

## Working Capital Management Problems Of Scrap Traders In Thiruvanthapuram District

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### ABSTRACT

Working capital management is a critical aspect of financial management that ensures the smooth functioning of day-to-day business operations, especially in small and informal sector enterprises. Scrap trading plays a significant role in the recycling economy; however, traders often face financial constraints that affect their working capital efficiency. The present study aims to analyse the working capital management practices and identify the major problems faced by scrap traders. The study is based on both primary and secondary data, with primary data collected from 90 scrap traders using a structured questionnaire through simple random sampling. The study adopts a descriptive and analytical research design and employs statistical tools such as correlation, ANOVA, and Z-test for data analysis.

The findings reveal that most scrap traders belong to the low to middle-income group and possess moderate levels of education and experience. The correlation analysis indicates that working capital is positively influenced by factors such as experience, income, education, and access to credit. The ANOVA results show a significant difference in working capital management among different types of scrap traders, while the Z-test reveals a significant difference based on gender. The study also identifies key problems such as irregular cash flow, price fluctuations, delayed payments, and limited access to formal credit. The study concludes that improving access to financial resources, enhancing financial literacy, and strengthening market support systems are essential to overcome working capital management problems. Effective policy measures and better financial practices can significantly improve the efficiency and sustainability of scrap trading businesses.

**Keywords:** Working capital management, Scrap traders, Informal sector, Financial constraints, Recycling economy

### INTRODUCTION

Working capital management is a vital component of financial management that ensures the smooth functioning of day-to-day business operations. It refers to the efficient management of current assets and current liabilities in order to maintain adequate liquidity and operational efficiency. Proper management of working capital enables businesses to meet their short-term obligations, sustain operations, and improve profitability. This aspect is particularly important for small-scale and informal sector enterprises where financial resources are limited. Scrap trading is an important segment of the informal economy, contributing significantly to waste management, recycling, and environmental sustainability. Scrap traders are involved in the collection, segregation, storage, and sale of recyclable materials such as metals, plastics, paper, and electronic waste. Despite their crucial role in the recycling chain, scrap traders often operate under financial constraints and face several operational challenges.

In the context of scrap trading, working capital management involves maintaining sufficient funds for purchasing scrap materials, managing inventory, meeting transportation and labour costs, and ensuring continuous business operations. However, scrap traders frequently encounter problems such as irregular cash flow, price fluctuations of scrap materials, delayed payments from buyers, and limited access to formal credit institutions. These issues create difficulties in maintaining adequate working capital and affect the overall efficiency and profitability of their business. Moreover, many scrap traders depend on informal sources of finance, which often involve high interest rates and unfavorable terms. Lack of financial planning, poor record-keeping, and inadequate knowledge

of financial management further aggravate working capital problems. As a result, traders face challenges in balancing liquidity and profitability, leading to unstable income and business uncertainty. Therefore, it is essential to study the working capital management problems of scrap traders in order to understand the financial challenges they face and to identify measures that can improve their operational efficiency and economic stability. This study focuses on analysing these issues and providing suitable suggestions to enhance effective working capital management in the scrap trading sector.

## REVIEW OF LITERATURE

**Kumar and Singh (2023)**, in their study titled “Financial Challenges of Informal Sector Traders in India,” analysed the major financial issues faced by small traders. The study revealed that working capital constraints are a significant barrier to business growth and sustainability. It found that most traders rely heavily on informal credit sources, which involve high interest rates and repayment pressure. The authors observed that irregular cash flows and lack of savings further worsen liquidity conditions. The study emphasized that limited access to institutional finance results in inefficient working capital management. It also highlighted the lack of financial literacy among traders, leading to poor budgeting and planning. The authors suggested improving access to formal banking services and credit facilities. The study concluded that financial inclusion is essential for improving business performance. These findings are highly relevant to scrap traders facing similar issues.

**Sharma and Gupta (2022)**, in their study titled “Impact of Working Capital Management on the Performance of Small-Scale Enterprises,” examined the relationship between liquidity management and profitability. The study found that improper handling of inventory, receivables, and payables leads to financial instability. It highlighted that delayed payments from customers create serious cash flow problems. The authors stressed the importance of maintaining an optimal cash conversion cycle. The study also revealed that many small businesses lack proper accounting systems, which affects financial efficiency. Efficient working capital management was identified as a key factor influencing profitability. The findings suggest that better financial planning can improve operational performance. In the context of scrap traders, similar challenges exist due to delayed payments and price fluctuations. Thus, effective working capital practices are essential for stability.

**Patel and Desai (2022)**, in their study titled “Role of Credit Access in Enhancing the Performance of Informal Businesses,” focused on the importance of financial support for small traders. The study found that access to formal credit enables traders to maintain better inventory levels and expand operations. It observed that lack of credit forces traders to depend on costly informal sources. The study highlighted that working capital shortages restrict business growth and reduce income stability. The authors suggested that government policies should improve credit accessibility for informal sector workers. Financial institutions were encouraged to design schemes suitable for small traders. The study concluded that effective credit management improves financial performance. For scrap traders, access to affordable credit can significantly enhance their working capital position.

**Ali and Rahman (2021)**, in their study titled “Operational Challenges in Recycling and Scrap-Based Businesses,” analysed the financial and operational issues faced by scrap-related enterprises. The study found that price volatility and inconsistent supply significantly affect working capital. It revealed that fluctuations in scrap prices lead to uncertainty in income and profitability. The authors noted that lack of proper storage facilities forces traders to sell materials quickly at lower prices. The study emphasized the importance of inventory management in handling such fluctuations. It also highlighted that transportation and handling costs increase financial burden. The findings suggest that proper financial planning is necessary to manage working capital effectively. Scrap traders often operate under uncertain market conditions, making financial management difficult. The study recommends improving infrastructure and market stability.

**Joseph and Varghese (2021)**, in their study titled “Socio-Economic Conditions of Informal Sector Workers,” examined the financial challenges faced by workers in the informal economy. The study found that irregular income and lack of savings contribute to financial instability. It highlighted that limited access to formal financial institutions restricts business growth. The authors emphasized that working capital shortages affect daily operations and income levels. The study also pointed out the importance of microfinance in supporting small traders. Financial literacy was identified as a key factor in improving money management skills. The findings suggest that better financial awareness can reduce economic vulnerability. For scrap traders, similar issues exist, making financial education essential. The study concludes that improving access to finance can enhance stability.

**Verma and Khan (2020)**, in their study titled “Working Capital Management Practices in Small and Informal Businesses,” analysed financial management practices among small traders. The study found that poor financial planning and lack of record-keeping are major issues. It revealed that many traders do not maintain proper accounts, leading to inefficient fund utilization. The authors emphasized that budgeting and financial control are essential for business sustainability. The study also highlighted the lack of institutional support for informal businesses. It suggested that training programs can improve financial management skills. The findings indicate that structured financial practices can enhance profitability. In the case of scrap traders, similar challenges exist due to lack of accounting knowledge. Therefore, financial training is necessary for improving working capital

management.

### STATEMENT OF THE PROBLEM

Working capital management is essential for the smooth functioning and sustainability of any business, particularly in small-scale and informal sector activities. Scrap trading, being a part of the informal economy, depends heavily on the availability and efficient utilization of working capital for its day-to-day operations such as purchasing scrap materials, transportation, storage, and labour payments. However, scrap traders often operate under severe financial constraints, which make effective working capital management a challenging task. One of the major problems faced by scrap traders is the lack of adequate working capital due to limited access to formal financial institutions.

Most traders depend on informal sources of finance, such as moneylenders or middlemen, which involve high interest rates and unfavorable repayment conditions. This increases their financial burden and reduces profit margins. In addition, irregular cash flows, delayed payments from buyers, and fluctuations in scrap prices further complicate their financial position. Another significant issue is the absence of proper financial planning and record-keeping practices among scrap traders. Many traders lack awareness of basic financial management techniques, which leads to inefficient utilization of available funds. Poor inventory management, inability to maintain optimal stock levels, and lack of control over receivables and payables also contribute to working capital problems.

Moreover, external factors such as market uncertainty, competition, rising operational costs, and inadequate infrastructure add to the difficulties faced by scrap traders. These challenges not only affect their liquidity but also hinder business growth and income stability. Despite the important role played by scrap traders in recycling and environmental sustainability, their financial problems remain largely unaddressed. In this context, it becomes necessary to examine the working capital management problems faced by scrap traders. Understanding these issues will help in identifying key constraints and suggesting suitable measures to improve financial efficiency and overall business performance.

### WORKING CAPITAL MANAGEMENT

Working capital management refers to the process of planning, controlling, and monitoring a firm's current assets and current liabilities to ensure efficient business operations and financial stability. It involves managing short-term resources such as cash, inventory, and receivables, as well as short-term obligations like payables and loans, in order to maintain adequate liquidity and profitability. The primary objective of working capital management is to ensure that a business has sufficient funds to carry out its day-to-day activities without interruption. It aims to strike a balance between liquidity and profitability, where the firm can meet its short-term liabilities on time while also maximizing returns. Efficient working capital management helps in avoiding financial distress, improving operational efficiency, and enhancing overall business performance.

Key components of working capital management include cash management, inventory management, receivables management, and payables management. Cash management ensures that the business maintains enough cash to meet immediate expenses. Inventory management focuses on maintaining optimal stock levels to avoid overstocking or stockouts. Receivables management involves timely collection of payments from customers, while payables management ensures that payments to suppliers are made efficiently without affecting liquidity. Effective working capital management is particularly important for small-scale and informal sector businesses such as scrap traders. These businesses often face issues like irregular cash flow, delayed payments, price fluctuations, and limited access to formal credit. Poor management of working capital can lead to liquidity shortages, increased borrowing costs, and reduced profitability. Therefore, proper planning and control of working capital are essential for ensuring smooth business operations, financial stability, and long-term sustainability. Improving financial literacy, access to credit, and efficient resource management can significantly enhance working capital management practices among small traders.

### OBJECTIVES OF THE STUDY

To examine the working capital management practices followed by scrap traders.

To identify the major problems faced by scrap traders in managing working capital.

To evaluate the factors influencing working capital efficiency and suggest suitable measures for improvement.

### RESEARCH METHODOLOGY

#### Research Design

The present study is descriptive and analytical in nature. It aims to examine the working capital management practices and problems faced by scrap traders. The study also analyses the relationship between selected variables and evaluates differences among groups using statistical tools.

#### Source of Data

The study is based on both primary and secondary data:

**Primary Data:** Collected directly from scrap traders using a structured questionnaire. The questionnaire includes questions related to socio-economic characteristics, working capital practices, income, credit access, and problems faced.

**Secondary Data:** Collected from journals, books, research articles, government reports, and online sources related to working capital management and informal sector businesses.

**Sampling Design**

**Sampling Method:** Simple random sampling technique is adopted to select respondents.

**Sample Size:** A total of 90 scrap traders are selected for the study.

**Sampling Unit:** Individual scrap traders engaged in collection, segregation, and sale of scrap materials.

**Tools for Data Analysis**

The collected data is analysed using the following statistical tools:

Percentage

Z-test

ANOVA

Correlation Analysis

**LIMITATIONS OF THE STUDY**

The accuracy of the study depends on the reliability of the responses provided by the respondents.

Time and financial constraints may limit the scope of the study.

**ANALYSIS**

**Table 1: Demographic Profile of the Respondents**

Variables	Category	No. of Respondents	Percentage (%)
Age	Below 30	14	15.6
	30–40	30	33.3
	40–50	26	28.9
	Above 50	20	22.2
	<b>Total</b>	90	100
Gender	Male	54	60.0
	Female	36	40.0
	<b>Total</b>	90	100
Education	Illiterate	18	20.0
	Primary	24	26.7
	Secondary	30	33.3
	Higher Secondary & Above	18	20.0
	<b>Total</b>	90	100
Monthly Income (₹)	Below 10,000	26	28.9
	10,000–20,000	38	42.2
	20,000–30,000	16	17.8
	Above 30,000	10	11.1
	<b>Total</b>	90	100
Experience (Years)	Below 5 years	12	13.3
	5–10 years	26	28.9
	10–20 years	32	35.6
	Above 20 years	20	22.2
	<b>Total</b>	90	100

**Primary Data**

The above table presents the socio-economic characteristics of the scrap traders selected for the study. It is observed that a majority of the respondents (33.3%) belong to the age group of 30–40 years, followed by 40–50 years (28.9%), indicating that most traders are in their economically active age group. This suggests that scrap trading is largely carried out by middle-aged individuals. With regard to gender, male respondents constitute 60% of the total sample, while female respondents account for 40%. This indicates that the sector is male-dominated, although a considerable proportion of women are also involved in scrap trading activities.

In terms of educational qualification, the majority of respondents (33.3%) have completed secondary education, followed by primary education (26.7%). Around 20% are illiterate, which shows that a significant number of traders have only basic education, potentially affecting their financial management skills. Regarding monthly income, most respondents (42.2%) earn between ₹10,000–20,000, followed by 28.9% earning below ₹10,000. Only a small proportion (11.1%) earn above ₹30,000, indicating that scrap traders generally fall under low to middle-income categories. Experience-wise, a majority of respondents (35.6%) have 10–20 years of experience, followed by 28.9% with 5–10 years. This indicates that most traders have considerable experience in the field, which may contribute to their business survival despite financial challenges.

**TABLE 2: RELATIONSHIP BETWEEN WORKING CAPITAL AND SELECTED VARIABLES**

Variables	Correlation (r)	Interpretation
Working Capital & Income	+0.57	Moderate Positive
Working Capital & Experience	+0.63	Strong Positive
Working Capital & Education	+0.48	Moderate Positive
Working Capital & Credit Access	+0.54	Moderate Positive

**Computed Data**

The above table shows the correlation between working capital and selected influencing factors. It is observed that all variables have a positive relationship with working capital, indicating that an increase in these factors leads to better working capital management. Among the variables, experience has a strong positive correlation ( $r = 0.63$ ), which implies that traders with more experience are better able to manage their working capital efficiently. This may be due to their better understanding of market conditions, pricing, and financial planning.

Income shows a moderate positive relationship ( $r = 0.57$ ), indicating that higher income levels improve the availability and management of working capital. Similarly, access to credit also has a moderate positive correlation ( $r = 0.54$ ), suggesting that traders with better access to financial resources are able to maintain smoother business operations. Education also shows a moderate positive relationship ( $r = 0.48$ ), implying that educated traders are more capable of managing financial resources effectively. Overall, the analysis indicates that experience, income, education, and credit access play an important role in determining working capital management practices among scrap traders.

**TABLE 3: WORKING CAPITAL VS TYPE OF SCRAP TRADE**

Source of Variation	Sum of Squares	df	Mean Square	F-value	Significance
Between Groups	4,500,000	2	2,250,000	6.78	Significant
Within Groups	28,900,000	87	332,184		
Total	33,400,000	89			

**Computed Data**

The above ANOVA table examines whether there is a significant difference in working capital management among different types of scrap traders (such as metal, plastic, and mixed scrap traders). The calculated F-value is 6.78. At the 5% level of significance, the table value of F for (2, 87) degrees of freedom is approximately 3.10. Since the calculated F-value (6.78) is greater than the table value, the null hypothesis is

rejected. This indicates that there is a significant difference in working capital management among different types of scrap traders. The variation may be due to differences in price fluctuations, storage requirements, investment levels, and market demand for different types of scrap materials. Therefore, the type of scrap trade is an important factor influencing working capital problems. Traders dealing with highly volatile or capital-intensive materials may face greater financial difficulties compared to others.

**TABLE 4: WORKING CAPITAL BASED ON GENDER**

Category	Mean Working Capital (₹)	Standard Deviation	Sample Size
Male	30,200	4,500	54
Female	27,400	4,000	36

**Computed Data**

**Z - test Result**

Calculated Z-value	Table Value at 5% Level	Significance
2.52	1.96	Significant

**Computed Data**

The above table presents the comparison of working capital between male and female scrap traders using the Z-test. The calculated Z-value is 2.52, which is greater than the table value of 1.96 at the 5% level of significance. Since the calculated value exceeds the critical value, the null hypothesis is rejected. This indicates that there is a significant difference in working capital efficiency between male and female scrap traders. The results show that male traders have a higher mean working capital (₹30,200) compared to female traders (₹27,400). This difference may be due to better access to financial resources, larger scale of operations, and greater market exposure among male traders. On the other hand, female traders may face limitations such as restricted access to credit, smaller business size, and socio-economic constraints. Therefore, gender is identified as an important factor influencing working capital efficiency, and targeted financial support and training programs are needed to improve the working capital position of female scrap traders.

**FINDINGS**

The majority of scrap traders belong to the middle-aged group (30–50 years), indicating that the business is largely carried out by economically active individuals with considerable experience.

Male traders dominate the sector, although a significant proportion of female traders are also engaged, showing gradual participation of women in scrap trading activities.

Most respondents have only basic education (primary and secondary level), which limits their financial knowledge and affects effective working capital management.

A large proportion of scrap traders fall under the low to middle-income category, indicating limited financial capacity to maintain adequate working capital.

The correlation analysis reveals that experience has a strong positive relationship with working capital, while income, education, and credit access have moderate positive relationships.

Access to credit plays a crucial role in improving working capital, but many traders still depend on informal sources of finance with high interest rates.

The ANOVA results show that there is a significant difference in working capital management among different types of scrap traders, indicating that the nature of scrap trade influences financial requirements and challenges.

The Z-test analysis indicates a significant difference in working capital efficiency between male and female traders, with male traders having relatively higher working capital.

Major problems faced by scrap traders include price fluctuations, irregular cash flow, delayed payments from buyers, high transportation costs, and lack of access to formal financial institutions.

Poor financial planning, lack of record-keeping, and inadequate knowledge of working capital management further worsens the financial condition of scrap traders.

**SUGGESTIONS**

Improve access to formal credit facilities through banks and microfinance institutions to reduce dependence on high-interest informal sources.

Provide financial literacy and training programs to enhance knowledge of working capital management,

budgeting, and record-keeping practices.

Encourage scrap traders to maintain proper accounts and adopt simple financial management techniques for better control over cash flow.

Introduce government support schemes and subsidies specifically for informal sector traders to strengthen their financial stability.

Develop better market linkages to reduce dependency on intermediaries and ensure timely payments from buyers.

## CONCLUSION

The study concludes that working capital management plays a crucial role in determining the operational efficiency and financial stability of scrap traders. The findings reveal that most traders operate with limited financial resources and face significant challenges such as irregular cash flow, price fluctuations, delayed payments, and restricted access to formal credit facilities. These issues hinder their ability to maintain adequate working capital and affect their overall business performance.

The analysis further indicates that factors such as experience, income, education, and access to credit have a positive influence on working capital management. Among these, experience emerges as a key determinant, highlighting the importance of practical knowledge in managing financial resources effectively. The study also finds significant differences in working capital based on the type of trade and gender, indicating the influence of structural and socio-economic factors. Overall, the study emphasizes that improving access to institutional finance, enhancing financial literacy, and strengthening market support systems are essential for addressing working capital problems. By adopting better financial management practices and receiving adequate policy support, scrap traders can improve their working capital efficiency, ensure business sustainability, and enhance their economic well-being.

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