

New studies on Kerala

Young Scholars' Forum, GIFT

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Economics

Scopus Indexed

T., T., Gangopadhyay, K. and Mondal, D. (2024). Structural transformation of the Indian states: heterogeneity among them in a ten-sector economy. *Indian Growth and Development Review*, 17(2), 232-259.

This paper aims to analyse the pattern of structural transformation and productivity growth of 15 major Indian states at a ten-sector level of disaggregation from 1983 to 2017. The analysis has been carried over in a ten-sector disaggregated level through construction of the labour and output data from various micro data sets. The majority of Indian states have bypassed the stage of industrialization, wherein labour previously engaged in agriculture has transitioned directly into the modern services sector while skipping the manufacturing. There are no sign of convergence of sectoral productivities and the heterogeneity among Indian states persists throughout the time period. The growth performance of states are not positively associated with the movement of labour across sectors as measured by the structural transformation index (STI). This goes against the narrative that structural transformation help reduce the misallocation of factors. Despite an increase in educational attainment of

workers across all sectors, more than one-third of agricultural workers still remain either illiterate or lack formal schooling. Among sectors, construction (C) and trade, hotels and restaurants (THR) have absorbed the majority of workers who have left agricultural jobs. Finance, insurance, real estate and business services (FIRB), electricity, gas and water supply (EGWS) and mining and quarrying (MQ) are the three sectors that have seen significant gains in labour productivity during the study period. To the best of the authors' knowledge, this is the first attempt to analyse structural change and productivity growth in the Indian economy using Indian states as critical geographical marker. The results are new and add value to the literature.

Other Journals

KK, V. R. Service sector led growth trajectory of Kerala economy. *Kerala Economy*, 5(2), 13-27.

Kerala stands out in this context with the growth pattern of service sector oriented one as against primary sector led development process followed by secondary sector. The contribution of primary sector to state domestic product has been declining overtime and the place has been taken over by the service sector followed by the secondary sector. This paved the way for a growth trajectory validating the hypothesis that the economy has undergone structural change. The growth of each sector at constant prices has been analysed for the period 1960-61 to 2020-21. The whole development process of the economy, the extent and change in direction is measured in terms of each sector's contribution towards Net State Domestic product which is otherwise known as 'state income'. It is inferred from the analysis that the pattern of growth and performance of the service sector in Kerala has set a magnificent mark and will also continue to be the highest contributing sector in the years to come

Rajan, S. I., & Pattath, B. (2024). COVID-19 Led Return to Kerala: A Comparative Analysis of Return Emigrants. *The Indian Journal of Labour Economics*, 67(2), 389-405.

This article concerns emigrants who returned to Kerala between May and December 2020 in the midst of the COVID-19 pandemic. We study and document the experiences of 1985 return emigrants (REM) through a quantitative survey conducted via Computer-Assisted Telephonic Interviews. The study utilises a comparative classificatory framework that categorises return emigrants into three groups: normal REM, distressed REM, and REM who returned to re-emigrate. While the REM have been a demographically, politically, and economically significant component of Kerala's population, the COVID-19 REM represent a unique case in history that has the potential to not only affect the economy, society, and psyche of Kerala for many years to come, but to also provide valuable insights into the future of global labor migration governance.

Sociology and human development

Other Journals

Devan, V. V., & Kumar, S. S. Allocation for women-centred policies in Kerala budget 2024-2025-an analysis. *International Journal of Creative Research Thoughts*, 12(6), C960- C967.

Kerala's developmental approach is unique in India since it places equal emphasis on social justice and economic progress. Significant advancements in health, life expectancy, literacy, and women's status have been made possible by this focus on social variables. Kerala is a fascinating scenario with strong social indicators for women's health and education. Despite these advancements, the Kerala model presents a complex picture for women. While social indicators are

high, economic opportunities for women remain limited. Labour force participation for women is lower compared to the national average, and they are often concentrated in informal or low-paying jobs. Furthermore, despite high literacy rates, translating education into leadership positions in government or industry remains a challenge. The paper analyses to what extent the Kerala budget 2024-25 addresses the needs and aspirations of women and how effective are its allocations in promoting women empowerment. The research article is a doctrinal work with a vivid study of the Kerala budget 2024-25 along with various research articles related to women empowerment.

Jacob, E. M., & Goveas, A. A. (2024). Diaspora of Social Exclusion: Exploring Transgender Realities in the Context of Kerala. *Journal of Social Work Education and Practice*, 9(3).

Inclusion, exclusion, discrimination and oppression of vulnerable communities and target groups have been in the discourses for decades. Social exclusion is a multi-dimensional concept that comprises Economic, Structural, and Societal Exclusion (G. Jehoel-Gijsbers & Vrooman, 2007). Most of the studies recognize that Transgender Communities are under social exclusion. Lack of family and community support in the name of gender identity maneuvered them into social marginalization and isolation (Ayyavoo, 2022). The amendments to the Transgender Persons (Protection of Rights) Act of India enacted in 2019 address non-binary persons' constitutional rights, recognition of their gender identity, and non-discrimination laws across institutional spaces. However, the community faces exclusion that intersects with social and economic wellbeing domains. Sporadic efforts to mainstream have not yet converged to achieve a realistic goal. The inclusion of these minority groups and reduction in inequalities, envisaged in the country's Sustainable Development Goals (SDGs), proffers the importance of understanding and describing the phenomenon of social exclusion as perceived by them subjectively. The current study is a

qualitative examination of the social exclusion phenomenon experienced by the transgender community in Kerala. The study explored Social Exclusion from three dimensions - resource insecurity, structural exclusion and lack of social integration. The study utilized a case study method to illustrate a picture of exclusion experienced by transgender people. The descriptions of the themes advocate for transformative paradigms in knowledge and practice.

Environment

Scopus Indexed

Meharroof, M., Yadav, V. K., Sharma, A., Anitha, V., Paul, T. T., & Paul, L. (2024). Economic valuation of cultural ecosystem services: A case of tropical reservoir ecosystem. *Journal of Environmental Biology*, 45(5).

This study analyzes the economic value of ecotourism in the Peechi reservoir of Kerala, focusing on cultural ecosystem services (CES) provided by the reservoir. Methodology: Consumer surplus of visitors visiting the reservoir was estimated using travel cost methodology, employing both primary and secondary data collection methods. Results: Peechi reservoir attracts an average of 165,061 visitors annually, generating revenue of ₹29,03,631.88 and ₹3,35,434.38 as entry and parking fees, respectively. Applying travel cost methodology, the total economic value of ecotourism at Peechi was estimated at ₹32,39,066.25 per year. The estimated potential economic value of the Peechi reservoir was ₹120,309,765 with a consumer surplus of ₹757.58. Interpretation: The CES offered by the reservoir ecosystem have not received enough attention. Recognizing the intrinsic value of these under appreciated services can serve as a powerful catalyst for their conservation, fostering a cycle of awareness, informed decision making, and responsible tourism, ultimately paving the path towards sustainable development. Key words: Cultural ecosystem services, Ecotourism, Monetary valuation, Reservoir, Travel cost method

History and culture

Scopus Indexed

Lijo Lal, W., & Jayakumar, M. S. (2024). Enculturation and ethnic identity: the second-generation Malayalee diaspora in Ontario, Canada. *South Asian Diaspora*, 1-15.

Malayalee immigrants from Kerala, a southern state of India, constitute an ethnic diaspora community in Ontario, Canada. Though Malayalee diaspora is smaller, compared to other diasporas in Ontario, including various Indian ethnic diasporas, it is the fastest growing one. The second generation in the Malayalee diaspora is more prone to the host culture by means of acculturation and education. To preserve their own ethnic culture, the Malayalee diasporic communities enculturate their children in multiple ways. The present article explores the process of enculturation of the second-generation Malayalee diaspora happening through family, religion, ethnic organisations, and ethnic clusters. Family is instrumental in the enculturation process for maintaining the ethnic identity of the second-generation Malayalee diaspora by preserving ethnic food, dress, language, values, and other cultural traits. Ethnic associations, ethnic clusters, and religion also make significant efforts to encourage them to maintain ethnic Malayalee identity.

Other Journals

K M, V. (2024). MEMORABLE CULTURAL EXPERIENCE AT CHEMBAI MUSIC FESTIVAL GURUVAYUR KERALA: SCALE DEVELOPMENT. *ShodhKosh: Journal of Visual and Performing Arts*, 5(1), 1161-1177.

WTTO has identified tourism as one of the major economic activities of the 21st Century. Experiences of the visitors at different purpose levels often result in multiple outcomes including revisit intention, word of mouth and so on.

Memorable Cultural Experience shall dwell a new path to understand the emotional connections of the visitors with cultural events. The present study undertakes a scale development and validation of the same at the famous Chempai Music Festival held at Guruvayur Temple, Thrissur, Kerala. A sample of 530 visitors were made part of the study, and data collected were analysed using EFA, CFA and validity measures. Visitor's perceived authenticity, novelty, emotional connections, cultural learning and values contributes to the total experience. Thus, this research endeavors to provide insights into the intricate interplay between cultural heritage, emotional engagement, and tourism dynamics, thereby enriching our understanding of visitor experiences and informing strategic initiatives for sustainable tourism development.

Chakrabarti, A., Dube, A., & Venkatraman, S. (2024). God's wealth, legal frames, and the question of material and immaterial heritage: the case of Sree Padmanabhaswamy temple in Kerala, India. *Cultural Studies*, 38(5), 794-814.

Analyzing the battle over Sree Padmanabhaswamy temple's enormous treasure, the paper documents the litigious journey of the concept of sacred possession and heritage. It shows how the evolving and complex logic of secular governance in India provides the legal categories that animate this contestation over the deity's wealth. While the enormous treasure trove housed in the six chambers of the temple's basement 'belongs' to the idol (murthi) Lord Sree Padmanabhaswamy, the royal family of Travancore has held the right for over the last two hundred and seventy years to control the wealth as the Lord's servants (dasa). Though the dispute over what is arguably the world's largest temple gold and valuables collection began in 2007, it gained widespread media attention in 2009 when a public interest litigation (PIL) was filed. Since then, the royal family, temple management, and other stakeholders have been embroiled in the struggle for possession and control of the temple's wealth. The paper explores how legal frames of Anglo-Hindu law in their postcolonial

avatars, material patrimony (gold and land), and notions of immaterial heritage (shebaitship) animated and framed this contestation. To this end, the paper maps the legal trajectory of the dispute and the public debates over the ownership and control of the astounding wealth of Sree Padmanabhaswamy temple. Further, it decodes the legal reasoning behind the courts' arguments and delves into ontological questions surrounding religious freedom and secularity. The discussion illustrates how notions of immaterial heritage anchored in ideas of kingship as well as kinship emerged as clinching evidence in the management and access to this sacred wealth. Finally, the analyses offer insights into the governance of sacred materiality through religio-legal categories in a postcolonial nation-state.

Agriculture and Rural Economy

Scopus Indexed

Preenanka, R., & Safeena, M. P. (2024). In vitro lytic potential of Streptococcus bacteriophage against multidrug resistant Streptococcus agalactiae. *Biologia*, 79(8), 2581-2590.

Streptococcus agalactiae stands out as a significant bacterial pathogen, causing substantial economic losses in the aquaculture sector. Given the challenges posed by multidrug resistance, this study explores the potential of phage therapy as an alternative to antibiotics in biocontrol strategies. The focus is on evaluating the multidrug resistance profile of *S. agalactiae* isolated from a tilapia aquaculture farm, with particular attention to the strain KSA/01, which exhibits resistance to seven structurally different classes of antibiotics and a notable MAR index of around 0.6. In response to this challenge, the study successfully identifies and isolates the specific and lytic phage SAP-13 targeting the multidrug-resistant strain KSA/01. Transmission electron microscopy reveals that SAP-13 shares morphological characteristics with the Siphoviridae

family. In a one-step growth curve, the phage demonstrates a substantial burst size of approximately 610 PFU/cell over a short burst period and the phage exhibited stability across various physicochemical parameters such as temperature, pH, and salinity. In vitro lytic ability of SAP-13 at different multiplicity of infection underscores its potential to effectively eliminate *S. agalactiae*, particularly at an MOI of 0.01. Consequently, these findings suggest that phage SAP-13 exhibits high infectivity against *S. agalactiae*, presenting a promising avenue for addressing multidrug-resistant strains in aquaculture.

Other Journals

Vikas, P. A., & Subramannian, S. (2024). Seed production of pearlspot (*Eetroplus suratensis*) The State Fish of Kerala. *Indian Farming*, 74(3), 71-73.

Pearlspot (*Eetroplus suratensis*), known as Karimeen, holds cultural and culinary significance in Kerala and is designated the 'State Fish of Kerala'. With an annual demand of 10,000 MT for 'Kerala Karimeen' far exceeding the production of 2,000 MT, there is a growing interest in pearlspot culture. However, limited availability of seeds, with an annual requirement of 40 million, poses a critical challenge. Addressing the low fecundity and unique reproductive behaviours of pearlspot, this article introduces an innovative seed production approach in pond systems. The article emphasizes pond preparation for optimal conditions, brood fish management, facilitating breeding environments, breeding behaviours etc. are explored. Parental care, predator control, economic and marketing aspects are also discussed. The innovative pond system approach emerges as a promising solution for making quality seeds available for pearlspot aquaculture.

Nihal, D., Aneesh Kumar, K. V., Saha, P., Rajeeshkumar, M. P., & Manjebayakath, H. (2024). Length-Weight Relationships of Eight Fish Species

Collected as Bycatch from Deep-Sea Shrimp Trawls Operated in the Arabian Sea. *Thalassas. International Journal of Marine Sciences*, 1-6.

This study establishes length-weight relationships (LWRs) for eight demersal fish species (*Dactyloptena orientalis*, *D. papilio*, *Minous dempsterae*, *M. trachycephalus*, *Pterygotrigla macrorhynchus*, *Rogadius asper*, *Lythrichthys longimanus*, *Sorsogona tuberculata*) for the first time. We collected fish specimens caught as trawl bycatch at depths of 200-420 m from Sakthikulangara fishing harbour, Kerala, India, between September 2021 and December 2022. Deep-sea shrimp trawl nets used had a mesh size ranging from 30 to 50 mm in the net body and 18-26 mm at the cod-end. Estimated b values ranged from 2.19 (*Minous trachycephalus*) to 3.55 (*Pterygotrigla macrorhynchus*). Most species deviated from the isometric growth value ($b=3$), except for *Dactyloptena orientalis*. High coefficients of determination (r^2) were obtained for the LWRs (0.94-0.97), indicating strong relationships. These LWR estimates are valuable for updating the FishBase database and understanding resource characteristics of poorly studied deep-sea demersal fishery resources in the Indian Exclusive Economic Zone (EEZ).

Banking

Scopus Indexed

Pandey, A., & Murugesan, R. (2024). A universal financial inclusion index covering banking, insurance and pension services in India. *International Journal of Economics and Business Research*, 28(1), 28-43.

To create a universal social security system for all Indians, especially the poor and the under-privileged, three social security schemes namely, Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jeevan Jyoti Yojana, and Atal Pension Yojana were initiated by the Government of India in 2015. In the paper, a new

universal financial inclusion index (FIU) covering banking, insurance, and pension parameters in India are developed. Given that all parameters used in financial inclusion index have separate units, all parameters are normalised using the min-max method of normalisation. The Euclidean distance method is used to assess the distance between any two points in an n-dimensional space. FIU is compared to the financial inclusion index covering banking parameters only. The FIU is a multi-dimensional index that captures values of various banking, insurance, and pension dimensions on the scale of 0 to 1, where 0 indicates complete financial exclusion and 1 indicates complete financial inclusion.

Education and Health

Scopus Indexed

Rosario, J., & Shanmugam, K. R. (2024). Elementary education outcome efficiency of Indian state governments: a generalized stochastic frontier approach. *Journal of Economic Studies*.

This paper aims to analyze the technical efficiency of Indian State governments in providing elementary education (EE) and to identify the determinants of their technical inefficiency. The Generalized Stochastic Frontier Approach (GSFA) is used in the context of the Inefficiency Effects Model to simultaneously estimate the frontier production function and the technical inefficiency model. Panel data of 28 Indian States from 2009-10 to 2018-19 is used. The mean efficiency of States stands at 86%. Efficiency varied between 67 and 97%. 96% of the inter-state disparity in EE outcomes can be explained by inefficiency. Arunachal Pradesh is the least efficient State, followed by Sikkim and Tripura. Efficiency estimates were observed to change across States over the study period. Proportion of government schools, rural population, and proportion of Schedule Caste and Schedule Tribe children are the major determinants of

inefficiency. This study emphasizes that efficient resource management is as important as adequate resource allocation for achieving positive EE outcomes. It distinguishes resource-poor States from inefficient ones, providing insights to enhance States' efficiency, and aiding policymakers in formulating strategies for ensuring equitable and quality EE. This is the first paper to apply GSFA (for Indian States), providing a more robust estimation of efficiency. The Inefficiency Effects Model is employed that address the limitations inherent in the two-stage approach.

Other Journals

Indhu, T. R. (2024). Resource allocation in education schemes for marginalized communities: A comparative analysis based on centrally sponsored schemes. *Kerala Economy*, 5(2), 114-123.

The Scheduled Castes (SCs) are among the most socially and educationally disadvantaged groups in India. Scheduled Castes have different histories of social and economic deprivation, and the underlying causes of their educational marginalisation are also strikingly distinct. However, comparing educational outcomes among Scheduled Castes yields a common picture the government has sought to address through a common set of policy prescriptions. This paper examines, how the allocation from the Centrally Sponsored Scheme (CSS) for scheduled caste communities, particularly for pre-matric and post-matric scholarships, helps in reducing dropout rates and increasing the Gross Enrolment Ratio. How far does this scheme help the marginalised communities to develop their education and thereby increase their standard of living?