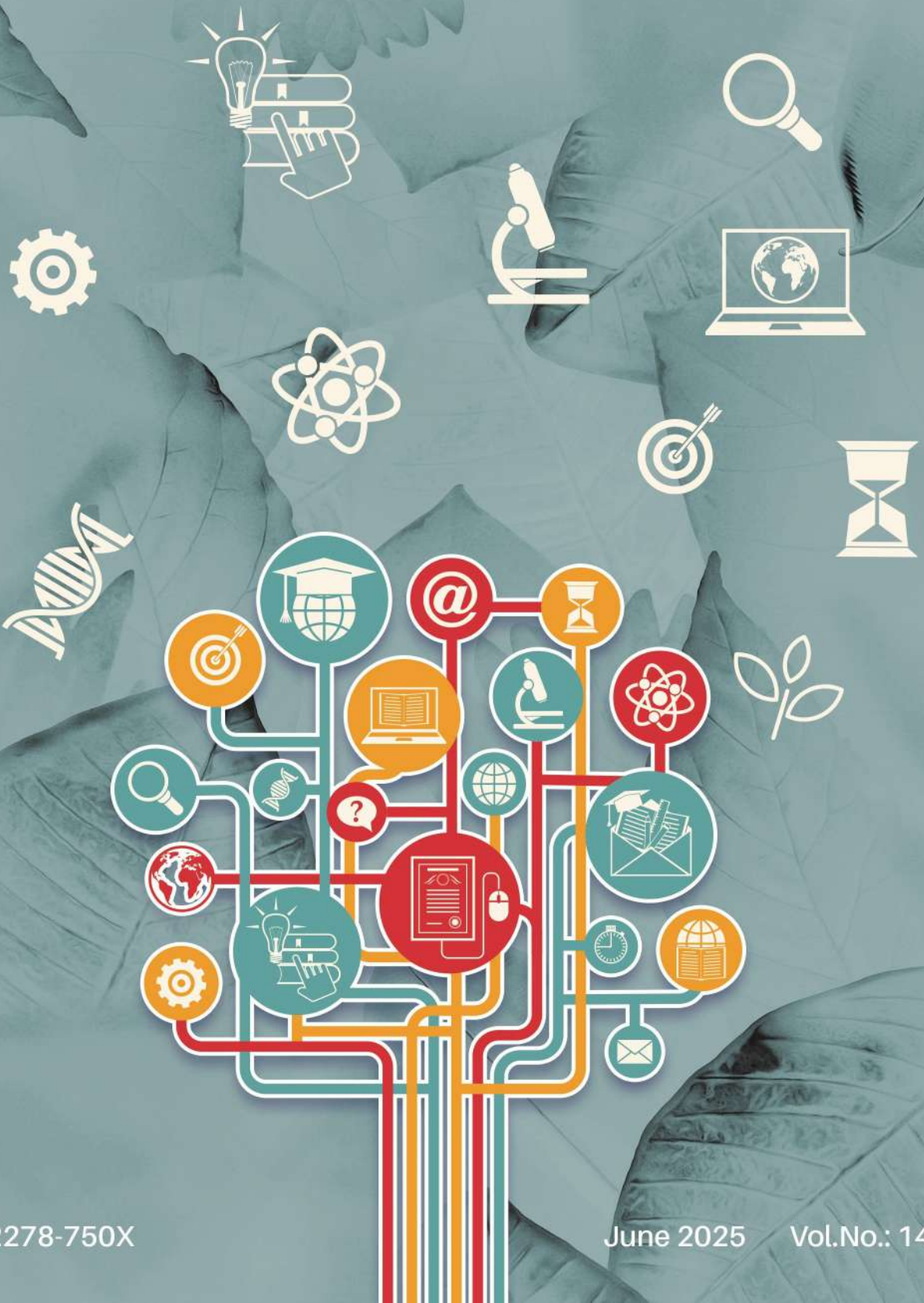




MERIDIAN

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Message from the Editor

It gives me immense pleasure to present the latest issue of *Meridian*, the biannual interdisciplinary research journal of MES Asmabi College, P. Vemballur. As a platform dedicated to fostering academic inquiry and intellectual exchange, *Meridian* continues to uphold its commitment to disseminating high-quality, peer-reviewed research across a wide spectrum of disciplines.

In this issue, we bring together thirteen insightful research papers representing diverse branches of knowledge, including literature, commerce, economics, politics and the life sciences. Each contribution reflects the depth and rigor of contemporary scholarship, underscoring the vibrancy of interdisciplinary engagement within and beyond our academic community. The authors have addressed themes of current relevance, offering fresh perspectives that enrich both theoretical understanding and practical applications.

I extend my heartfelt appreciation to all contributors for choosing *Meridian* as the home for their research. My sincere gratitude also goes to the reviewers and members of the editorial team for their meticulous effort in maintaining the scholarly standards of the journal. Their commitment ensures that every issue we publish stands as a testament to academic integrity and excellence.

We hope that this issue inspires further research, dialogue, and exploration among our readers. As always, we welcome constructive feedback and look forward to continued scholarly collaboration.

Dr. Sanand C Sadananda Kumar
Editor in Chief
Meridian
MES Asmabi College, P. Vemballur

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Sanand C Sadananda Kumar

A STUDY ON CONSUMER SATISFACTION TOWARDS E-COMMERCE PACKAGING IN THRISSUR, KERALA

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ABSTRACT

E-commerce has emerged as a crucial platform for improving consumer happiness. The development of technology has completely changed how businesses engage with the consumers. Consumers view E-commerce platforms more convenient as it resolves a lot of conventional problems, such as product availability, cost, door step delivery etc. Even though E-commerce resolves many conventional issues, the packaging quality plays a significant role in improving customer satisfaction. In addition to providing customers with a sense of security and protecting the goods from harm, e-commerce packaging also improves the unboxing experience, which may increase customer happiness and loyalty. Additionally, efficient packaging can reduce returns, guarantee regulatory compliance, and provide businesses a competitive edge. This paper provides an overview of the satisfaction level of consumers on E-commerce packaging. It examines the key factors contributing to customer satisfaction in E-commerce packaging including protection of the product, sustainability of packaging, packaging information and disposal of packaging materials. A structured questionnaire was employed to gather data from randomly selected hundred consumers in the area of Thrissur district. Spearman's rank correlation and logistic regression were used for the analysis. The analysis shows that the package protection and package information have statistically significant effect on the level of consumer satisfaction on E-commerce packaging.

Keywords: *E-commerce, Packaging, Consumer satisfaction, Package protection, Package information.*

INTRODUCTION

E-commerce refers to the purchase and sale of goods and services through online platforms. The concept of E-commerce emerged in the modern world following the development of telecommunication and information technologies. The major problems with traditional shopping are limited choices and working hours; geographical restrictions; comparatively higher cost etc. E-commerce is a solution to these problems to an extent and there exist an increasing competition in the E-commerce market wherein packaging plays a significant role. Protection is the primary function of packaging, while there are many other benefits as well. Opening a package marks the initial interaction with the product. There are several exploratory studies on various aspects of packaging and the consumer behaviors.

REVIEW OF LITERATURE

Jayakumar (2021) mentioned that online shopping is becoming more popular day by day with the increase in the usage of World Wide Web known as www. Understanding customer's need for online selling has become challenge for marketers. Specially understanding the consumer's attitudes towards online shopping, making improvement in the factors that influence consumers to shop online and working on factors that affect consumers to shop online will help marketers to gain the competitive edge over others.

Kyberneetes (2022) emphasized the need to analyze the connections between the level of satisfaction of E-commerce users and various factors of influence is justified by the fact that E-commerce is an area which has grown significantly in the last decade. Moreover, the beneficiaries of E-commerce are different in terms of behavior from one country to another, as well as in terms of profile. Statistics show that the number of E-commerce users is constantly growing in both Romania and Moldova, which means that marketing managers must be very attentive to the individual and group needs of consumers and to specific stimuli that can improve overall satisfaction of customers.

The study by Aditi Sharma and Mamta (2025) shows that service quality, website usability, product quality, pricing, trust, and post-purchase services are the major drivers of customer satisfaction. Efficient logistics and responsive customer support must be enhanced to improve service quality in the E-commerce platform.

SIGNIFICANCE OF STUDY

The rapid expansion of e-commerce platforms has led packaging to evolve beyond a mere protective covering, becoming a key factor in shaping the consumer's overall shopping experience. This study helps to assess consumer expectations regarding packaging quality, sustainability, design, convenience, and safety of delivered products. The findings will provide valuable insights for E-commerce companies, logistics providers, and packaging designers to improve packaging practices that enhance customer satisfaction and brand loyalty. Moreover, it will also highlight local consumer preferences and concerns—such as eco-friendliness and waste management—thereby helping businesses in adopt more sustainable and customer-centric packaging strategies.

SCOPE OF THE STUDY

The study focuses on analyzing the perceptions and satisfaction levels of customers regarding the packaging of products purchased through various E-commerce platforms. The study is limited to the geographical area of Thrissur district and considers a sample size of 100 randomly selected consumers. It aims to evaluate key factors such as packaging quality, safety, design, eco-friendliness, ease of handling, and information labeling.

OBJECTIVES OF THE STUDY

- To identify the key factors influencing consumer satisfaction on E-commerce packaging.
- To examine the relationship between packaging quality and consumers repurchase intentions in online shopping.
- To understand the package disposing practices of consumers

MATERIALES AND METHODS

Sample of 100 consumers who use E-commerce apps were selected using a random sampling method. Data were collected using primary and secondary sources. Primary data were collected using the questionnaire mode. Secondary sources include published journals, magazines, books and from various websites. The data collected were suitably classified and analysed keeping in view the objectives of the study. The analysis has been done with statistical tools like percentages and

logistic regression, Spearman's rank correlation were used.

RESULTS AND DISCUSSION

Demographic profile of the respondents

Table 1: Gender of the respondents.

Gender	Freq.	Percent
Female	52	52.00
Male	48	48.00
Total	100	100.00

Source: Primary data

The above table shows the gender composition of the sample. 52% of the sample comprises of female respondents and 48% are men.

Table 2: Age of the respondents

Age	Freq.	Percent
0-20	14	14.00
20-30	27	27.00
30-40	32	32.00
40-50	22	22.00
Above 50	5	5.00
Total	100	100.00

Source: Primary data

The above table depicts that 32% of the respondents fall between the age group of 30-40 years ,27% falls under 20-30 age group and 22% falls under 40-50.

DATA ANALYSIS

The relationship between consumer satisfaction and repurchase decision.

H0 :There is no significant relationship between consumer satisfaction level with the overall packaging of E-commerce products and repurchasing decision from the same platform

H1 :There is significant relationship between consumer satisfaction level with the overall packaging of E-commerce products and repurchasing decision from the same platform

Table 3: Showing relationship between customer satisfaction and repurchase decision

Satisfaction Level	Repurchase decision					Total
	Agree	Disagree	Neutral	Strongly Disagree	Strongly agree	
ExtremelyDissatisfied	0	0	0	0	0	0
Dissatisfied	1	1	0	0	0	2
Neutral	4	2	14	0	1	21
Satisfied	35	1	17	2	14	69
Very satisfied	3	0	1	0	4	8
Total	43	4	32	2	19	100

Respondents were asked to indicate their level of satisfaction on e-commerce packaging and their decision to repurchase the product using a five-point Likert scale. The Spearman's rank-order correlation was conducted to examine the relationship between the satisfaction level and repurchase decision. The results show a moderate positive, and statistically significant association between satisfaction level and repurchasing decision with $\rho = 0.4176$, and $p < 0.001$ which indicates that participants who reported higher satisfaction with packaging quality were more likely to indicate a willingness to repurchase. Thus, the null hypothesis is rejected.

The factors influencing the level of consumer satisfaction on E-commerce packaging.

Hypothesis testing

H0: There is no statistically significant relationship between package protection, Package information and Eco-friendly packaging and the consumer satisfaction on E-commerce packaging

H1: There is a statistically significant relationship between package protection, Package information and Eco-friendly packaging and the consumer satisfaction on E-commerce packaging

Table 4: Showing relationship between package protection, Package information and Eco-friendly packaging and the consumer satisfaction on E-commerce packaging

Variable		Coefficient (Std. err)
Dependent Variable		
Package Protection (Variable A)	Disagree	33.79 (10.15)
	Neutral	52.18*** (11.48)
	Agree	53.14*** (11.49)
	Strongly agree	54.37*** (11.52)
Package Information (Variable B)	Neutral	1.725 (1.44)
	Satisfied	3.37** (1.46)
	Very satisfied	4.40** (1.87)
Eco Friendly packaging (Variable C)	Neutral	7.60 (11.39)
	Important	6.36 (11.30)
	Very Important	6.64 (11.30)
Control Variable		
Age		.006
Gender	Male	-88.52
R2 = 0.303		

Note: ***P > |z| is less than 0.01 **P > |z| is less than 0.05 *P > |z| is less than 0.1

The results shows that package protection is one of key factors that influence the level of consumer satisfaction of E-commerce packaging. The people who opine the packaging provides adequate protection of the product are highly satisfies with the packaging showing a positive and statistically significant coefficient($p < 0.001$). This indicates that as consumers perceive packaging to be more protective the likelihood of reporting a higher satisfaction level increase. Package information show statistically significant positive effects ($p < 0.05$), suggesting that more detailed, clear and useful information on the packaging enhances consumer satisfaction. The third factor considered was the eco-friendly packaging which does not show a statistically significant relationship($p > 0.05$). Therefore, the hypothesis is partially supported. The Eco friendliness of the packaging has no effect on level of satisfaction indicates consumers among the sample are least bothered about the environment.

Table 5: Disposal of E-commerce package

Dispose methods	Freq.	Percent	Cum.
Recycle	16	16.00	16.00
Reuse	20	20.00	36.00
Throwaway	64	64.00	100.00
Total	100	100.00	

Source: Primary data

The above table shows that majority of the respondents 64% throwaway the package materials, 20% of respondents reuse it and 16% of consumers recycle it. The major share of the sample throws away the packaging indicate that people are not bothered about the sustainable and eco-friendly packaging practices.

52% of the respondents in the study were female and 48% were males. 32% of the respondents fall between the age group of 30-40 years, 27% of respondents fall between 20-30 and 22% of respondents fall between 0-20 years. The study reveals that that majority of the respondents 64% throwaway the package materials, 20% of respondents reuse it and 16% of consumers recycle it.

The level of consumer satisfaction and repurchase decision shows a moderate correlation with rho of 0.4176 with statistically strong significance. While considering the factors influencing the level of satisfaction of E-commerce packaging, the major factors identified were the package protection and package information. The insignificant relation between the sustainable packaging and level of satisfaction shows an alarming situation where policy makers should immediately initiate steps to make people aware about the need of sustainable packaging.

CONCLUSION

The study was conducted to know the factors influencing and consumer satisfaction level of consumers regarding E-commerce packaging. The study reveals that consumers who reported higher satisfaction with package quality were also more likely to indicate a willingness to repurchase. Package protection and package information is the important factor for customer satisfaction. There should be policy level intervention to inculcate the use of sustainable packaging products. The E-commerce companies can also provide a special discount for sending the packaging back for re using and can induce people to reuse and recycle the packaging.

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EFFECTS OF SOFT DRINKS AND MAGGI NOODLE MASALA ON MITOSIS IN ALLIUM CEPA L. ROOT TIPS

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ABSTRACT

In the present research work, the effects of various soft drinks on the mitotic division in the root tips of onion (*Allium cepa* L.) were studied. The onion bulbs were allowed to germinate in soil and after germination, the roots were treated with various soft drinks (RICHYAA, COCA COLA, PEPSI, SPRITE and 7 UP) and maggi masala solution for 1 hour. After one hour, the root tips were used for the mitotic studies. Untreated root tips served as control. From the results, it was clear that the different soft drinks significantly reduced the rate of cell division and caused many chromosomal aberrations. COCA COLA treated root tips showed numerous interphase lesions and cells failed to proceed to actual mitotic divisions. In other treatments, the cells proceed to prophase, but single and double nuclear lesions observed clearly in the cells. Similarly, the maggi masala treated root tips also showed prophase lesions. Thus from the results it can be concluded that, the widely used soft drinks and maggi masala imparted severe chromosomal aberrations in root cells, which can lead to mutagenic effects.

Keywords: *Allium cepa*, Chromosomal aberrations, Mitosis, Soft drinks

INTRODUCTION

Soft drinks are non-alcoholic water based flavoured beverages that may be sweetened, acidified, or carbonated, and can include fruit juice or added salts. Their flavor can come from plant extracts or various aromatic ingredients. They offer virtually none of the essential nutrients and are sweetened with sugar, high fructose corn syrup, fruit juice a sugar substitute or some combination of these. Soft drinks flavours came from artificial or natural flavours. Acids like citric and phosphoric acid contribute a sour flavour and also function as preservatives. Colouring agents might also be added. The British Soft Drinks Association Annual Report (2016) indicates that soft-drink consumption in the UK rose slightly—by 0.2%—between 2010 and 2015. In 2015, consumers drank 13.3 billion litres, compared with 13.2 billion litres in 2010, with no- or low-calorie beverages (0–20 kcal per 100 ml) accounting for 58% of total intake.

Some soft drinks have been linked to negative impacts on both dental and overall health, particularly among children and adolescents. In response, manufacturers and government bodies have undertaken various measures to lessen the health risks associated with sugar-sweetened beverages. These initiatives include prohibiting soft-drink sales in schools, limiting advertising, reformulating products, and imposing taxes on sugary drinks.

Similarly, the noodles are very popular now adays among children and youngsters. This is mainly due to the easy preparation method of noodles. But these noodles used along with the masala supplied along with the noodles. This masala contains many food preservatives and there are several reports on the side effects of consuming noodles excessively. Eating noodles every day, especially instant noodles, can lead to several negative health effects including: high blood

pressure due to high sodium content, weight gain from excessive calories, nutrient deficiencies due to low fiber and protein, digestive issues like bloating and constipation, increased risk of heart disease, and potential metabolic disruptions derived from processed carbs and harmful fats.

There are many reports on the effects of soft drinks on human health. But research work related to the influence of these soft drinks and noodle masala on cell division is less. This project work discusses the effects of five common soft drinks and noodle masala (maggi) on mitosis of onion root tips.

MATERIALS AND METHODS

MATERIALS

Plant material

Onion (*Allium cepa* L.)

Soft drinks

Commonly used soft drinks-RICHIYAA, COCA COLA, PEPSI, SPRITE and 7 UP

Noodle Masala

Maggi noodle masala

Chemicals

1. Modified Carnoy's fluid
(1 acetic acid:2 alcohol)
2. 70% Alcohol
3. 1N HCl
4. 2% Acetocarmine

METHODS

Incubation of *Allium cepa* bulbils in the Petri dishes for cytological studies

Allium cepa Assay

Onion bulbils (*Allium cepa* L., $2n=16$) of average size were allowed to germinate in soil. After 48 hours, the bulbils were taken out and washed in distilled water to remove the soil. Then the roots of onion bulbils were treated with different soft drinks and maggi masala solution for 1 hour in small glass bottles. Onion bulbils in distilled water was used as control. After 1 hour, the root tips were cut and fixed in modified Carnoy's fluid for 1 hour. After the fixations, the roots were taken out and washed in distilled water and then stored in 70% alcohol. For the cytological studies, the stored root tips were washed with distilled water to remove the alcohol and it was then treated with 0.1 N HCl for the cell separation. After this, the root

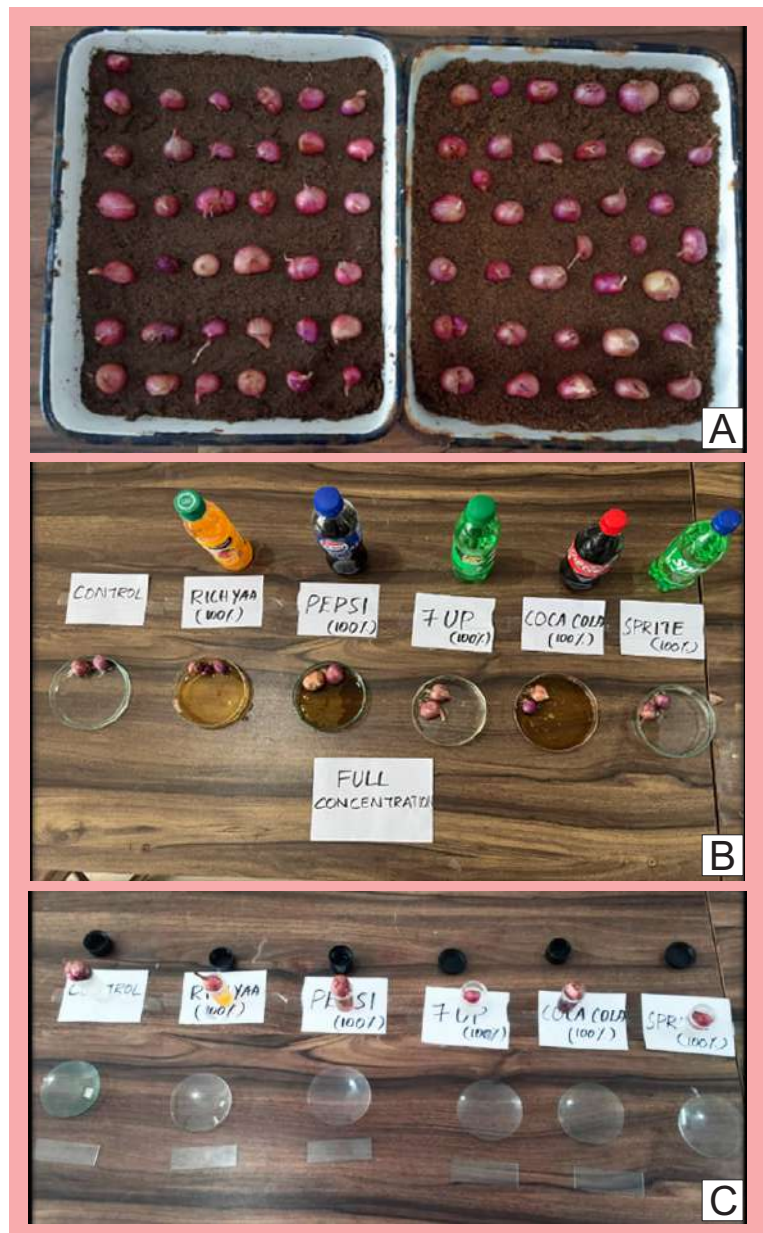


Fig. 1: Experimental set - Germination of onion bulbils in soil (A), Treatment of onion bulbils in Petri dishes and glass bottles (B, C).

tips again washed in distilled water and the extreme tip of roots with high mitotic activity was placed on glass slide, treated with 2% acetocarmine stain and coverslip was placed over the root tips and gently warmed and smear preparation was done by gently squashing the root tips. The smear was observed under compound microscope (LABOMED) (Fig. 1).

RESULTS

Cytological studies

In the control root tips normal cell division was observed. The mitotic stages like, prophase, metaphase and anaphase were observed in the cells of control. The number of cells undergoing cell division was also found to be high (Fig. 2 A&B). But in the treated root tips, the number of dividing cells was very less and most of the cells failed to proceed to metaphase itself. Among the different treatments, Coca cola showed highest mitotic aberrations, where, the cell division was arrested and

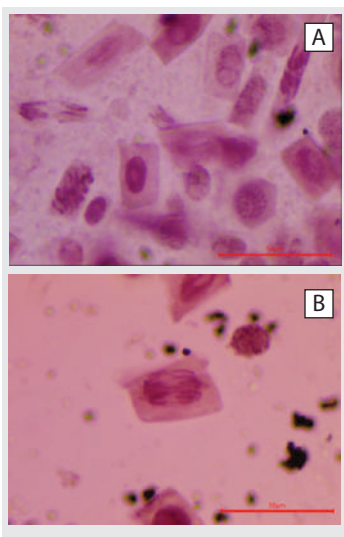


Fig. 2: Control – Mitotic stages- Prophase, Metaphase and Anaphase (A), Anaphase (B)

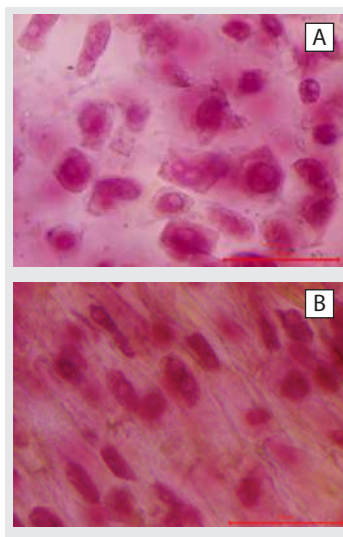


Fig. 3: Coca cola – Interphase lesions (A, B)

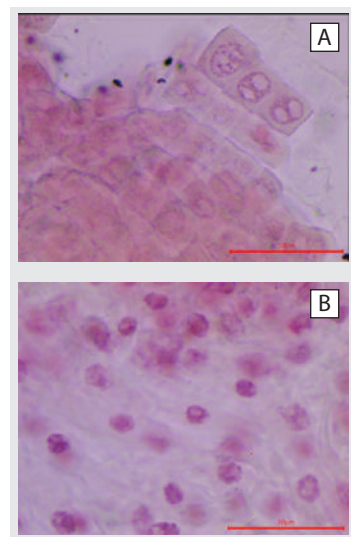


Fig. 4: 7UP – Prophase lesions (A, B)

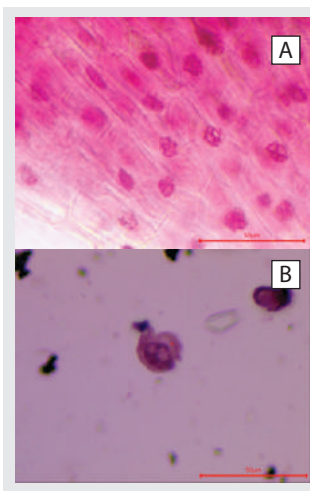


Fig. 5: Pepsi – Prophase lesions (A, B)

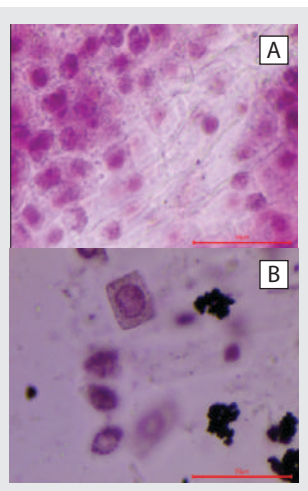


Fig. 6: Sprite – Sticky Anaphase (A), Prophase lesions (B)

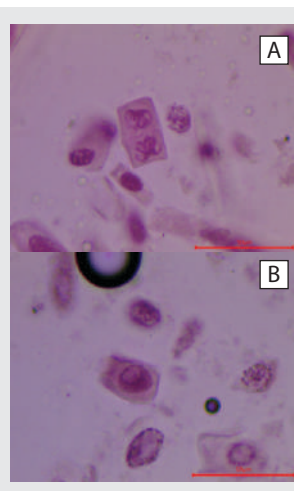


Fig. 7: Richyaa – Interphase (A), Prophase lesions (B)

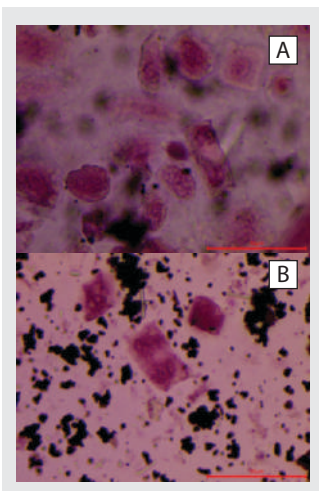


Fig. 8: Maggi Masala- Prophase lesions (A), Anaphase bridge (B)

in the interphase itself, nuclear lesions and chromosomal disintegration was observed (Fig. 3 A&B). In all other treatments prophase lesions were observed (Fig. 4 to 7). The least effect was observed in the sprite treated roots, where the cell entered the anaphase, but the anaphase was sticky due to the destruction of spindle fibers (Fig. 6A). The maggi masala treated root tips also showed several prophase lesions and anaphase bridges (Fig. 8 A&B).

DISCUSSION

Soft drink consumption has risen sharply over the past few decades, with the most significant growth seen in children and teenagers. Frequent intake of sugar-rich and acidic soft drinks—both regular and diet—can negatively affect dental and overall health, contributing to issues such as tooth decay, dental erosion, weight gain, obesity, and a higher likelihood of developing type 2 diabetes. Due to these detrimental effects of soft drinks on human health, the current project work is an attempt to investigate whether these so called soft drinks has harmful or beneficial effects on cytology of plants.

From the results of the project work, it was clear that all the soft drinks as well as maggi masala imparted negative effects on the cell division in onion root tips. Chandraker et al (2014) and Kayraldiz et al. (2001) studied the cytogenetic effects of different chemicals on root tip cells of *Allium cepa* L. Their studies showed that as the concentration of chemicals increased, cytotoxic effects and abnormalities in mitosis increased, which again indicate that these chemicals had negative impact on *Allium cepa* L. The inhibition of cell division, especially in the coca cola treated onion root tips may be due to the prevention of DNA synthesis during interphase and holding the cell from interphase. In other treatments, prophase lesions were observed, which may be due to the disintegration of chromosomes by the soft drinks. The metaphase and anaphase stages were not observed in the treated root tips, except in sprite treatment which again implies that the soft drinks caused destruction of spindle apparatus during mitosis. In sprite treated roots, anaphase was observed, but it was interrupted and observed as sticky anaphase.

SUMMARY AND CONCLUSION

In the present project work the effects of various soft drinks and maggi masala on onion root tip was studied and it was found that all the soft drinks used significantly reduced the rate of cell division and caused many chromosomal aberrations. The study provides strong evidence that common dietary substances such as soft drinks and Maggi Masala can negatively impact cell division and cause genetic alterations in plant cells. Although onion root tip cells serve as a model system, the findings raise concerns about potential health risks associated with prolonged consumption of these substances. Further research is needed to explore their effects on human cells and long-term implications on health.

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STUDY ON EFFECTIVENESS OF YONO APPLICATION AMONG THE CUSTOMERS OF STATE BANK OF INDIA WITH SPECIAL REFERENCE TO GURUVAYOOR BRANCH, THRISSUR

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ABSTRACT

The study looks at customer satisfaction with the YONO SBI application among clients of the State Bank of India, Guruvayoor Branch in Thrissur District. It investigates comfort, dependability, user interface, and registration ease using both primary and secondary data sources. The findings show that most respondents find the app comfortable, user-friendly, and efficient for digital transactions, however difficulties such as OTP delays and service outages persist. Customers were quite satisfied with the app's terms, conditions, and overall usefulness. Despite minor technical issues, most users suggest YONO SBI, indicating a high level of trust and acceptance of digital banking services.

Keywords: *YONO, Digital payment, Online banking. SBI, E-banking.*

INTRODUCTION

The banking industry is an important part of the Indian financial system, as it manages financial assets, facilitates investments, and promotes economic progress. It has undergone significant modification over time because of technical breakthroughs. The introduction of information technology in the 1980s dramatically enhanced efficiency, transparency, and accessibility. Fund transfers are becoming more frictionless and quicker thanks to innovations like Real Time Gross Settlement (RTGS) and digital payment systems. With the government's strong push through the Digital India program, the country is moving towards a "Faceless, Paperless, and Cashless" economy.

The State Bank of India (SBI), the country's largest public sector bank, has been a pioneer in the digital revolution. SBI has converted traditional banking into a holistic digital experience with its e-banking websites such as Online SBI and the integrated digital platform YONO (You Only Need One). YONO, which launched in 2019, allows clients to access banking, investment, insurance, shopping, and travel services all through a single app. YONO Cash, for example, allows for cardless ATM withdrawals, which is both convenient and secure. SBI-certified for safety, YONO represents the bank's dedication to innovation and customer-centric digital banking, revolutionising financial accessibility for today's customers.

REVIEW OF LITERATURE

The evolution of electronic banking (E-banking) has significantly altered the structure and operation of financial institutions worldwide. The use of modern technologies, combined with client expectations for speed, convenience, and accessibility, has compelled banks to rethink their offerings. Banking has seen a spectacular digital transition, from the historical launch of the first

Automated Teller Machine (ATM) to the current YONO application by the State Bank of India. The literature evaluated from 2011 to 2020 reflects this evolution through empirical and conceptual assessments that highlight the benefits, limitations, and customer-centric implications of digital banking.

According to Sharma (2011), the installation of the first Automated Teller Machine (ATM) in Finland marked the beginning of a new era in banking by revolutionizing how customers accessed cash and setting the foundation for a broader transformation toward electronic banking (E-banking). Finland emerged as a pioneering nation, demonstrating how technology could enhance the efficiency and convenience of financial operations, ultimately paving the way for the global adoption of technology-driven banking services. Building on this basis, Hsiu-Fen Lin (2011) demonstrated how technological improvements like mobile banking had a substantial impact on user behaviour and adoption patterns. Customers were drawn to mobile banking because of its convenience, time efficiency, and ability to execute transactions from anywhere, giving them more control over their own funds. Lin emphasised that these innovations altered traditional banking operations and prompted banks to invest extensively in digital infrastructure to satisfy changing client expectations

Rejikumar and Ravindran (2012) published a study in the *Journal of Internet Banking and Commerce* looking into the characteristics that influence early adopters' continuous use of mobile banking. Their research found that customers who initially accepted mobile banking remained loyal due to satisfaction with service quality, reliability, and the perceived value of digital services, which play a vital role in customer retention. In the Indian context, Sikdar and Makkad (2013) investigated the benefits and drawbacks of internet banking and concluded that switching from traditional branch-based operations to direct customer engagement via online platforms could improve commercial banks' long-term efficiency. This digital transformation enables banks to reduce operations and focus on strategic, value-added activities like customer relationship management and new product development, boosting competitiveness in an increasingly digital financial market. Trivedi and Remedios (2014) evaluated the impact of online banking on customer retention. Their findings revealed that internet banking significantly boosts client loyalty. However, the survey underlined that banks must prioritise service quality, responsiveness, protection, assurance, and dependability in order to retain and develop their online clientele. The authors recommended banks to consistently improve the quality of their internet banking services in order to meet rising customer demands.

Chauhan and Choudhary (2015) investigated the problems and opportunities surrounding internet banking in India's fast changing financial landscape. They discovered that, while internet banking was steadily gaining traction, significant government actions were required to improve user safety, awareness, and confidence. The authors emphasised that the government's efforts to assure the security and dependability of e-banking services were critical in encouraging digital adoption. To support this viewpoint, Rajput (2015) conducted an empirical study on consumer satisfaction with online banking services utilising questionnaires and ANOVA analysis. According to his results, approximately 45% of clients favour e-banking, with ATMs, bill payments, and electronic statements being the most commonly used services. This highlighted increased client trust in digital financial systems, as well as how technical improvements and supportive government

policies combined to improve operational efficiency, convenience, and modernisation in the banking sector.

Singh and Sinha (2016) emphasised the importance of awareness and education in mobile banking adoption, arguing that banks must actively improve user knowledge of digital services. Their findings showed that mobile banking is transforming traditional transaction techniques, allowing users to migrate to digital platforms. In a similar spirit, Koorses and Kavitha (2016) acknowledged the banking system as a crucial engine of economic progress, defining e-banking as both a challenge and an unavoidable advancement for the industry. They concluded from secondary data analysis employing trend analysis and compound annual growth rate (CAGR) that innovation and flexibility may effectively manage digital banking concerns. Complementing these findings, Amutha (2016) discovered that most customers were already aware of e-banking services, but emphasised the importance of ongoing customer education regarding evolving technology. Nandhini (2016), in a survey involving 200 respondents from Coimbatore, found that banks are continually implementing new technology to satisfy changing client expectations. Her investigation, which used percentage and chi-square approaches, revealed that technological adoption greatly improves consumer satisfaction and loyalty, highlighting the need of innovation and education in increasing digital banking acceptability.

Since 2016, numerous studies have focused on the customer-centric transformation of Indian banking, emphasising technology's growing influence on service quality and financial inclusion. Raghavendra and Sravan Kumar (2016) cited rapid response, secrecy, site design, and ease of use as significant factors of customer satisfaction, pointing out that instruments like as ATMs, biometric systems, and core banking technology have improved efficiency in public sector banks. Samsunisa (2016) discovered that education, domicile, and income all have a favourable influence on internet banking adoption, with urban and educated customers being more accepting. Singh and Bassi (2017) emphasised the need of safe, user-friendly interfaces in building confidence and promoting adoption, while Odhiambo (2017) related mobile banking to financial inclusion and poverty reduction. Manivannan (2017) noticed that user preferences drive digital transformation, while Santiago Carbo-Valverde (2017) observed that digitalisation improves efficiency and lowers costs. Golden S. (2017) and Golani (2017) emphasised the importance of digitalisation in modern banking, which is supported by government initiatives, whilst Rathee and Yadav (2017) emphasised its good influence on customer experience and operations. Furthermore, studies conducted by Adam Ahmed Musa Hamid et al. (2018), Ran and Saravanan (2018), Arunangshu Giri and Ipsita Paria (2018), and Divya and Suma Vally (2018) found that increased awareness, technological deployment, and digital inclusion have significantly improved customer satisfaction, banking performance, and India's transition to a cashless economy.

Shettar (2019) underlined the need of digital banking in meeting modern client expectations as smartphones became more prevalent. Digital platforms have replaced traditional banking processes, bringing convenience, efficiency, and environmental benefits. Finally, Vijaya Kittu Manda, Satuluri Subhadara Shashi Rekha, and Dr. Aruna Polisetty (2020) looked into SBI's YONO platform, citing it as a key technological breakthrough that provides financial instruments and merchant relationships to increase customer engagement. They called for YONO to grow into a subsidiary fintech model, further revolutionising digital banking in India.

STATEMENT OF THE PROBLEM

Today banking sector have adopted digital platform to maintain a competitive edge and provide flexible banking services to their retail customers. Most of the customers are now preferring online banking services for a convenient life style. By adopting digitalization, banks provide sophisticated services to the customers anywhere at any time. The prospect of digital banking depends on customers therefore, understanding customer's requirements and meeting their demand and expectation is a challenge to the banks. The study focuses on effectiveness of YONO application introduced by State Bank of India among its retail customers. It aims to identify the factors which influence the customers to use digitalised banking services and and how much they are satisfied with the facilities provide by YONO application.

OBJECTIVES OF THE STUDY

1. To study the factors influencing the customers in using digitalised banking services.
2. To analyze the level of satisfaction of customers towards YONO application and its services provided by State Bank of India.

RESEARCH METHODOLOGY

The study focuses on customer satisfaction with the YONO application at the Guruvayoor Branch of the State Bank of India, Thrissur. Primary data were collected from 50 customers using a structured questionnaire, while secondary data were sourced from articles and journals. Convenient sampling and analytical tools like percentage analysis and weighted averages were used. The study is descriptive in nature and focuses on the customers of the State Bank of India, Guruvayoor Branch, in Thrissur district. It aims to identify and explain customer satisfaction patterns by revealing potential relationships between variables associated with the use of banking services, particularly the YONO.

The demographic profile of respondents reveals an equal distribution of males and females. Over half belong to the 20–30 age group, with nearly half residing in semi-urban areas. Most respondents are graduates or pursuing graduation, half are employed, and 22% each fall within income categories below ₹ 15,000 and ₹ 30,000– ₹ 45,000.

Table 1: Level of agreement in attraction towards digital banking services

SL NO	Factors	Weight	5	4	3	2	1	Total	Weighted Average	Rank
1	It is convenient.	F	36	11	3	0	0	50	4.66	1
		Fx	180	44	9	0	0	233		
2	It is reliable.	F	30	17	3	0	0	50	4.54	3
		Fx	150	68	9	0	0	227		
3	It is safe.	F	28	19	3	0	0	50	4.5	5
		Fx	140	76	9	0	0	225		
4	It is time saving.	F	35	11	4	0	0	50	4.62	2
		fx	175	44	12	0	0	231		
5	It is the need of the hour.	F	31	14	5	0	0	50	4.52	4
		Fx	155	56	15	0	0	226		

The table illustrates the ranking of factors influencing respondents' attraction toward digital banking. Most respondents strongly agree that all listed factors encourage the use of digital banking services. Convenience emerged as the most influential factor, while safety and security concerns remain a significant consideration for many users.

Table 2: Agreement level relating to registration process of YONO SBI application

Sl. No.	Factors	Weight	5	4	3	2	1	Total	Weighted Average	Rank
1	Registration steps of the app is complex and difficult to understand.	f	10	15	14	7	4	50	3.4	4
		fx	50	60	42	14	4	170		
2	There are so many important registration and login information related to internet banking needed to be remembered.	f	8	19	13	6	4	50	3.42	3
		fx	40	76	39	12	4	171		
3	You able to register for the application service within 1 day.	f	20	15	14	0	1	50	4.06	1
		fx	100	60	42	0	1	203		
4	You are able to access the customer service of SBI immediately for assistance in registration process.	f	14	16	16	3	1	50	3.78	2
		fx	70	64	48	6	1	189		

The table presents respondents' level of agreement regarding the registration process of the YONO SBI application. The highest rank was given to the factor indicating that users could complete registration within a day, while the lowest rank went to the perception that the registration steps are complex and difficult to understand.

Table 3: Level of agreement relating to reliability and convenience of YONO SBI application

Sl. No.	Factors	Weight	5	4	3	2	1	Total	Weighted Average	Rank
1	SBI's internet banking facility is very reliable.	f	31	15	4	0	0	50	4.54	2
		fx	155	60	12	0	0	227		
2	It is easy to do transactions through 'YONO SBI' app.	f	22	18	10	0	0	50	4.72	1
		fx	110	72	54	0	0	236		
3	YONO SBI app is most convenient way to manage your finance.	f	17	15	17	1	0	50	3.96	5
		fx	85	60	51	2	0	198		
4	The application provides time saving measures.	f	17	15	17	1	0	50	3.96	5
		fx	85	60	51	2	0	198		
5	YONO SBI app is sufficiently secured.	f	17	15	17	1	0	50	3.96	5
		fx	85	60	51	2	0	198		

Table 4: Level of satisfaction relating to user interface of YONO SBI application: Agreement level relating to registration process of YONO SBI application

Sl. No.	Factors	Weight	5	4	3	2	1	Total	Weighted Average	Rank
1	It is easy to access the features of the app.	f	24	18	8	0	0	50	4.32	1
		fx	120	72	24	0	0	216		
2	It is easy to understand and read the contents of the 'YONO SBI' app.	f	20	22	8	0	0	50	4.24	2
		fx	100	88	24	0	0	212		
3	The response speed of 'YONO SBI' app is fast.	f	16	20	10	3	1	50	3.94	5
		fx	80	80	30	6	1	197		
4	We can depend on this app if any emergency occurs and you are in need of money urgently.	f	15	25	9	1	0	50	4.08	4
		fx	75	100	27	2	0	204		
5	It is the cheapest way to conduct banking activities through this app.	f	21	17	12	0	0	50	4.18	3
		fx	105	68	36	0	0	209		

The table presents respondents' rankings regarding the user interface of the YONO SBI application. The highest rank was given to the factor indicating that the app's features are easy to access, while the lowest rank was assigned to the perception that the app's response speed is fast.

Table 5: Satisfaction level regarding usage of YONO SBI application

Sl. No.	Factors	Weight	5	4	3	2	1	Total	Weighted Average	Rank
1	State your satisfaction level regarding YONO SBI app services.	f	20	20	9	1	0	50	4.18	3
		fx	100	80	27	2	0	209		
2	How would you rate your experience during the payment process?	f	20	21	9	0	0	50	4.22	2
		fx	100	84	27	0	0	211		
3	Are you satisfied with terms and conditions of this app?	f	20	22	8	0	0	50	4.24	1
		fx	100	88	24	0	0	212		
4	The app is competent in providing excellent digitalized banking facilities.	f	16	22	11	0	1	50	4.04	4
		fx	80	88	33	0	1	202		

The table depicts respondents' ranking scores regarding their satisfaction with the YONO SBI application. The highest rank was given to satisfaction with the app's terms and conditions, while the lowest rank was assigned to the perception that the app is highly competent in providing excellent digital banking services.

Table 6: Agreement level regarding drawbacks of YONO SBI application

Sl. No.	Factors	Weight	5	4	3	2	1	Total	Weighted Average	Rank
1	More features are required.	f	14	16	12	6	2	50	3.68	3
		fx	70	64	36	12	2	184		
2	Delaying transactions due to OTP based issues.	f	15	19	9	6	1	50	3.82	1
		fx	75	76	27	12	1	191		
3	Customer care services is not adequate.	f	11	14	15	6	4	50	3.44	4
		fx	55	56	45	12	4	172		
4	Frequent service disruptions noticed.	f	16	14	12	6	2	50	3.72	2
		fx	80	56	36	12	2	186		
5	Not easy to use.	f	5	11	14	14	6	50	2.9	6
		fx	25	44	42	28	6	145		
6	More convenient applications are available with other banks.	f	15	5	19	6	5	50	3.38	5
		fx	75	20	57	12	5	209		

The table illustrates respondents' rankings regarding the drawbacks of the YONO SBI application. The highest rank was given to the factor indicating that transactions are often delayed due to OTP-related issues, while the lowest rank was assigned to the perception that the app is not easy to use.

The study reveals that most respondents strongly agree that convenience is the key factor attracting them to digital banking services. They are well aware of the features offered by the YONO SBI application and find it easy to register within a day, perform transactions, and access its features and content. Respondents expressed strong satisfaction with the app's terms, conditions, and overall payment experience. However, many reported delays in transactions due to OTP-related issues and occasional service disruptions. Despite these drawbacks, almost all respondents stated that they would recommend the YONO SBI application to their friends and relatives.

The present study, conducted among the customers of the State Bank of India, Guruvayoor Branch in Thrissur District, primarily aimed to evaluate customer satisfaction toward the YONO SBI application. The findings of the study have provided valuable insights into the level of awareness, ease of use, convenience, and overall satisfaction associated with this digital banking platform. In an era marked by rapid digital transformation, such studies are vital to understanding customer perceptions and improving the quality and efficiency of digital banking services.

CONCLUSION

The survey reveals that YONO SBI is well-liked for its convenience, accessibility, and ease of registration, particularly among young, educated, and employed users. While consumers highly value its dependability and user-friendly design, technical difficulties including transaction delays

and slow response times highlight areas for improvement. Despite these problems, overall consumer happiness remains high, with the majority of respondents eager to suggest the app to others. To maintain confidence and loyalty, SBI should prioritise improving system performance, implementing tighter security measures, and constantly innovating to provide a smoother, faster, and more efficient online banking experience.

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UNLOCKING THE POTENTIAL OF CROWDFUNDING FOR YOUNG ENTREPRENEURS: INSIGHTS FROM THRISSUR DISTRICT

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ABSTRACT

Entrepreneurship plays a crucial role in economic development by transforming ideas into innovative ventures through resource mobilisation and risk-bearing. However, young entrepreneurs, particularly those aged 18 to 25, continue to face significant barriers in accessing traditional financing due to limited experience, lack of collateral, and strict lending criteria imposed by banks and financial institutions. As a result, many young entrepreneurs struggle to secure adequate funding to launch or sustain their businesses. In recent years, crowdfunding has emerged as a viable alternative financing mechanism that enables entrepreneurs to raise capital from large groups of individuals via online platforms. By leveraging social networks and community support, crowdfunding not only provides financial resources but also validates market demand and enhances investor confidence. This study examines the popularity of crowdfunding among youth entrepreneurs and explores how this innovative funding model addresses the financial constraints historically associated with early-stage ventures. The findings aim to contribute to entrepreneurial finance literature by highlighting the growing relevance of crowdfunding as an accessible, democratic, and flexible funding option for young entrepreneurs.

Keywords: *Youth Entrepreneurs, Entrepreneurial Finance, Equity Crowdfunding, Startup Funding, Alternative Finance, Peer to Peer Lending, Due Diligence, Online Platforms.*

INTRODUCTION

Entrepreneurship is a vital driver of economic development in India, contributing significantly to employment, innovation, and GDP growth. According to the National Sample Survey (NSS), India had over 58 million micro, small, and medium enterprises (MSMEs) in 2020, with a large proportion of them being driven by young entrepreneurs. However, despite their potential, young entrepreneurs in India—especially those between the ages of 18 and 25—face major barriers in accessing traditional financing. A report by the Indian government's Ministry of Micro, Small, and Medium Enterprises (MSME) found that over 75% of MSMEs in India struggle with inadequate access to finance, primarily due to challenges such as lack of collateral, limited credit history, and the stringent requirements of banks and other financial institutions.

To address these challenges, crowdfunding has gained traction as an alternative source of financing for young entrepreneurs in India. The India Crowdfunding Report 2021 by Ketto, a leading crowdfunding platform in India, revealed that crowdfunding in India raised over 1,000 crores in 2020 alone, with startups and young businesses accounting for a significant portion of this amount. Crowdfunding provides an opportunity for Indian entrepreneurs to raise capital through small contributions from a large number of people, typically via online platforms like Ketto, Milaap, and Wishberry, which are gaining popularity. This study explores the role of crowdfunding in facilitating the growth of youth-led ventures in India, examining its popularity, effectiveness, and how it is

transforming the funding landscape for young entrepreneurs.

SIGNIFICANCE OF THE STUDY

Crowdfunding (CF) has become a popular alternative funding mechanism, especially with the rise of internet technologies that allow individuals to fund entrepreneurial projects. In India, young entrepreneurs—particularly those with strong educational backgrounds—are increasingly turning to crowdfunding to overcome financial barriers. This study focuses on the Thrissur district of Kerala, aiming to explore young entrepreneurs' awareness, perceptions, and attitudes toward crowdfunding as a source of funding for new ventures.

The research will assess the potential benefits and challenges that crowdfunding presents to entrepreneurs, who often struggle with traditional financing due to a lack of collateral, credit history, and the stringent requirements of banks. By analyzing the factors that influence the use of crowdfunding, this study seeks to better understand its role in helping youth entrepreneurs turn business ideas into reality, offering valuable insights into the future of entrepreneurial finance in the region.

RESEARCH PROBLEM

The market is flooded with innovative ideas, ground-breaking breakthroughs, and remarkable business concepts provided by young entrepreneurs, but they suffer a lack of funding and resources to get their enterprises off the ground. Bank loans, venture capitalists, and other traditional sources of funding have shown to be damaging to these smaller, freshly growing, and growing firms. The notion of crowd funding caters to such enterprises and catalyses the process of gathering funds from the general public via an internet platform with no practical challenges. As a result, it's critical to research the potential of crowd funding as a novel source of capital—a study among young entrepreneurs in the Thrissur district is crucial. The goal of this study is to learn about young entrepreneurs' attitudes and perceptions of crowd fundraising as a source of capital.

OBJECTIVES

- To determine the comparability of crowdfunding with other fund-raising methods among young entrepreneurs of Thrissur district.
- To identify whether there is any association between gender and willingness to use crowdfunding.

SCOPE OF THE STUDY

The current study focuses on young entrepreneurs' attitudes and awareness of crowd financing, as well as their perceived benefits and challenges to using crowd fundraising as an innovative source of money. The feasibility of crowd fundraising in comparison to traditional forms of financing is investigated. The study's focus is on young entrepreneurs in Kerala's Thrissur district. The study will focus on young entrepreneurs between the ages of twenty and thirty-five.

MATERIALS AND METHODOLOGY

This study employs a quantitative research approach to explore the awareness and perceptions of young entrepreneurs (aged 20 to 35) in Thrissur district regarding crowdfunding as an alternative

funding source. Primary data was collected through a self-administered questionnaire distributed to 100 respondents, with a final sample of 60 valid responses from entrepreneurs who are familiar with crowdfunding. Secondary data was gathered from relevant literature, including journals, articles, and online sources. The study uses random sampling to ensure unbiased selection of participants, with data sourced from the District Industries Centre (DIC) in Thrissur. Analytical tools such as percentage analysis, weighted mean, and Chi-square tests were employed to evaluate the data and draw meaningful conclusions. The research aims to shed light on the benefits, barriers, and awareness of crowdfunding, providing valuable insights for young entrepreneurs seeking alternative financing options.

HYPOTHESIS

H1: Assuming that the majority of respondents under study are not aware of crowdfunding.

H2: Assuming that there is association between gender and willingness to use crowdfunding.

RESEARCH GAP

An overall review of the previous studies conducted in relation to this topic had done an indepth sight to the crowdfunding basics and its scope in various countries. The popularity of crowdfunding is comparatively high in other countries when comparing with India. But it is relatively less in kerala. Studies related with scope of crowdfunding in our state as an alternative source of finance is less. So it is important to study how far crowdfunding is popular among the young entrepreneurs and their willings to employ the same in their new ventures. The study is confined to Thrissur district only and attempts to get a view of the attitude and awareness of young entrepreneurs in Thrissur district and the related perceived benefits and barriers.

Why crowd funding?

Crowdfunding offers numerous strategic advantages that extend far beyond merely raising capital. It provides an excellent opportunity to reach a younger, digitally engaged audience (ages 18-34) who are not only comfortable with online payments but are also highly active on social media platforms, making them ideal supporters for crowdfunding campaigns. This demographic is often eager to back innovative projects and causes they believe in, creating an audience ready for engagement. Beyond fundraising, crowdfunding acts as a powerful marketing and brand-building tool, allowing entrepreneurs to raise awareness for their causes or businesses while creating a buzz that increases visibility. The campaign itself becomes a form of promotion, spreading the word to a wider audience and generating interest. Moreover, crowdfunding provides valuable market validation by letting the public vote with their wallets, proving the demand for a product or idea before committing to larger investments or expansion. It also serves as a testing ground for marketing channels and target audiences, allowing entrepreneurs to fine-tune their messaging based on backer feedback and interaction. The crowd's engagement offers valuable insights into the level of support from various demographics, helping entrepreneurs understand which elements resonate most with their audience. Furthermore, crowdfunding can help build new relationships with backers, investors, collaborators, and even customers, offering future networking opportunities. It also provides entrepreneurs with direct feedback on their ideas, offering an early opportunity to pivot or improve based on audience responses. In sum,

crowdfunding not only helps entrepreneurs raise funds but also facilitates market entry, brand exposure, audience engagement, and valuable relationship-building—all of which are crucial for the long-term growth and success of a business or cause.

Forms of crowd funding

Donation-Based Crowdfunding

Donation-based crowdfunding is a method where a large number of people contribute small amounts of money to support a cause, typically for charitable, social, or environmental initiatives. The main motivation behind this model is philanthropic support, rather than expecting financial returns. Donors may receive token rewards, but their primary goal is to contribute to a cause they believe in. This form of crowdfunding is particularly popular in India, where it is frequently used for charity and social causes. Well-known platforms such as Kickstarter, Indiegogo, and Give forward typically charge a fee ranging from 5% to 10% on the total donations raised.

Debt-Based Crowdfunding (Peer-to-Peer Lending)

Debt-based crowdfunding, also known as Peer-to-Peer (P2P) Lending or Marketplace Lending, allows individuals to lend money to businesses or individuals in exchange for repayment with interest. This model became prominent with the founding of Zopa in the UK in 2005. Investors lend money to borrowers who then repay the loan with interest, typically through online platforms. This model offers an alternative to traditional bank loans and is often used for personal or small business financing. Popular platforms in this space include Zopa and Rate setter, where investors can choose the loans they wish to fund, and earn interest on their investments.

Reward-Based Crowdfunding

Reward-based crowdfunding enables individuals to fund projects in exchange for non-monetary incentives, such as products, services, or exclusive experiences. This model is commonly used for creative projects like film production, album recordings, or the development of innovative products. Platforms like Kickstarter and Indiegogo are leading examples in this space, where backers receive rewards based on the amount they contribute. The reward system provides an added incentive for people to support projects they are passionate about, while also helping entrepreneurs raise capital. These platforms usually charge fees ranging from 5% to 13% of the funds raised.

Equity-Based Crowdfunding

Equity-based crowdfunding allows individuals to invest in early-stage companies in exchange for equity shares in the business. This form of crowdfunding allows small investors to participate in the potential growth and profits of startups, often providing a high-risk, high-reward opportunity. The 2012 JOBS Act in the U.S. opened the door for more accessible equity crowdfunding by relaxing regulations on small investors. However, in India, equity crowdfunding faces significant regulatory hurdles, with the Securities and Exchange Board of India (SEBI) raising concerns about the lack of investment knowledge among the public. As of now, India's regulatory framework for equity crowdfunding is still under development, limiting the growth of this funding method in the country. g children and adolescents. In response, manufacturers and government bodies have uhe

Table 1: Crowdfunding V/S Traditional Fundraising

BASIS FOR COMPARISON	CROWDFUNDING	TRADITIONAL FUNDRAISING
Meaning	Crowdfunding is a method of arranging funds for a project or business, in many small amounts from a large group of people using an online platform.	Traditional fundraising is when promoters use typical sources to fund their business ideas.
Amount	Large amounts from one or two sources.	Many small amounts from hundreds of individuals.
Investors	Easy to find investors	Difficult to find investors.
Validation	It gives a validation that the idea is quite exciting and innovative.	No such validation is available.
Idea	Disclosed to the crowd, to get funding.	Remains confidential with the funding individuals and
Control and Management	Remains in the hands of the promoters.	Shared with the investors, due to their stake in the business.
Network	It facilitates to connect with a large number of people.	The promoters will contact with a few High net worth individuals or banks only
Investors focus	Innovative and thought provoking ideas, with work ability.	Idea that has profit potential.

RESEARCH GAP

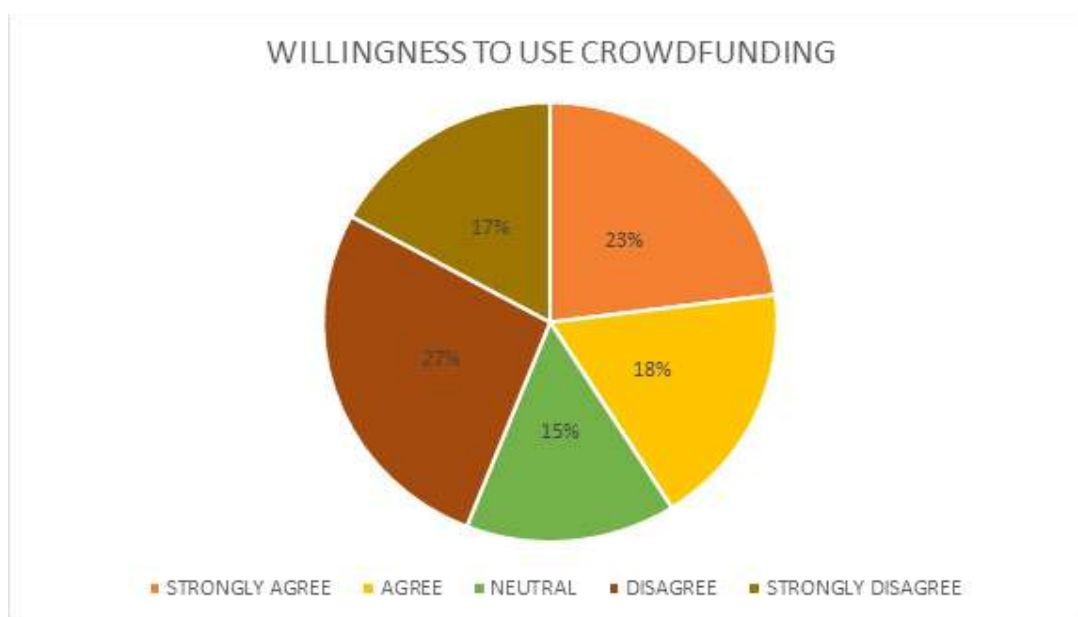


Fig. 1: Willingness to use crowdfunding

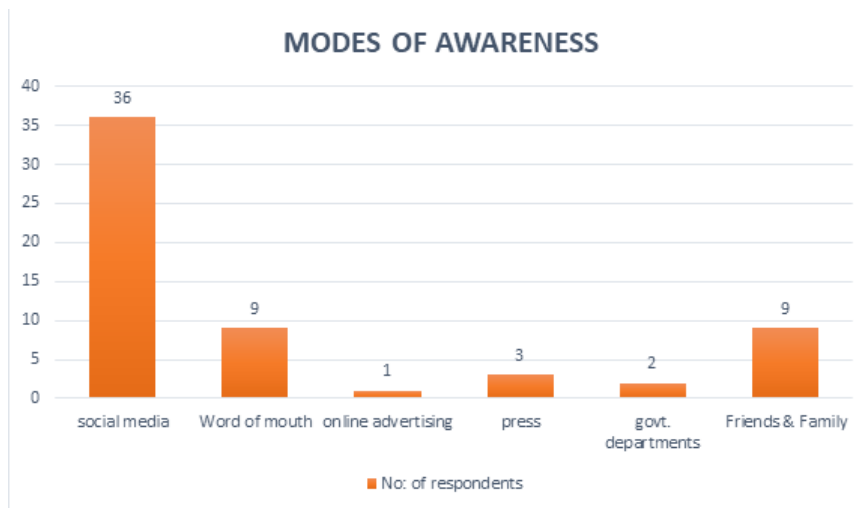


Fig. 2: modes of awareness.

Table 2: Knowledge about crowdfunding.

Definition	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Mean	%
CF consists of financial entities or their activities and projects through electronic platforms accessible through the internet.	45	3	9	3		4.5	90%
CF raises investment tranches from several individual investors.	15	27	12	6		3.85	77%
CF is a form of financing for profit entities.	9	12	6	15	18	2.65	53%
CF is a form of financing for non-Profit entities	12	9	3	15	21	2.6	52%
In CF the financed entities offers some products / services, discounts or other bonuses to investors or some of the members that support the project.	8	10	23	11	8	2.98	60%
In CF, the financed entity pays the financing through participation (share) in the capital, distribution of dividends or profit sharing.	6	9	16	20	9	2.71	54%
In CF, the financed entity does not remunerate the funds attained, since the financing is assigned as a donation.	11	15	18	8	8	3.21	64%
In CF, the financed entity pays the financing through the payment of the interest rate that is agreed at the time of fundraising.	11	5	14	10	20	2.61	52%

Table 3: Understanding on crowdfunding terminologies

TERMINOLOGIES	COMPLETELY AWARE	PARTIALLY AWARE	NOT AWARE	WEIGHTED MEAN	PERCENTAGE
Angel investors	42	12	6	2.6	87%
Seed Capital	46	6	8	2.63	88%
Venture Capital	50	4	6	2.73	91%
Backer	12	27	21	1.85	62%
Funder	28	8	24	2.06	68%
Creator	15	14	31	1.73	58%
Pitch	10	2	48	1.36	45%
Peer to Peer Lending	32	18	10	2.36	79%
Due Diligence	30	9	21	2.15	72%
Start up Business	50	10		2.83	94%
Rewards	48	5	7	2.68	89%
Crowdfunding platforms	21	24	15	2.1	70%
Crowdfunding campaign	30	15	12	2.2	73%
Average				2.23	

Table 4: Perceives benefits of using crowdfunding

TERMINOLOGIES	COMPLETELY AWARE	PARTIALLY AWARE	NOT AWARE	WEIGHTED MEAN	PERCENTAGE
Angel investors	42	12	6	2.6	87%
Seed Capital	46	6	8	2.63	88%
Venture Capital	50	4	6	2.73	91%
Backer	12	27	21	1.85	62%
Funder	28	8	24	2.06	68%
Creator	15	14	31	1.73	58%
Pitch	10	2	48	1.36	45%
Peer to Peer Lending	32	18	10	2.36	79%
Due Diligence	30	9	21	2.15	72%
Start up Business	50	10		2.83	94%
Rewards	48	5	7	2.68	89%
Crowdfunding platforms	21	24	15	2.1	70%
Crowdfunding campaign	30	15	12	2.2	73%
Average				2.23	

Table 5: Perceived barriers of using crowdfunding

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Weighted Mean	%
There are difficulties related with the preparation of campaign	3	43	3	11	0	3.63	73%
It has costs associated with raising capital.	12	30	9	6	3	3.7	74%
Creates uncertainty about ability to pay financing costs and repay capital	27	24	3	3	3	4.15	83%
There is a need to provide information about the business	15	27	9	6	3	3.75	75%
There is a fear of not being able to obtain the necessary funding	9	30	15	3	3	3.65	73%
There are fears related to regulatory issues	36	15	6	3	0	4.4	88%
It is unknown who will be the campaigns financiers	12	18	27	0	3	3.6	72%
There are fears related with administrative issues	6	45	6	3	6	3.8	76%
There is a need to provide personal information	15	3	15	24	3	3.05	61%
Average						3.75	

Test 1

The Chi-Square Test was used to assess if there is an association between gender and willingness to raise funds through crowdfunding. The null hypothesis (H_0) stated that there is no association, while the alternative hypothesis (H_1) suggested there is an association. The analysis of the observed and expected frequencies revealed a calculated chi-square value of 19.4, which is greater than the critical value of 9.488 at a 5% significance level. As a result, we reject the null hypothesis and conclude that there is a significant association between gender and willingness to use crowdfunding. The data suggests that women are less willing to engage in crowdfunding ventures than men, potentially due to factors such as risk aversion and perceived barriers, despite women's increasing empowerment and involvement in entrepreneurship.

Test 2

The Z-test was conducted to determine if there is a significant difference in the awareness of crowdfunding among respondents. The calculated Z-value was 1.7, which is less than the critical value of 1.96 at a 5% significance level. The p-value for the calculated Z-value (1.7) is 0.46, which is

greater than 0.05, further supporting the acceptance of the null hypothesis. Therefore, we conclude that there is no significant difference between the two groups, and the majority of respondents (60%) are aware of crowdfunding.

RESULTS AND DISCUSSION

The study reveals several key insights about young entrepreneurs' awareness and perceptions of crowdfunding. 60% of respondents were aware of crowdfunding, with a higher willingness to use it observed among male entrepreneurs compared to females. In terms of income, 45% of respondents reported earning less than 1 lakh rupees, while 35% earned between 2 to 3 lakh rupees annually. The majority of entrepreneurs showed strong internet usage, with 50% spending at least two hours daily online, essential for accessing crowdfunding platforms. Most respondents learned about crowdfunding through social media, and 90% correctly understood its basic concept, such as financing projects through online platforms. While entrepreneurs demonstrated familiarity with terms like seed capital and venture capital, their understanding of more technical crowdfunding language was less robust.

A positive attitude toward crowdfunding was prevalent, with 83% of respondents citing increased visibility for projects as the main benefit, although access to finance without bureaucracy was viewed as the least significant advantage. Regulatory concerns were the most significant barrier, with 88% of entrepreneurs expressing concerns about legal issues, while privacy concerns about sharing personal information were the least agreed-upon barrier. Additionally, 90% of respondents indicated they would be willing to use crowdfunding if offered training, and 87% expressed interest if a solid regulatory framework for the industry were in place.

CONCLUSION

This study explores young entrepreneurs' awareness and perceptions of crowdfunding (CF) as an alternative funding mechanism. While the findings show that young entrepreneurs in Thrissur have a moderate understanding of crowdfunding, they recognize its potential benefits, such as increased visibility, customer feedback, and reduced financial costs. However, concerns around regulatory issues, uncertainty about repayment terms, and the need to share personal information were identified as significant barriers. Despite these challenges, most respondents expressed a positive attitude toward using crowdfunding, particularly donation and reward-based models, which they view as promising avenues for securing capital. The study suggests that crowdfunding could be a viable solution for young entrepreneurs facing difficulties in accessing traditional funding, provided there is a strong regulatory framework to boost confidence and support. This indicates a growing acceptance of crowdfunding as an innovative financing tool in India, with the potential to transform how young entrepreneurs fund and grow their businesses.

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FROM MASS FRONTS TO COMMUNITY FRONTS: CHANGING COALITION STRUCTURES IN KERALA POLITICS.

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ABSTRACT

Kerala is widely recognized as one of India's most progressive states, celebrated for its achievements in education, healthcare, gender development, and participatory governance. The "Kerala Model of Development" emerged from a historical convergence of radical social reform movements, sustained communist mobilization, and strong state-led welfare policies (Heller, 2020). However, in recent decades, Kerala's political landscape has witnessed a growing prominence of identity-based politics. Communities are increasingly mobilizing around caste, religion, gender, and ethnic identities, compelling political parties to accommodate diverse group-specific demands (Jeffrey, 1992; Josekutty, 2019). This shift raises critical questions about the nature of democratic representation and the future of ideological politics in the state. In this context, the paper examines whether emerging identity coalitions represent a crisis of ideology or a new horizon of democratic pluralism.

Keywords: *Identity Politics, Coalition Building, Community Mobilization, Ideological Shift, Kerala Politics.*

INTRODUCTION

Kerala's political arena reflects a distinctive interplay between ideological traditions and identity-based mobilizations. Historically, politics in the state were anchored in strong ideological currents, most notably the rise of the Communist Party, which drew strength from agrarian struggles, labor movements, and progressive social reforms during the mid-20th century (Jeffrey, 1992; Hardgrave, 1977). The election of the first Communist government in 1957 marked a watershed moment that placed class politics and welfare-oriented governance at the forefront (Mattumannil, 2023).

Over time, however, the compulsions of coalition politics and electoral pragmatism led both the Left Democratic Front (LDF) and the Congress-led United Democratic Front (UDF) to increasingly accommodate caste and religious interests, diluting their ideological commitments (Heller, 2020). Minority-based parties such as the Indian Union Muslim League (IUML) and Kerala Congress exerted substantial influence in coalition governments by articulating community-specific demands (Menon, 1994).

In recent years, the Bharatiya Janata Party (BJP) has emerged as a potential third pole by appealing to Hindu identity politics and capitalizing on perceived minority appeasement by the dominant fronts (Varma, 2024). This shift signals a growing tension between ideological commitments and identity-based alignments, with class politics increasingly intersecting with caste and communal agendas (Sasikumar & Sunilraj, 2020). Kerala's political trajectory thus represents a continuous negotiation between its ideological past and its identity-centered present.

1. Coalition Politics In Kerala

Since the formation of the state in 1956, Kerala's party competition has been structured around a Left–Right axis, with Communist-led coalitions positioned left of the Congress (Kaul & Kannangara, 2023). The early Communist government (1957–1959), though short-lived due to Central intervention, implemented land and education reforms that fundamentally reshaped the state's political economy (Herring, 1983). The 1960s witnessed intense factionalism within both the INC and CPI, leading to splits that produced the CPI and CPI(M) in 1964 (Jeffrey, 1992). Their rivalry eventually consolidated into two stable coalitions:

- **Left Democratic Front (LDF)** led by CPI(M)
- **United Democratic Front (UDF)** led by INC, supported by IUML and Kerala Congress factions

This bipolar coalition system has remained durable despite periodic realignments (Josekutty, 2019). Electoral outcomes have historically been tight, with alternating governments until 2021. In 2021, the LDF broke Kerala's four-decade trend of alternating governments by winning 99 out of 140 seats—an outcome largely attributed to effective governance during natural disasters and the COVID-19 pandemic (Heller, 2020).

The 2024 Lok Sabha elections, however, disrupted this narrative. The UDF swept 18 of 20 seats, while the BJP won its first Lok Sabha seat in Thrissur—largely due to a notable OBC shift, particularly among Ezhavas (The Hindu, 2024). The BJP's rise—from 15.64% vote share in 2019 to 19.23% in 2024—indicates a possible reconfiguration of Kerala's traditionally bipolar coalition politics (Varma, 2024). Thus, while LDF and UDF remain dominant; caste-religion alignments significantly shape coalition outcomes. The growing footprint of the BJP may reshape coalition politics ahead of 2026.

2. Ideological Orientation And Social Base Of The Parliamentary Left

Kerala became the second polity in the world after San Marino to democratically elect a Communist government (Mattumannil, 2023). Scholars attribute this rise variously to class-based mobilization and to caste-community dynamics (Jeffrey, 1992; Hardgrave, 1977). Communist mobilization historically drew support from lower castes—Ezhavas, Pulayas, and other SCs—despite being led by largely upper-caste leaders (Hardgrave, 1977). Land reforms and social welfare programs further cemented this support (Heller, 2020). Yet the Left has historically struggled with minority support: only 25–35% of Muslims and Christians vote for the LDF (CSDS, 2016). This limited appeal reflects both ideological differences and the influence of IUML and Kerala Congress among minority communities (Heller, 2020). Despite this, the Left has made tactical alliances with minority factions, especially since 2011 (Hindustan Times, 2024). Kerala's fragmented social structure—marked by caste, religion, and region—compels the Left to adopt accommodative coalition strategies that dilute ideological purism (Heller, 2020).

3. Ideological Orientation And Social Base Of The Indian National Congress In Kerala

Unlike the national INC's emphasis on secular modernism, the Kerala unit historically leaned toward cultural conservatism and accommodation of dominant caste and religious groups (Jeffrey,

1978; Weiner, 1967). In the early years, while the INC supported Gandhian social reforms, it resisted structural reforms such as land redistribution (Desai, 2005). This reluctance pushed many radicals toward the Communist movement (Jeffrey, 1992). The Vimochana Samaram of 1959—supported by Christian institutions and landed elites—illustrated Congress's anti-communist stance (Menon, 1994).

Over time, the INC maintained strong alliances with Nair elites and Syrian Christian groups (Weiner, 1967). It adopted selective welfare programs but upheld conservative cultural positions, as seen in issues like Sharia debates (1984), textbook controversies (2008), and Sabarimala (2018) (Sasikumar & Sunilraj, 2020). Thus, the INC balances welfare rhetoric with cultural conservatism—an ideological stance shaped by its caste-religious base.

4. Ideological Shift: Alignment Or Realignment?

Kerala's political dynamics reflect fragmentation shaped by caste, religion, and increasing class consciousness (Josekutty, 2019). The bipolar coalition structure has created a political environment in which small parties gain disproportionate bargaining power (Kumar, 1980). Historically, ideological differences—such as between the CPI(M)'s land reforms and Congress's resistance—reflected class and caste interests (Herring, 1983). Similarly, education policy disputes were shaped by religious institutions, especially Christian managements (Mathew, 1989; Lieten, 1977). Realignments continue to shape every election cycle, enhancing the influence of IUML, Kerala Congress, BDJS, NDP, and SRP (Josekutty, 2019). These parties often extract concessions that undermine consistent ideological governance (Kumar, 2014).

Examples include:

- LDF's concessions to minority educational institutions (Kumar, 2014)
- Congress ceding Rajya Sabha seats to Kerala Congress (Economic Times, 2012)
- LDF's temple priest recruitment reforms and EWS quota (Heller, 2020)
- Competition among CPM, Congress, and BJP over temple festivals (Josekutty, 2019)

Such developments illustrate the erosion of ideological coherence. The rise of identity-based mobilization—particularly from caste organizations like NSS and SNDP—further blurs ideological boundaries (Josekutty, 2019). As Prabhash (The Hindu, 2020) notes, Kerala politics has increasingly shifted from principled ideological contestation to competitive power politics driven by community calculations.

CONCLUSION

Kerala's political history highlights an enduring tension between ideological commitments and identity-driven mobilizations. The Communist movement's early successes rooted in class struggle and welfare reforms once provided a strong ideological anchor. Yet coalition compulsions, electoral pressures, and social fragmentation have gradually eroded ideological consistency in both the Left and Congress.

The emergence of the BJP as a third force—alongside the assertiveness of caste and religious

organizations—has diversified political competition but also intensified identity politics. As the 2026 Assembly elections approach, Kerala's political future will depend on whether major parties can balance identity claims with inclusive welfare governance.

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SUSTAINABLE NANOPARTICLE PRODUCTION FROM *SYZYGIUM TRAVANCORICUM* GAMBLE (WESTERN GHATS ENDEMIC): CHARACTERIZATION AND EVALUATION IN SEED PRIMING APPLICATIONS

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ABSTRACT

Plant-mediated synthesis of nanomaterials has gained increasing attention in recent years due to its eco-friendly, sustainable, and cost-effective nature. Among various biological routes, the use of plant extracts for the green synthesis of nanoparticles (NPs) offers a safer alternative to conventional chemical and physical methods that often involve toxic reagents. In the present study, silver nanoparticles (AgNPs) were synthesized using aqueous leaf extracts of *Syzygium travancoricum* Gamble, an endangered medicinal plant native to the Western Ghats. The plant extract acted as a natural reducing and stabilizing agent in the conversion of silver ions (Ag) to AgNPs. The formation of nanoparticles was visually confirmed by a color change from dark brown to light golden brown and spectroscopically validated using ultraviolet-visible (UV-Vis) spectrophotometry, which showed a distinct absorption peak at 432 nm, characteristic of AgNPs. The synthesized nanoparticles were further characterized by Energy-Dispersive X-ray Analysis (EDAX), Scanning Electron Microscopy (SEM), and Transmission Electron Microscopy (TEM). Furthermore, the synthesized AgNPs were evaluated for their application in seed priming. The results demonstrated that AgNP-treated seeds exhibited a significantly higher germination rate compared to untreated controls. This enhancement is attributed to the nanoparticles' ability to penetrate the seed coat, facilitating improved water absorption and activation of enzymatic processes essential for seed metabolism and growth. Overall, this study highlights an eco-sustainable approach for nanoparticle synthesis from an endangered plant species and its promising role in enhancing seed germination and early seedling vigor through nanoparticle-based seed priming.

Keywords: *Green synthesis, UV-Visible spectroscopy, TEM, EDAX, Ag2NPs, Seed priming*

INTRODUCTION

Plants have played an integral role in human civilization, providing food, medicine, shelter, and raw materials for centuries. In recent decades, their importance has extended into advanced scientific fields, particularly biotechnology and nanoscience. One emerging area is the green synthesis of nanoparticles, which utilizes plant-derived biomolecules to manufacture nanoparticles in an environmentally safe manner. Unlike conventional chemical and physical methods, which often require toxic reagents, high temperature, or expensive instrumentation, green synthesis is simple, sustainable, cost-effective, and eco-friendly. Plant extracts are rich in phytochemicals such as flavonoids, terpenoids, phenolics, alkaloids, and proteins, which naturally act as reducing, capping, and stabilizing agents during nanoparticle formation (Ahmed et al., 2016).

The present study focuses on the synthesis of silver nanoparticles (AgNPs) using the leaf extract of *Syzygium travancoricum*, locally known as *Kullavetty*. This species, belonging to the family Myrtaceae, is endemic to Kerala and listed as endangered due to habitat loss and limited

distribution (Sasidharan, 2007; Sreekumar et al., 2020). Utilizing its bioactive compounds for nanoparticle production not only demonstrates scientific value but also highlights the plant's hidden biochemical potential.

The green-synthesized AgNPs were further evaluated for agricultural application through seed priming of *Brassica nigra* (black mustard). Seed priming with nanoparticles has gained attention for enhancing germination, vigor, chlorophyll content, and early growth. In this study, the AgNP-treated seeds showed improved germination percentage and healthier seedling development compared to untreated seeds. The method is affordable, scalable, and does not require harmful chemicals, making it suitable for sustainable farming practices.

Overall, the synthesis of AgNPs using *Syzygium travancoricum* establishes a promising link between plant biotechnology, nanotechnology, and eco-friendly agriculture. It demonstrates how endangered medicinal flora can be scientifically explored while promoting greener innovations for future food security.

MATERIALS AND METHODS

Fresh *Syzygium travancoricum* leaves were collected from S.N.M College, Maliankara. The leaves were thoroughly washed with deionized water, air-dried, and finely crushed using a mortar and pestle. For extract preparation, 100 g of crushed leaves were mixed with 250 ml of deionized water in a 500 ml Erlenmeyer flask and agitated on a rotary shaker. The mixture was then filtered through Whatman No. 1 filter paper to obtain the leaf extract (Ravichandran, 2016; Song and Kim, 2009; Tripathi et al., 2019). For silver nanoparticle synthesis, a 0.1 M aqueous solution of silver nitrate (AgNO_3) was prepared, and 50 ml of the leaf extract was added to 10 ml of the silver nitrate solution. The mixture was exposed to sunlight for three hours, resulting in a color change from dark brown to golden brown, confirming the formation of silver nanoparticles (Dipankar and Murugan, 2012). The synthesized nanoparticles were collected by centrifugation at 5000 rpm for 20 minutes.

Characterization of the synthesized nanoparticles was carried out using both visual and instrumental methods. UV-Visible spectroscopy (Shimadzu UV-Visible spectrophotometer) was used to monitor the reduction of Ag^+ ions and confirm nanoparticle formation. Morphological and structural analyses were performed using Scanning Electron Microscopy (SEM, Jeol 6390LA OXFORD XMXN) and Transmission Electron Microscopy (TEM, Jeol JEM 2100) at the Sophisticated Test and Instrument Centre (STIC), CUSAT, to determine nanoparticle distribution and size (Tripathi et al., 2019; Zhang et al., 2016).

For the nanoprimering study, *Brassica nigra* seeds were surface-sterilized with 0.1 M mercuric chloride for 30 seconds, rinsed with deionized water, and soaked in five different priming solutions with aeration for two hours. Twenty-five seeds per treatment were germinated on tissue-lined Petri plates. Controls were soaked in distilled water, and unprimed seeds were also sown. Germination rates were recorded after seven days (Anand et al., 2020; Dipankar and Murugan, 2012; Rahimi et al., 2021).

$$\text{Germination Percentage} = \frac{\text{Number of seeds germinated}}{\text{Total number of seeds}} \times 100$$

RESULTS AND DISCUSSION

The synthesis of silver nanoparticles (AgNPs) using *Syzygium travancoricum* leaf extract was confirmed through a distinct color change in the reaction mixture. The transformation from dark brown to light golden brown indicated the successful reduction of silver ions (Ag^+) to elemental silver (Ag). This visual observation served as primary evidence of nanoparticle formation, suggesting that the phytochemicals present in the *Syzygium travancoricum* extract acted as natural reducing and stabilizing agents. The color transition demonstrated the efficiency of the plant extract in facilitating the biosynthesis process without the need for hazardous chemicals, confirming the environmentally friendly nature of this green synthesis method.

UV-Visible Spectral Analysis

The formation and stability of the synthesized AgNPs were further verified using UV-Visible spectrophotometric analysis. The reduction of silver ions upon exposure to the plant extract was supported by a characteristic absorption peak observed at 432 nm, which corresponds to the surface plasmon resonance (SPR) of silver nanoparticles. This SPR band results from the collective oscillation of conduction electrons on the nanoparticle surface when excited by light. The colloidal AgNP solution showed a strong absorption range between 300 and 480 nm, indicating well-dispersed and stable nanoparticles. The sharp spectral peak confirmed the presence of monodispersed nanoparticles and validated the successful green synthesis of AgNPs using *S. travancoricum* as a natural reducing agent (Fig. 1 & Fig. 2).

SEM and TEM Analysis

The morphological and elemental characteristics of the biosynthesized silver nanoparticles (AgNPs) were analyzed using Scanning Electron Microscopy (SEM) coupled with Energy Dispersive X-ray Analysis (EDAX) and Transmission Electron Microscopy (TEM). SEM-EDAX provided both qualitative and quantitative information on nanoparticle structure and composition. SEM images revealed a uniform surface topology with nanoparticles showing minimal aggregation, while the EDAX spectrum confirmed silver as the dominant elemental component, validating successful nanoparticle synthesis. The even distribution and reduced clustering observed in SEM suggested effective capping and stabilization of nanoparticles by the bioactive compounds present in *Syzygium travancoricum* leaf extract (Fig. 3).

TEM analysis was employed to determine the precise size, shape, and morphology of the nanoparticles. A drop of the nanoparticle-containing extract was placed on a carbon-coated copper grid and dried under vacuum before imaging. TEM micrographs showed that the silver nanoparticles were well-dispersed, predominantly spherical, and smooth in texture. The particles exhibited uniform morphology, with sizes ranging between 2 and 100 nm, confirming their nanoscale dimensions. These findings collectively demonstrate that *S. travancoricum* leaf extract is effective in producing stable, uniformly shaped silver nanoparticles suitable for biological and agricultural applications (Fig. 4).

Nanoprimering and Its Effects on Seed Germination

Nanotechnology has emerged as a valuable tool in agriculture, particularly for improving seed germination, stress tolerance, and crop productivity. In this study, silver nanoparticles (AgNPs)

synthesized from *Syzygium travancoricum* were applied for nanopriming of *Brassica nigra* seeds. The AgNPs, along with controls including pure plant extract, tap water, and distilled water, were used for seed treatment. During synthesis, silver ions (Ag^+) were reduced to silver oxide (AgO), forming a bioactive nanoparticle suspension suitable for seed soaking.

The results demonstrated notable differences in germination responses. Seeds treated with AgNPs showed enhanced germination rates and improved seedling vigor compared to unprimed control seeds, whereas seeds soaked only in distilled water exhibited minimal germination. After seven days, AgNP-treated seeds displayed faster germination and healthier growth, suggesting that nanoparticles may enhance water uptake, enzyme activation, and metabolic activity during early seed development.

The mechanism of nanopriming is likely influenced by nanoparticle size, surface area, and chemical reactivity, with smaller nanoparticles interacting more efficiently with seed surfaces and cellular structures, promoting metabolic efficiency and early growth. Additionally, no significant inhibition of germination was observed in seeds treated with pure plant extract or AgO nanoparticle solutions. These findings indicate that AgNPs synthesized from *S. travancoricum* are effective in enhancing seed germination and hold potential for sustainable agricultural applications (Fig. 5).

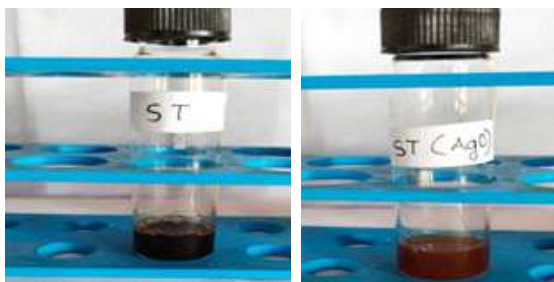


Fig. 1: Plant Extract before and after adding silver nitrate

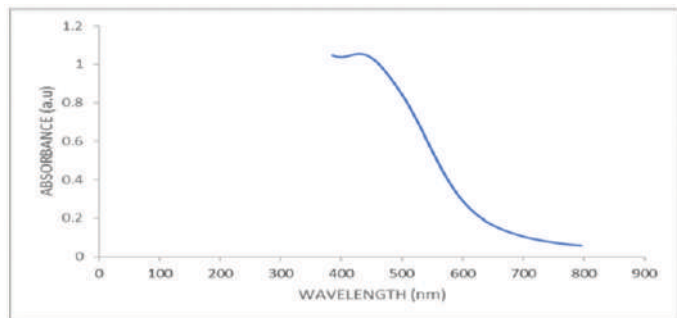


Fig. 2: UV Visible Spectral Analysis of Silver Nanoparticles from plant Extract

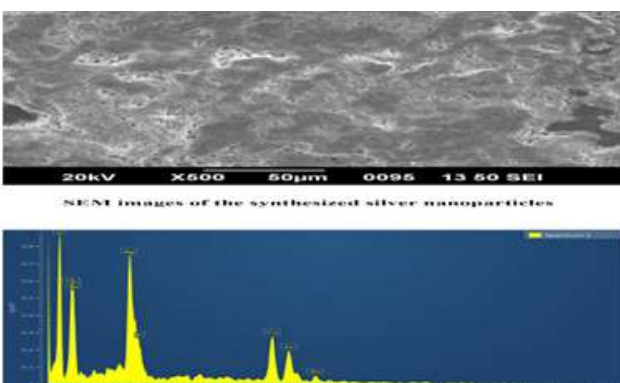


Fig. 3: SEM EDAX result of *Syzygium travancoricum*-AgNPs

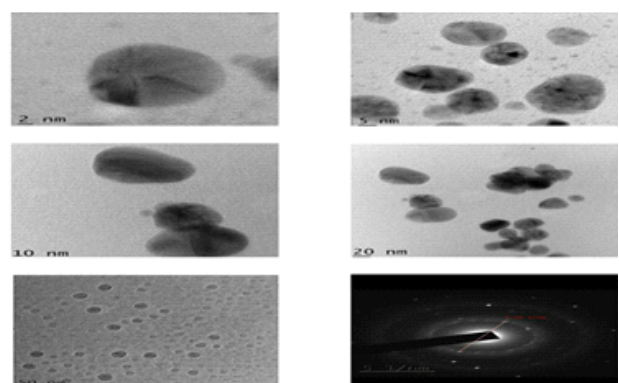


Fig. 4: TEM Images of *Syzygium travancoricum*-AgNPs



Fig. 5: Nano priming of *Brassica nigra* seeds

CONCLUSION

Silver nanoparticles synthesized from *Syzygium travancoricum* leaf extract were successfully produced, characterized, and shown to be stable and uniformly shaped. Nanoprimering with these AgNPs significantly enhanced *Brassica nigra* seed germination and seedling vigor, demonstrating their potential as an eco-friendly tool to improve early plant growth and sustainable agriculture.

Table 1: Germination Percentage of *Brassica nigra* seeds

DAY	DISTILLED WATER	UNPRIMED	EXTRACT +Ag	AgNO
DAY1	4%	16%	36%	8%
DAY2	8%	20%	40%	12%
DAY3	12%	20%	40%	16%
DAY4	16%	24%	44%	20%
DAY5	20%	24%	48%	24%
DAY6	20%	28%	52%	24%
DAY 7	24%	32%	60%	28%

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SEED PRIMING AS A STRATEGY TO MITIGATE SALINITY STRESS IN MULLANKAIMA RICE

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ABSTRACT

Environmental pollutants and abiotic stress influence seed germination, emergence and agricultural output. Salinity can affect agricultural output in dry and semi-arid regions. Underneath salt conditions, seed priming can be used to reduce the consequences of salt stress. Priming has the benefit of displaying steady and faster germination price, seedling vigor and crop development below adverse circumstances, as well as overcoming them from dormancy. As a result, seed priming may be regarded as an advanced solution to germination problems whilst seeds are produced in detrimental. The present study explored numerous seed priming methods with an indigenous rice variety of Wayanad, Mullankaima to standardized suitable seed priming treatment and to examine its effect on increase parameters under salt stress conditions. To systematize an appropriate seed priming treatment for rice, the seeds were primed with different priming methods like hydro priming, osmo priming, chemical priming, redox priming and hormonal priming at different concentrations of salt stress. The results discovered that Mullankaima shows the highest rate of growth under all concentration of Ascorbic acid.

Keywords: *Indigenous variety, Seed priming, Salt tolerance, Mullankaima rice*

INTRODUCTION

Soil and water salinization represent significant abiotic stress that limit rice production worldwide, particularly in coastal and marginal areas. Increased levels of salinity along with osmotic stress disrupt seed germination, early seedling establishment, water absorption, photosynthesis, and ionic balance. These factors ultimately affect grain yield (Vibhuti et.al., 2022). Since rice is especially sensitive to salinity during germination and early growth stages, it is crucial to develop strategies that improve salt tolerance during these important phases to enhance performance in salt-affected soils.

Seed-priming is an effective, low-cost farming practice that involves pre-treating seeds with water, osmotic solutions, chemicals, or growth regulators before planting. This process begins partial hydration, activates metabolic repair and stress-adaptation systems, and allows the seed to dry back to its normal moisture level. Pre-conditioning can shorten average germination time, increase emergence uniformity, and boost early seedling vigour. This leads to better tolerance to later abiotic stresses, including salinity (Singh et.al, 2018). In rice farming, many studies show that halopriming or chemical priming of seeds enhances salinity tolerance by promoting a better Na^+/K^+ balance, increasing antioxidant enzyme activity, maintaining higher relative water content, and improving germination and seedling growth in saline environments (Botanical Studies, 2022; Kappen, Thomas, & Prameela, 2022).

Heritage rice landraces, like Mullankaima, are aromatic, bold-grained, awned varieties grown in the Wayanad hills of Kerala. Mullankaima belongs to the "kaima/kazhama" group of aromatic

landraces, prized for their fragrance and creamy texture, and is often used in special dishes by local communities. Historically, its awned feature has protected it against bird damage. Nutritional studies show that Mullankaima has a higher iron content than typical white rice and is considered beneficial for lactating mothers.

Despite its important heritage status and unique benefits, there is a lack of published studies on seed priming or salt tolerance enhancement specifically for Mullankaima. In light of the growing risk of soil salinization in Kerala and the need to preserve and use heritage landraces, it makes sense to investigate priming strategies for Mullankaima. Seed priming could help this landrace adapt better to salty conditions, which could expand its cultivation options, support agro-biodiversity, and combine heritage rice conservation with climate resilience efforts.

MATERIALS AND METHODS

The study was conducted in the Department of Botany, St. Joseph's College (Autonomous), Irinjalakuda, to examine the effect of seed priming on rice under salinity stress. Mature, dried seeds of three rice varieties were collected from Wayanad district, Kerala. Different priming techniques were evaluated to enhance salinity tolerance: hydropriming with sterile distilled water; osmopriming with calcium chloride (CaCl_2) at 5, 10, and 15 mM; redox priming with hydrogen peroxide (H_2O_2) at 25%, 50%, and 75%; chemical priming with sodium selenate (Na_2SeO_4) at 100, 150, and 200 μM ; and hormonal priming with ascorbic acid at 50, 100, and 200 mg L^{-1} .

Healthy, dehusked seeds were surface sterilized with 5% sodium hypochlorite for 15 minutes, rinsed repeatedly with sterile distilled water, soaked for 20 hours at 28°C, and air-dried at 30°C for 24 hours to serve as unprimed controls. For priming treatments, seeds were incubated in the dark at 30°C for 20 hours with gentle agitation at a seed-to-solution ratio of 1:5 (w/v). The seeds were then washed twice with distilled water, surface-dried using blotting paper, and re-dried to their original moisture content at 30°C for 24 hours.

To assess germination under salinity stress, sodium chloride (NaCl) was applied at 100, 150, and 200 mM. Germination tests were performed using the paper towel method, with seeds pre-soaked in NaCl solutions (0–200 mM). The dishes were sealed to maintain humidity. After 14 days, germination percentage was determined according to ISTA (2011) guidelines.

Growth parameters, including root and shoot length, fresh and dry biomass, vigour index, and seed stamina index, were measured. Salinity tolerance was evaluated visually following the Standard Evaluation System (SES) for rice established by the International Rice Research Institute (IRRI) (Gregorio et al., 1997; Bado et al., 2016; Wang et al., 2016; Wangsawang et al., 2018).

Treatments selected for this study were:

T1 indicates No priming + Control temperature,

T2 indicates Hydro priming

T3 indicates Osmo priming using CaCl_2 : (a:5mM, b:10mM, c:15mM)

T4 indicates Chemical priming using Na_2SeO_4 : (a:100 μM , b: 150 μM , c: 200 μM)

T5 indicates Hormonal priming using Ascorbic acid (a: 50 mg L⁻¹, b: 100 mg L⁻¹, c: 200 mg L⁻¹)

T6 indicates Redox priming using H₂O₂: (a:25%, b:50%, c:75%)

i. indicates Salinity stress of 50 mM NaCl

ii. indicates Salinity stress of 100 mM NaCl

iii. indicates Salinity stress of 200 mM NaCl

RESULTS AND DISCUSSION

Table 1: Growth parameters of Mullankaima rice variety

TREATMENT	GERMINATION % (15 TH DAY)	SHOOT LENTH. (15 TH DAY) cm	ROOT LENTH. (15 TH DAY) cm	VIGOUR INDEX	SEED STAMINA INDEX	DRY WIGHT PERCENTAGE	SES SCORE
T1	100	6.5	3.8	1030	10.30	89.5	5
T2.a	100	9.8	3.6	1340	13.40	88.7	1
T2.b	100	9	3.6	1260	12.60	89.0	1
T2.c	100	5.4	2.3	770	7.70	88.1	1
T3.a.i	100	11.6	4	1560	15.60	82.0	1
T3.a.ii	100	8.5	3.9	1240	12.40	89.5	1
T3.a.iii	100	4.8	2	680	6.80	89.0	3
T3.b.i	100	9.9	3.9	1380	13.80	85.5	1
T3.b.ii	100	7.8	3.5	1120	11.20	85.1	1
T3.b.iii	100	4.9	1.8	670	6.70	88.0	1
T3.c.i	100	8	3.8	1180	11.80	89.8	1
T3.c.ii	90	6.2	3	828	8.28	88.2	1
T3.c.iii	100	5	2.9	790	7.90	86.1	1
T4.a.i	30	3.3	0.6	117	1.17	89.8	7
T4.a.ii	35	3	1	147	1.47	85.9	7
T4.a.iii	0	0	0	0	0	80	9
T4.b.i	35	3.5	0.9	154	1.54	87.7	7
T4.b.ii	30	3	1	120	1.20	87.9	7
T4.b.iii	15	0.3	0	4.5	0.045	78.4	9
T4.c.i	40	4.2	1.3	220	2.20	84.7	7
T4.c.ii	20	2.9	1	78	0.78	88.5	7
T4.c.iii	20	0.3	0	6	0.06	87.9	9
T5.a.i	100	13.9	5	1890	18.90	83.5	1
T5.a.ii	100	11	4.2	1520	15.20	87.9	1

T5.a.iii	100	9.3	4	1130	11.30	88.8	1
T5.b.i	100	13.5	4.9	1840	18.40	89.6	1
T5.b.ii	100	10.5	4.3	1480	14.80	89.8	1
T5.b.iii	100	8.6	3.9	1250	12.50	87.7	1
T5.c.i	100	12.9	4.5	1740	17.40	88.3	1
T5.c.ii	100	9.9	4.3	1420	14.20	89.9	1
T5.c.iii	100	7.5	3.4	1260	12.60	87.0	1
T6.a.i	100	9.2	3.6	1280	12.80	88.7	1
T6.a.ii	100	9.1	3.5	1260	12.60	88.3	1
T6.a.iii	100	9.9	3.3	1330	13.30	88.8	1
T6.b.i	70	8.3	3.5	826	8.26	89.4	1
T6.b.ii	65	7.3	2.9	663	6.63	85.7	5
T6.b.iii	50	5.2	2.3	37	0.37	86.9	5
T6.c.i	65	6.8	3.4	663	6.63	88.2	5
T6.c.ii	45	5.5	2.3	351	3.51	85.4	7
T6.c.iii	20	3.4	1.6	100	1	83.6	7

Mullankaima displayed moderate germination rates in all treatments but treatments with highest salinity had reduced germination. Vigour Index, which measures the seedling quality in terms of both shoot and root growth, correlated well with germination. In most cases, rice demonstrated the highest vigour index in treatments such as T5ai (1890) and T5bi (1840), suggesting high seedling vigor and adaptability under optimal conditions. Dry weight percentage is an important indicator of the nutrient content and robustness of seedlings. Mullankaima showed consistently high dry weight percentages (around 88-89%) in most treatments (T2a, T3bi, T5ai), signifying strong overall growth and development under optimal conditions. The Seed Stamina Index, which measures the resilience of seedlings to environmental stress, was highest in treatments like T5ai (18.90) for Mullankaima. These high values suggest that these treatments produced the most resilient seedlings capable of thriving under variable conditions. In contrast, the SES score revealed poor performance in certain treatments with low vigour and reduced seedling survival, particularly in T4 and T6 treatments. The SES score was lowest (9) for treatments exhibiting minimal germination or growth, confirming that these seedlings failed to develop adequately.

The highest vigour is observed in treatments like T2a, T3ai, and T5ai, with vigor indices exceeding 1500 and SES scores of 1. These treatments also exhibit high germination (100%) and substantial shoot/root lengths. Conversely, treatments like T4aiii and T4biii show poor germination (0-15%) and poor seedling development, with corresponding high SES scores (7-9), suggesting reduced seed viability. Its resilience, as indicated by the Seed Stamina Index, was also relatively



high.

SUMMARY AND CONCLUSION

Mullankaima germinated under NaCl 100mM shows highest (100%) germination in hydropriming, osmo-priming, hormonal priming and Redox priming. Highest shoot and root length is observed (13.9,5) in hormonal priming with ascorbic acid. Vigour index and seed stamina index is higher (1890,18.90 respectively) in hormonal priming. Dry weight percentage is more (89.8%) in both osmo-priming and chemical priming.

Mullankaima germinated under NaCl 150mM shows highest (100%) germination in hydropriming and hormonal priming. The highest shoot length and root length is observed (11,4.2) in hormonal priming. Vigour index and seed stamina index (1480,14.80) is more in priming with ascorbic acid. Dry weight percentage (89.9%) is higher in hormonal priming.

Mullankaima germinated under NaCl 200mM shows highest (100%) in hydropriming

osmopriming and hormonal priming. Shoot length and root length is more (9.3,4) in hormonal priming. Vigour index and seed stamina index (1330,13.30) are highest in Redox priming. Dry weight percentage is maximum (89.0%) in osmo-priming.

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AN INVENTORY OF BIRD ASSEMBLAGES IN THE KADALUNDI–VALLIKUNNU COMMUNITY RESERVE, KERALA

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ABSTRACT

Avian communities serve as reliable indicators of ecosystem health and play an important role in maintaining ecological functions, particularly within wetland environments that support both resident and migratory species. The Kadalundi–Vallikkunnu Community Reserve in Kerala comprises a mosaic of coastal habitats, including mudflats, mangrove patches, sandy shorelines, and shallow estuarine waters, and is internationally recognized for its importance to migratory shorebirds. To evaluate bird species diversity and assemblage structure, systematic surveys were conducted between October 2024 and February 2025. The study employed total count census methods along with direct visual and auditory observations, aided by standard identification guides and expert verification. A total of 28 bird species representing 16 families were recorded during the survey period. Members of the family Ardeidae were most abundant, accounting for six species, followed by Alcedinidae and Scolopacidae with three species each. Several migratory shorebirds, including sandpipers and shanks, were also observed. When compared with previously published records, the present findings suggest a decline in migratory shorebird occurrence, potentially linked to habitat alteration, pollution pressures, and changing climatic conditions. The study emphasizes the urgent need for wetland habitat restoration, mangrove protection, and increased community engagement, to sustain avian diversity, ecosystem functions, and nature-based tourism in the reserve.

Keywords: *Avian community, wetland, Ardeidae, Alcedinidae, Scolopacidae*

INTRODUCTION

Birds (Class Aves) are widely recognised as sensitive indicators of environmental change and habitat quality due to their ecological diversity, mobility, and position in food webs (Bibby et al., 2000). Wetland ecosystems, in particular, support a high diversity of avifauna by providing essential resources such as feeding, nesting, and roosting habitats for both resident and migratory species. Coastal wetlands play a crucial role along migratory flyways, offering stopover and wintering grounds for shorebirds and waterbirds.

The Kadalundi–Vallikkunnu Community Reserve, located along the Malabar Coast of Kerala, is an ecologically important coastal wetland comprising estuarine waters, mudflats, mangroves, sandy beaches, and shallow water bodies. The reserve is well known for supporting migratory shorebirds, especially during the winter season, and has been designated as a protected area due to its avifaunal significance. Mangrove vegetation, particularly *Acanthus ilicifolius*, contributes to habitat complexity by providing shelter and foraging opportunities for a variety of bird species.

Although the reserve is recognised for its importance to birds, detailed and updated

documentation of avian species composition and family-wise distribution remains limited. Baseline studies are essential for detecting changes in avian assemblages over time and for formulating effective conservation and management strategies. The present study aims to document the avian diversity of the Kadalundi–Vallikkunnu Community Reserve, analyse species composition and family-wise representation, and assess the occurrence of migratory birds within the wetland ecosystem

MATERIALS AND METHODS

The present study was conducted at the Kadalundi–Vallikkunnu Community Reserve, situated in Kozhikode District, Kerala, along the southwest coast of India. The reserve encompasses a mosaic of habitats including estuarine regions, intertidal mudflats, mangrove patches, sandy shorelines, shallow waters, and adjacent human-influenced landscapes such as coconut plantations. These diverse habitat types collectively support a wide range of avian species. Data collection for the present study was done during the period of October 2024 to February 2025, corresponding to the migratory season. Birds were recorded using direct observation and total count census methods. Observations were made during daylight hours when bird activity was high. Species identification was based on visual sightings and auditory cues, using standard field guides (Ali, 2002; Ali and Ripley, 1983; Grimmett et al., 1999), and identifications were further validated through expert consultation when required. All observed species were recorded and classified family-wise to analyse avian composition.

RESULTS

Species Richness and Family Composition: The avifaunal survey conducted at the Kadalundi–Vallikkunnu Community Reserve recorded a total of 28 bird species belonging to 26 families (Table 1, Fig. 1) during the study period (October 2024–February 2025). The observed species comprised both resident and migratory birds, indicating the importance of the reserve as a multi-season habitat. Among the recorded families, Ardeidae was the most species-rich (Fig 2), represented by six species, followed by Alcedinidae and Scolopacidae with three species each followed by Accipitridae (2 spp), Corvidae (2 spp) and Columbidae (2 spp). The remaining families were represented by one species each, contributing to the overall diversity of the avian assemblage.

Occurrence of Migratory Birds: Migratory shorebirds, including sandpipers and shanks, were recorded

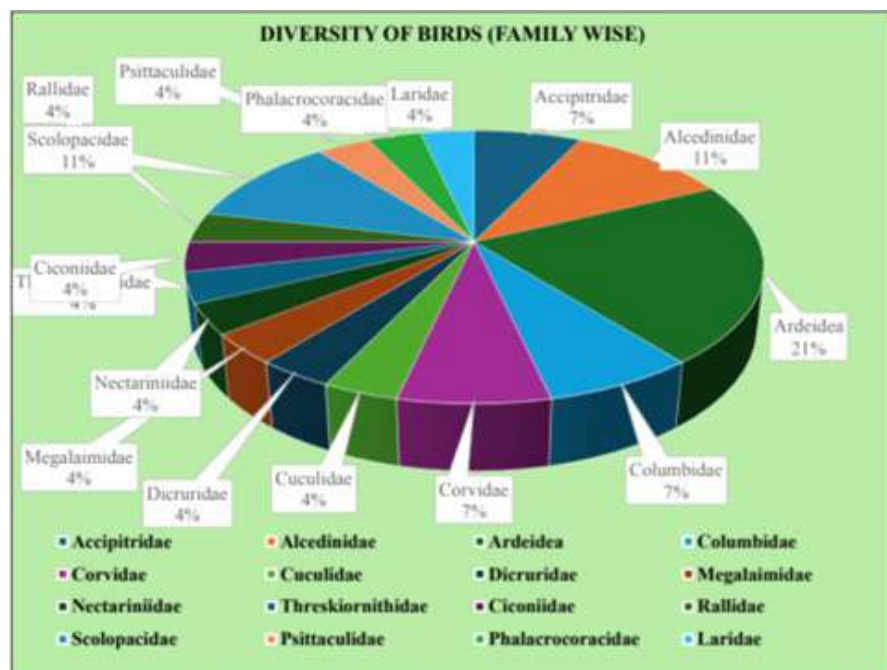


Fig. 1: Diversity of the Birds (Family wise)

during the survey period. These species were primarily observed utilising the intertidal mudflats and shallow water zones of the reserve for feeding and roosting. Their presence confirms the role of the Kadalundi–Vallikkunnu Community Reserve as a seasonal habitat for migratory birds along coastal flyways.

Table 1: List of Birds observed from the study area

SLNo	Family	Common Name	Scientific Name
1	Accipitridae	Brahminy Kite	<i>Haliastur indus</i>
		Black Kite	<i>Milvus migrans</i>
2	Alcedinidae	Common Kingfisher	<i>Alcedo atthis</i>
		Stork-billed Kingfisher	<i>Pelargopsis capensis</i>
		White-throated Kingfisher	<i>Halcyon smyrnensis</i>
3	Ardeidae	Great Egret	<i>Ardea alba</i>
		Little Egret	<i>Egretta garzetta</i>
		Striated Heron	<i>Butorides striata</i>
		Indian Pond-Heron	<i>Ardeola grayii</i>
		Grey Heron	<i>Ardea cinerea</i>
		Western Reef Heron	<i>Egretta gularis</i>
4	Columbidae	Rock Pigeon	<i>Columba livia</i>
		Spotted Dove	<i>Spilopelia chinensis</i>
5	Corvidae	House Crow	<i>Corvus splendens</i>
		Large-billed Crow	<i>Corvus macrorhynchos</i>
6	Cuculidae	Greater Coucal	<i>Centropus sinensis</i>
7	Dicruridae	Greater Racket tailed drongo	<i>Dicrurus paradiseus</i>
8	Megalaimidae	White Cheeked barbet	<i>Psilopogon viridis</i>
9	Nectariniidae	Purple Rumped sunbird	<i>Leptocoma zeylonica</i>
10	Threskiornithidae	Black headed Ibis	<i>Threskiornis melanocephalus</i>
11	Ciconiidae	Asian Openbill	<i>Anastomus oscitans</i>
12	Rallidae	White breasted waterhen	<i>Amaurornis phoenicurus</i>
13	Scolopacidae	Common sandpiper	<i>Actitis hypoleucos</i>
		Redshank	<i>Tringa tetanus</i>
		Whimbrel	<i>Numenius phaeopus</i>
14	Psittaculidae	Rose ringed parakeet	<i>Psittacula krameria</i>
15	Phalacrocoracidae	Little Cormorant	<i>Microcarbo niger</i>
16	Laridae	Black headed gull	<i>Chroicocephalus ridibundus</i>

DISCUSSION

Avian Diversity and Habitat Suitability:

The recorded avian species diversity reflects the ecological suitability of the Kadalundi–Vallikkunnu Community Reserve for wetland–associated bird species. The dominance of the family Ardeidae suggests the availability of shallow–water and mudflat habitats that support prey

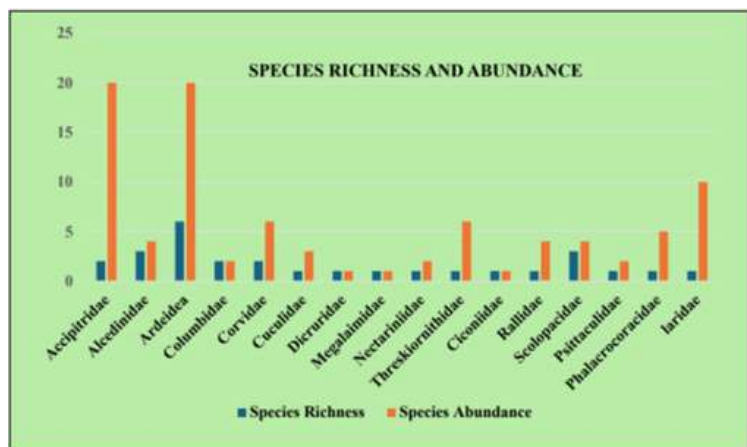


Fig. 2: Species richness and abundance in each Family observed

organisms such as fish and aquatic invertebrates. Similar patterns of heron and egret dominance have been reported from other tropical coastal wetlands (Ali, 2002). The presence of multiple kingfisher (Alcedinidae) indicates favourable aquatic conditions and adequate fish resources, while the occurrence of raptors belonging to Accipitridae suggests the availability of prey and the presence of a relatively stable trophic structure within the ecosystem.

The observation of migratory shorebirds such as sandpipers and shanks highlights the importance of the reserve as a wintering and stopover site. Mudflats provide nutrient-rich foraging grounds essential for migratory waders during long-distance movements. However, when compared with earlier records from the region, the present observations suggest a reduced occurrence of migratory shorebirds, which may indicate declining habitat quality. Such declines in migratory bird populations have been widely attributed to habitat loss, pollution, human disturbance, and climate-related changes affecting coastal wetlands globally (Wetlands International, 2012).

Influence of Habitat Heterogeneity: The heterogeneity of habitats within the reserve, including estuarine waters, mangrove vegetation, mudflats, and sandy stretches, plays a crucial role in supporting diverse bird assemblages. Mangrove vegetation, particularly *Acanthus ilicifolius*, offers shelter and roosting sites, while open mudflats and shallow waters support the feeding activities of waders and waterbirds. Despite increasing anthropogenic pressures in surrounding areas, the continued presence of diverse avian species indicates that the core wetland habitats remain functionally important.

Overall, the observed species composition, family-wise dominance, and occurrence of migratory shorebirds indicate that the habitat structure of the Kadalundi–Vallikkunnu Community Reserve continues to support diverse avian assemblages, while also suggesting emerging pressures that may influence bird distribution patterns.

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INFESTATION OF PARASITIC CRUSTACEANS ON PONY FISHES (PERCIFORMES: LEIOGNATHIDAE) OF MALABAR COAST OF INDIA

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ABSTRACT

Leiognathid fishes (Perciformes) are small to medium-sized bottom-dwelling fishes that constitute an important component of India's demersal fishery resources. The present study documents the species diversity of leiognathid fishes along the Malabar Coast of India and evaluates the threat posed by infestation of parasitic crustaceans. Fish samples were collected randomly from Aykkara and Azheekal fish landing centres in Kannur District, Kerala, during January–March 2018. A total of eight leiognathid species were identified, namely *Eubleekeria splendens*, *Nuchequula blochii*, *Leiognathus brevirostris*, *Secutor insidiator*, *Secutor ruconius*, *Karalla daura*, *Gazza minuta*, and *Gazza achlamys*. Alpha diversity analysis revealed a Shannon–Wiener diversity index (H) of 1.678, Simpson's dominance index (D) of 0.2251, and Simpson's index of diversity (1–D) of 0.7749. Parasitological examination revealed four species of parasitic crustaceans. Copepod infestations included *Lernanthropus leiognathi* on *E. splendens* (5.3% occurrence; mean intensity 1.33) and *L. brevirostris* (5.9%; 1.0), *Lernanthropus secutoris* on *S. ruconius* (7.7%; 1.0), and *Nothobomolochus multispinosus* on *N. blochii* (3.8%; 1.0), primarily infesting the branchial cavity near the opercular hinge region. Additionally, the isopod *Catoessa bosicii* was recorded from *G. minuta* (2.4%; 1.0), attached to the inner operculum with its mouth oriented toward the host's buccal cavity. *L. secutoris* exhibited host specificity to *Secutor* species, whereas *L. leiognathi* infested multiple leiognathid genera. The study highlights host–parasite associations in leiognathid fishes and emphasizes the ecological significance of parasitic crustaceans in demersal fish populations of the Malabar Coast.

Keywords: Demersal fishes, Kannur, Alpha diversity, host fishes, copepodes

INTRODUCTION

Fishes of the family Leiognathidae, popularly called silver bellies, pony fishes, slipmouths or tooth ponies (*Mullan* in Malayalam, *Karal* in Tamil, *Karalu* in Telugu) belong to the order Perciformes. They are small to medium-sized, oblong or round silvery bodied bottom-living fishes of shallow coastal waters, constitute a main group of demersal fisheries resources along the Indian coast (Abraham et al., 2011). They constitute 2.13% of the total marine production of India (CMFRI Annual Report, 2021) and the fishery was supported by 48 species belongs to 9 genera distributed along Indo-West Pacific, of which 16 species were recorded from the Cochin water, West Coast of India (Abraham et al., 2011), but there is no report on the diversity of pony fishes from the Malabar Coast. The present study aims to understand the diversity of this marine taxon of Malabar Coast and also its threats by the infestation of parasitic crustaceans.

Among the crustacean parasites, copepods represent the largest and diverse groups, are seen in the mouths, operculum and gills of all most all marine fishes (Huys and Boxshall, 1991) and displays

a wide range of adaptive modifications to survive on diverse hosts (Kabata, 1979). Majority of them can be seen with naked eyes and they typically carry their eggs in paired egg sacs, extruded from their genital apertures and carried until ready to hatch (Misganaw and Getu, 2016). There is not much study done on diversity and parasitic infestation of leiognathid fishes of Malabar coasts. Thus, studies on parasitic infestation on fishes have considerable significance. With increasing fishing pressure, the only option left for the sustainability of leiognathid fisheries is their rational management and is possible not only with a thorough knowledge on the dynamics of the fish stocks through the taxonomic studies and understanding its foremost threats.

MATERIALS AND METHODS

Fish sample collection and identification: Leiognathidae fishes were collected from Aykkara (11° 51'33" N, 75° 02'30" E) and Azheekal (11° 56' 16.62" N 75° 19' 29.6796" E), fish landing centre of Kannur district, Kerala, Malabar Coast of India during January to March 2018. Sampling of pony fishes was done fortnightly at random level. Collected fishes were identified up to the species level using morphometric character based on FAO Species Identification Guide for Fishery Purposes, Indian Ocean; Fish base (<http://www.fishbase.org>) and WoRMS (World Register of Marine Species, 2018) (available from <http://www.marinespecies.org>). The standard length (from tip of mouth to tip of caudal fin) and breadth of all the samples were measured. Mean and standard deviation of all measurements were calculated using Microsoft Excel. These measurements are useful in comparing and differentiating between morphologically similar species (Murty, 1978).

Diversity indices: Alpha diversity indices: Dominance-D, Simpson-1-D, Shannon-H, Brillouin of pony fishes were analyzed using the software Past3.

Parasitological examination: Collected fishes were thoroughly observed for the presence of parasitic crustaceans. General body surface, fins, gill cavity, gill filaments, operculum, mouth, nasal pore, eyes etc were closely observed with the help of a hand lens under the bright illumination. Recovered parasitic crustaceans were removed and preserved in 5% formalin for further study. Preserved parasites were cleared in a drop of 85% lactic acid prior to examination using a Leica S6D stereo microscope. Identification of copepods was based on the morphological features according to Yamaguti (1963), Kabata (1985) and Pillai (1985). The photographs of the fish were captured using iPhone 7 and the parasites were taken using Magnus MIPS 10MP microscope (OLYMPUS SZ61). Parasitic indices like prevalence and abundance were measured using the software Qp3 (Quantitative parasitology).

RESULTS AND DISCUSSION

Altogether 8 species under 6 genera of Leiognathidae fishes namely *Leiognathus brevirostris* Valenciennes, *Eubleekeria splendens* Cuvier, *Secutor insidiator* Bloch, *Karalla daura* Cuvier, *Nuchequula blochii* Valenciennes, *Secutor ruconius* (Hamilton- Buchanan), *Gazza minuta* Bloch, *Gazza achlamys* Jordan and Stakes were collected through the present study (Fig.1). Collected species were listed in the table (Table 1) and the percentage of distribution of each species was also given (figure 1).

Table 1: List of Leignathidae fishes collected during the study period.

SI No	Name of species	Common Name	S L *	B**
1	<i>Leignathus brevis</i> Valensiennes	Short nose ponyfish	9.16± 1.22	3.86±0.63
2	<i>Eubleekeria splendens</i> Cuvier	Splendid ponyfish	9.02 ±0.68	4.29± 0.41
3	<i>Secutor insidiator</i> Bloch	Pugnose ponyfish	7.28±1.01	3.06±0.54
4	<i>Karalla daura</i> Cuvier	Gold stripe ponyfish	8.21±0.13	3.2± 0.19
5	<i>Nuquequula blochii</i> Valensiennes	Two blotch ponyfish	7.82± 1.14	2.5±0.46
6	<i>Secutor ruconius</i> (Hamilton-Buchanan)	Deep pugnose ponyfish	7.38± 0.98	3.59± 0.62
7	<i>Gazza minuta</i> Bloch	Tooth pony	8.75±0.35	3.35±0.21
8	<i>Gazza achlamys</i> Jordan and Stakes	Small toothed ponyfish	8.45±0.01	3.7±0.01

*SI- Standard length in cm, *B – Breadth in cm

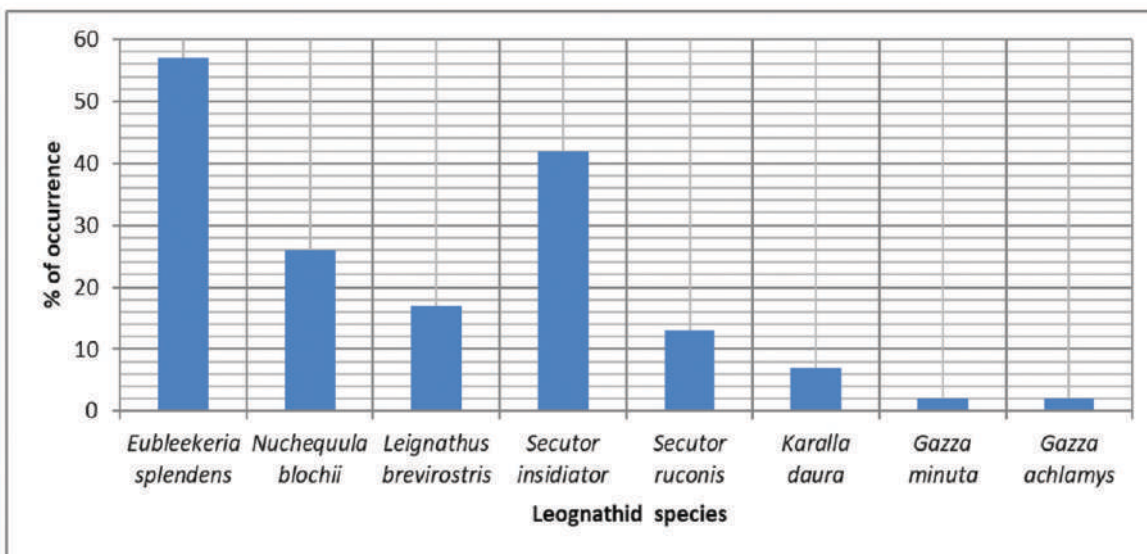


Fig. 1: Percentage of distribution of Leignathid fishes during the study period.

Diversity indices: Fish diversity was assessed by calculating the various diversity indices such as Shannon - Wiener diversity index (H)-1.678, Simpson's Dominance index (D)-0.2251, Simpson's index of diversity (1- D)-0.7749, Brillouin index- 1.594 using the software Past 3.

Parasitic Crustaceans infested on Leignathid fishes (Fig. 3): Of the 8 species of leignathid fishes collected from the commercial landings of marine fishes, 4 species of parasitic crustacean were recovered: *Lernanthropus leignathi*, *L. secutoris*, *Nothobomolochus multispinosus* and *Catoessa bosicii* (Table 2). Of which *Lernanthropus* and *Nothobomolochus* are belonging to

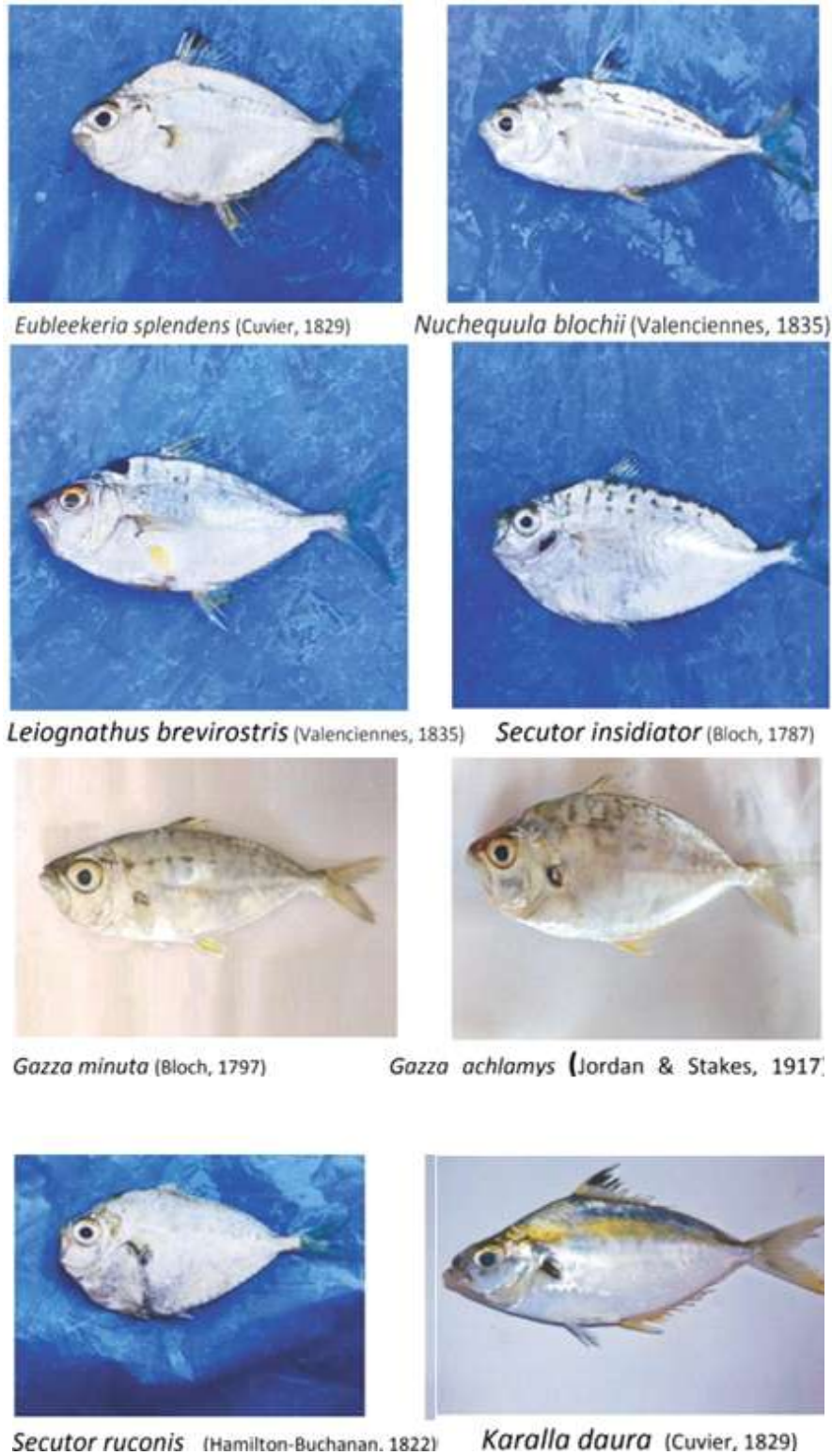


Fig. 2: *Leiognathidae* fishes collected during the study period

copepod whereas *Catoessa* is an isopoda genus. *L. secutoris* were found to be infested on the gill filaments of host fishes belongs to the genus *Secutor* while *L. leiognathi* prefer the host members of all *Leiognathus* genus except the genus *Secutor*. *Nothobomolochus multispinosus* found to be infested on the branchial cavity at the opercular hinge region as their microhabitat. One isopod species, *Catoessa boscii* infested as attached to the inner side of operculum by its mouth was

directed towards the mouth opening of the host fish.

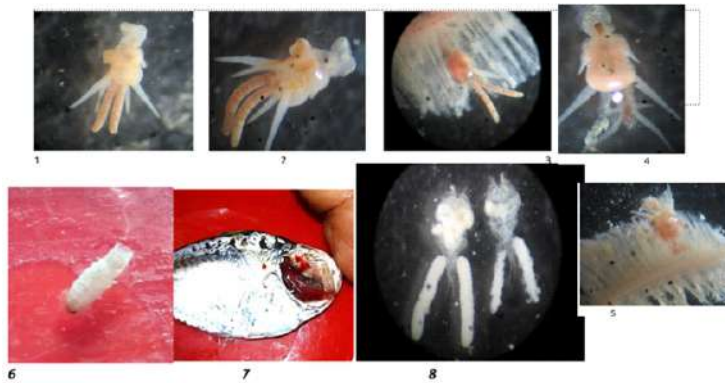
Table 2: Infestation of parasitic crustacean on Leiognathidae fishes of Malabar Coast.

SI No	Leiognathid sp.	NFO	NFI	NPR	Parasite sp	Site of infestation
1	<i>Eubleekeria splendens</i>	57	3	4	<i>Lernanthropus leiognathi</i>	Gill filaments of first and second gill arch
2	<i>Nuclequula blochii</i>	26	1	0	<i>Nothobomolochus multispinosus</i>	Inner operculum on hinge region
3	<i>Leiognathus brevirostris</i>	17	1	1	<i>L.leiognathi</i>	Middle gill filament of 1 st gill arch
3	<i>Secutor insidiator</i>	42	1	1	<i>Catoessa boscii</i>	Branchial cavity at inner operculum
6	<i>Secutor ruconius</i>	13	1	1	<i>L.secutoris</i>	Middle gill filament of 1 st gill arch
4	<i>Karalla daura</i>	7		X	-	-
7	<i>Gazza minuta</i>	2		X	-	-
8	<i>Gazza achlamys</i>	2		X	-	-

NFO= Number of fishes observed; NFI= Number of fishes infected; NPR= Number of parasites recovered

Table 3: Descriptive statistics on parasitic crustaceans' infestation on Leiognathidae fishes of Malabar Coast (Quantitative Parasitology- version 3)

SI No	Name of Host	Name of parasite	Prevalence	Mean Intensity	Median intensity
1	<i>E. splendens</i>	<i>L.leiognathi</i>	5.3%	1.33	1.0
2	<i>N. blochii</i>	<i>N.multispinosus</i>	3.8%	1.0	1.0
3	<i>L. brevirostris</i>	<i>L. leiognathi</i>	5.9%	1.0	1.0
4	<i>S. insidiator</i>	<i>C. bruci</i>	2.4%	1.0	1.0
5	<i>S. ruconius</i>	<i>L.secutoris</i>	7.7%	1.0	1.0



1. *Lernanthropus secutor* (Dorsal); 2. *L. secutor*(Ventral); 3. *L.secutor* attached on gill filament of *Secutor* fish; 4. *L. leiognathi* attached on gill filaments of *E. splendens*; 5. *L. leiognathi* (male and female in copulatory position); 6. *Catoessa boscii*; 7. *Catoessa boscii* attached on inner operculum of *S.ruconis*; 7. *N. multispinosus*

Fig. 3: The parasitic crustacean recovered from Leiognathidae fishes during the study period

DISCUSSION

Leiognathidae is represented by a high diversity of species among commercial marine landings of the Kerala coast. A total of 20 species of Leiognathidae known commonly from the seas around India, 16 species from Cochin and Neendakara on the western coast of India (Abraham, 2011) and in the present study 8 species were collected. Of which *Gazza achlamys*, a rare species reported first time from the Western Coast of India (Abraham et al, 2011) which is also recovered from present study. Out of the 8 species, *L. brevisrostris* and *N. blochii* are the new report from the Kerala Coast.

Two types of diversity indices of leiognathid fish biodiversity are discussed are: Dominance Indices, and Information-Statistic Indices. Dominance Indices -Simpson's Index (D) are weighted toward the abundance of the commonest species and considers both the richness and evenness. In this index, 0 represents infinite diversity and 1, no diversity and present study D value is 0.2251. Simpson's diversity index, 1-D- the value of this index ranges between 0 and 1 and greater the value, the greater the diversity and the present study 1-D value is 0.7749.

Information-statistic indices can consider rare species in a community and widely used one is Shannon index (Hs). Values of Shannon index for real communities are often found to fall between 1.5 and 3.5. Thus, the value obtained from the present study (1.678) has no significance. The index becomes useful only while comparing two or more sites. Brillouin index (Hb) an information-statistic index reflects species abundance. It places more emphasis on species richness and is moderately sensitive to sample size (Hb 1.594).

The present study reveals that the fishes of Leiognathidae family infested by four parasitic crustacean species. *L. leiognathi*, *L. secutoris*, *N. multispinosus* (Copepoda) and *C. boscii* (isopoda) were collected from 4 species of fishes. The prevalence, mean and median intensity vary according to the parasitic species. The highest intensity was observed in *L. leiognathi*. These four parasitic crustaceans also showed specific attachment sites apparently to avoid the inter-parasitic competition for space and food. The isopod and Bomolochus species prefer buccal cavity and Lernanthropus strictly specific on gill filaments for their infestation site.

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CHALLENGES FACED BY THE WORKERS IN HARITHA KARMA SENA -A STUDY WITH SPECIAL REFERENCE TO THRISSUR DISTRICT

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ABSTRACT

Haritha Karma Sena (HKS) is a grassroots initiative in Kerala that significantly contributes to sustainable waste management through waste collection, segregation, and disposal, with the active participation of women and marginalized communities. The initiative has helped improve environmental cleanliness, reduce pollution, and generate livelihood opportunities at the local level. However, despite their crucial role, HKS workers face numerous challenges, including health and safety risks arising from inadequate protective equipment and insufficient training, low and irregular wages, lack of social security benefits, and poor infrastructure and basic amenities. Social stigma attached to sanitation work and limited public cooperation further increase their workload and cause psychological stress. The study conducted among 120 workers of Haritha Karma Sena in Thrissur district.

INTRODUCTION

With rising urban populations and increasing waste generation, managing solid waste has become a critical concern. In Kerala, improper waste handling leads to environmental degradation, pollution, and health hazards. To tackle this issue, the state launched the Haritha Karma Sena (HKS) under the Suchitwa Mission. This initiative is a people-centered model that engages green workers in collecting, segregating, and managing non-biodegradable waste. These workers also carry out public awareness campaigns to promote waste segregation and recycling at the sources.

HKS significantly contributes to reducing landfill waste and supports sustainable environmental practices. Despite their essential role, the workers face various problems such as poor wages, limited job security, inadequate protective gear, and minimal public appreciation. The physically demanding nature of the work worsens these challenges.

Nishad (2024) examines solid waste management practices in Kerala, India, with a focus on the strategies employed by Haritha Karma Sena. It aims to evaluate the impact of these strategies and identify factors influencing waste management in the region. Prasad (2024), explores the role, significance, issues, and challenges faced by women working as Solid Waste Management (SWM) workers in urban Kerala. It also evaluates whether the HKS system, operating under the Kudumbashree Mission the world's largest women empowerment initiatives functioning effectively, highlighting both its strengths and weaknesses. The study of Ravikumar (2024) examines the contributions of Haritha Karma Sena to waste management and sustainable development. The study also highlights the importance of addressing electronic waste, urging each Haritha Karma Sena unit to focus on various factors that contribute to sustainable development in their area.

The study of Shameerda and Sandhya (2024) investigates the "Role of Haritha Karma Sena in

Waste Management and the Green Economy."The primary objectives are to explore the concept of the green economy by analyzing the environmental impact of waste disposal, examine the significance of waste trade in generating government revenue, evaluate Haritha Karma Sena's role in providing employment opportunities for disadvantaged communities, and assess the importance of technical support in waste disposal. The activities of Haritha Karma Sena play a vital role in mitigating improper waste treatment, thereby improving environmental quality.

In India, the Haritha Karma Sena (HKS) plays a key role in managing solid waste, especially in Kerala. Operated by local self-government bodies, it includes around 30,000 trained workers mostly women who collect non-biodegradable waste from over 3 million households across more than 1,000 local bodies. With each household generating about 0.3 kg of plastic waste daily, HKS manages approximately 900,000 kg (900 tons) of plastic waste every day, highlighting its large-scale impact on environmental sustainability and employment generation. However, despite their vital role, HKS workers often face serious challenges, including low wages, lack of safety equipment, exposure to health risks, and minimal recognition. Poor working conditions, irregular sanitation, and social stigma further reduce their job satisfaction and overall well-being. This study aims to shed light on these issues and recommend practical steps to improve their working conditions and dignity. The present paper explores the issues faced by HKS workers in Thrissur district.

OBJECTIVES OF THE STUDY

1. To identify the challenges faced by workers in haritha karma sena.
2. To study the influence of demographic profile on the problems faced by the workers of Haritha karma sena

RESEARCH METHODOLOGY

The study is based on both primary and secondary data, where primary data were collected from 120 respondents in Thrissir district using a well-structured questionnaire. Convenience sampling technique is used to select the samples. The secondary data were gathered from thesis papers, books, journals, relevant articles, and websites. The simple statistical tools like percentage weighted mean, ANOVA were used for data analysis.

RESULTS AND DISCUSSION

Table 1: Influence of Age on Problems Experienced by Workers

H01: There is no significant difference in the problems encountered by workers across various age categories.

ANOVA						
		Sum of Squares	DF	Mean square	F	Sig.
Occupational stigma	Between Groups	4.422	3	1.474	1.002	0.4
	Within Groups	67.658	46	1.471		
	Total	72.08	49			

Wage inadequacy	Between Groups	0.961	3	0.32	0.289	0.833
	Within Groups					
	Groups	51.059	46	1.11		
	Total	52.02	49			
Wage irregularity	Between Groups	9.442	3	3.147	2.009	0.126
	Within Groups					
	Groups	72.078	46	1.567		
	Total	81.52	49			
Lack of recognition.	Between Groups	1.634	3	0.545	0.461	0.711
	Within Groups					
	Groups	54.286	46	1.18		
	Total	55.92	49			
	Between Groups	5.165	3	1.722	2.013	0.125
Inadequate facilities."	Within Groups	39.335	46	0.855		
	Total	44.5	49			

Source: Primary data

The ANOVA results reveal no significant differences across age groups in Haritha Karma Sena workers' experiences of occupational stigma ($p = 0.400$), wage inadequacy ($p = 0.833$), wage irregularity ($p = 0.126$), lack of recognition ($p = 0.711$), and inadequate facilities ($p = 0.125$). Since all p -values exceed 0.05, the findings suggest that these challenges are uniformly faced by workers, regardless of age. This highlights the need for broad-based interventions to address social stigma, wage-related concerns, delayed payments, lack of appreciation, and inadequate facilities, rather than targeting specific age groups.

Table 2: How different age groups perceive the sufficiency of income among the workers.

H02: There is no significant difference in the perception of income sufficiency among workers across different age groups.

ANOVA						
Factors		Sum of squares	DF	Mean Square	F	Sig.
Occupational health issues	Between Groups	1.071	3	0.357	0.417	0.742
	Within Groups	39.409	46	0.857		
	Total	40.48	49			

Workplace safety	Between Groups	1.109	3	0.37	0.35	0.789
	Within Groups	48.511	46	1.055		
	Total	49.62	49			
Awareness sufficiency	Between Groups	1.523	3	0.508	0.343	0.794
	Within Groups	68.097	46	1.48		
	Total	69.62	49			
Workplace satisfaction	Between Groups	2.214	3	0.738	0.74	0.534
	Within Groups	45.866	46	0.997		
	Total	48.08	49			
Workload stress.	Between Groups	2.28	3	0.76	0.828	0.485
	Within Groups	42.22	46	0.918		
	Total	44.5	49			
Work-life balance	Between Groups	1.551	3	0.517	0.379	0.769
	Within Groups	62.769	46	1.365		
	Total	64.32	49			

Source: Primay data

Haritha Karma Sena workers' perceptions of occupational health issues ($p = 0.742$), workplace safety ($p = 0.789$), awareness sufficiency ($p = 0.794$), workplace satisfaction ($p = 0.534$), workload stress ($p = 0.485$), or work-life balance ($p = 0.769$). Since all p -values exceed 0.05 The null hypothesis is not rejected indicating that these challenges are experienced similarly across all age groups. This suggests that concerns related to health, safety, job satisfaction, workload, and work-life balance are not age-dependent and should be addressed through broad, organisation-wide interventions rather than age-specific strategies.

Table 3: Influence of age on Society's View on Work and Experiences with Discrimination

H03: There is no significant difference in how different groups perceive the level of social recognition for their work.

ANOVA						
Factors		Sum of Squares	DF	Mean Square	F	Sig.
Mismanagement	Between Groups	1.433	3	0.478	0.675	0.572
	Within Groups	32.567	46	0.708		
	Total	34	49			
Social neglect	Between Groups	0.799	3	0.266	0.995	0.404
	Within Groups	12.321	46	0.268		
	Total	13.12	49			
Public approval	Between Groups	0.466	3	0.155	0.471	0.704
	Within Groups	15.154	46	0.329		
	Total	15.62	49			
Health and Safety issues	Between Groups	1.262	3	0.421	1.517	0.223
	Within Groups	12.758	46	0.277		
	Total	14.02	49			
Unstable	Between Groups	0.183	3	0.061	0.153	0.927
	Within Groups	18.397	46	0.4		
	Total	18.58	49			

Source: Primay data

The ANOVA test examined whether there were significant differences among groups in their perceptions of mismanagement, social neglect, public disapproval, health and safety issues, and unstable income. With all p-values (Sig.) greater than 0.05 (Mismanagement = 0.572, Social Neglect = 0.404, Public Disapproval = 0.704, Health & Safety Issues = 0.223, Unstable Income = 0.927), The null hypothesis is not rejected indicating no statistically significant differences in perceptions among the groups. This suggests that concerns related to these factors are experienced similarly across all groups, without any one group perceiving them as significantly more or less severe than others.

Findings

- The analysis indicates that there is no significant difference in the challenges faced by workers across age groups. Issues such as occupational stigma ($p = 0.400$), wage inadequacy ($p = 0.833$), irregular payments ($p = 0.126$), lack of recognition ($p = 0.711$), and inadequate facilities ($p = 0.125$) are experienced equally, regardless of age.
- There is no significant variation in perceptions of occupational health issues ($p = 0.742$), workplace safety ($p = 0.789$), awareness levels ($p = 0.794$), job satisfaction ($p = 0.534$), stress due to workload ($p = 0.485$), or work-life balance ($p = 0.769$) among different age groups. Respondents of all ages reported similar views in these areas.
- There is also no significant difference in perceptions related to mismanagement ($p = 0.572$), social neglect ($p = 0.404$), public disapproval ($p = 0.704$), health and safety concerns ($p = 0.223$), and unstable income ($p = 0.927$). These findings suggest that workers from all age brackets face these issues in a similar way.
- The majority of Haritha Karma Sena workers earn less than 10,000 per month, highlighting their financial struggles despite the physically demanding nature of their work.
- Nearly 68% of the respondents experience job insecurity due to the absence of formal contracts or long-term employment agreements.
- Around 82% of workers face resistance from the public, making waste collection and disposal more challenging.
- Many workers suffer from physical strain and injuries caused by improper waste handling and the lack of safety equipment.

Suggestions

- Conduct public awareness campaigns to promote waste segregation at the source and build respect for the role of HKS workers.
- Ensure fair wages, timely payments, and proper protective equipment to improve job satisfaction and worker safety.

Conclusion

The Haritha Karma Sena initiative has improved sustainable waste management in Kerala by involving local communities, especially women, in waste collection and recycling. It has enhanced

cleanliness, created employment, and increased public awareness about responsible waste disposal. However, challenges such as poor infrastructure, low wages, and social stigma remain. For long-term success, better working conditions, fair wages, modern technology, public education, and supportive policy reforms are essential to strengthen the program's impact.

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ON THE RAILS OF FASCISM AND RESISTANCE: POSTCOLONIAL PERSPECTIVES ON V SHINILAL'S *THE WANDERER*

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ABSTRACT

The paper examines how V Shinilal's *The Wanderer* (2025) - originally published in Malayalam as *Samparka Kranti* in 2019 - mobilizes the imagery of trains and territoriality to critique the fragile idea of the nation-state. By dismantling the triumphalist narratives of national progress and subsequently foregrounding dislocation, exclusion and existential precarity as the defining experiences of modern citizenship, the image of *Samparka Kranti*, a train that connects Trivandrum and Chandigarh via New Delhi metaphorically connotes the rise of fascist tendencies in a novel 'liberal' democracy. Deconstructing the traditional perception of train as a symbol of progress, modernity and connectivity, Shinilal's narrative reconfigures it as a divisive site marked by violence, surveillance and estrangement. By the myriad symbolic stories associated with each of the passengers, the novel shows how the nation is in a threatening phase, rendering them as territorial animals who are compelled to assert and defend fragile claims of space, echoing the violent politics of partition, displacement and marginalization that structure the modern Indian nation. Through this metaphor, the paper argues that Shinilal interrogates the nation's contradictions: its idealized image as an inclusive home on the one hand and its lived reality of exclusionary practices on the other. The train's compartments allegorize fragmented social world's—class, caste and religion find their representation in the micro-territories of its seats and berths, spaces where negotiations of identity occur under constant threat. It also demonstrates the endless wandering of the protagonist Karam Chand, representing Gandhiji, in a new nation of the territorial species like Dvi and his supporters who symbolize divisiveness.

Keywords: *Postcolonialism, Nationalism, Territoriality, Displacement, Allegory, Fascism*

Postcolonial studies have long interrogated the nation as both an imagined community and a contested terrain of identity. Thinkers such as Benedict Anderson and Homi Bhabha emphasize that national belonging is fraught with ambivalence, forged through narratives of unity yet fractured by colonial legacies, internal exclusions and territorial anxieties. In Anderson's perspective, "regardless of the actual inequality and exploitation that may prevail ... the nation is, always conceived as a deep, horizontal comradeship" (7). Bhabha supplements it in the Introduction of *Nation and Narration* by stating that "nations, like narratives, lose their origins in the myths of time and only fully realize their horizons in the mind's eye" (1). The postcolonial nation thus emerges as a space where modernist symbols of progress coexist uneasily with memories of displacement, violence and marginalization, revealing its unstable and divisive foundations. However, thinkers like Partha Chatterjee remind us that nationalist modernity in India is never a simple adoption of European forms; it becomes what he calls a "derivative discourse" (5) that is appropriated and reconfigured within local cultural and political contexts.

In literary studies, political allegories function as a powerful mode of resistance literature. It is done by incorporating symbolism, metaphor and narrative indirection to challenge authoritarianism and critique dominant ideologies. By encoding political critique within fables,

dystopias, or fantastical settings, writers circumvent censorship and reach wider audiences while sharpening the emotional and intellectual force of their dissent. Allegories demonstrate how power operates in postcolonial societies, often through manipulation, surveillance and systemic exclusion. Foregrounding the agency of individuals and communities who resist these pressures, these counternarratives against fascism reimagine the structures that govern collective life. It is in such a background that Shinilal's *The Wanderer* is presented as a political allegory of the Indian nation in the wake of the fascist uprisings.

The concept of the train is considered as a fundamental icon of historical, cultural and political unification in India. This idea occupies a central place in both colonial and postcolonial imaginaries, symbolizing integration, mobility and the promise of national unity. Introduced by the British in the 19th century primarily to serve imperial economic and military interests, the railway soon acquired a dual significance: while it facilitated the extraction of resources, it also created unprecedented networks of connection across India's vast geography. People of diverse castes, classes, religions and regions found themselves traveling together in the same compartments, making the train a lived metaphor for the composite idea of the Indian nation. None other than Karl Marx noted about the sense of modernity and the possibility of unification in the Indian scenario, as given in the novel's Preface titled as "Story So far":

The day is not far distance when, by a combination of railways and steam vessels, the distance between England and India, measured by time, will be shortened to eight days and when that once fabulous country, will thus be actually annexed to the western world.

The railway system will therefore become, in India, truly the forerunner of modern industry. (2)

Nationalist leaders like Gandhiji (who was initially critical of the idea of trains and railway as a whole in his opposition to mechanization) recognized this potential, famously using train journeys to experience the realities of India firsthand and to mobilize people across linguistic and cultural boundaries. Richard Cronin in *Imagining India* argues the irony of the colonial vision about the trains: "Dalhousie planned the railways to tighten British rule of India, to make it more efficient. But the trains had one effect that Dalhousie surely did not foresee. They made possible the birth of the idea that was finally to put an end to the Raj, the idea that India was a nation" (77).

Both the train and the nation is European in terms of origins. However, both get transformed in the colonies in native ways. In countries like India, Partha Chatterjee writes: "nationalism sets out to assert its freedom from European domination. But in the very conception of its project, it remains a prisoner of the prevalent European intellectual fashions" (10). The derivations of the nation that appeared in the post-independence phase is like the crowded trains in India, which differ from their Western counterparts by functioning not merely as efficient transport systems but as dense, culturally layered social worlds—spaces where diverse languages, religions and classes converge in chaotic intimacy. In this sense, it is argued that the train represents the nation like no other literary metaphor especially in the postcolonial Indian scenario. Shinilal himself states in an interview that appeared in Thasrak.com, an online platform: "Movement is the essence of human existence. A self-acting mechanism is embedded within man. Therefore, man moves through time and space. So do nations, which grow and develop over time. The most appropriate metaphor to represent India is the train itself. The train is a biopsy piece of the larger body of India" (trans.).

In post-independence India, the railway came to embody Nehru's vision of modernity and development, a democratic infrastructure knitting together the fragments of a newly partitioned land. Politically, it functioned as both a material and symbolic tool: the Indian Railways became one of the largest state-run institutions, affirming the government's capacity to administer and unify a diverse population. In sum, the train remains a powerful political entity that consolidates national identity, connects remote geographies and sustains the imagination of India as a cohesive whole. It is at once infrastructure, ideology and allegory, embodying the ongoing project of nation-making.

Literature has always imagined in the Indian scenario how the trains were positioned literally and symbolically the idea of an "imagined community" for the postcolonial nation. In Kipling's *Kim* (1901), the railway is portrayed as a vibrant microcosm of colonial India, symbolizing both mobility and the hybrid experiences of empire. In contrast, Khushwant Singh's *Train to Pakistan* (1956) presents the railway as a tragic emblem of Partition, carrying not only refugees but also the weight of communal violence and displacement. Later, in Rohinton Mistry's *A Fine Balance* (1995), the railway functions as a connective thread, bringing together the protagonists while simultaneously reflecting the turbulence and oppressive realities of the Emergency. Together, these texts highlight how the railway becomes a crucial metaphor for imagining the nation across shifting political contexts. Similarly, in Paul Theroux's non-fictional work *The Great Railway Bazaar* (1975) the railway is not only a mode of travel but also a lens through which the diversity, contradictions and cultural richness of India are vividly recorded. According to Theroux, "to understand the real India, the Indians say, you must go to the villages. But that is not strictly true, because Indians have carried their villages to the railway stations... The village in rural India tells the visitor very little... The life of the village, its interior, is denied to him. But the station village is all interior" (114). These texts highlight how the railway becomes a crucial metaphor for imagining the nation across shifting political contexts.

The critique of fascism in Malayalam literature emerges as a powerful response to authoritarian tendencies, communal polarization and the erosion of democratic values within the nation's socio-political life. Writers across ages, especially in the post independent scenario, have employed allegory, satire, realism and dystopian visions to expose the dangers of political absolutism and cultural homogenization. From O.V. Vijayan's *Dharmapuranam* which satirizes authoritarian excess, to K.R. Meera's *Arachar (Hangwoman)*, 2012 which portrays the violence and oppression of the new millennium amidst the rising fascist tendencies, Malayalam literature repeatedly warns against the cult of strongman politics and the silencing of dissent. Such a critique addresses the creeping normalcy of fascist tendencies in everyday life—caste exclusion, religious bigotry and state sponsored violence.

V. Shinilal's *Samparka Kranti* (2019) translated as *The Wanderer* (2025) in English is a contemporary Malayalam novel that allegorises the Indian nation through the metaphor of the railway system or train. The title in Malayalam, borrowed from the Sampark Kranti Express trains introduced to connect state capitals with New Delhi, signals a political as well as cultural journey. The novel situates its narrative inside a train, which becomes a moving miniature of India's plurality—its passengers embody diverse castes, religions, languages, ideologies and regional identities. The journey which begins on 23 January 2019 and ends on 25 January 2019 is a discourse physically through the myriad landscape of the country and symbolically referring to the major

stages in the formation of the present station. The journey includes people of different walks such as Karamchand, Lekha Namboodiri, Sameera Fathima, Kuriakose M, Zachariah, John the wildlife photographer, Louis Fulton Carvalho along with the innumerable number of travellers of various walks. The rest of the narrative allegorically portrays how the nation is aimlessly moving forward and backward, once the authoritarian Dvi takes control of the train and converts into a country of deaths of all who dissent and resist. Through the constant motion of the train, Shinilal reflects on the tensions of belonging and exclusion, where the promise of connection often collides with experiences of alienation, hierarchy and violence. Louis Harrington observes in "The Train nation': the Railway as a Leitmotif in South Asian literature" about the complex duality associated with the train and nation as "the railway and the nation both encapsulate the movement of multitudes who appear fundamentally chaotic in their diversity, yet who move in similar patterns and on the same terrain" (294).

The train as the unifying idea of the nation has been critically negotiated in the new millennial Malayalam literature. At a time when the nation has shown signs of disintegration in the wake of majoritarian fascism, literature has begun to perceive the nation as a hub dominated by territorial animals who always kept away other animals of the same species. "We had a dog in our village. When other dogs entered his territory, he would attack and chase them away... We had a landlord in our village. If anyone entered his lands, he would shoot them with his shotgun (5). Shinilal visualizes the transition of the integrationist national politics under the rubrics of 'unity in diversity' is reformulated as 'uniformity against diversity' through this metaphor from the biological world. The text shows how the symbols of unification of the past have become tools in the revivalist new age a symbol of division and a way to autocracy.

The train in *The Wanderer* is more symbolic than real. Though the train is realistically described as one with "twenty-two coaches, (travelling) 3417 kilometres, (in) Forty-eight hours and thirty-five minutes, (with) speakers of eighteen languages..." (11), it is situated in temporality rather than spatiality. It is a journey that is carefully structured against the colonial invasion of the Portuguese and the British connoted through the historical and fictional characters. The postcoloniality of spatial geography is conveyed through the fictional British wildlife photographer John and the ticket examiner Louis Fulton Carvalho. The Indian resistance to colonial and neofascist agencies is allegorized in the figure of Karamchand son of Mohandas, who resembles Gandhiji and is presented as a consciousness eternally alive in the country. Partha Chatterjee observes how the image of Gandhi could unify a sect of scattered people: "for the first time in Indian politics an ideological basis for including the *whole people* within the political nation" (110).

The most striking symbolization of the colonial memory in the novel is the museum piece steam engine called "Wanderer". The postcolonial is imagined as the offspring of the colonial modernization paradigm of development is metaphor thus:

A steam engine attached to the rear of the train turned out to be the centre of attraction. The crowd looked at it in amazement. It was being taken to New Delhi for display in an exhibition of heritage engines on Republic Day. With its chimney that had once set the skies trembling, 'Wanderer', now aged, stood quietly behind the twenty-two coaches pulled by one of its modern descendants. (8)

This image is supplemented by the idea of a book entitled *India* which John holds and falls upon the shit of the rails and gets retrieved through a porter. At the climax, the symbolic transfer of the book to Gandhi's namesake is a pointer about the irony of the power transfer. The past, present and future of the country is blended by the scatological image connoting the still shitty nature of the millions even in the digital, neoliberal world. No doubt, in medical terms of bodily disintegration, the novel describes, "a railway compartment is a tiny biopsy section of the Indian body" (85). However, when the train resumes its journey from New Delhi, it travels without the chronicler and unifier Karamchand who carries all the characters in his head in his identity as the child with no history – meaning the eternal present.

The resistance to colonialism by the subaltern masses is allegorized through the mythological Kariman who resents the Savarna lords and the Portuguese navy headed by Francisco de Almeida. The slave rebellion in history by a Pulaya (A Scheduled Caste in Kerala) is emblematic of the innumerable subaltern uprisings situated in opposition to Dvi's emergence later. The severed penis, connoting the sense of castration the marginalized faced in India, recurs in the form of the transgender Amanushi, who often dresses up as a man in the north-bound train and return as a woman in the south bound train, later defies the binary construction initiated by the fascists.

Dvi encapsulates the autocratic fascist who appropriates the rights of all the travellers who travel. He is the functional signifier that enables the nation to metaphorically function as an aimlessly wandering train in place of the connection by revolution. The coup in the text, as Shinilal argues, is characterized by the establishment of a Panopticon-like structure of a jail. "As of this instant, this train is the Mahabharat Express. I am its manager. I'll decide where and when the train should go.' The mob cheered him. The stationmaster regained his senses. He gave the signals for the train to proceed. The passengers ran up to the train and boarded it. Mahabharat Express started its journey" (204). Shinilal brings the allegory of fascism in the comparison of Dvi with Hitler. "If the mob was a pyramid, Dvi was its needle tip. He was the sum total of smaller individuals with analogous thoughts. Hitler was not a single individual. He was the manifest form of millions of mini-Hitlers" (200). Such rulers rise by manipulating the consent of the herd animals who are the symbolic supporters of authoritarianism and autocracy. In similar lines to many parody fictions in Malayalam and World literature, the novel portrays how the nation is converted into an army of thoughtless people depending on mythological scholarship articulating "Os" (meaning Oh, yes) to the commands of the master.

The political allegory also connects how the nation is transformed from *ahimsa* to *himsa* as well. One can argue that the Beretta M semi-automatic gun of 1934 vintage allegorically points to the centrality of violence in the formation of a fascist nation. The trajectory of a gun that has historical connections in the hands of the Italian fascists to Nathuram Godse's hands to assassinate Gandhi emerges as the historical connective. The novel portrays Dvi as carrying the same gun in his hands refers to the continuing flow of the fascist order in twenty-first century India replacing the Gandhian ideal.

Dvi polished the gun. He caressed its black body. He kissed its cold, dead barrel, and shoved it in his trouser pocket. He rose from his seat, silently slid open the door and went out.

What else has intervened and interceded in history as much as weapons?

What is this thing between humans and weapons? (214)

One of the most striking expositions of the rising facism in the country within the novel is the discussion between Karamchand and Dabholkar who is travelling in the train to attend a seminar titled "Nationalism and Black Magic". The discourse between two ideologies – Gandhism and Political Liberalism – presents a stark, unsettling meditation on nationhood, nationalism and democracy, exposing them as artificial human constructs rooted in territorial instinct and myth-making. The historical character Dr. Narendra Dabholkar, who was a pioneering rationalist that dedicated his life to challenging superstition and promoting scientific temper in India until his assassination in 2013, defines the nation as "an open jail ... The nation is a shackle put on our ankles, our movement is circumscribed" (164). Expanding the debate on nationalism, Dabholkar extends the argument in the lines of Anderson. Nations, therefore, are not natural entities but human inventions born of a territorial impulse: "Everything that is against the natural order has been created by men... Men are territorial animals" (164). Using the metaphor of a dog and its garbage bin, the text configures the nationalist critique through Dabholkar who argues that humans elevate their equivalent the nation by surrounding it with stories, songs and rituals. People "write and sing paeans about the bin" (164), proclaiming it superior and sacrificing themselves for it. Thus, nationalism becomes a cultivated ideology "a survivalology that a dog doesn't have" (164) constructed to sanctify ownership and justify exclusion. The contemporary practice of democracy, far from offering liberation, is framed as another illusionary construct, a "new form of dictatorship with makeup on" (164) a system in which authoritarian power merely disguises itself behind a mask of collective participation. Analysed in terms of historical facticity, both Gandhi and Dabholkar who visualised the nation got murdered by right wing extremists. But figuratively, unlike the eternal Karamchand, the liberal ideas of Dabholkar is not resurrected in the narrative.

The Wanderer functions as an incisive political allegory like George Orwell's classical political critique *Animal Farm* (1945). Exposing the mechanisms of power, control and ideological manipulation within their respective historical contexts, both the texts mark two contrastive ideologies through a fictional lens. Orwell's novella employs the simplicity of a farmyard fable to dramatize the rise of totalitarianism, revealing how revolutionary ideals are corrupted by authoritarian leadership. Through the gradual transformation of the pigs into indistinguishable replicas of human oppressors, *Animal Farm* critiques the cyclical nature of power and the ease with which democratic promises devolve into tyranny. "The pigs did not actually work, but directed and supervised the others. With their superior knowledge it was natural that they should assume the leadership" (Orwell 23). In contrast, *The Wanderer* situates its allegory within the contemporary postcolonial nation-state, using the symbol of a long-distance train journey to map the anxieties, exclusions and territorial conflicts embedded in modern citizenship. The train, which is traditionally celebrated as a sign of progress, here becomes a heterotopic site where surveillance, violence and spatial control operate in unsettling ways. While Orwell externalizes political brutality through the metaphor of animals overthrowing their masters, Shinilal internalizes it within the lived experiences of passengers whose precarious identities are shaped by caste, class, religion and rising fascist impulses. Both works, however, share a structural affinity: they expose how ordinary individuals become complicit in sustaining oppressive systems, whether through fear, habitual obedience, or the illusion of national unity. Orwell's characters are deceived by propaganda

slogans, while Shinilal's passengers enact territorial defensiveness that mirrors the divisive ideologies of the state. Yet where *Animal Farm* ends in total ideological collapse, *The Wanderer* stages resistance through the figure of the perpetual wanderer reminiscent of the father of the Great Indian nation, whose movement unsettles the rigid boundaries imposed by fascist structures.

In conclusion, in the context of the crisis in humanities in the liberal/post-truth age, translated texts from regional literatures can offer a pluralist and broadened perspective regarding the nation. *The Wanderer*, in this sense, resists fascism not only through political commentary but also by celebrating plurality, memory and ethical responsibility. The nation is imagined as a moving train which rather than connecting serves as a metaphor that divides the people in times of a political crisis. The way Shinilal links human nature is linked to the images of territorial, herd and subversive animality systematically demonstrate how the nation is transformed against the general dehumanization of the individuals in fascism. Through such symbolic acts, in Indian literature translations from regional literatures, especially from the South, can position itself as a cultural safeguard, reaffirming the values of justice and diversity in the face of totalitarian impulses.

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GEN-ZS OF GLOBAL SOUTH: THE REFORMERS OF CIVIC CULTURE

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ABSTRACT

This paper analysis the cause and effects of Gen-z led political riots in the global south particularly of the South Asia that not only disrupted the classic paradigm of political mobilization but also altered the nature of civic culture in its entirety. This paper argues that the Gen-z is leading a new period of hyperconnected social media activism that combines both the international tech culture and domestic socio-economic discontents. Through this method, they are establishing a new performance oriented political belonging and awakening, functioning more or less out of political institutions and pointing to a potentially irreversible change in the ways of thinking and active civic engagement in 21st century. A generation of hyperconnected and economically disadvantaged, politically ignorant and alienated youngsters are arising bringing drastic changes to the established and an organized political system. Even though the youth have never ceased being the forerunner of political change, the current contractions are characterized by a decentralized, digitally native stressed youngsters. The generational gap they have experienced can be called a generational rupture, the gap between a generation born in the age of digital omnipresence and instant wide connection and a generation of old school members. The dissatisfaction by the Gen-zs are not ideological but also due to economic deprivation and mass unemployment. In all the Gen-zs are constructing a new civic identity that is fluid, flexible and inclusive.

Keywords: *Gen-Z, Civic Culture, Nepotism, Digital activism, Monarchy, Internet shutdown*

INTRODUCTION

The work "Gen-z" originated from its place in alphabetical sequence of generations, following Generation X and Generation Y. Gen-z is the generation of people born between late 1990s and early 2000s. The name is also sometime linked to the term "zoomer", referring to this generation being the first to zoom across the internet from a very young age. As the growing young population of Africa, South and Southeast Asia that totals around 1.5 billion people-i.e about 60% of regional populations. These new generation leads activism and protest when confronted with corrupt and unjust practices. A shifting job market and lack of quality education have also kept the generation depressed. Gen-z stifled by internet shutdowns and censors, corrupt governments and a deficit of job opportunities is wreaking havoc on governments in Africa and South Asia. As a domino effect, one after another being triggered and influenced by their neighboring or regional political climate, youth led uprisings have spread in Kenya, Bangladesh, Nepal. Indonesia, Morocco and Madagascar becoming a major political force overthrowing the governments in their countries to reverse manipulating policies. Youth centric demography is a double edged- sword: they can trigger the nations in the global south to attain the developmental measures with the right opportunities of education, liberal economic policies especially or an open economy, efficient and transparent governance mechanism otherwise they can be a source of chaos and instability where corruption and of failing of policies exist. Gen-zs are a driving political force-the outcome which will ripple through the economic political and social order and be moulded by it.

In a world of multi-crisis, adds another layer of challenge that countries in the youthful nation faces. Many of these states are trying to navigate and find an apt solution for their demographic challenges in the midst of an uncertain, complex world order: two dominant economically aggressive major powers, deep debt amidst shrinking aid, grants and devastating environmental challenges. Debt in Bangladesh for instance has grown exponentially over the past decade amounting to over 103 billion. Serving this debt intakes 13% of government revenues, that affects funds for education, health and other public services. Foreign debt, an unscientific and non sensical tax base and American Tariffs of 35% are disrupting the countrys' once robust textile industry which is second only to China in terms of export and a major labour-intensive sector. Whereas, in Nepal the earlier protests were triggered by an abrupt ban on social media which was to silence the dissenters. The main factors for the rage included a weak and largely informal economy that is majorly dependent on foreign remittances for 27% of GDP, Foreign debt consuming 29% of government revenue and limited spending on public services and welfare schemes and 20% of mass unemployment that compounds the problem. The youths were frustrated with the elite corruption and widening inequality, that resulted in a youth led movement toppling the government within 48 hours. From Nepal to Indonesia, Srilanka to Bangladesh, Asian youths are furious. Protest shows a generation unwilling to accept and tolerate inequality and injustice as their destiny.

THE YOUTH LED RIOTS IN THE ASIAN COUNTRIES

The Unrest in Nepal

In the Himalayan country of Nepal the people's movement was for democracy and took 19 days to oust the monarchy but currently there is demand for the restoration of monarchist sentiments and hot rage against corrupt government. The whole movement began as a generational chaotic uprising against systematic corruption and nepotism but the latest trigger was a government-imposed ban on all social media platforms. However, the anger has been building for years. The ferocity of the youth who make up around 40% of population and have witnessed the country through 14 governments in 16 years with bare progress on education education, jobs or infrastructure development finally culminated into violence. The youth movement also created for new political voices-some among them demanding stronger democratic reforms. Nepal's P.M, K.P Sharma Oli was forced to resigned after two days of demonstrations over an abrupt social media ban. At least 19 people were killed and hundreds more injured. Blocking the app was the sudden catalyst for their frustrations and the remaining of living under a government that is out of touch with their concerns. These digital tools are vital in a country where approximately one in 4 live below national poverty line. In Frebruary 2022, demonstrators opposing a 500 million U.S grant clashed with the police forces and dozens were detained amid fears that the deal would compromise our national sovereignty. There has been demand for Hindu statehood due to the mis happenings with the government. In 2023 the government approved for a controversial National Cyber Security Policy, introducing provisions such as state-controlled internet gateway. Rights group warned the move could enable mass surveillance, online censorship and endanger data privacy which lacks protections of freedom of expression. The appointment of Arzoo Rana Dauba to parliament through proportional representation despite speculation that she might not win a direct first past the post election is seen as betrayal of the spirit of Nepal's constitution which

intended proportional representation for women and people from marginalized groups who are not politically powerful. Nepotism, misuse of state resources and a political class that appears detached from the struggles of ordinary Nepalis have deepened the trust deficit. Gen-z is not simply rebelling, they are demanding systemic reforms. Demonstrators expressed dissatisfaction with unemployment and mismanagement of public funds by political elites. The protests centered on governance and political accountability. The situation was aggravated by banning of 26 social media sites. Nepal now stands at crossroads. It can either continue the path of kleptocracy where wealth and power remain concentrated in a few hands or it can seize this moment to rebuild trust in governance and government. Justice must be served both for those who pulled the trigger and those who gave the orders. Nepal must create a mechanism to include Genz voices in governance, ensuring their concerns are heard before frustrations spills into the street again. Nepal's sensitive geopolitical position has always complicated its internal politics. Sandwiched between two giant neighbours- India to the south and China to the north-every major political instability raises suspicion of foreign policy. While Gen-z's movement is homegrown, many Nepali's worry that external powers may try to exploit the current political situation to advance their own strategic interests-making Nepal to find solutions from within, focusing on building an inclusive governance system that actually serves its people and shields the country from unwanted foreign influence.

The riot in Srilanka

In Srilanka -their experiences are of a cautionary tale. In 2022 a largely youth led protest movement known as Agralaya borrowing its name from Sinhala word for struggle that forced the resignation of president Gotabaya Rajapaksha and the political clan. His incompetent, nearly 3year rule culminated with the nation economically melting down. The government foreign reserve crisis meant it was not even unable to pay import duties that ended up in citizens standing in a long queue for petrol and daily 13hour power cuts which was unmanageable for the commoners. Only last year did electorates find an authentic alternative in NPP led by Anura Kumara Dissanayake. Protests in Srilanka has evolved beyond the streets and penetrated into the places of power corridors. Demands should focus not just toppling the government or authorities but reform should take place on the efficient functioning of courts, election commissions, legislatures, police forces and also by creating an independent watch dogs. Movements solely led by youth will dissolve when the anger or the moment of heat fades. Building a viable and structural political parties or coalitions that can confidently and credibly stand for elections is essential and restore public faith in the authorities is essential in the long run.

Jasmine revolution in West Asia

The Arab spring or Jasmine revolution offers relevant lessons. More than a decade ago, youthful revolts toppled dictators from Tunisia to Egypt and Libya but movement collapsed and ended with worsening repression in certain parts of the region.

PROBABLE CAUSES ON THE GEN-Z UPRISINGS IN THE GLOBAL SOUTH

Gen-z led violent demonstrations across global south point to the long term socio-economic and environmental crisis caused by neo-liberalism and also they have been co-opted by entrenched social classes.

There is youth dominance across the global south, where the average age is 25 years and youngsters in these regions find themselves as victims of debt-ridden societies, climate catastrophe and permanent war.

Youth in the global south are stressed and anxious with the mass unemployment. Neo-liberalism has left state with weakened capacity, leaving very few solutions and options to address this problem. Educated youth with middle class aspirations are unable to find apt employment opportunities that leads to disguised unemployment or skills mismatch. Gen-z is the most educated and literate generation in history yet it is also the most obligated and underemployed. This paradox between ambition and precarity produces resentment and anger.

Youngsters do not want to migrate in order to have a respectable life. In Nepal young protestors chanted against the forceful economic migration. This compulsion to migrate evokes embarrassment about one's own culture and feeling of alienation from the history of national movements that has shaped one's nation.

Large agri-business and mining companies have grinded their assault on small holder workers and farmers. Youth from these families are fed up with rural distress and radicalized by the often-failed protests of their parents move to the cities and then abroad for jobs. They bring experiences from the country sides to cities and are often the main reasons of these movements.

For Gen-z the issues of climate change and continuous natural calamities is not an inattention but a cause of proletarianization through displacement and financial exploitation. They understand that the recurrent climate crisis is directly linked to their inability to work and build a present let alone a future.

This generations main interaction with the state are through rigid and inflexible bureaucrats and militarized police. The old national parties have exhausted their agenda or had it destroyed by sternness and mishandling of finances, leading to political voidness in global south. To get rid of them all is an activism that ends with a focus on social media political commentators and influencers who have not participated in real party politics but often use their platforms to preach a gospel of anti-politics and middle-class dissatisfaction.

The rise of informal and blue-collar labourers workers have created an unorganized society with no hope of fellow feelings among workers or memberships in mass organizations like trade unions. The uberisation of working conditions and the gig platforms have created an informality of life itself, where worker is alienated from all the connections and are pressurized to perform. The cruciality of social media rises with the increase in informality as the internet becomes the main platform for exchange of ideas and thoughts replacing older forms of political organizations. It is attractive but erroneous to conclude that social media is the main driving force behind these impulsive riots. Social media is a communication instrument of ideas, strategies and tactics. Internet is also a tool for surplus extraction and interactions. Platform workers are continuously monitored and disciplined by algorithms that force them to work harder for a minimum wage.

These reasons have been mainly urban with small indication that they have drawn in rural areas. The goals and aim of these protests rarely addresses the long term or the complex structural-

functional crisis in the underdeveloped nations. To put things straightforwardly the typical politics of Gen-z uprisings lead in to an abyss of middle-class resentment. These protests like in Bangladesh and Nepal are created and supported by entrenched social forces that entertain the voices on the streets and develop conspiracies that benefit the western financiers. The solution in the long term is to articulate the authentic grievances into a social policy that demands a higher share of social and economic surplus and uses that surplus to enhance net fixed investment and transform social conditions of the masses.

CONCLUSION

The cause and effects of Gen-z led uprisings in the global south particularly of the south asia that not only disrupted the classic paradigm of political mobilization but also altered the nature of civic culture in its entirety. The Gen-z is leading a new period of hyperconnected social media activism that combines both the international tech culture and domestic socio-economic discontents. Through this method, they are establishing a new performance oriented political belonging and awakening, functioning more or less out of political institutions and pointing to a potentially irreversible change in the ways of thinking and acting civic engagement in 21st century. A generation of hyperconnected and economically frustrated politically ignorant and alienated youngsters are arising bringing drastic changes to the established political domain. Youth congregated on discord using pseudonym such as jalebi and ghost to discuss political leaders and their disappointment with the government. Nepal's case exemplifies youth aspiration for employment and dignified life. When nepo kids flaunted luxuries, this showcased the gap between masses and political elites-particularly egregious when a new democratic framework had promised inclusivity and better life. Social media generated activism has tendency towards slacktivism people restricting internet to clicks rather than real time action. Even though the youth have never ceased being the forerunner of political change ,the current spasms are characterized by a decentralized, digitally native stressed youngsters. The generational beak they have experienced can be called a generational rupture, the gap between a generation born in the age of digital omnipresence and instant wide connection and a generation of old school members. The dissatisfaction by the Gen-zs are not ideological but also due to economic deprivation and mass unemployment. In all the Gen-zs are constructing a new civic identity that is fluid, flexible and inclusive.

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POLITICAL PHILOSOPHY OF VIVEKANANDA: A SOCIALISTIC READING

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INTRODUCTION

Swami Vivekananda was not only a visionary, or a monk but a nationalist and a reformer par excellence. He was a protagonist of Hindu social ideas and forerunner of socialism. He championed in his own time the causes of the down-trodden masses and the exploited poor class. He was much in advance of his age and prophesied the rule of the proletariat. The philosophical foundations of Vivekananda's political thought are innumerable. Major sources of the philosophy of Vivekananda are threefold.¹

1. Vedic and Vedantic traditions of Sankaracharya, Ramanuja, Madhava and Vallabha
2. Influence of Sri Ramakrishna.
3. His own life experiences.

He was never a political philosopher in the sense in which we regard Thomas Hobbes, Rousseau, T.H. Green as system builders in the field of political thought. He does not enter into the analytical study of the concepts of political philosophy. For getting an account of Vivekanand's philosophy one has to turn to his complete works. His political philosophy is contained mainly in his

- Lecture from Colombo to Almora
- The East and the West
- Modern India

But he has a place in the history of modern Indian political thought for two reasons²

I. The influence of Vivekananda over the Indian national movement.

Swami Vivekananda is widely considered to have inspired India's freedom movement. The revolutionary ideas he propounded had a tremendous influence on subsequent political thinking and action in India, especially on the mass dynamism of Mahatma Gandhi and the socialistic ideas of Jawaharlal Nehru. His sociological views played a positive role in the development of the patriotic and national self-consciousness of the youth of India. Vivekananda's clamant call to the Indian youth – "Awake, arise, and stop not till the goal is reached" – is resounding all through India, rousing their social consciousness and kindling their damp spirits.

According to M.N. Roy, "*Vivekananda's nationalism was a spiritual imperialism. He called on Young India to believe in the spiritual mission of India his philosophy, on which was subsequently built the orthodox nationalism of the declassed young intellectuals, organized into secret societies advocating violence and terrorism for the overthrow of British rule. This romantic vision of conquering the world by spiritual superiority electrified the young intellectuals, whose desperate economic position made them restive*"³

With his own concept of Vedanta, Vivekananda gave the country the secularist ideal that now forms a part of the Constitution of modern India. It was he who first proclaimed on world platforms that all religions were but different paths that led to the same goal. His idea of secularism was, in fact, an advance of what is found in modern India. Even in 2011, during the anti-corruption Lokpal bill movement, the prominent figure Anna Hazare repeatedly mentioned that he was greatly inspired by Swami Vivekananda's thoughts.

II. Vivekananda was one of the first thinkers in India to offer a sociologically realistic interpretation of Indian history.

His sociological interpretation of Indian history is partly Marxist and partly comparable to the theory of Vilfredo Pareto. Comparable to Pareto regarding his notion of conflict among rival ruling classes or "Circulation of elites". According to Vivekananda there are two social trends in Indian history. One is the constant struggle for supremacy among the Brahmans and Kshatriyas with occasional interludes when these sections collaborated, and second, the unremitting exploitation of the masses through the ritualism of the priests and the sword of the Kshatriyas and later on of the Rajputs.⁴

ASA SOCIALIST

"I am a socialist, not because it is a perfect system, but because I believe that half a loaf is better than no bread."⁵

He can be considered as a Socialist in two senses: His vision about ancient Indian society as the domination of two upper castes and their political & economic exploitation over the poor sections. He championed the concept of equal chance for all the inhabitants of the country. He condemned the exclusion of the Shudras from the benefit of the vedic knowledge. Vivekananda denounced untouchability. He ridiculed the meaningless cult of the kitchen and the cooking-pot. Vivekananda's understanding of Vedanta made him a total opponent to the practice of untouchability. Denouncing, as he did, the practice of untouchability, Vivekananda anticipated, by several decades, the more effective campaign that Gandhi and Ambedkar carried on against this social evil.

Vivekananda's burning enthusiasm for the redemption of the oppressed is evident in these lines:

*"I do not care whether they are Hindus, or Mohammedans or Christians, but those love the Lord will always command my service. Plunge into the fire, my children.... Everything will come to you, if you only have faith.... Let each one of us pray day and night for the downtrodden millions in India, who are held fast by poverty, priest craft and tyranny- pray day and night for them.... I am no metaphysician, no philosopher, nay, no saint. I am poor. I love the poor.... who feels in India for the two hundred millions of men and women sunken for ever in poverty and ignorance? Where is the way out?..... Who will bring light to them? Let these people be your God.... Him I call a Mahatma(great soul) whose heart bleeds for the poor.... So long as the millions live in hunger and ignorance, I hold every man a traitor, who having been educated at their expense, pays no the least heed to them....."*¹⁶

Removal of poverty, eradication of illiteracy, restoration of human dignity, freedom from fear,

availability of spiritual and secular knowledge to all, irrespective of their caste and class and the ending of all monopolies, religious, economic, intellectual, social and cultural – all these formed a part of what he derived from his practical Vedanta or Vedantic socialism.

SWAMI VIVEKANANDA AND KARL MARX

Vivekananda (1863-1902) and Marx (1818-1883) were two towering personalities of the 19th century, who redefined our outlook to human nature and society. These two great men in two different parts of the world, with their distinctive philosophies, were totally committed to the cause of the oppressed and were ready to sacrifice everything for that cause. Both were revolutionary thinkers who pioneered a radical change, in their own unique ways.

Vivekananda saw socialism as a ray of hope for the myriad of problems confronting India. He viewed the course of world history as a change in governance between the four castes: Brahmin, Kshatriya, Vaishya and Shudra in conformity to the law of nature. With the rise of Shudras, the lowest class, Vivekananda identified democracy and distribution of physical comforts and education. Swamiji's concept of socialism was in no way averse to religion. He believed in elevation of masses without injuring the religious sentiments and that social changes can be brought forward only on a firm platform of conduct character and spirituality.

Marx was an ardent socialist who believed in dialectical materialism wherein there is a dialectical manner of confronting, studying and understanding natural phenomena; and materialistic by its means of interpreting phenomena and drawing up its theory.

In the system of Marx economics, technology which represent the substructure are more important than the superstructure of politics. But Vivekananda not much emphasized the social and economic value of money. But after his return from the West he realized the value of social organization and used to say that if he collected three hundred million rupees, the salvation of Indian masses could be affected. He once wrote:

“Material civilization, nay, even luxury, is necessary to create work for the poor, Bread! Bread! I do not believe in God who cannot give me bread here, giving me eternal bliss in heaven! Pooh! India is to be raised, the poor are to be fed, education is to be spread, and the evil of priest craft is to be removed. No priest craft, no social tyranny! more opportunity for everybody”⁷

Vivekananda believed in the betterment & liberation of the individual first, before the society could be improved. He once declared “one single man contains within himself the whole universe”⁸.

Communism calls for collectivism, and it seems to stand against natural organic evolution of the individual. Marx stressed the need of an organized proletarian party for effectuating the coming socialist revolution. Vivekananda wanted to train individual workers for the social amelioration of India. He insistently repeated that India could be roused and rebuilt with the help of small groups of enthusiastic patriots, strong and courageous with “muscles of iron and nerves of steel and gigantic wills”.

The fundamental difference between the vedantic socialism of Vivekananda and Marxism is that, the former stressed the reformation of society. Marx was a great realist and a dialectical materialist and wanted even violent social revolution. Although he was a man of religion and

meditation, Vivekananda was all for activity that would lead to increase in production and the removal of poverty. He always said with his Guru, Ramakrishna Paramahansa, that, "religion is not for empty stomachs." In Vivekananda's opinion, religion had to be the principal and leading force in implementing all social changes in India. Vivekananda's concept of socialism was in no way averse to religion. He believed in elevation of masses without injuring the religious sentiments and that social changes can be brought forward only on a firm platform of conduct character and spirituality.

Dialectical materialism is a scientific approach and is opposed to idealism which offers an interpretation based on religion. Marx believed in the power of economic forces rather than the ideological approach. For him, religion was the opium of the working class by the ruling class. Marxism sees in religion the exploitation of human ignorance and credulity.

Regarding nationalism Marx was an internationalist and never cared for the sentiments behind nationalism. The largest gap in his writings in politics was the limited attention given to the nation-state and nationalism. Marx believed that nations were a byproduct of the capital age because of the economic undercurrent bringing about markets for the good produced. Marx proclaimed that workingmen have no country and championed international co-operation of the working class. Vivekananda, on the contrary, was a nationalist to the core and believed in patriotism and national feeling. Vivekananda wanted each nation to grow to its full stature and strength, thus contributing to the sum total of world's growth and human welfare. Swamiji's nationalism had internationalism in essence and execution.

In Hinduism, the ultimate aim of human life is the attainment of salvation or Moksha. To attain Moksha, a conducive socio-economic order wherein an individual can lead a peaceful and undistracted life is imperative. Marxism also professes the attainment of a different order, that is, a classless society. A socialist state has no exploitation and the individual is freed from the burden of having to work for those who exploit his labour whereby leading to a classless society. Vivekananda and Marx viewed socialism through two different prisms with the ultimate goal of uplifting the downtrodden and the exploited class.

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 8. In autumn 1895, he wrote to Abhayananda: *Individuality is my motto, I have no ambition beyond training individuals*" (Quoted in R. Rolland, The Life of Vivekananda, P,790)

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