2026). Gender inequality-A comparative analysis of gendered time inequality in India and Kerala. International Journal of Innovative Research Findings, 13(7).

The study analyses gendered time inequality in India and Kerala by examining how unpaid domestic and care responsibilities are disproportionately borne by women despite improvements in literacy, health, and social development indicators. The paper highlights the paradox of Kerala, where women achieve higher educational attainment and favourable demographic indicators but continue to experience "time poverty" due to rigid gender roles and unequal household labour distribution. The study finds that excessive unpaid work restricts women's participation in paid employment, economic independence, leisure, and personal development. By comparing national and regional patterns, the article demonstrates that gender inequality persists not only through income disparities but also through unequal allocation of time and responsibilities, thereby reinforcing structural barriers to women's empowerment and inclusive development.

2. Jamsheer, T. P. M., & Chengodan, N. (2026). Who are the women in Kerala's gig economy? A socioeconomic and income-based analysis using logistic regression. Journal of Economics, Management and Trade, 32(3), 25-38.

The study investigates the socioeconomic profile and income determinants of women engaged in Kerala's gig economy using survey data from 300 women workers across Kannur, Ernakulam, and Thiruvananthapuram districts. Employing descriptive statistics, chi-square analysis, and binary logistic regression, the research finds that gig work creates important opportunities for women's labour-force participation and income generation, but also exposes workers to precarious employment conditions and financial insecurity. The study reveals that traditional social identity factors such as caste and religion do not significantly determine income vulnerability, whereas household size and rural residence have stronger effects on earnings insecurity. Women from larger households and rural areas are more likely to experience unstable incomes. The paper concludes that although gig platforms expand economic participation, structural vulnerabilities remain significant, highlighting the need for inclusive labour policies, stronger social protection mechanisms, and targeted skill-development programmes for women gig workers in Kerala.

Growth and Development

Scopus Indexed

1. Mathew, P. V., & John, A. (2026). Returnee entrepreneurs: An empirical investigation on entrepreneurial success and psychosocial satisfaction. Journal of Developmental Entrepreneurship, 31(1), 2650002.

This study examines the entrepreneurial success and psychosocial well-being of Gulf returnee entrepreneurs operating MSMEs in Kerala, India. Using human capital and social capital theories, the research analyzes how international experience, entrepreneurial orientation, and local environmental adaptation influence business success. Based on structural equation modeling of survey data from 234 entrepreneurs, the study finds that entrepreneurial success depends not only on foreign-acquired skills but also on effective integration into the local market environment. The research further shows that successful entrepreneurship significantly improves psychosocial satisfaction and societal reintegration among returnees. The paper highlights the importance of policy support for local market integration rather than relying solely on migrants' international exposure.

2. Dinesh, H., Trivikram, T. N., Surekha, K. C., et al. (2026). Accessibility as a factor in assessing urban public spaces: A case of Kannur, Kerala. City, Territory and Architecture, 13, 8

The study examines accessibility as a key factor in evaluating urban public spaces in Kannur, Kerala. Using a multidimensional accessibility framework that combines spatial mapping, photographic documentation, and qualitative comparative analysis, the research assesses how physical, visual, and symbolic dimensions of access shape the usability and inclusiveness of public spaces. The study finds that congestion, poor connectivity, underutilization, and inadequate pedestrian infrastructure limit the effectiveness of public spaces as inclusive community hubs. It argues that improvements such as pedestrian-friendly pathways, better visual accessibility, enhanced safety measures, and integrated urban design can significantly improve social interaction, cultural engagement, and community participation. By linking local urban challenges with global accessibility debates, the paper emphasizes the importance of equitable and well-connected public spaces in sustainable urban development and advocates policy interventions that prioritize accessibility and inclusivity in urban planning.

Other Articles

1. Neethu, L. (2026). Food price rise and consumption behaviour: A comparative study of APL and BPL in Fort Kochi. International Journal of Social Science Research (IJSSR), 3(2), 822.

This study investigates the impact of food inflation on the consumption behaviour of Above Poverty Line (APL) and Below Poverty Line (BPL) households in Fort Kochi, Kerala. The paper highlights how rising food prices reduce purchasing power, especially among vulnerable and fixed-income groups. It examines the coping strategies adopted by households and evaluates the socio-economic consequences of inflation on food security and daily living standards. The research also assesses the role of ration shops and the public distribution system in providing affordable food during inflationary periods. The findings aim to support policymakers in designing targeted measures to improve food security and economic resilience among vulnerable urban populations.

2. Thottathodi, M. H. (2026). India in Hindu eschatology: A survey on Kerala Bhakti literature. Life and Death: Journal of Eschatology, 3(2), 72-85.

The study examines the eschatological dimensions of Kerala's Bhakti literature and explores how devotional writings shaped India's spiritual and political imagination. Focusing on the works of prominent Malayalam Bhakti poets such as Thunchaththu Ezhuthachan, Poonthanam Namboodiri, and Melpathur Narayana Bhattathiri, the article analyses concepts such as Kaliyuga, moral decline, devotion, and salvation through a hermeneutic textual approach. The study argues that Kerala's Bhakti corpus transformed scriptural ideas into vernacular moral philosophy, presenting devotion as a path to redemption and social renewal during periods of ethical decline. It further conceptualizes India (Bharath) as a spiritually redemptive geography where divine grace and moral regeneration converge. By linking devotional literature with historical resilience and political imagination, the article contributes to debates on Hindu eschatology, cultural identity, and the continuing influence of Bhakti traditions on India's ethical and cultural modernity.

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GULATI INSTITUTE OF FINANCE AND TAXATION

What is new(s) from GIFT

A. Seminars/Webinars

GIFT conducted a Seminar on Strategic PIVOTAL Developmental Model & Alternative Innovative Inclusive Financing Kerala for Kerala's Economy on January 09, 2026

The paper was presented by Prof. Marc Oliver Opresnik, Founder & CEO, Opresnik Management Consulting, & Prof. A G Iyer, President & Founder, Markenomy Foundation, Thane. The session was chaired by Prof. K J Joseph, Director GIFT and Dr Geetha Rani V proposed the vote of thanks.

Abstract : Abstract: PIVOTAL Strategy for Public Finance: Purpose-Driven Financing for Kerala AIIIF (Alternative Innovative Investment for Inclusion Financing) can be strengthened through the PIVOTAL Strategy as a purpose-driven "infinite loop" that keeps capital providers, project operators, and citizens aligned around measurable SDG outcomes. PIVOTAL begins with Purpose (the business of doing good) and an "all stakeholders win" logic, then translates intent into continuous decisions across long-duration assets such as renewable energy, hydropower/PSPs, irrigation, and resilient infrastructure. Innovation becomes the design of new capital structures-low-cost debt, blended vehicles, and PPP/project-finance models-while Value is defined by bankable risk- return plus inclusion, reliability, and climate impact. Outreach mobilizes investors through credible narratives, data transparency, and partner ecosystems. Transfer specifies the channels, controls, and reporting that move funds efficiently to projects and beneficiaries. Finally, Advocacy and Lifetime Value build durable investor confidence and community buy-in, countering short-termism and compounding impact over 12-25 years.

Alternative Innovative Investment for Inclusion Financing /Funding The World Order is moving towards the Sustainable Development Goals (SDGs) and an investment cycle, especially for Projects that require a long-term approach. Projects of Long Duration, like Infrastructure, Renewable Energy such as Hydropower & PSPs, Irrigation, etc, need long-term competitive Financing with Low IDCs, and that cannot be left to the Present Multilateral Mechanism. UNCTAD had pointed out in 2024 that the VGF (Viability Gap Funding) of $ 544 billion then was Simply Inadequate to cover the SDG & RE build-up necessary for Climate Action, as it needed at least $ 4-5 trillion to have any impact. Despite this, CoP 29 ultimately reduced the VGF to US$300 billion. The Renewable Energy Promotion Association (REPA) advocates for a minimum of 10% of the Global

GDP of US$115 trillion, or approximately US$11.5 trillion, to be committed to spending / Investment into SDG & Renewable Energy for Climate Action, which will enable developing and emerging economies to transition towards a Positive Energy Future. It is in this Background that the REPA & MARKENOMY Foundation's advocacy of AIIIF brings fresh traction and hope to its Delivery, with a US$1 trillion opportunity via ECBS (low-cost debt) at around 2.2-2.5% p.a., flexible with long-term (12-25 Years) spreads, and No Country Risk loading. Similarly, PPP Financing is another Option where projects with PPA, Hybrid Annuity IRR Returns can attract direct Project Investments without any Collateral, based on risk and return principles. A Brand-New Opportunity for Projects to build up in an SDG- aligned & RE-driven Framework.

GIFT organised a Seminar on Sex, Social Groups and Learning Mathematics in School Completion in Karnataka on January 19, 2026

The paper was presented by Prof D Narayana, Honorary Professor, GIFT and Former Director, GIFT. The session was chaired by Prof. K J Joseph, Director GIFT and the discussant of the paper was Dr Sumalatha B S Assistant Professor GIFT, Trivandrum. and Dr Geetha Rani V proposed the vote of thanks.

Abstract: Secondary School Leaving Certificate (SSLC) examination in India is an important milestone in every child's growth as it marks the completion of life and learning in the school system and is a decider of entry into collegiate education. The Board examination at the end of ten years of schooling, in a sense, decides the fate of the child. Success in SSLC is a passport to higher education, and failure largely leads to openings only in the poorly rewarded lower rungs of the informal sector of the economy. School completion is also an issue of human capital development and economic growth. Every year, SSLC (Secondary School Leaving Certificate) examination results in Karnataka are declared as pass or fail, taking a cut-off of 40 per cent (or around) in each of the six subjects. Every year they show large inter-district variation. A satisfactory explanation of the variation in examination results is not to be found and calls for an analysis. This paper seeks to provide an explanation of the inter-district variation in SSLC pass percentage in Karnataka. First and foremost, it analyses the difference in pass percentage between girls and boys in relation to the girls' pass percentage across the 35 educational districts. It successive steps it analyses variation in the difference between girls and boys in relation to levels by medium of instruction English and Kannada, by institutions government, aided, unaided, by eight caste groups, and by subjects. The conclusion arrived at is that there exists a steep gradient in SSLC pass percentage across the districts and the difference shows a significant negative relationship with levels. As regards subjects the lowest pass percentages are in mathematics and Science. Two

questions arise from this analysis. Firstly, does the difference between boys and girls exist from the early years, or does it get built as the students' progress from primary schooling. Secondly, what factors other than medium of instruction and caste composition explain the steep gradient in pass percentage across the districts? An answer to the first question is offered using a unique dataset of Grade 4 performance of boys and girls in mathematics. While levels vary in maths performance of both boys and girls vary across the districts, differences between them are not statistically significant in any of the district. Obviously, the school system contributes to systematic performance difference between boys and girls.

Post Budget Discussion on Kerala Budget 2026-27 on February 13, 2026.

The dialogue was conducted as panel discussion. The event was conducted in two panel sessions. Scholars from various sector presented their views on budget in the sessions.

GIFT organised a Two-Day Seminar on "16th Finance Commission and Fiscal Federalism" on March 18 -19, 2026.

Two-day seminar on the "16th Finance Commission and Fiscal Federalism," was conducted upon drawing top economists, policymakers, and former Finance Commission members to deliberate on India's evolving fiscal landscape. This seminar served as a crucial platform for academic and policy-level discourse as the 16th Finance Commission begins its work, as noted by Prof. K. J. Joseph, Director of GIFT during his welcome address. The event was inaugurated by Shri K. M. Chandrasekhar IAS. In his inaugural address, he emphasized the critical role of the Finance Commission in maintaining the delicate balance of resources between the Centre and States.

The discussions then moved toward the mechanics of resource sharing, chaired by Shri A. N. Jha, Member of the 14th & 15th Finance Commissions, focusing on the total pool of taxes shared with states and led by Prof. M. Govinda Rao, who steered the conversation on how funds are distributed among various states based on specific criteria. Notable panelists included Prof. Ashok Lahiri, Prof. Pinaki Chakraborty, and Dr. Haseeb A. Drabu, former Finance Minister of Jammu & Kashmir, who delivered a thought-provoking keynote address.

The second day of the seminar shifts focus toward the "last mile" of fiscal federalism. Discussions on Grants-in-Aid by Prof. Pinaki Chakraborty, and Local Finances are scheduled to be chaired Prof. M. A. Oommen, respectively. The event concluded with a Valedictory Session chaired by Shri A. N. Jha, featuring a valedictory address by Prof. M. Govinda Rao. The seminar is coordinated by GIFT Assistant Professors Dr. Kiran Kumar Kakarlapudi and Dr. Geetha Rani V.

13th Annual Conference of Kerala Economic Association jointly organised by Kerala Economic Association in association with Kerala Institute of Labour and Employment (KILE) and Gulati Institute of Finance and Taxation (GIFT) , on March 13-14, 2026 at GIFT

4th Annual Conference on Public Finance and Policy organized at Madras School of Economics, Chennai Jointly organized by Centre for Public Finance, Madras School of Economics (MSE) & Gulati Institute of Finance and Taxation (GIFT) on March 23-24, 2026.

Seminar Co ordinators

Dr Kiran Kumar Kakarlapudi and Dr Geetha Rani V

B. Teaching and Training programmes

1. Post Graduate Diploma in GST (PGDGST)

Third Schedule of Classes started on 3rd January 2026 for the current batch of PGD-GST students . Invited Lectures by Sri. S Suresh, Assistant Commissioner, CGST, Sri. Kiran Lal P. S., Joint Commissioner, SGST, Adv. Sindhu Manghat, Partner Swamy Associates & Sri. Sam Jubin, Tax Practitioner, J S Associates were delivered during this period

PGD GST Course 2025-26 Exams were notified on 26th March 2026 and the candidates can register for exams till 25th April 2026.

Coordinators Dr. Meenu Mohan & Dr Geetha Rani V

For more details: https://www.gift.res.in/index.php/course/detail/14/PGD-GST

2. PhD programme

The activities of the Ph.D programme during January 2026 to March 2026 are listed below. The course work for the sixth batch of Ph. D is ongoing. The Ph. The faculty interaction with Mr. Ajay Narayan Jha was held on 20th January 2026 at GIFT Boardroom. This is followed by the work progress seminar presentations of all batches of PhD held during 21st to 30th January 2026. Ms. Steffy Antony, Ph.D scholar of the second batch presented her Ph.D pre submission seminar on the topic 'Fiscal consolidation in Indian states: Rationale Effectiveness and Sustainability' on 12th January 2026 at the institute. The Ph.D pre submission seminar of the Ph.D scholar Ms. Shagishna K on the topic 'Influence of religion based faith on financial inclusion in India: Incidence and Implications' was held on 16th January 2026 at GIFT. A Research Committee meeting was held on 19th January 2026 to discuss the Ph.D related activities.

Seminar Presentations

Divya Kannan K R, GIFT Ph.D Scholar presented a paper in the 4th Annual Conference on Public Finance and Policy jointly orgnaised by Madras School of Economics and GIFT from 23-24 March 2026.

Amalu Seby, GIFT Ph.D Scholar presented a paper titled 'Examining the Feldstein-Horioka Puzzle in OECD Countries: Evidence from Asymmetric Causality Testing Approach' at the Diamond Jubilee (60th) Annual Conference of the Indian Econometric Society (TIES), organised by Department of Economics, Autonomous, Shivaji University, Kolhapur, Maharashtra from February 26 to 28, 2026.

Anuraj P K, GIFT Ph.D scholar presented a paper titled 'An Empirical Study of Revenue-Expenditure Dynamics: Evidence from Southern Indian States' at the Diamond Jubilee (60th) Annual Conference of the Indian Econometric Society (TIES), organised by the Department of Economics, Autonomous, Shivaji University, Kolhapur, Maharashtra from February 26 to 28, 2026.

Anjalikrishna Sudhakaran, GIFT Ph.D scholar presented a paper titled 'Financial Concurrency of Public Education Expenditure in India' at the Diamond Jubilee (60th) Annual Conference of the Indian Econometric Society (TIES), organised by Department of Economics, Autonomous, Shivaji University, Kolhapur, Maharashtra from February 26 to 28, 2026.

Shahid P K, GIFT Ph.D scholar presented the term paper titled 'The Redistributive Impact of Taxation: Does the Composition Matter? Evidence from a Cross-Country Panel Analysis' in the 4th Annual Conference on Public Finance and Policy jointly organised by Madras School of Economics and GIFT from 23-24 March 2026.

Workshop attended/ presentation

Joyal P Joseph, GIFT Ph.D Scholar presented the paper titled 'Impact of Monetary Policy on Sub national Inflation' in the second workshop on Open Economy Macroeconomics and Economic Integration in Emerging Market Economies, organized by the RBI Endowment at the Centre for Development Studies (CDS) from 19th to 24th February 2026.

Adithya Krishnan, GIFT Ph.D scholar presented a paper in the second Workshop on Open Economy Macroeconomics and Economic Integration in Emerging Market Economies, organized by the RBI Endowment at the Centre for Development Studies (CDS) from 19th to 24th February 2026.

Surya K, GIFT Ph.D scholar presented a paper in the second workshop on Open Economy Macro Economics and Economic Integration in Emerging Market Economies-Organized by the RBI endowment at CDS from 19th to 24th January 2026.

Anuraj P.K, GIFT Ph.D scholar attended an online training session on "EconLit with Full Text" organized by ICSSR NASSDOC on 30th March 30, 2026.

Anjalikrishna Sudhakaran, GIFT Ph.D scholar attended the five-day National Workshop on Financial Modelling, scheduled from 24th to 28th March 2026 at the Department of Commerce, School of Business Management and Legal Studies, Kariavattom Campus, Thiruvananthapuram.

Greeshma K S, GIFT Ph.D scholar presented a paper in the workshop on Open Economy Macro Economics and Economic Integration in Emerging Market Economies organized by the RBI endowment at CDS on 19th to 24th January 2026.

Annie Antony Pinto, GIFT Ph.D scholar presented a paper titled as 'Is Public Debt Redistributive? Evidence from India' in the national seminar held at Madras School of Economics jointly organised by MSE - GIFT, on 23-24 March 2026.

Jubairiya P M, GIFT Ph.D scholar attended the third Summer Training Programme in Public Finance held at the Madras School of Economics, Chennai.

Manju Preman, GIFT Ph.D scholar presented a paper on 'Public expenditure titled "Electoral Incentives and Public Expenditure in India: A Sub-national Analysis' in the national seminar held at Madras School of Economics jointly organised by MSE - GIFT, on 23-24 March 2026.

News Paper Article

Anjalikrishna Sudhakaran, GIFT Ph.D scholar along with Dr. Aswathy Rachel Varugheese, Assistant Professor, GIFT published an article titled 'Don't neglect Higher Education' in the Businessline on 6th February, 2026. *https://www.thehindubusinessline.com/opinion/dont-neglect-higher-education/article70596744.ece*

Others

Rhwithwik M S, GIFT Ph.D scholar worked as a Research Associate for the Economic Survey report of Tamil Nadu from October 13th 2025 to February 12th 2026 at the Madras Institute of Development Studies, Chennai. *https://tamildigitallibrary.in/assets/docs/uploads/catalogue_article_file/BOK/upload/2026/02/TVA_TVA_BOK_062955/upload_primary_20260216113955411_20260216113539.pdf*

Kalaiyarasan, A., & Rhwithwik, M. S. (2026). Budget 2026-27: How does South India fare (Issue Brief No. 1). Deccan Centre for International Relations. *https://www.deccancentre.org/pages/MzA*

Rhwithwik, M. S. (2026, February 21). The flawed logic of the Finance Commission. The Left Views. *https://www.leftviews.in/en-IN/economy-26266/views-02385/finance-commission-fiscal-policy-states-privatisation-critique*

Course Coordinators: Dr Sumalatha B S and Dr Renjith P S

3. Research Capacity Building Program (RCBP)

The Research Capacity Building Program (RCBP) on Data Analytics Using Python, jointly organised by the Gulati Institute of Finance and Taxation (GIFT) and the Kerala State Higher Education Council (KSHEC), is a three-month certificate programme, comprising 72 hours of structured training delivered fully in online mode, has witnessed strong participation, with over 100 participants enrolled from diverse academic and professional backgrounds. The programme was successfully completed in the month of February 2026. Certificates were distributed to the successful candidates. The feedback from the participants were highly encouraging, particularly highlighting the course's hands-on pedagogy, interactive learning environment, and practical exposure to Python programming, data handling and visualisation, statistical analysis, and applied research workflows.

Course Coordinators: Dr Aswathy Rachel Varughes and Dr Akhil M P

C. Publications

1. Kerala Tax Reporter (KTR)

October, November and December 2025 issues of KTR published Online and offline.

https://www.gift.res.in/ktr

2.Innovation and Development

A Routledge journal from GIFT, Volume 16, No. 1 (2026) published, Editor in Chief, K J Joseph.

For details, please visit https://www.tandfonline.com/toc/riad20/current

3. Weekly update on Finance, Taxation and the Indian Economy

This is an attempt by the Young Scholar' Forum in GIFT, led by Smt Soudhamini G S, Assistant Librarian to update on important developments on Finance, Taxation and the Indian economy. Twelve issues of Weekly updates published during January to March 2026 which are available in GIFT Website. Latest issue: 21-27 March 2026.

For details, please visit *https://www.gift.res.in/index.php/publish/publish_list/14/*

Weekly-Updates-on-Finance

4.Monthly Content Alert from GIFT Library

The GIFT library provides a monthly content alert service, extensively designed to support the research endeavors of our PhD scholars. This attempt provides a selection of recently published journal article titles, abstracts, and links, delivering them directly to the GIFT community each month. The content alert service is more than just a monthly update and the initiative aims to be an indispensable tool for scholars, providing them with timely access to the latest research developments in their fields. It is drawn from a wide array of reputed journals.

Twelve issues of the content alert service have been published, covering the period from January to March 2026. The preparation of this content alert is led by Smt Soudhamini G S, Assistant Librarian, GIFT. Latest issue: March 27, Vol. 12. Part 4 , 2026

D. Faculty Publications

1.GIFT Discussion Paper

D K Srivastava (2026), Equalization Transfers in India and Profiles of Inequality,, GIFT Discussion Paper Series No.1/2026

Abstract: Fiscal transfers to states in India have been guided by the equalization principle among other considerations. The outcomes of such transfers have been equalizing in relation to a number of dimensions including education and health outcomes, per capita state primary revenue expenditures and per capita consumption expenditures. There is also a decrease in the incidence of poverty. We juxtapose these outcomes with a profile of growing inequality in per capita real GSDP as well as per capita fiscal capacity as proxied by nominal GSDP. These two profiles show directionally opposite trends. We explore what causes these opposite movements and highlight the role of market forces in inducing spatial concentration patterns of capital stock and investment flows. We consider policy options to moderate or reverse this pattern of growing divergence in per capita incomes across states.

Key Words: Equalization, Gini inequality coefficient, Theil inequality index, Herfindahl Hirschman concentration ratio, capital stock, fiscal transfers, education and health, infrastructure.

2.Faculty publications and presentations/involvement

Prof K J Joseph, Director, GIFT

Paper Submitted for the Fourth Annual International Conference	September 15, 2025.	The conference, themed **"Sustainable Development: Theory, Practice, Approach, and Policy,"** held on **November 10-11**, 2025, at North-Eastern Hill University (NEHU), Shillong.
Vision 2031 International conference Kochi	October 13, 2025	VISION 2031 : An International Conference on Development and Democracy-Session Committee
Round Table Conference on Fiscal Federalism, NIAS, Bangalore	November 7, 2025	The NIAS Democracy Forum, in association with the Hanns Seidel Foundation, Germany, is organised a Round Table Conference on "Effective Fiscal Federalism and Decentralised Governance for Viksit Bharat" on November 7, 2025. The primary objective of this conference is to deliberate on the key issues of fiscal federalism and explore how they can contribute to achieving India's developmental goals. In recognition of your deep expertise on the subject, it is my privilege to invite you to participate as a resource person at this conference, delivering a lecture on a topic of your choice related to the conference theme.
Stakeholder Engagement Meeting with AG	31st October 2025	The Accountant General (Audit II) Kerala, Thiruvananthapuram

Invitation - Ideation Workshop on Exploring Federal Governance Practices in India and Germany on 4 November 2025 in Delhi	on 4 November 2025	Hanns Seidel Foundation (HSF) India, in collaboration with the Comparative Federalists Research Group of the Department of Political Science, University of Delhi, is organized an **Ideation Workshop on** *Exploring Federal Governance Practices in India and Germany* on **4 November 2025** in Delhi. The workshop is designed as a working session to co-define priorities, objectives, and responsibilities for a structured academic cooperation between India and Germany in the field of fiscal federalism and good governance.
Participation in a public-facing event on the Govt. guarantee research	5th November 2025 at Taj M.G. Road, Bengaluru.	Event is scheduled on ***Role of E-governance in implementation of the guarantee schemes.*** I request and invite you to Chair this session. Your participation is important to receive the valuable feedback on the Government of Karnataka's model and implementation strategies of the guarantee schemes (especially, DBT-based) through e-governance initiatives. This is useful for improvements in policy design, implementation and outcomes of the guarantee schemes in Government of Karnataka.
Prof K K Subramanian Memorial Lecture 2025, Thrissur	22nd November 2025	Dreaming with kerala : Plausible Pathways to Prosperous Society
Globelics	November 22nd and 28 th 2025	Globelics International Conference 2025 - South Africa

GST Awareness Program	November 5th, 2025	The Central Travancore Chamber of Commerce and Industry and the Department of Commerce, CMS College, Kottayam jointly organizeed a GST Awareness Program, aimed at providing basic knowledge and practical insights to the Chamber members and the final-year B.Com students of CMS College.
University of Kerala, Kariyavattom	10-12 December 2025	Micro Evidence on Innovation and Development Conference 2025 [MEIDE]
A Virtual Lecture on "Goods and Service Tax and India's Fiscal Federalism: Which way now?" held on January 23, 2026 (through online)	January 23, 2026 (through online)	SPIESR, Ahmedabad, lecture on 'Goods and Service Tax and India's Fiscal Federalism: Which way now?'
Resource Person - National Seminar in Tribute to Dr P. J. Thomas	on 5 & 6 February 2026	St Thomas College Palai Autonomous, served as a Resource Person for a National Seminar on "GST Reforms: Impact on MSMEs, Start-ups, Entrepreneurship, and State Governments" held on 5 & 6 February 2026, commemorating the 60th death anniversary of Dr P. J. Thomas (1895-1965), eminent economist and the founding Principal of our College.
CDS	6th February	Editorial Perspective session at the annual PhD Colloquium Crossroads 2.0
National Research Conference & Higher education Expo 2026	9 to 11th February 2026	Govt. Women's College Vazhuthakkdu

16th FC Panel Discussion CESS	25th February 2026	Centre for Economics and social Studies, Hyderabad
Understanding GST 20. GST and Indian Economy	6th and 7th March 2026	Department of economics St. Xavier's University Kolkatta
Sardar Patel Institute of Economic and Social Research (SPIESR), Near Doordarshan Kendra, Thaltej Road, Ahmedabad - 380054, Gujarat, India.	6th and 7th March 2026	National Seminar on "Socio-economic Implications of GST: Introduction and Reforms" March 6-7, SPIESR Ahmedabad
Beja Model College Of Arts And Science National Seminar	10 March 2026	Fiscal federalism at cross roads: rethinking Indian fiscal relations
Centre for Public Finance Madras School of Economics Gandhi Mandapam Road, Kotturpuram Chennai 600025	23-24 March 2026	4th Annual Conference on Public Finance and Policy
Layola School of Kindergarten	27 March 2026	Graduation & Merit day Speech
CDS	March 28-29, 2026	Two day international conference on "Socio-Economic Impacts of GST in India: Introduction, Reforms, Consumption Patterns, and Fiscal Federalism",
TKM Institute of Management Kollam	31st March 2026	9th Research Conference, Delivered Keynote address

Dr Vidya V Devan

Project Submitted

- A project titled "Change In Legal Framework & Local Government Revenue: A Study of Kerala in the Context of Goods and Services Tax (GST) In A Comparative Analysis Submitted to the 7th Kerala State Finance Commission in January 2026 jointly with Meenu Mohan and Anitha Kumary L

Newspaper /Popular Article

- നടപ്പാക്കാൻ ഏകലക്ഷ്യം, നൽകാൻ വിവിധ മാനദണ്ഡങ്ങൾ, മലയാളം samakalikamalayalam The New Indian Express, on
- 02 Jan 2026, https://www.samakalikamalayalam.com/premium/news-plus/kerala-economy-policy-climateource=whatsapp&utm_medium=whatsapp- group&utm_campaign=clicks
- “സിനിമാ ടിക്കറ്റുകളിലെ വിനോദ നികുതി”, കേരളകൗമുദി on 22nd February 2026. (Daily News Paper) co authored with Meenu Mohan and Anitha Kumary L

Presentation

'Protecting The Gift Of Life: State Responsibility In Promoting Organ Donation And Preventing Organ Trafficking' in the International Conference on Medical Law Policy and Ethics held on 27th and 28th February 2026, jointly organised by Universite Paris Nantrre(France), Kerala Law Academy Law College (India) Europa Universitat Viadrina (Germany) and Universite Franco-Allemande (Germany) at the Kerala Law Academy Law College Campus, Thiruvananthapuram, Kerala.

FDPs Attended

1. One Week Online Faculty Development Programme for Law Teachers on Interpretation of Statutes jointly organised by HRSPM'S Sarsenapati Hambirrao Mohite Law College, Rajgurunagar and Law teachers in India from January 12 to January 18, 2026.
2. One Week Online Faculty Development Programme for Law Teachers on 'Judicial Process' jointly organised by Bharati Vidyapeeth's New Law College, Sangli and Law Teachers India conducted from 11th February 2026 to 17th February 2026.

News paper articles

- Nirmal Roy V P, Anitha Kumary L & Sumalatha B S (2026). 'Kerala Budget: A Budget for the State's New Normal, published in Business Line on 02/02/2026.
- Anitha Kumary L, Sumalatha B S and Nirmal Roy V P (2026). Budget's Fiscal Consolidation drive my hit Growth momentum, published in Business Line on 06/02/2026.

Call for Papers: Kerala Economy Journal

Dear Scholars and Researchers,

We welcome submissions for publication in the Kerala Economy Journal, an esteemed peer-reviewed quarterly publication of the Gulati Institute of Finance and Taxation (GIFT).

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Kerala Economy has been a beacon of knowledge, enlightening readers with its monthly publication since its inception in September 2020. As a testament to our commitment to accessibility, we present not only the English edition but also a meticulously translated Malayalam counterpart, ensuring that our invaluable insights reach audiences far and wide. In a world of constant evolution, we adapt and evolve. From 2022 onwards, Kerala Economy has blossomed into a quarterly journal, offering deeper analyses, fresher perspectives, and richer content.

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- Every article should carry a short abstract between 150-250 words, summarising and foregrounding the significance of the article.
- The article length shall not be more than 4000 words(excluding references).
- The manuscript shall be anonymous in nature
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- Images/Tables shall be continuously numbered and appropriately placed in the manuscript
- For initial submissions, there are no formatting requirements. However, the authors are expected to follow a uniform formatting criteria. After acceptance, the authors shall format the article as per journal requirements.
- Spelling, dates, references and footnote numbers should be checked for accuracy.
- All the works of others used for the preparation of the article should be cited appropriately
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Articles submitted for publication will be subjected to anonymous peer-review and the authors are expected to revise/respond to the comments offered by the peer-reviewer(s) in the final submission.

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After accepted, the authors shall format the article as per the journal requirements and submit it to the journal. Proofs of the articles in PDF format would be sent to the author who is expected to return them to the Handling Editor within a week. Substantive alterations or additions cannot be made at this stage and hence, authors should ensure that their final submissions must be thoroughly checked for accuracy.

Journal Information

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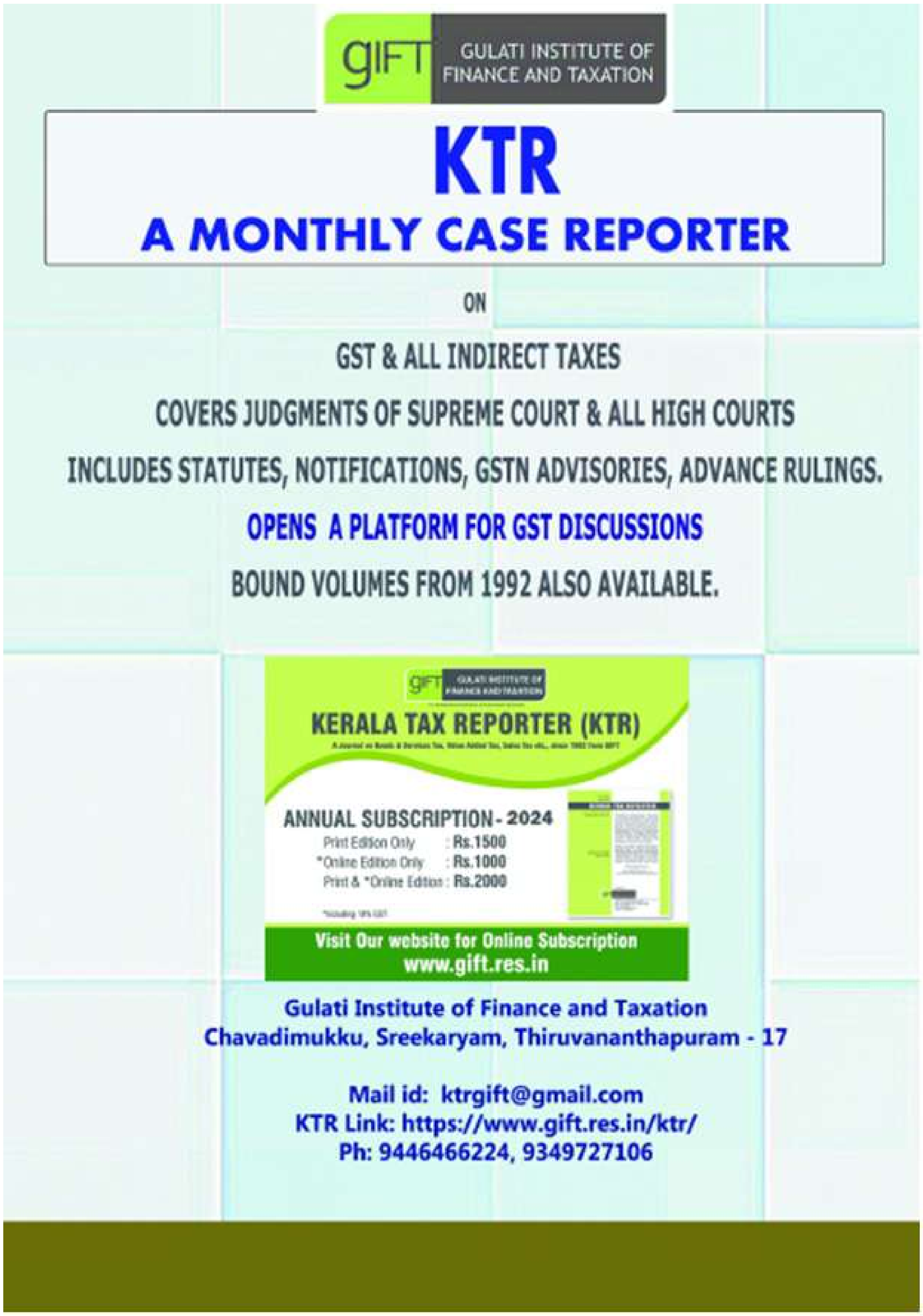
For details contact: Smt Anitha Kumary L, Associate Editor, Kerala Economy, 9495511136, Dr Aswathy Rachel Varughese, Assistant Professor, GIFT, 9897885522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Gulati Institute of Finance and Taxation (GIFT), Thiruvananthapuram, Kerala, India formerly Centre for Taxation Studies (CTS), is an autonomous institute of the Government of Kerala recognized by the Indian Council of Social Science Research (ICSSR). It is conceived as a premier national institute to promote theoretically grounded empirical research with an interdisciplinary perspective to aid policy-making at the national and sub-national levels. The uniqueness of the Institute is its faculty having a background in Commerce, Economics, and Law. GIFT offers a Ph.D. program in Social Sciences focussing on Public Economics, affiliated with Cochin University of Science and Technology (CUSAT). GIFT conducts two other programs; Post Graduate Diploma in Goods and Service Tax (PGDGST) and the Research Capacity Building Program (RCBP) besides offering training for capacity building of different stakeholders including Government officials. GIFT brings out three publications; *Kerala Economy* (Quarterly) *Kerala Tax Reporter* (Monthly) and *Weekly Updates on Finance, Taxation and the Indian Economy*.

The Governing Body and Executive Committee of GIFT consist of Scholars of Eminence and Senior Administrators representing both the Central and State Governments. Shri K N Balagopal, Minister for Finance, Government of Kerala, is the Chairperson of the Institute.

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