

**REGIONAL DISPARITIES IN TRIBAL
DEVELOPMENT IN KERALA: A Study on Fund Allocation
and Utilisation (2016-17 to 2025-26)**

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BY

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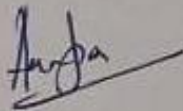
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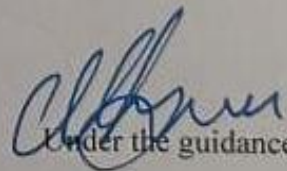
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This is to certify that the dissertation titled "**REGIONAL DISPARITIES IN TRIBAL DEVELOPMENT IN KERALA: A Study on Fund Allocation and Utilisation (2016-17 to 2025-26)**", submitted in partial fulfillment of the requirement for Post Graduation of Integrated M.A Programme in Social Sciences-Economics to St. Teresa's College, Ernakulam (Autonomous) affiliated to **MAHATMA GANDHI UNIVERSITY, KOTTAYAM**, is a true record completely done by the student under supervision and guidance.



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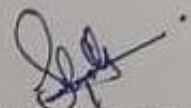
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I hereby declare that the dissertation titled "**REGIONAL DISPARITIES IN TRIBAL DEVELOPMENT IN KERALA: A Study on Allocation and Utilisation (2016-17 to 2025-26)**" submitted by me for partial fulfillment of the requirement for Post Graduation of the Integrated M.A programme in Social Sciences-Economics in original work.


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LIST OF ABBREVIATIONS

- ST- SCHEDULED TRIBE
- TSP-TRIBAL SUB PLAN
- SCA-SPECIAL CENTRAL ASSISTANCE
- BN-BILLION
- M-MILLION
- FRA- FOREST RIGHT ACT

CHAPTER 1

INTRODUCTION

1. INTRODUCTION

1.1 Background of the Study

Scheduled tribes (STs) form part of one of the most socio-economically disadvantaged and historically marginalised parts of the Indian society. In spite of the constitutional protection, affirmative action policies and specific welfare programmes, there is still consistent deprivation of tribal communities in the areas of income, education, health, housing and access to basic services. This exclusion is historical, based on geographical isolation, dislocation of traditional livelihoods and unequal access to development prospects. As a result, the issue of tribal development has been a burning topic in Indian policy and planning.

The government of India has implemented a number of policy interventions in response to the structural disadvantages that are experienced by scheduled tribe with the objective of enhancing their socio-economic development. The tribal sub plan (TSP) is one of them and it has been an important plan since the fifth five year plan.

The TSP model aims at providing a committed financial provision towards the development of the tribes with involvements by both the central and state governments. Throughout the years, several sources of funds like state plan, special central assistance (SCA) to tsp and sector-specific programs have been used to deal with the disparity in education, health, livelihood, and infrastructure in the tribal regions. The efficacy of such interventions however is dependent on the manner in which development funds are distributed and used in various regions.

Kerala offers a unique setting within which tribal development spending can be studied. State is generally recognized as having high literacy rates, better health status as well as comparatively inclusive social development model. Nevertheless, this general development story leads to serious intra-state inequalities, especially in relation to scheduled tribes. In spite of the fact that scheduled tribes make up 1.45 percent of the total population of Kerala according to census in 2011, their socio-economic status is still much lower than that of the state. Land alienation, unemployment, lack of education, inadequate housing and poor access to healthcare are some of the issues that still impact much of the tribal population.

The population spread of the scheduled tribe in Kerala is very disproportionate over space. Significant tribal population is clustered within the districts like Wayanad, Idukki and Palakkad

which are hilly in nature, forest-reliant, remote with insufficient infrastructure. Accessing the services of the state can be a challenge to the tribal settlements in these areas due to the geographical factors and a lack of proper connection. Districts with lower tribal population on the contrary have better infrastructure and administration capacity and this may also affect how the development funds are placed and used. These disproportional patterns of demography and geography have significant consequences of the regional development processes.

Regional differences in the development of tribes have been an endemic characteristic of Kerala even with decentralised governance and local self-government institutions. Although participatory planning mechanisms have been facilitated in the state and special funds set aside towards tribal welfare, development expenditure has not been realised in all districts equally. There are still areas that have tribal concentrations and are still lagging behind with regard to access to education, access to healthcare, and housing as well as opportunities to make livelihood. Such differences also create issues with respect to how tribal development funds are distributed across the regions and how the current distribution mechanisms are efficient.

A regional approach to allocation and expenditure patterns is thus a vital analysis that can give insights as to the type and level of disparities in the state. Regional analysis put emphasis on allocation and spending of development at district and regional levels and not the aggregate figures of the state. By so doing, it is possible to distinguish districts that get relatively higher or lower amounts of development funds and determine whether the expenditure patterns can be related to the spatial concentration of the tribal population. Regional analysis can also be used to understand the impact of geographical, administrative and socio-economic factors on the outcome of development better.

Census 2011 offers a valid and holistic demographic foundation on which this regional analysis could be conducted. The district-level information on the population of the scheduled tribe allows getting a clear picture of the spatial distribution of tribal groups in Kerala. The study compares allocation and expenditure data with district-level ST population data by comparing them to determine whether there are disparities in the distribution of tribal development funds across regions and whether there are differences between tribal dominated and non-tribal dominated districts. Census 2011, therefore forms an important benchmark in the study of the inequalities of tribal development in the regions.

The current research work dubbed as regional disparities in tribal development in Kerala: A study on fund allocation and utilisation (2016-17 to 2025-26) aims at studying the regional

profile of allocation and expenditure of tribal development in the state. The research aims at determining the inter-district differences in how development funds are distributed and used and the implication of such in the outcomes of tribal development. With the adoption of a regional approach to analysis, the study is no longer concerned with general descriptions of tribal deprivation, but highlights the existence of spatial disparity in development funding.

The knowledge of the regional differences in distribution and spending is essential to develop in a inclusive and balanced manner. One of the most important tools of dealing with the historical disparities and encouraging social justice is the public expenditure. When there are unequal distribution of development funds in the various regions, there is a likelihood that the existing inequalities will continue even with incremental increases in the budgetary allocations. The regional perspective of the tribal development expenditure is thus a useful policy formulation tool as it allows planners and administrators to come up with more specific and region specific interventions.

To sum up this paper, tribal development is placed in the context of the inequality in the region and fiscal distributions in Kerala. It aims to add to the further insight into regional disparities in tribal development by analysing the distribution and spending trends by district based on the evidences from 2016-17 to 2025-16 of scheduled tribe population data. It is likely that the research results will be useful in policy discussions and create more just and practical approaches to the socio-economic empowerment of scheduled tribes in Kerala.

1.2 Research Gap

The available literature on tribal development in India is more concerned with the socio-economic status, welfare policy and demographics of scheduled tribes. In Kerala, it is reported that space distribution and the inability to sustain development pose a challenge even in situations where human development in general is higher. Nevertheless, the financial aspect of the tribal development is not properly investigated. Very little empirical studies are carried out on region-wise allocation and expenditure pattern especially on the population of scheduled tribe. Research seldom looks into the question of how the financial resources are distributed or utilized evenly or efficiently within regions. This lack of regional fiscal analysis puts a big gap and this is where the current study aims to fill this gap.

1.3 Statement of the Research Problem

The development of the tribals in Kerala is still challenged at the serious level even though there is a specific welfare programme running and the general progress of the state in human development. The scheduled tribe population is not well spread across the regions and has different access to basic service, infrastructure expansion, and livelihood opportunities. This imbalance of space brings out concerns of sufficiency, trend and equity of the financial allocation and expenditure of the tribes by the public.

Despite the existence of a number of researches conducted on the socio-economic status of scheduled tribes in the state of Kerala, a little effort has been made to analyse sector-wise allocation and spending patterns across regions relative to the scheduled tribe population in reference to census 2011. Furthermore, the more recent alterations in the decentralised planning and budgeting are not measured in a systematic way on a regional fiscal perspective. Hence, the core issue in this research is that there exist geographical differences in distribution and use of funds to develop scheduled tribe in Kerala and how it impacts on equitable development.

1.4 Objectives

1. To investigate the level of regional inequality in financial allocation spending on scheduled tribe development in various regions of Kerala.
2. To categorize development sectors in regard to scheduled tribe welfare into broad sectoral groups and study its distribution and spending pattern in various regions.
3. To examine the trends in the allocation and the expenditure towards the development of scheduled tribe during the study period using the graphical and analytical scientific tools.

1.5 Scope of the Study

The current research is aimed at examining the variation in the sector based allocation and expenditure in scheduled tribe development in Kerala on a regional basis. The comparison is made using the scheduled tribe population according to the census 2011 and the year under analysis is 2016-17 to 2025-26 as a way of knowing the recent trends of the fiscal on decentralised planning. To facilitate analysis, the state is subdivided into three parts, north,

central and south due to grouping of the districts at the district level and inter-regional comparisons are done.

The research limits itself to financial allocation and real spending on key development areas in reference to the tribal well-being. It does not evaluate physical performance, administrative effectiveness, and effects at the beneficiary level. The evaluation is grounded solely on the secondary data on the official government budget reports and other sources. Therefore, the research can only cover the regional differences in the allocation and expenditure on tribal development in Kerala during the chosen period.

1.6 Methodology of the Study

The research design is descriptive, analytical, and inferential to study the inequalities in the distribution and use of funds on the tribal development in Kerala. The goal is to examine the changes in sector wise allocation and actual expenditure of the various regions of the state between the years 2016-17 to 2025-26.

The research will be grounded in secondary data which will be obtained through official sources of data provided by the government such as tribal development department reports, state budget documents, and other sources like Sulekha portal. The time frame of the study is ten financial years (2016-17 to 2025-26).

To facilitate the analysis, Kerala is divided into three regions namely north, central and south regions and these divisions are based on the grouping of districts. A total of 20 gram panchayats that have concentration of scheduled tribe population have been chosen as samples out of these regional strata through a systematic random sampling. This sample selection and regional classification allow making a comparative evaluation of the allocation and utilisation patterns of spatial disparities.

The important variables utilized in the study are the allocation of funds by the sector, the actual utilisation of funds (expenditure), the percentage utilisation, the share of funds in region, and the yearly trends. The examination will be on the imbalance in the production, infrastructure and service sectors under tribal development programmes.

The analysis of data is done by the use of both graphical and statistical analysis. Power bi are used to create graphical representation to determine spatial and temporal analyses of allocation

and utilisation. Besides, the statistical significance of regional differences in fund allocation and utilisation are tested by performing statistical tests (paired sample t-test) on Microsoft excel.

Therefore, the methodology is a combination of the quantitative analysis and regional comparison to measure the degree and the character of differences in funding of tribal development in each part of Kerala.

1.7 Hypothesis of the Study

1. Hypothesis for Regional Analysis (paired sample t-test)

Null Hypothesis (H_0):

There is no significant difference in the mean fund allocation/utilisation between the two regions.

Alternative Hypothesis (H_1):

There is significant difference in the mean fund allocation/utilisation between the two regions.

2. Hypothesis for Sectoral Analysis (paired sample t-test)

Null Hypothesis (H_0):

There is no significant difference in the mean fund allocation (or expenditure) between the two sectors.

Alternative Hypothesis (H_1):

There is significant difference in the mean fund allocation (or expenditure) between the two sectors.

1.8 Limitation of the Study

The following limitations are applicable to the study:

This is purely a secondary data study conducted on the government reports including the tribal development departments reports, state budget reports and sulekha portal.

The validity of analysis lies on the availability, consistency and reliability of published data. The findings can be influenced by any mistakes or corrections made in formal documents.

The sample of 20 randomly chosen gram panchayats across Kerala regions is used to study. Hence, results might not be accurate of the entire state that is inhabited by the tribals. The study will address 2016-17 to 2025-26 period only and not before or after this time.

The analysis does not give strict attention to socio cultural, political, administrative or institutional issues that can determine the results of tribal development in the analysis of fund allocation and utilisation patterns.

1.9 Chapter Scheme

The study has been organized into six chapters. The main contents of each of the chapters are described briefly below:

Chapter 1: the first one is the introduction, statement of the research problem, objectives of the study, methodology and limitations of the study.

Chapter 2: the second chapter will contain the review of the literature.

Chapter 3: the third chapter gives a detailed account of the history of ST and the first two chapters and TSP operations.

Chapter 4: chapter 4 will contain the data analysis and hypothesis of the study.

Chapter 5: the chapter consists of findings, conclusion and recommendations.

CHAPTER 2

REVIEW OF LITERATURE

2. REVIEW OF LITERATURE

Pradhan (2015) explores the effects of globalisation on tribal progress in India, specifically, social, economic and cultural aspects. The study reveals that even though globalisation has contributed to economic growth and integration, the tribal groups have not benefited much. Pradhan indicates that increasing industrialization, overexploitation of the environment, policies formulated under the influence of the market requirements, and others have led to the displacement, the disappearance of traditional forms of living and the loss of indigenous cultural traditions. Also, the paper identifies that tribes have major obstacles to education, health care, and employment opportunities in the realm of the global economy. The pre-existing disparities are aggravated by improper implementation of policies and lack of effective institutional support. The study concludes that globalisation is bound to enhance marginalisation as opposed to sustainable development of tribal societies unless there are development strategies that are comprehensive and sensitive to tribal needs.

Kurien (1995) develops a comprehensive review of the Kerala model of development by discussing its major trend and major exceptions. The study indicates Kerala success in social progress, particularly, in such areas as literacy levels, health indicators and demographic shifts, despite the fact that the income per citizen in this state is quite low. Kurien opine that such favourable outcomes have been achieved due to historical factors such as land reforms, social activism and welfare programs, which are government initiated. However, the fundamental weaknesses of the article include sluggish industrial development, high unemployment levels and dependence on foreign-based money transfer which threatens the long-term viability of the models. By distinguishing between the average achievements and the gaps in regions and social classes. Kurien emphasizes that the benefits of the Kerala model have not been distributed equally. The study provides a powerful analytical perspective towards the understanding of the concept of inclusive development and its limitations.

Devarapalli et al. (2020) conducted a systematic literature review that dedicated its attention to the lack of specific research in this area as an urgent shortage, as the majority of studies concentrated on whether the planned tribes in India are having mental health problems or not. Their review has explored literature published between 1980 and 2018 and found that only 32 of them were relevant to this topic indicating a low academic interest in this subject. The authors found that problems that were associated with substance abuse, primarily alcohol and tobacco, were widespread and intricately connected with other factors including poverty,

cultural practices and psychosocial stressors. Rampant depression, anxiety and suicidal tendencies were observed to be caused by socioeconomic problems, displacement and social marginalisation. Devarapalli et al. also observed that there were significant barriers to accessing mental health services and some of these barriers included use of traditional healers, inadequate healthcare facilities and geographical isolation. The study highlights the urgent need of culturally sensitive community based mental health.

Haseena (2014) examines the problem of property taking in detail and the way it has influenced the lifestyle of the scheduled tribes in Kerala. The paper draws attention to the fact that loss of land, primarily caused by construction works, the development of unauthorized settlements and the laxity of regulations protecting land rights have had a significant negative impact on the economic condition of tribal communities. Haseena claims that land grabbing has caused less farming activities, increased unemployment, greater food anxiety and increased reliance on paid labour. The study also indicates that even with government guarantees and the official measures, land has not been effectively handed back due to the issues existing in organisations and the slow pace of government work. The study concludes that the ground is requisite not only to the self-view but also to earning a living among tribal communities and handling land taking is essential to assist in consistent development and delivering fairness to the planned tribes in Kerala.

Chathukulam and John (2006) evaluate the present state of development of the tribes in Kerala by examining policy measures, existing systems and social relationships more carefully. The study asserts that despite the developed emphasis on well-being, the tribal groups continue to face incessant distress in areas such as property rights, employment security, education and health care in Kerala. Among issues that have delayed their success, the writers cite the issues related with implementation of tribal advancement plans, particularly on land changes and recovery initiatives. It is also noted in the research that the directive style is also common with progress projects which lacks incorporation of tribal involvement and the ground situation. Chathukulam and John conclude by saying that the tribal development in Kerala requires planning, dissemination of a superior system of responsibility and rules, stressing on property rights, employment security and group toleration.

Von Furer Haimendorf (1982) presents such a detailed analysis of tribal communities in India, focusing on their struggle to survive due to rapid socio-economic and political changes. The author documents how post-independence colonial policies and development programs have

broken existing tribal lifestyles and societal structures. The issues raised in the text include loss of land, cultural erosion, forced migration and a lack of autonomy among the tribal community. Von Furer Haimendorf points out that more often development campaigns are not considered of tribal customs and traditional rights, which are more being marginalised, rather than being integrated in. the analysis supports the recognition of the tribal identities, the protection of the land ownership rights and the development strategies taking into consideration of the cultural contexts. This study remains a critical addition to the understanding of the institutional challenges of tribal.

Sundar (1997) is done both anthropological and historical terms in the tribe population of Bastar where the authors study the changing nature between these indigenous communities and the state in the colonial days up to post-independent days. In the study, the negative effect of colonial forestry laws, post-independent governmental interventions and development policies on the liberty of tribes and their traditional governance systems are highlighted. On her part, Sundar assumes that the current struggles of land, forest right and politics played a key role in determining both resistance and cooperation tribal responses. The book offers a critical analysis of how development programs and conservation programs instigated by the state often relegated the tribal people to the side-lines by reducing their access to essential resources that they required to survive. The publication helps us to better understand the relationship dynamics between tribes and the state and the historical circumstances leading to a marginalized state and equally give us the perspectives that can be relevant to the broader debates about tribal development and governance in India.

The Xaxa (1999) has provided a significant peep into how the tribes are considered as native groups within India. The research asserts that the indigenous people have their own unique history, social characteristics that qualify them to be called indigenous people. Xaxa underlines the impact of the old colonial regulations as well as the new ones which led to the displacement of tribal communities by means of land loss, their lack of control and cultures mingling. The paper also examines the consequences of recognition as native, the governing consequences of being acknowledged as such in terms of property claims, woods as well as local choice. In a close analysis of the talk about being native Xaxa, it accentuates the necessity of shifting off the aid-oriented agenda to the growth strategies directed at rights. This piece of work offers a critical thinking analysis of tribal selfhood, their exclusion, and their quests of equity throughout India.

Xaxa (2001) examines the mixed outcomes of protective discrimination policies of the scheduled tribes and scheduled castes in India closely. The study asserts that despite the constitutional safeguards and the affirmative action initiatives, the scheduled tribes continue to lag behind the scheduled castes in social and economic developments. Xaxa attributes this disconnection due to factors such as distance, lack of effective political organization, poor educational attainment and employment as well as implementation of policies that regulate reservations in tribal areas. Another observation made in the paper is that basic issues like land being usurped and being deprived of control over the resources of nature have not been resolved by the welfare-oriented approaches. Xaxa concludes that protective discrimination must be accompanied by local rights measures to enhance the tribal self-rule and address past injustice in a more acceptable manner.

The state planning board of Kerala published the economic review 2017, which provides the complete picture of the situation in the region in financial terms, revealing the growth of the industries and the government spending patterns. The report mentions the achievements of Kerala in the social development and the problems that persist such as disparities between regions, unemployment and financial constraints. It contains detailed research on budget and non-budget expenditure, including the funds that are allocated to social care and empowerment of the disadvantaged groups of people. Speaking of scheduled tribe, the analysis reveals discrepancies between the money allocated and the actual results with the focus on the issues related to the execution of the work and local losses. The publication serves as a crucial second hand source of information towards understanding the areas of government concentration and plans of progress and expenditure in Kerala, and in particular, offers useful information towards analysing variability of progress funds between locations and social groups.

Baiju (2011) looks closely at tribal progress in Kerala using the structure of dispersed authority brought in by local governing bodies. That research claims that spreading out power made chances for involvement in planning and made responses better to what local people required in tribal zones. Yet Baiju points out numerous difficulties that hold back its success, such as fragile organisational ability, not enough money independence and low involvement of tribal groups in choosing things. The report further notes slow progress in using funds, missing specialised knowledge locally and bad teamwork among different branches. Because of this, progress results in tribal zones staying unequal even with bigger assigned amounts. The research finds that making local bodies stronger, increasing tribal involvement and making sure

checking works well are crucial for reaching shared and lasting tribal growth within spread-out governance.

Chacko (2017) studies how tribal families move around for agricultural reasons across Kerala via a local area research project. The research looks at shifts in who owns Land what crops are grown, and jobs held by tribal groups, showing a slow move away from older farming methods. Chacko notes that losing land, plots becoming smaller and less access to shared resource areas have lowered tribal involvement in farming. Consequently, a growing number of tribal families rely on paid work and tasks outside of farming to keep their living situation safe. The research also indicates that small amounts of official help, not enough borrowing options and slow use of current farming ways limit better chances for advancement. Chacko finishes by stating that making land rights stronger, better access to farming supplies and focused government actions are needed to boost lasting farm lives for tribal groups in Kerala.

Thorat (2010) offers a framework for understanding social exclusion within India highlighting inequalities across groups, levels and combinations of groups. This research suggests exclusion stems from a system based on caste, tribe, gender and class consistently limiting entry to needed things, chances and making choices. Thorat stresses that wealth generation by itself will not fix these differences without also having policies that help those groups traditionally left behind. The document points out how vital positive steps fair chances for schooling and jobs and rules against bias are for lessening social isolation. By supporting policies that include rights and full participation Thorat's research gives a significant basis for looking at how unequal standing being side-lined and results in progress affect the less fortunate groups in India.

The Eleventh Five-Year Plan (2007), put together by the Planning Commission of the government of India, stresses inclusive growth as a main developmental goal. The plan acknowledges ongoing socio-economic differences encountered by disadvantaged communities, especially scheduled tribes and stresses the requirement for focused actions. It points out important areas like broadening education and medical care creating job opportunities and better ways to reach essential services in rural and tribal areas. The plan also brings in methods for making local administration stronger increasing how well public money is spent and checking the results of aid initiatives. Through concentrating on social inclusion and fairness the eleventh five year plan offers a vital policy structure for looking at

development preparation government spending and how government actions affect regional and social differences within India.

Suresh and Swamy (2019) offer a summary concerning the education and health situation of scheduled tribes across India emphasising ongoing differences when measured against non-tribal groups. The research indicates lower reading skills increased school leaving frequencies weaker wellness measures and restricted availability of medical treatment for tribal groups. These writers point out main obstacles like economic hardship remote locations insufficient fundamental structures and poor execution of aid programs. Furthermore the document stresses the connection linking learning results and wellness status observing that lacking education worsens sickness susceptibilities for scheduled tribes. Suresh and Swamy finish by stating that bettering human progress results for tribal populations necessitates focused government spending reinforced organizational backing and welcoming plans that deal with systemic unfairness.

Devika (2016) looks at the social and economic exclusion in Kerala through a close look at a city slum questioning the idea of Kerala as a completely inclusive way of development. The research shows how disadvantaged groups face being left out in getting homes jobs, schooling and public help even with the region's solid welfare structure. Devika claims that non formal work deals vulnerabilities based on gender and poor city management add to ongoing differences. The document also notes that social support efforts frequently do not deal with the daily types of exclusion met by those who are poor in cities. By focusing on real life situations the research gives important understandings into structural exclusion and social unfairness in Kerala presenting a useful way for grasping marginalisation beyond areas outside cities and those with tribal populations.

Martinez-Rodriguez et al. (2020) pay close attention to the contradictory aspects of the progress strategy in Kerala when discussing the native population. The study assumes that despite the significant advancements in human development indicators in Kerala in indigenous populations continue to face continuing deprivation and social isolation. The researchers indicate variations in property rights methods of making a living, schooling and health outcomes in general that show that gains made in progress were not distributed equally to all. This paper emphasizes that the government social programs often overlook such deep rooted issues as loss of property cultural side-lining and minimal participation of the tribes in government. Martinez-Rodriguez et al .Conclude that the development agenda in Kerala should

be restructured to embrace accepting rights based plans that can support the unique needs of the indigenous people in achieving sustainable development.

The Kerala institute of local administration (2023) investigates the impact of twenty five years decentralisation on the socio economic status of scheduled tribes in Kerala. The study assesses the role played by the local self-government institutions in allotting the planning funds and implementation of tribal development programmes. It finds that decentralisation has increased the extent of participation and prevalence of tribal issues in local planning. The persistence of challenges that include inadequate use of funds that are limited institutional ability and inconsistency in development outcomes in various regions is still being experienced. The paper highlights policy goal differences and actual implementation at the ground level particularly with regard to land right livelihood security and access to basic services. The discussion concludes by saying that institutional accountability through strengthening institutions and tribal participation and enhancing monitoring mechanisms are essential to achieving inclusive tribal development under decentralised governing in Kerala.

Chemmencheri (2013) investigates the relationship between decentralisation community involvement and the implementation of forest right act (FRA) in Wayanad district within Kerala. The study examines the impact of governing structures that are decentralized on tribal individuals who have come together to petition to be given forest rights. Although the decentralisation created space where the local people could engage in institutions chemmencheri asserts that boundaries created by the levels of bureaucracy and barriers of administrative lines isolated the results of any kind of change. The paper indicates discrepancies between what is stated by law by the FRA and what is implemented locally so as to only partially implement tribal rights. It also observes that the local strong priorities often trailed weaker opinions of the tribe. The study concludes by stating that decentralisation alone will not suffice and requires the support of actual political will and institutional reforms to ensure that the tribal folks are indeed empowered.

CHAPTER 3

**OVERVIEW OF SCHEDULED TRIBE
DEVELOPMENT**

3. Overview of Scheduled Tribe Development

3.1 Introduction

Scheduled tribes are one of the most socio-economically disadvantaged and historically marginalised groups in the Indian society. Such communities are recognised by article 342 of the constitution of India and listed periodically in the population census done by the census of India. Scheduled tribes are identified by peculiarities of the culture, geographical seclusion, economic backwardness and social deprivation.

As per census 2011, 8.6 per cent of the total population of India is represented by scheduled tribes. Whereas Kerala is likely to have a relatively lower proportion of scheduled tribe population in comparison with the national levels, it is worth noting that the state is characterized by a high level of regional concentration of tribal population. The tribal settlements in Kerala have been strategically situated mainly in forested, hilly and ecologically sensitive areas and most of the times this has made accessing any public service and development infrastructure difficult.

The government of India has implemented the tribal sub plan (TSP) strategy in the fifth five year plan as a way of dealing with the socio-economic deprivation among the tribal communities, which has existed since time immemorial. The major aim of the tsp is to have a reasonable amount of plan funds used to develop the socio-economic life of the scheduled tribes according to their share in the population. Kerala has assumed the system of tsp and also has tribal development programmes on budgetary allocations but the same is channelled primarily through the Scheduled Tribes development department. Even with the continuous public speaking and the introduction of various welfare programmes, there remains regional disparities on the outcome of the tribal development across the state of Kerala. Inequality is also witnessed when it comes to access to education, medical centres, residential homes, access to means of living and basic infrastructure. These differences are affected by the differences in geographical condition, administrative capacity and efficiency on fund utilisation among the districts.

In this respect, this paper aims at studying the regional inequalities in the tribal development in the state of Kerala by assessing allocation and expenditure trends on the state of Kerala by assessing allocation and expenditure trends on the basis of the scheduled tribe population according to the census of 2011. The history of demographic profile and spatial distribution of

scheduled tribes would be required to get an overview of the foundation on which equity in the allocation and expenditure should be determined across the regions.

3.2 Scheduled Tribe Population in India

The population of the scheduled tribe in India has recorded a consistent growth in absolute figures in successive census years. According to census 2011, the total population of scheduled tribe was around 104.3 million with 8.6 percent being the proportion of total population of the nation. It is a growth in comparison to 84.3 million in the year 2001 when scheduled tribes constituted 8.2 percent of the overall population.

The increase in the scheduled tribe population can be attributed to the natural population increase, as well as better enumeration procedures. Nevertheless, tribal communities in India still are under a socio-economic disadvantage compared with the rest of the population. Such indicators as literacy levels, workforce participation, income and healthcare access are relatively low among scheduled tribes.

There is a gross inequality in spatial distribution of the population of the tribes in India. These concentrations are very large in the central Indian states (i.e. Madhya Pradesh, Chattisgarh, Odisha, Jharkhand and Maharashtra) and in the northeast states. In other states of the south such as Kerala, a relatively smaller proportion is taken but the regional distribution within the states is usually characterized by significant regional inequalities. With such an unequal allocation, policies on the national level, including the tribal sub plan, focus on decentralized planning and interventions at the regional level. Such policies are not effective simply because of the quantity of allocation, but also because of efficiency of spending and meeting the needs of the locals.

Table 3.1 Scheduled Tribe Population in India (Census 2011)

Census year	Test populations (in millions)	ST population (in millions)	Percentage of ST population
2001	1,028,737,436	84,326,240	8.2
2011	1,210,854,977	104,545,716	8.6

Source: Census of India 2011, Primary Census Abstract

The data reveal that there is an increment of the absolute number and percentage share of scheduled tribes in India in 2001-2011. The increased number of ST population highlights the necessity to increase financial resources and efficiently use them to change the situation in

society and the economy. The tribal population is unevenly distributed geographically in India, with the seasoned concentrations in central, northeast and selected western areas of the nation. However, with a relatively lower proportion of tribal population, Kerala exhibits regional clustering in the state.

3.3 Scheduled Tribe Population in Kerala

The case of Kerala is special in the research of tribal development. Although the state is doing quite well on most human development indicators, tribal communities in Kerala still face various deprivation cases. The scheduled tribe population in Kerala stood at 484,839 as per census 2011 which represents 1.45 per cent of the entire population of the state. This is a significant growth of 1.14 percent in 2001.

Kerala is characterised by a high degree of diversity of tribal population. Large tribal groups consist of Paniyan, Kurichiyan, Kuruma, Kattunayakan, Irula, Adiyar and Muthuvan. These communities are diverse in regard to the livelihood patterns, cultural practices as well as the integration with the mainstream economy.

Most tribal families rely on farming, forestry and wage labour. In spite of well-developed system of the state welfare, tribal people in Kerala have to endure numerous problems which include land alienation, nutritional insecurity, backward education system, and lack of employment. Tribal population density in the ecologically unfriendly areas further complicates interventions in development and makes the delivery of services even more expensive.

The knowledge of the demographic profile of scheduled tribes in Kerala is thus essential in determining the scenario of whether the public expenditure through the tribal sub plan is sufficient to address the needs of the population and the needs of the region.

Table 3.2 Scheduled Tribe Population in Kerala (Census 2011)

Census year	Total population	ST population	% of ST population
2001	31,841,374	364,189	1.14
2011	33,406,061	484,839	1.45

Source: Census of India 2011, Kerala Series

3.4 District-Wise Distribution of Scheduled Tribes in Kerala

The spread of the scheduled tribe population in Kerala districts indicates a significant geographical difference. The census 2011 data indicate that the total population of scheduled tribe is over 30 percent in Wayanad district alone in the state. This has made Wayanad the most tribally-controlled district of Kerala in the absolute sense, as well as the proportion of the district population.

Idukki and Palakkad districts have also shares of notable tribal population. Hilly, terrain, forest cover and high reliance on plantation and agricultural labour are some of the characteristics of these districts. However other districts like Alappuzha, Pathanamthitta and Thiruvananthapuram in the southern region of Kerala have comparatively fewer tribal inhabitants.

Scheduled tribes are unevenly distributed in space, and this fact has significant implications on the planning of development. Districts where the number of people by the tribe is higher must be given more resources to invest in education, health, housing and livelihood.

Nonetheless, the differences in the administrative capabilities and institutional efficiency can shape the degree to which the provided funds are actually used. The district level demographic difference is the empirical input to the study on inter-regional allocation as well as expenditure differences in the tribal development programmes of Kerala.

Table 3.3 District-Wise Distribution of Scheduled Tribe Population in Kerala

District-wise Scheduled Tribes Population In Kerala				
District	Total population in 2011 (as per census population) (in lakhs)	ST population in 2008 (tribal survey)	ST population 2011 (census)	% ST population to total population in 2011
Thiruvananthapuram	3307284	17185	26759	0.8
Kollam	2629703	4641	10761	0.4
Pathanamthitta	1195537	6379	8108	0.7
Alappuzha	2121943	3014	6574	0.3
Kottayam	1979384	16764	21972	1.1
Idukki	1107453	52913	55815	5.0
Ernakulam	3279860	8936	16559	0.5
Thrissur	3110327	5561	9430	0.3
Palakkad	2810892	46948	48972	1.7
Malappuram	4110956	14496	22990	0.6
Kozhikode	3089543	10627	15228	0.5
Wayanad	816558	153181	151443	18.5
Kannur	2525637	37772	41371	1.6
Kasargod	1302600	47791	48857	3.8
State total	33387677	426208	484839	1.5

Source: Census of India 2011, District Primary Census Abstract

3.5 Allocation and Expenditure under Tribal Sub Plan in Kerala

The main tool of financial tribal development projects in Kerala is the tribal sub plan. Within this framework, there are numerous interventions that are funded such as scholarships at educational institutions, residential schools, healthcare, housing, and infrastructure development, and livelihood promotion. Ideally tsp allocation should be proportional to the scheduled tribe population. Nonetheless, real allocation and expenditure patterns can be different because of administrative bottlenecks, project delays, and differences in capacity of implementing it on the ground at the district level. In others, the funds might not be used or diverted to other non-core activities thus lowering the effectiveness of tribal development programmes.

A time study of allocation and expenditure patterns can assist in detecting the imbalance and inefficiency in regions. Districts containing greater tribes are not necessarily given their fair share of funding and districts containing greater administrative potential may have higher amounts of expenditure regardless of the population requirement.

Thus, the allocation and expenditure of the census 2011 scheduled tribe population is to be analysed and introduced as an objective framework of measuring equity and efficiency of tribal development expenditure in Kerala.

3.6 Conclusion

This chapter gave a summary of the demographics profile and location distribution of scheduled tribes in India and Kerala in relation to census 2011. As it was identified in the analysis, even though Kerala contains a rather insignificant portion of the tribal population in India, there is great unequal distribution of it in the state.

Many districts, including Wayanad, Idukki, Palakkad and a few southern districts, have a high percentage of tribal population, whereas those in the south have very low percentage. This unequal distribution lays emphasis on regional-based planning and need based resource distribution with the help of tribal sub plan.

The demographic outline forms the basis of the further study of the disparities in allocation and spending on tribal development in Kerala on the regional level. The other chapters thus look at budgetary trends, utilisation patterns as well as inter-district disparities so that to evaluate the efficiency of the public spending to meet tribal development needs.

CHAPTER 4

ANALYSIS OF DATA

4. ANALYSIS OF DATA

This chapter will show the analysis of regional and sectoral allocation and expenditure of tribal development in Kerala during 2016-2017 to 2025-2026. To examine the inter-regional disparity in allocation and expenditure, the analysis is done in the framework of regions where the state is classified into three regions i.e. north, central and south. The allocation and expenditure data is analysed to identify the spatial variations and temporal change in the tribal development funding in accordance with the scheduled tribe population in accordance with census 2011. Patterns and comparisons are presented in visualisation in the form of graphs which are generated with the help of power bi. Additionally, paired sample t-test is also applied in determining the statistical significance of regional variation.

The chapter has been broken down into various sections and they include:

4.1 Regional Analysis: it looks at the inter-regional variation on allocation and expenditure on the tribal development in the three areas of Kerala

4.2 Sectoral Analysis: it looks at the inter-regional variation on allocation and expenditure on the tribal development in the three areas of Kerala.

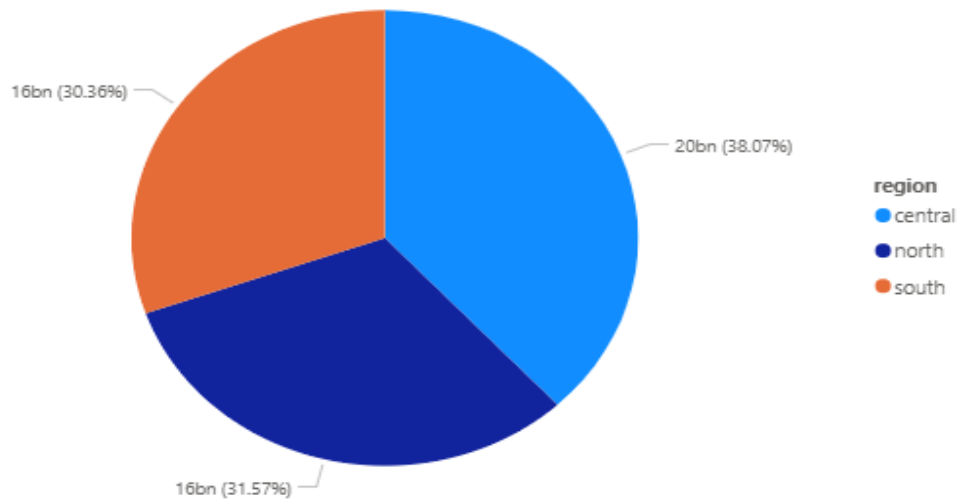
4.3 Empirical Testing: it involves paired sample t-test to test the statistical significance of the regional differences in funds allocation and expenditure to develop the tribal programs.

4.1 Regional Analysis

The section examines the allocation and expenditure differences in respect of the scheduled tribe (ST) community in the chosen gram panchayats in Kerala of 2016-17 to 2025-26. To compare them systematically, the state is subdivided into three regions, which are north, central and south. An analysis of this is done on whether allocation of funds is in accordance with regional distribution of tribal population and also looks into discrepancies in utilisation patterns and thus indicates inter-regional disparities in terms of fiscal prioritisation and implementation of programmes.

Fig. 4.1
Sum of Fund Total by Region

Sum of fundtotal by region



Source: Primary Data

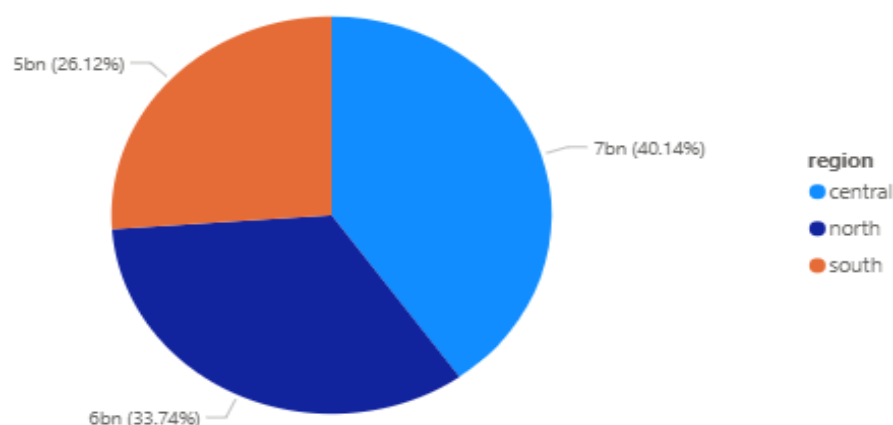
4.1.1 Sum of Fund Total by Region

The total funds distribution among regions indicates that there are differences in the regions allocation. The biggest portion of the total funds is received by the central region, about 20 billion that amounts to 38.07 percent of the total allocation. The north has a slightly lower amount of approximately 16 billion that contributes to 31.57% of the total funds. In the same way, south region is appointed slightly less than 16 billion which is the percentage of 30.36 of the total.

Even though the distribution is fairly fair to the north and the south region, the central region is obviously the prevailing one in terms of funds allocation. This trend may indicate that the financial resources are more concentrated in the central region which may indicate more development needs, more projects or priorities in the policies. Generally, the chart shows that there are regional discrepancies in the distribution of funds, the central region was allocated relatively more compared to the other two regions.

FIG. 4.2
Sum of Expenditure by Region

Sum of expenditure by region



Source: Primary Data

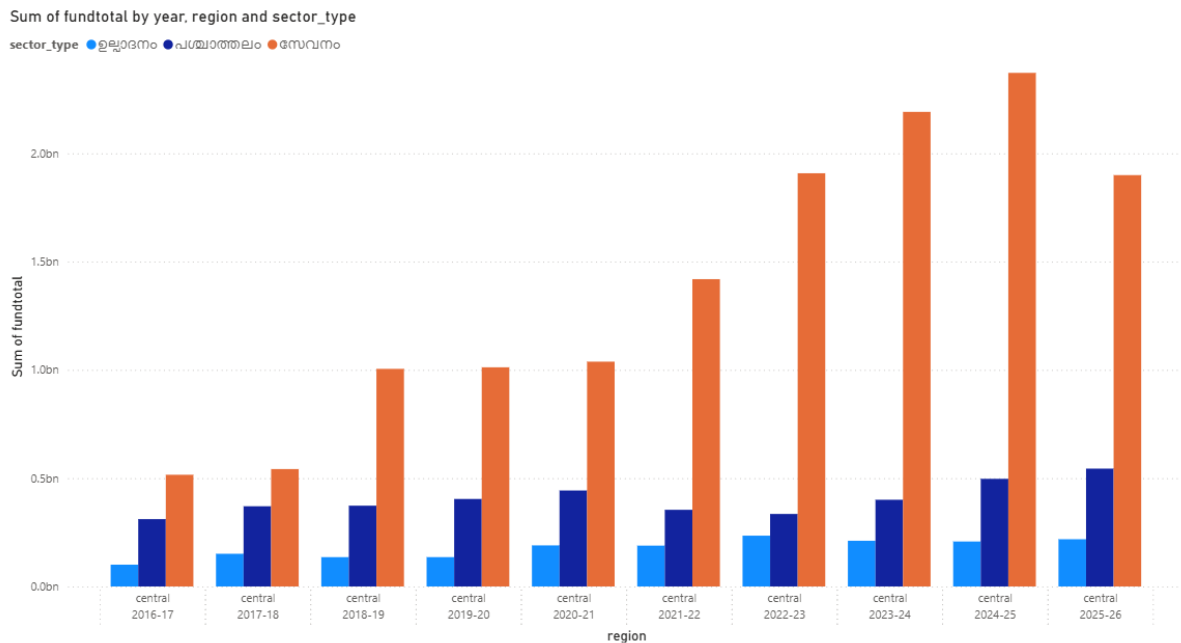
4.1.2 Sum of Expenditure by Region

Regional distribution of total expenditure within the three regions reveal that there is a evident regional difference in the spending patterns. Central region takes the largest portion of about ₹7 billion, which amount to 40.14 of the total expenditure. The north area has 6 billion or so with its 33.74 share in the total expenditure. The south region has the lowest amount of expenditure of about 5 billion which is 26.12% of the total.

The numbers give a clear indication that there is a relative concentration of expenditure in central region implying more project implementation, fund needs or more fiscal prioritisation in the area. Even though the northern region is allocated a considerable portion, it is still much lower compared to the central region. The relatively low spending by the south region is captured by the relatively low percentage. Generally, the distribution shows regional variations on the expenditure distribution whereby central region dominates the other two regions.

FIG. 4.3

Sum of Fund Total by Year, Region and Sector-Type



Source: primary data

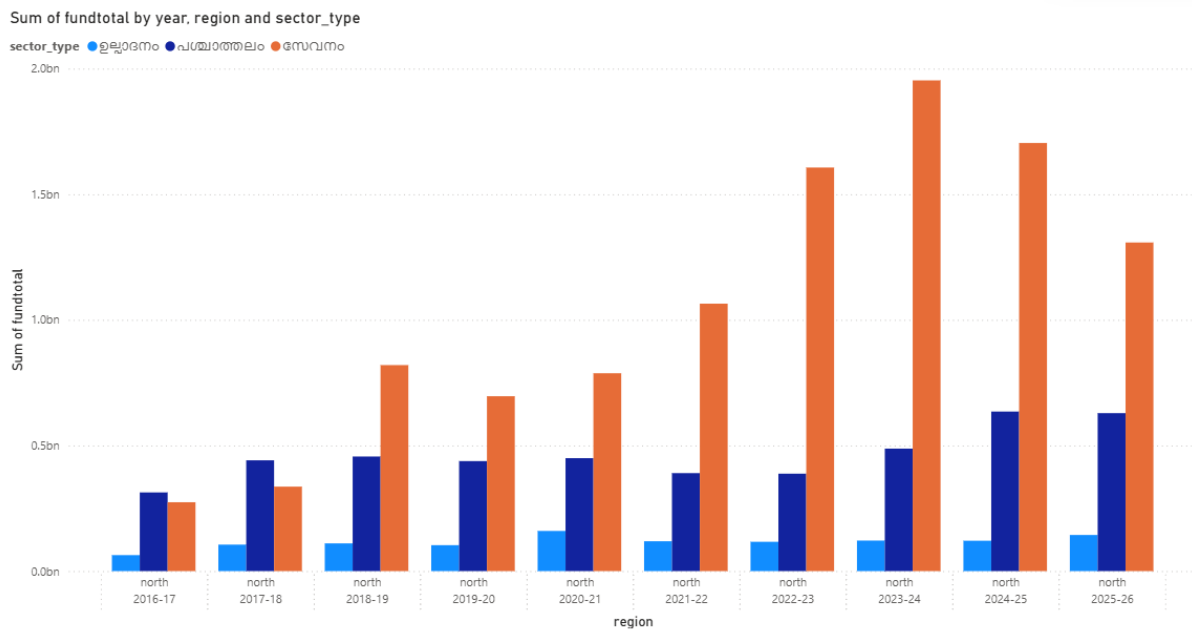
4.1.3 Sum of Fund Total by Year, Region, and Sector Type

The pattern of fund allocation in the central region by the various types of sectors over the years reveals a definite trend of growth and imbalance in sectors over the years between 2016-17 and 2025-26. The third sector is the one that is always allocated the entire greatest portion of funds and is increasing drastically over time, as the figures of approximately 0.5 billion in 2016-17 grow to almost 2.4 billion in 2024-25, but slightly decreasing in 2025-26.

The second sector shows an average but consistent growth, where the allocations would grow steadily between 0.3 billion to over 0.5 billion by the end of the period. On the contrary, the initial sector is the least financed, but it is in a gradual increase with slight fluctuations. In general, the trend suggests the high level of concentration of financial resources in a single sector in the central region, especially in the later years, due to the change in priorities and increased investment in certain areas.

FIG. 4.4

Sum of Fund Total by Year, Region and Sector-Type



Source: Primary Data

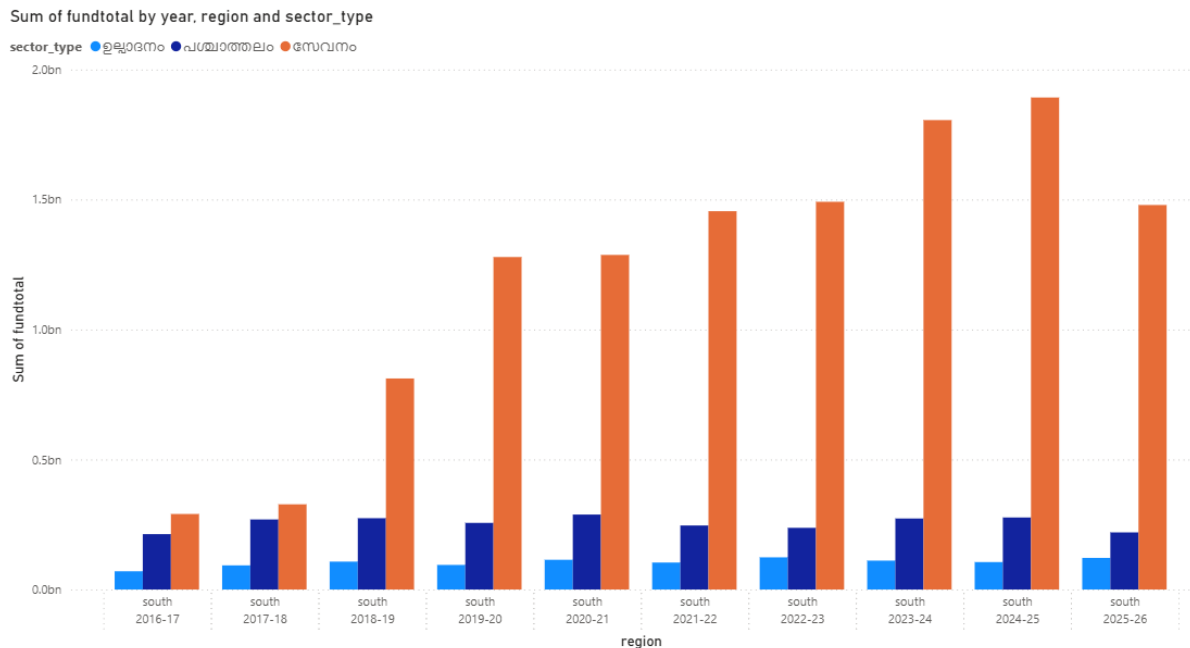
4.1.4 Sum of Fund Total by Year, Region, and Sector Type

The analysis of annual fund allocation in the north region according to the types of sectors shows apparent industry differences between the years 2016-17 and 2025-26. The third sector has always got the largest amount of funds and demonstrates the positive growth tendency, raising approximately 0.3 billion on 2016-17 to approximately 2.0 billion in 2023-24 and then the amount will drop in the following years.

The second industry has a moderate growth rate with various ups and downs and increases steadily reaching a high of over 0.3 billion to 0.6 billion by 2024-25 and then stays relatively stable. The former industry is the least financed during the period but gradually increases with minor annual growth. The general trend shows that there was a significant concentration of funds to a single dominant sector in the north region particularly in the later years, which demonstrates the imbalances between sectors, and a change of priorities in funding with time.

FIG. 4.5

Sum of Fund Total by Year, Region and Sector-Type



Source: Primary Data

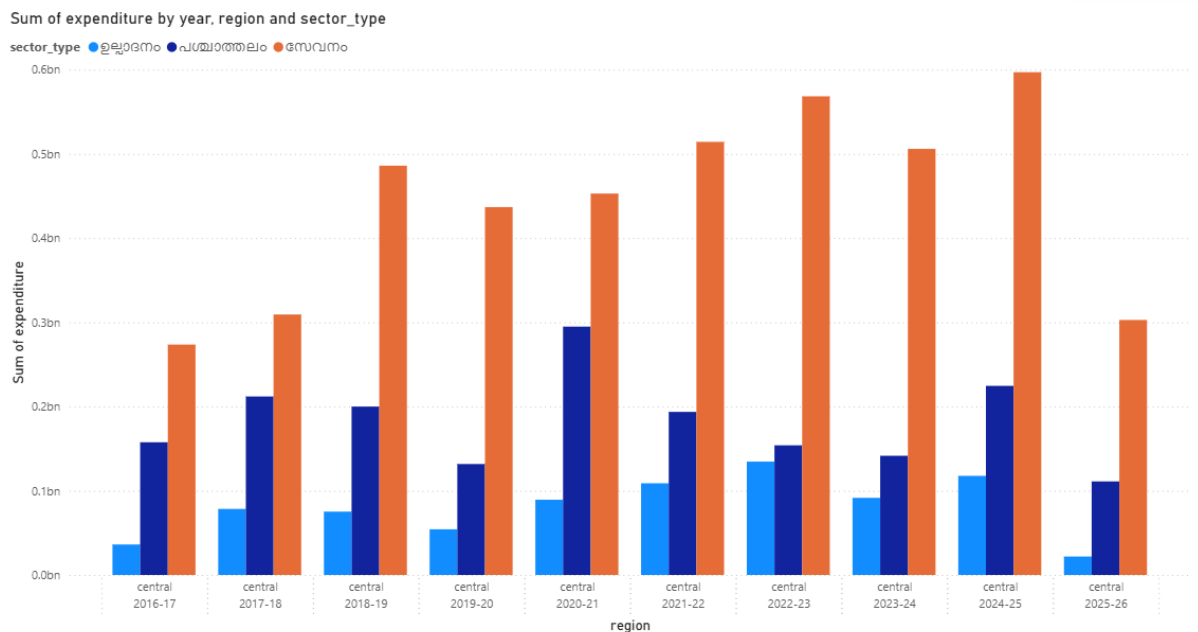
4.1.5 Sum of Fund Total by Year, Region, and Sector Type

The trend of yearly fund distribution in south region of various types of sectors presents a distinct trend of growth and sector concentration between 2016-17 and 2025-26. Increased proportionately with time, the third sector has been allotted the highest amount of funds, being below 0.3 billion in 2016-17 and almost 1.9 billion in 2024-25, then decreasing in 2025-26. The moderate yet comparatively constant allocations are entered into the second sector and they fluctuated between 0.2 and 0.3 billion with a slight variation in the later years. The least funded is the first sector though it is gradually improving with little year to year growths.

The trend in general shows that the financial resource is highly concentrated in the third sector in the south region particularly in the middle and later years. The visible growth through 2024-25 can be attributed to a higher priority in funding, and the negative development in the last year can indicate financial changes or new distributions.

FIG. 4.6

Sum of Expenditure by Year, Region and Sector-Type



Source: Primary Data

4.1.6 Sum of Expenditure by Year, Region, and Sector Type

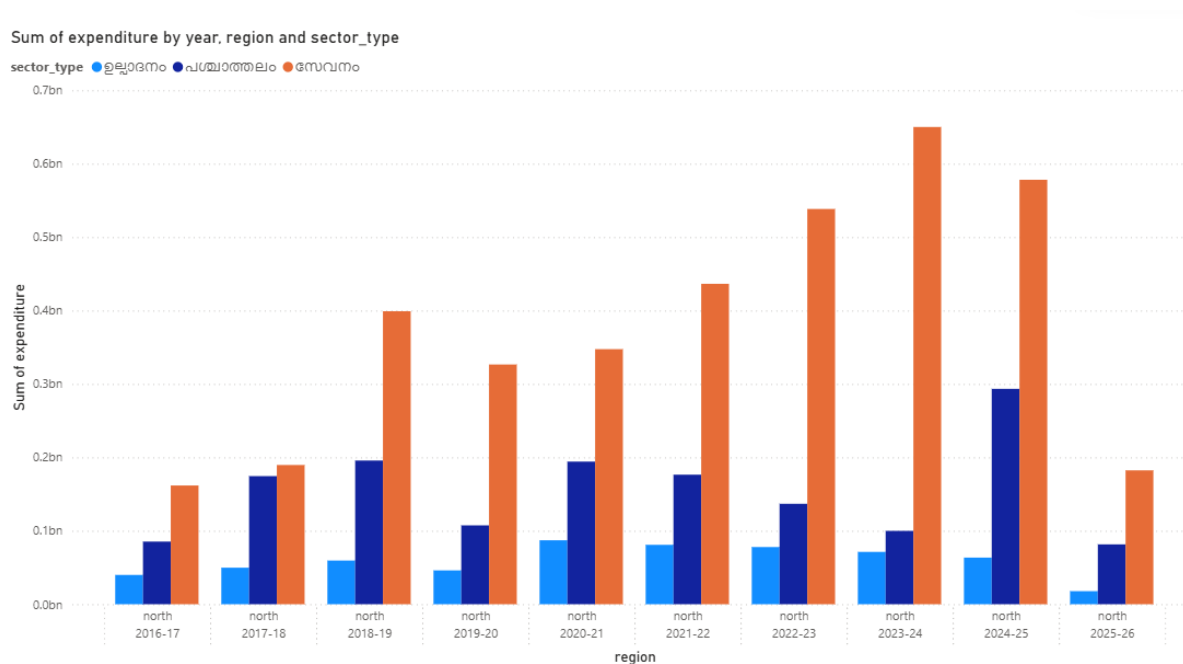
The growth of the expenditure in the central region on the basis of the types of sectors during the year period brings about a clear trend of increase in the expenditure with observable difference in the sectors between the period 2016-17 and 2025-26. The third sector also registers the largest expenditure across the years with the expenditure gradually rising between the years 2016-17 to close to 0.60 billion in 2024-25 and then steeply falling in 2025-26.

The second sector shows average fluctuations, increasing dramatically in 2020-21 and 2024-25, which means that there would be times of more intense spending. It, however does not go up to the levels experienced in the third sector. The lowest one has not been engaging much as a sector regarding expenditure; however over time, the sector is slowly improving with minimal annual gains, reaching its peak in the year 2022-23 and 2024-25 and drying up in the last year.

The general tendencies show that the third sector in the central region is highly concentrated in terms of expenditure, and the rest of the two sectors are moderately varied. The decreasing 2025-26 in the sectors can be due to budgetary adjustments or temporary expenditure amount.

FIG. 4.7

Sum of Expenditure by Year, Region and Sector-Type



Source: Primary Data

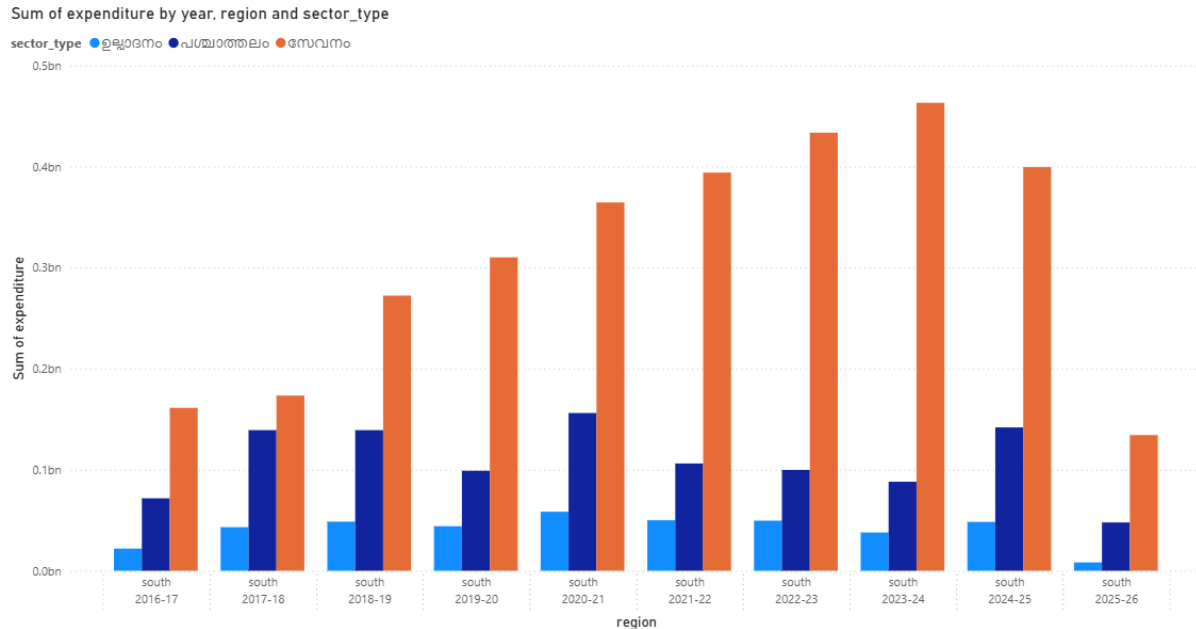
4.1.7 Sum of Expenditure by Year, Region, and Sector Type

The annual spending by north region in terms of the type of sectors and sectoral concentration is quite varied in the duration of 2016-17 to 2025-26. The third sector has always registered the highest expenditure, with a consistent rise of approximately 0.16 billion in 2016-17 to almost 0.65 billion in 2023-24. Even though the expenditure decreases marginally afterwards, it is still relatively high in the years 2024-25 then it falls drastically in the years 2025-26.

The second sector shows moderate growth over the years, with significant growths in 2018-19, 2020-21 and a significant high in 2024-25, which can be seen as the periods of increased spending. The first sector still stands at the lowest level in terms of spending during the period, but exhibits a slow increase in the same up to the later years, and slight decreases in the later years. Generally, the trend of expenditure shows that the third sector is heavily dominant in the north region, whereas the other two sectors show unequal distribution of expenditure. The decline in 2025-26 in the sectors can be interpreted as tightening of fiscal policies or temporary spending amounts.

FIG. 4.8

Sum of Expenditure by Year, Region and Sector-Type



Source: Primary Data

4.1.8 Sum of Expenditure by Year, Region, and Sector Type

The expenditure of the south region by year-wise spending of various types of sectors indicates a steady increase with evident concentration of sectors in the time frame between 2016-17 to 2025-26. The third sector spends the most amount every year, with 2016-17 expenditure being 0.16 billion, and 2023-24 being the highest at 0.46 billion before decreasing in the following years. The second area is characterized by the moderate changes where spending increases significantly in 2017-18, 2020-21 and 2024-25 which shows that there are periods of high spending priority and periods of low spending priority.

The former is the least spending sector within the period, although it shows a slow growth until the mid-period, after which it has a slight decrease towards the end of the period. In general, the trend indicates that the third sector is very dominant in the spending pattern in the south region unlike the other two sectors which receive relatively lower portions. The fall in 2025-26 in all sectors could be because of fiscal changes or temporary expenditure amounts.

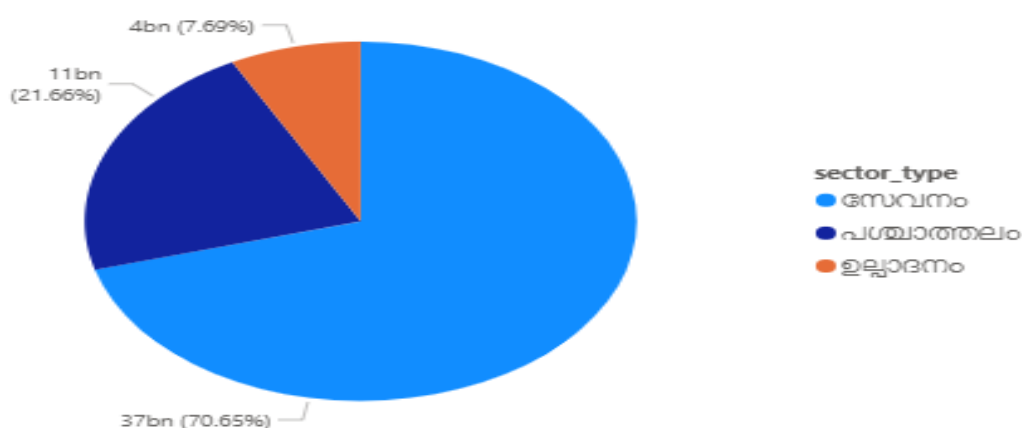
4.2 Sectoral Analysis

The section examines the sector wise change in the allocation and spending on scheduled tribe (ST) population in production, infrastructure, and service sectors in Kerala between 2016-17 to 2025-26. The comparison will be done on sectoral shares, trends and utilization patterns. The analysis shows the imbalances in the sectors by looking at the priority given to welfare oriented, supportive, and productive activities in the development of scheduled tribes in various regions of the state.

FIG. 4.9

Sum of Fund Total by Sector-Type

Sum of fundtotal by sector_type



Source: Primary Data

4.2.1 Sum of Fund Total by Sector Type

The figure shows the distribution of the total funds in terms of three types of sectors. It is easy to see that a large part of the money approximately 37 billion or 70.65 percent of the total allocation is clustered in one, powerful sector (sevanam). The second sector (pashchathalam) receives an amount of 21.66 percent or about 11 billion of the total funding. The third sector (ulpadanam) with nearly 4 billion (or only 7.69 percent) of the total allocation holds the least

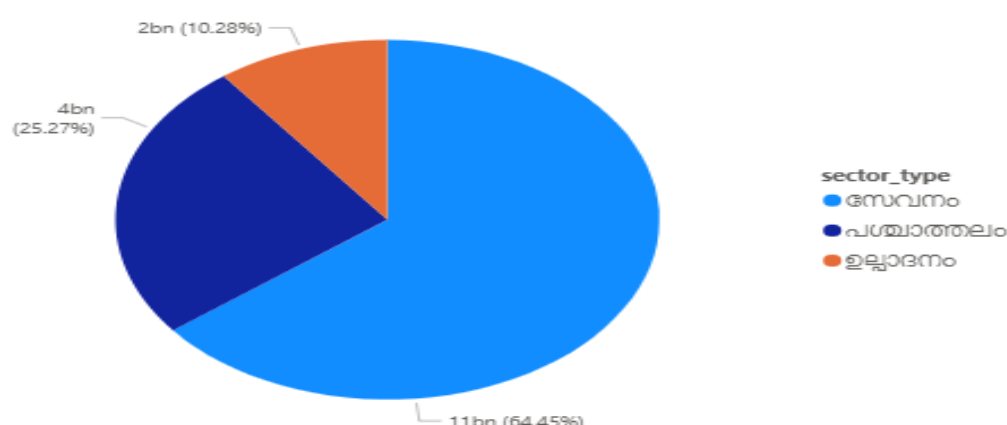
proportion. Having most of the resources concentrated in a single industry, this allocation demonstrates a high sectoral asymmetry in allocation of money.

The other two industries propose relatively lower fund shares through relatively low program coverage, or narrow prioritising in comparison to others. Such discrepancies in the allocation of the resources may affect equitable resource allocation and balanced development. On the whole the chart displays the concentration of the financial resources in one sector and this depicts the sectoral focus and spending agendas of the governments in the overall budget.

FIG. 4.10

Sum of Expenditure by Sector-Type

Sum of expenditure by sector_type



Source: Primary Data

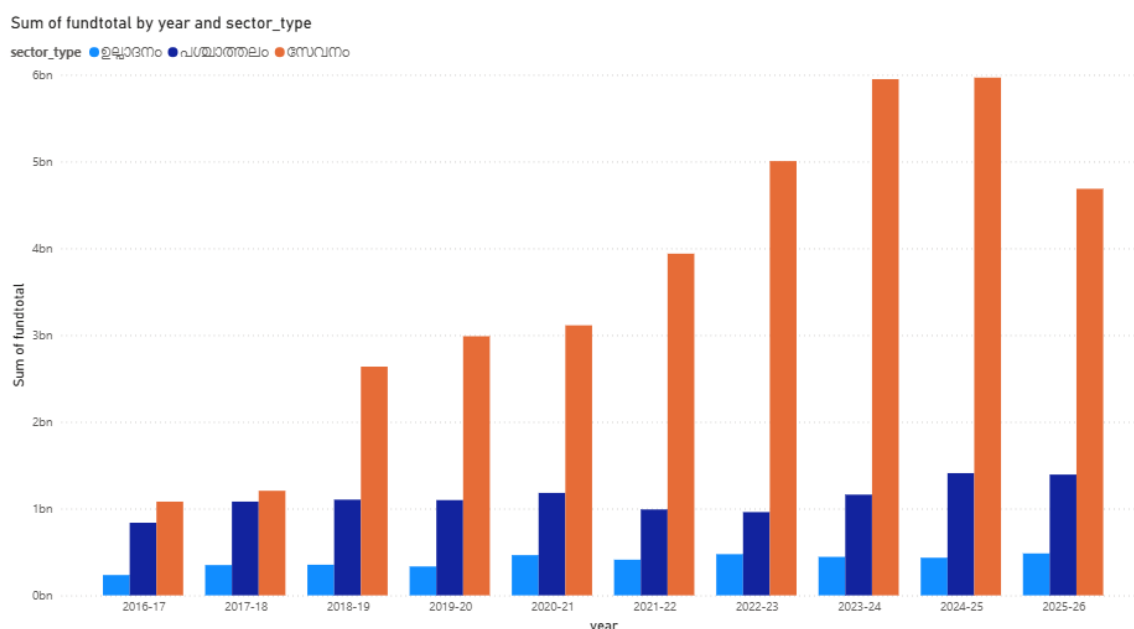
4.2.2 Sum of Expenditure by Sector Type

The amount indicates the industry-by-industry total expenditure. It indicates that there is a single sector with very high percentage of expenditure that is 64.45, which is equivalent to about 11 billion rupees in terms of expenditure. The second sector will get approximately 4 billion, which is 25.27 percent of the total spending. The third sector, in the meantime, has the least share, having approximately 200 million or 10.28% of the total.

This trend shows that there was a definite prioritisation of spending to a single sector and this indicates area was the one that was implemented and more capital spending occurred. The second sector takes moderate share although it is far below the leading sector. The small allocation in the third sector implies low coverage of expenditure or intense programme. All in all the figure shows that there is unevenness in the distribution of expenditure with a significant portion of the funds being in one sector thus indicating the relative priority given to the various sectors by the total budget.

FIG. 4.11

Sum of Fund Total by Year and Sector-Type



Source: Primary Data

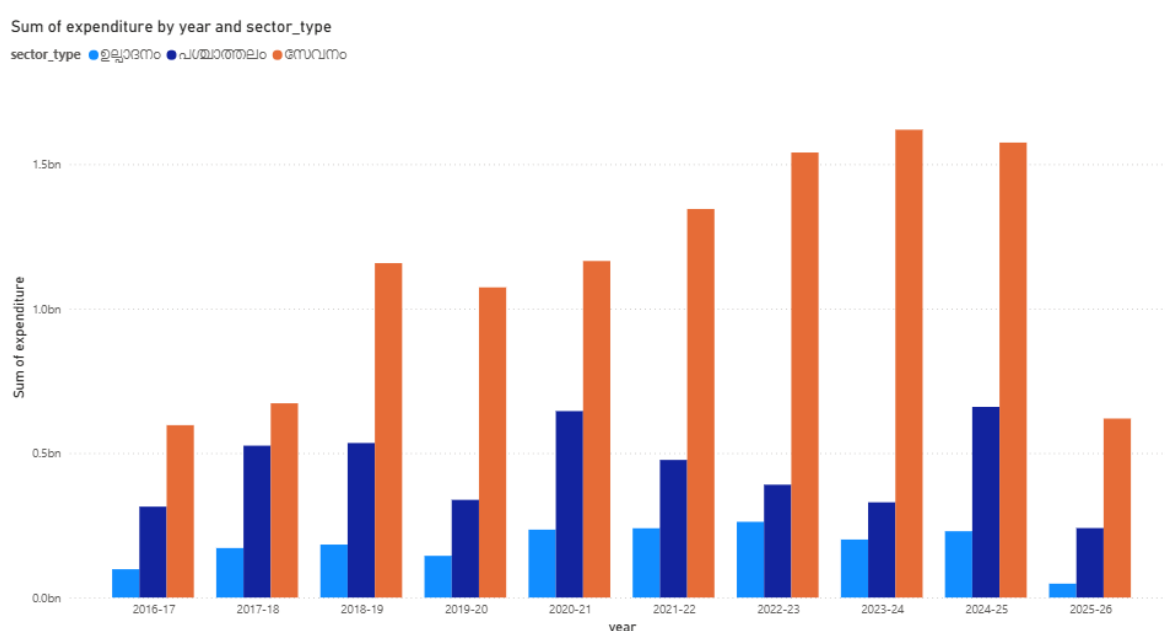
4.2.3 Sum of Total by Year and Sector Type

The figure shows the distribution of total funds in the three sector between the period 2016-17 to 2025-26. All said and done, the statistics indicate a clear increasing trend in the frequency of the fund allocation over time indicating steady increment in spending. The third sector (sevanam) is routinely getting the highest share of funds among the three with a significant increase of 1.1 billion of 2016-17 to around 6 billion of 2023-24 and 2024-25 and then slightly of 2025-26.

The second sector (pashchathalam) is moderate but stable in growth with its allocations increasing at a slow pace with minimal fluctuations. Conversely, although it has steadily and gradually risen, the first sector (ulpadanam) receives the minimum amount of funding in all years. Although the last years fall could be a sign of the budgetary changes or some of the provisional estimates, the highest levels of expenditure observed over the recent years are pointed to sectoral prioritising.

FIG. 4.12

Sum of Expenditure by Year and Sector-Type



Source: Primary Data

4.2.4 Sum of Expenditure by Year and Sector Type

An illustration of the amount of expenditure on each of the three types of sectors between 2016-17 and 2025-26 is presented in the figure. The spending has generally been rising over the years particularly in the third sector (sevanam) that regularly spends the most (of the three). Expenditure in this sector increases gradually up to approximately 1.6 billion in 2023-24 and 2024-25 and then drops drastically in 2025-26. The other one (pashchathalam) is more moderately fluctuating revealing periods of increased spending priority with significant upsurges in 2020-21 and 2024-25.

The least amount of funding is still on the first sector (ulpadanam) although it has been steadily growing with only minor fluctuations. These two highest levels of spending in 2022-2023 and

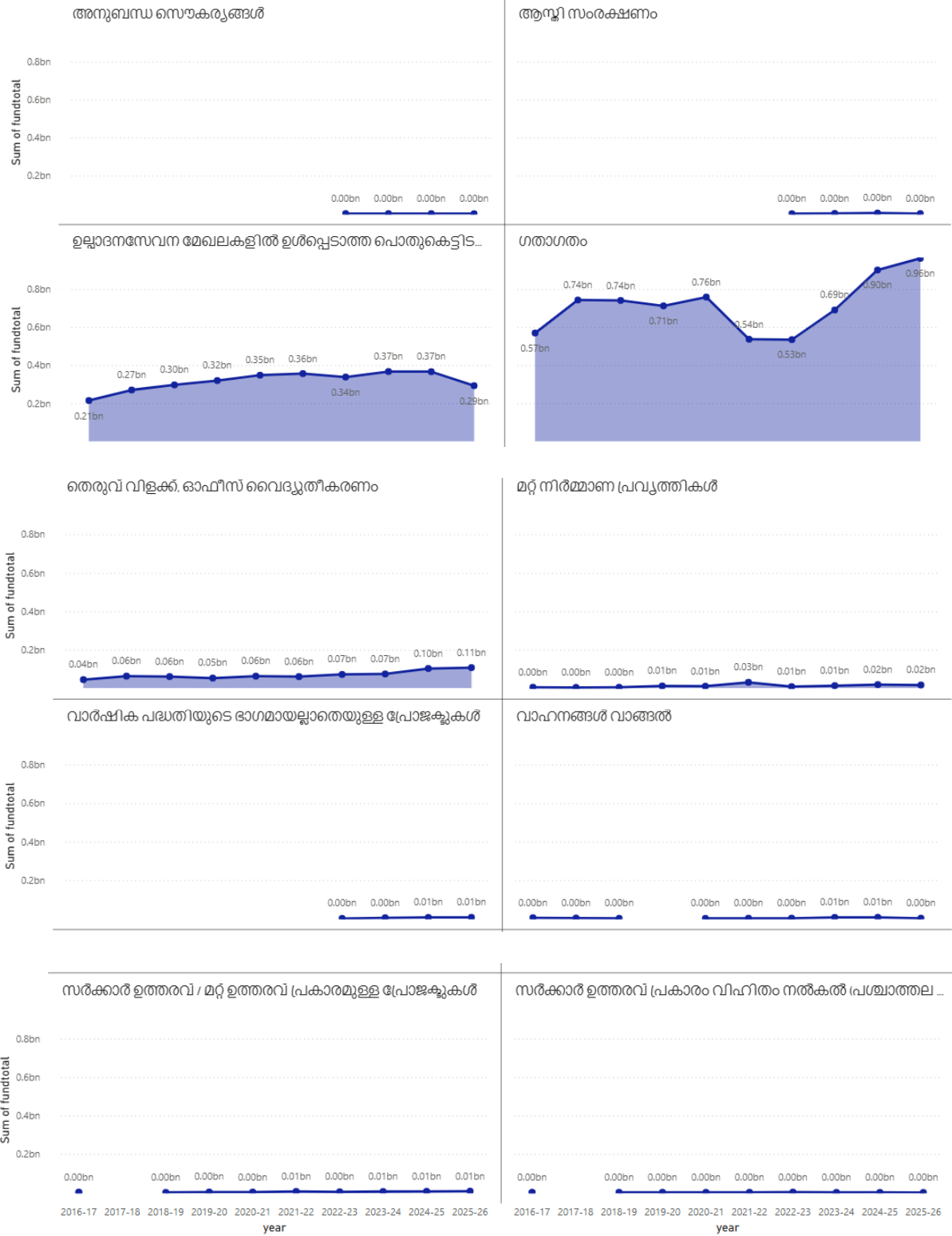
2024-2025 indicate a more intensive program execution in these years. The rapid fall of 2025-26 in all sectors might be because of the allocation of resources, fiscal tightening or provisional statistics. In general it can be seen that the changes in spending patterns between sectors have varied with time in the figure.

FIG. 4.13

Sum of Fund Total by Year, Sector-Type and Sector

Sum of fundtotal by year, sector_type and sector

sector_type ● പശുമാത്തലം



Source: Primary Data

4.2.5 Sum of Fund Total by Year, Sector Type and Sector

The figure shows the amount of total funds (in billion) that are to be spent in 2016-17 up to 2025-26 in major infrastructure areas. Of these, transportation is given the greatest portion during the period. It depicts a powerful upward trend since approximately 0.57 billion in 2016-17 to approximately 0.95 billion in 2025-26 with slight variations between them which shows that infrastructure and mobility development remain a priority. The sector that do not lie in the manufacturing and service industries have moderate allocations with an average of above 0.21-0.37 billion with it reaching its highest point of approximately 2023-24, and then declining slightly in the last year.

The lighting of streets and electrification of offices show a steady growth between about 0.04 billion up to 0.11 billion indicating the gradual development of the basic civic infrastructure. Vehicle purchase and other building works have rather small civic infrastructure. Vehicle purchase and other building works have rather small yet gradually increasing allocations typically in 0.01-0.03 billion profile, indicating minor but steady capital expenditure.

On the contrary, associated facilities, assets under protection, non-planning projects, government orders and related projects, and giving out fund as per government order indicate negligible or slight allocations in most of the years and range around 0.00 billion with few slight variations. This implies that such heads either get very limited funding or they are not activated unless it is necessitated by some administrative requirements.

Lastly, social welfare and social security show a relatively small but consistent allocation pattern as a result of the persistence of the through relatively low priority when compared to core infrastructure sectors like transportation. Generally, the pattern of distribution indicates distinct preference of transportation and civilian infrastructure whereby the administrative and protective and non-plan elements have minimal and relatively constant funding during the study period.

Sum of Fund Total by Year, Sector-Type and Sector



4.2.6 Sum of Fund Total by Year, Sector Type and Sector

The figure shows the amount of total funds (in billion) to be spent on production sectors of major sectors between 2016-17 and 2025-26. It outlines industry-based differences in the priorities of finances and the shifting trend of allocations during the decade. The lowest allotments are given to the energy production in the course of the study. The funding will be zero in the first three years with a slight increase in the years 2019-20 and onwards with the fluctuation ranging between 2 million and 4 million, signifying a permanent low priority.

Agriculture comes out as one of the most financed sectors. The allocation increases dramatically, 63 million in 2016-17, to above 100 million in the other years, with a highest figure of 160 million in 2020-21. Although there are sporadic drops in funding, it is continually high and is terminated at 157 million in 2025-26, which is a sign of persistent policy relevance. There is also a lot of funding towards animal protection during the period. The allocation rises to a high of 168 million in 2022-23 than the 98 million in 2016-17. Even though moderate variations follow it, funding amounts over 130 million on average and in end in 160 million in 2025-26, which also indicates good and ongoing support.

The dairy growth has a consistent upward trend with suitable oscillations wherein the growth is growing steadily between 16 million in 2016-17 and 47 million in 2025-26. This implies the gradual increasing concern on dairy related activities. Micro enterprises has low initial allocations but has shown a high growth rate after 2020-21, and it is expected to reach 28 million in 2024-25 then decreases slightly to 27 million in 2025-26. This implies that laying more emphasis on small scale industries and entrepreneurship.

Minor irrigation has relatively constant allocations, varying between 23 million and 32 million during the period which shows a consistent and constant support. The middle years are also characterized by significant expansion in soil and water conservation which grows between 3 million and 46 million in 2021-22 and then it gradually decreases to 19 million in 2025-26.

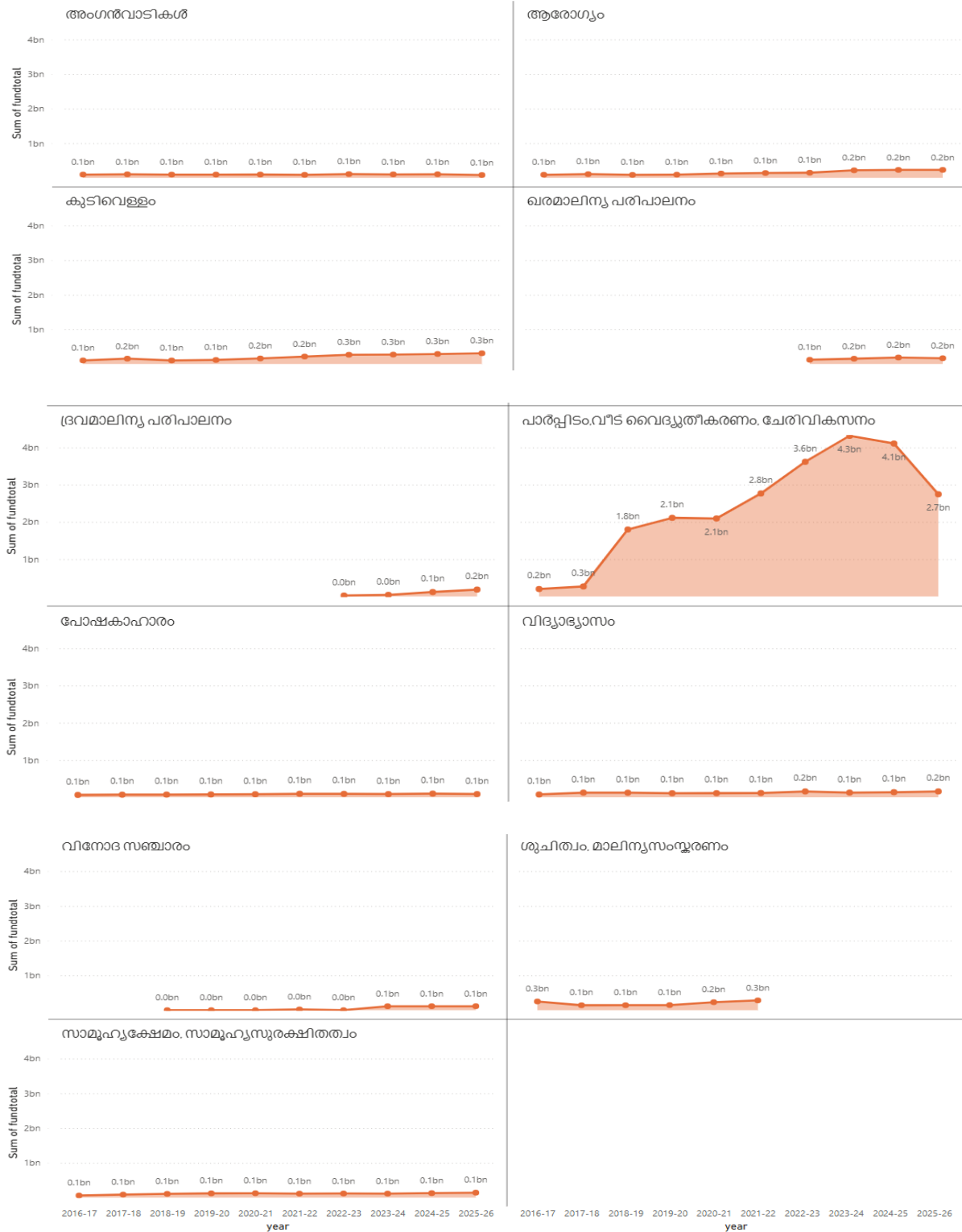
Fisheries indicates low and unsteady expenditure with a peak of 31 million in 2020-21 and a drop back to 2 million towards the end of the period. In general, agriculture and animal protection are the main recipients of the funds, whereas the energy production and fisheries are the poorly funded areas.

FIG. 4.15

Sum of Fund Total by Year, Sector-Type and Sector

Sum of fundtotal by year, sector_type and sector

sector_type ● സേവനം



Source: Primary Data

4.2.7 Sum of Fund Total by Year, Sector Type and Sector

The figure demonstrates total funds of the service sector between 2016-17 and 2025-26 the overall trend shows that the service sector is allocated comparatively low and consistent funds during the period, and the situation does not include significant fluctuations.

Anganwadis, nutrition, liquid waste management, sanitation and waste management, social welfare and security also get a consistent amount annually as approximately 0.1 billion which is consistent but not increasing by large percentages.

Health is also similar with the figure standing almost constant at 0.1 billion during the initial years and 0.2 billion in the later period. The consumption of water and solid waste is gradually improving and is presently increasing to almost 0.2-0.3 billion instead of 0.1 billion.

Education is showing a gradual increasing trend to almost insignificant figures to access, approximately 0.1 billion over the past years, whereas tourism is considered to be peripheral with extremely low allocation. By comparison, housing, home electrification and slum development takes up the largest portion of the service sector, increasing sharply and directly by an increasing margin, which is currently less than 0.5 billion in the early years, but peaking to over 4 billion by around 2023-24 and decreasing slightly by 2025-26.

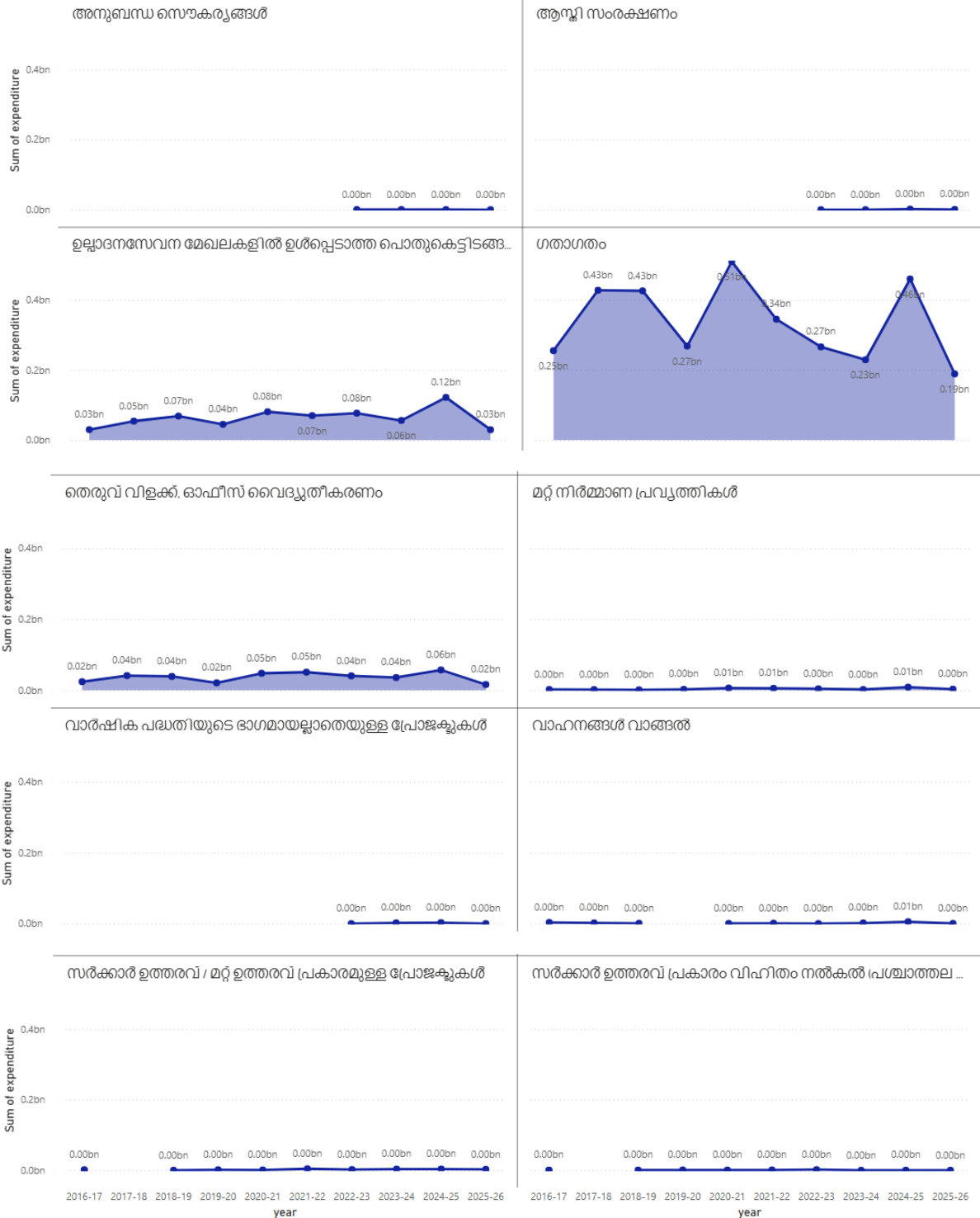
In general, the service sector is highly concentrated in the activities regarding the housing sphere, while other ones have modest and consistent funding trends.

FIG. 4.16

Sum of Expenditure by Year, Sector-Type and Sector

Sum of expenditure by year, sector_type and sector

sector_type ● പ്രയോജനം



Source: Primary Data

4.2.8 Sum of Expenditure by Year, Sector Type and Sector

The figure illustrates the sum of expenditure (in billion) allocated from 2016-17 to 2025-26 across major infrastructure sectors.

The chart shows that transportation consistently received the highest expenditure throughout the period. It increased from about 0.25 billion in 2016-17 to 0.43 billion in both 2017-18 and 2018-19, declined to 0.27 billion in 2019-20, and then peaked sharply at 0.51 billion in 2020-21. After that, spending fluctuated-falling to 0.34 billion in 2021-22, 0.27 billion in 2022-23, and 0.23 billion in 2023-24, rising again to 0.42 billion in 2024-25, and finally dropping to 0.18 billion in 2025-26.

Expenditure on public places (excluding manufacturing and services) remained moderate and fluctuating over the years. It rose from 0.03 billion in 2016-17 to 0.05 billion in 2017-18 and 0.07 billion in 2018-19, before declining to 0.04 billion in 2019-20. The allocation increased again to 0.08 billion in 2020-21, slightly decreased to 0.07 billion in 2021-22, rose to 0.08 billion in 2022-23, declined to 0.06 billion in 2023-24, and realised its peak at 0.12 billion in 2024-25, followed by a sharp fall to 0.03 billion in 2025-26.

Street lighting and office electrification received comparatively smaller allocations, beginning at 0.02 billion in 2016-17, increasing to 0.04 billion in 2017-18 and 2018-19, declining again in 2019-20, and then rising to 0.05 billion in both 2020-21 and 2021-22. The expenditure slightly reduced to 0.04 billion in 2022-23 and 2023-24, increased to 0.06 billion in 2024-25, and finally declined to 0.02 billion in 2025-26.

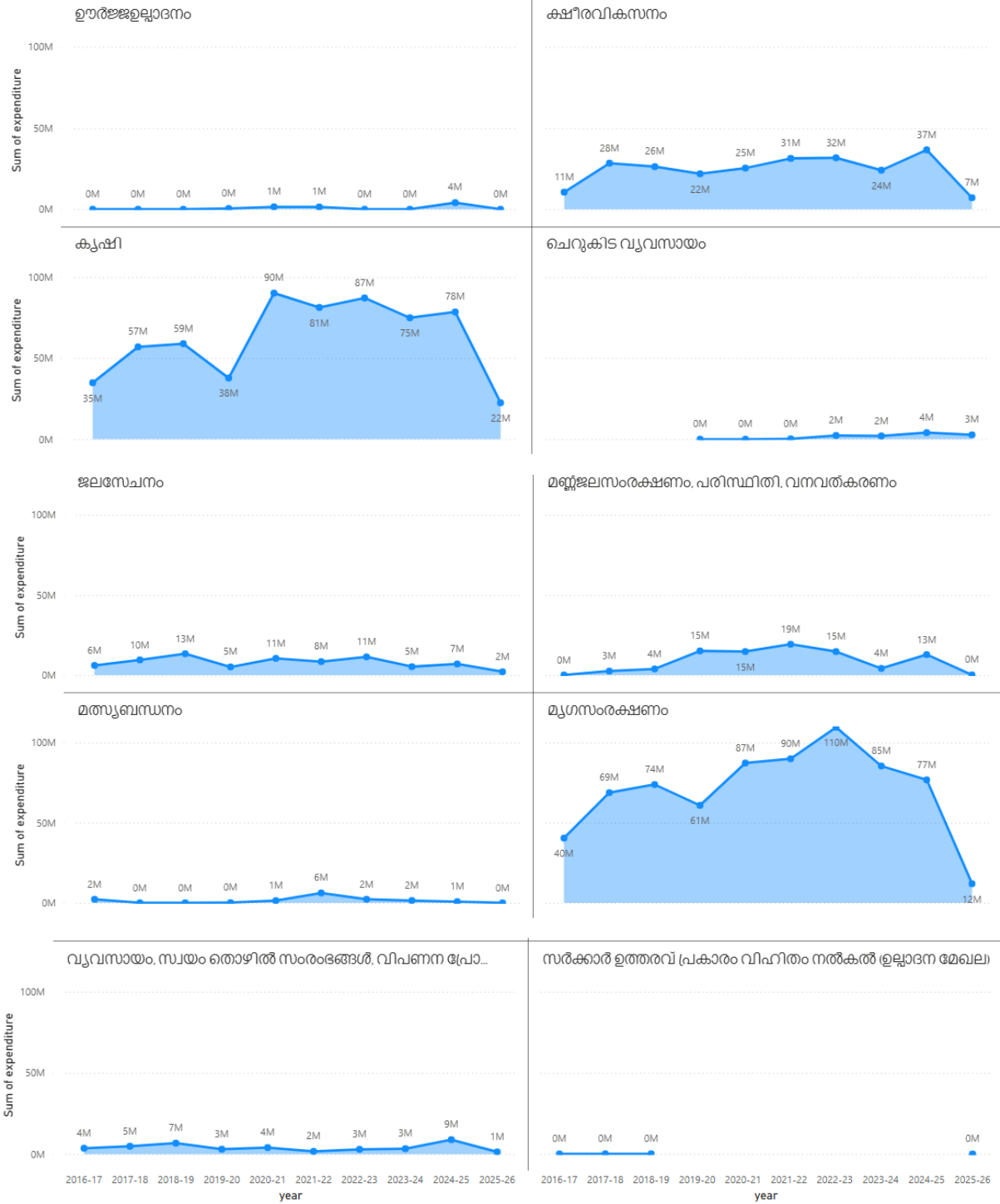
The remaining heads-related facilities, asset protection, other construction works, projects not part in the annual plan, vehicle purchase, government orders and related projects, and provision in lieu of government order-recorded negligible or nearly zero expenditure throughout the study period, with only marginal allocations in certain years. This indicates that financial priority during the period was predominantly concentrated in transportation infrastructure, followed by development of public places and basic electrification works.

FIG. 4.17

Sum of Expenditure by Year, Sector-Type and Sector

Sum of expenditure by year, sector_type and sector

sector_type ● ഉല്ലാസനം



Source: Primary Data

4.2.9 Sum of Expenditure by Year, Sector Type and Sector

Based on the figure showing sector wise expenditure from 2016-17 to 2025-26, the year-wise trend under the production sector (in million) shows clear differences among the heads.

Agriculture and animal protection receive the highest allocations during most of the period. Agriculture increases from 35 million in 2016-17 to a peak of 90 million in 2020-21, remains high until 2024-25 (78 million), and then drops to 22 million in 2025-26. Similarly, animal protection rises from 40 million in 2016-17 to its highest level 110 million in 2022-23, before declining sharply to 12 million in 2025-26.

Dairy development shows moderate growth, moving from 11 million in 2016-17 to 37 million in 2024-25, but falls to 7 million in 2025-26. Minor irrigation fluctuates between 5 million and 13 million, ending at 2 million in 2025-26. Soil and water conservation peaks at 19 million in 2021-22 but declines to 0 million in 2025-26.

Micro enterprises and fisheries receive very low allocations throughout, mostly below 5 million, while energy production remains almost negligible, with only small spending in 2020-21, 2021-22, and 2024-25.

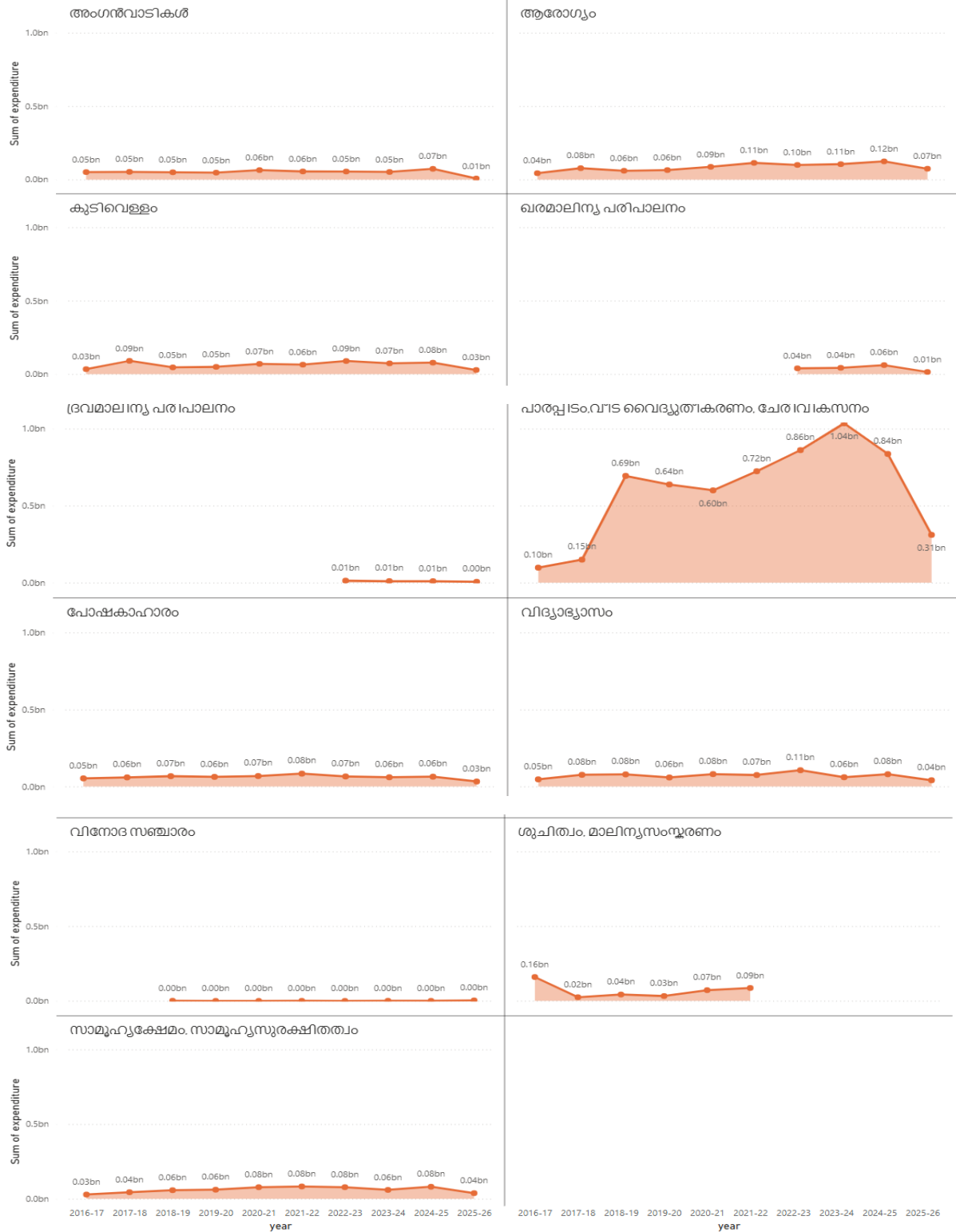
Overall, the production sector records its highest spending between 2020-21 and 2022-23, followed by a noticeable decline in 2025-26, with agriculture and animal protection dominating the expenditure pattern.

FIG. 4.18

Sum of Expenditure by Year, Sector-Type and Sector

Sum of expenditure by year, sector_type and sector

sector_type ● സേവനം



Source: Primary Data

4.2.10 Sum of Expenditure by Year, Sector Type and Sector

Based on the values visible in the figure (2016-17 to 2025-26), the year wise expenditure (in billion) under the service sector shows noticeable variation across different heads, with certain sectors receiving consistently higher allocations than others.

Expenditure on anganwadis begins at around 0.05 billion in 2016-17, remains largely stable between 0.05-0.06 billion up to 2022-23, slightly increases to 0.07 billion in 2023-24, and declines to nearly 0.01 billion in 2025-26. Health spending starts at 0.04 billion in 2016-17, gradually rises through the years, reaches approximately 0.12billion in 2024-25, and then decreases to 0.07 billion in 2025-26.

Allocation for drinking water fluctuates between 0.03 billion and 0.09 billion, peaking in 2017-18 and showing moderate variation thereafter before declining in the final year. Solid waste management and liquid waste management receive comparatively lower but steady allocations, generally ranging between 0.02-0.06 billion, with minor year to year changes.

The highest expenditure is observed in housing, home electrification and slum development, which increases significantly from 0.10 billion in 2016-17 to a peak of around 1.04 billion in 2023-24, followed by a decline in subsequent years. Nutrition and education maintain moderate and relatively stable allocations (around 0.05- 0.08 billion), while tourism records negligible spending.

Finally, sanitation and waste management and social welfare and social security show moderate allocations with small fluctuations, reflecting continued but controlled investment within the service sector over the study period.

4.3 Empirical Testing

4.3.1 Introduction

This chapter shows statistical data of the regional and sectoral differences in the funding of tribal development in Kerala in the year 2016-17 and compared with that year 2025-26. The main aim of this chapter is to test the hypothesis of whether there are any noteworthy differences in both fund allocation and fund utilisation between regions and sectors.

The analysis is done in two dimensions. To begin with, the analysis of regional disparities is performed and compared the allocation of the funds and its expenditures between the central, north and south areas of Kerala. Second, sectoral differences are also examined through a comparison of allocation, expenditures of the production, infrastructure and service sectors.

Paired sample t-test has been used to test the existence of statistically significant differences. This approach is suitable since the data are matched yearly observations on regions and sectors in the same year.

The test is used to determine the statistical significance of the mean difference between two related groups. It has adopted a level of significance of 5 percent ($\alpha = 0.05$) to use when testing a hypothesis.

4.3.2 To Analyse Regional Disparities in Fund Allocation and Utilisation.

In order to study the findings of whether there are significant regional differences in tribal development of the three regions of Kerala, namely central, north and south regarding fund allocation and fund utilisation (expenditure) in the years 2016-17 to 2025-26, a paired sample t-test of the three regions was undertaken to study the difference in fund allocation and fund utilisation (expenditure).

The paired t-test is appropriate as the data represent year-wise matched observations for each region over the same time period (30 observations).

The level of significance adopted for the study is 5 per cent ($\alpha = 0.05$).

Hypothesis formulation

For each regional comparison, the hypotheses are framed as follows:

Null Hypothesis (H_0):

There is no significant difference in the mean fund allocation/utilisation between the two regions.

Alternative Hypothesis (H_1):

There is a significant difference in the mean fund allocation/utilisation between the two regions.

A. Central and North region

TABLE 4.1

Paired sample t-test results-central and north

t-Test: Paired Two Sample for Means		
fund allocation		
	<i>central</i>	<i>north</i>
Mean	656918294.7	544729824
Variance	4.28335E+17	2.61499E+17
Observations	30	30
Pearson Correlation	0.974669207	
Hypothesized Mean Difference	0	
df	29	
t Stat	3.175971996	
P(T<=t) one-tail	0.001764111	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	0.003528221	
t Critical two-tail	2.045229642	

Note. The paired sample t-test computed using Microsoft excel

The mean allocation for the central region (656918294.7) is higher than that of the north region (544729824). The calculated t-value (3.17) exceeds the critical value (2.045), and the two-tailed p-value (0.0035) is less than 0.05. Therefore the null hypothesis is rejected.

Inference:

There exists a statistically significant difference in fund allocation between the central and north regions. The central region receives comparatively higher allocations.

B. North and South region**Table 4.2****Paired sample t-test results- North and South**

t-Test: Paired Two Sample for Means fund allocation		
	<i>north</i>	<i>south</i>
Mean	544729824	523940639.7
Variance	2.61499E+17	3.46416E+17
Observations	30	30
Pearson Correlation	0.932651093	
Hypothesized Mean Difference	0	
df	29	
t Stat	0.528039672	
P(T<=t) one-tail	0.300744698	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	0.601489397	
t Critical two-tail	2.045229642	

The mean allocation of the north region (544729824) which is slightly higher than that of the south region (523940639.7). However the calculated t-value (0.52) is less than the critical value (2.045), and the two tailed p-value (0.601) is greater than 0.05. The null hypothesis is accepted.

Inference:

There is no statistically significant difference in fund allocation between the north and south regions. Allocation patterns between these two regions are statistically similar.

C. South and central Regions

Table 4.3

Paired sample t-test results – South and Central

t-Test: Paired Two Sample for Means fund allocation		
	<i>south</i>	<i>central</i>
Mean	523940639.7	656918294.7
Variance	3.46416E+17	4.28335E+17
Observations	30	30
Pearson Correlation	0.970025153	
Hypothesized Mean Difference	0	
df	29	
t Stat	-4.39723644	
P(T<=t) one-tail	6.74166E-05	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	0.000134833	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

The mean allocation of the south region (523940639.7) is considerably lower than that of the central region (656918294.7). The calculated t-value (-4.39) exceeds the critical value in absolute terms, and the two-tailed p-value (0.000134) is less than 0.05. Therefore the null hypothesis is rejected.

Inference:

There exists a significant difference in fund allocation between the south and central regions, with the central region receiving substantially higher funds.

A. Central and North region

Table 4.4

Paired sample t-test results – Central and North

t-Test: Paired Two Sample for Means fund expenditure		
	<i>central</i>	<i>north</i>
Mean	235896631.5	198309407.8
Variance	2.96572E+16	2.95477E+16
Observations	30	30
Pearson Correlation	0.946585692	
Hypothesized Mean Difference	0	
df	29	
t Stat	3.6608894	
P(T<=t) one-tail	0.000498029	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	0.000996058	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

The mean expenditure of the central region (235896631.5) is higher than that of the north region (198309407.8). The calculated t-value is 3.66, which is greater than the critical value (2.045). The two-tailed p-value (0.000996) is less than 0.05. Since $p < 0.05$, the null hypothesis is rejected

Inference:

There exists a statistically significant difference in fund utilisation between the central and north regions. The central region demonstrates higher utilisation levels compared to the north region.

B. North and South region

Table 4.5

Paired sample t-test results North and South

t-Test: Paired Two Sample for Means fund expenditure		
	<i>north</i>	<i>south</i>
Mean	198309407.8	153544228.7
Variance	2.95477E+16	1.84909E+16
Observations	30	30
Pearson Correlation	0.968680048	
Hypothesized Mean Difference	0	
df	29	
t Stat	4.672223445	
P(T<=t) one-tail	3.15163E-05	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	6.30327E-05	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

The mean expenditure of the north region (198309407.8) is higher than that of the south region (153544228.7). The calculated t-value is 4.67, exceeding the critical value (2.045) and the two tailed p-value (0.00063) is less than 0.05. Therefore the null hypothesis is rejected.

Inference:

A significant difference exists in fund utilisation between the north and south regions. The north region utilises more funds compared to the south region.

C. South and Central regions

Table 4.6

Paired sample t-test results –South and Central

t-Test: Paired Two Sample for Means fund expenditure		
	<i>south</i>	<i>central</i>
Mean	153544228.7	235896631.5
Variance	1.84909E+16	2.96572E+16
Observations	30	30
Pearson Correlation	0.967866132	
Hypothesized Mean Difference	0	
df	29	
t Stat	-8.49744194	
P(T<=t) one-tail	1.15629E-09	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	2.31257E-09	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

The mean expenditure of the south region (153544228.7) is considerably lower than that of the central region (23896631.5). The calculated t –value is -8.49, which is far beyond the critical value in absolute terms. The two tailed p-value (0.0000000023) is significantly below 0.05. Therefore the null hypothesis is rejected.

Inference:

There is a highly significant differences in fund utilisation between the south and central regions. The central region records substantially higher expenditure.

4.3.3 The Findings of the Hypothesis Tests between the Regions show that:

Therefore we can say that the findings also demonstrate that there is a statistically significant regional difference in the use of funds between all the three regions. The trend of spending is as follows:

Central > north > south

This implies that the tribal development funds are unequally used in the areas over the study period.

There are major differences in the utilisation of funds in all three regions. The disparity in the allocation of funds is much higher between the central region and the other two regions. There is no substantial difference in allocation in north and south region. The utilisation inequalities are higher compared to those in allocation. In this way, the research will prove the fact there are regional imbalances in the financing of tribal development in Kerala in 2016-17 to 2025-26. Central region has always had higher allocation and utilisation and the south region has been relatively lower hence a variation in structural and implementation across regions.

4.3.4 To Analyse the Sector-Wise Disparities in Allocation and Expenditure

To examine sectoral imbalances in tribal development funding in Kerala during 2016-17 to 2025-26, a paired sample t-test was conducted across the three major sectors:

Production sector

Infrastructure sector

Service sector

The test compares mean differences in both fund allocation and fund expenditure over 30 matched yearly observations.

Level of significance: 5 per cent ($\alpha=0.05$), degrees of freedom: 29

Hypothesis Formulation

Null Hypothesis (H_0):

There is no significant difference in the mean fund allocation (or expenditure) between the two sectors.

Alternative Hypothesis (H_1):

There is no significant difference in the mean fund allocation (or expenditure) between the two sectors.

A. Production and Infrastructure

Table 4.7

Paired sample t-test results – production and infrastructure

t-Test: Paired Two Sample for Means sector fund allocation		
	<i>production</i>	<i>infrastructure</i>
Mean	132698850.4	373796661.8
Variance	1.92522E+15	1.28963E+16
Observations	30	30
Pearson Correlation	0.413311348	
Hypothesized Mean Difference	0	
df	29	
	-	
t Stat	12.76465255	
P(T<=t) one-tail	9.9556E-14	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	1.99112E-13	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

Mean allocation: Production – 132698850.4

Infrastructure – 373796661.8

T-stat = -12.76

P-value (two tail) = 1.99E-13 (<0.05), since $p < 0.05$, the null hypothesis is rejected.

Inference:

There exists a highly significant difference in fund allocation between production and infrastructure sectors. Infrastructure receives substantially higher allocations than production.

B. Infrastructure and Service

Table 4.8

Paired sample t-test results – Infrastructure and Service

t-Test: Paired Two Sample for Means sector fund allocation		
	<i>infrastructure</i>	<i>service</i>
Mean	373796661.8	1219093246
Variance	1.28963E+16	3.58598E+17
Observations	30	30
Pearson Correlation	0.230331672	
Hypothesized Mean Difference	0	
df	29	
t Stat	7.938221938	
P(T<=t) one-tail	4.68524E-09	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	9.37048E-09	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

Mean allocation: Infrastructure= 373796661.8

Service= 1219093246

T-stat= -7.94

P-value = 9.37E-09(<0.05), the null hypothesis is rejected.

Inference:

A significant difference exists between infrastructure and service sectors. The service sector receives considerably higher allocation.

C. Service and Production

Table 4.9

Paired sample t-test results – Service and Production

t-Test: Paired Two Sample for Means sector fund allocation		
	<i>service</i>	<i>production</i>
Mean	1219093246	132698850.4
Variance	3.58598E+17	1.92522E+15
Observations	30	30
Pearson Correlation	0.581570696	
Hypothesized Mean Difference	0	
df	29	
t Stat	10.35896045	
P(T<=t) one-tail	1.4737E-11	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	2.9474E-11	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

Mean allocation: Service= 1219093246

Production= 132698850.4

T-stat= 10.36

P-value = 2.94E-11 (<0.05), therefore null hypothesis is rejected.

Inference:

There is a strong significant difference between service and production sectors. Service sector allocation is overwhelmingly higher.

A. Production and Infrastructure

Table 4.10

Paired sample t-test results – Production and Infrastructure

t-Test: Paired Two Sample for Means sector expenditure		
	<i>production</i>	<i>infrastructure</i>
Mean	60415856.8	148524532.2
Variance	8.79772E+14	3.57896E+15
Observations	30	30
Pearson Correlation	0.618270288	
Hypothesized Mean Difference	0	
df	29	
	-	
t Stat	10.14115986	
P(T<=t) one-tail	2.3987E-11	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	4.7974E-11	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

Mean expenditure: Production= 60415856.8

Infrastructure= 148524532.2

T-stat = -10.14

P-value = 4.79E-11 (<0.05), the null hypothesis is rejected.

Inference:

There exists a significant difference in expenditure between production and infrastructure sectors. Infrastructure sector spending is substantially higher.

B. Infrastructure and Service

Table 4.11

Paired sample t-test results – Infrastructure and Service

t-Test: Paired Two Sample for Means sector expenditure		
	<i>infrastructure</i>	<i>service</i>
Mean	148524532.2	378809879.1
Variance	3.57896E+15	2.08334E+16
Observations	30	30
Pearson Correlation	0.454388931	
Hypothesized Mean Difference	0	
df	29	
	-	
t Stat	9.800074798	
P(T<=t) one-tail	5.20732E-11	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	1.04146E-10	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

Mean expenditure: Infrastructure= 148524532.2

Service= 378809879.1

T-stat = -9.80

P-value = 1.04E- 10(<0.05), the null hypothesis is rejected.

Inference:

There is a statistically significant difference in expenditure between infrastructure and service sectors. Service sector expenditure is much higher.

C. Service and Production

Table 4.12

Paired sample t-test results – Service and Production

t-Test: Paired Two Sample for Means sector expenditure		
	<i>service</i>	<i>production</i>
Mean	378809879.1	60415856.8
Variance	2.08334E+16	8.79772E+14
Observations	30	30
Pearson Correlation	0.734020971	
Hypothesized Mean Difference	0	
df	29	
t Stat	14.04002376	
P(T<=t) one-tail	9.13115E-15	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	1.82623E-14	
t Critical two-tail	2.045229642	

Note. Paired sample t-test computed using Microsoft excel

Mean expenditure: Service = 378809879.1

Production = 60415856.8

T-stat= 14.04

P-value = 1.83E-14(<0.05), the null hypothesis is rejected.

Inference:

A very strong significant difference exists between service and production sector expenditure. The service sector records highest utilisation levels.

4.3.5 The Findings of the Hypothesis Tests between the Sectors show that:

The results of the testing of the hypothesis shows clearly:

1. There is a considerable variance in the funds allocation between all the three sectors.
2. There are also significant disparities in the fund expenditure in all the sectors.
3. The service industry is the largest in terms of allocation and spending.
4. Production sector always receives and uses the lowest amount of funds.

In this way, it is statistically proved that there is sectoral disparity in tribal development funding. Its distribution and spending pattern is as follows:

Service Sector > Infrastructure Sector > Manufacturing Sector

This implies that the funds allocated in 2016-17 to 2025-26 on tribal development in Kerala are more welfare and service based and relatively low on the productive and income generating activities.

CHAPTER-5

**FINDINGS, CONCLUSIONS AND
RECOMMENDATIONS**

5.1 Findings

The research investigated regional and sectoral differences in fund distribution and utilisation to tribal development in Kerala between 2016 -17 to 2025-26.

The analysis shows that the central region was the one to obtain the greatest part of the funds allocation and expenditure, next comes the north and south regions. Although the difference between north and south allocations was not statistically significant, the difference between central and other two regions was significant. Statistically, there were significant differences between all three regions in terms of utilisation. The general direction of fund utilisation is as follows: Central> North> South which is the evidence of inter-regional imbalance.

An analysis sector-wise indicates that there is evident concentration of funds in the service sector, then infrastructure and then the production sector received the least allocation and expenditure. Statistically significant differences in all the three sectors in terms of allocation and utilisation are confirmed by the paired sample t-test. The general pattern of the sector goes as: Service > Infrastructure > Production.

The results also show that the difference between regions and sectors in the implementation capacity and efficiency is even greater in utilisation than in allocation.

5.2 Conclusion

The research proves the presence of regional and sectoral differences in funding to tribal development in Kerala in the study period. Despite the fact that Kerala has an inclusive model of development, the empirical data indicate that funds are not equally distributed and used in all regions and sectors.

Central region is always leading in the allocation as well as expenditure, whereas the south region is relatively lower. The sectoral composition of the economy exclusively composed of mostly service sector portrays a welfare style of doing business and the relative low investment in the production sector reveals a lack of long-term economic empowerment.

Accordingly, the paper confirms that the funding of tribal development in Kerala, despite its increment with time, is not fully balanced in space and area. Such imbalances could affect the fairness and sustainability of the outcomes of the tribal development.

5.3 Recommendations

The results would lead to the following recommendations:

The proportion and location of the population of scheduled tribe should be more aligned with fund allocation.

The production sector should be put more into focus to enhance the livelihood creation and sustainable economic development.

The mechanisms of administrative capacity and monitoring have to be increased in order to narrow the gap in the use of funds.

To achieve a balanced and equitable growth, tribal development planning is supposed to take a region-focused and sector- balanced approach.

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