



UNDEREMPLOYMENT IN KERALA

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Abstract: Underemployment is the result of unemployment among educated people in Kerala. If a person is not doing a job according to their education and skills, it is called under-employment among such people. Underemployment, which mainly exists in rural areas, refers to the educationally competent people working in low-wage jobs related to agriculture. Underemployment, which is prevalent in urban areas, means that the higher educated are employed in less-than-qualified jobs in both the public and private sectors. This phenomenon which is seen in cities in many villages of Kerala continues. Time-related under-employment is listed as labour slack. Time-related underemployment refers to the underutilization of the labor force. Underemployment is primarily studied by classifying Kerala into three zones. The method of measuring underemployment is also discussed. The objective of this study was various types of under-employment, causes of under-employment and effect due to under-employment are analyzed with Kerala.

Index Terms - Underemployment, Time related underemployment, Causes of underemployment, effect of underemployment, Visible underemployment, Invisible underemployment.

I. INTRODUCTION

Underemployment refers to a person performing permanent or part-time work for his economic needs other than according to his qualifications and acquired skills (Gerald, P. Glyde, 1977). says that For example, most of the people who work as lead clerks in Kerala government services have acquired higher education (PG, BED, MED, MPhil, Phd, Engineering, Mtech etc) (Gerald, P. Glyde, 1977). Those who are qualified in this way, those who are supposed to do higher qualification jobs have to do lower qualification jobs (Anamitra Roychowdhury, 2021). This is called underemployment. Underemployment is a worldwide issue that is escalating amid healing economic recessions and unstable job markets (Navpreet Kaur and Niladri Sekhar Dhar, 2013). In this setting, vocational psychologists can uniquely ascertain the processes by which underemployment correlates with facts of work well-being, such as meaningful employment (Navpreet Kaur and Niladri Sekhar Dhar, 2013). This study offers novel insights into the labour market outcomes of underemployed persons, namely the full-time underemployed, who are frequently excluded from official statistics (Meehan, L et al., 2024). The Report of the Fifth Annual Employment-Unemployment Survey (2015-16) provides a qualitative assessment of the degree of underemployment across India, as well as its States and Union Territories, categorised by gender for both rural and urban sectors (Subrata Mukherjee et al., 2017).

Time-related under-employment or underutilisation consists of three main categories: the underemployed, the unemployed, and the potential labour force. It examined the labour market results of the underemployed in comparison to their fully used peers (Meehan, L et al., 2024). In this analysis, we examine not only the underemployed individuals working part-time but also a subset of the underutilised who are excluded from official statistics: those employed full-time (30 or more hours per week) who desire and are available for additional hours of work. This category is designated as the full-time underemployed (Meehan, L et al., 2024).

Underemployment denotes individuals who are employed but work fewer hours than desired, whereas in the subsequent approach, underemployment refers to workers engaged in occupations that inadequately utilise their skills, training, and experience (Bonnal et al., Citation 2009:317; Wilkins & Wooden, Citation 2011:14, Beukes, R et al., 2017). Intra-skill underemployment arises when individuals within a specific skill group are unable to utilise their skills comparably to their peers due to factors such as employer discrimination; inter-skill underemployment occurs when individuals in a particular skill group struggle to apply a specific skill because it is less in demand relative to other skills that require the same investment of resources (Beukes, R et al., 2017).

II. Review of literature

Prajanma Das (2020) This article shows that under-unemployment in India has increased a lot. Those who had a salary of 4 lakhs per annum have reduced to 2.5 lakhs per annum during the covid period. As unemployment increases, underemployment increases.

James Chen (2022) In this article, underemployment is explained in detail, causes are explained and examples are included. Global reception is also explained as the main cause of underemployment.

Navpreet Kaur and Niladri Sekhar Dhar(2013) This article describes in detail the underemployment in rural India. Data were collected from 9 villages in Andhra Pradesh, Uttar Pradesh, Madhya Pradesh and Maharashtra. Underemployment among manual workers is examined through this study.

Preliminary study from the United States establishes a correlation between diminished self-esteem and underemployment among new graduates (Prause & Dooley, 1997), as well as a connection between underemployment and depression (Dooley et al., 2000). Australian survey research indicates that underemployed individuals experience poorer mental health outcomes (Milner & LaMontagne, 2017) and identifies a negative correlation between underemployment, income, and subjective well-being, and a positive correlation with welfare dependence (Wilkins, 2007).

Numerous research indicate that the Global Financial Crisis significantly affected women's involvement in the labour force (Blanton et al., 2018; Horn, 2010). Women's wages and labour market participation declined more significantly than those of men. A report by UN Women (Citation2014) indicated that in developing and transition economies, women were disproportionately impacted by the crisis, whereas in industrialised economies, the sectors most affected were predominantly male, bearing the majority of job losses. Numerous research have identified significant health impacts particular to women resulting from the GFC (Mohindra, Citation2011; UN Women, Citation2014).

III. Objectives

1. To discuss the method of measuring based on under-employment.
2. To discuss the underemployment in India.
3. To understand the various types, causes and effects based on under-employment in Kerala.
4. To analyse the data provided for educated underemployment in Kerala.

IV. Hypotheses

- H₀:- There is no significant relationship between types of underemployment.
 H₁:- There is significant relationship between types of underemployment.

V. Methodology

Primary and secondary data collection has been done for this study. Here, the primary study method of classifying Kerala into three zones has been implemented. Data has been collected from 100 people equally in all the three zones. Secondary data collection has been done from Financial Modeling and Valuation Analyst (FMVA), CFI, Institute of Development Studies, Kerala Economic survey, Sample survey and National Economic Survey. The tools used that SPSS, one way ANOVA, crosstab and bar-diagram.

VI. Data interpretation and analysis

The investigation primarily focused on the assessment of underemployment, its prevalence in India, its types, causes, and effects.

1. Calculating method of underemployment

Underemployment is described as a condition for an individual inside the labour force who may be employed, jobless while seeking employment, or not participating in the labour force during any half-day of a 7-day reference week (Subrata Mukherjee et al., 2017). This basic index allows for the aggregation of similar workers, potentially resulting in an underemployment index for certain categories, such as home workers, village residents, district inhabitants, or those aged 15-40 years (Subrata Mukherjee et al., 2017). The underemployment index for several types of workers has been computed for comparison using the unit-level dataset from the NSS 66th round: Employment-Unemployment Survey (Subrata Mukherjee et al., 2017). The number of underemployed workers among Kerala divided by total labour force among Kerala is called underemployment.

2. Underemployment in India

According to the underemployment rate varies from 1% (for females in rural Rajasthan) to 23% (for females in remote Kerala and city Bihar) (Subrata Mukherjee et al., 2017). The index rating for males living in rural areas ranges from 3 percent in Rajasthan to 14 percent in Kerala (Subrata Mukherjee et al., 2017). The respective range for rural females is 1 percent (Rajasthan) and 29 percent (Kerala) (Subrata Mukherjee et al., 2017). The range for urban males ranges from 4 percent in Himachal Pradesh and Gujarat to 15 percent in Kerala. Ultimately, for urban females, the range varies from 4 percent (Haryana) to 23 percent (Bihar) (Subrata Mukherjee et al., 2017). The underemployment index among various family socioeconomic group groups is rather low, with female workers consistently exhibiting higher values in nearly all instances (Subrata Mukherjee et al., 2017). Hindu and Muslim labourers exhibit largely analogous indices in both male and female categories across urban as well as rural India (Subrata Mukherjee et al., 2017). This indicates that, in comparison to the male employee who is 'right now got married,' a 'at present married' female worker will exhibit a greater underemployment list, thereby highlighting the gender-based imbalance faced by female workers (Subrata Mukherjee et al., 2017). The issue of workforce underemployment is widespread in economies that are both developed and emerging (Subrata Mukherjee et al., 2017; The times of India, 2018). Nevertheless, the issues in these two sorts of economies differ qualitatively. In emerging economies, underemployment is primarily a frictional and temporary phenomenon caused by short-term employees market fluctuations, while in the emerging third-world economy, it is related to structure, stemming from the unorganised and private characteristics of the economy (Navpreet et al., 2013; Subrata Mukherjee et al., 2017).

3. Types of underemployment

Underemployment refers to the segment of the labour force engaged in low-wage, low-skill, or part-time positions despite possessing qualifications for more advantageous employment. It is a neglected indicator of unemployment (Kim, T et al., 2019; James Chen, 2022). Visible underemployment includes employees who work less hours than the standard in their respective sector or industry (CFI). Invisible underemployment refers to people who work in jobs that don't utilize their skills – such as a financial analyst working as a waiter in a restaurant (CFI). It includes people who have looked for employment in the past year, who would like to work, and are available for work, but are “discouraged workers” or those who have given up looking for

employment altogether because of their prolonged inability to find work (CFI).The types of underemployment involved that work fewer hours (Visible), part-time jobs (Visible), don't use utilize their skills (Invisible) and discouraged workers-long term job seekers (Invisible).It is divided in three zones such as Thiruvananthapuram, Ernakulam and Kozhikode in Kerala.

Table 3.1:Types of unemployment (Crosstabulation)

| Zones | | Types of underemployment | | | | Total |
|--------------------|-----------------------------------|----------------------------|--------------------------|--|---|--------|
| | | Work fewer hours (Visible) | Part-time jobs (Visible) | Don't use utilize their skills (Invisible) | Discouraged workers-long term job seekers (Invisible) | |
| Thiruvananthapuram | Count | 9 | 11 | 32 | 48 | 100 |
| | % within Zones | 9.0% | 11.0% | 32.0% | 48.0% | 100.0% |
| | % within Types of underemployment | 30.0% | 25.0% | 28.8% | 41.7% | 33.3% |
| | % of Total | 3.0% | 3.7% | 10.7% | 16.0% | 33.3% |
| Ernakulam | Count | 10 | 15 | 41 | 34 | 100 |
| | % within Zones | 10.0% | 15.0% | 41.0% | 34.0% | 100.0% |
| | % within Types of underemployment | 33.3% | 34.1% | 36.9% | 29.6% | 33.3% |
| | % of Total | 3.3% | 5.0% | 13.7% | 11.3% | 33.3% |
| Kozhikode | Count | 11 | 18 | 38 | 33 | 100 |
| | % within Zones | 11.0% | 18.0% | 38.0% | 33.0% | 100.0% |
| | % within Types of underemployment | 36.7% | 40.9% | 34.2% | 28.7% | 33.3% |
| | % of Total | 3.7% | 6.0% | 12.7% | 11.0% | 33.3% |
| Total | Count | 30 | 44 | 111 | 115 | 300 |
| | % within Zones | 10.0% | 14.7% | 37.0% | 38.3% | 100.0% |
| | % within Types of underemployment | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | % of Total | 10.0% | 14.7% | 37.0% | 38.3% | 100.0% |

Source:-Field survey

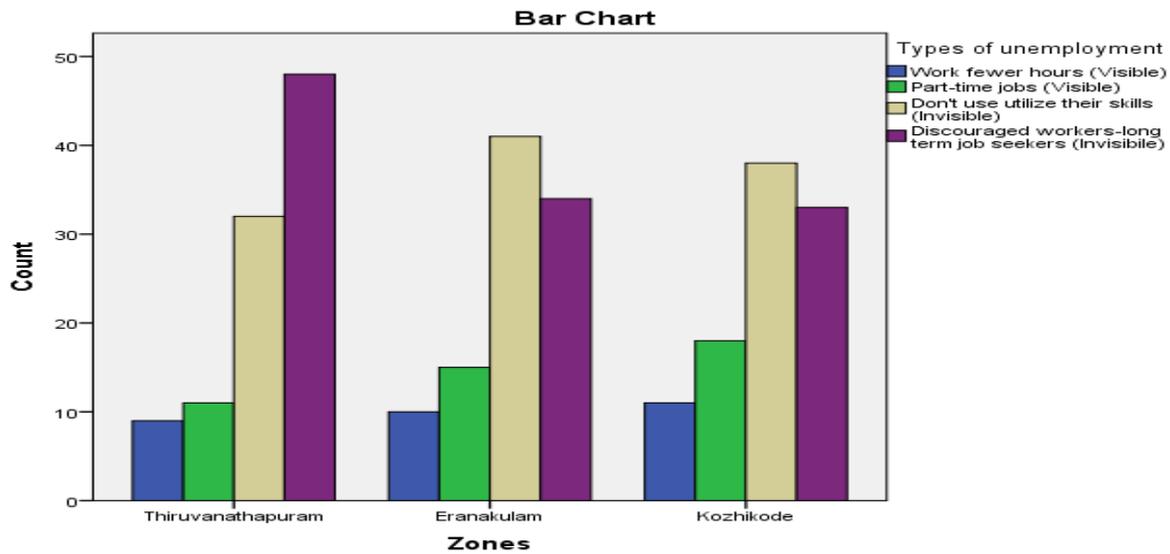
Table 3.1 shows that in Thiruvananthapuram district, the type of underemployment is the highest, with 48 percent of the number of discouraged workers and long-term job seekers. Ernakulam district has the highest number of types of underemployment in the second position with 41 percent belonging to the do not utilize their skills in the invisible category. Kozhikode district has the highest number of underemployment in the third place with 38 percent belonging to the do not utilize their skills in the invisible category. Ernakulam is ranked fourth, with 34 percent of the district's discouraged workers and long-term job seekers. The percentage of discouraged workers and long-term job seekers in Kasaragod district as position in 33 percent. Thiruvananthapuram district has 9 percent types of underemployment in the category of work. Similarly, 11 percent of part-time jobs and 32 percent of don'ts use utilize their skills are included. Ernakulam district has 15 percent in part-time jobs, 10 percent in the work few hours in types of underemployment. In Kozhikode district 18% work a few hours and 18% do part-time jobs in the Types of Underemployment Category.

| Table:-3.2 ANOVA | | | | | |
|--------------------------|----------------|-----|-------------|-------|------|
| Types of underemployment | | | | | |
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 3.707 | 2 | 1.853 | 2.002 | .137 |
| Within Groups | 274.890 | 297 | .926 | | |
| Total | 278.597 | 299 | | | |

Source:-Field survey Table 2.1

Table 3.2 shows that the ANOVA result had P value as .137 (F-value=2.002) which is less than 0.05 and it specify that the regression model is statistically significant and therefore the alternative hypothesis is accept. Here there is significant relationship existing between the variables tested in the hypothesis. Thus, it has been identified that the faced by the significant relationship between Types of underemployment.

3.1:Types of unemployment



Source:-Field survey

Figure 3.1 shows that In Thiruvananthapuram district, the type of underemployment is the highest in the of the number of discouraged workers and long-term job seekers. Ernakulam district has the highest number of types of underemployment in the second position belonging to the do not utilize their skills. Kozhikode district has the highest number of underemployment in the third place belonging to the do not utilize their skills in the invisible category.

4. Causes of underemployment

Engineers are being hired for positions classified as engineering roles on job wage; however they receive approximately Rs 10,000 monthly (Prajanna Das, 2020). These are legitimate industrial positions, not mere menial occupations, created through the complexities of informality and compensation structures within the sectors (Prajanna Das, 2020). This is not the conventional form of underemployment; rather, you are being regarded as a daily labourer (Prajanna Das, 2020). Technological advancements might augment labour demand by generating new employment opportunities directly linked to the emerging technology (Melline Somers et al., 2022). Moreover, technology-driven enhancements in productivity free up production resources, potentially elevating the need for workers in alternative jobs within the same firm or industry (Melline Somers et al., 2022).

The proliferation of ICT predominantly yields favourable employment outcomes for high-skill, non-routine, and service occupations (Melline Somers et al., 2022). Research on robotics frequently overlooks the synergy between robots and human labour in task execution (Melline Somers et al., 2022). Therefore, the employment-generating impact of robots is likely associated with the production, operation, and maintenance of such technology (Melline Somers et al., 2022). Research that utilises innovation as a metric for technology frequently contends that the employment effects are contingent upon the nature of the invention (Melline Somers et al., 2022). The employment increases have predominantly benefited non-production, high-skill, and service occupations (Melline Somers et al., 2022). These studies are frequently associated with ideas positing that technical change induces structural transformation, resulting in the reallocation of economic activity along the supply chain from primary sectors to progressively processed industries and services (Melline Somers et al., 2022). This premise was contested during the recovery following the Great Recession, as policymakers observed that a significant portion of the first decline in unemployment was attributable to a perplexing decrease in labour force participation (Christiano, J., et al., 2021). Occasionally, technology supplants the role of a worker who would have formerly occupied a position that has now been automated (CFI). Vending machines have supplanted certain restaurant personnel and cashiers, while ATMs have displaced some bank tellers (CFI).

A primary cause of underemployment is the prevailing business cycle of the economy (CFI). During a recession or economic downturn, it is improbable that organisations will be recruiting for several full-time roles (CFI). Underemployment arises when the supply of labour exceeds its demand (CFI). Several factors may include an escalation in population growth or a reduction in product demand (CFI). When specific industries cease to require labour, individuals possessing relevant talents may be compelled to choose low-wage employment that inadequately utilises their competencies (CFI). The contraction of the coal industry has compelled numerous former mining workers to seek employment in alternative sectors (CFI).

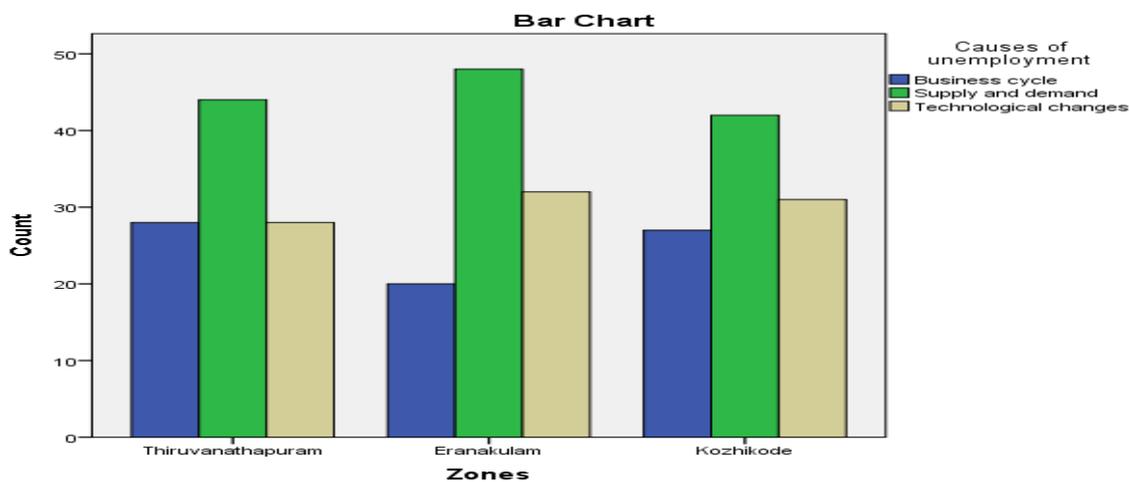
Causes of underemployment involve the business cycle, supply and demand and technological changes. It is divided in three zones such as Thiruvananthapuram, Ernakulam and Kozhikode in Kerala.

Table 4.1: Causes of underemployment

| Zones | | Causes of underemployment | | | Total |
|--------------------|------------------------------------|---------------------------|-------------------|-----------------------|--------|
| | | Business cycle | Supply and demand | Technological changes | |
| Thiruvananthapuram | Count | 28 | 44 | 28 | 100 |
| | % within Zones | 28.0% | 44.0% | 28.0% | 100.0% |
| | % within Causes of underemployment | 37.3% | 32.8% | 30.8% | 33.3% |
| | % of Total | 9.3% | 14.7% | 9.3% | 33.3% |
| Ernakulam | Count | 20 | 48 | 32 | 100 |
| | % within Zones | 20.0% | 48.0% | 32.0% | 100.0% |
| | % within Causes of underemployment | 26.7% | 35.8% | 35.2% | 33.3% |
| | % of Total | 6.7% | 16.0% | 10.7% | 33.3% |
| Kozhikode | Count | 27 | 42 | 31 | 100 |
| | % within Zones | 27.0% | 42.0% | 31.0% | 100.0% |
| | % within Causes of underemployment | 36.0% | 31.3% | 34.1% | 33.3% |
| | % of Total | 9.0% | 14.0% | 10.3% | 33.3% |
| Total | Count | 75 | 134 | 91 | 300 |
| | % within Zones | 25.0% | 44.7% | 30.3% | 100.0% |
| | % within Causes of underemployment | 100.0% | 100.0% | 100.0% | 100.0% |
| | % of Total | 25.0% | 44.7% | 30.3% | 100.0% |

Source:-Field survey

Table 4.1 shows that the causes of under employment involved that business cycle, technology changes, supply and demand. The first position is business cycle also occupied by Thiruvananthapuram district with 44%, Besides Ernakulam district's supply and demand category with 48%, and Kozhikode district with 42%. The fourth position has been secured by technological changes of Ernakulam district which is thirty two percent. Kozhikode district is at the fifth position with 31%. Thiruvananthapuram district has 28 percent business cycle, Ernakulam 20 percent and Kozhikode 27 percent. Technological changes in the district comprise 28 percent.

Figure 4.1: Causes of underemployment

Source:-Field survey

Figure 4.1 shows that the first position is business cycle also occupied by Thiruvananthapuram district Besides second position is Ernakulam district's supply and demand category, and the third position is Kozhikode district. The fourth position has been secured by technological changes of Ernakulam district. Kozhikode district is at the fifth position.

5. Effect of underemployment

Underemployment is a societal issue that impacts employment expansion, economic development, poverty rates, and the emotional and psychological well-being of the underemployed (CFI). When an individual is compelled to accept employment that does not align with their competencies, they generally earn a remuneration that is beneath their appropriate pay scale (CFI). Due to insufficient income, families are consuming fewer products and services than previously. A decline in demand results in sluggish company growth, steering the economy towards recession or depression, characterised by diminished Gross Domestic Product (GDP) and minimal to nonexistent job creation (CFI). Numerous families that once experienced a comfortable level of living are now facing financial difficulties (CFI). Underemployment results in people, who are no longer engaged in their preferred profession, being unable to enhance their abilities through practical experience. Some individuals develop competencies in several sectors, while others exit the labour market entirely (CFI). This occurrence is typically referred to as structural unemployment.

Underemployment may lead to detrimental mental health outcomes(CFI). The tension and worry stem from financial instability, resulting in a feeling of inadequacy. Partnerships may also deteriorate due to underemployment. Underemployment can significantly impact an individual's mental and emotional well-being (CFI). Effect of underemployment involves poverty levels, Structural unemployment and psychological problems. It is divided in three zones such as Thiruvananthapuram, Ernakulam and Kozhikode in Kerala.

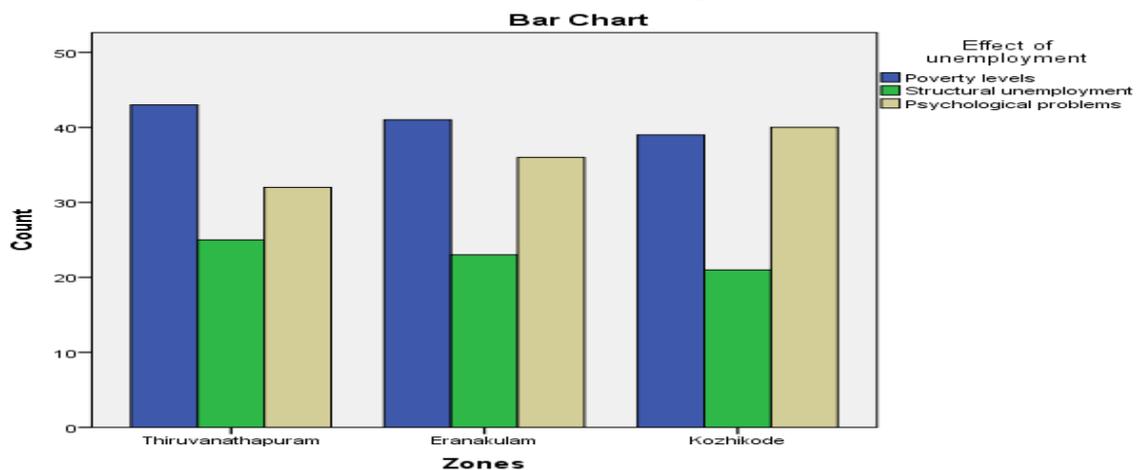
Table 5.1: Effect of underemployment (Crosstabulation)

| Zones | | Effect of underemployment | | | Total |
|--------------------|------------------------------------|---------------------------|-------------------------|------------------------|--------|
| | | Poverty levels | Structural unemployment | Psychological problems | |
| Thiruvananthapuram | Count | 43 | 25 | 32 | 100 |
| | % within Zones | 43.0% | 25.0% | 32.0% | 100.0% |
| | % within Effect of underemployment | 35.0% | 36.2% | 29.6% | 33.3% |
| | % of Total | 14.3% | 8.3% | 10.7% | 33.3% |
| Ernakulam | Count | 41 | 23 | 36 | 100 |
| | % within Zones | 41.0% | 23.0% | 36.0% | 100.0% |
| | % within Effect of underemployment | 33.3% | 33.3% | 33.3% | 33.3% |
| | % of Total | 13.7% | 7.7% | 12.0% | 33.3% |
| Kozhikode | Count | 39 | 21 | 40 | 100 |
| | % within Zones | 39.0% | 21.0% | 40.0% | 100.0% |
| | % within Effect of underemployment | 31.7% | 30.4% | 37.0% | 33.3% |
| | % of Total | 13.0% | 7.0% | 13.3% | 33.3% |
| Total | Count | 123 | 69 | 108 | 300 |
| | % within Zones | 41.0% | 23.0% | 36.0% | 100.0% |
| | % within Effect of underemployment | 100.0% | 100.0% | 100.0% | 100.0% |
| | % of Total | 41.0% | 23.0% | 36.0% | 100.0% |

Source:-Field survey Table 4.1

Table 5.1 shows that the effect of underemployment involved poverty levels, structural unemployment and psychological problems. Thiruvananthapuram district has 43 percent poverty levels in first place, Ernakulam district has 41 percent in second place, Kozhikode district has 40 percent in psychological problems in third place and 39 percent in fourth place in poverty levels. The structural unemployment of Thiruvananthapuram district is 25 percent and 23 percent and Kozhikode is 21 percent. Psychological problem is 32% in Thiruvananthapuram district and 36% in Ernakulam district.

Figure 5.1: Effect of underemployment



Source:-Field survey,

Figure 5.1 shows that the Thiruvananthapuram district has 43 percent poverty levels in first place, Ernakulam district has 41 percent in second place, Kozhikode district has 40 percent in psychological problems in third place and 39 percent in fourth place in poverty levels.

VII. Findings

1. It has been identified that the faced by the significant relationship between Types of underemployment.
2. In Thiruvananthapuram district, the type of underemployment is the highest, with 48 percent of the number of discouraged workers and long-term job seekers. Ernakulam district has the highest number of types of underemployment in the second position with 41 percent belonging to the do not utilize their skills in the invisible category. Kozhikode district has the highest number of underemployment in the third place with 38 percent belonging to the do not utilize their skills in the invisible category.

3. The causes of under employment involved that business cycle, technology changes, supply and demand. The first position is business cycle also occupied by Thiruvananthapuram district with 44%, Besides Ernakulam district's supply and demand category with 48%, and Kozhikode district with 42%.
4. The effect of underemployment involved poverty levels, structural unemployment and psychological problems. Thiruvananthapuram district has 43 percent poverty levels in first place, Ernakulam district has 41 percent in second place, Kozhikode district has 40 percent in psychological problems in third place and 39 percent in fourth place in poverty levels.

VIII. Suggestions

1. To Provide employment based on educational qualification merit while making appointments to government services and private institutions.
2. Take away or to avoid the difference in supply and demand in Kerala.
3. Candidates need to gain more knowledge about the technological changes in the employment sector in Kerala.

XI. Conclusion

The underemployment trends are such that the quality of the employment sector of Kerala is being lowered. It is clear from here that there are very few job sectors that Kerala puts forward before the world. Today, Kerala has a situation where people with higher educational qualifications are forced to work in low-paid occupations as job sectors are not created in line with the new educational system. Young people in the labour force often encounter higher rates of underemployment due to job transitions and fluctuations in labour force participation. Numerous public policies may inhibit job growth, including elevated minimum wage, substantial unemployment benefits, and a little opportunity cost related to employee termination. Employment serves as the principal source of income for individuals and, consequently, is a catalyst for economic growth. It is seen as a lagging economic indicator. Elevated underemployment indicates a diminished GDP and reduced labour demand.

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