



PAVANATMA COLLEGE
MURICKASSERY

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Recent Research Communications

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Communications

Editor : Rev.Dr.Fr. Bennichen Scaria

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RECENT RESEARCH COMMUNICATIONS

Selected Research works of the faculties of Pavanatma College in the academic year 2022-23.

Editors

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Co-Editors

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Preface

We are ecstatic to introduce this book containing research works of the faculties of Pavanatma College from various disciplines, which brings together articles on commerce, science, and arts. As the world continues to evolve and become more interconnected, it is increasingly clear that the challenges humanity face requires approaches and innovative solutions from multi-disciplines.

In this book, you will find research works from a diverse range of scholars, covering topics as varied as the latest developments in commerce and business, cutting-edge research in science and technology, and ground-breaking work in the arts and humanities. Our contributors hail from a wide range of backgrounds and bring with them a wealth of knowledge and expertise, making this endeavour truly useful for future references.

Through this book, we also hope to encourage collaboration and dialogue across disciplines, and to highlight the ways in which commerce, science, and arts intersect and influence one another. By bringing together these diverse perspectives, we aim to contribute to a more holistic understanding of the world and the challenges we face, and to inspire new ideas and approaches to solving these challenges.

We believe that this book will be a valuable resource for scholars, researchers, and practitioners across a range of fields, and we look forward to the insights and contributions that it will generate. We are excited to be a part of this conversation and to share the ground breaking work of our contributors with the world.

Editor

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A Study on Income and Consumption Pattern of Coir Workers in Kerala with Special Reference to Vaikam Taluk

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Abstract

Vaikom is the capital city of Vaikom Taluk. Vaikom village is more popular in the name of Vaikom coir. There are 24 coir producing units situated in this village. According to the report of Ampalapuzha chamber of commerce, Vaikom have the third rank in Kerala in terms of the production of coir. A census of coir units in the state shows a high level of labour shortage in the coir sector. The census also indicates that the number of coir workers has come down over the years. The census in 2001 had enumerated 3.83 lakh workers in coir and coir related occupations. This has come down to 2.70 lakh including 15000 people who were not directly in production. The census also enumerated 75471 coir units in the state of which 73973 were household units.

Income and expenditure are very important economic variables. The major economic activity for a human being is earning income and making expenditure. Without income there will be no expenditure. So we can see that there is a strong relation between income and expenditure. The expenditure includes expenditure on the goods and services, health care, education etc. In the context of coir workers, the income consumption pattern should be analyzed because income earnings from coir production units are relatively lower than other earnings. This study focus on the following objectives, to analyze the income - consumption pattern of coir workers in Vaikom Taluk, and to identify the major issues of coir workers & coir industry in Vaikom Taluk. The study found the income of the workers is lower than expenditure but they are trying to increase their standard of living by accumulating durable goods.

Key Words: Coir Workers, Income, Expenditure, Standard of Living, Accumulation of Durable Goods.

Introduction

Coir Industry is mostly concentrated in the coconut producing countries like India, Sri Lanka, Indonesia, Malaysia, Philippines and Thailand. Although, Philippines and Indonesia are together account nearly 45 percent of the world production of coconuts. India and Sri Lanka account to nearly 90 percent of the world coir production (Coir Board 2010). Coir Industry has developed on a large scale only in India and Sri Lanka. These two countries are largest producers and exporters of coir. Owing to fundamental differences in economic conditions governing coconut cultivation and coir extraction and those necessary for coir production many of the large coconut producing counties viz. Philippines, Indonesia, Malaysia and Thailand have only relatively small coir output. India is the major producer of coir among the coir producing countries in the world, its contribution is 56 percent. India is producing white fibre and brown fibre. Almost the entire production of white fibre in the country gets converted to coir yarn. About one - fifth of the total production of coir yarn goes for the manufacture of value added products, namely, door mats, mattings etc. While 60 percent of the production of finished products is exported, domestic market consumes the balance. Out of the total production of coir yarn, about 20 percent gets converted to rope and cordages mainly for domestic consumption (Mohamed 2004).

The data given by coir board in 2010, In India, Kerala is the largest producer of coir. Tamil Nadu, Karnataka and Andhra Pradesh are relatively good producers of coir. Besides these states, small quantities of coir are produced in Orissa, West Bengal, Gujarat, Goa, Assam, Lakshadweep, Andaman Nicobar Island, Pondicherry and Tripura. Production of white fibre is mainly concentrated in Kerala and its share is 90 percent in the total output. Kerala has considered as the home of the coir industry in India. Tamil Nadu is the second largest producer of coir in India contributing to 54 percent of total production in the brown fibre.

For historical and geographical reasons, Kerala ranks first in coir production. Kerala was the major centre of coir production in the country on account of the availability of large quantity of raw materials, that is,

coconut husks. In addition, because of the abundance of natural retting facilities with long stretch of coastal areas and lagoons, Kerala alone accounted for over 85 percent of the total production in the country. So the Coir Industry has taken deep root in Kerala. The coastal belt of Kerala (580 km) with a large labor force achieved the development of the coir industry here.

According to coir board annual statistics 2018 nearly 80 percent of the coir industries are located in Kerala and 35 percent of coir and 90 percent of the coir products of the country are produced in this state. Kerala is the only state in India where the Industry has developed to manufacture various types of products out of retted fibre. Fibre extraction and spinning of coir yarn are carried on as a cottage industry, extensively in the coastal area but the manufacturing activities are concentrated in Alappuzha, Cherthala, Ambalapuzha and Vaikom. The production of coir mats and matting is by and large on handloom but there are units producing coir mattings on power looms also.

Vaikom is the capital city of Vaikom Taluk. Vaikom village is more popular in the name of Vaikom coir. There are 24 coir producing units situated in this village. According to the report of Ampalapuzha chamber of commerce, Vaikom have the third rank in Kerala in terms of the production of coir. First and second rank respectively goes to Anchutheng and Alampadan. Anchutheng contributes 53.7 percent of the total coir in Kerala. Contribution of Alampadan is 14.2 percent and by the Vaikom is 11.1 percent. In Kerala, coir industry has a long history. A census of coir units in the state shows a high level of labour shortage in the coir sector. The census also indicates that the number of coir workers has come down over the years. The census in 2001 had enumerated 3.83 lakh workers in coir and coir related occupations. This has come down to 2.70 lakh including 15000 people who were not directly in production. The census also enumerated 75471 coir units in the state of which 73973 were household units.

The major activities in the household sector were spinning, weaving, retting and beating. Most of the household units did not have work shed and this prevented them from doing their work during the rainy seasons.

More than half of the units functioned only for 200 days or less during a year. The spinning sector contributed three fourth of the employment in the household sector. One fifth of the employment was in weaving and related activities. From the census data, the government decided to increase the minimum earnings of workers in the coir sector by Rs.30 to 35 per day, so that the minimum wage would be at least Rs90 per day. The earnings from coir production are very low when compared to the other categories of employment opportunities,. For a human being consumption is very important. Human sells their labour for income. And most part of the income is used for the consumption of goods and services. So that income and consumption are two economic variables which are correlated.

JM Keynes stated that consumption and income are positively correlated. It means when income increases consumption also increases, but less than the increased income. This study tries to analyze the income consumption pattern of coir workers in Vaikom Taluk with respect to the following objectives.

Objectives of the Study

This study is focused on the following objectives.

1. To analyze the income - consumption pattern of coir workers in Vaikom Taluk; and
2. To identify the major issues of coir workers and coir industry in Vaikom Taluk.

Significance of the Study

Income and expenditure are very important economic variables. The major economic activity for a human being is earning income and making expenditure. Without income there will be no expenditure. So we can see that there is a strong relation between income and expenditure. The expenditure includes expenditure on the goods and services, health care, education etc. In the context of coir workers, the income consumption pattern should be analyzed because income

earnings from coir industry are relatively lower than other earnings. Through this study, the standard of living of the coir workers in Vaikom Taluk can be understood.

Methodology of the Study

This study is based on survey method. Both primary and secondary data are required for the study. The secondary data is collected by a books and websites. As secondary data is inadequate to collect wide information relating to the concerned topic, primary data was collected. The field survey is also conducted by personal interviews. For the primary data collection Vaikom taluk is selected because this is one of the largest coir producing centers in Kottayam district. This study is based on small sample size because from this taluk fifty workers are selected as respondents on simple random sampling basis. After the field study, the information derived is analyzed in conformity with the objectives of the study.

Limitations of the Study

The following are the important limitations of the study. The data collected through personal interview is subject to the error of response are largely due to the lack of memory of the respondents. The data on the cost of production and wages excepting those from the cooperative societies for the past may not be precise because very few workers maintain its accounts. Many of the households do not provide adequate values especially about income and their savings.

Review of Literature

Thomas Issac (1992) shows that the crisis of coir industry in Kerala. He explores the importance of coir industry in Kerala economy, the pitiable conditions of coir workers and improvements in the conditions of the workers through the leadership of militant trade unionism. It includes socio political, economic and technological factors that affect trend of coir industry in Kerala. This study shows the opinion that the policy of unfettered mechanization is not socially acceptable because coir

production is the major source of employment after agriculture in the coastal area. However on the same time it supports technology choice for reducing the time of retting, mechanization of fibre extraction and spinning process. **Ajith Kurnar (2002)** explains the reasons for low demand of coir yarn in U.S.A, which was the major market for coir yarn in the world. He shows that the reason is lack of competition of coir industries in India, and it continues the use of traditional method of production which could not withstand the competition from Sri Lanka in US market. It found that the emotional policies against modernization and mechanization of coir industry in India pull down the progress of coir industry in India. **Chillar Mohamed (2004)** presented an overall picture of the industrial sickness of coir industries in Tamil Nadu. The study identifies the sickness is because of financial problems caused by 50 per cent coir units, production problems caused by 29 per cent, marketing problems by 15 per cent and pith disposal, lack of Coir Board involvement and miscellaneous problems were responsible for 6 per cent.

Discussion

Vaikom Taluk is situated in the North-West of Kottayam District in Kerala, India. Its western border is the Lake Vembanad, and is crossed by various estuaries of the river Muvatupuzha. Vaikom is the oldest township in Kottayam district, and among the oldest in South India. This area is famous for coir production in Kerala. The basic details of the taluk are given in the following table;

Table: 1 The Basic Details of Vaikom Taluk

Total households	76876
Males	152570
Females	157844
Total population	310414
Literacy	88.26%
Working participation of males	54.77%
Working participation of females	20.41%

Total working participation	37.26%
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Source: Census 2011

Table: 2 Income Wise Distributions

Income per month	Frequency	Percentage
1000 – 5000	30	60
5000 – 10000	19	38
10000 – 15000	1	2
15000 – above	0	0
Total	50	100

Source: Primary data

The above table shows that about 30 members have income between 1000 to 5000 rupee per month, that is 60 percent of the coir workers. And 19 members are belongs to next class in between income 5000 to 10000. That is about 38 percent workers. Only one member has income more than 10000.

Table: 3 Expenditure Patterns of Households Per Month

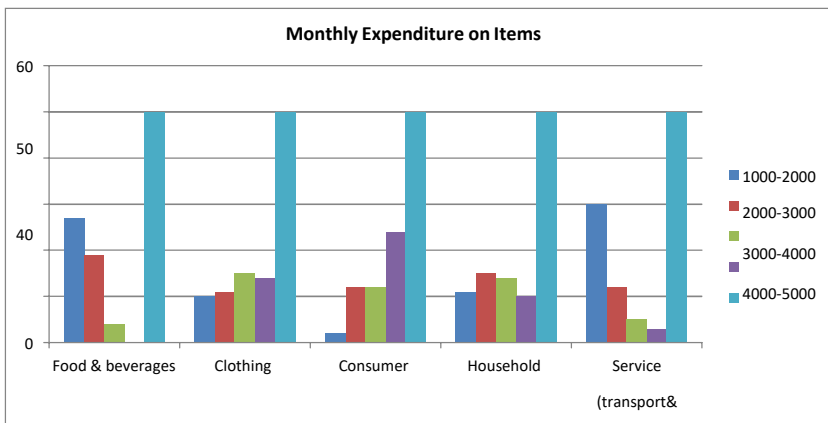
Income spending	Number of Families Making Expenditure on items				
	Food& beverages	Clothing	Consumer durables	Household operations	Service (transport& entertainment)
1000-2000	27	10	2	11	30
2000-3000	19	11	12	15	12
3000-4000	4	15	12	14	5
4000-5000	0	14	24	10	3
Total	50	50	50	50	50

Source: Primary data

This table shows monthly expenditure of the households for their livelihood activities. These activities are classified into five groups on the basis of linear expenditure system. From this table it can be analyzed

that the marginal propensity to consume is more for the coir workers in the area. Because from the above two tables (Table number 2 and 3) it can understand that the people have income between 1000 and 5000 are 30 out of 50 respondents. That means majority of the respondent's income is very low. Nineteen respondents have income between 5000 and 10000 that is about 38 percent of total samples. From the income table it can be understand that the income earnings of coir workers are relatively less than that of average wage rate.

Graph: 1 Monthly Expenditure on Items by the Respondents



Source: Primary data

From graph 1, first two categories of income spending (1000-2000 and 2000-3000) shows 27 and 19 lies in the groups respectively. This shows that the food & beverages are income inelastic and workers are spending less irrespective of income and it is just like permanent spending because these goods are necessary goods. From the table it is notable that most of the people spend more of their income on consumer durables. The income spending categories like 2000-3000, 3000- 4000 and 4000-5000 are preferred by the respondents 12, 12 and 24 respectively. From this it can understand that the people are trying to accumulate more consumer durable goods in their home, this habit pushing them to a higher standard of living with the below average earnings from the coir production works. The workers are also spending

less income for services like entertainment and transportation. On the case of cloth and household operations the respondents are almost equally distributed, there is no association to a particular group. This is showing in the graph 1.

Table: 4 Economic Status of Coir Workers

Type of card	No. of Respondents	Percentage
APL	16	32
BPL	34	68
Total	50	100

Source: Primary data

According to the poverty measurement taken by the government, out of 50 families 34 families are living in below poverty line. That is 68 percent workers and 32 percent persons living above poverty line. From this data it found that most of the coir workers are in below poverty line but the people try to maintain standard of living by making expenditure on durable goods. The economic status of coir workers is simply illustrated in the pie diagram also.

Table: 5 Details of Land Holdings of Coir Employees

Class of land holding in cent	Frequency	Percentage
0 – 5	16	32
5 – 10	23	46
10 – 20	8	16
20 – above	3	6
Total	50	100

Source: Primary data

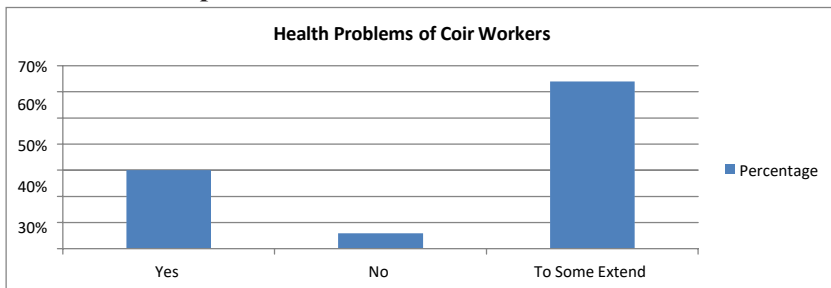
From this table it can be understand that there are 46 percent of workers have land holding in between 5 to 10 cents. Like that 32 percent of the respondents have 0 to 5 cent land holdings and 16 percent people lies

between 10 to 20 cent land holdings. There are 3 persons have above 20 cent land. This is clear that costal people have less land holdings. The people lies in first class that is 0 to 5, includes the landless households also. They are around 32 percent. This is also indicating that the standard of living is varying among the workers.

Table: 6 Health Problems of Coir Workers

Response	Outcome	Percentage
Yes	15	30
No	3	6
To Some Extend	32	64

Graph: 2 Health Problems of Coir Workers



From the above table and graph it can evident that the coir workers are usually face health issues to some extend that is about 64 percent. Some other workers are facehealth issues in about 30 percent and 6 percent says they don't have any health problems. From the analysis it found those workers face health issues.

Findings

It is collected 50 samples from the Vaikom taluk because here is the main coir production hub in Kottayam district. Usually the workers are facing health problems while working in coir production. From the study it is found that the income earned by the coir workers is usually less and they won't get government support. But an interesting outcome from the study is, the workers are in less income group and they are

tried to accumulate durable goods and also to increase their standard of living with the limited income. Which means the income is relatively lower and the expenditure is higher and they are in debt because of loans taken from different sources for different purposes. The findings of the study are listed below;

- ▲ The 60 percent workers have only income between 1000 and 5000 rupee per month.
- ▲ Most of the people spend more of their income on consumer durables. From this it can understand that the people are trying to accumulate more consumer durable goods in their home, this habit pushing them to a higher standard of living with the below average earnings from the coir production works.
- ▲ According to the poverty measurement taken by the government, out of 50 families 34 families are living in below poverty line in Vaikom.
- ▲ It can be understand that there are 46 percent of workers have land holding only in between 5 to 10 cents.
- ▲ It evident that the coir workers are usually face health issues to some extend that is about 64 percent.

Conclusion

Coir industry has a significant role in the Kerala economy. It provides more employment to the people who are living in the coastal areas. The study 'Income - Consumption pattern of coir workers in Vaikom Taluk' tried to investigate the relationship between income earnings of workers of coir industry and their expenditure pattern. Women are the majority workers in the coir production centers. In Kerala coir industry is not fully mechanized so that man power is used in the production. The respondents said that income received by them is low because of this wage issue most of the persons are disinterested to the work here. This study concludes that the coir workers are in serious economic problems. They can't run life with the existing wage, due to this problem and some other reasons labourers are leaving this work and shifts to other, so that the coir industry in Kerala is in a critical stage.

Suggestions

▲ The minimum wage of coir workers have to be increased. And also provide social securities like insurance, bonus etc.

▲ Government should provide medical concession to coir workers and introduce health centers in coastal areas. The coastal area is polluted by the coir making process that leads to health issues continuously to the workers and their children also.

▲ In order to reduce the problem of shortage of labours the industry should be mechanize.

Reference

▲ Isaac, T. T., van Stuijvenberg, P. A., & Nair, K. N. (1992). Modernization and employment-the coir industry in Kerala. Modernization and employment-the coir industry in Kerala.

▲ Ajithkumar, P. (2002). Coir Bhoovastra-Some Thoughts on Market Promotion. INDIAN COCONUT JOURNAL-COCHIN-, 33(4), 12-14.

▲ Chillar Mohamed, p. (2004): "Sickness in Coir Industries in tamil Nadu: A Scenario", Southern Economist, Vol. 43(5), July.

▲ <http://www.ccriindia.org>

▲ <http://www.coirboard.gov.in>

▲ <http://www.kerala.gov.in>

▲ <http://www.keralaplanningboard.org>

▲ <http://www.kottayam.nic.in/Talukvillage.html>

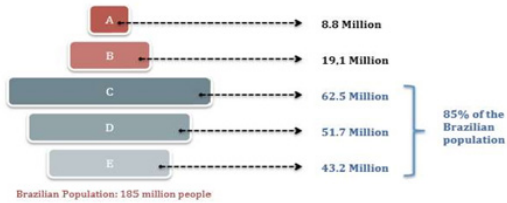
Shared Value Approach as an Alternative to CSR

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Introduction:

Policies and operational procedures that improve a company's competitiveness while also improving the social and economic climate in the communities where it works. The goal of shared value creation is to better understand and connect society and economic progress. Target possibilities, such as creative uses for recycled products, zero deforestation practices, or renewable energy sources. They can also be used to target long-standing social problems, such as access to treatment, employment self-determination opportunities or improved agricultural techniques(Pfitzer et al., 2013). While it substantially tackles social and environmental issues, it also enables them to do so on a large scale. Despite playing important roles in tackling societal concerns, governmental and social organizations' resources pale in comparison with those of corporate companies.Coca Cola, an American company established in 1892 that specialises in producing and selling syrup and concentrates for Coca-Cola(Puravankara, 2007). With a variety of more than 125 products that include standard flavours and low-calorie versions, the Coca-Cola Brazil System operates in eight areas of the non-alcoholic beverage industry: water, tea, soft drinks, nectars/refreshments, energy drinks, isosmotic drinks, and dairy drinks(Sawayda et al., 2014).

Class A (the very rich)	In Brazil classes A and B represent the upper and upper-middle class and generally consist of those who completed higher education and take over positions as bankers, directors, managers, politicians, major landowners, doctors, well graduated professors, lawyers, etc.
Class B	
Class C	Class C represents the middle class who, in most cases, has finished high school and works as teachers, managers, electricians, nurses, etc.
Class D	This class is formed by people who have not finished high school and usually work as housemaids, low-paid drivers, small stores sellers, bartenders, bricklayers, etc.
Class E (the very poor)	Class E is characterized by a high degree of illiteracy and people have not finished elementary school. Class E earns minimum salaries, working as cleaners, street sweepers or are unemployed.



Source:(Schneider, 2016)

Practical implications

The System, which was created by Coca-Cola Brazil and Twelve Brazilian bottling companies, directly and indirectly, employs sixty-six thousand people in Brazil. The various strategies adopted by Coca-Cola in Brazil have helped the company and also the country. Coletivo Retail started by the company has helped to enhance community development which helped various students and helped various small businesses to grow better (Kim, 2018). The organisation started a fascinating research project with the Brazilian consulting firm FSG to assist us to execute the shared value concept more quickly. Coca-Cola highlighted skills development among low-income adolescents as a key social concern for strategic focus in 2008 after researching the demands of Brazil's expanding lower middle-class population for six months (Banks, 2016). Whereas the Brazilian government was reasonably successful in ensuring that all children received a basic education, the majority of young people from low-income families had little to no opportunity to find employment due to their lack of relevant skills and the scarcity of employment opportunities in their neighbourhoods. The activities carried out by the company are based on the following five steps.



Source:(Porter et al., 2011)

It starts with investing in the various **societal problems**,Coca-Cola identified low-income youth skill development as a crucial social issue that requires deliberate attention. While the Brazilian government was reasonably successful in ensuring that all children received a basic education, the majority of young people from low-income families had little to no chance of finding employment due to their lack of relevant skills and the scarcity of employment(Jiao & Xie, 2013). The next step is to **find out the opportunities**, Given its wide reach and connections to retailers and bottling partners, Coca-Cola Brazil was well positioned to meet these objectives. But new approaches and a willingness to take risks are needed to move forward. Business and community leaders were brought together by Coca-Cola to co-create its shared value strategy. Then, the **execution of the Programme**, teaches retailing, company development, and entrepreneurship to local children for two months while partnering them with a local retailer to gain their first work experience and offer suggestions for improvement. Coca-Cola made the hypothesis that with trainee support, small stores might dramatically enhance their operations, leading to higher sales of Coca-Cola goods and greater consumer penetration within the developing lower middle-class group(Jenkins et al., 2013). The next step is to **track the program**, Each community's Coletivo supervisors track the number of participating adolescents, the number of participating retailers, and the success of those retailers over time as they measure and report success every month. The business also keeps a careful eye on the charges related to the effort to guarantee its efficacy and efficiency. The final step is making **follow-up and taking corrective measures**, So far, the Coletivo Program has had great success. A little over 30% of the young people who receive training get their first job with Coca-Cola or with one of its affiliates right away, and at least 10% launch their businesses with help from the company's microcredit programme. A Coletivo site investment becomes lucrative from a business standpoint in about two years. Coca-Cola uses insights and data to open up new value creation, integrating shared value planning and measurement phases(Vanessa Lima, n.d.).

The company have various kinds of commitment to the society in which it operates. Adoption of corporate social responsibility practices are vital for the existence of a company, most companies treat such practices as their obligation and they fulfil such activities for name sake only such activities may concentrate on the commitment of responsibilities. But the **shared value concept** concentrates on providing a **solution to various kinds of societal problems**. The activities connected with improving shared value have a long-term impact on the profitability of the firm. The activities have a wider perspective and they have a positive impact on the lifestyle of people who are having a very low income. Productivity of the people and proper training in the region were increased due to the efforts. Identification of the various skills of the people increased their **self-confidence and women empowerment** is also made possible through these efforts. All such activities in turn resulted in reducing unemployment and increasing the standard of living. Hence the activities created a good active market for Coca-cola and also for the people in Brazil.

Brazil was Coca-**second-largest Cola's overseas market** after Mexico and its third-largest operation. Despite being a sizable market and Coca-third-largest Cola's operation, Brazil had a comparatively low average Coke consumption. Only 144 bottles, every 237 ml per person were only consumed annually in Brazil. These occur due to the low-income level of the people and their low brand engagement. The company operates in a highly competitive developing market in Brazil (Peddar, 2021). The Coletivo retail program has various social implication in Brazil and also have positive implications on the **brand value**. The people in the country especially women and youth are more empowered as a result of the various kinds of training and other practices offered by the company to the people in that particular control group. An eight-week education offered by **Coletivo Retail** combines skill development, practical experience, and access to and readiness for employment (Kim, 2018). The first skills training was primarily centred on the technical aspects of retailing, but as students' success was delayed by a lack of self-worth and confidence, imparting various **life skills** was added as a crucial component of the programme. An attempt was made to

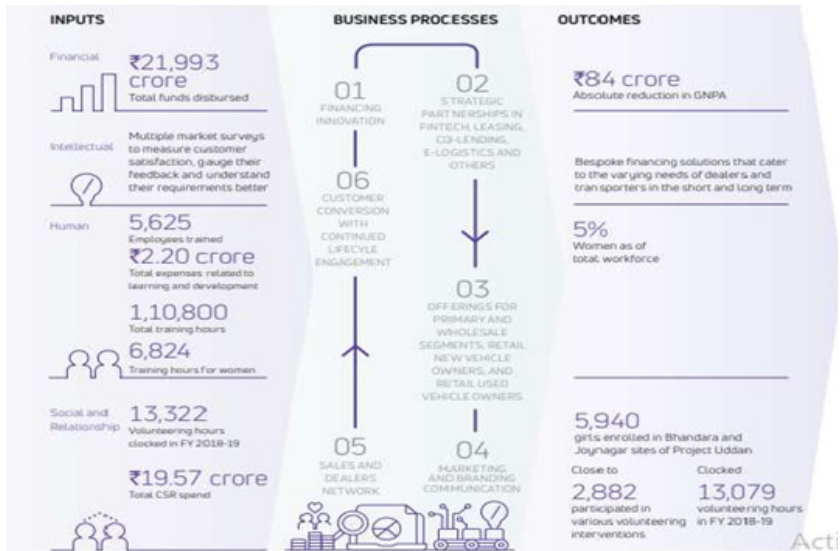
increase the ability of the NGOs participating in the campaign after a monitoring system demonstrated the value of a robust NGO integrated solution with physicality in the community. Brazil is one of the most highly populated countries in the world, and establishing a successful market in such a country will have long-term implications (Coca-Cola, 2020). The strategies adopted by Coca-Cola in Brazil helped to expand their customer base and also increased the purchasing power of the customers. Business revenues have dramatically increased as a result of enhanced small store productivity, higher incomes, and the economic independence of youngsters and their families inside Coletivo communities. The connections between the programmes and the possibilities for end-to-end solutions supported by the shared training programmes are a major factor in Coletivo's success (Gertner et al., 2005). For those who would not otherwise be organised, the recycling model allows them to succeed economically. The recycled bottles are used by artisans and which increased their income also (Jenkins et al., 2013).

The goal of Coca-Cola Brazil is to connect with all customer types in the nation, particularly in the key markets where it competes. The Coletivo model enhanced the market share of the company and created a greater value for the firm in the minds of the customers. Due to higher productivity and income levels in the years following the program's inception, the company's revenues in Coletivo villages climbed on average by 9.5 percent annually (Vanessa Lima, n.d.). The sales growth is increased due to the direct initiatives in Coletivo as the income level and brand engagement of customers were increased due to this initiative. With a market share of 55% in terms of sales volume, the Coca-Cola Company holds a commanding position in the soda market in Brazil. Women empowerment has a direct relationship with increasing household income, such activities are also the consumption of beverages (Schneider, 2016). The Coletivo program was a great success especially for the company also, it was able to generate more profits and the programs helped the company to penetrate new and unexplored markets. The perception of customers towards the brand was also increased and these all things indirectly lead to greater brand

recognition and awareness.

How it can be practiced in Indian companies

Tata Motors is one of the reputed automobile brands from India. Tata motors is a leading vehicle manufacturing company in India. The company have international access to a wide range of products. Tata Motors Ltd. Sells commercial and passenger automobiles, as well as offers finance for the vehicles purchased(Tata Motors, 2020). It offers engineering and automotive remedies, manufacturing of construction equipment, and supply chain operations for automotive vehicle components.Over 2.4 million trees were planted in the Jamshedpur region by Tata Motors, including 80,000 plants in the township and 80,000 trees at the factory. The workers in Pune have been urged to form a variety of industrial cooperatives involved in beneficial tasks like welding, baling steel scrap, assembling battery cables, and recycling scrap wood into furniture(Anita & Yadav, 2014). The Tata Grihini Social Assistance Society helps female dependents of employees; they produce a range of goods, such as pickles and electrical wire harnesses, making them financially self-sufficient(Mitra, 2011).Tata Motors has established numerous scholarship programmes for children's higher education. The company played a vital role in the rural development of India.The various activities carried out by Tata motors including the training of various unemployed youth and assistance to the women helped the company to expand the standard of living of people, especially in Jamshedpur and such activities created values for the company and the people in India.The activities created a good brand image to the brand and also increased its goodwill and reputation in the minds of customers(Maji, 2019).According to the study, 82 percent of Indian customers prefer to patronise businesses that match their convictions and values and steer clear of those that don't while purchasing goods and services("Integration of CSR Strategy Model in Organisations," 2019).



Source: (Report, 2019)

The Coletive model adopted by Coca-Cola in solving the societal problems has a greater impact on the company in Brazil and as a result of their activities, their customer base and sales revenue increased. The case of Tata motors is also similar in that the activities carried to the societal development of India have helped the company to increase its customer base, as well as its brand value of the company, has increased. The company is a corporate citizen if it does the most good for society then, it will have a positive impact on the financial performance of the company. Businesses that advocate for something greater than their products are often more likely to draw customers and have an impact on purchasing behaviour, which increases competition.

Reference:

Anita, & Yadav, P. (2014). Influence of Selected Financial Indicators on Stock Price of Tata Motors LTD. International Journal of Application or Inovation in Engineering Management, 3(7).

Banks, H. (2016). The business of peace: Coca-Cola's contribution to stability, growth, and optimism. Business Horizons, 59(5), 455–461.

<https://doi.org/10.1016/j.bushor.2016.03.018>

Coca-Cola. (2020). Refresh the World. Make a Difference. Business & Environmental, Social and Governance Report, 35–72. <https://www.coca-colacompany.com/>

Gertner, D., Gertner, R., & Guthery, D. (2005). Coca-Cola's marketing challenges in Brazil: The Tubáinas war. *Thunderbird International Business Review*, 47(2), 231–254.

<https://doi.org/10.1002/tie.20050>

Integration of CSR Strategy Model in Organisations. (2019). *International Journal of Innovative Technology and Exploring Engineering*, 8(12S).

<https://doi.org/10.35940/ijitee.l1182.10812s19>

Jenkins, B., Valikai, K., & Baptista, P. (2013). The Coca-Cola Company's 5by20 Initiative.

48. http://sharedvalue.org/sites/default/files/resource-files/CSRI_businessfightspoverty_5by20report_September2013.pdf

Jiao, Y., & Xie, W. (2013). How does CSR influence a firm's profitability: A case study of Sandvik. *Bussine*.

Kim, K. (2018). A Case Study to Explore Applicability of Creating Shared Value (CSV) into Design Practice. *DRS2018: Catalyst*, 5, 25–28. <https://doi.org/10.21606/drs.2018.223>

Maji, angita. (2019). Corporate – NGO Partnership for Successful CSR Programs – A Study with Reference to Selected Indian Automobile Companies. *International Journal of Management Studies*, VI(1(3)). [https://doi.org/10.18843/ijms/v6i1\(3\)/14](https://doi.org/10.18843/ijms/v6i1(3)/14)

Mitra, R. (2011). Framing the corporate responsibility-reputation linkage: The case of Tata Motors in India. *Public Relations Review*, 37(4).

<https://doi.org/10.1016/j.pubrev.2011.06.002>

Peddar, J. (2021). Developing skills and knowledge for social work practice (2nd Edition).

The Journal of Practice Teaching and Learning, 18(1–2). <https://doi.org/10.1921/jpts.v18i1-2.1602>

Pfitzer, M., Bockstette, V., & Stamp, M. (2013). Innovating for shared value. Harvard Business Review, 91(9).

Porter, M. E., Hills, G., Pfitzer, M., Patscheke, S., Hawkins, E., & Hills, G. (2011).

<Measuring_Shared_Value1111.pdf>. Foundation Strategy Group (FSG). https://www.hbs.edu/ris/Publication_Files/Measuring_Shared_Value_57032487-9e5c-46a1-9bd8-90bd7f1f9cef.pdf

Puravankara, D. (2007). Strategic Analysis of The Coca-Cola Company. Simon Fraser University, 1–102.

Report, A. (2019). Holistic approach to Value creation. Nature, 1(1), 77. <https://doi.org/10.1038/191586b0>

Sawayda, J., Sample, K., & Rob, B. (2014). The Coca-Cola Company Struggles with Ethical Crises. Center for Ethical Organizational Cultures Auburn University, 1–13.

Schneider, S. (2016). How To Design a Measurable Shared Value Strategy : the Case of Coca-Cola Brazil. June.

Tata Motors. (2020). TATA MOTORS' ANNUAL CSR REPORT 2019-20. Tata Motors, 53(9).

Vanessa Lima,C.(n.d.).Relationship of Coca-Cola Brazil and the Communities Participant of the Social Projects: (Im) Possibilities.”. Fgv, Im.

Guerrilla Marketing Concept and Instruments: A Review

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Abstract

Marketing is the practise of promoting and selling goods and services while using advertising and market research. Every marketing effort's main goal is to bring in new clients while keeping the old ones. As a result, many methods and approaches have been attempted and tested in this area. One such strategy is Guerrilla marketing. Guerrilla marketing is a tactic used by businesses to advertise goods and services that have a surprise component. Nowadays, a lot of marketers believe that outdated marketing strategies like print ads and billboards are ineffective. So, the purpose of this research is to examine the usefulness and acceptance of guerrilla marketing. This study compares the efficiency of conventional marketing techniques to contemporary ones. This work provides readers with an insight into the concept of Guerrilla Marketing and different guerrilla marketing instruments or techniques and also highlight the two effect of guerrilla marketing instruments (surprise and diffusion) with the major effect of low cost large reach.

Keywords : Guerrilla marketing, Ambient marketing, Stealth Marketing, Viral /buzz marketing, Diffusion Effect.

Introduction

In recent years, marketing has become increasingly significant in our daily lives. It is a method of reaching out to clients and exposing them to new goods and services. Marketing can be thought of as a path to the hearts of consumers. The four P's of marketing are Product, Place, Promotion, and Price. Promotion is regarded as the most important component of those 4 Ps because customers need to be aware of new products. The various elements of the promotion mix include advertising, personal selling, direct marketing, etc. Advertising, a

for-profit/impersonal type of communication, is the primary way that customers learn about new items. Since there is no middleman involved, direct marketing is currently popular since it allows manufacturers to reach buyers directly with their goods via email, the internet, etc.

Several innovative ideas and techniques are being tested and utilised in the marketing industry. A single one of them is guerrilla marketing. Conrad Levinson's book *Guerrilla Marketing*, published in 1984, popularised the form of publicity known as guerrilla marketing. Mostly, it's an ad campaign in which the maker or business makes a number of unusual ways to advertise the good or service. There, surprise plays a significant role. These kinds of Promotional strategies employ methods to establish direct touch with clients. The supreme goal is to change the way that customers recall the goods and services. Currently, conventional advertising techniques like radio, television, etc...losing their appeal as a result of advancements and new methods in this industry.

Objectives

- ▲ To find out different guerrilla marketing instruments or techniques
- ▲ To highlight the two effect of guerrilla marketing instruments (surprise and diffusion) with the major effect of low cost large reach.

Discussion

The American, Jay Conrad Levinson authored the term *Guerrilla marketing* in the 1980s, which means offbeat advertising that utilizes battles as well as procedures to make a critical limited time impact. Although the guerrilla phenomenon has been around for more than thirty years, it is still a relatively new idea that gained popularity in the marketing industry in the last ten years. Guerrilla marketing tactics are being used by more and more businesses nowadays as they compete for market dominance (Kudryavtseva, 2012).

Guerrilla marketing is a result of traditional print, radio, and television marketing moving to electronic media. It was first used by Jay Conrad Levinson in his 1984 book *Guerrilla Marketing*. Its objective is to generate buzz about a product or brand to raise the possibility that

a customer will buy the good or service or tell others who might be interested in it. Small firms may find guerrilla marketing to be incredibly cost-effective, particularly if they are successful in launching a viral marketing craze (Liya Xavier, Vimala Lucy Jayan, 2021). Guerrilla Marketing is a special type of marketing strategy which is now a days designed for marketing mix model and mainly used in 'P' (promotion) element (Levinson, 2006).

Techniques or Instruments of Guerrilla Marketing

1. Ambient marketing

According to Luxton & Drummond ambient marketing is the placement of advertising in unusual and unexpected places (location) often with unconventional methods (execution) and being first or only ad execution to do so temporal (Luxtonbn & Drummond, 2000). This kind of advertising frequently involves placing a message combined with an intriguing and eye-catching object in a highly visible location. The idea is to surprise the customer by grabbing their attention in unexpected ways. Magazine advertisements, product placement in TV and movies, and internet news are examples of common forms that consumers are accustomed to and may disregard. In contrast, it would be more memorable and impactful if they encountered a larger-than-life object or phrase while walking to work (Liya Xavier, Vimala Lucy Jayan, 2021). The clients were requiring something different for their campaigns, which made the agency come up with something new. The agency started to place the ads on unusual places like on the floors, petrol pump handles and on the back of toilet doors; this became the characteristic of ambient marketing (Luxton & Drummond, 2000).

2. Ambush marketing

The definition of ambush marketing is that a company acts as if they are sponsor to an event, but they are not. At the same time, they get the same benefit as if they are the official sponsors. In other words, the ambushers are avoiding the costs of a sponsor, but at the same time they want to mislead the customers to make them believe that the

company is a sponsor (Mazodier, 2009). There are two types of ambush marketing. The first one is ambush marketing by association, which is the classical form; it seeks to create a connection between the company and the event. The second is ambush marketing by intrusion. This type means that the company puts its trademarks in a visible spot that can be seen through the television camera. (Scassa, 2011). In order to compete for visibility with other (typically direct competitors) advertisers, an advertiser “ambushes” an occasion, a location, or ad space. Like the dialogue between two luxury automobile brands on the billboard below: AUDI and BMW (Liya Xavier, Vimala Lucy Jayan, 2021).

3. Stealth Marketing

Marketing to consumers secretly is referred to as stealth marketing. Whether it's product placement in a movie or TV show or the barely perceptible ads you see on the fringes of Facebook. It is nearly impossible to steer clear of stealth marketing because it is so prevalent. The greatest strategy for stealth marketing is to make it undetectable to the observer as a marketing technique.

4. Viral/buzz marketing

Buzz marketing is the term for marketing tactics that aim to grab customers' and influencers' attention in order to spread the marketing message via social media and word-of-mouth. So much so that discussing the good, service, or brand becomes interesting, enjoyable, and newsworthy (Liya Xavier, Vimala Lucy Jayan, 2021). Business men educates five to ten individuals regarding it and afterward they advise another five to ten individuals. Here data spreads without requiring extra showcasing exercises (Wendrila Biswas, Dr. Debarun Chakraborty, 2018). When the concept buzz marketing first started it was just oral communication; nowadays the buzz is in all social media like Facebook, Twitter and MySpace that have been involved in creating buzz marketing (Sandra Belic, Emelie Jonsson, 2012). Viral marketing creates a chain effect This chain is like a virus that spreads the information very fast. At the beginning it was only one person that was affected by the viral marketing but after a while there

are hundreds of people that know about it, and the information spreads without requiring additional marketing activities (Sandra Belic, Emelie Jonsson, 2012).

5. Guerrilla projection advertising

This marketing strategy successfully transforms a building's facade into a digital billboard that is shown at night. This frequently occurs without the owner of the building or with no consent from governing organisations (council permits). In busy areas, these projections are shown on the sides of buildings (people on foot and in vehicles). Guerrilla projection advertising is a useful supplement to larger-scale campaigns, such as the introduction of a product or service, a concert, shows, and events (Liya Xavier, Vimala Lucy Jayan, 2021).

6. Guerrilla PR

This strategy is used to disseminate the desired message through the media's editorial section, which appears to be a more reliable source of information for consumers than traditional advertising. Furthermore, while increasing the population, this kind of marketing is offered for almost no cost. Guerrilla PR campaigns are to be carried out in a captivating manner that includes attention-grabbing installations or sensational marketing initiatives.

7. Sensation Marketing

Sensation marketing aims to astound visitors in public spaces with various actions that go beyond levels of familiarity. To draw attention to the theatre, for instance, actors can stage a play directly in front of it. The term "flash mob" is also used to describe a variety of unknown individuals who assemble incongruously in a public setting to conduct a brief, useless act (Katharina Hutter, Stefan Hoffmann, 2011). Sensation marketing aims to create a sensation by undertaking a spectacular action. The action is only lasting for a short while and is designed to attract the highest possible amount of attention. The generated attention in combination to the spectacular and surprising characteristics of sensation marketing often result in a viral spread of the marketing

actions within social media and can therefore often turn into a viral marketing campaign, which proves how interconnected some guerrilla marketing instruments are and how their effects constitute each other (Sandra Belic, Emelie Jonsson, 2012).

8. Word-of-Mouth (WoM)

The goal of the marketing strategy is to get people talking about the business or brand by using spectacular and unexpected marketing initiatives. When a customer becomes aware of product that a company markets and then tells five to ten people about it (Sandra Belic, Emelie Jonsson, 2012). But now a days WOM take place through electronic Medias. So it become well-planned, well-researched and well-executed consumer-driven eWOM (Electronic Word-Of-Mouth) (Ken Fong, Rashad Yazdanifard, 2014). The idea behind this marketing approach is to implement sensational, thrilling and unexpected marketing projects, aiming for consumers to be talking about the brand or the company (Ferguson, 2008).

Guerrilla Marketing Techniques and Corresponding Effects

Many researchers find that guerrilla marketing techniques or instruments create a surprise effect, diffusion effect, low cost effect.

Surprise Effect : The main aim of guerrilla marketing approach is, capture the attention of customers to the advertising message by adopting unexpected activities to surprise them (Katharina Hutter, Stefan Hoffmann, 2011). According to activity theory by Lindsley, a surprised person will forgot all previous activities and focused on surprised event. Ambient and sensation marketing creates a surprising effect by placing advertisements at unexpected locations (Katharina Hutter, Stefan Hoffmann, 2011). Both ambient and sensation marketing tools which are described below account for surprise effect, which can be explained as the divergence of expectations and perceptions, which in turn leads to the change in the mental activation (Kudryavtseva, 2012). Guerrilla marketing harmoniously complements traditional

marketing mix giving marketers a new option how to differentiate through surprise and diffusion effects (Liya Xavier, Vimala Lucy Jayan, 2021). To get the surprise effect, companies use ambient or sensation marketing. These kinds of guerrilla marketing instruments are placed in unusual locations and they are a type of classical outdoor marketing, for example, fly posting stickers and graffiti proofs. Ambient marketing is seen as a very fast growing market sector and due to the low cost, a company can reach a wide target group (Sandra Belic, Emelie Jonsson, 2012).

Diffusion Effect : Guerrilla marketing techniques expose advertisements to a large group by reducing cost. So diffusion marketing strategy should be planned and economical. Viral, Buzz, WOM marketing and guerrilla PR create a diffusion effect (Katharina Hutter, Stefan Hoffmann, 2011). Guerrilla marketing provides possibility to reach large number of individuals without necessarily increasing the total cost of a campaign. Thus, the so-called diffusion effect is attained in cost-efficient and goal-oriented manner (Levinson and Lautenslager, 2005). The most popular type of viral marketing is video clips which enable marketers to embed message of any unconventional, provocative, sexual, humorous or taboo breaking content, which will ensure the diffusion effect among consumers (Kudryavtseva, 2012).

Low Cost Effect : Ambush marketing create a low cost effect it has free riding effect (Katharina Hutter, Stefan Hoffmann, 2011). There are two main characteristics accountable for low-cost effect. First one is the diffusion effect, when consumers pass on to their peers and friend the advertising message. Second is the requirement of little monetary efforts to launch a campaign (Katharina Hutter, Stefan Hoffmann, 2011). The instrument that is keeping the marketing budget on a low level is ambush marketing. Ambush marketing is when a company or a brand is visible at events, for example, sporting events, but does not pay for it (Sandra Belic, Emelie Jonsson, 2012).

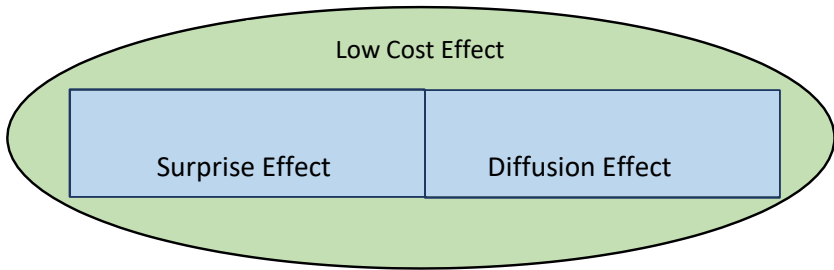
Table 1: Guerrilla Marketing Techniques and Corresponding Effects

Techniques	Effects	Description
-Ambient Marketing -Sensation Marketing	Surprise Effect	Consumers pay increased attention to the message due to surprise of unconventional guerrilla action.
-Viral Marketing -Buzz Marketing -Guerrilla PR	Diffusion Effect	Consumers tend to diffuse the advertising message through various media channels voluntarily because they are thrilled by guerrilla action.
-Ambush Marketing	Low-cost Effect	Guerrilla marketing is inexpensive, does not involve traditional advertising costs and diffuses flexibly

Even if many researchers point out different guerrilla marketing techniques and instruments with corresponding effects of surprise, diffusion, low cost effects, at the end of their study they saying that there have two major effect (Surprise and diffusion effect)on every guerrilla marketing instruments with over all effect of low cost. Guerrilla Marketing is a entire term denoting large promotional activities with low cost by creating surprise and diffusion effect (Katharina Hutter, Stefan Hoffmann, 2011). To make a big impact on the consumer, the relatively low-costs effect along with the combination of other two effects are essential into getting to the consumer on a deeper level (Katharina Hutter, Stefan Hoffmann, 2011). Guerrilla marketing campaigns are intended to be unexpected and unannounced, and they look for creative ways to attract customers and persuade them to tell others

about the product or service while reducing marketing expenses to a minimal (Syrett, Lammiman, 2003). Guerrilla marketing harmoniously complements traditional marketing mix giving marketers a new option how to differentiate through surprise and diffusion effects with low cost (Klepek, 2014).

Figure 1 : Guerrilla Marketing Techniques Effects Relation



Conclusion

Guerrilla advertising is a very good technique and reaches the mass quickly and the cost incurred is also less. Many researchers find that guerrilla marketing techniques or instruments create a surprise effect, diffusion effect, low cost effect. Even if many researchers point out different guerrilla marketing techniques and instruments with corresponding effects of surprise, diffusion, low cost effects, at the end of their study they saying that there have two major effect (Surprise and diffusion effect)on every guerrilla marketing instruments with over all effect of low cost.

Bibliography

1. Katharina Hutter, Stefan Hoffmann. (2011). Guerrilla Marketing: The Nature of the concept and Propositions for Further Research. Asian Journal of Marketing .
2. Ken Fong, Rashad Yazdanifard. (2014). Viral Marketing and Guerrilla Marketing Which Influence Online Customer Behaviour. Global of Journal of management and Business Research : E-Marketing .

3. Klepek, M. (2014). Guerrilla Marketing concept and further Research Possibilities. ResearchGate .
4. Kudryavtseva, A. (2012). Guerilla marketing : new concept in practice, sport master case. Mikkeli University of Applied Science.
5. littisha. (2001). marketing. kochi: kalyani.
6. Liya Xavier, Vimala Lucy Jayan. (2021). The Guerrilla Marketing Technique. Alappuzha.
7. Sandra Belic, Emelie Jonsson. (2012). Guerrilla Marketing. International Business and Economics Program, Kristianstad University.
8. Wendrila Biswas, Dr. Debarun Chakraborty. (2018). Influence of Guerilla Marketing on Consumers Purchase Decision. Inspiria Excellence Series Multidisciplinary Conference on future paradigms in Industry. Siliguri: Inspiria Knowledge Campus.
9. Ferguson, R. (2008). Word of mouth and viral marketing: taking the temperature of the hottest trends in marketing. Journal of Consumer Marketing, 25 (3), pp. 179-182.
10. Syrett, M. & Lammiman, J. (2003). Management Development. New York: John Wiley & Sons.
11. Levinson Jay Conrad 2006. Guerrilla marketing: put your advertising on steroids. Morgan James publishing.
12. Levinson Jay Conrad, Lautenslager Al 2009. Guerilla Marketing in 30 Days, Second Edition. Entrepreneur press.
13. Luxton, S., & Drummond, L. (2000). What is this thing called 'Ambient Advertising'? Visionary Marketing for the 21st Century: Facing the Challenge , pp. 734-738
14. Mazodier, M., Quester, P., & Chandon, J. (2009). Unmarking the ambushers: conceptual framework and empirical evidence. European Journal of Marketing , 46(1/2), pp. 192-214.

15.Scassa, T. (2011). Ambush Marketing and the Right of Association: Clamping Down on References to That Big Event With All the Athletes in a Couple of Years. *Journal of Sport Management* , 25, pp. 354-370.

16.Nufer, G. 2013. Guerilla Marketing. Innovative or Parasitic Marketing? *Modern Economy*, Vol. 4, 1-6. Reutlingen, GER.

Study on Investment Status and Work Potential of Retired Employees

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Abstract

Retirement is not just a cessation of employment, but it is also a social change, a status change and a standard of life change. Retirement usually results in the giving up of a major life structure, one that provides social status focus, purpose and economic resources. The potential loss of daily stimulation can lead to problems in social and cognitive functioning. Social identity can also be threatened as one's social status is closely linked to occupational attainment.

Retired people face several challenges mainly of financial and economic nature. They includes lack of adequate earnings or source of income after retirement, absence of financial freedom, increased medical expenses after retirement etc...This study is an effort to through light into gray areas, which is even now enables to make an outlook into such problems and challenges of retirees. This study also makes an analysis of investments made by the retired employees, taking into consideration the investment smartness of retired employees.

Keywords: Retirement, work potential, Investment smartness

Introduction

The study in the economic performance of retired employees is a matter relevant to various stake holders. Retirement age of employees is a topic of debate at present& many discussions are being conducted on basis of this topic. But serious study relating to work capability, social security, and productive potential of employees are not conducted yet. A study relating to such aspects become relevant in this situation.

It is significant to the employers mainly in the govt. sector, because the present system of retirement would lead to a brain drain of experience

and expertise which could otherwise be off great asset for them. More than that, the burden of pension extends to a longer time span as the life expectancy and health standard are on the advancement.

Conducting a study about productive potential and work capability of employees may help the government to take decisions and judgments in various matters. This study can also be beneficial to employees in raising their dignity by knowing about the contribution & services that they can make to society even after their retirement.

Objectives

- ▲ To study about the investment smartness of retired employees.
- ▲ To evaluate the work potential and productivity of retired employees

Scope of the Study

The study is conducted among some retired employees in Kerala. Maximum effort has been made to ensure that the sample represents different category of retired employees in all respect.

The methodology adopted to carry out this study consists of the following;

Data Collection Technique

Primary data and Secondary data are used in conducting this study. The questionnaire method is used to collect the primary data. Secondary data is collected from Internet and various books.

Sampling Method

The retired employees in Kerala constitute the population for the study. Out of the population, 100 respondents are chosen by convenient sampling method and interviewed to collect necessary data. The respondents were chosen at random among employees retired from different categories like central govt. service, state govt. service, other govt. service and others.

Data Analysis

Mathematical and statistical tools like percentages, tables, charts and diagrams are used for the analysis and interpretation of data.

Limitations of the Study

1. Due to shortage of time, only 100 Samples are taken for this study. Therefore the study might not be completely reflecting the actual.
2. Hesitations from some of the respondents in responding and answering to certain questions are a major limitation of this study.
3. The inherent limitations of primary data itself become a limiting factor of this study.

Review of Literature

Retirement marks a sharp reduction or cessation of lifetime work effort. Yet, a curious fact about retirement behaviour is that many people later reverse their retirement decision and return to work. Many have speculated that economic shocks are a likely cause. Indeed, rates of return on many financial assets are uncertain, health care expenses may increase unexpectedly, and no one knows the evolution of his health or life span. Information shocks are also possible, if after retiring some individuals learn they did not save enough or discover they do not like retirement as much as anticipated (J Hum Resour. 2010)

The decision to retire is affected by a number of factors, including the availability of health insurance, Social Security eligibility, financial resources, and spousal interdependence. Several studies have also pointed to health status as a significant determinant. Workers in poor health, who suffer from activity limitations and chronic health conditions, are found to retire earlier than those who are healthy (Belgrave et al., 1987). A Kaiser Permanente study of members of a health maintenance organization (ages 60-66) compared mental health and other health behaviors of those who retired with those who did not (Midanik et al., 1995)

From a societal standpoint, population aging in the developed countries has intensified pressure on public pension systems (Annink et al., 2016). It now seems clear that society will not be able to guarantee quality of life in retirement unless people save on their own behalf including private (i.e., corporate) pensions leading governments to adopt increasingly active policies designed to involve citizens in Financial Planning for Retirement (FPR). FPR consists of the series of activities involved in the accumulation of wealth to cover needs in the post-retirement stage of life. It is necessary because of the high, mid- and long-term, negative impact of poor planning (Choi and Jang, 2016; Ekici and Koydemir, 2016)

Analysis and Findings

Table 1 Demographic Classification of Respondent

Demographic variable	Sub components	Number of respondents
Gender	Male	57
	Female	43
Education	SSLC	47
	Plus Two	13
	UG	33
	PG	7
E m p l o y m e n t category	Central government	13
	State government	70
	Other government service others	10
		7
Years completed after retirement	Below 5 years	33
	5-10 years	23
	Above 10 years	44

Source: Primary data

In Demographic break up of respondents as shown in Table 1 ,four components are choosen.Gender,Education employment category and Years completed after retirement.Majority of respondents chosen for the study are male.Most of the employees(70%) retired from state govt. service.Most(44%) completed 10 years si9nce retirement.

Table 2 Investment Smartness of Retired Employees

Variable	Sub components	Number of respondents
Investment status	Yes	77
	No	23
Motives of investment	Regular Return	57
	Wealth Appreciation	43
	Avoids unnecessary spending	22
Risk perception	High Risk	4
	Moderate Risk	17
	Low risk	78
Monitoring & revision of investment	Yes	65
	No	35
Frequency of revision	Weekly	7
	Monthly	13
	Quarterly	13
	Yearly	67

Source: Primary data

In order to study investment smartness of retired employees, 5 variables are considerd.While considering first variable, ie Investment status, it is evident from Table 2 that 77%of the respondents were able to make

some investment out of their retirement benefits. While 23% were not able to make any investment. Analysis of motives of investment, it is evident that the motive of large group consisting of 57% is regular return. Another motive is appreciation of wealth (43%). 22% of respondents made investment in order to avoid unnecessary spending. While reviewing monitoring and revision of investment, it is evident that 65% of the respondents revise and monitor their investments regularly (75% of male & 55% of female). 35% do not make any revision and monitoring of their investments. While analysing frequency of revision It is observed that majority of the respondents i.e., 67% make revision of their investments on yearly basis. 13% each of the respondents makes monthly and quarterly revision. Only 7% of the respondents makes revision on weekly basis.

Table 3 Work Potential of Retired Employees

Variable	Sub components	Number of respondents
Engagement in any business or profession after retirement	Yes	63
	No	37
Factors motivating to work after retirement	Additional Income	22
	Meet additional expense	4
	Avoid boredom	17
	Self-Satisfaction	35
	Serve Society	17
	Others	4

Source: Primary data

While studying work potential of retired employees, it is evident from Table 3 that 63% of the respondents are engaged in any work, profession or business after retirement. And among them 37% of respondents are

not engaged in any work, profession or business after retirement. While analysing factors motivating to work after retirement, it is evident that majority of the respondents,(35%)preferred to work after retirement for self-satisfaction.22% are working in order to earn additional income.17% each prefer to work to avoid boredom &to serve the society.4%prefer to work to meet additional expenses after retirement.

Findings

1. Most of the retirees are able to make some kind of investment out of their retirement benefits. Gender wise analysis of the investment status of retirees revealed that most of the female retirees i.e., 85%were able to make some kind of investment out of their retirement benefits, while only 71%of male retirees made investment from retirement benefits.
2. Main Investment motive of male retired employees is wealth appreciation, while that of females is earning regular returns.
3. Most of the retired employees making an investment out of their retirement benefits, made investment in the form of bank deposit.
4. Females invest in least risky avenues. Majority of female retirees chooses investments with low risk.
5. Employees retired from other govt. services like KSRTC,KSEB etc... seemed to be more risk seeking.
6. Majority of the respondents revise and monitor their investments regularly. When it comes to gender wise analysis, 75% of male &55% of female respondents make regular monitoring and revision of their investment. Thus male respondents takes more care about their investments and making periodic revisions based on periodic changes and variations in returns.
7. Majority of the retired employees are engaged in any business, profession or work after retirement.
8. Majority of male retirees, i.e., 88%are engaged in any business, profession or work after retirement, while only 33%of female retirees

engaged in any business, profession or work after retirement

9. Major factor (35%) motivating retirees to work after retirement are to gain self satisfaction.

Suggestions

▲ Most of the female retirees are risk averters. They invest only in highly safe avenues. They should be encouraged to divert their investments to some riskier avenues too, in order to magnify their returns.

▲ Investment education should be provided to the retired employees in order to make them more scientific in their investment decisions, since only a few of the retirees depend on Internet and other modern sources for making their investment decisions out of their retirement benefits.

▲ Regularly and timely monitoring and revision of investments must be made to make investments more efficient and smart.

▲ Most of the retired employees are engaged in some sort of productive activity. This clearly shows that these persons are still able to contribute significant economic values to the society again for a couple of years. The employers can find some ways to tap their experience for longer periods

Reference

1 Topa Gabriela.,Lunceford Gregg.,Boyatzis.E.Richard.,(2018). Financial planning for retirement: a psycho social perspective.Frontiers in psychology

2 Dave Dhaval.,Rashad Inas.,Spasojevic Jasmina.,(2006).The effect of retirement on physical and mental health outcomes.NBER Working paper series,12123

3 Kothari CR., (1990). Research Methodology, 2nd Edition

Changes in the Revenue Maximisation Techniques Through Price Dynamics by Indian Airline Industry after the Covid Pandemic

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Abstract

Price dynamics is a common technique adopted by the airline industry to maximise revenue. 'Price increases as the departure date approaches' is a well-known rule in the civil aviation segment everywhere. However, the covid pandemic slowed the aviation industry, as in the case of many other sectors. This paper examines changes in the pattern of price movement and changes in dispersion after the covid pandemic. The study also analyses the changes in the price dispersion within the brands. The airlines' price behaviour on the route Delhi and Kolkota, the two metropolitan hub cities in India, are taken for this analysis. The study reveals changes in the price movement behaviour after the covid pandemic, irrespective of airline companies.

Introduction

The covid pandemic has significantly declined the performance of the travel industry. Civil aviation was not an exception. Indian domestic civil aviation industry also showed a decline of 47% in aircraft movements resulting in a 56% reduction in passenger traffic in the year 2020 (MCA, 2020) (MCA, 2022). Even though relaxations were relieved, the industry has not yet recouped traffic status in 2018. A June-to-June traffic comparison of 2018 and 2022 shows a reduction of nearly 7% in passenger traffic (DGCA, 2022). The Passenger Load Factor of the market leader Indigo in June 2018 was 88.3%, whereas it was 78.6% in June 2022, irrespective of an increase in market share by 16% (DGCA, 2022b). Airline companies seem to undergo a crisis, as in the case of any travel industry. Price dynamics is the typical strategy adopted globally in the civil aviation segment. This strategy has a triple function to perform: revenue maximisation, demand penetration, and

facing competition. Charging high prices to time-sensitive business travellers and less to leisure travellers was a common strategy used for revenue maximisation (Lazarev, 2013). This study examines the changes in this policy after covid pandemic on the Delhi Kolkata route.

Literature Review

The route, airport dominance on a route, and at the endpoint airports significantly influence an airline's ability to charge more prices. Hub formation also increases the fares on the route (Borenstein, 1989). Price discrimination is a method used to exploit customer heterogeneity in terms of willingness to pay (Gale, 1993). 'Price increases monotonically as the booking date was close to the departure date' was the established rule of civil aviation pricing globally. This observation was made in the European market during the initial periods of booking started (Xie & Shugan, 2001). While studying the price volatility in the U.S. market, w, Gillen observed more or less stable prices till two weeks before the flight and a sudden increase after these two weeks (Gillen & Mantin, 2009). Fares are jointly affected by in-flight seat availability and purchasing date (Alderighi et al., 2012). Prices for airlines are responsive to rival prices, rival seat availability, and load factors (Clark & Vincent, 2012). In the non- stop travel from New York to London route, the Bilotkach observed an accelerated increase in price as the departure date approached (Bilotkach et al., 2010). The same effect of an increase in price as the departure date approaches was admitted in future research also (Siegert & Ulbricht, 2015) (Siegert & Ulbricht, 2020). The entry of big airline companies influences the prices of current airlines on that route with lowered prices (Sweeting et al., 2020). But to the contrary, a study in the Russian market revealed that prices on domestic airline tickets decreased as the departure dates approached (Lantseva et al., 2015).

Selection of Route and Airlines

Delhi, Bengaluru, Mumbai, Hyderabad, Chennai, and Kolkata are the main hub airports in India, having more than 75 direct flight routes. Delhi stood first among the major hubs in 2018 and 2022, and Kolkata

was the last. This study chose Delhi to Kolkata route, and the data was collected 30 days before the departure date in both years. Air Asia, Air India, Indigo, Go Air, Jet Airways, Spicejet, and Vistara were operating direct flights on these routes in 2018, with a total number of 30 flights. In 2022, Air India, Indigo, Go First (Go Air), Spicejet, and Vistara were operating direct flights with a total of 24 flights. All the flights are considered for the evaluation of dispersion on the route. Air Asia and Jet Airways are excluded from evaluating the price dispersion of flights. The study evaluates the price dispersion caused by price dynamics on the route before and after the covid pandemic.

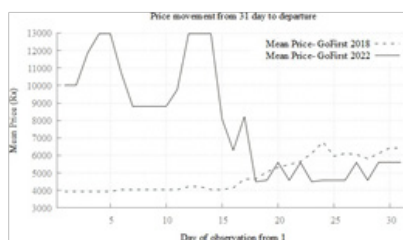
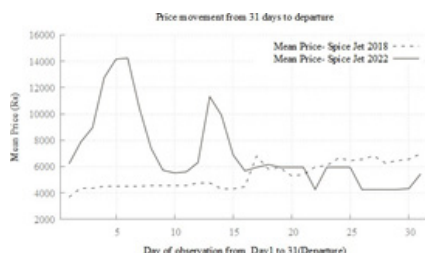
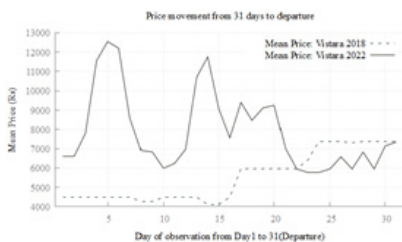
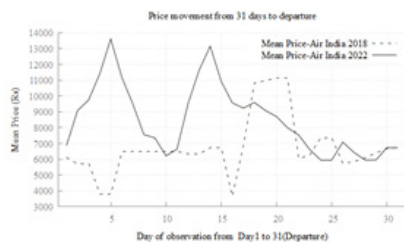
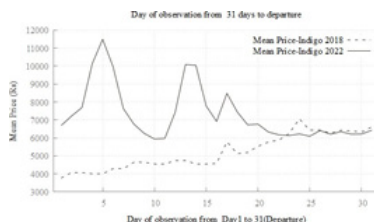
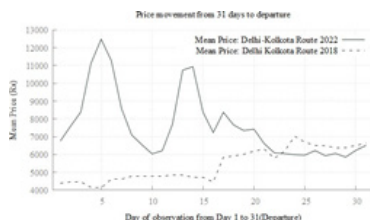
Fare Dispersion in the Route

The Gini coefficient is a standard tool used to analyse the dispersion in the airline industry. In 2018, prices were collected 31 days before the departure for all seven direct flights resulting in 929 price points. In 2022, prices were collected 31 days before departure for all five direct flights resulting in 806 price points. The mean price of all the flights from 31 days departure of each year was calculated as the mean price of the route. Similarly, airline company-wise mean fare was also calculated to assess the brand-wise mean price. Comparison has been made for all airlines except Jet Airways and Air Asia. The summary statistics are:

	Mean	Minimum	Maximum	Std. Dev.	C.V.	Mean Difference
D-K						
Route:2018	5432	4150.1	7024.7	923.93	0.17009	
D-K						39.80
Route:2022	7593.7	5856.7	12483	1864	0.24547	
Air India: 2018	6751.1	3652.5	11134	1887.3	0.27956	25.91

Recent Research Communications						
Air India: 2022	8500	5953.3	13608	2182.4	0.25675	
Indigo: 2018	5211.1	3766.9	7061.1	971.08	0.18635	40.03
Indigo: 2022	7296.9	5939	11487	1508.5	0.20673	
GoFirst: 2018	4877.2	3939	6763.7	983.75	0.2017	62.02
GoFirst: 2022	7901.9	4499	12945	3111.6	0.39378	
Spicejet: 2018	5332.2	3684.3	6979	996.46	0.18688	31.71
Spicejet: 2022	7022.8	4257.7	14233	2854.8	0.40651	
Vistara: 2018	5542.8	4107	7379	1279.1	0.23076	42.25
Vistara: 2022	7884.8	5776	12546	2045.2	0.25938	
JetAirways:						
2018	21393	17440	28908	3924.5	0.18345	NA
AirAsia: 2018	4992.4	4504	6577	738.05	0.14783	
			I.Q.	Gini	Gini	Mkt Share
	Skewnes	Kurtosis	range	coefficient	Difference	Dif
D-K						
Route:2018	0.1562	-1.5894	1744.1	0.09353	+	NA
D-K						
Route:2022	1.2388	0.42718	2290.8	0.12521		
Air India: 2018	1.137	1.2817	682.5	0.13226	+	1.49
Air India: 2022	0.6793	-0.448	2953	0.14048		
Indigo: 2018	0.2747	-1.3346	1719.4	0.10362	-	8.60
Indigo: 2022	1.3847	0.76557	1474.3	0.10241		
GoFirst: 2018	0.5153	-1.3776	1918.3	0.10776	+	-2.88
GoFirst: 2022	0.4237	-1.2462	5420	0.21608		
Spicejet: 2018	0.268	-1.4617	1933.3	0.10237	+	5.77
Spicejet: 2022	1.3483	0.78903	2352	0.20202		
Vistara: 2018	0.4226	-1.4783	2817	0.12231	+	7.82
Vistara: 2022	0.9931	-0.1844	2874.8	0.13699		
Jet Airways:						
2018	0.82811	-0.7242	6953	0.097	NA	NA
Air Asia: 2018	1.05	-0.6687	1291.5	0.06999		

The mean fare of the route has increased by 39.8% after the Covid Pandemic. The minimum fare was also increased by 41.1%, and the maximum fare by 77.8%. Dispersion reflected by the Gini coefficient and interquartile range is also increased. The trends of tailedness also changed as per the value of Kurtosis. The time Trend of the price movements of both years is given to get a better inference.



All the flights on the route in 2018 showed an upward trend from the 1st day of observation to the 31st day, the day of departure. However, in 2022 the movement was downward for all the flights.

Airline Company Fare Dispersion

Excluding Air Asia and Jet Airways, a comparison has been made for the airlines. As per the records published by DGCA, Indigo has the highest overall market share in the Indian Civil Aviation market with 39.7% in the first quarter of 2018 (DGCA, 2022b). Their share increased to 56.3% in the first quarter of the year 2022. Indigo was the market leader of the route with a 39.9% share in 2018 and a 48.5% share in 2022, leading to the highest increase in the share during the period.

Indigo

The mean fare of Indigo has increased by 40.03% after the Covid Pandemic. Minimum fare and maximum fare were increased by 57.66% and 62.68%, respectively. Dispersion reflected by the Gini coefficient and interquartile range shows price dispersion has also increased. The trend of tailedness also changed. The direction was upward before covid pandemic, but the trend seems to be down after the covid pandemic. This change is reflected in the value of Kurtosis. The market share of the route increased during the period.

Air India

Air India had the label of National Carrier in 2018, whereas, in 2022, it became a private carrier. They had 12.1% and 13.6% of the market share, respectively, for the years 2018 and 2022. The mean fare has been increased by 25.9% in 2022. The minimum fare increased by 63%, and the maximum by 22.2%. Dispersion reflected by the Gini coefficient and interquartile range also increased. The trend of tailedness also changed. Market share for the route increased during this period.

Vistara

Vistara has increased its overall market share from 3.7% to 8.9% in

2022. Their share in the route also increased from 9% to 16.8% during the period. The mean fare of Vistara airlines has increased by 42.25% in 2022. The minimum fare and the maximum fare were increased by 40.64% and 70.02%, respectively. Dispersion reflected by the Gini coefficient and interquartile range shows dispersion has also increased. The trend of tailedness also changed.

SpiceJet

Their overall market share in the domestic segment has decreased from 12.6% to 9.7% from 2018 to 2022. But their market share in the route has increased from 11.6% in 2018 to 17.4% in 2022. The mean fare of SpiceJet has increased by 31.7% in 2022. The minimum fare and the maximum fare were increased by 15.56% and 103.3%, respectively. Dispersion reflected by the Gini coefficient and interquartile range shows price dispersion has also increased. The trend of tailedness also changed.

GoFirst

GoAir renamed GoFirst has increased its overall market share from 9.3% to 10.4%. But their market share in the route has reduced from 6.6% to 3.7 % during the period of observation. The mean fare of GoFirst has increased by 62.02% in 2022 compared to the mean fare in 2018. The minimum and the maximum fares were increased by 26.2% and 86.7%, respectively. The Gini coefficient and interquartile range show that price dispersion has increased.

Conclusion

The time trend of all the flights on the route has changed its direction between the two periods of analysis. This is contrary to the established rule of price increases monotonically as the booking date was close to the departure date. Price dispersion indicated by the Gini coefficient and interquartile range increased, except for the market leader after the covid pandemic. During the period mean price increased by 26% to 62%, the minimum price by 14% to 63%, and the maximum price by

22% to 103%. It would be interesting to see whether the change is there in other routes and international flights in future research. Whether this increase is justifiable on the ground of inflation or passenger load factor is also suggested for future research.

References

Alderighi, M., Nicolini, M., & Piga, C. A. A. (2012). Combined effects of load factors and booking time on fares: Insights from the yield management of a low-cost airline. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2030092>

Bilotkach, V., Gorodnichenko, Y., & Talavera, O. (2010). Are airlines' price-setting strategies different? *Journal of Air Transport Management*, 16(1), 1–6. <https://doi.org/10.1016/j.jairtraman.2009.04.004>

Borenstein, S. (1989). Hubs and high fares: Dominance and market power in the U.S. airline industry. *The RAND Journal of Economics*, 20(3), 344. <https://doi.org/10.2307/2555575>

Clark, R., & Vincent, N. (2012). Capacity-contingent pricing and competition in the airline industry. *Journal of Air Transport Management*, 24, 7–11. <https://doi.org/10.1016/j.jairtraman.2012.04.005>

Directorate General of Civil Aviation. (2022a). Dom Citypair Data, June 2022. <https://www.dgca.gov.in/digigov-portal/?page=monthlyStatistics/259/4751/html&main259/4184/servicename>

Directorate General of Civil Aviation. (2022b). Performance of domestic airlines for June 2022. <https://www.dgca.gov.in/digigov-portal/?page=jsp/dgca/InventoryList/dataReports/aviationDataStatistics/airTransport/domestic/airTraffic/June2022.pdf&main4264/4206/servicename>

Gale, I. (1993). Price dispersion in a market with advance purchase. *Review of Industrial Organization*, 8, 451–464.

Gillen, D., & Mantin, B. (2009). Price volatility in the airline

markets. *Transportation Research Part E*, 45(5), 693–709. <https://doi.org/10.1016/j.tre.2009.04.014>

Lantseva, A., Mukhina, K., Nikishova, A., Ivanov, S., & Knyazkov, K. (2015). Data-driven modeling of airlines pricing. In *Procedia Computer Science* (Vol. 66). Elsevier Masson SAS. <https://doi.org/10.1016/j.procs.2015.11.032>

Lazarev, J. (2013). The welfare effects of intertemporal price discrimination: An empirical analysis of airline pricing in U.S. monopoly markets. In *economics.sas.upenn.edu*. https://economics.sas.upenn.edu/sites/default/files/filevault/event_papers/Lazarev-02092012.pdf

Ministry of Civil Aviation, G. of I. (2020). DGCA Annual Report_AR-Eng-2019-2020.pdf. <https://www.civilaviation.gov.in/en/publication/annual-reports>

Ministry of Civil Aviation, G. of I. (2022). DGCA Annual Report_AR-Eng-2021-22. <https://www.civilaviation.gov.in/en/publication/annual-reports>

Siebert, C., & Ulbricht, R. (2015). Dynamic oligopoly pricing: Evidence from the airline industry. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2413180>

Siebert, C., & Ulbricht, R. (2020). Dynamic oligopoly pricing: Evidence from the airline industry. *International Journal of Industrial Organization*, 71, 102639. <https://doi.org/10.1016/j.ijindorg.2020.102639>

Sweeting, A., Roberts, J. W., & Gedge, C. (2020). A model of dynamic limit pricing with an application to the airline industry. *Journal of Political Economy*, 128(3), 1148–1193. <https://doi.org/10.1086/704760>

Xie, J., & Shugan, S. M. (2001). Electronic tickets, smart cards, and online prepayments: When and how to advance sell. *Marketing Science*, 20(3), 219–243. <https://doi.org/10.1287/mksc.20.3.219.9765>

Work-Life Balance of Women Faculties in Colleges - A Study with Special Reference to Idukki District

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Abstract

The last few decades have seen increase in the level of education, confidence and most importantly, ambition women, who are striving to claim their rightful place in society. They have changed the way they used to look at themselves and that has changed the outlook of society towards them. There as on for this state of affairs can be attributed to the changes in socio-cultural setup. Families have now begun to accept working women and parents have started exploring the ample opportunities of career growth for their daughters. The increase in the number of women in the labour market signifies an important trend regarding women's employment. This has been occurring alongside increases in labour force and workforce, especially for urban women, although rural women workers predominate in terms of participation rates and overall magnitude. It's important to know the factors that affect the work and life balancing of the women faculties in colleges. Through this work we can realise the way that the college women faculties handle their day today lives.

Introduction

Nowadays the increase in women in the labour market signifies an important trend regarding women's employment. The concept of Work-Life-Balance of women deals with how an employee meets the demands of her life and work. Imbalance with life and family may result in serious problems in the family and workplace of an employee. So, a balance between two is highly essential for better living and work in the case of a woman employee. The dynamics of the working environment have exerted enormous pressure on working women as

they need to cope with virtually two full time jobs one at the office and the other at home. Looking back over the last two decades ,it is seen that enormous change has occurred in the status of women in India. Before the 1950s ,a few women were engaged in work outside their home . Most of the women were uneducated , the majority didn't engage in work beyond their home wall ,and those who did were mostly in nursing , primary school teaching and other female occupations. Few women were held the responsibility in the workplace. Today India, we found more women personalities carrying a responsible position giant organisation, at the control of aircraft, in parliament, and judiciary, as the police officers, doctors, engineers, teachers- the list seems never ending. Asia Result, The modern Indian woman redefines her limits and emerges to claim traditional male spaces of her own.

The increase in the number of women in the labour market signifies an important trend regarding women's employment. This has been occurring alongside increases in labour force and workforce, especially for urban women, although rural women workers predominate in terms of participation rates and overall magnitude. The Increasing Share Of women participation in the labor force and its significant contribution to household income as well as GDP requires some policy attention paid to gender dimensions of employment. The eleventh Five Year Plan documents for the first time the history of India planning recognizes not only as equal citizens but as agents of sustained socio-economic growth and change.

Importance Of The Study

It's important to know the factors that affect the work and life balancing of the women faculties in colleges. Through this work we can realize the way that the college women faculties handle their day today lives. This work will help to analyze how their family can help to maintain their lives and also can realize what are the factors that help them and the attitude of the society to them. The work shows job satisfaction as well .

Statement of the Problem

A good balance between work and life will only be possible with the supporting atmosphere in both home and workplace. Unlike in today's society, housework is the responsibility of women in most households. There is work and commitments at home after work at the work place. All little support in the home and workplace leads to better relief to the life of the women faculties but on many occasions though they were not getting it. An unsatisfied life can make an unhappy life for the women faculties. It is very difficult to work more hours after work at the workplace. It can affect both working in colleges and can create distress in the family. All these are affecting the potential source of life satisfaction and organizational performance. Work-Life-Balance is an issue of vital importance to individuals, organizations, families, government and society. The study is proposed to analyze how the life and family related factors influence the Work-Life-Balance of Women Faculties in Colleges.

Objectives

1. To identify the factors influencing the Work-Life Balancing of women faculties in colleges.
2. To study the influence of working time on family commitments.
3. To study the influence of family support in the daily life of women faculties.

Scope of the Study

The focus of the study is women faculties in different colleges. The study was conducted to know the effect or influence of various job-related and work-related factors on the work-life balance of women faculties. The scope of the study is limited to the colleges in the Idukki district.

Research Methodology

Sources of data

Primary data

The primary data is collected from the respondents in various colleges in Idukki district. The sample study was conducted among 55 respondents, having different ages, colleges and destinations. The sample is collected from women faculties.

Secondary data

Secondary data is gathered from published records like websites, journals, magazines, books and unpublished sources.

Sample designing

Sampling size

Under convenience sampling 55 respondents from different colleges in Idukki district.

Sampling method

Convenience sampling is the sampling method used for the study. Snowball sampling is also used.

Analysis And Presentation

Tools used for analysis

Percentage Analysis

Percentages are often used in data representation as they simply number by reducing all of them to a 0 to 100 range. Through the use of percentages, the data are reduced to the standard form with base equal to 100 which facilitates the relative comparison. Tabular Analysis

It includes any analysis that uses tables, in other words almost any form of quantitative analysis.

Tools used for presentation

Pie Charts

It is a circular chart divided into sectors ; each sector shows the relative size of each value. Pie diagrams are used when the aggregate and their divisions are to be shown together. The aggregate shown by means of a circle and the divisions by the sectors of the circle.

Bar charts

A bar chart or bar graph is a chart or graph that presents categorical data with rectangular bars with heights or lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. A vertical bar chart is sometimes called a column chart.

Method of data collection

Questionnaire method is used for the collection of primary data.

Method used for testing

Chi square test (Goodness to Fit) is selected for the analysis.

Significance of the Study

Work-Life-Balance is a necessary aspect of teacher efficiency and happiness, which consequently assists student's learning. In the present scenario, due to many changes happening in the workplace and family 10 systems, a vast majority of women are finding it difficult to achieve a desired Work-Life-Balance. In comparison with men, women have more responsibilities at home. They need to manage the daily requirements of the family on one side and other routine responsibilities colleges. Therefore, there is a need to study the influence of various factors on the Work-Life Balance women faculties in colleges.

Hypothesis

H0: There is no significant difference between the job satisfaction in different categories of colleges on the basis of monthly salary.

H1: There is a significant difference between the job satisfaction in different categories of colleges on the basis of monthly salary.

Review of Literature

Sumaira Rehman, Muhammad Azam Roomi (2012) has conducted a study in Pakistan through the interpretive phenomenological approach based on different influencing factors on women's work and family roles in the unique Pakistani socio-economic and cultural environment. So as a solution they found that, for achieving work life balance, start their own businesses, So they can achieve flexibility, control, and freedom.

Rumiana Stoilova, Petya Ilieva-Trichkova, Franziska Bieri (2020) has analysed how the factors affect the life of women and men about work and life. The study uses multilevel modelling to explore the factors which shape the work life balance of men and women aged 15-34 across 24 European countries. The study analysed that the higher education increases the likelihood of considering work life balance as important in work selection for men, while lower education decreases the odds of considering this balance for women.

Jean E. Wallace (2006) conducted a little research that examined how the contextual characteristics of law firms affect women lawyers' sense of work life balance and career satisfaction. The study shows the contextual characteristics of law firms are important in understanding mother's and non mother's working experience.

R Balaji (2014) in his international journal of innovative research in science, Engineering and Technology analyzes women in the IT sector who are gaining the domain place in highly discussed topics. His study gives importance to the success level of the women in the IT sector. It is necessary to examine how the stages of life (e.g., marriage, childbirth, and child rearing) affect work and family concerns.

Delina, G., and Dr. R Prabhakara Raya Dual (2013) career couples suffer daily to take over their life and the work. Here the women are more suffering than the men. The health issues are reported by the highly stressed persons. So through the study the author found that probing is required to find solutions for the imbalances of women. Rincy V. Mathew and N. Panchanatham (2011) The study says that the work-

life balance issues that women entrepreneurs face are role overload, health maintenance problems, poor time management, dependent care issues and lack of sufficient support networks. And also says that the support network, quality of health and time management are positive predictors of WLB, dependent care issues and role overload are negative predictors. So the majority of respondents struggle with Work life balance issues, and they are different to each category of women entrepreneurs, depending on age group, education level, income and marital status.

Findings and Suggestions

Major Findings

- ▲ The satisfaction level of each of the faculties in different types of colleges (Autonomous, Aided, Unaided, Government and Self finance college) in case of the remuneration is different.
- ▲ Work environment has a great significance in the life of women.
- ▲ Imbalance in work - life balance will create diseases.
- ▲ Compensation, respect and recognition, job security, challenges and career growth have a good impact in the life of women faculties.
- ▲ Working hours, working in holidays, attitude of male faculties and work stress have an important role in work - life balance.
- ▲ Family commitments, friends circle, family conflict and spiritual affairs are affected by work-life balance.
- ▲ Work and family related matters that have a positive attitude creates a positive work-life balance and a negative attitude towards these factors creates work-life imbalance.
- ▲ Most of the faculties work about 5-10 hours for their work life per day.
- ▲ Most of the faculties in the study work in self financing colleges.
- ▲ The faculties are only satisfied below average about the entire work-life balance.
- ▲ The imbalance of work-life balance creates many diseases like depression, chronic pain, heart disease etc.
- ▲ Work-life balance creates a good life.

▲ Work-life balance creates a positive impact in the workplace and family.

Demographic Findings:

- ▲ In analysis about 58% of faculties are aged between 23-30.
- ▲ About 49% of faculties are unmarried.
- ▲ Most of the faculties are permanent in the employment
- ▲ About 69% of faculties are Assistant professor
- ▲ 60% of the faculties in study are having an experience of below 5 years.

Suggestions

- ▲ Family should be more supportive. For this there can be create a meeting or awareness about the factors that are affecting the women faculties
- ▲ The family/society should avoid the foolish talks (such as she can't, male dominated talks etc) , and should provide their own space to take actions and thoughts.
- ▲ Fair remuneration plan should be executed and implemented in the self-financing streams.
- ▲ The faculties should have a better work environment so that they can have their optimum utilisation of skills and abilities.
- ▲ Plan for daycaring of the faculty's dependents so that they can reduce their mental stress during work time.
- ▲ Provide mind relaxing programmes to reduce stress during the working environment.

Conclusion

Nowadays the work-life balance is an important matter for women also working outside the home. The work-life balance of women is entirely different from the men. Because the woman is obliged with daycaring responsibility of her dependent or family members. The work-life imbalance may lead to different types of diseases and also makes humans unhealthy. Here the work-life balance of women is an important factor to study. The study includes primary and secondary data. Questionnaire form is developed for the collection of primary data and 55 responses

have been recorded for the study. Many of the researchers had researched about this topic as earlier. By testing the hypothesis Chi Square test is used and it is found that the satisfaction level of the women faculties on the basis of the remuneration in different colleges (Autonomous, Aided, Unaided, Government and Self finance college) are the same. There are many changes needed for the life of women faculties.

References

1. Usha Lenga, Sucheta Agarwal (2017) *Study on work-life balance of women entrepreneurs - review and research agenda.*
2. Sumaira Rehman, Muhammad Azam Roomi (2012) *Phenomenological study of women entrepreneurs in Pakistan.*
3. Rumiana Stoilova, Petya Ilieva-Trichkova, Franziska Bieri (2020) *Work-life balance in Europe: institutional contexts and individual factors.*
4. Jean E. Wallace (2006) *A Study of Motherhood, Career Satisfaction and Life Balance.*
5. R Balaji (2014) *Work life balance of women employees.*
6. Delina, G., and Dr. R Prabhakara Raya Dual (2013) *A study on Work-Life Balance in Working Women.*
7. Rincy V. Mathew and N. Panchanatham (2011) *An exploratory study on the work - life balance of women entrepreneurs in south India*
8. Doherty Liz (2004) *Work-life balance initiatives: implications for women*
9. Triveni K Kumari and Devi V Rama (2012) *Impact of Demographic Variables on Work-Life Balance of Women Employees (with special reference to Bangalore City).*
10. Geetha Subramaniam, John Overton and Bala Maniam (2015) *Flexible Working Arrangements, Work Life Balance and Women in Malaysia.*

11. S. Vijayakumar Bharathi and E. Padma Mala (2016) *A Study on the Determinants of Work-Life Balance of Women Employees in Information Technology Companies in India.*
12. Tahani H. Alqahtani (2020) *Work-Life Balance of Women Employees*
13. N. Krishna Reddy, M.N. Vrandha, Atiq Ahmed, B.P. Nirmala, B. Siddaramu (2010) *Work-Life Balance among Married Women Employees.*
14. Deepak Chawla and Neena Sondhi (2011) *Assessing Work-Life Balance Among Indian Women Professionals.*
15. Sangita Basak (2021) *Factors Affecting Work-Life Balance of Women in Bangladesh: A Study during COVID-19 Pandemic.*
16. Tunji-Olayeni, P.F., Ogunde, A.O., Joshua, O and Oni, A.A (2017) *Work life balance of women in male dominated fields.*

Websites

[https://employsure.co.nz/blog/what-exactly-does-work-life-balance-mean/#:~:text=W](https://employsure.co.nz/blog/what-exactly-does-work-life-balance-mean/#:~:text=Work%20life%20balance%20refers%20to,hours%2C%20and%20lacks%20personal%20time.)ork%20life%20balance%20refers%20to,hours%2C%20and%20lacks%20personal%20time.

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4079063/#:~:text=The%20concept%](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4079063/#:~:text=The%20concept%20of%20work%E2%80%93life,women%20and%20children%20were%20restricted.)

[20of%20work%E2%80%93life,women%20and%20children%20were%20restricted.](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4079063/#:~:text=The%20concept%20of%20work%E2%80%93life,women%20and%20children%20were%20restricted.)

<https://trulyexperiences.com/blog/history-of-work-life-balance/>

<https://www.mbaknol.com/human-resource-management/work-life-balance/>

<https://www.coursecorrectioncoaching.com/reasons-why-work-life-balance-is-important/>

<https://www.hrzone.com/hr-glossary/what-is-work-life-balance>

<https://www.nibusinessinfo.co.uk/content/advantages-improved-work-life-balance>.

A Study on the Influences of Banks Among People in Rural Areas

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Abstract

Now a day's banking sector act as the back born of modern business. Development of any country mainly depends upon the banking system. Banks are among the main participant of the financial system in India. Banking offer several facilities and opportunities. Since, nationalization of bank in 1969, the public sector banks, owned by the government, has acquired a place of prominence, and there has been tremendous progress. Banking in India is highly fragmented with 30 banking units contributing to almost 50% of deposits and 60% of advances.

The importance of the banking into the economic development of the country cannot be overlooked. Gandhi said "real India lies in village" and village economy is the backbone of Indian economy. Without the development of the rural economy, the objective of economic planning cannot be achieved. Hence bank and other financial institution are considered to be vital role for the development of the rural economy in India. Studies of influences of bank among people in rural areas are very important. This study helps to know about the banks and the customer's response towards the banks and to know the influences of banks among people.

Keywords: reserve Bank of India, regional rural bank, rural development, nationalization, financial inclusion

Introduction

A bank is a "financial institution which deals with deposits and advances and other related services. It receives money from those who want to save in the deposit and it lends money to those who need it". Agriculture and rural sectors play an important role in India's overall development

strategy in terms of income and employment generation and poverty alleviation. General significance has, therefore been accorded to developing appropriate institution and mechanism for catering to the credit requirements of these sector.

Government of India promoted regional rural banks through the RR'Bs act of 1976 to bridge the gap in the flow of credit to the rural poor. The RR'Bs special place in the multi agency approach adopted to provide agriculture and rural credit in India. These banks are state sponsored, regionally based on rural oriented besides the RR'B commercial and operative banks have been catering to the credit requirement of the rural sector.

These studies of the influence of bank among people are very important. Federal Bank is the leading banking private sector. State Bank of India is the leading Bank in public sector. These Banks are among the main participant of the financial system in India. Banking offers several facilities and opportunities for people. So this study is deals with the influences of banks among people in rural area.

Objectives

- ▲ To study the influence of banks among people
- ▲ To make an overall assessment of effectiveness of banking service offered by banks in rural areas.

Scope of the Study

The study is conducted among some rural areas in Kerala. Maximum efforts have been made to ensure that the sample selected to represent difference categories of the people in all respects. so sample selected for the study included respondents from different walks in such a businessman, women, employees, agriculturist etc.

Research Methodology

Sample Design

A sample of 100 respondents has been drawn from the various socio-

economic statistics at different designation and having different educational qualification and belonging to different age groups. Sample units are chosen primarily on this basis of the convenience sampling.

Source of Data Collection

In this study both primary and secondary data are used. The primary data are collected from selected respondents by using questionnaire. Secondary data are collected from different books, journals, magazines and websites.

Limitations of the Study

- ▲ Since the convenience sampling technique has been used in this study. Sample taken according to accessibility and proximity to the researcher.
- ▲ The reliability of the data depends upon the information supplied by the respondents.
- ▲ Limited sample size.
- ▲ There is a limitation in generalization and inference making about entire population.

Review of Literature

A number of studies have been conducted in India and abroad on various aspects of banking especially retail banking. Some worthwhile studies relating to the banking sector are reviewed here.

Bhattacharya (1997) he has studied the impact of the limited liberalization initiated before the deregulations of the 90's on the performance of the different categories of banks. His study covers 70 banks in the period 1986-91. He has constructed one grand frontier for the entire period and measured technical efficiency among the three categories with foreign and private banks having much lower efficiencies. The main results accord with the general perception that in the nationalized era, public sector banks were successful in achieving their principle objectives of deposit and loan expansion.

Gaganjot Singh (1998) in his study "New innovations in banking

industry – a study of new private sector banks” views that the new private sector banks in India are using better technology and are offering better services to the customers. The new private banks have emerged as a model to the banking industry in terms of service levels, ambience, technology etc. As the public sector banks have already established a huge customer base, they become complacent and are slow to become customer friendly. The International journal of analytical and experimental modal analysis they are also less innovative in the use of technology-assisted customer service. Because of their huge customer base they feel that they can withstand competitions from new generation banks.

Anthony T. Allred and H. Lon Addams, (2000) in their article, indicated that neither banks nor credit unions do a good job of surveying customer needs or retaining customers. Other results indicate that fifty per cent of total respondents surveyed reported that they had stopped using a financial service provider because of poor service performance. The vast majority of that group reported that their decision was made because a bank failed to provide adequate service.

Mini Joseph's (2001) view is that new generation banks have created a spirit of competition in the banking industry by fully utilizing the facilities and amenities available from technology and computerization, and by accepting customer satisfaction as the core aspect. For preventing the erosion in the market share of old private sector banks and public sector banks, they are also providing quality service now in a competitive spirit.

P. D. Jeromi (2002) who studied “The trends and issues of bank credit in Kerala” finds that the absolute rate of growth of credit is reasonably good. But in relation to deposits, per capita credit, credit per account, disbursement by all India Financial Institutions the level of credit is lower. He also observes that more attention should be given to mobilization of deposits than to expansion of credit.

SujitChakravarti (2003) says credit cards provide benefits to consumers and merchants not provided by other payment instruments as evidenced

by their explosive growth in the number and value of transactions over the last 20 years. Recently, credit card networks have come under scrutiny from regulators and antitrust authorities around the world. The costs and benefits of credit cards to network participants are discussed. The International journal of analytical and experimental modal analysis. Focusing on interrelated bilateral transactions, several theoretical models have been constructed to study the implications of several business practices of credit card networks. The results and implications of these economic models along with future research topics are discussed.

Singh S. (2004) empirically studies the appraisal of customer services of PSBs in terms of level of customer service and satisfaction determined by brand, location and design, variety of services, rates and changes, systems and procedures etc. The study concludes that staff behavior is very polite and services are provided even in the late hours. Study reveals that 62 percent respondents answer that immediate credit is not given for outstation cheques, 93 percent feel that they do not hold periodical meetings and services are not provided according to the given schedules. It concludes that services of private sector banks are better than the services of public sector banks.

Velouston and Cleopatra (2004) in their study have analyzed the relative role of certain drivers of bank loyalty. Their study shows the links between image, perceived quality satisfaction, commitment and loyalty in Greek retail banking. The result of the study is that the image has a positive impact on perceived quality and satisfaction. The key factor that leads to loyalty is the personalization in providing services to customers which help to increase customer satisfaction.

Ramola (2005) in his article states that Indian banking industry can reach international level only through the growth of retail banking. For the growth of retail banking, innovative products which satisfy the needs of the individuals are required. Such products can be developed through market research. Besides, new regulations are required to reduce NPA in retail sector.

Rudra Sen Sarma (2005) makes a study on “The cost and profit efficiency of Indian banks during 1986-2003”. During this period the cost efficiency of the banks improved. The International journal of analytical and experimental modal analysis.

Findings

▲ It can be observed that Access to basic banking services in rural areas remains poor, and they will not be able to raise enough money to cope with unforeseen emergencies like domestic illness. People may need to take more expensive steps in the event of such a shock, rather than withdrawing money or taking money from the bank.

▲ It can be observed that the closest option that has received the most attention lately in rural areas is “mobile money,” where people can transfer, deposit, and withdraw money using their mobile phones.

▲ It can be observed that many local banks suffer from heavy credit crunch due to low repayment rates, untrained staff, low deposit rates and severe loan penalties without regard to the eligibility of their customers.

▲ It can be observed that there is a lack of information in rural areas about the role and function of banks, banking services, products, and interest rates, etc. This keeps people from investing in regular banks.

Suggestions and Conclusion

▲ Banks should conduct training sessions to explain to local people why it is important to keep an account, and how people can learn to save and invest in a variety of ways. They can also encourage rural people to look for opportunities for their small businesses.

▲ Rather than reducing the number of branches in rural areas, it should be encouraged to implement more complex credit distribution mechanisms to meet evolving agricultural needs. Regional planning authorities, Panchayat raj centers, and rural banks should all have open lines of communication.

The studies of the influence of banks among people in rural area are very important. Agriculture and rural sectors play an important role in India overall development strategy in terms of income and Employment generation and poverty alleviation. Gandhi said “real

India lies in village” and village economy is the backbone of Indian economy. Without the development of the rural economy the objectives of economic planning cannot be achieved.

References:

- ▲ Dr. Sunnukutty Thomas, Boddy Simon, Biju Abraham “Modern Banking”, pratibha publication, 2011.
- ▲ Mathew S.N “BANKING THEORY AND PRACTICES”, Kalyani publication
- ▲ Gaganjot Singh “ new innovations in banking industry- a study of new private sector banks”, 1998.
- ▲ Gordon and Natarajan- “Banking Theory and law and practices”, Himalaya publishing house, mumbai 20th revised edition 2006.
- ▲ Maheswari S N and R R Paul –“ Banking theory and practices”, Kalyanipublishers, New Delhi.
- ▲ Kothari C R- “ Research methodology – Methods and Techniques “ new age international (p) ltd publishers.

Websites

www.google.com, www.wikipedia.org, www.investorsworld.com
<http://rural.nic.in>, [http://en.wikipedia.org/wiki/banking in india](http://en.wikipedia.org/wiki/banking_in_india)

A Study on the Fundamental Theorem of Algebra , Special Reference with Algebraic Topology

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Abstract

This paper is a study on the Fundamental Theorem of Algebra which states that every n degree polynomial has exactly n roots , special reference with algebraic topology. The theorem can also be stated as every non constant polynomial with real or complex coefficients has at least one(real or complex) root. The theorem has been proved in different ways by different Mathematicians over this period. In this work I go through the different theorems which help in proving The Fundamental Theorem of Algebra in different methods.

Keywords : Polynomials, degree, zeroes, analytic, maximum modulus, algebraic topology, ccovering space, homotopy,homomorphism,nulhomotopic.

Introduction

Algebra in the modern sense can hardly be said to have existed in the golden age of Greek mathematics. The Greeks of the classical period could solve many algebraic problems of considerable difficulty, but the solutions were all geometric. The Fundamental Theorem of Algebra can be proved in multiple ways. A proof that the Fundamental Theorem of Algebra is false was given by Leibnz, but later it was proved that leibniz's examples were false or were inadequate. Here I am going to study about the proof of the same with the help of algebraic topology in the view of Munkers. Algebraic topology is a branch of mathematics that uses tools from abstract algebra to study topological spaces. The basic goal is to find algebraic invariants that classify topological spaces upto homeomorphism, though usually most classify upto homotopy equivalence. Although algebraic topology primarily uses algebra to

study topological problems .Using topology to solve algebraic problems is sometimes also possible.

Different proofs of the theorem:

1. With the help of Liouville's Theorem

Statement of Liouville's Theorem

If a function $f(z)$ is analytic for all finite values of z and is bounded, then $f(z)$ is constant. Or,

If f is regular in whole z -plane and if $|f(z)| < K$ for all z then $f(z)$ is constant.

2. With the help of Rouché's Theorem

Statement of Rouché's Theorem

If $f(z)$ and $g(z)$ are analytic inside and on a simple closed curve C and $|g(z)| < |f(z)|$ on C , Then $f(z)$ and $f(z) + g(z)$ both have the same number of zeros inside C .

3. With the help of Maximum Modulus Principle

Statement of Maximum Modulus Principle

Suppose $f(z)$ is analytic within and on a simple closed contour C and $f(z)$ is not constant . Then $|f(z)|$ reaches its maximum value on C (and not inside C), that is to say , if M is the maximum value of $|f(z)|$ on C , then $|f(z)| < M$ for every z inside C .

4. With the help of Picard's Theorem

Statement of Picard's Theorem

If there are two distinct points that are not in the image of an entire function $p(z)$ (ie, there exist $Z_1 \neq Z_2$ such that for all $Z \in C$, $P(Z) \neq Z_1$ or Z_2), then $p(z)$ is constant.

5. With the help of Minimum Modulus Principle

Statement of Minimum Modulus Principle

Suppose $f(z)$ is analytic within and on a closed contour C and Let $f(z) \neq 0$ inside C suppose further that $f(z)$ is not constant . Then $|f(z)|$ attains its minimum value at a point on the boundary of “ C ” that is to say, if M is the minimum value of $|f(z)|$ inside and on C . Then $|f(z)| \geq M \forall z$ inside C .

The Fundamental Theorem of Algebra

A polynomial equation $x^n + a_{n-1}x^{n-1} + \dots + a_1x + a_0 = 0$ of degree $n > 0$ with real or complex coefficients has atleast one (real or complex) root.

Proof:

Step 1. Consider the map $f : S^1 \rightarrow S^1$ given by $f(z) = z^n$, where z is a complex number. We show that the induced homomorphism f_* of fundamental groups is injective.

Let $p_0 : I \rightarrow S^1$ be the standard loop in S^1 ,

$$p_0(s) = e^{2\pi i s} = (\cos 2\pi s, \sin 2\pi s).$$

Its image under f_* is the loop

$$f(p_0(s)) = e^{2\pi i s n} = (\cos 2\pi n s, \sin 2\pi n s).$$

This loop lifts to the path $s \rightarrow ns$ in the covering space $\mathbb{R}$. Therefore, the loop $f \circ p_0$ corresponds to the integer n under the standard isomorphism of $\Pi_1(S^1, b_0)$ with the integers, whereas p_0 corresponds to the number 1. Thus f_* is “multiplication by n ” in the fundamental group of S^1 , so that in particular f_* is injective.

Step 2. We show that if $g : S^1 \rightarrow \mathbb{R}^2 - 0$ is the map $g(z) = z^n$, then g is not nulhomotopic.

Let $j : S^1 \rightarrow \mathbb{R}^2 - 0$ be the inclusion map. Then $g = f \circ j$. Now f_* is injective, and j_* is injective because S^1 is a retract of $\mathbb{R}^2 - 0$. Therefore $g_* = j_* \circ f_*$ is injective. Thus g cannot be nulhomotopic.

Step 3. Now we prove a special case of the theorem. Given a polynomial equation

$$x^n + a_{n-1}x^{n-1} + \dots + a_1x + a_0 = 0,$$

We assume that $|a_{n-1}| + \dots + |a_0| < 1$ and show that the equation has a root lying in the unit ball B^2 .

Assume it has no such root. Then we can define a map $k : B^2 \rightarrow R^2 \cdot 0$ by the equation

$$k(z) = z^n + a_{n-1}z^{n-1} + \dots + a_1z + a_0.$$

Let h be the restriction of k to S^1 . Because h extends to a map of the unit ball into $R^2 \cdot 0$, the map is nullhomotopic. On the other hand, we shall define a homotopy F between h and the map g of Step 2; since g is not nullhomotopic, we have a contradiction.

We define $F : S^1 \times I \rightarrow R^2 \cdot 0$ by the equation

$$F(z, t) = z^n + t(a_{n-1}z^{n-1} + \dots + a_1z + a_0).$$

Step 4. Now we prove the general case. Given a polynomial equation

$$x^n + a_{n-1}x^{n-1} + \dots + a_1x + a_0 = 0$$

Let us choose a real number > 0 and substitute $x = cy$. we obtain the equation

$$(cy)^n + a_{n-1}(cy)^{n-1} + \dots + a_1cy + a_0 = 0.$$

Or

$$y^n + (a_{n-1}/c)y^{n-1} + \dots + a_0/c^n = 0.$$

If this equation has the root $y = y_0$, then the original equation has the root $x_0 = cy_0$.

So we need merely choose c large enough that

$$|(a_{n-1})/c| + |(a_{n-2})/c^2| + \dots + |a_0/c^n| < 1$$

To reduce the theorem to the special case considered in step 3.

Hence the theorem.

Analysis

The Fundamental Theorem of Algebra can be proved in a number of ways with the help of some existing proofs like Liouville's theorem, Maximum Modulus Theorem, Minimum Modulus Theorem, Rouché's Theorem etc. Eventhough the proof of The Fundamental Theorem of Algebra with the help of algebraic topology is long and difficult, it excelles in its own way. The most difficult task was to prove that every polynomial equation of positive degree has atleast one root. This can be done in different methods. Here at first, a special case of the theorem

is proved such that assuming the sum of modulus of coefficients of the polynomials will attain a value strictly less than one and shows that the equation has a root lying in the unit ball $\square 2$, by the method of contradiction. Followingly the general case is proved. In this algebraic topological way of proving The Fundamental Theorem of Algebra, the concepts like homotopy, homomorphism, fundamental group, covering spaces etc... are used.

Conclusion

A first attempt of proving the theorem was made by d'Alembert but his proof was incomplete, eventhough the theorem is also known as Alembert's Theorem. Later many mathematicians work on this theorem and cameup with right proof with the help of different branches of mathematics. The proof which we have discussed is included in the text "Topology" by James R Munkers. The homotopy approach has been used for solving nonlinear algebraic equations by the homotopy continuation approach. Based on the concept of the homotopy, computation methods for algebraic and differential equations have been developed.

Reference

1. JR Munkers, Elements of algebraic topology, addison-wessley, Reading, Massachusetts (1984).
2. James R Munkres and James R Munkres, Topology: a first course, vol. 23, Prentice-Hall Englewood Cliffs, NJ, 1975.
3. William S Massey, A basic course in algebraic topology, Springer Science & Business Media, 1991.
4. Mushtag Shah, Fundamental Theorem of Algebra A Study, International Journal of Computational Engineering Research, vol 2, issue 8

Properties of Trees

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Abstract: This article emphasizes and signifies the review of properties of Trees. Trees belong to the simplest class of graphs and hence provide a range of useful applications as simple as a family tree to as complex as trees in data structures of computer science. Fundamentally, they are graphs without even a single cycle. Additionally, they graphically depict hierarchical organization. But even though they are straightforward, they have a complex structure. A connected acyclic graph is called a tree. In other words, a connected graph with no cycles is called a tree. The edges of a tree are known as branches. Elements of trees are called their nodes. The nodes without child nodes are called leaf nodes. A tree with ' n ' vertices has ' $n-1$ ' edges. If it has one more edge extra than ' $n-1$ ', then the extra edge should obviously have to pair up with two vertices which leads to form a cycle. Then, it becomes a cyclic graph which is a violation for the tree graph.

Introduction:

A tree in which a parent has no more than two children is called a binary tree. Tree is a discrete structure that represents hierarchical relationships between individual elements or nodes. A connected acyclic undirected graph is a tree. There is a unique path between every pair of vertices in G . A tree with N number of vertices contains $(N-1)$ number of edges. The root of the tree is the vertex with a degree of zero. The leaf node of the tree is the vertex with a degree of 1, while an internal node has a degree of at least 2.

In graph theory, a tree is an undirected, connected and acyclic graph. To put it another way, a tree is a linked graph without even a single cycle. A graphical representation of hierarchical organization is a tree. The nodes and branches of a tree, respectively, are its constituent parts. A tree with n vertices has $(n-1)$ edges. As simple as a family tree to as complicated as trees in computer science data structures, trees have a wide range of beneficial uses. A vertex of degree 1 or any vertex with

no offspring is referred to as a leaf in a tree. Every tree which has at least two vertices should have at least two leaves. Any two vertices of graph T are connected by exactly one path. T contains no cycles, and for any new edge e , the graph $T + e$ has exactly one cycle. A tree has been hacked on every edge. A tree specifies exactly one cycle when one edge is added to it. A spanning tree can be found in each connected graph. Every tree has a minimum of two degree two vertices.

Content

Tree: - A tree is a linked graph with no circuits. To put it another way, a tree is an undirected graph G that satisfies any of the corresponding conditions listed below: In G , a singular simple path can connect any two vertices.

G is acyclic, and a simple cycle is formed if any edge is added to G . G is connected and has no cycles.

G is connected but would become disconnected if any single edge is removed from G . G is connected and the 3-vertex complete graph K_3 is not a minor of G .

Theorem 1: Prove that for a tree (T), there is one and only one path between every pair of vertices in a tree.

Proof: Since tree (T) is a connected graph, there exist at least one path between every pair of vertices in a tree (T). Now, suppose between two vertices a and b of the tree (T) there exist two paths. The union of these two paths will contain a circuit and tree (T) cannot be a tree. Hence the above statement is proved.

Theorem 2: If in a graph G there is one and only one path between every pair of vertices than graph G is a tree.

Proof: There is the existence of a path between every pair of vertices so we assume that graph G is connected. A circuit in a graph implies that there is at least one pair of vertices a and b , such that there are two distinct paths between a and b . Since G has one and only one path between every pair of vertices. G cannot have any circuit. Hence graph

G is a tree.

Wherein for any square matrix A , the $\det f(X)$ for arbitrary polynomial matrix $f(X)$. The linear polynomial matrix $(A-XI)$ of $\det(A-XI)$ in the classical Cayley-Hamilton theorem is replaced by the general polynomial matrix

Theorem 3: Prove that a tree with n vertices has $(n-1)$ edges. Proof: Let n be the number of vertices in a tree (T) .

If $n=1$, then the number of edges $=0$. If $n=2$ then the number of edges $=1$. If $n=3$ then the number of edges $=2$.

Hence, the statement (or result) is true for $n=1, 2, 3$.

Let the statement be true for $n=m$. Now we want to prove that it is true for $n=m+1$.

Let e be the edge connecting vertices say V_i and V_j . Since G is a tree, then there exists only one path between vertices V_i and V_j . Hence if we delete edge e it will be disconnected graph into two components G_1 and G_2 say. These components have less than $m+1$ vertices and there is no circuit and hence each component G_1 and G_2 have m_1 and m_2 vertices.

Now, the total no. of edges $= (m_1-1) + (m_2-1) + 1$

$$= (m_1+m_2)-1$$

$$= m+1-1$$

$$= m.$$

Hence for $n=m+1$ vertices there are m edges in a tree (T) . By the mathematical induction the graph exactly has $n-1$ edges.

Theorem 4: Every tree with at-least two vertices has at-least two pendant vertices.

Proof: Let the number of vertices in a given tree T is n and $n \geq 2$. Therefore, the number of edges in a tree $T = n-1$ using above theorems. summation of $(\deg(V_i)) = 2 \cdot e$

$$= 2*(n-1)$$

$$= 2n-2$$

The degree sum is to be divided among n vertices. Since a tree T is a connected graph, it cannot have a vertex of degree zero. Each vertex contributes at-least one to the above sum. Thus, there must be at least two vertices of degree 1. Hence every tree with at-least two vertices has at-least two pendant vertices.

Conclusion

A tree, also known as a linked acyclic undirected graph, is an undirected graph in graph theory in which any two vertices are connected by precisely one path. Any two vertices in a forest are connected by a maximum of one path, making it an undirected graph, an acyclic undirected graph, or alternatively, a disjoint union of trees. A directed acyclic graph called a polyforest—also known as a directed forest or an oriented forest—has a forest as its underlying undirected graph. Some authors have described a rooted tree as a directed graph in and of itself. A disjoint union of rooted trees is a rooted forest. When a rooted forest is directed, it either has all of its edges pointing in the opposite direction of the roots of each rooted tree, in which case it is known as an anti-branching or in-forest, or all of its edges pointing in the same direction as the roots of each rooted tree, in which case it is known as a branching or out-forest. A polytree is a directed acyclic graph (DAG) whose underlying undirected graph is a tree. Other names for polytrees include directed tree, oriented tree, and singly connected network. In computer science, trees are used to refer to a variety of data structures that have underlying graphs that are trees in graph. Theory, although such data structures are generally rooted trees.

Reference

- ▲ R. Balakrishnan and K. Ranganathan, A Textbook of Graph Theory
- ▲ Robin J Wilson, Introduction to Graph Theory Fourth Edition
- ▲ Douglas B. West, Introduction to Graph Theory, second edition

Lagrange's Theorem for B-Algebra

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Abstract

This paper emphasis the review of the Lagranger's theorem based on the study of Lagrange's theorem for B-algebra proposed by Joemar Endam and Jenette S. Bantug

Introduction

Lagrange theorem is one of the central theorems of abstract algebra. This theorem deals with order of a Group and its subgroup. There are various studies are conducted in this theorem, and generalized to many applicable fields. In this paper explains the review of a study in Lagrange's theorem.

Preliminary

Group

A group is a set of elements defined with an operation that integrates any two of its elements to form a third element satisfying four axioms. These axioms to be satisfied by a group together with the operation are; closure, associativity, identity and invertibility and are called group axioms.

Order of A Group

The order of a finite group is the number of its elements. If a group is not finite, one says that its order is infinite

Order of an Element in A Group

The order of an element in a group is the smallest positive power of the element which gives you the identity element.

Lagrange's Theorem

Lagrange theorem is one of the central theorems of abstract algebra. It states that in group theory, for any finite group say G , the order of subgroup H of group G divides the order of

G . The order of the group represents the number of elements. This theorem was given by Joseph- Louis Lagrange. The converse of the theorem is not always true.

The Lagrange function is used to solve optimization problems in the field of economics

Lagrange's method of multipliers is used to derive the local maxima and minima in a function subject to equality constraints .

Content

Joemar Endam and Jenette S. Bantug established Lagrange's theorem for B-algebra. According to them , A B-algebra is an algebra $(X ; *, 0)$ satisfying the following axioms for all

$x, y, z \in X$:

$$(I) \quad x * x = 0,$$

$$(II) \quad x * 0 = x,$$

$$(III) \quad (x * y) * z = x * (z * (0 * y)).$$

(IV) A B-algebra $(X ; *, 0)$ is commutative , if $x*(0*y) = y*(0*x)$ for all $x, y \in X$.

J. Neggers and H.S. Kim introduced the notions of a subalgebra and normality of B-algebras and some of their properties are established. A nonempty subset of X is called a subalgebra of X ,

if $x * y \in N$ for any $x, y \in N$. It is called normal in X if for any $x * y, a * b \in N$ implies $(x * a) * (y * b) \in N$. A normal subset of X is a subalgebra of X . There are several properties of B-algebras as established by some authors .The following properties are used in this paper, for any $x, y, z \in X$,

$$(P1) 0 * (0 * x) = x$$

$$(P2) x * y = 0 * (y * x)$$

$$(P3) x * (y * z) = (x * (0 * z)) * y \quad (P4) x * y = x * z \text{ implies } y = z$$

N.C. Gonzaga and J.P. Vilela introduced cyclic B-algebras. They also established the laws of exponents for B-algebras. J.C. Endam and R.C. Teves established some properties of cyclic B-algebras. In this paper, we establish the Lagrange's Theorem for B-algebras. Throughout this paper, X means a B-algebra $(X; *, 0)$.

Lagrange's Theorem for B-algebras

Let H be a subalgebra of X and $x \in X$. Let $xH = \{x * (0 * h) : h \in H\}$ and $Hx = \{h * (0 * x) : h \in H\}$, called the left and right B-cosets of H in X , respectively. If X is commutative, then $xH = Hx$ for all $x \in X$. Observe that $0H = H = H0$ and $x = x * (0 * 0) \in xH$ and $x = 0 * (0 * x) \in Hx$.

Theorem : (Lagrange's Theorem for B-algebras)

Let H be a subalgebra of a finite B-algebra X .

$$\text{Then } |X|_B = [X : H]_B |H|_B.$$

Note

Let H be a subalgebra of X . Then the number of distinct left (or right)

B-cosets, written $[X : H]_B$, of H in X is called the index of H in X . By Theorem, $[X : H]_B$ is well-defined. If X is finite, then clearly $[X : H]_B$ is finite.

Conclusion

This paper explains review on Lagrange's theorem based on the study Lagrange's Theorem For B-Algebra by Joemar Endam and Jenette S. Bantug. Here first defines B-algebra and explain the concept of Lagrange's theorem in B-algebra.

Reference

[1] Jenette S. Bantug Department of Mathematics College of Arts and Sciences Silliman University

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[2] Joemar C. Endam Department of Mathematics College of Arts and Sciences Negros Oriental State University

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[3] P.J. Allen, J. Neggers and H.S. Kim, B-algebras and groups, *Scientiae Mathematicae Japonicae Online*, 9 (2003), 159-165.

[4] J.R. Cho and H.S. Kim, On B-algebras and quasigroups, *Quasigroups and Related Systems*, 8 (2001), 1-6.

[5] J.C. Endam and J.P. Vilela, The Second Isomorphism Theorem for B- algebras, *Applied Mathematical Sciences*, 8 (2014), no. 38, 1865-1872. <https://doi.org/10.12988/ams.2014.4291>

[6] J.C. Endam and R.C. Teves, Some Properties of Cyclic B-algebras, *Inter- national Mathematical Forum*, 11 (2016), no. 8, 387-394. <https://doi.org/10.12988/imf.2016.6111>

[7] N.C. Gonzaga and J.P. Vilela, On Cyclic B-algebras, *Applied Mathemat- ical Sciences*, 9 (2015), no. 111, 5507-5522. <https://doi.org/10.12988/ams.2015.54299>

[8] H.S. Kim and H.G. Park, On 0-commutative B-algebras, *Scientiae Math- ematicae Japonicae Online*, (2005), 31-36.

[9] M. Kondo and Y.B. Jun, The Class of B-algebras Coincides with the Class of Groups, *Scientiae Mathematicae Japonicae Online*, 7(2002), 175-177.

[10] J. Neggers and H.S. Kim, On B-algebras, *Mat. Vesnik*, 5 4 (2002), 21-29.

[11] J. Neggers and H.S. Kim, A fundamental theorem of

B-homomorphism for B-algebras, Int. Math. J., 2 (2002), no. 3, 207-214.

[12] A. Walendziak, Some Axiomatizations of B-algebras, Math. Slovaca, 56 (2006), no. 3, 301-306.

Generalization of Cayley Hamilton Theorem

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Abstract

This paper emphasis the review on the Generalization of the Cayley-Hamilton Theorem based on different studies in different types of matrices.

Introduction:

The Cayley Hamilton Theorem states that every square matrix satisfies its characteristic equation, that is M is a $n \times n$ matrix whose characteristic equation is

$$\lambda^n + c_1 \lambda^{n-1} + Lc_n - 1\lambda + cn = 0 \text{ then}$$

$$M^n + c_1 M^{n-1} + Lc_{n-1} M + c_n = 0$$

That is, A is a square matrix, By Cayley Hamilton Theorem; A satisfies its own characteristic equation

$$\text{ie, } |A - \lambda I| = 0$$

The classical Cayley-Hamilton Theorem says that every square matrix satisfies its own characteristics equation. The Cayley-Hamilton Theorem has been extended to rectangular matrix, block matrices, pairs of commuting matrices, and standard and singular two-dimensional linear systems. The Cayley-Hamilton Theorem has been extended to n dimensional systems and 2 Dimensional continuous discrete-time linear systems.

The Cayley-Hamilton Theorem and its generalizations has been used in control systems and also automation and control in electronics and circuits theory, time-systems with delays, singular 2 D linear systems, 2-D continuous discrete linear systems, automation and eclectrotechniques etc.

Content

Raj Kumar Kanwar generalize the concept of the famous classical Cayley-Hamilton Theorem for square matrices wherein for any square matrix A , the $\det f(X)$ for arbitrary polynomial matrix $f(X)$. The linear polynomial matrix $(A - XI)$ of $\det(A - XI)$ in the classical Cayley-Hamilton theorem is replaced by the general polynomial matrix

$$f(X) = A_0 + A_1 X + A_2 X^2 + \dots + A_n X^n$$

Where A_i 's for $i = 0, 1, 2, 3 \dots n$ are square matrices of the same order.

The generalized Cayley Hamilton Theorem proved that if $f(X) = \det f(X)$ and whenever for a Square Matrix A , $f(A) = 0$ Implies $g(A) = 0$; $g(A) = \det f(X)$

B.G.Mertzios And M.A.Christodoulou extended the Cayley-Hamilton Theorem to the case where two A and B $n \times n$ matrices are involved. Results similar to the regular case are presented. The results are useful for problems that concern the analysis as well as the synthesis of singular systems, for the definition of a function of two matrices $f(A, B)$ and in various other problems in linear algebra. Mertzios and christdoulou explain these, based on below theorem

Theorem

The summation of nC_i ordering of products of two $n \times n$ square matrices, where in each product the first matrix appears i times and the second $n-i$ times, is a linear combination of all possible summations of ordering of all products such that times that both matrices appear in each product is less than i , $n-i$ respectively.

This theorem appears to be a generalization of the Cayley Hamilton Theorem, where only one matrix is involved. It should be extended to the case where $m > 2$ matrices are involved.

Preliminaries - Illustration 1

Let $f(X) = A_0 + A_1 X + A_2 X^2$ be a polynomial matrix over $M_2(f(X))$ for

$$A_0 = \begin{bmatrix} 3 & 3 \\ 4 & 1 \end{bmatrix} \quad A_1 = \begin{bmatrix} 1 & -2 \\ 3 & -1 \end{bmatrix}$$

$$\text{and } A_2 = \begin{bmatrix} -2 & 1 \\ -1 & 0 \end{bmatrix}$$

Where A_2 is a non-singular matrix whose elements are polynomials in X over the field f . Then

there exist a matrix $A = \begin{bmatrix} -1 & 2 \\ 0 & 3 \end{bmatrix}$ such that

$$f(A) = A_0 + A_1 A + A_2 A^2$$

$$= \begin{bmatrix} 3 & 3 \\ 1 & 4 \end{bmatrix} + \begin{bmatrix} 1 & -2 \\ 3 & -1 \end{bmatrix} + \begin{bmatrix} -1 & 2 \\ 0 & 3 \end{bmatrix} + \begin{bmatrix} -2 & 1 \\ 0 & -1 \end{bmatrix} + \begin{bmatrix} 1 & 4 \\ 0 & 9 \end{bmatrix}$$

$$= \begin{bmatrix} 3 & 3 \\ 4 & 1 \end{bmatrix} + \begin{bmatrix} -1 & -4 \\ -3 & 3 \end{bmatrix} + \begin{bmatrix} -2 & 1 \\ -1 & -4 \end{bmatrix}$$

$$= \begin{bmatrix} 2 & -1 \\ 1 & -2 \end{bmatrix} + \begin{bmatrix} -2 & 1 \\ -1 & -4 \end{bmatrix}$$

Also from $f(X) = A_0 + A_1 X + A_2 X^2$

$$= \begin{bmatrix} 3 & 3 \\ 4 & 1 \end{bmatrix} + \begin{bmatrix} 1 & -2 \\ 3 & -1 \end{bmatrix} X + \begin{bmatrix} -2 & 1 \\ -1 & 0 \end{bmatrix} X^2$$

$$= \begin{bmatrix} 3 + X - 2X^2 & 3 - 2X + X^2 \\ 4 + 3X - X^2 & 1 - X \end{bmatrix}$$

Given that $g(X) = \det f(X)$

$$\begin{aligned}
&= (3+X-2X^2)(1-X) - (4+3X-X^2)(3-2X+X^2) \\
&= -9-3X+2X^2-3X^3+X^4 \\
&\text{Ie, } g(A) = -9I -3A +2A^2-3A^3+A^4 \\
&= -9 \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} -3 \begin{bmatrix} -1 & 2 \\ 0 & 3 \end{bmatrix} +2 \begin{bmatrix} 1 & 4 \\ 0 & 9 \end{bmatrix} -3 \begin{bmatrix} -1 & 14 \\ 0 & 27 \end{bmatrix} + \begin{bmatrix} 1 & 40 \\ 0 & 81 \end{bmatrix} \\
&= \begin{bmatrix} -9 & 0 \\ 0 & -9 \end{bmatrix} + \begin{bmatrix} 3 & -6 \\ 0 & -9 \end{bmatrix} + \begin{bmatrix} 2 & 8 \\ 0 & 18 \end{bmatrix} -3 \begin{bmatrix} 3 & -42 \\ 0 & -81 \end{bmatrix} + \begin{bmatrix} 1 & 40 \\ 0 & 81 \end{bmatrix} = 0
\end{aligned}$$

Hence $f(A) = 0$ implies $g(A) = 0$

Illustration 2

Consider the following two matrices,

$$A = \begin{bmatrix} -1 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & -1 \end{bmatrix} \text{ and } B = \begin{bmatrix} 2 & -1 & 0 \\ 0 & 1 & -1 \\ 1 & -1 & 0 \end{bmatrix}$$

Suppose that we want to apply the generalized Cayley-Hamilton Theorem in the case where A appears twice and B once in each product. From above theorem it results that

$$\begin{aligned}
(A^2, B) &= A^2B + BA^2 + ABA = \begin{bmatrix} 6 & -1 & 0 \\ 0 & 0 & 1 \\ -2 & 1 & 0 \end{bmatrix} \\
A^2 &= \begin{bmatrix} 1 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 1 \end{bmatrix}, \quad (A, B) = AB + BA = \begin{bmatrix} 6 & -1 & 0 \\ 0 & 0 & -1 \\ -2 & 1 & 0 \end{bmatrix}
\end{aligned}$$

Conclusion

It has been explicitly show how the basic ideas involved in the case of one $n \times n$ matrix are extended in the case of two $n \times n$ matrices. It should be also noted that based on the ideas explored in the theorem easily extended to the case, where $m > 2$ equidimensional $n \times n$ matrices appear

simultaneously. the generalizes Cayley Hamilton theorem is of a great practical importance because it simplifies the solution of problems that have to do with analysis as well as with synthesis of singular systems.

The generalized Cayley Hamilton Theorem is also useful in the definition of a function of two matrices $f(A, B)$ where $f(Z_1, Z_2)$ is an analytic function of $(Z_1, Z_2) \in C^2$. Also Cayley Hamilton Theorem can be generalized to any polynomial matrix of arbitrary degree with coefficients as square matrices of any order. The Cayley Hamilton Theorem is one of the most powerful results in linear algebra. This theorem basically gives a relation between a square matrix and its characteristic polynomial. One important application of this theorem is to find inverse and higher powers of matrices.

Reference

- ▲ B.G. Mertzios And M.A. Christodoulou, Generalized Cayley Hamilton Theorem. IEEE Transactions on automatic control 31(2):156-157. DOI:10.1109/TAC.1104208
- ▲ Raj Kumar Kanwar, A Generalization of the Cayley Hamilton Theorem. Department of mathematics and statistics, Himachal Pradesh university, Shimla
- ▲ F.R. Gantmacher, Theory of matrices. New York: Chelsea, 1959
- ▲ J. Gilbert and L. Gilbert, Linear Algebra And Matrix Theory. Academic Press Inc., New York, 1995.
- ▲ Kenneth Hoffman and Ray Kunze, Linear Algebra. Pearson Education inc., publishing as prentice hall.

Status of Vitamin D in Patients with Type II Diabetes Mellitus

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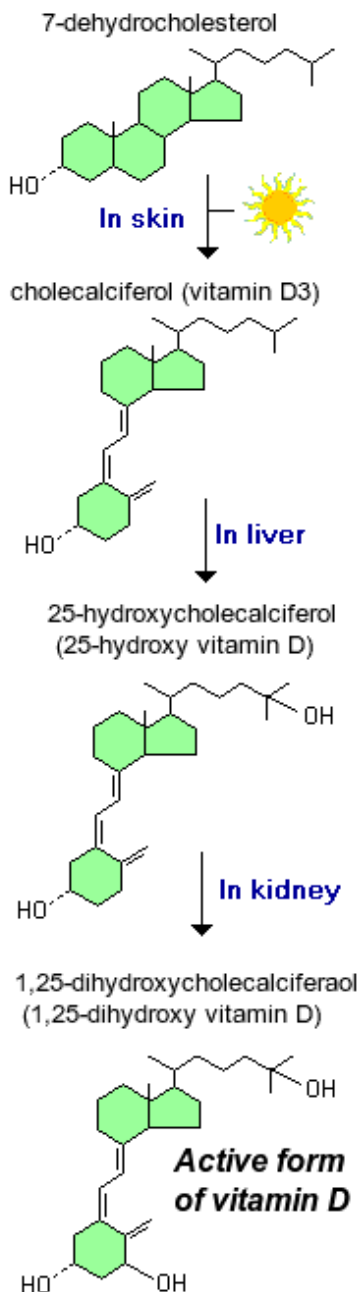
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Abstract

Diabetes is a metabolic disorder caused by defective insulin secretion, insulin action or both. The two major actors for the development of diabetes are pancreatic beta cell dysfunction and insulin resistance. In type 2 diabetes mellitus, production and release of insulin is unobstructed but due to factors like ageing or obesity, the produced insulin cannot compensate for the increased demand. Measurement of the serum level of 25-hydroxyvitamin D3 is the most useful parameter in evaluating vitamin D status. The serum level of vitamin D is an essential factor for studying short-term effects upon exposure to ultraviolet light and absorption of the vitamin after oral administration. Method for determination of vitamin D3 is described in this work. The objective of the current study is to analyze the concentration of vitamin D3 in patients with type 2 diabetes mellitus.

Introduction

Vitamin D refers to a group of fat-soluble secosteroids responsible for enhancing intestinal absorption of calcium, iron, magnesium, phosphate and zinc. In humans, the most important compounds in this group are vitamin D3 (also known as cholecalciferol) and vitamin D2 (ergocalciferol). Cholecalciferol and ergocalciferol can be ingested from the diet and from supplements. The body can also synthesize vitamin D (specifically cholecalciferol) in the skin, from cholesterol, when sun exposure is adequate (hence its nickname, the “sunshine vitamin”).



The chemical structure of vitamin D₃ was established and proven to result from the ultraviolet irradiation of 7-dehydrocholesterol. When 7-dehydrocholesterol or ergocalciferol in the skin are exposed to solar ultraviolet B [UV B, 290 to 320nm], chole calciferol [Vitamin D₃] is formed. Concentration of vitamin D varies according to the geographic region, clothing, climate, dietary deficiency, age, gender etc. People with dark skin do not absorb sunlight as easily as those with light skin, so their risk of low vitamin D is even higher. The status of vitamin D is known to be lower in the elderly compared with the young because of the reduced subcutaneous concentration of 7-dehydrocholesterol and reduced absorption of oral vitamin D. People living in high latitude will have very limited vitamin D and this is very true in winter months. It has been reported that vitamin D deficiency may predispose to glucose intolerance, altered insulin secretion and type 2 diabetes mellitus. Vitamin D replenishment improves glycaemia and insulin secretion in patients with type 2 diabetes with established hypovitaminosis D, thereby suggesting a role for vitamin D in the pathogenesis of type 2 diabetes mellitus (4,5). The mechanism of action of vitamin D in type 2 diabetes is thought to be mediated not only through regulation of plasma calcium levels, which regulate insulin synthesis and secretion, but also through a direct action on pancreatic beta cell function. Therefore owing to its increasing relevance, one can very well understand the important role of vitamin D in the pathogenesis of type 2 DM.

Type 2 DM results from insulin resistance, a condition in which cells fail to use insulin properly, sometimes also with an absolute insulin deficiency. In type 2 DM, though the production and release of insulin is unobstructed; the produced insulin cannot compensate for the increased demand due to factors like ageing or obesity. Type 2 DM is a polygenic disease resulting from the combined effect of peripheral insulin resistance and a genetically determined susceptibility to B cell dysfunction caused also by the defective ion channel function.

High-performance liquid chromatography (HPLC; formerly referred to as high-pressure liquid chromatography), is a technique in analytic chemistry used to separate the components in a mixture, to

identify each component, and to quantify each component. It relies on pumps to pass a pressurized liquid solvent containing the sample mixture through a column filled with a solid adsorbent material. Each component in the sample interacts slightly differently with the adsorbent material, causing different flow rates for the different components and leading to the separation of the components as they flow out the column. HPLC has been used for medical (eg: detecting vitamin D levels in blood serum), legal (eg: detecting performance enhancement drugs in urine), research (eg: separating the components of a complex biological sample or of similar synthetic chemicals from each other) and manufacturing (eg: during the production process of pharmaceutical and biological products) purposes.

Retention time :

The time taken for a particular compound to travel through the column to the detector is known as its retention time. This time is measured from the time at which the sample is injected to the point at which the display shows a maximum peak height for that compound.

Interpreting the output from the detector:

The output will be recorded as a series of peaks – each one representing a compound in the mixture passing through the detector and absorbing UV light. Retention times are used to identify the compounds present. The area under the peak is proportional to the amount of the compound (X) and this area can be calculated automatically by the computer linked to the display.

Materials and Method

The analysis of vitamin D metabolites is a unique challenge as the lipophilic compounds strongly associate with vitamin D-binding protein. There are different methods for the determination of 25-hydroxy vitamin D. The Competitive Protein Binding Assay (CPBA), a fully automated chemi luminescence method, the HPLC method are some of them. HPLC estimation has an advantage that 25(OH)D₂, 25(OH)D₃ and some other vitamin metabolites can be estimated separately.

▲ Collection Of Serum Samples For Analysis

5 ml of serum samples irrespective of the gender was collected from the patients of a clinic lab who were identified having Type II D.M during July-August 2013. 250 μ L of serum was extracted by 250 μ L methanol isopropanol (90:10V/V) solution. The amount of vitamin D was estimated at the Biochemistry laboratory of the college.

▲ Chemicals

All solvents were of analytical grade. n-Hexane, methanol and isopropyl alcohol were of HPLC grade (Merck). Rectified spirit (Travancore sugars) was purchased from Sigma-Aldrich (99%, HPLC). Hydrochloric acid was of analytical grade. Glycerol was of analytical grade (Merck). Water quality was secure by treatment on millipore synergy U.V water treatment system.

Calibrator stock (1mg/100ml) of 25 (OH)D₃ was prepared by dissolving the compound in rectified spirit and the concentration was verified on a Perkin Elmer spectrophotometer using molar absorptivities at 265nm(1cm path length) of 18000 and the concentration of the solution corresponds to 1000ng/ml. The multiple working standards containing 100ng, 50ng, 25ng, 15ng, 10ng and 5 ng per 20ml were prepared by appropriate dilution using rectified spirit. Stocks solution and working standards were always protected from light during preparation.

▲ Calibration of the Instrument

In order to analyse the level of vitamin D in serum sample in patients with diabetes mellitus, it should be noted that the instrument is calibrated using the standard solutions of Vitamin D.

▲ Serum Sample Preparation for HPLC

500 μ L of serum brought to the room temperature was taken in a 2ml microvial and precipitated by mixing with 500 μ L of methanol-isopropanol (90:10 v/v). It was kept as such for one minutes and vortex mixed for 30s. 500 μ L n-hexane was added to it and vortex mixed for one minute and centrifuged at 450 RPM for 3 minutes. The hexane layer was carefully separated using a micropipette¹⁷. The extract was evaporated to dryness under vacuum in a rotary evaporator. Residue

was reconstituted in 50ml of methanol and 20ml was injected. The solvent system used for elution consisted of a mixture of methanol and water (87.5:12.5v/v) and detected at 265nm at 11.9min. Very slight variation in the retention time was observed. Peak heights and area were recorded. The concentration in the sample was calculated using the regression equation obtained with known concentrations and peak heights of authentic sample.

▲ Regression Formula

A regression is a statistical analysis assessing that the association between two variables. It is used to find the relationship between two variables.

$$\text{Linear Regression: } Y = a + bX$$

Where:

X and Y are the variables.

Y = the variable that we are trying to predict

X = the variable that we are using to predict Y.

a = the intercept.

b = the slope

Result and Discussion

The aim of the project was to study the status of vitamin D of T2DM patients of the age-group from the South Indian population and to check whether any significant correlation exist among the parameters. T2DM patients were defined on the basis of serum HbA1c percentage (greater than or equal to 6.5). Out of 80 cases participated we could get completed data from only for 73 cases. Insufficient serum for determination of vitamin D status was a limiting factor for deriving data from the rest of the patients. For the calculation of vitamin D, 20 µl of solutions containing 100, 125, 250, 500, and 1000 ng of 25(OH)D3 monohydrate per ml were separately evaporated in microvials. The dried samples

were then reconstituted in 20 μ l n-hexane and separately injected and eluted under the same experimental conditions as in the estimation procedure. The peak heights were recorded and the regression equation was obtained. The data for the estimation is given in the given table:

Standardisation peaks and concentrations

Peak height (X)	Concentration (ngml) (Y)
509	100
751	125
912	250
1372	500
3076	1000

The regression equation produced from the data $Y = -80.263 + 0.359X$ was used to find the unknown concentrations of the serum samples. The actual concentration of 25(OH)D₃ of serum would then be 1/5 the value so obtained. The data is given in table below.

Data produced

Sl.No.	25(OH)D [8-60ng/ml]
1	0
2	3.83
3	7.35
4	9.8
5	23.86
6	20.56
7	22
8	3.6
9	30
10	5.4
11	14.1
12	15
13	12.45
14	27.1
15	25.4

16	0
17	14.5
18	16.96
19	0
20	0
21	16.68
22	1.9
23	12.2
24	51.3
25	74
26	116.7
27	37.6
28	17.9
29	3.4
30	34.6
31	34.2
32	162.7
33	33.3
34	8.7
35	58.6
36	3
37	0
38	0
39	0
40	0
41	3.7
42	61.6
43	72.8
44	62.4
45	35.4
46	78.4
47	40

48	33.8
49	13.5
50	12.88
51	16.4
52	0
53	0
54	8.2
55	17.62
56	0
57	26.32
58	49.71
59	0
60	64.78
61	36.6
62	58.4
63	33.7
64	0.03
65	23.51
66	5.84
67	0
68	23.94
69	29
70	25.52
71	3.55
72	7.86
73	23.14
74	17.12

Discussion

Though, historically a ‘normal’ nutritional vitamin D status has been defined as just about any circulating level of 25(OH) D in asymptomatic subjects, a range of 8-60 ng/ml is generally accepted for it. It is also

reported that 32ng/ml is needed for normal functions .Low vitamin D status is reported associated with markers of impaired glucose metabolism such as glycosylated haemoglobin (HbA1c).In a study on a heterogeneous group of middle aged subjects,HbA1c concentration is reported decreased at higher serum vitamin D concentration independent of covariates. Absence of any association between vitamin D deficiency and other parameters in that study including HbA1c was accounted due to vigorous clinical management of the disease and the longer time interval between the disease development and the assessment of vitamin D status.

Out of the 74 cases studied in the project, we have noticed 48 cases (65%) have lesser than the required minimum. Vitamin D intoxication is referred to as a hypercalcemic state.Vitamin D formation in skin depends on sunlight and the main dietary source of it is fatty ocean fish and other marine foods.It is interesting to note that inspite of both the favourable factors,the relative vitamin D level of local inhabitants is very low. Ie,The concentration of vitamin D3 in type 2 diabetic patient is very low

AMOUNT OF 25(OH) D3[ng'ml]	NO.OF SAMPLES ANALYSED
Deficient (<20)	42
20-50	20
50-80	10
80-100	0
>>>100	2

Conclusion

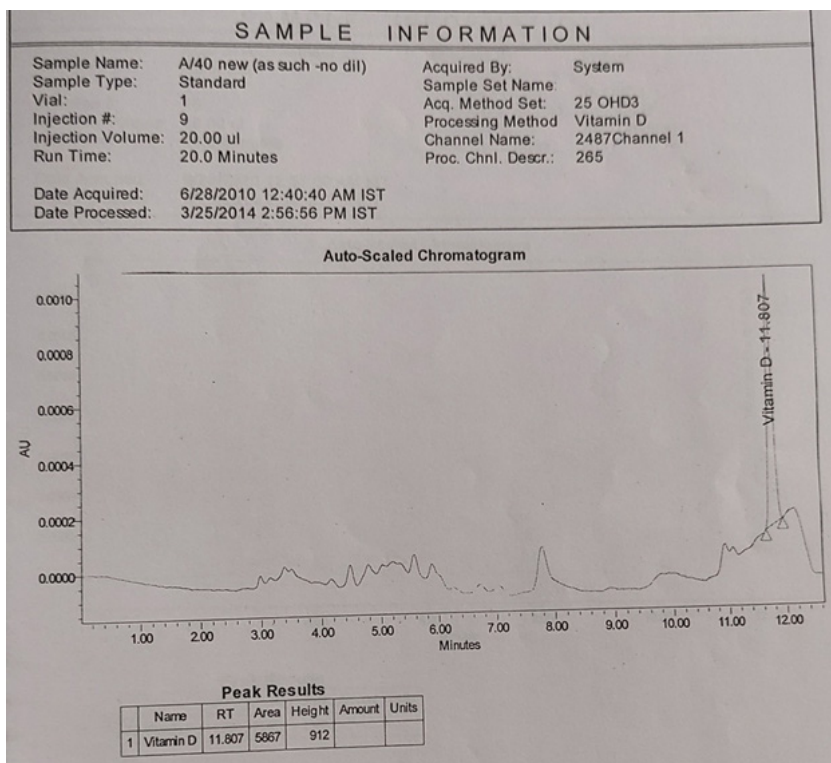
T2DM is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Mechanisms for the onset of this disease remain under extensive investigations. Abnormal homeostasis of vitamin status may contribute to certain diabetic outcomes. Any information regarding the status of the vitamin D would be a contribution to the field of health

care. This becomes all the more important as India is expected to have the maximum diabetic patients by 2020. Normal range of Vitamin D level in human serum is found to be 8-60 ng/ml. From the analysis, we can conclude that :-

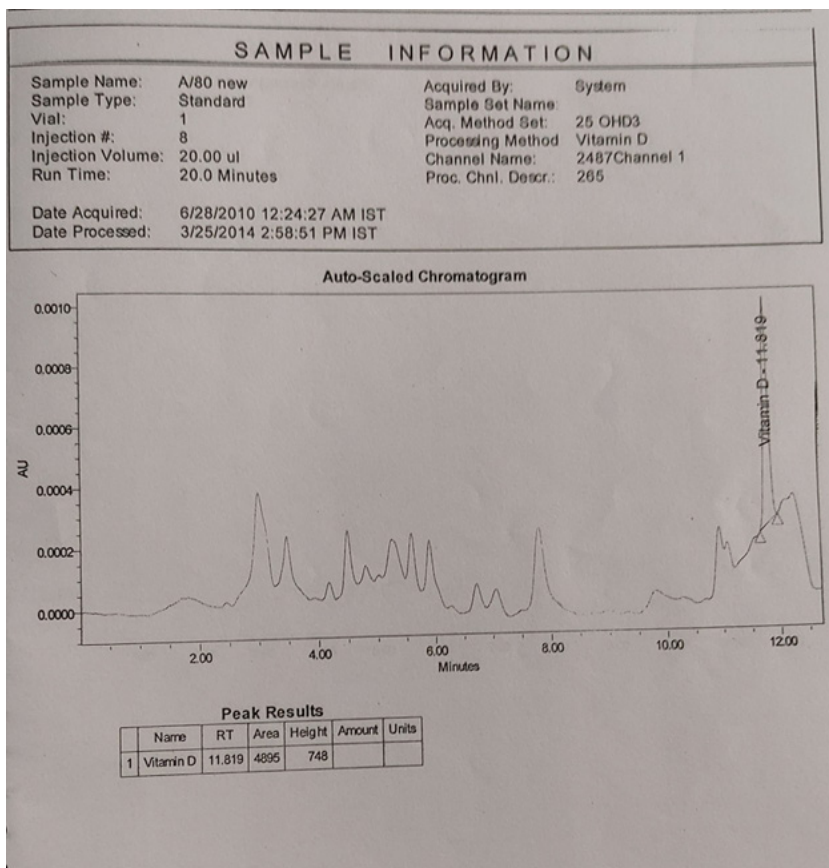
- Vitamin D may play a role in type 2 diabetes.
- Majority of the diabetic patients were suffered by vitamin deficiency and it constitute about 41% of the total.
- A very small percentage of the patients (about 2%) shows abnormal increase in vitamin D level.
- The concentration of vitamin D3 in type 2 diabetic patient is very low.
- A relationship is found in between level of vitamin D and diabetes mellitus.

Some sample informations and corresponding chromatograms are randomly listed below :

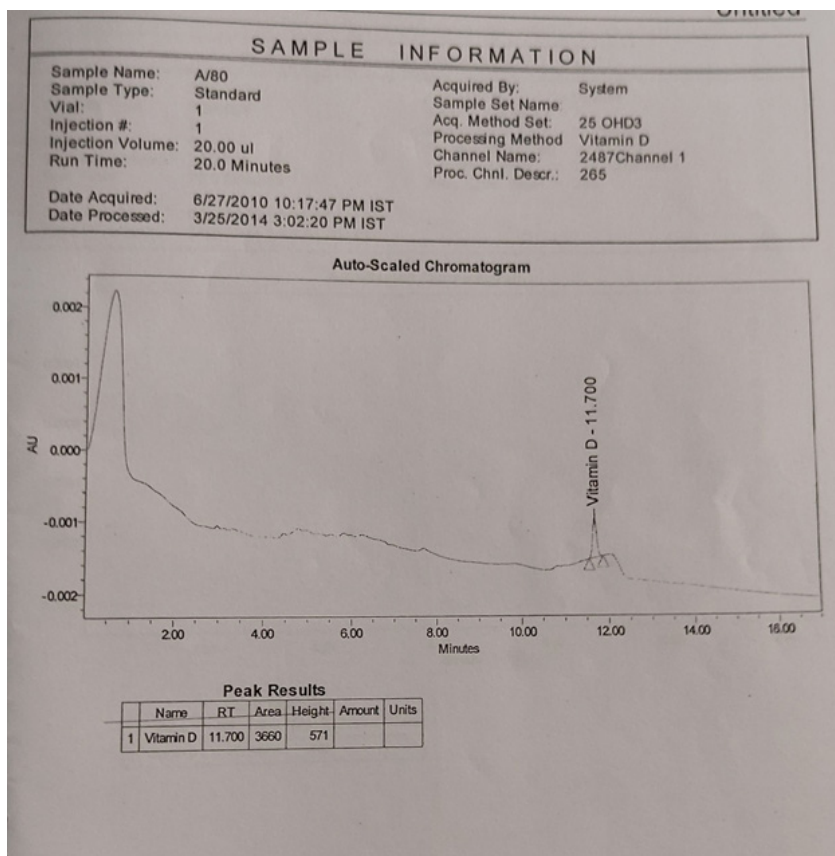
Sample 1



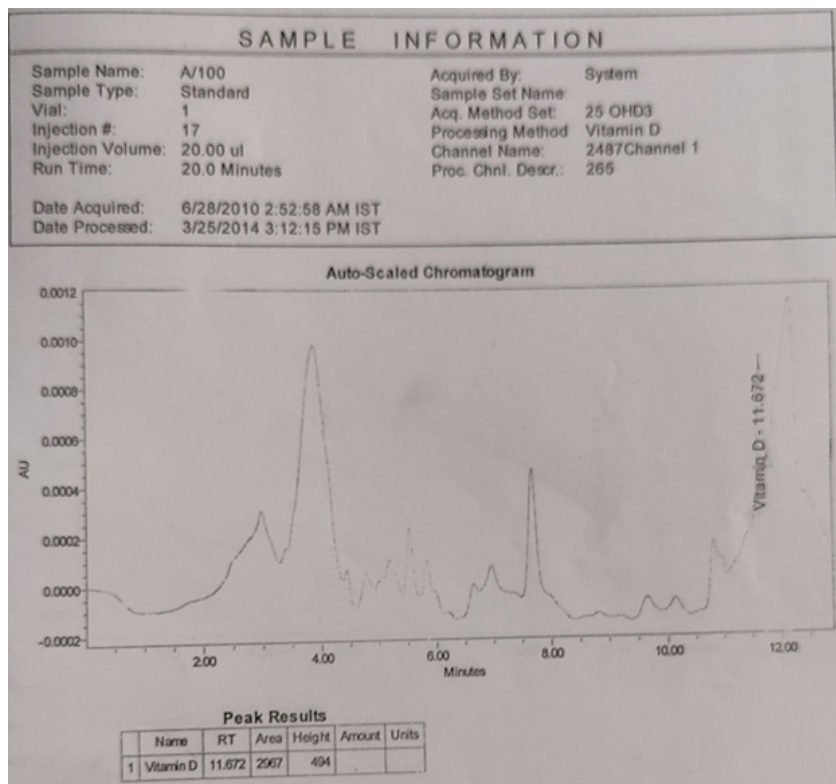
Sample 2



Sample 3



Sample 4



REFERENCE

1. Armas L A, Heaney R P, Vitamin D: the iceberg nutrient, J Ren Nutr, Volume-21, 2011, 134-91
2. Bikle D, Nonclassic actions of vitamin D. J Clin Endocrinol Metab. Volume-94, 2009, 26-34
3. David L W, Nutrient interrelationships, Minerals-vitaminsendocrines, journal of Orthomolecular Medicine, vol5, 1990, No 1
4. Scragg R, Sowers M, Bell C, Serum 25-hydroxyvitamin D, diabetes, and ethnicity in the Third National Health and Nutrition Examination Survey. Diabetes Care, volume-27, 2004,2813-2818

5. Dalgard C, Vitamin D status in Relation to Glucose Metabolism and Type 2 Diabetes in Septuagenarians; Diabetes care, Volume 34, June 2011
6. Chiu K C, Chu A, Go V L, Saad M F, Hypovitaminosis D is associated with insulin resistance and beta cell dysfunction.
7. Dalgard C, Peterson M S, Schmedes A V et al, High latitude and marine diet: vitamin D status elderly Faroese, Br J Nutr, volume-104, 2010, 914-918
8. Blaak E E, Van Aggel-Leijssen D P, Wagenmakers A J, Saris W H & van Baak M A; Impaired oxidation of plasma-derived fatty acids in type 2 diabetic subjects during moderate-intensity exercise. volume 49, 2102-2107
9. Snyder, Lloyd R. and Dolan, John W. High-Performance Gradient Elution: The Practical Application of the Linear-Solvent-Strength Model. Wiley Interscience, 2006.
10. Song Y, Wang L, Pittas A G, Del Gobbo L C, Zhang C, Manson JE, Hu F B. Blood 25-hydroxy vitamin D levels and incident type 2 diabetes: a meta-analysis of prospective studies, Diabetes Care, 2013, volume- May 36(5), 1422-8.
11. Barger-Lux M J, Heaney R P, Lar S J et al. Clin Endocrinol Metab, 1995, volume- 80, 406-11.
12. Fisher R A, "The goodness of fit of regression formulae, and the distribution of regression coefficients". Journal of the Royal Statistical Society (Blackwell, Publishing) volume- 4, 1922. 597,612.
13. Aldrich, John, "Fisher and Regression". Statistical Science, volume-20 (4), 2005, 401,417.

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Ardra C Mathew

Importance of Cloud Software Development in Business

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Abstract

Cloud software development is the next step in the business software evolution. It allows businesses to store and share data securely. It also helps organizations develop, deploy and scale applications quickly while accessing work across teams in real-time. For these reasons, businesses are starting to shift from on-premise to cloud-based software development models.

This article will discuss all you need to know about cloud computing and cloud software development to get you started.

Keywords : SaaS — Software-as-a-Service, PaaS — Platform-as-a-Service, IaaS — Infrastructure-as-a-Service

Introduction

Cloud computing describes a range of computing services or infrastructure offered by cloud service providers to users over the internet. These services or infrastructure include software, servers, storage, networking, intelligence, analytics and databases to provide faster innovation, flexibility and reduce operational costs.

Businesses and development teams that use cloud computing no longer need to maintain their own infrastructure for software development. Instead, they can “rent” these computing resources from cloud vendors and use them on demand.

These “rentable” resources are of three types:

▲ **SaaS** — delivers cloud software that users can access over the internet without installing or maintaining them. Slack, Mail Chimp and Sales force, for example.

▲ **PaaS** — provides a cloud app development framework for developers to build or create customized software. The resources you can get in this category are computing, database, memory, storage, etc. PaaS providers include Windows Azure and AWS, among many others.

▲ **IaaS** — hosts large-scale computing infrastructure on the cloud, like storage, virtual servers and networks for enterprises. Third-party cloud vendors or smaller businesses rent or lease this infrastructure to run their web applications or operating systems without accruing operating or maintenance costs. IaaS vendors include Google Compute Engine, Azure Virtual Machines and AWS EC2.

IaaS IT Encl.	• Abstract Compute/Storage/Bandwidth Resources • Amazon Web Services[10,9] – EC2, S3, SDB, CDN, CloudWatch
PaaS Programmers	• Abstracted Programming Platform with encapsulated infrastructure • Google Apps Engine(Java/Python), Microsoft Azure, Aneka[13]
SaaS	• Application with encapsulated infrastructure & platform

The technologies you’ll use will depend heavily on your business needs. For developers, PaaS is in high demand as it lets teams collaborate on projects efficiently. On the other hand, enterprise users are more likely to sign with IaaS and SaaS providers. Enterprise users decide what they need and pay for resources as they use them, saving upfront costs of purchasing physical infrastructure or tools.

Advantages of Cloud Software Development

Let’s examine some of these advantages to understand better why developers and businesses are moving to the cloud. For starters, it is an excellent alternative to traditional on-premise infrastructure. That aside, cloud software development makes it easier to develop and deploy robust software without colossal overhead costs, maximizing business performance and facilitating growth.

1. Cost-effectiveness

You can scale up your business depending on your needs without incurring the costs of managing your servers. Cloud service providers have their own Developer teams. You don't need to hire a large team to maintain your cloud infrastructure to keep everything running smoothly.

Maintaining on-premise infrastructure is time-consuming and costly, with security patches and operating system updates. Adopting cloud software development ensures your team can focus on more critical tasks, such as application development and customer support.

Moreover, cloud computing storage enables you to host applications on remote servers, saving you the headache of hardware-related costs.

2. Ease of use

Building and maintaining an in-house infrastructure can be challenging, especially for small businesses without a dedicated IT department. You can access cloud computing platforms from any device that has an internet connection, including desktop computers, laptops, tablets and smart phones.

Retrace users enjoy seamless usage, including access to all application logs from one place across all their applications and servers.

As the centralized logging feature aggregates all your logs into one place, you can get started right away without having to learn complicated systems or processes.

3. Scalability

If your business grows, your cloud apps can grow with it.

Cloud platforms can help you scale more effectively than traditional platforms because you can handle increased usage by allocating resources according to current demand. You pay for what you use and can increase your usage seamlessly as needed.

Cloud solutions are suitable for enterprises that fluctuate or escalate the

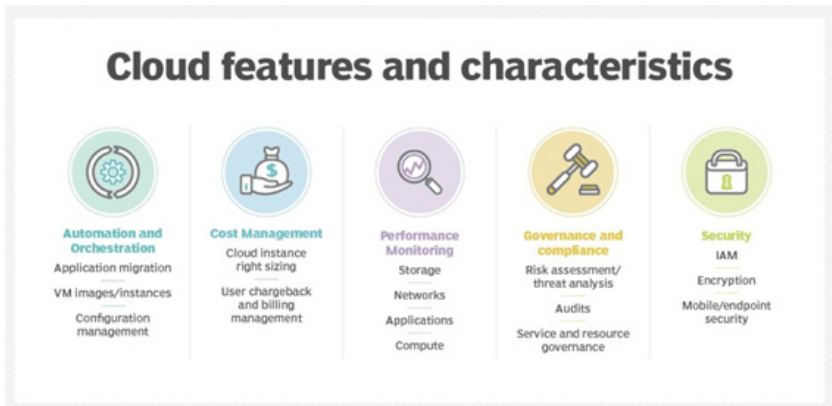
demand for computing power. You can scale up your cloud capacity without having to invest in physical equipment as your business grows. Businesses that use cloud computing may gain a significant competitive advantage because of their flexibility.

Features of Cloud Computing

Cloud computing allows you to focus on your core business functions while leveraging cloud providers' expertise to deliver your software on the web and mobile devices.

You're not restricted to a single operating system or device, and you're not responsible for server upkeep or application updates.

As shown below, cloud services' versatility and their ever-expanding variety of tools and technology have sped up adoption across industries. Cloud technology allows you to have more efficient computing by centralizing storage, memory, processing and capacity.



Here's a list of the standard features of cloud computing to keep in mind. Features also determine why businesses and developers choose one cloud software platform over another.

1. Pay-as-you-go model

Many cloud vendors provide flexible pricing models that allow businesses to pay only for the resources they use or require. Enterprises

can scale up their development based on their needs without spending much money on IT infrastructure management teams.

Users pay only for the services they consume, giving them greater flexibility in how much they use and spend. You can also start small as you test new applications and then scale them as your business grows.

2. Self-service

Cloud products are self-serviced, meaning that you can start using them without waiting for anyone to configure and test the software for you. You save time and money on implementing the service in your business.

For example, you can go onto a website, register their details, and immediately access the software. You may choose to access email verification tools first, then add other features as your business needs change. When cloud software is accessible through a mobile app, there is no need to install or update the software on each user's device or computer.

3. Multi-tenancy

Multi-tenancy is software architecture in which a single instance serves many tenants. While working in the same shared environment, many tenants can share the same software, hardware, data storage and other resources. The data of each tenant is separated from that of other users.

Multi-tenancy can reduce costs, hardware requirements and maintenance costs, improve server response time and have a lesser environmental impact. By allowing several users to access the same instance without losing performance or security, multi-tenancy makes cloud computing accessible to small and medium businesses.

4. Quality service

Cloud Computing is based on a third-party hosting your applications over the internet without accruing operational and maintenance costs. The hosting company pays for the equipment needed to run your software and any maintenance or upgrades required. You won't have

to worry about any of those expenses, and you'll still be able to use the service for your business needs.

Cloud providers invest extensively in quality control tests, monitoring and other methods to assure a high level of service. Cloud providers also keep redundant systems in place for data security and disaster recovery. If one system fails, the other takes over, resulting in more dependable services than those you might set up yourself.

With Retrace, for example, you can identify application performance issues earlier and solve them faster. Your team can identify and fix any problems within your suite of work management tools before the end-users even notice.

Overview of Legal Issues

▲ The legal issues that arise in cloud computing are wide ranging. Significant issues regarding privacy of data and data security exist, specifically as they relate to protecting personally identifiable information of individuals, but also as they relate to protection of sensitive and potentially confidential business information either directly accessible through or gleaned from the cloud systems (e.g., identification of a company's customer by evaluating traffic across the network).

▲ Additionally, there are multiple contracting models under which cloud services may be offered to customers (e.g., licensing, service agreements, on-line agreements, etc.).

▲ The appropriate model depends on the nature of the services as well as the potential sensitivity of the systems being implemented or data being released into the cloud. In this regard, the risk profile (i.e., which party bears the risk of harm in certain foreseeable and other not-so-foreseeable situations) of the agreement and the cloud provider's limits on its liability also require a careful look when reviewing contracting models.

▲ Additionally, complex jurisdictional issues may arise due to the potential for data to reside in disparate or multiple geographies. This geographical diversity is inherent in cloud service offerings. This means

that both virtualization of and physical locations of servers storing and processing data may potentially impact what country's law might govern in the event of a data breach or intrusion into cloud systems.

Conclusions and Future

Cloud computing has been a game-changer since its inception. Its significance will continue to grow. According to many in technology and business, cloud software development is laying the groundwork for the world's economy of tomorrow.

If you want to reach your SMART goals while running your business, it's time to consider uploading all your data files and applications to the cloud. You won't regret it. You'll be able to save money on overhead for larger projects.

In the end, cloud software development will offer you several unique benefits that you can't get with a traditional software development plan. With the right software and minimal costs, you too can implement a cloud infrastructure that is scalable and easy to use.

Consider adopting this revolutionary approach, and you'll be setting up your business for success.

References

- ▲ Nayan B. Ruparelia ,S. M. A. Sharif, Cloud Computing (The MIT Press Essential Knowledge series) Paperback – Illustrated, 13 May 2016
- ▲ Kris Jamsa ,Cloud Computing: SaaS, PaaS, IaaS, Virtualization, Business Models, Mobile, Security and More Paperback – 1 January 2013
- ▲ Ronald L. Krutz , Russell Dean Vines ,Cloud Security: A Comprehensive Guide to Secure Cloud Computing Paperback – 1 January 2010
- ▲ George Reese ,Cloud Application Architectures: Building Applications and Infrastructure in the Cloud (Theory in Practice (O'Reilly)) 1st Edition, Kindle Edition.

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▲ HSST Computer science at G.H.S.S Thopramkudi (2014-2015)

Theoretical Investigation of the Non-Linear Optical Characteristics of 2 - (4-Fluorophenyl) - 1 - Phenyl - 1H - Benzimidazole and 1- Phenyl - 2- p- tolyl - 1H - benzimidazole

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Murickassery*

Abstract

Two benzimidazole derivatives, 2- (4-fluorophenyl)-1-phenyl-1H-benzimidazole (C₁₉H₁₃FN₂) (FPBENZ) and 1- phenyl - 2- p-tolyl-1H-benzimidazole (C₂₀H₁₆N₂) (TPBENZ), were the subject of a theoretical investigation. Data from the study were recorded and processed using the Gaussian03 programme. 6- 31G basis sets have been used in DFT/B3LYP computations to examine the vibrational frequencies and geometrical characteristics. In the current work, the first order hyperpolarisability and dipole moment values of the title compounds are reported using ¹HNMR, FTIR, and the topologies from HOMO-LUMO analyses. First order hyperpolarisability, dipole moment values, and topologies from HOMO-LUMO analyses all suggest that the aforementioned compounds might function as effective NLO materials.

Key words: IR, Raman, DFT, Hyperpolarizability, NLO activity, Benzimidazoles

Introduction

Due to their characteristic linear and non-linear optical properties and also due to their thermal stability in guest-host systems, chromophores based on benzoimidazoles have drawn more and more interest. The covalent insertion of the NLO chromophores into polyamides, which results in NLO side chain polymers, is made possible by the imidazole ring's simple ability to be modified to accommodate functional groups. The majority of- conjugated systems have a significant impact on the

second-order NLO response. The NLO is active in benzimidazoles[1]. We chose two benzimidazoles, 2- (4-fluorophenyl)- 1- phenyl- 1H- benzimidazole (C₁₉H₁₃FN₂) (FPBENZ) and 1- phenyl - 2- p- tolyl- 1H- benzimidazole (C₂₀H₁₆N₂), all of which include electron-donating groups (TPBENZ) For the aforementioned compounds, computational studies were done to explore the potential for application as NLO active components. As far as we know, there is no literature on the examination of chemical structures using FTIR, FTNMR, and quantum mechanical techniques such dipole moment, first order hyperpolarisability, highest occupied molecular orbital (LUMO), and natural bond analysis. Quantum mechanical computational techniques can be used to perform spectral activities. The wavenumbers of the title compound,s FT-IR, FT-Raman, and theoretical calculations are provided in the current work.

Computational Details

The chemical structure and vibrational frequencies of the molecule in the title were calculated using the Gaussian03 software programme utilising the B3LYP/6-31G basis sets. Scaling factors must be utilised to achieve a significantly better agreement with experimental data because the DFT hybrid B3LYP functional technique has a tendency to overestimate the basic modes. The Gaussview program's animation option, which provides a visual representation of the vibrational modes, aids with the assignment of the calculated wave numbers.

Results and Discussion

Optimized geometry of FPBENZ (Figure - 1)

and TPBENZ (Figure - 2) is given below :

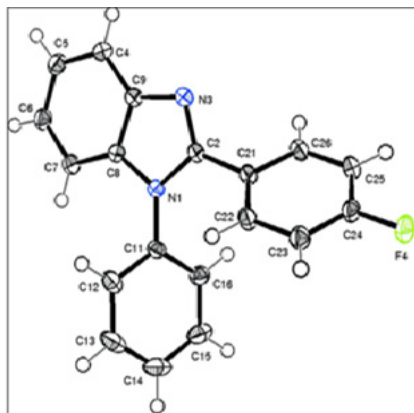


Figure - 1

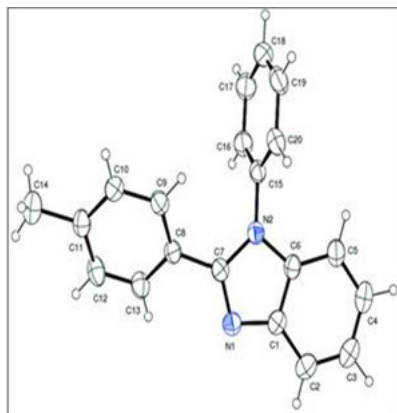


Figure - 2

The experimental^[2] and optimized bond length (Å) and bond angles of 2- (4- fluorophenyl)- 1- phenyl- 1H- benzimidazole (Table - 1)

a. Bond length

No	Bond length	Experimental value (Å)	Optimized value B3LYP/6-31G
1	F4—C24	1.3633	1.35000
2	N1—C2	1.3890	1.40717
3	N1—C8	1.3877	1.45766
4	N1—C11	1.4298	1.54000
5	N3—C2	1.3186	1.40768
6	N3—C9	1.3908	1.45750
7	C2—C21	1.4735	1.54000
8	C4—C5	1.3897	1.40491
9	C4—C9	1.3976	1.38996
10	C5—C6	1.4050	1.38996
11	C6—C7	1.3864	1.40492
12	C7—C8	1.3961	1.38028
13	C8—C9	1.4052	1.44578

14	C21—C22	1.3952	1.39516
15	C21—C26	1.4005	1.39483
16	C22—C23	1.3867	1.39471
17	C23—C24	1.3825	1.39543
18	C24—C25	1.3787	1.39482
19	C25—C26	1.3893	1.39514
20	C4—H4	0.9300	1.09891
21	C5—H5	0.9300	1.10026
22	C6—H6	0.9300	1.10025
23	C7—H7	0.9300	1.09889
24	C12—H12	0.9300	1.09965
25	C13—H13	0.9300	1.09968
26	C14—H14	0.9300	1.09968
27	C11—C12	1.3939	1.39516
28	C11—C16	1.3883	1.39483
29	C12—C13	1.3919	1.39471
30	C13—C14	1.384	1.39543
31	C14—C15	1.3891	1.39483
32	C15—C16	1.3920	1.38514
33	C15—H15	0.9300	1.09976
34	C16—H16	0.9300	1.09960
35	C22—H22	0.9300	1.09960
36	C23—H23	0.9300	1.09976
37	C25—H25	0.9300	1.09968
38	C26—H26	0.9300	1.09966

b) Bond angles (Table – 2)

No	Bond angles	Optimized value B3LYP/6- 31G	Experimental value
1	C2—N1—C8	106.15	108.18308

2	C2—N1—C11	128.03	127.09446
3	C8—N1—C11	125.75	124.72246
4	C2—N3—C9	104.91	108.17556
5	N1—C2—N3	113.10	109.57281
6	N1—C2—C21	123.13	125.22226
7	N3—C2—C21	123.76	125.20494
8	C5—C4—C9	117.69	118.45159
9	C4—C5—C6	121.32	121.13865
10	C5—C6—C7	121.80	121.14115
11	C6—C7—C8	116.45	118.45527
12	N1—C8—C7	131.97	132.56253
13	N1—C8—C9	105.45	107.03388
14	C7—C8—C9	122.51	120.40359
15	N3—C9—C4	129.50	132.55593
16	N3—C9—C8	110.38	107.03468
17	C4—C9—C8	120.12	120.48939
18	N1—C11—C12	119.29	119.99719
19	N1—C11—C16	119.75	120.00431
20	C12—C11—C16	120.96	119.9849
21	C11—C12—C13	118.90	130.00859
22	C12—C13—C14	120.69	119.00420
23	C13—C14—C15	119.87	119.99398
24	C14—C15—C16	120.29	120.00469
25	C11—C16—C15	119.30	120.00003
26	C2—C21—C22	121.34	119.99722
27	C2—C21—C26	118.84	120.00430
28	C22—C21—C26	119.75	119.98848
29	C21—C22—C23	120.23	120.00862
30	C22—C23—C24	118.14	119.99413
31	F4—C24—C23	118.21	119.98107
32	F4—C24—C25	118.13	120.02489
33	C23—C24—C25	123.67	119.99403

34	C24—C25—C26	117.52	120.00474
35	C21—C26—C25	120.69	119.99997
36	C5—C4—H4	121.00	120.27663
37	C9—C4—H4	121.00	121.27141
38	C4—C5—H5	119.00	119.11130
39	C6—C5—H5	119.00	119.75004
40	C5—C6—H6	119.00	119.75260
41	C7—C6—H6	119.00	119.10625
42	C6—C7—H7	122.00	120.27026
43	C8—C7—H7	122.00	121.27447
44	C11—C12—H12	121.00	119.98080
45	C13—C12—H12	121.00	120.01057
46	C12—C13—H13	120.00	120.01280
47	C14—C13—H13	120.00	119.99300
48	C13—C14—H14	120.00	119.98115
49	C15—C14—H14	120.0	120.02486
50	C14—C15—H15	120.00	120.01134
51	C16—C15—H15	120.00	119.98397
52	C11—C16—H16	120.00	120.00802
53	C15—C16—H16	120.00	119.99194
54	C21—C22—H22	120.00	120.00802
55	C23—C22—H22	120.00	119.99201
56	C22—C23—H23	121.00	119.98388
57	C24—C23—H23	121.00	120.01139
58	C24—C25—H25	121.00	119.99312
59	C26—C25—H25	121.00	120.01275
60	C21—C26—H26	120.00	119.98077
61	C25—C26—H26	120.00	120.01056

The experimental[3] and optimized bond length (Å) and bond angles of 1- phenyl - 2- p- tolyl- 1H- benzimidazole

a) Bond length (Table – 3)

No	Bond lengths	Experimental value(A°)	Optimized value B3LYP/6-31G
1	N1—C1	1.387	1.45750
2	N1—C7	1.318	1.40768
3	N2—C6	1.383	1.45766
4	N2—C7	1.383	1.40717
5	N2—C15	1.431	1.54000
6	C1—C2	1.393	1.38033
7	C1—C6	1.389	1.44578
8	C2—C3	1.370	1.40491
9	C16—C17	1.373	1.39514
10	C17—C18	1.352	1.39483
11	C18—C19	1.378	1.39543
12	C19—C20	1.388	1.39471
13	C2—H2	0.9300	1.09891
14	C3—H3	0.9300	1.10026
15	C4—H4	0.9300	1.10025
16	C5—H5	0.9300	1.09889
17	C3—C4	1.387	1.38996
18	C4—C5	1.372	1.40492
19	C5—C6	1.381	1.38028
20	C7—C8	1.468	1.5400
21	C8—C9	1.386	1.39483
22	C8—C13	1.386	1.39516
23	C9—C10	1.377	1.39514
24	C10—C11	1.381	1.39483
25	C11—C12	1.382	1.39543
26	C11—C14	1.506	1.5400
27	C12—C13	1.379	1.39471
28	C15—C16	1.371	1.39483

29	C15—C20	1.373	1.39516
30	C9—H9	0.9300	1.09960
31	C10—H10	0.9300	1.09976
32	C12—H12	0.9300	1.09968
33	C13—H13	0.9300	1.09966
34	C14—H14A	0.9600	1.07000
35	C14—H14B	0.9600	1.07000
36	C14—H14C	0.9600	1.0700
37	C16—H16	0.9300	1.09960
38	C17—H17	0.9300	1.09976
39	C18—H18	0.9300	1.09968
40	C19—H19	0.9300	1.09968
41	C20—H20	0,9300	1.09966

b) Bond angle (Table – 4)

No	Bond angles	Experimental value	Optimized value B3LYP/6-31G
1	C1—N1—C7	105.41	103.78253
2	C6—N2—C7	106.49	112.38875
3	C6—N2—C15	122.81	120.93870
4	C7—N2—C15	130.43	126.67162
5	N1—C1—C2	130.20	130.33872
6	N1—C1—C6	110.19	114.36519
7	C2—C1—C6	119.61	115.29608
8	C1—C2—C3	117.71	119.18779
9	C2—C3—C4	121.64	122.68557
10	C3—C4—C5	121.73	120.64021
11	C4—C5—C6	116.43	116.76538
12	N2—C6—C1	105.72	99.12817
13	N2—C6—C5	131.41	133.44687
14	C1—C6—C5	122.88	127.42493

15	N1—C7—N2	112.19	110.33533
16	N1—C7—C8	123.20	1210.69353
17	N2—C7—C8	124.60	128.97104
18	C7—C8—C9	123.12	122.14373
19	C7—C8—C13	118.97	121.20764
20	C9—C8—C13	117.81	116.64863
21	C8—C9—C10	120.76	121.57575
22	C9—C10—C11	121.86	121.83689
23	C10—C11—C12	117.08	116.54345
24	C10—C11—C14	120.82	121.78519
25	C12—C11—C14	122.09	121.66909
26	C11—C12—C13	121.77	121.83166
27	C8—C13—C12	120.72	121.55593
28	N2—C15—C16	119.43	119.45192
29	N2—C15—C20	119.29	119.47555
30	C16—C15—C20	121.25	121.07004
31	C15—C16—C17	119.32	119.22475
32	C16—C17—C18	120.5	119.61386
33	C17—C18—C19	120.47	121.24334
34	C18—C19—C20	119.9	119.65601
35	C15—C20—C19	118.57	119.19114
36	C1—C2—H2	121.00	120.32669
37	C3—C2—H2	121.00	120.48250
38	C2—C3—H3	119.00	117.82988
39	C4—C3—H3	119.00	119.48455
40	C3—C4—H4	119.00	121.61201
41	C5—C4—H4	119.00	117.74777
42	C4—C5—H5	122.00	119.57687
43	C6—C5—H5	122.00	125.65775
44	C8—C9—H9	120.00	119.04160
45	C10—C9—H9	120.00	119.38179
46	C9—C10—H10	119.00	118.56429

47	C11—C10—H10	119.00	119.59875
48	C11—C12—H12	119.00	119.57197
49	C13—C12—H12	119.00	118.59610
50	C8—C13—H13	120.00	118.76396
51	C12—C13—H13	120.00	119.67882
52	C11—C14—H14A	109.00	113.84058
53	C11—C14—H14B	109.00	113.82269
54	C11—C14—H14C	109.00	111.59477
55	H14A—C14—H14B	109.00	106.04195
56	H14A—C14—H14C	110.00	105.41103
57	H14B—C14—H14C	109.00	105.39224
58	C15—C16—H16	120.00	119.55107
59	C17—C16—H16	120.00	121.22409
60	C16—C17—H17	120.00	118.86247
61	C18—C17—H17	120.00	121.52306
62	C17—C18—H18	120.00	119.38696
63	C19—C18—H18	120.00	119.36956
64	C18—C19—H19	120.00	121.46658
65	C20—C19—H19	120.00	118.87724
66	C15—C20—H20	121.00	119.53761
67	C19—C20—H20	121.00	121.27125

Comparative study of vibrational spectra of FPBENZ (Figure - 3) and TPBENZ (Figure - 4)

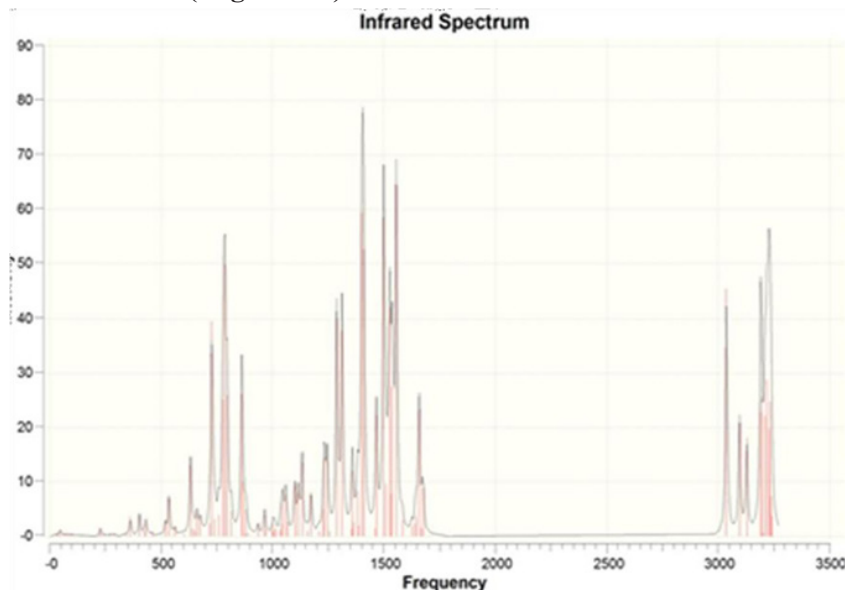


Figure – 3 IR spectrum of FPBENZ

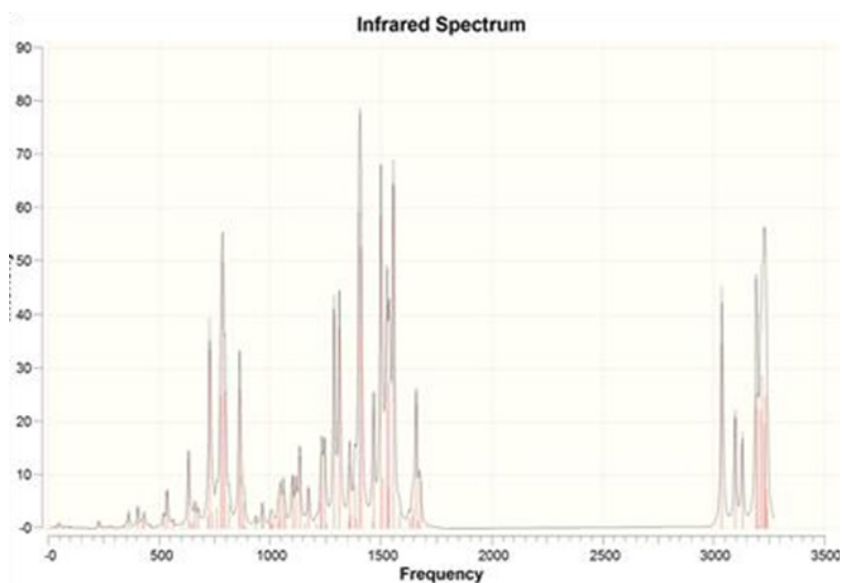


Figure - 4 IR spectrum of TPBENZ

The band obtained in the vibrational spectra gives important information regarding the structure and chemical properties of molecules. The characteristic vibrational frequency of Benzimidazole, phenyl, C-F [from FPBENZ] and methyl [from TPBENZ] groups was analyzed.

1) Aromatic C-H vibration

The nitrogen heterocyclic aromatic compounds commonly exhibit stretching vibration in the region $3100\text{-}3000\text{ cm}^{-1}$. According to the present investigation the C-H stretching vibration bands due to 4-fluoro phenyl group is 3237.75 cm^{-1} and phenyl group attached to imidazole and 1-phenyl groups has value 3220.59 cm^{-1} . C-H stretching frequency obtained from 4-methyl phenyl group is 3228.75 cm^{-1} and phenyl group of attached to imidazole and 1-phenyl group has C-H stretching frequency is 3218.9 cm^{-1} . Also the C-H in plane deformation vibration band of variable intensity appear in the region $1300\text{-}1180$ [1224.61 for FPBENZ & 1221.98 for TPBENZ]. Aromatic C-H bending vibration for FPBENZ is observed at 1555.55 cm^{-1} and for TPBENZ it is 1538.41 cm^{-1} .

2) C=C and C-C vibrations

The C=C stretching vibrations are observed in the region $1670\text{-}1430\text{ cm}^{-1}$. The C=C frequency increases as alkyl group attached to the double bond. But the presence of electronegative group decreases the value. In FPBENZ the C=C stretching vibration observed at 1407.4 cm^{-1} . In TPBENZ the value is 1399.2 cm^{-1} .

3) C=N and C-N vibrations

The C=N and C-N stretching vibration observed at the region $1680\text{-}1200\text{ cm}^{-1}$. In FPBENZ the C=N and C-N stretching vibrations are observed at 1672.07 cm^{-1} and 1289.38 cm^{-1} . The TPBENZ are observed at 1643.46 cm^{-1} and 1248.46 cm^{-1} . The electron donating group in TPBENZ results in the lengthening of C=N bond hence bond order reduced. Nitrogen atom a H bond acceptor resulting in inter molecular H bonding. In the case of FPBENZ the F atom accepts electron from neighboring group hence N atom does not take part in H bonding.

4) Methyl C-H vibration

The methyl group is an less electronegative group hence its vibrational value in TPBENZ is 3045.6 cm^{-1} . C-H deformation value is obtained at the region 1420.3 cm^{-1} .

Comparative study of ^1H NMR spectra of FPBENZ (Figure – 5) and TPBENZ (Figure – 6)

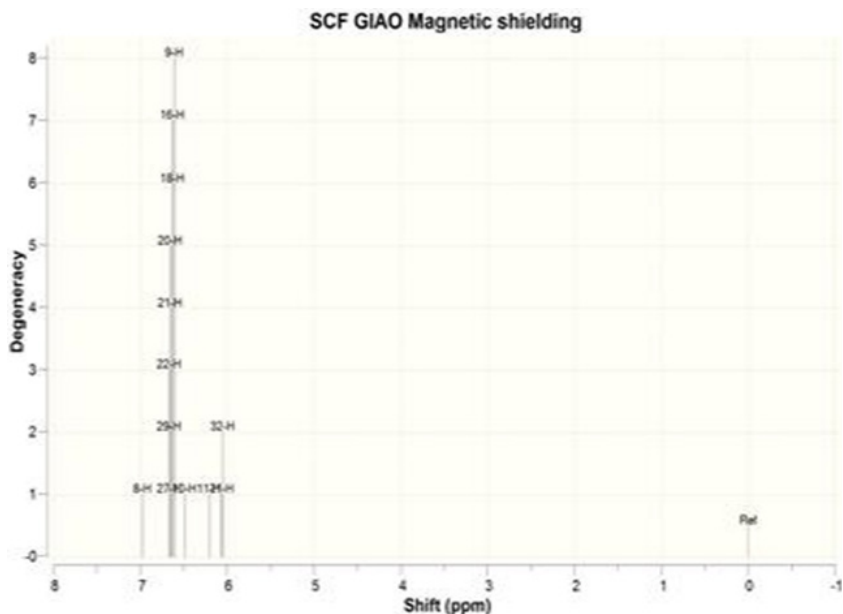


Figure - 5 ^1H NMR spectra of FPBENZ

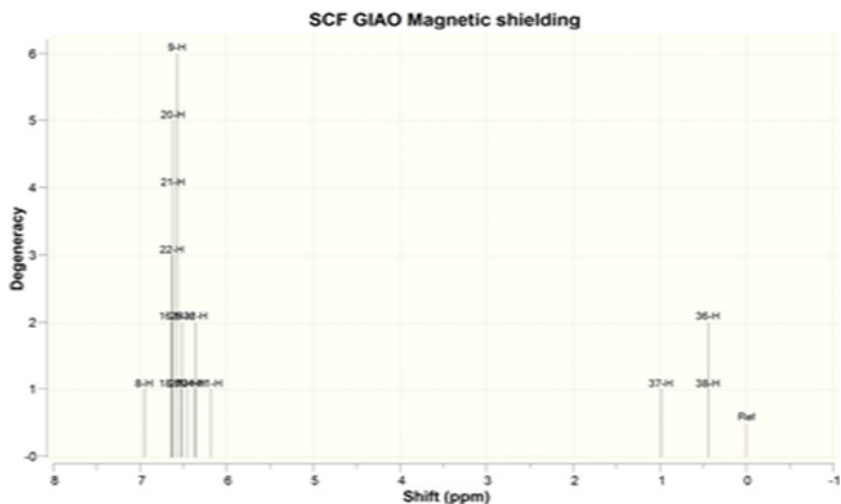


Figure - 6 ^1H NMR spectra of TPBENZ

The FPBENZ and TPBENZ was characterized by ^1H NMR using GIAO method using 6-31G basis set. Aromatic proton in the FPBENZ and TPBENZ was observed in the region 6-7 ppm. But in TPBENZ the methyl group is present in the Para position of phenyl group attached to the second portion of Benzimidazole. It gives 3H singlet 4-1 ppm. In this compound the presence of electron donating group resulting in up field shift [low δ value]. But in FPBENZ high electronegative group result high δ value [down field shift].

Frontier Molecular Orbital Analysis

Multi aryl compounds are characterized by HOMO and LUMO separation, which arises due to significant degree of inter- molecular charge transfer (ICT) from the electron-donor to the efficient electron acceptor group. The frontier molecular orbital determine the way in which molecules interact with each other. The HOMO is the orbital that primarily act as an electron donor and the LUMO is the orbital that largely act as the electron acceptors. The gap between HOMO and LUMO characterizes the molecular stability and activity. The more conjugation (free movement of electrons) there is in a molecule, the less of an energy gap will exist between HOMO and LUMO and

also the molecular orbital energy gap decreased with a decrease in electro negativity functional group. The HOMO-LUMO energy gap of FPBENZ and TPBENZ has been calculated at DFT/6-31G levels. The molecular topology of HOMO-LUMO orbitals of FPBENZ and TPBENZ are shown in following (Figure 7 &8).

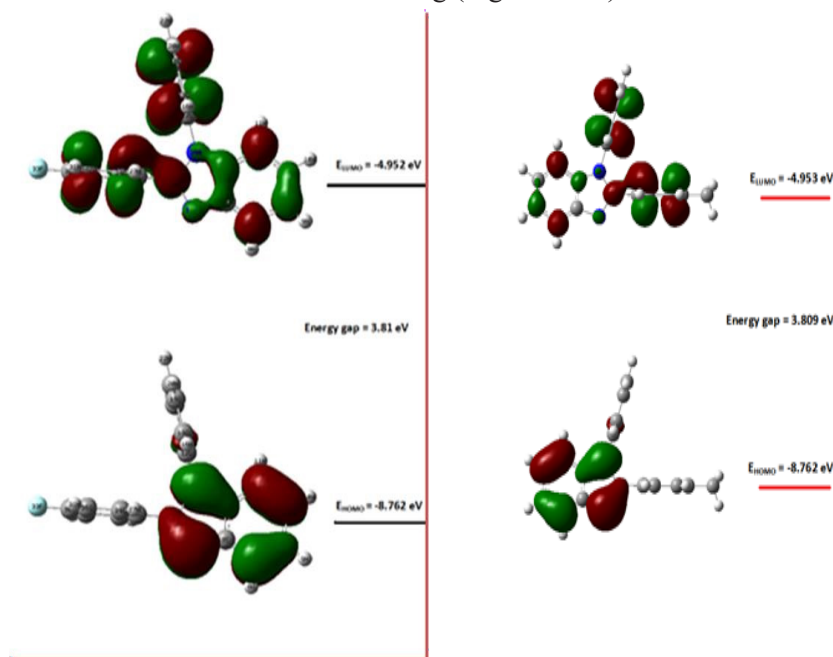


Figure – 7 HOMO-LUMO plot of FPBENZ

Figure - 8 HOMO-LUMO plot of TPBENZ

The Figure - 7 represents the molecular topology of FPBENZ. In this compound the more electronegative element such as F is attached to the para position of TPBENZ, which is high electron withdrawing group, also the HOMO is located over Benzimidazole and phenyl ring where as LUMO is localized over C-F bonds. The HOMO-LUMO energy of FPBENZ are found to be

$$\text{HOMO} = -8.762$$

$$\text{LUMO} = -4.952$$

$$\text{Energy gap} = 3.81 \text{ eV}$$

The Figure – 8 represents the molecular topology of TPBENZ. In this compound the less electronegative group such as CH_3 is attached to the para position of TPBENZ, which is electron donating group. Also the HOMO is located over Benzimidazole and phenyl ring. Whereas LUMO is localized over entire molecule. The HOMO-LUMO energy of TPBENZ are found to be

$$\text{HOMO} = -8.762$$

$$\text{LUMO} = -4.952$$

$$\text{Energy gap} = 3.809 \text{ eV}$$

The energy gap difference between FPBENZ and TPBENZ is very small and the value is 0.001. Indicating that both the molecules can effectively be used electron transport materials.

A molecule with a small HOMO-LUMO energy gap is more polarizable and is generally associated with a high chemical reactivity and low kinetic stability [4;5]. Frontier molecular orbital consist of π – aromatic orbitals, so an electron transition from HOMO to LUMO is mainly derived from the electronic transitions of π - π^* . Frontier molecular orbital analysis supports the fact that the FPBENZ and TPBENZ has approximately same energy band gap. So they could be a suitable NLO active and electron transport material.

Nonlinear Optical Properties

The first hyperpolarisability (β_0) of thin novel molecular systems are calculated using the effective core potential basis set method (HF/6-31G). E_0 being the energy of an unperturbed molecule, the Taylor series expansion of the energy in an external electric field is

$$E = E_0 - \sum_i \mu_i F_i - \frac{1}{2} \sum_{ij} \alpha_{ij} F_i F_j - \frac{1}{6}$$

$$\sum_{ijk} \beta_{ijk} F_i F_j F_k - \frac{1}{24} \sum_{ijkl} \gamma_{ijkl} F_i F_j F_k F_l + \dots$$

β_{ijk} gives the component of first hyperpolarisability. The first hyperpolarisability can be represented by a $3 \times 3 \times 3$ matrix of third rank

tensor and is given as

$$\beta_0 = (\beta_x^2 + \beta_y^2 + \beta_z^2)^{1/2}$$

where

$$\beta_x = \beta_{xxx} + \beta_{xyy} + \beta_{xzz}$$

$$\beta_y = \beta_{yyy} + \beta_{xxy} + \beta_{yzz}$$

$$\beta_z = \beta_{zzz} + \beta_{xxz} + \beta_{yyz}$$

The 27 component of the 3D matrix can be reduced to 10 components due to Kleinman symmetry [5]. The non-zero first order hyperpolarisability values are obtained by the numerical second order derivative of the electric dipole according to the applied field strength. There is a rather strong relationship between the calculated dipole moment and the first order hyperpolarisability values. Therefore in this study the dipole moment values may be responsible for enhancing or decreasing the first order hyperpolarisability values. The first order hyperpolarisability is more dominant in xyy direction [β_{xyy}] thus the charge transfer mechanism is more in particular direction assigned.

The calculated first hyperpolarisability of the FPBENZ (Table - 5)		The calculated first hyperpolarisability of the FPBENZ (Table - 5)	
β_{xxx}	-39.354385	β_{xxx}	1.26054
β_{xxy}	-2.4106683	β_{xxy}	6.599463
β_{xyy}	-31.1094101	β_{xyy}	-54.4215
β_{yyy}	2.7758085	β_{yyy}	10.27804
β_{xxz}	1.7519203	β_{xxz}	-13.0814
β_{xyz}	2.1912738	β_{xyz}	94
β_{yyz}	30.2317176	β_{yyz}	1.240114
β_{xzz}	-125.6349063	β_{xzz}	-125.213
β_{yzz}	24.1696052	β_{yzz}	11.97998
β_{zzz}	201.5675507	β_{zzz}	-240.902

The calculated first hyperpolarisability of the FPBENZ (Table - 5) is 2.64×10^{-30} esu. And TPBENZ (Table - 6) is 2.64×10^{-30} esu. This is larger than that of standard NLO material urea (0.13×10^{-30} esu) [6]. But experimental evaluation of this data is not readily available. We conclude that the FPBENZ and TPBENZ is an attractive object for future studies of nonlinear optical properties. The dipole moment value calculated for FPBENZ is 4.2347 D. and the TPBENZ is 3.9379 D.

Conclusion

Multy aryl compounds widely used as electron transport material, NLO materials and drugs. The theoretical and experimental comparative studies of these compounds are important to understand the nature, property and applicability.

2-(4-fluorophenyl)-1-(phenyl)-1H- benzimi- dazole and 1-(phenyl)-2-(p- tolyl)- 1-H- benzimidazole were theoretically studied using Gaussian03 software. The geometry optimization of the title compounds were carried out using DFT using B3LYP/6-31G basis set. The position of proton of FPBENZ and TPBENZ were analyzed by ¹HNMR spectra. Also different vibrations were studied using FTIR spectroscopy. The topologies from HOMO-LUMO analysis, first order hyperpolarisability and dipole moment values indicate that the title compounds could be an efficient NLO material. The first hyperpolarisability of FPBENZ and TPBENZ were found to be about 20 times greater than urea. Also the comparative study of experimental values of geometric parameters is approximately good agreement with theoretically calculated values. These results suggest that the title compounds could be an effective NLO active and electron transport material. Also the presence of electronegative group has a negligible effect on HOMO- LUMO energy band gap. Hence both compounds can be used as electron transport and NLO active materials.

References

[1] Shodhganga, chemistry of coumarin benzimidazoles, chapter- 3, 74.

- [2] K. Jayamoorthy, S. Rosepriya, A. Thiruvalluvar, J. Jayabharathi, and R.J. Butcher, 2-(4-Fluorophenyl)-1-phenyl-1H-benzimidazole.
- [3] T. Mohandas, a K. Jayamoorthy, b P. Sakthivelc and J. Jayabharathi, 1-Phenyl-2- p-tolyl-1H-benzimidazole
- [4] B. Kosar, C. Albayrak, Spectrochem. Acta 78 (2011) 160- 167.
- [5] D. A. Kleinman, Phys. Rev. 126 (1962) 1977- 1979.
- [6] M. Adant, M. Dupuis, J. L. Bredas, Int. J. Quantum. Chem. 56 (1995) 497- 507.

Synthesis and Characterisation of Nickel (II) Nitrate Complex of O- Vanillin

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Abstract

One of characteristic properties of transition elements is their ability to form co-ordination compounds, in which the central metal ions surrounded by several ligands which are attached to it by coordinate cov alent bonds. In the present investigation, the Ni(II)nitrate complex of the ligand 2- hydroxy-3-methoxy benzald ehyde (ortho-Vanillin abbreviated as o-VAN) has been prepared and characterized by elemental analysis, electrical conductance in non-aqueous solvents electronic and infrared spectra and magnetic susceptibility measurement.

Introduction

One of the characteristic properties of transition elements is their ability to form co-ordination compounds, in which the central mental ion is surrounded by several ligands which are attached to it by coordinate covalent bonds. Co-ordination complexes are good catalysts and they play a significant role in industry & life process. Because of the key role in new fields, co-ordination chemistry has an important role in science.

The scope of the chemistry of co-ordination compounds has becomes so great in these days that it is considered to be a separate branch of chemistry. The synthesis and study of coordination compound were once, academic interest, today it has extended to disciplines of science. The reason for the persistent interest in these compounds are many, but the important one among them must be there is ease preparation, their diverse properties (physical and chemical), structural aspects and their

model systems, which can help understanding several fundamental biochemical processes. One of the most fascinating aspects in the study of coordination compound, in particular those of poly functional ligands is the phenomenon of isomerisation particularly structural or positional isomerism and stereo or space isomerism.

Many of the biological process find its way of application through complex formation. The ligand used in the present study is o-vanillin, a compound of the formula $C_8H_8O_3$, is distinctly different from its more prevalent isomer, vanillin. It is present in the extracts and essential oils of many plants⁵. It is a weak inhibitor of tyrosinase and displays both antimutagenic and comutagenic properties. However, its net effect makes it a "potent comutagen."ortho-Vanillin possesses moderate antifungal and antibacterial properties and today, it is used in the study of mutagenesis and as a synthetic precursor for pharmaceuticals⁵. The main objective of the present work is the synthesis and characterization of Ni (II) complex of o-vanillin.

In the present investigation, the Ni(II)nitrate complex of the ligand 2- hydroxy-3-methoxybenzaldehyde (ortho-Vanillin abbreviated as o-VAN) has been prepared and characterised by elemental analysis, electrical conductance in non-aqueous solvents electronic and infrared spectra and magnetic susceptibility measurement.

Materials and Methods

Synthesis of the complex

1.2 g of vanillin dissolved in methanol was taken in a beaker and then 0.6gm of the metal salt, $Ni(NO_3)_2 \cdot 6H_2O$, dissolved in methanol was added drop wise to it and then refluxed on a boiling water bath for about one hour. It was concentrated to get a viscous mass and then washed repeatedly with Diethyl ether to get the solid complex. The solid so obtained was kept over anhydrous $CaCl_2$.

Estimation of metal

The metal content in the present complex was estimated gravimetrically.

About 0.1g of the complex was accurately weighed and digested with 2 ml H_2SO_4 , diluted to 50 ml., heated to 70- 80°C and a slight excess of dimethyl glyoxime reagent (6 ml of 2% dimethyl glyoxime) was added followed by dilute ammonia solution. Filtered through a sintered glass crucible. Washed, dried, cooled in a desiccators and from the mass of the complex, percentage of the metal content was calculated.

Analytical and physico- chemical methods

The physico-chemical methods employed in the present investigation for the characterization of the complex were: Estimation of the metal content, Molar conductance in non aqueous solvents, IR and UV spectra and Magnetic susceptibility measurements.(sample mass = 1g; heating rate 70-80oC).Conductance measurement were done in nitrobenzene, acetonitrile and methanol at 30oC using a conductivity bridge having a dip type cell with platinum electrodes(cell constant 1.05)and solution of concentration 0.001M. I R spectra were recorded on a Shimadzu I R -470 spectrophotometer in the range 4000 – 400 cm^{-1} using KBr pellet technique and Electronic spectral studies in solid state were carried out on a Shimadzu U.V 2050 spectrophotometer in the range 400- 900 nm. Magnetic susceptibility measurements were done using Sherwood Scientific Magnetic Susceptibility Balance (MK – 1)

Results & discussion

Appearance and Solubility

The complex is brown in color, non hygroscopic, partially soluble in ethanol and methanol, aceto nitrile etc., but insoluble in CCl_4 , diethyl ether, chloroform, benzene, nitrobenzene and ethyl acetate.

Analytical and Physico-Chemical Methods

Estimation of Metal

The metal content of the complex was estimated as described in above. The percentage of Nickel in the complex is found to be very close to the theoretical value (Table 3.1) suggesting the molecular formula as $\text{Ni}(\text{O-VAN})_2(\text{NO}_3)_2$

Compound	Metal	
	% Theoretical	% Experimental
$\text{Ni}(\text{o-VAN})_2(\text{NO}_3)_2$	11.95	11.83

Electrical Conductance

Molar conductance values provide us valuable information about the nature of the counter ions present in the complex. In the present study the molar conductance values are measured in nitrobenzene, methanol and acetonitrile. It was found that the conductance values are in good agreement with those values suggested for non-electrolytes (Table 3.2). Thus the structural formula may be represented as $[\text{Ni}(\text{o-VAN})_2(\text{NO}_3)_2]$ where o-VAN is the ligand, ortho-Vanillin.

Compound	Solvent	Molar Conductance*
$[\text{Ni}(\text{o-VAN})_2(\text{NO}_3)_2]$	Nitrobenzene	7.30
	Acetonitrile	83.40
	Methanol	55.40

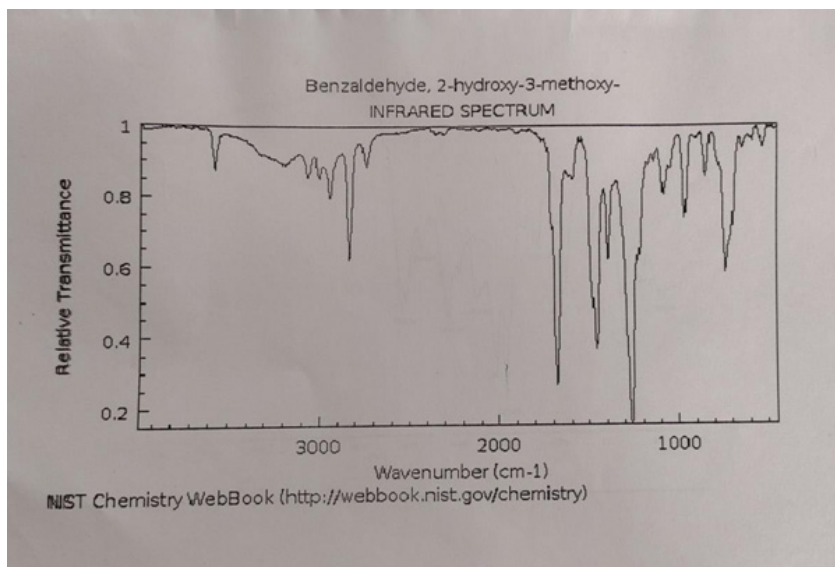
Molar conductance in $\text{ohm}^{-1} \text{cm}^2 \text{mol}^{-1}$

Table 3.2 Molar Conductance Values of Ni (II) Complex of o-Vanillin

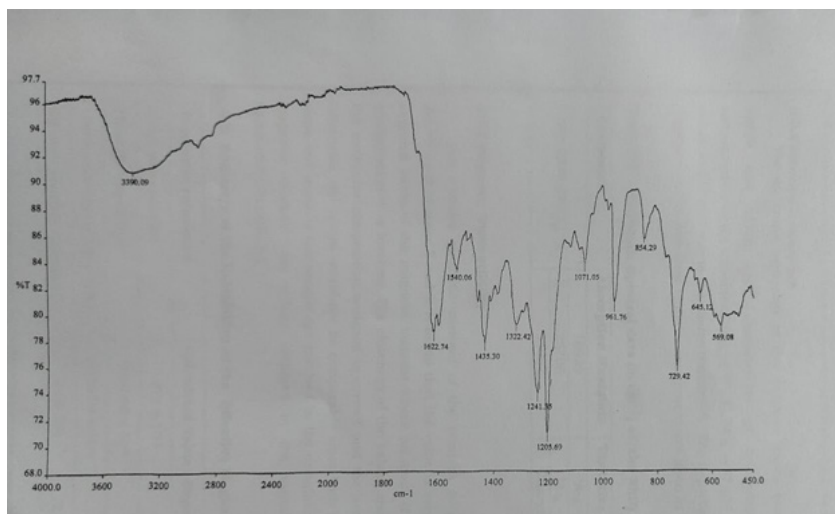
Infra Red Spectrum

The infrared spectrum of the free ligand shows absorptions characteristic of the carbonyl group at 1680 cm^{-1} . But in the complex, the band at 1680 cm^{-1} characteristic of the carbonyl group is shifted to 1623 cm^{-1} indicating that the carbonyl group is coordinated to the metal ion in this complex. Thus, the ligand act as a neutral monodentate ligand..

The bands observed at 1540 and 1322 cm^{-1} are due to the V_4 and V_1 vibrations of the nitrate group of C_2 , symmetry. The difference in wave numbers between the two highest frequency bands ($\text{v}_1 - \text{v}_1$) of the C_2 , nitrate is around 218 cm^{-1} indicating that the nitrate group is bidentately coordinated to the metal ion, in this complex. Thus, a coordination number of six may be assigned to the metal ion in this complex.



I R Spectrum of O- Vanillin

I R Spectrum of $[\text{Ni}(\text{O-VAN})_2(\text{NO}_3)_2]$

The important infrared spectral bands of the ligand and its complex are described in Table 3.3.

Compound	$\nu(\text{C}=\text{O})$	$\nu_4(\text{NO}_3)$	$\nu_1(\text{NO}_3)$
O-VAN	1680		
$[\text{Ni}(\text{O-VAN})_2(\text{NO}_3)_2]$	1623	1540	1322

*in cm^{-1}

Table 3.3 Important Infrared Spectral data* of Ni (II) complex of VAN

Electronic Spectrum

The electronic spectrum of the complex shows two maxima at 18939 and 25706 cm^{-1} characteristic of octahedral complexes corresponding to the transitions ${}^3\text{A}_{2g} \rightarrow {}^3\text{T}_{1g}(\text{F})$, ${}^3\text{A}_{2g} \rightarrow {}^3\text{T}_{1g}(\text{P})$ and another one at 37037 cm^{-1} due to the charge transfer. The important absorption maxima together with their tentative assignment are given in Table 3.4.

Compound	Absorption Maximum	Tentative assignment
$[\text{Ni}(\text{O-VAN})_2(\text{NO}_3)_2]$	18939	${}^3\text{A}_{2g} \rightarrow {}^3\text{T}_{1g}(\text{F})$
	25706	${}^3\text{A}_{2g} \rightarrow {}^3\text{T}_{1g}(\text{P})$
	37037	Charge transfer

Table 3.4 Electronic Spectral data (in cm^{-1}) of the Ni(II) Complex

Magnetic Susceptibility

The effective magnetic moment of the complex is calculated as described in above. And it is found that the value is very close to the expected value of the magnetic moment where an atom of d^8 electronic configuration is involved. The closeness of the values also reveals that the molecular composition assigned is correct and the sample is pure. Otherwise, the values would not be comparable since both the molecular mass and mass of the sample are involved in the calculation of effective magnetic moment. The values obtained in the various steps are summarized in table 3.5.

Parameter calculated	Calculated Value	Expected Range
Gram susceptibility	7.271×10^{-6}	

Molar Susceptibility	3569.98 x 10 ⁻⁶	
Corrected Molar Susceptibility	3719.98 x 10 ⁻⁶	
Effective Magnetic Moment	2.98 BM	2.8 -4.0BM

Table 3.5 Summary of the Calculation of the Effective Magnetic Moment

Conclusion

Ni(II) complex of the ligand has been synthesized and characterized by elemental analysis, electrical conductance in non-aqueous solvents electronic and infrared spectra and magnetic susceptibility measurement

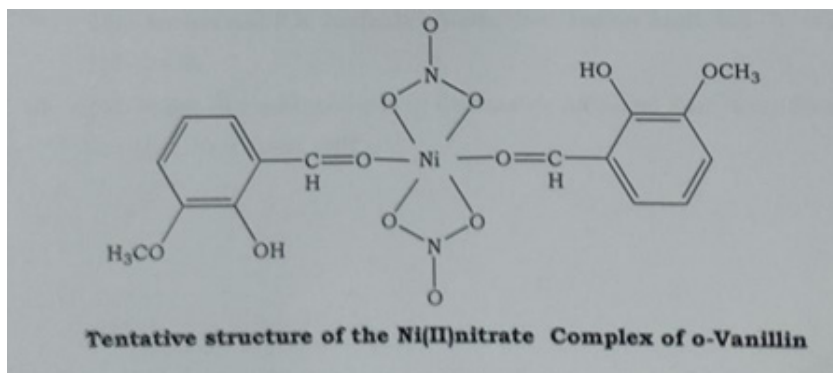
The analytical data suggests that the molecular formula is Ni(o-VAN)₂(NO₃)₂ and the non-electrolytic nature proposes the structural formula [Ni(o-VAN)₂(NO₃)₂].

The $\nu(\text{co})$ of the free ligand is found to be shifted in the IR spectrum of the complex, suggesting that the carbonyl group is co-ordinated monodentately to the metal ion in this complex. The difference between the frequencies ν_4 and ν_1 attributed to the nitrate ion revealed that the nitrate is bidentately coordinated.

Thus, the conductance values together with the infrared spectral data propose a co-ordination number of six to the metal ion in this complex.

In the electronic spectrum of the complex, absorption maximum is obtained in the region reported for octahedral complexes and Magnetic susceptibility value is in good agreement with the expected value confirming the molecular composition and purity of the prepared complex.

Thus, based on the above mentioned facts may be represented as:



References

1. S.F. A Kettle, "Co-ordination Compound", ELBS, (1975).
2. H.A. John and E. Teller, *Proc. Soc. London, Ser. A* 161, 220 (1937)
3. J.E. Huheey, E.A. Keiter and R.L. Keiter "Inorganic Chemistry principles of structure and reactivity", 4th edn, Harper Collins, Cambridge (1993).
4. F.A. Cotton (Ed), "Encyclopaedia of Inorganic Chemistry", John Wiley & Sons, Vol.7 (1990)..5.
5. Watanabe, Kazuko; Ohta, Toshihiro; Shirasu, Yasuhiko. Enhancement and inhibition of mutation by o-vanillin in *Escherichia coli*. *Mutation Research, DNA Repair* (1989), 218 (2), 105–109.
6. . Vogel A.I "A text book of Quantitative Inorganic Analysis, 5th Edn. ELBS.
7. W.J. Geary, *Coord. Chem. Rev*, 7, 81 (1971).
8. Nakamoto "Infrared and Raman Spectra of Inorganic & Co-ordination Compounds", Wiley New York (1986).
9. Curtis N.F & Curtis Y.M, *Inorg. Chem.* (1965) 804.
10. Burger. K, I.T Miller & D.N Allen "Co-ordination Chemistry

11. D.N Sathyanarayana "Electronic Absorption Spectroscopy and Related Techniques" Univerities Press, (2001)
12. Hathaway B.J, Holah D.G and Hudson M.J Chem. Soc. (1963) 4586.
13. Siby Joseph and P.K. Radhakrishnan, Proc. Indian Acad. Sci - 110(2) 107 (1998).
14. R.S Drago, Physical methods in Chemistry, Affiliated East-West Press Pvt. Ltd., New Delhi. (1971)

Islamic Banking

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Abstract

This article analyses a study on Islamic Banking and its services. Islamic Banking is not much familiar in India. The main aim of this study is to get some idea on this topic.

Keywords : Islamic Banking, Islamic Finance, Shariah,

Introduction

Islamic banking, also referred to as Islamic finance or Shariah-compliant finance, refers to financial activities that adhere to Shariah (Islamic law). Islamic banking is grounded in the tenets of the Islamic faith as they relate to commercial transactions. The principles of Islamic banking are derived from the Quran—the central religious text of Islam. In Islamic banking, all transactions must comply with Shariah, the legal code of Islam (based on the teachings of the Quran). The rules that govern commercial transactions in Islamic banking are referred to as *fiqh al-muamalat*.

Evolution of Modern Islamic Banking

The first successful example of an Islamic Bank was perhaps a financial institution called Tabung Haji in Malaysia which originally came into being due to high demand of interest-free money for pilgrimage (Hajj) since this was not possible by way of conventional banking system. Thus, in 1963 Tabung Haji came into being with a total of 1,281 depositors which increased to 8,67,220 depositors and with deposits over one billion Malaysian dollars. This paved the way for creation of more Islamic banks especially in Egypt where small-scale Islamic Banks existed in the 1960s, catering primarily to the rural areas. The success of these banks led to the formation of the Naseer Social Bank in Cairo in the year 1972. In the same decade an International

Islamic Bank for Trade and Development was proposed, which led to the creation of Islamic Development Bank with a view to promote economic development of the Muslim community in accordance with the Shariat laws.

Basis

Islamic banking is grounded in the tenets of the Islamic faith as they relate to commercial transactions. The principles of Islamic banking are derived from the Quran, the central religious text of Islam. In Islamic banking, all transactions must comply with Shariah, the legal code of Islam based on the teachings of the Quran. The rules that govern commercial transactions in Islamic banking are referred to as *fiqh al-muamalat*.

Two fundamental principles of Islamic banking are the sharing of profit and loss and the prohibition of the collection and payment of interest by lenders and investors. Islamic banks make a profit through equity participation, which requires a borrower to give the bank a share in their profits rather than paying interest. Some conventional banks have windows or sections that provide designated Islamic banking services to their customers.

Islamic banks focus on generating returns through investment tools which are Shariah compliant as well. Islamic Shariah links the gain on capital with its performance. Operating within the ambit of Shariah, the operations of Islamic banking are based on sharing the risk which may arise through trading and investment activities using contracts of various Islamic modes of finance.

Differentiation Between Islamic and Conventional Banking

Islamic banking is a type of finance that involves the use of profit-sharing, interest-free loans, and other financial services based on the principles of Islamic Sharia law. Unlike conventional banking, which charges interest on loans, Islamic banks are structured to encourage

financial transactions with a principal focus on charity and community development.

In many ways, Islamic banking is similar to conventional banking in that it allows individuals to save their money and receive loans for large purchases such as homes or vehicles. However, there are also differences in how Islamic banks operate. It's often referred to as "ethical" or "people-friendly" banking. As well as being more ethical, Islamic banking is also more environmentally friendly than conventional banking because it encourages people to make smaller loans rather than take out large ones. This means that Islamic banks can also be more sustainable than conventional ones in the long run.

Main modes of Islamic Banking and Finance:

1. Murabaha Account Input

Murabaha financing is a contract between a customer and the bank, wherein the bank purchases goods upon request of the client, who makes deferred payments that cover the costs and at an agreed profit margin for the bank.

On completion of the agreed payments, the ownership of the goods is transferred to the customer. This finance may or may not be linked to physical fixed assets.

2. Ijarah Account Input

In this type of financing arrangement, the lessor (who must own the property) leases the property to the lessee in exchange for a stream of rental and purchase payments, ending with the transfer of property ownership to the lessee.

Ijarah is a lease contract wherein the bank purchases property or capital equipment and leases it to a customer. The bank may rent the property/equipment and receive the rent or invest it in the business and get a share of the profit. Ownership of the property or equipment passes on to the customer either during the schedules of payment or at the end of the period.

3. Istisnaa Account Input

Istisnaa is similar to a regular financing for working capital. All features are similar to a Murabaha except that the actual delivery of goods happen at a later date after the receipt of all due payments.

4. Mudarabah Account Input

Mudarabah is a contract between the investors and the bank. The investor approaches the bank and shares the investment plans. Based on that, the bank funds the money for the business and shares the profit earned by the investor. The profit is collected as Mudarabah fee. Mudarabah is a profit-and-loss sharing partnership agreement where one partner (financier or rab-ul mal) provides the capital to another partner (labor provider or mudarib) who is responsible for the management and investment of the capital. The profits are shared between the parties according to a pre-agreed ratio.

5. Musharaka Account Input

Musharakah is a form of a joint venture where all partners contribute capital and share the profit and loss on a pro-rata basis. The major types of these joint ventures are:

▲ Diminishing partnership: This type of venture is commonly used to acquire properties. The bank and investor jointly purchase a property. Subsequently, the bank gradually transfers its portion of equity in the property to the investor in exchange for payments.

▲ Permanent musharkah: This type of joint venture does not have a specific end date and continues operating as long as the participating parties agree to continue operations. Generally, it is used to finance long-term projects.

6. Tawarooq Account Input

Tawarooq is a finance contract between the bank and the customer for buying an underlying commodity from a dealer. At the request of the customer, the bank advises the dealer to sell the commodity at a profit or loss. The sale proceeds of the assets so disposed by the dealer will be

paid to the customer. There cannot be any financing transaction without an underlying commodity.

Investment Vehicles

Due to the number of prohibitions set by Sharia, many conventional investment vehicles such as bonds, options, and derivatives are forbidden in Islamic finance. The two major investment vehicles in Islamic finance are:

1. Equities

Sharia allows investment in company shares. However, the companies must not be involved in the activities prohibited by Islamic laws, such as lending at interest, gambling, production of alcohol or pork. Islamic finance also allows private equity investments.

2. Fixed-income instruments

Since lending with interest payments is forbidden by Sharia, there are no conventional bonds in Islamic finance. However, there is an equivalent of bonds called sukuk or “Sharia-compliant bonds.” The bonds represent partial ownership in an asset, not a debt obligation.

Scope of Islamic Banking in India

In India the scope of Islamic banking is very large because 140 million Muslims live in India which is around 15 per cent of the Islamic population. According to Standard & Poor’s Ratings Services the potential market is \$4 trillion worldwide; therefore this can be a tool for enhancing economic development in India. This will provide opportunities to the laborers and the working class belonging to the community.

There are several foreign banks operating in India, like Citibank, Standard Chartered Bank, HBSC are operating interest free windows in several West Asian countries, USA and Europe. The growing awareness about the concept among Indian banks and it is generally felt that there is a huge potential market in India for Islamic banking. Several banks in

the country have shown an inclination to undertake this form of interest-free banking. However, unless proper regulations are in place to oversee this form of banking, it will not be possible for scheduled commercial banks to follow the Islamic rules of banking even in a small way. Islamic banking has been approved by RBI in India. This welcome development was expected after Dr. Raghuram Rajan took over as the governor of RBI, replacing D. Subbarao whose position on Islamic Banking was not favorable. Dr Raghuram Rajan, a former Chief Economist of IMF and the Chief Economic Adviser to the Finance Ministry, was the head of the Committee of the Financial sector Reforms-CFSR of the Planning Commission which recommended Islamic Banking to be approved in India. So, on August 6, 2013 Dr. Manmohan Singh approved Dr. Raghuram's appointment as the governor of RBI, people like us got fresh hopes, and RBI finally gave a 'Go ahead' to it.

Islamic Banking Current Status In India

Islamic Finance in India is at a nascent stage, with only a handful of players in the systemic sector. The entire South Asia region had \$73 Billion in Islamic Finance Asset by 2019.

The majority were from Pakistan and Sri Lanka, leaving a miniscule volume in India. The participation of Banks in Islamic finance, what we refer to as Islamic Banking, has always been stuck in the abeyance for the lack of clarity in the Indian legal structure. The Banking Regulation Act, 1949 favours the 'banking with interest' system, the operation of 'banking without interest' faces challenge in the form of several regulations, such as restriction on profit sharing business, restriction on owning immovable property other than banking assets, SLR requirements, etc. However, it shall be pertinent to note that there is no specific legal bar on Islamic finance, though banks may be deferred from participating due to the Banking Regulations Act, nothing stops other financial institutions such as NBFCs from following the path. The RBIs committee on Medium- term Path on Financial Inclusion proposed in its report, for setting up a separate window for Islamic finance products rather than establishing a separate framework for Islamic banking. However, there were several media reports that RBI in response to a

RTI application, stated that it is not pursuing the development Islamic banking further due to the “wider and equal opportunities available to all citizens.” Hence, though the Islamic finance products may be offered by entities other than banks, the participation of banks shall remain in abeyance till RBI takes any other steps. This restricts the majority of the capital pool from this space.

Advantages

1. Prohibits Usury/ Interest Charges

One of the profound advantages of Islamic banking is the avoidance of usury/ interest charges on borrowed fund. In essence, Islamic banks operate in accordance with Sharia law, which prohibits usury and speculations. So if your faith does not encourage interest payments, these banks are ideal for you and your business.

2. Equitable Distribution of Income and Wealth

The foundation of the Islamic Banking model is based on a profit and loss-sharing principle, whereby the risk is shared by the bank and the customer. This system of financial intermediation contributes to a more equitable distribution of income and wealth.

3. Discouraging Speculation

Islamic Banks are prohibited from engaging speculative activities in their business transactions, rather focusing on providing capital to the real economy, to promote socio economic equity. Speculation drives instability and by nature leads to misappropriation of capital.

4. Banking for All

Although based on Shari’a principles, Islamic Banking is not restricted to Muslims only and is available to non-Muslims as well.

5. Transparency

Islamic Banking is about conducting business in a fair and transparent manner. Guiding you through to ensure full understanding of risks and

costs associated with the products and services is the utmost prerogative.

6. Ethical and Moral Dimensions

The strong ethical and moral dimensions of doing business and selecting business activities to be financed play an important role in promoting socially desirable investments and better individual or corporate behaviour.

Disadvantages of Islamic banks

1. Dilution

Unlike conventional banks that make credit investments in a business, Islamic and non-interest banks make equity investments in a business. In equity investment, the bank takes part of the equity shares of the business and also take part in profit and loss sharing in the business. Equity investors usually take part in owners and decision making process company there diluting the control powers of the promoters (initial owners) of the business. Many business owners are afraid of losing control of their business through equity funding, and there prefer credit funding through credit investment provided by commercial banks and other financial institutions.

In credit investment, the bank or investor provides capital for the business in form of loan and the capital is paid back in future with interest whether business makes profit or loss.

2. Does not Provide Fund for All Businesses

Another disadvantage of Islamic banks is that they don't provide business loan for all kinds of businesses. They prohibits funding of unethical ventures such as, alcohol, tobacco, ammunition manufacturing and adult entertainment institutions and also prohibits any form of gambling. Most of these businesses which are considered as unethical or un-Islamic are legitimate businesses under states laws.

3. Non-maximization of Business Investment Profits

Non-interest model of Islamic banking makes investment in Islamic and non-interest banking unattractive to investors who are interested in profits maximization.

Investors in the banking sector are more interested in credit investment in a customer's business project than equity investment that involves profits and loss sharing - they want the paid both the principal and interest whether the business project makes profits or not. This is one of the major reasons there are no much non- interest banks in most economies.

Conclusion

Islamic banking would be another alternative mode of banking that would strengthen market efficiencies with innovations and competition. There is need of Islamic banking and also there is a huge scope of Islamic banking, this shows that future prospect of Islamic banking is good. Islamic banking not only covering the needs of Muslim population but it is fulfilling the need for the development of all the community. Considering the present status, Islamic banking is not possible in India as per the present banking regulation. But with the effort from government and reserve bank of India it is possible. 'Islamic Banking' should be looked as 'Interest Free Banking' through the broad economic kaleidoscope and not a narrow religious prism. Area which can directly affect the growth and development of Islamic banking in country like India is the role of Government participation and intervention in providing necessary arrangements for legislation and legal framework (Ahmad, 2008). Last but not the least, Islamic banking institution should research in Training and Development of people to make sure that they promote Islamic banking properly

Bibliography

<https://www.investopedia.com/terms/i/islamicbanking.asp>

<https://www.investopedia.com/terms/i/islamicbanking.asp#toc-history-of-islamic-banking>

<https://aims.education/study-online/difference-between-islamic-banking-and-conventional-banking-system/>

<https://vinodkothari.com/2022/02/feasibility-of-islamic-finance-in-india/>

<https://www.businesscompilerng.com/2022/01/advantages-and-disadvantages-of-islamic-bank.html#:~:text=One%20of%20the%20profound%20advantages,f or%20you%20and%20your%20business.>

<https://corporatefinanceinstitute.com/resources/knowledge/finance/islamic-finance/>

Financial Inclusion-an Overview

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Abstract

This article provides a comprehensive literature review of financial inclusion. It identifies the emerging themes in the financial inclusion literature as well as impact of demonetization on financial inclusion. In particular, I draw attention to some issues such as financial inclusion through digital payment system and financial inclusion with the help of fintech.

Financial inclusion is a method of offering banking and financial services to individuals. It aims to include everybody in society by giving them basic financial services regardless of their income or savings. It focuses on providing financial solutions to the economically underprivileged. The term is broadly used to describe the provision of savings and loan services to the poor in an inexpensive and easy-to-use form. It aims to ensure that the poor and marginalised make the best use of their money and attain financial education. With advances in financial technology and digital transactions, more and more startups are now making financial inclusion simpler to achieve.

Keywords : Financial inclusion, Financial Technology, digital finance, poverty reduction, Financial stability, Financial institutions, micro finance, demonetization, fintech

Introduction

Financial Inclusion is described as the method of offering banking and financial solutions and services to every individual in the society without any form of discrimination. It primarily aims to include everybody in the society by giving them basic financial services without looking at a person's income or savings. Financial inclusion chiefly focuses on providing reliable financial solutions to the economically underprivileged sections of the society without having any unfair

treatment. It intends to provide financial solutions without any signs of inequality. It is also committed to being transparent while offering financial assistance without any hidden transactions or costs.

Financial inclusion wants everybody in the society to be involved and participate in financial management judiciously. There are many poor households in India that do not have any access to financial services in the country. They are not aware of banks and their functions. Even if they are aware of banks, many of the poor people do not have the access to get services from banks.

They may not meet minimum eligibility criteria laid by banks and hence, they will not be able to secure a bank's services. Banks have requirements such as minimum income, minimum credit score, age criteria, and minimum years of work experience. A bank will provide a deposit or a loan to an applicant only if he or she meets these criteria. Many of the poor people may be unemployed without any previous employment record due to lack of education, lack of resources, lack of money, etc.

These economically underprivileged people of the society may also not have proper documents to provide to the banks for verification of identity or income. Every bank has certain mandatory documents that need to be furnished during a loan application process or during a bank account creation process. Many of these people do not have knowledge about the importance of these documents. They also do not have access to apply for government- sanctioned documents.

Financial inclusion aims to eliminate these barriers and provide economically priced financial services to the less fortunate sections of the society so that they can be financially independent without depending on charity or other means of getting funds that are actually not sustainable. Financial inclusion also intends to spread awareness about financial services and financial management among people of the society. Moreover, it wants to develop formal and systematic credit avenues for the poor people.

Financial Inclusion Schemes in India

The Government of India has been introducing several exclusive schemes for the purpose of financial inclusion. These schemes intend to provide social security to the less fortunate sections of the society. After a lot of planning and research by several financial experts and policymakers, the government launched schemes keeping financial inclusion in mind. These schemes have been launched over different years. Let us take a list of the financial inclusion schemes in the country:

- ▲ Pradhan Mantri Jan Dhan Yojana (PMJDY)
- ▲ Atal Pension Yojana (APY)
- ▲ Pradhan Mantri Vaya Vandana Yojana (PMVVY)
- ▲ Stand Up India Scheme
- ▲ Pradhan Mantri Mudra Yojana (PMMY)
- ▲ Pradhan Mantri Suraksha Bima Yojana (PMSBY)
- ▲ Sukanya Samriddhi Yojana
- ▲ Jeevan Suraksha Bandhan Yojana
- ▲ Credit Enhancement Guarantee Scheme (CEGS) for Scheduled Castes (SCs)
- ▲ Venture Capital Fund for Scheduled Castes under the Social Sector Initiatives
- ▲ Varishtha Pension Bima Yojana (VPBY)

Objectives of Financial Inclusion

- ▲ Financial inclusion intends to help people secure financial services and products at economical prices such as deposits, fund transfer services, loans, insurance, payment services, etc.
- ▲ It aims to establish proper financial institutions to cater to the needs of the poor people. These institutions should have clear-cut regulations and should maintain high standards that are existent in the financial industry.
- ▲ Financial inclusion aims to build and maintain financial sustainability so that the less fortunate people have a certainty of funds which they struggle to have.
- ▲ Financial inclusion also intends to have numerous institutions that offer affordable financial assistance so that there is sufficient competition

so that clients have a lot of options to choose from. There are traditional banking options in the market. However, the number of institutions that offer inexpensive financial products and services is very minimal.

▲ Financial inclusion intends to increase awareness about the benefits of financial services among the economically underprivileged sections of the society.

▲ The process of financial inclusion works towards creating financial products that are suitable for the less fortunate people of the society.

▲ Financial inclusion intends to improve financial literacy and financial awareness in the nation.

▲ Financial inclusion aims to bring in digital financial solutions for the economically underprivileged people of the nation.

▲ It also intends to bring in mobile banking or financial services in order to reach the poorest people living in extremely remote areas of the country.

▲ It aims to provide tailor-made and custom-made financial solutions to poor people as per their individual financial conditions, household needs, preferences, and income levels.

▲ There are many governmental agencies and non-governmental organisations that are dedicated to bringing in financial inclusion. These agencies are focused on improving the access to receiving government-approved documents. Many poor people are unable to open bank accounts or apply for a loan as they do not have any identity proof. There are so many people who live in rural areas or tribal villages who do not have knowledge about documents such as PAN, Aadhaar, Driver's License, or Electoral ID. Hence, they cannot avail many of the services offered by governmental or private institutions. Due to lack of these documents, they are unable to avail any form of subsidies offered by the government that they are actually entitled to.

Financial Inclusion with the Help of Financial Technology (Fintech)

Financial technology (fintech) refers to the utilisation of advanced technology in the financial industry or the financial sector. With the

introduction of financial technology or fintech, financial inclusion is improving extensively across the whole world. India also has many fintech companies that are constantly working towards simplifying the process of providing financial services to prospective clients. Fintech companies have also been successful in offering financial services and products at minimal costs. This is very helpful to customers as their expenses are low and they can distribute their savings to their other needs also.

Financial technology companies are enabling people in rural areas to apply for loans or open bank accounts by using mobile phones. Several people in Indian rural places have mobile phones and some of them have access to mobile internet and hence, they can make use of fintech services to get reliable financial services.

A few of the latest fintech options that are used by individuals include crowdfunding, digital payment systems, peer-to-peer (P2P), electronic wallets, etc. Many people in both rural and urban areas are utilising these advanced options of banking. However, there are still many untouched people who have not had any experience with a banking or any other financial institution. For such people, it is tough to use any mobile-based financial service.

When many of these poor people engage in financial transactions via cheques or cash, they tend to get cheated by financial scammers. Also, when they visit bank branches or branches of NBFCs to open a deposit or to apply for a loan, they may end up paying high fees at the branch. These fees or charges can be processing fees, transaction fees, money order fees, etc. In order to save poor people from such high expenses for availing financial services, banks, NBFCs, and fin tech companies are collaborating together to come up with simpler and quicker banking processes which will eliminate unnecessary fees and charges. The evolution of such processes will help in including the underbanked or unbanked people of the society.

Financial Inclusion through Digital Payment Systems

They can also make payments for products and services in their residential regions with the help of electronic payment wallet systems. The Government of India has launched several electronic wallet systems through smartphone apps such as Bharat Interface for Money (BHIM), Aadhaar Pay, and lots more!

Electronic wallets or e-wallets refer to wallets that can be used with the help of electronic means such as mobile phones. These wallets replace physical wallets. A user can make cashless payments through online as well as offline means. He or she will need to download the e-wallet app on their mobile phone and utilise it to make transactions. These e-wallets can be utilised for mobile recharges, utility bill payments, grocery stores, e-commerce portals, etc.

Many digital financial tools offer attractive offers and discounts when people make use of these tools. These are very helpful and new to the economically underprivileged sections of the society. They can enjoy offers, receive cashback options, and rewards. These incentives will help a user save a lot of money.

Impact of Demonetisation on Financial Inclusion

With the objective of making India completely cashless in a few years, the government has introduced inexpensive e-wallet options so that the less fortunate people of the nation are not excluded from going cashless. These e-wallets have regional languages apart from English. The user can select the language that he or she knows and make use of the app conveniently. Some of these e-wallets not only allow a user to make payments, but also enable them to make fund transfers from one bank account to another.

With the implementation of the demonetisation process in India in the year 2016, the need for digital financial services has risen. The ban on usage of the notes of Rs.500 and Rs.1,000 led to the increasing demand for alternative modes of payment for goods and services. Hence, the number of digital wallets increased extensively in the country. The goal of the Indian government is to make the nation cashless and hence, the

high number of digital wallets is excellently helping the government in attaining its goal. Moreover, there was a rise in the transaction limit for electronic wallets to Rs.20,000. This is great news for both users and e- wallet companies.

Many people belonging to low-income groups also started to utilise electronic wallet options as they did not have any other choice. It is true that a lot of them struggled initially due to the demonetisation process. Several middle-class and low-class people were left stranded when the demonetisation process came into effect suddenly. However, the introduction of multiple digital banking and financial services served as a great boon to all economic classes of the society.

Several low-income people, unemployed people (including people who were illiterates) living in both rural and urban areas started to learn about how to open a bank account, how to apply for credit, how to use technology for banking services, how to avail financial services without standing in long lines, and how to carry out transactions without carrying cash in hand.

Financial Inclusion in India through Digitisation of Monetary Transactions

The government of India intends to carry out crores of digital financial transactions for the present and upcoming years with the help of Unified Payment Interface (UPI), Unstructured Supplementary Service Data (USSD) banking methods, Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT), Aadhaar Pay, debit cards, BHIM, and credit cards.

Moreover, the government wants to make it compulsory for fertiliser depots, block offices, petrol pumps, road transport offices, hospitals, colleges, universities, etc. to make arrangements for accepting payments for services and products through digital payment systems. It makes a lot of sense especially when customers are required to make high-value

payments at these institutions or offices. The government intends to achieve this by issuing a mandate to the above-mentioned institutions.

Apart from this, the government also wants to make it mandatory that every government receipt is offered exclusively through any digital mode. Presently, many government operations are carried out digitally and customers receive receipts for payments in the digital form. However, this has not been completely effective in every part of the nation. To attract more and more users for digital modes of payment, the government is trying its best to remove or reduce service charges that are levied by companies on the electronic transactions.

These digital financial apps will help in eliminating corruption apart from achieving financial inclusion. These apps aim to attain financial inclusion by offering interesting and attractive bonuses for both users and merchants. Customers who make use of these cashless payment tools will be able to enjoy referral bonus schemes and meanwhile, merchants will get cashback rewards and points when they allow customers to transact through these cashless systems.

Apart from introducing digital financial systems to the poor people, a few banks have released mobile banking vans or trucks to reach the interior parts or untouched parts of the country. In these parts, people do not have access to transport, communication, or financial services.

Along with the government-owned payment apps, there are many private mobile electronic wallet (e-wallet) systems created by private companies and banks. Most of these apps allow bank fund transfers. All these e-wallets enable users to make payments digitally in a convenient manner. Individuals will not get stranded anywhere even if they are out of cash in hand. If they have money in their electronic wallet, they are safe and can carry out financial transactions successfully without having to rely on others for money. Most of these apps are available on Android and iOS smartphones. There are also some apps that are available on phones that operate through Windows.

One of the leading e-wallets in India is Paytm. It is available on Android, Blackberry, iOS, Ovi, Windows, etc. Some of the other prominent e-wallet apps include Freecharge, MobiKwik, Citrus Wallet, Oxygen Wallet, ItzCash, Axis Bank Lime, Jio Money, HDFC PayZapp,

SBI Buddy, mRupee, Vodafone M-Pesa, PayMate, PayUmoney, Juspay, Ezetap, Citi MasterPass, MomoeXpress, Ola Money, Mswipe, etc.

Financial Inclusion Programmes Organised by the Reserve Bank of India (RBI)

The Reserve Bank of India works on exclusive programmes and plans in order to have financial inclusion in the nation effectively. It applies a bank-led strategy in order to attain financial inclusion smoothly. The central bank of India also has firm regulations in place that need to be followed by every bank. The RBI also is offering qualified assistance to every bank in the nation in order to attain its financial inclusion objectives.

Let us take a look at some of the programmes introduced by the RBI in order to achieve its goals:

▲ The RBI instructed every bank to have Basic Saving Bank Deposits (BDSD) accounts for the economically weaker sections of the society. These are no-frill accounts where account holders do not have to maintain any minimum balance or minimum deposit. These account holders can withdraw cash at any ATM or at the bank branch. They should also be given the opportunity to make use of electronic payment channels for receiving and transferring money to others.

▲ The RBI also asked banks to have simple Know Your Client (KYC) regulations for the less fortunate people of the society. There are many people in rural areas who are unable to open bank accounts due to strict KYC norms. Hence, the RBI wants banks to have simplified KYC requirements particularly if a low-income individual is interested in opening a bank account with an amount not above Rs.50,000. It also wants minimal KYC norms if the overall credit in the accounts does not go above Rs.1 lakh for 1 year. Recently, banks have been asked to accept Aadhaar Card as identity proof as well as address proof since most people belonging to low-income groups have made Aadhaar card in their names.

▲ Keeping in mind about the lack of bank branches in rural areas, the RBI has asked all banking institutions to open more and more branches

in villages across the nation in order to provide good banking services to the villagers. There are many remote villages where there are no banks and also no good transportation services. It is very difficult for residents of these areas to commute to a far- off bank branch for availing banking services. Hence, with the compulsory rule of the RBI, banks are distributing the ratio of banks in villages and cities to have a balance.

Special Financial Products Offered for Attaining Financial Inclusion

Keeping in mind that low-income people living in rural and urban areas have very limited access to financial products and services, scheduled commercial banks (SCBs) have been asked by the Reserve Bank of India to design and offer exclusive financial products to the economically weaker sections of the society. Many of them are only aware of basic financial services such as savings schemes, savings accounts, personal loans, crop loans, microfinance, etc. They do not know anything about credit cards or debit cards.

However, due to their lack of access to instant credit facilities, banks were instructed to issue cost-efficient credit cards to the low-income groups of the society. Some of the special financial products provided to them include:

▲ General Credit Cards (GCC): Banks were asked by the RBI to launch and offer General Credit Card facilities with an amount of up to Rs.25,000 at their branches located in semi-urban and rural areas.

▲ Kissan Credit Cards (KCC): The Reserve Bank of India also instructed banks to provide Kissan Credit Cards exclusively to small farmers who earn very low incomes and who have very limited funds due to which they cannot invest in proper farming tools, fertilisers, pesticides, crop seeds, tractors, land for farming, storage warehouses, etc. They are forced to rely on other wealthy landlords for getting land to sow crops. These Kissan Credit Cards are intended to help farmers make instant purchases whenever required. Many a time, farmers give up on purchasing things required for their occupation due to lack of

funds.

▲ **ICT-Based Accounts via BCs:** The Reserve Bank also devised a plan to help banks to reach out to the unbanked individuals of the society by offering information and communications technology (ICT)-based bank accounts with the help of business correspondents (BCs). These accounts allow users to make withdrawals of cash, create deposits, and apply for loans and other forms of credit through electronic forms. This type of account makes banking inexpensive and simple.

▲ **Increase in ATMs:** The Reserve Bank of India also reported that many rural parts of the nation do not have enough automated teller machines (ATMs) and this is hampering many buying and selling operations of the people residing in those areas. In order to increase the availability of physical cash for these people, the number of ATMs increased massively.

Financial Inclusion through Microfinance

Microfinance is a very effective way of offering funds to the economically underprivileged sections of the society. Microfinance refers to giving micro loans or micro credit to the less fortunate entrepreneurs and small-scale business enterprises. This mode of financing has helped India extensively in achieving financial inclusion in a cost-effective manner. It has impacted the lives of the poorest people in the nation. It includes the provision of loans, savings instruments, and other financial instruments for the purpose of making more money and saving it proficiently for multiple purposes.

There are several impoverished people in the nation who do not have access to financial sources and who have no idea how to get out of their hopeless financial condition. With basic microfinance, they will be given opportunities to start some form of business or get a better job and improve their lifestyles. They do not have access to traditional banking options and hence, microfinance is a great boon to them as it gives them a chance to borrow money, utilise it for lucrative purposes, and repay it conveniently over a fixed period of time. They will also learn to manage their hard-earned money meticulously.

Financial Inclusion with the Help of Private Companies

Private companies have also initiated programmes in order to contribute towards achieving financial inclusion in the nation. These private companies planned and implemented projects in order to make the low-income groups of people be engaged in developmental projects.

Some of these programmes include Haryali Kisan Bazaar by DCM, EChoupal or E- Sagar by ITC, Project Shakti by Hindustan Unilever, and many more.

Over the past few years, financial inclusion has become a very prominent public policy aspect in order to develop the economy in a sustainable manner. It plays a significant role in keeping institutions that provide finance in a very steady and firm condition. Banks can enjoy excellent stability when financial inclusion is attained.

It also helps in minimising the distance between financial institutions and customers, and this, in turn, assists in maintaining a healthy relationship. With financial inclusion, every economic agent in the nation will have the ability to make use of formal financial services and move towards the overall development of the economy.

Reference

1. <https://www.investopedia.com/terms/f/financial-inclusion.asp>
2. <https://www.worldbank.org/en/topic/financialinclusion/overview>
3. wikipedia

Chetna as an Epitome of Female Trickster Figure in K R Meera's Hangwoman

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Abstract

The trickster archetype keeps a strong hold in the world of mythology, art and folklore. As a result, it has been one of the popular archetypes that have special appeal to many people around the world, across different cultures. The trickster figure is one who uses his smart wit and will to play tricks on others to get abandoned or they were misrepresented as a mad or frenzy woman. It is in this context, the paper attempts to locate and justify Chetna Grddha Mullick, the protagonist of the novel Hangwoman by K.R Meera as a female trickster.

Key Words: trickster, archetype, mythology

Introduction

Many characteristics of male tricksters can be identified in women characters too. For example, they are deceitful, that they bring about change through trickery. They often remain solitary, which brings to light that they work or struggle alone to defeat their enemies. Female trickster also has certain special abilities which help them to perform tricks. They can also be seen as mentors or teachers that they make readers analyse themselves and the society in which she lives. Above all, she challenges old stereotypes. At times she emerges as a culture hero, when she becomes an agent of change or transformation.

Like all male tricksters, female tricksters also bear similar qualities. Here, Chetna too withholds those characteristics, which affirm her as a female trickster. Some of them are being deceitful, ambiguous, outspoken, subversive, inherently feminist, courageous figure and one who refuses to be a victim. Chetna is also portrayed as a superhuman,

pursuer, culture hero, symbol of empowered woman who mocks and challenges male powers, has a command over language, laughs for no reason and has second personality. After the analysis of all these traits, we understand that Chetna could be distinguished as a female trickster who stands as an equal or at times quite privileged than the other male tricksters discussed so far in the field of literature.

Tracing the Trickster tactics in Chetna

Like all other trickster characters, Chetna is deceitful. It is one among the characteristics of trickster figures, to trick or deceive. Regardless, as a female trickster she tricks or deceives others only for the sake of her own life, in order to save herself from the cruel and oppressive subjugators. Here, from Sanjeev Kumar Mitra who uses her just as a weapon for his own selfish motifs. Chetna uses her power as a hangwoman to escape from Sanjeev's hold. After Jatindranath Banerjee's hanging, the one who was convicted for the brutal rape of a thirteen year old girl, Chetna was taken to the CNC channel studio, where Sanjeev works as a reporter, for a detailed interview about the hanging. In the interview room, there is also another person, Mr. Kartik Banerjee, Jatindranath's brother.

To demonstrate how the hanging was performed, Sanjeev and his team has created a set of gallows in the studio and demanded Chetna to perform the hanging with the help of Kartik in place of Jatindranath Banerjee. But Chetna witfully deceived Sanjeev saying that the length of the rope is not fit for Kartik and therefore Sanjeev should take the place instead. As there was no time for him to argue since the programme has to be telecasted within a few hours, he admitted defeat and agreed to it. She tied his hands with his tie, put the noose around his neck and tightened it. Even before Sanjeev could utter a word, in a lightning pace, she pulled the other end of the rope and he strangled for breath. Thus she hanged the man who has tormented her in every possible ways, with her trickery. Poor Sanjeev thought it would just be a trial. She utters,

Sociologist, Michael. P. Carroll in his article titled "Levi- Strauss, Freud and the Trickster: A New Perspective upon an Old Problem", asserts,

“Very often, the trickster label is given to any fictional character that is seen to be clever, deceitful and selfish” (Carroll 305). Chetna also resembles her trait to deceive and thus can be viewed as a trickster figure.

Ambiguity embodies every trickster figure. Akin to this, Chetna has an ambiguous nature. To put in other words she is uncertain. On the one hand, she feels immense love towards the one she loved, Sanjeev, who comes to her aid to attain the status of a hangwoman. But on the other hand, rage overfilled her for the fact that he had his own goals and she was a mere instrument for the attainment of his goal. She says, “But I was intensely attracted to him as well. The reason for that was clear. There was something in him that was vibrantly alive. In his smile, his conversation, even in that green tinted glance. The hangman’s blood that flowed in my veins yearned for the vitality of his soul” (Meera 41). Desperate, she could not separate her feeling for Sanjeev as love or hatred. Her utmost abhorrence to him is visible from her own words itself. It claims her to be an ambiguous character. She conveys that,

I will measure out his rope accurately. Not an inch more. Not an inch less. I too want to have him. At least once. (44)

Even then, Chetna wished to have his presence aside her. Sanjeev’s nearness made her fall for him each and every time. However, she could never measure out what was the real feeling that she had for him. She states, “Desire and disappointment tormented me in equal measure” (Meera 88). Once when her brother Ramu da told her father that Sanjeev is not a good person and it is a great fault to hand her to him, her father announced in rage that it is an alliance of which they could ever imagine in this lifetime and he also believed that Chetna too loved him. In that confidence, he argued with his son to ask her whether she likes Sanjeev or not. Infuriated, Chetna wished to burst out that she never liked him, but she could not utter a word. She asserts, “Truly, I wanted to say that I did not like him. But my voice hung back. My heart desired him even when he hurt me more and more” (113). Lewis Hyde in his work *Trickster Makes This World: How Disruptive Imagination Creates Culture* conveys, “Trickster is the mythic embodiment of

ambiguity and ambivalence, doubleness and duplicity, contradiction and paradox” (Hyde 7). Thus, evaluating Hyde’s statement, ambiguous nature is clearly visible in Chetna’s character throughout the novel.

Chetna is seen outspoken at various circumstances in the novel. At the very first interview, Sanjeev Kumar Mitra asks her that she is young and if she continues with her job, who will marry her, she replies, “I need someone who loves me not my job” (42). In another instance, when her father proclaimed that she would carry on the job as a hangwoman, Sumati Singh, the leader of a women’s organisation, arrives at her house for a detailed interview. She queried whether her father is putting pressure on her to handle the job as a hangwoman to which Chetna reasonably remarked that “It is no use of putting pressure on me if it is something I can’t do. Isn’t that so?”(24).

In *Laughing Feminism: Subversive Comedy in Frances Burney, Maria Edgeworth and Jane Austen*, Audrey Bilger declares that “The female trickster is the polar opposite of an angel: she is outspoken; she makes people uncomfortable and she wilfully violates codes of female behaviour” (Bilger 98). By this, Bilger means that a female trickster is not always appealing: she irritates people and makes discomfort through her words. Chetna’s outspoken attitude is presented in another occasion where Sanjeev comes to her home to talk about their marriage, realizing the fact that these are mere traps of him and he would never love her, Chetna retort saying, “You will not marry me. That’s not your real aim. In your eyes, I am the daughter of a beggarly chap who has no qualms about finishing off a man in ten or fifteen years for a merely sum of one fifty rupees a month. Your eye is on the market Babu, I know that very well” (281). Be it anywhere, Chetna used to be direct, straightforward and forthright in stating her opinions which elevates her to the position of a female trickster.

A female trickster acts as a subversive or submissive character to other male characters. Meera presents before us Chetna, at the beginning of the novel as an obedient and loyal daughter to her father, Phanibhushan Grddha Mullick. He is the official hangman who is revered for his hanging of four hundred and fifty one criminals. One of the direct

examples for this is her acceptance of the position as a hangwoman. It wasn't Chetna's wish to be a hangwoman. Her father announced to one of the interviewer's that the decision was not by his own will, instead Chetna wishes to be and hence he cannot stop her. He claims, "Look, in a father's eyes, his daughter's hand will always be tender...but she has to decide herself, as a person. She told me, Baba, my hands are strong, I can do this work. Yes, my daughter, as you wish, I told her, in this land women have the democratic right to equal opportunity" (23).

However, she could not utter a word against her father's will. Therefore she admits what her father muttered was all-true.

Chetna's submissiveness to her father is evident in her own words itself. She says, "In school and at home, I was taught never to utter a word against father" (80). She reminisces about this when they visited the jail before the execution. There, Sanjeev cunningly pushes her down to the gallows and jumps after her demanding that it was from his love that he jumped to save her. No one knew what actually happened was his inhumane attack over her. When everyone including the I G praised him for his act of love, no one was in support of her, not even her Father. Instead, he looked daggers at her. She always feared her father. He symbolized the all- powerful patriarchy. She says, "The truth was that none of us had the courage to speak against father even inside the house" (197). He was not confident about her position as a hangwoman. He always made her realize that she is just a woman and a woman has limits for everything. When Chetna affirmed that she could handle the execution all alone, her father retorted that "I am a man whereas you are a mere woman" (396).

Even in her relationship with Sanjeev, rather than equals, she was always submissive and inferior to him. She could not love him properly. As a hang woman she was powerful than Sanjeev but as a lover, she was just like any ordinary woman who is meek and subservient to her beloved. She reveals, "The realization sank in that even the symbol of self- respect of Indian womanhood could submit meekly if a man gently rubbed the unguent of love on her. It left me amazed" (223). Chetna is thus understood as a submissive character in the beginning of the novel,

before her transformation into hangwoman.

In the novel, Chetna imbibes the quality of an inherently feminist character, which a female trickster must possess. Like every woman, she too desired for freedom. Sophia Laettner in her essay, "Identifying and Mapping the Female Trickster" argues that "Like all tricksters she is subversive and furthermore, the female trickster is inherently feminist" (Laettner 1). Chetna in every means includes and presents before us as a female trickster. It was from her ardent desire to have equal status for men and women; she decided to cooperate with Sanjeev but when her father restricted her to take the job of a hangwoman that he will do it, Chetna broke out saying,

I want to do this by myself. Even if you simply stand beside the gallows with your arms folded, Baba, no one will believe I did. The hangman's daughter. His mere assistant! I make the ideal executioner for Jatindranath Banerjee. I want the status of the hangman, not of the hangman's daughter. (397)

Thus, she wanted to be a hangwoman at any risk and it presents the feminist attitude of Chetna. After the declaration of Chetna as official hangman by the government of Bengal, she visited the jail to meet the I G and make necessary arrangements. Coming out, Sanjeev and his media surrounded her and enquired that should all women be proud for the reason that Chetna have become an executioner, she replied, "This will prove that there is no job that women can't do" (68). Thereby, breaking away from the traditional norms of stereotypical women roles, Chetna rises up to the position of a woman executioner and "have cut the very root of the male race" through her first hanging (416).

To assert that a character is a female trickster, she must be courageous. Chetna proves to be courageous in various situations. To begin with, when Chetna along with Sanjeev and her father visited I G Ajoy Chakrabarti to make decision about appointing Chetna as hangwoman, he at first refused commenting that it is not an ordinary job. Because the law itself makes it clear that, the applicant must be a male of sound physique and mind power.

Sanjeev at once said that she is not an ordinary woman rather she is of stubborn strength and courage. He says, "You don't know Chetna, Babu. She is a girl with a mind stronger than us men" (58).

Chetna decides to give back all the agonies she had received from Sanjeev. She was not just the Chetna before; she became more courageous and brave to face any situations. In another context, when Chetna and Sanjeev were in his house at Sonagchi, she put on his hands on his shoulder and caressed him. But, he could not accept it. Not love but fear filled within him. She says, "If the prey who should be running away in terror decides to turn around, raise its head and walk straight and walk straight back to the predator, that will scare away any beast, no matter how menacing" (323). Towards the end of the novel, when Chetna is sent to stay in the jail for some security reasons, three days before the hanging of Jatindranath Banerjee, she felt no fear, instead valour overflowed her. She no longer feared the sensuous looks of I G Srinath Mullick. She says, "The only thing that worried me was my own lack of fear" (404). In her work, *Scheherazade's Sisters: Trickster Heroines and Their Stories in World Literature*, Marilyn Jurich, Associate Professor at Suffolk University establishes that "In many instances, the female (female trickster) proves more self-sufficient, competent and courageous than the male characters in the same narrative" (114). Chetna presents herself as more skilled and daring than Sanjeev and her father. Thus with all her courage she turns obstacles into triumphs.

Apart from the ordinary female figures, female trickster characters are stubborn and bold. They refuse to be victims rather fights and competes with the male figures. Chetna manifests this trait in many circumstances. She had worked as a proof reader after her twelfth grade in Anjaneya Prasad Yadav's Sri Maruti Press, for two weeks. It was during this time, Maruti Prasad, Anjaneya's son tried to grope her. However, in a trice she made a noose with her dupatta and pulled him tight. At the moment, she forgot the fact that she was just a girl but realized that the man who looked stronger in appearance was actually powerless before her. She declares,

I tied a noose in a bat of an eyelid and smiling at him, put it around

his neck like a marriage garland. Before he could pull me closer, I had tightened the noose, pushing the other end of the dupatta through the window bars and pulling it tight. His mouth gaped open. His eyes popped. His tongue protruded and paan juice flowed from it like blood. He struggled hard. (9)

Like male tricksters, Chetna also contain trickster features like being deceitful, ambiguous, outspoken, subversive, superhuman, being an inherently feminist and courageous character with dual personality. She never admits to be a victim, maintains vengeance, gets transformed and emerges as a culture hero. She has a powerful command over language, mocks and challenges male power and laughs unreasonably. Chetna, encompassing all those trickster features discussed above thus proves to be a female trickster who only harms those who had subjugated and oppressed her and thereby brings about change in the attitude of women in society. A woman no longer is an instrument for man's pleasure or his selfish motives, she has self-respect and the power to question injustice and violence against them.

Many of the trickster figures have superhuman or divine qualities, which helps them to perform tricks on others. In this sense, they are above human nature. Analysing Chetna as a superhuman, she has immense power to be a hangwoman which no average person can do. Her grandmother, Bhuvaneswari Devi, whom she called Thakuma would declare in pride, "No ordinary person can do it. The mind must be firm, the hand must be strong and you've got to have brains" (13). No one believed that Chetna could do the hanging by herself. But, she stood adamant in her opinion. As the first official hang woman, she hanged the culprit in lightning fast and it took just twenty seconds for the man to die, whereas her father required thirty seconds to complete it. The doctor who examined the convict's body proclaimed, "Just twenty seconds! Perfect hangman's fracture. The break in the C-2 vertebrae was precise, simply beautiful. Like a seashell splitting open" (416).

A trickster must hold a powerful command over language. Chetna's command over language left even Sanjeev amazed. In his interview with her two weeks after she received the government order to be the

assistant hangman of her father, Chetna made everyone beyond their expectations about her through the reasonable use of her language. He could not believe she was just a girl of twelfth grade qualification who holds such a power over language. He says, “Chetna you speak very well” (87). Not even once did she feel nervous before camera or media.

A female trickster is one who laughs for no reason. Adhering to this, Chetna proves to be a perfect female trickster by laughing for no certain reason. One of the best examples to confirm it is when Sanjeev asks her about the marriage and she replies that she is not interested. He claims, her father had given him word and she will be thrown out of the house if she disagrees, Chetna just burst out laughing. She says, “I couldn’t stop. I was laughing to myself. What a terrible loss, I realized (275).

Culture hero is a feature of female trickster at its core. Chetna can be identified as a culture hero in many different ways. Being a transformed woman, she has brought about change throughout the world. As a woman executioner, she proved there is no job women cannot do and she must be given respect equal to the status as men enjoy. She has also become an inspiration to many women and young girls who aspire to break the taboos and attain a place in the mainstream. Thus, she brings about a change of her own in a society that till then stuck on to the traditional stereotypical roles and norms.

Conclusion

Like male tricksters, Chetna also contain trickster features like being deceitful, ambiguous, outspoken, subversive, superhuman, being an inherently feminist and courageous character with dual personality. She never admits to be a victim, maintains vengeance, and emerges as a culture hero. She has a powerful command over language, mocks and challenges male power and laughs unreasonably. Chetna, encompassing all those trickster features discussed above thus proves to be a female trickster who only harms those who had subjugated and oppressed her and thereby brings about change in the attitude of women in society. A woman no longer is an instrument for man’s pleasure or his selfish motifs, she has self-respect and the power to question injustice and violence against them.

Reference

Bilger, Audrey. *Laughing Feminism: Subversive Comedy in Frances Burney, Maria Edgeworth, and Jane Austen*. Detroit, Mich: Wayne State University Press, 2002. Print.

Carroll, Michael P. "Lévi-strauss, Freud and the Trickster: A New Perspective Upon an Old Problem." *American Anthropologist*. 83 (1981): 301-313. Print.

Jurich, Marilyn. *Scheherazade's Sisters: Trickster Heroines and Their Stories in World Literature*. London: Greenwood Press, 1998. Print.

Meera, K. R. *Hangwoman*. Trans. J. Devika. India: Penguin Books, 2015. Print.

Designing with Type

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Introduction

Font design has been written about extensively, but where do you begin if you want to create your own typeface? Designers and illustrators who are new to the discipline will need to understand the practicalities of font design, including the software needed as well as elements to consider. To make sure you're getting started on the right path on font and type design, it's worth enrolling in a short type design course, either in your local area or online. But if that's not possible, these tips should help you begin to create your own font design.

Top Tips to Create Your Own Typeface

▲ Design a brief

Designing a typeface can be a long journey, so it's prudent to have a clear vision of its purpose. You might begin with something purely self-expressive. However, the usual practice in font design is to create a typeface in response to a brief.

▲ Make fundamental choices

There are a number of choices you need to make early on. Will it be a serif or sans-serif typeface? Will it be based on a writing implement or be more geometric? Will your design be a text face, comfortable at small sizes and suitable for long documents; or will it be a display face with an imaginative style that works better at a larger size? Designing a sans-serif typeface can be more challenging for beginners, because the features that provide these typefaces with their identity are much more subtle. If you're a more advanced type designer, you might want to explore the world of variable fonts. As its name suggests, variable fonts allow type designers to personalise their letters, essentially enabling one font to act like multiple fonts

▲ Start from scratch

You might decide to start by digitising your own handwriting. This can be a useful practice exercise, but because handwriting is so individual. You should avoid basing your design on the outline of an existing typeface. ‘Helvetica with wings’ is not going to produce a better typeface or help you develop your skills as a type designer. This should go without saying, but I’m told that typefaces like these are regularly submitted to foundries (unsuccessfully).

▲ **Use your hands**

Even if you’re a Bézier curve master, I’d advocate defining your letterforms by hand in the first instance. Articulating certain shapes via a computer when establishing your design can be awkward and time-consuming. Try to create graceful shapes on paper for the first few characters before refining them digitally. Further characters can then be constructed on screen by matching key features, such as terminal endings and stroke widths. Note that the hand naturally draws smoother, more accurate curves in a concave arc pivoted by the arm and wrist. To take advantage of this, keep turning your paper rather than adjusting your position or drawing against this pivot point.

▲ **Start with ‘control characters’**

Designing certain characters first can help set the style of your typeface and bring the other characters into harmony. These are often called ‘control characters’. In a lowercase Latin typeface they would be the ‘n’ and o, and in the uppercase, ‘H’ and ‘O’ are often used. On the course I attended, we steadily added to these, building the word ‘adhesion’, which is used for testing the type’s basic proportions (though initially, it was ‘adhecion’ leaving the tricky ‘s’ for later).

▲ **Move to your computer**

There are a variety of ways to get your drawings onto the computer. Some people advocate tracing programs, however I prefer manually tracing my drawings because I want full control over where the points on my curves go. Most software requires a well-defined drawing to work with effectively, so when you’re happy with a sketched character, try outlining it with a fine tipped pen (to get a shape edge) and then fill in the shape with a marker. You can then take a snap with your phone’s

camera, and send it to your computer.

▲ **Choose your software**

Like myself, many designers from a graphic design background will naturally opt straight for Adobe Illustrator to start drawing their type. For drawing individual letterforms and experimenting, this is fine. However, it soon becomes obvious that this is simply not the right tool for creating a typeface. From the outset you will benefit from working in an environment that gets you thinking about letter spacing and word creation. There are a number of options, depending on personal preference, but FontLab Studio, Glyphs and RoboFont are all popular type-based software among the design community. The programs aren't cheap, but Glyphs does have a 'Mini' version on the Mac App Store, with some functionality removed that beginners are unlikely to miss. Both versions also offer a 30-day free trial. The other obvious advantage of these packages is that you can export your work-in-progress as a font.

▲ **Draw some letters**

I was using Glyphs. The interface is good and there are handy videos online, but like any software, it takes a little time to become familiar with. Once you've imported your image, the drawing interface is pretty close to Illustrator CC, however I found the control of Bézier curve points and handles much more accurate in Glyphs. For greater control of your font design, where possible, place your points on the extremities of the letterform curves (top, bottom, left, right).

▲ **Move into text view mode**

Once you have drawn a few letters, you can start typing words using the text view mode. One major advantage of Glyphs is that you can edit your shapes in the same text view to start harmonising the characters together in words. You can then begin making adjustments to the letter spacing, looking at the rhythm of the counters and refining the overall proportions, like the x-height, weight and width of your typeface (if you're in need of a refresher, take a look at our glossary of typography rules and terms).

▲ **Test out some words**

As type designer Matthew Carter is often quoted: "Type is a beautiful

group of letters, not a group of beautiful letters”. With this in mind, aim to start looking at your design from a line and paragraph level as early as possible. Create a simple InDesign CC document (learn how to download InDesign [here](#)), with text frames and paste some words into them. I set each text frame to a different font size for comparison (the sizes will depend on what your typeface is to be used for). Finally, export your typeface and select it within your document to see it in action. While you’re still in the early stages of your design, before you’ve settled on any spacing, you can use InDesign’s built-in kerning tool to optically space your letters, maybe with some extra tracking, for a quick and dirty impression. When it comes to doing the job properly, take a look at out expert tips for kerning type.

▲ **Study other typefaces**

To create a credible typeface, you need to study other good examples. Looking at them in a critical way, from a contextual or historical perspective, will help you understand why certain design choices in these and your own typeface have a particular effect. Look at how the system of shapes work together consistently while forging an identity. Our article [5 ways type can define brands](#) starts to unpack the different effects certain type features can have. The advice I was given is to look at both typefaces that are in a similar style to your own, and those text typefaces that are generally accepted to be good examples.

▲ **Scale it down**

It’s important to review your typeface at different sizes in your test document. Depending on your brief, readability might be critical at smaller sizes, or you might be concerned with how your display text reads at a distance. A change of scale can be troublesome. Looking at how your shapes behave at a variety of sizes, and learning what design decisions affect them, takes practice.

▲ **Get it on paper**

Printing your progress and seeing it away from the confines of pixels and backlighting will help you view it from a different perspective. To me, it seems much easier to spot issues with misshapen characters, the rhythm of counters, the modulation of strokes and so on, when printed

out and pinned to a wall. It's also easier to make notes and sketches for adjustment. Another benefit of printing is that when making thousands of micro-adjustments over a long development period, a printout can help you track your progress so you can see how far you've come.

▲ **Explore different styles, weights and widths**

When a designer is choosing a particular typeface, they are likely going to need a palette of options to design with. Does your typeface have a true italic, not just a slanted roman? Would your typeface suit a condensed version? This goes back to your brief and use cases for your typeface.

▲ **Consider global usage**

There is a growing market for non-Latin typefaces and some scripts are woefully under-served. A common question that I also asked myself is: Can a non-speaker design a good script for a language they do not read? The answer is emphatically yes. It takes a lot of research, learning about the script's history and culture, meeting native speakers and exploring historical examples, but a large number of excellent typefaces have been designed this way throughout history. See our top multilingual fonts for some examples.

▲ **Put it to the test**

Once you've crafted something you're happy with, you'll want to start seeing how it performs at a range of tasks suited to the original brief. Try using your font on some previous design projects, replacing the original typeface.

Legibility and Readability

There are some terms in typography that are frequently confused with others because they are related in meaning but still different. Legibility and readability are two of them. These terms are important for designers to know as they contribute to the language used to talk about fonts, typesetting, and design. Legibility and readability both relate to the ease and clarity with which one reads any particular setting of type, but they actually refer to two different concepts: legibility is related to the design of the typeface and the shape of the glyphs, while readability refers to

how the font is arranged, or typeset. Both are particularly important when setting text or any smaller type sizes.

Readability applies to the overall reading experience. It's macro-typography and it's about making type aesthetically pleasing in order to make it more inviting to read. Imagine you land on a web page of text that's been formatted as one very long paragraph with no headings or subheadings. It's just one long block of text. How inviting would it be to read? Are you going to attempt to find out? Probably not. The only way to know if you want to read that block of text is to begin reading it and unless the first sentence or two is extremely compelling you'll probably move on to another page. Had the type been separated into several paragraphs, had there been a main page heading and subheadings giving clues about the content, had there been images, or some bulleted lists, the text would have been much more inviting to read. That's readability. You design your type so it looks more interesting. You make certain parts of the type stand out to attract attention to them and let those parts provide a way into the full body of the text.

Legibility applies to parts of the text like letters and words and paragraphs. It's micro-typography. It's about type's ability to be easily read, particularly under normal reading conditions. Assuming you find some text readable at some point you'll actually be reading it. The type shouldn't get in the way at this point. In fact the less you actually notice the type the easier it will be to read the words. We can think of illegibility as a condition where your mind is ready for more information, but it has to wait on your eyes to make out the words trying to convey that information. Illegible type is where your mind is waiting on your eyes. Legibility is the opposite. The letters and words are so clear that your eyes have to wait on your mind to be ready for more. Reading legible type is effortless. Legibility is the job of text type. To make text type more legible.

Conclusion

Typography is primarily utilitarian. Therefore, good typography is measured on a utilitarian yardstick. Typography that is aesthetically

pleasant, but that doesn't reinforce the meaning of the text, is a failure. Typography that reinforces the meaning of the text, even if aesthetically unpleasant, is a success.

Bibliography

<https://www.creativebloq.com>

<https://fonts.google.com>

Development of the Green Gold: A Short History of Cardamom Plantation in Idukki

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Introduction

In the ancient period Idukki was famous due to various reasons particularly because of spices and pearls. During the period Before Christ it was noted in 'Arthasasthra' of Kautilya, that a pearl named Chaurneyam was available from Periyar (also called river Churni). In Sukasandesa, the Sanskrit work it is also stated that pearl was available in the river Churni during the 14th Century A.D. In the Ayurvedic book from B.C. 1000 onwards reveal the fact that cardamom was available solely in Idukki hills. The mummies of Egypt were prepared with spices including the cardamom from Kerala.¹ Idukki hills were the place of origin of cardamom in India. Greek and Roman people were familiar with the spices from Kerala especially cardamom, during period before the Christian era.

The Greek physician Dios Coridios described the medicinal qualities of cardamom, cinnamon, ginger, turmeric and pepper in his famous book 'Material Medica'.² Mesopotamia and Babylon had trade relations with the Kerala coast even before the Christian era. The Cardamom, cinnamon, and other spices were popular items at that time. The foreign traders were interested in the trade of teakwood, sandalwood, spices and wild animals during the ancient period. Many foreign coins particularly roman coins were unearthed from Vandanmedu, Anakara, and Kochara regions of Idukki district. The Cardamom trade route was through the Arabian countries from Kerala to the Greek Roman states. 'Amoman' is a Greek word which originated from 'Hehama' an Arab word. 'Amamum' and 'Cardamom' are the two words used in roman language to denote Cardamom.

The scientific name of Cardamom is *elettaria* Cardamom. The "elettaria" is connected with Dravidian languages. The Greek Philosopher Plutarch

and physician Hypocrates called 'Kardamom' for the Cardamom. Cardamom is known as the "Queen of the spices".³ The origin of Cardamom is within the Western Ghats forest areas. The rainfall, humidity, tree shade and good climate are necessary for the growth of Cardamom. Pepper is called black gold and Cardamom is called 'Green Gold'.⁵ The adivasi's sold Cardamom to the government during the 1850's in Travancore. Even the soldiers came to the Western Ghats for Cardamom harvest with the order of the kings in the past.

Historical Roots of Cardamom

The high ranges of the Idukki district were the centre point of Cardamom cultivation even from the period of Travancore kings. The Cardamom hills are spread along the 40% of the high range hills. The thirty percent of the total production of Cardamom and 85% of the total area of Cardamom cultivation come from the high ranges of Kerala.⁷

The royal rule in the Travancore imposed government monopoly on the Cardamom cultivation and other commercial goods in the state. The government came to know the importance of the Cardamom cultivation in Travancore state after the first geographical survey by Lieutant Ward and Corner. A Special 'Cardamom Department' was organized in Travancore in 1823.⁸ A Forest Conservator was appointed and responsible rule was imposed in the department. All these measures increased the production and commerce of Cardamom in the state and Alapuzha developed as the prominent port in Kerala.

The grading, auction and other supply processes were conducted at Alapuzha. During those periods the state took the monopoly in the cultivation and collection of the Cardamom products in the high range hills of the Travancore. The manpower of Adivasis was crucial source for the cultivation. The economic importance of the Cardamom production paved way for the cross border trafficking and unauthorized business in the State. The Travancore government appointed invigilators throughout the Cardamom Hills and in the trade routes. A Nair brigade of the state army was appointed in the cardamom to resist the unauthorized business of cardamom. The border areas of the Travancore was under the control

of the army and they stopped inter- state unauthorized trafficking of cardamom.

Agricultural and land tax were the principal revenue source in the Travancore State. So the government encouraged cultivators to start Cardamom plantations in the state. The Western Ghats of the state became a plantation hub of the planters. Coffee, Tea and Cardamom plantations were flourished during the period. The Travancore government provided economic incentives and land supply to the cultivators especially for Cardamom. Thus the Government became the monopolistic power in Cardamom cultivation and commerce.

In 1913 a law was passed to control the land supply for agricultural purpose. According to the law, land allotted for agricultural purpose with limitations like 50 yard from the riverside and 1/4 miles in the hill sides from the bottom level. Some restrictions were needed due to excess cattle grazing in the agricultural land. The cattle grazing prohibited in the plantation land with 15 years old and natural forest with 20 years old to protect the tree saplings. The planters came from outside Kerala state were responsible for the development of cardamom plantations in Kerala. The British missionaries and top officials helped for the expansion of cardamom cultivation in Kerala. Many cultivators came to the high ranges of Idukki district from the Madurai district of the Madras Presidency. Most of the cultivators and planters were from the places like nearby villages Gudallur, Kambam, Thevaram and Kombay in Tamil Nadu. The Tamil planters were recruited labourers from the Madurai district on yearly basis. The British planters appointed many workers on permanent basis in the plantations to maintain the Cardamom plants and there by a regular production. It was a notable feature that almost all the Tamil planters were come from the 'Chetty' community in Tamil Nadu. 'Kudivilai' was the cost of production given to the farmers during the 1823 – 1841. A new change happened in the plantation field in 1870 i.e. the workers who lived in the plantations were able to receive the labour charge for weeding and harvesting in the early periods, like "loans".

The tenants or the Kudikidappukarar were paid their ground rent

supervision charge and the loan to the plantation supervisor their produce were sold. The Cardamom plantations were depended much on the climate and the price of the produce changed due to the fluctuations in the demand and supply. The monopoly of the government ended and the private cultivators were given encouragement in due course.

Chettys and Cardamom Trade

The Chetty community controlled the trade of the Cardamom produce after the Government's monopoly ended. During this period the number of Cardamom traders in the high ranges numbered about 183 and out of these, 118 were the Chetty.⁹ The number of Cardamom traders increased as a result of the trade became prosperous and flourishing. In 1891 there were 183 traders and within ten years 277 traders were active in the field. Most of the traders came from Tamil Nadu and Tamil plantation owners became the omnipotent power in the Madras Province and the Palani hills because of Cardamom trade.

Bodinaikkannur became the Cardamom town of the eastern slope of the high ranges in Idukki. And then the Tamil monopoly in the trade became a fact. Travancore ruler Rani Gauri Parvathy Bhai declared in Kollavarsham 997 Medam 15th that "the places east to the river Periyar that there where hills cultivated the Cardamom became the monopoly of the State."¹⁰ This declaration was the first attempt to approve the Cardamom cultivation in an organized plantation status. Earlier from the ancient times this was practically done by the hill tribes. They did it in an unscientific way, to collect the yield from the forests. A separate Thahsildar was appointed for the Cardamom hills and in the joint effort with the Thodupuzha Thahasildar Cardamom cultivation expanded in large scale. ¹¹ Kambum, Gudalur, Komba, Bodinaikkannur etc. were the villages where the workers came from the Madras presidency into the cardamom estates. ¹² The Village headmen of the areas sent workers to the cardamom estates and the Travancore government provided remuneration to the village headmen(Nattanmaikkars).¹³ There were special rules to provide services and privileges to the tenants, in the government publications and in fact this reveals the interest of the government in this matter.

Formation of the Cardamom Department

In 1867 the responsibility of the Cardamom cultivation was vested up on a special officer in Peermade hills. Mr. U.V Munroe was appointed as the Cardamom Supervisor and the Magistrate of the hills of Peerumade. The new Cardamom department was created and started functioning. The harvest of Cardamom, anti trafficking, expansion of cultivation, the control of depot, sale of timber, grazing fee collection, the construction of Ghats roads and the magistrate of cases concerned were the major responsibilities of Cardamom superintendent.¹⁴

After U.V Munroe, John Daniel was the Supervisor of Cardamom Department. During his time no major changes were occurred in the structure and nature of the department. The Kudis were allowed to cultivate Cardamom and imposed 'malavaram'¹⁵ 'Aminadar'¹⁶ was the officer who helped the Cardamom supervisor. Peerumedu was the head quarters of Cardamom supervisor during the period. In 1898, tea estates were flourished in the Munnar hills and Mr. J. D Munroe shifted the head quarters to Devikulam. The Periyar project was started and the Cardamom cultivation was prohibited in the Periyar valley. This was another reason to shift the head quarters from Peerumedu and more importance was given to the tea cultivation in the Munnar hills. In 1896 April 17 i.e. Malayalam Era 1071 Medam 6th, the existing Monopoly of the cardamom cultivation of the government ended with the introduction of new laws.

Poopara, Udumbanchola, Elackadu and Vandanmedu were the four divisions of cardamom cultivation with 93, 635 acres, according to the first paragraph of the law.¹⁷ In the second paragraph it is stated that if a plantation of a kudiyan¹⁸ is spread in a division or two divisions, it is considered as a single holding. The tax applicable, the importance of harvest and storing of Cardamom, the guidelines to plant new areas and clearing of forest land etc. are described in the following paragraph. In the 10th paragraph it is stated that the land allotted for Cardamom cultivation never be used for other cultivation. And again described that pepper could be planted without hampering Cardamom plants. The transfer of holdings must be informed earlier and permitted by

the government Pattam was registered and the holder must be given a pattayam.¹⁹

The forests of Cardamom Hills are regulated by the laws of forest regulations act. And all other actions against the regulations are met with severe punishments, as stated in 13th paragraph. In Kollam Era 1072 Karkkidakam 28th “Cardamom Hills Reserve” Declaration came to existence.²⁰ This created an everlasting and formidable impact in the history of the high ranges of Idukki. This regulation was the mother of all other forest laws. The Cardamom cultivation started in the high ranges during 1896 onwards and land holdings were allotted for the cultivation by the government. Before this allotment Pattam was given to the Kudiyans. This was Cardamom Kuthaka Pattam²¹, twenty five acres of land given for 3 years and again 30 years. Thus cardamom plantations were started.

Most of the Kuthakapattam²² owners were Tamil landlords or businessmen. This was the main reason for the majority of Tamil people are the residents of the high ranges and the border areas of Theni district today. Most of the Former adharams²³ of the high ranges are included in the Bodinaikkannur, Bharka, due to the reasons given above.

The Maharaja of Travancore knew the fact that high ranges became Tamil majority area and the control must have lost. The government tried to provide land only to the Malayalis after initial period because of the above reason. In 1934 a special law was enacted. This was the law that did not permit other people to have land for Cardamom cultivation, except people from Travancore. It was meant then the Tamil People were excluded. But the law could not come in to force. The British opposed the law because they ruled the Madras residency. The only way before the Travancore government was to increase the number of Malayali population in the high ranges. Law and declaration might be opposed by the British rulers. Thus the revenue authorities encouraged the Malayali people to settle in the high ranges of the Cardamom Hills. Before 1920, land allotted to 10,000 more acres to Malayali people with 100 rupees per acre and the pattam land tax was three rupees, per year, per acre.²⁴

Until 1947 this was continued. But the majority of the high range population was Tamilian people. In 1950, when the state was created on the basis of the language, the news creates a sudden change in Peerumedu, Udumbanchola and Devkulam Taluks. People divided into Tamil and Malayali fractions. The minority Malayalis and the majority Tamils were divided into two opposing groups.²⁵ The candidates who won the election in 1947 were Tamils in the Devikulam and Peerumade constituencies. The Tamil people raised a slogan 'Malayali Ozhika'. Malayalis and Tamils were fought in Peerumedu area and the conflict was ended in police firing and curfew.²⁶

In 1822 the administrative areas of Thodupuzha, Mandapathum, and Vathilkal Adikarikal included places like Gudallore, Kambam, Komba and Bodinaikkannur in Tamil Nadu. The west of these areas and east to the Periyar river, the hills and plantations Malayadianmars and all of others informed. In 1822 there were Kudiyans in the Cardamom hills and that they cultivated Cardamom. Cardamom was illegally taken to the Tamil area through six routes. The Travancore Government tried to influence and enforce the Kudiyans and Adivasis to provide full support to Cardamom cultivation. This declaration reveals the importance of Cardamom cultivation.²⁷ The Kudiyans received their cash after the sale of Cardamom by the Government. The cultivators brought their Cardamom into the auction centers and took the receipts there. When the Government sold the product, the cultivator received the amount. This was planned to encourage the cultivators or the Kudiyans to stick on to the dense forests of the Anamudi and other valleys. This declaration reveals the fact that there was a false belief about the migration of farmers in Idukki.

It is a common misunderstanding that during the 1950's Travancore Farmers migrated to the high range hills and they destroyed forests. Actually before 125 years there were kudiyans and royal brigades cultivated the Cardamom Hills for royal exchequer. The Thahasildars and the revenue officials were active cultivators in the dense woods.²⁸ The rulers tried to obstruct the trafficking of Cardamom, Nair sol²⁹diers active to resist the malpractices. The roads were constructed in the dense

forest Ghats. There were hundreds of kudiparppukal³⁰ in the present Thekkady wild life sanctuary area, today, which lies about, 777 sq. kms.

Conclusion

In Idukki the Cardamom is considered as the back bone of the farmers. It provided the growth of many roads connecting with other major towns of the district. The most important roads were the Manjappara, Panikkankudy, Adimaly, Nedumkandam, Ezhukumvayal, Thopramkudy, Karimban, Ernakulam roads etc. From the early period the people lived in the isolated villages and with the growth of Cardamom they started to break their isolation to engage with other people and passed through other regions. Marketing facilities are increased time to time as a part of the auction of Cardamom. The district provided better employment opportunities to the people especially to women. Many auction centers emerged as regarding the growth of Cardamom plantations such as the Kerala Cardamom Processing and marketing company.

Cardamom also provided the growth of trees and other plants because the Cardamom plants must get the shade of the trees, these trees also helpful to increase amount of rain. In spite these opportunities and development many problems emerged as a part of the Cardamom plantation. The most important problem is that the fall in price of the Cardamom products .The cost of the production is increased time to time the changes in climatic condition also affected the farmers .The most important crisis is that the part played by the intermediaries. Most of the profits are vested in the hands of these intermediaries. The use of heavy pesticides is also caused the depression of the farmers, and now Idukki is the centre of cancer patient.

Endnotes

1 Fr. J kurias Highrangeinte Kudiyetta Charithram, A.k.c.c, Diocese of Idukki, 2012, p. 41.

2 Ibid.

3 Ibid.

4 Ibid.

5 Santhosh George, Idukkiyude Charithram , op. cit., p. 33.

6 Ibid., p. 35.

7 Chetties are the local communities.

8 T Rajesh, Idukki charithra rekhakal, e- lion books, Kattappana, 2008, p. 78.

9 Ibid., p.79.

10 Ibid.

11 Nattamakkar is a kind of intermediaries to import the farmers in the areas of periyar.

12 T Rajesh, Idukki Charithra-rekhakal, op. cit., p. 82.

13 Malavaram is a tax paid by the farmers.

14 Aminadar is an officer in the Cardamom estate.

15 T Rajesh, Idukki Charithra-rekhakal, op. cit., p.82.

16 Kudiyan-peasant

17 Pattayam- The government given the right to hold the land to cultivators.

18 T Rajesh ,Idukki Charithra-rekhakal, op . cit. p.83.

19 C.V kunjiraman, Tamil-Malayali Lakhalaye Tudarnnum Kudiyyetty Kerala kaumudi daily ,dated 2006,p.12.

20 Kuthakapattam-The land given to cultivators on fixed term of years

21 Adharams-It was document related to land ownership.

22 C.V Raman, Tamil-Malayali Lahalaye Tudarnnum Kudiyyetty, loc. cit., p.12.

23 C.V Raman,Tamil-Malayali Lahalaye Tudarnnum Kudiyetty, Loc. cit.,

24 Ibid.

25 Karuppum Kanchavum Nalki Kudiyettiya Raja Bharanam, Kerala Kaumudi daily, Kottayam, dated,13.3.2006,wednesday, p. 12.

26 Karuppum Kanchavum Nalki Kudiyettiya Raja Bharanam, Loc. cit.

27 Kudiparppukal-The settlement of the kudians.

Manifestation of Benevolent Sexism in The Poison of Love by K R Meera

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A more subtle type of sexism that appears to be favourable is called benevolent sexism. It is exemplified by placing women on a pedestal in a chivalrous manner, stressing men's responsibility to care for and protect them. Women must conform to established gender norms in order to get this protection and love. This type of sexism is caused by patriarchal and conventional attitudes that view women as valuable, fragile, and attractive, necessitating the protection of males.

Madhav is a perfect incarnation of benevolent sexism. The first encounter between Madhav and Tulsi he makes her aware of her womanhood through his looks. Here Tulsi was also attracted to him and it is the figure of a charming hero and protector that she envisions in him indirectly showcasing her acceptance of a BS male counterpart. He mentions her name in the article that he prepares based on his report of the psychological pressures faced by the students at IIT where the evident fact is that he acknowledged Tulsi's presence in the campus during the visit and also the very picture of his that is revealed before her and also among the other students of the institution is that of a man who dared to voice against the problems that they are facing in the campus. Thus it is the image of a hero or a protector that Madhav takes up in his first encounter with Tulsi. This played a crucial role in Tulsi's attraction towards Madhav. "I never went seeking anyone. All of them came in search of me"(Meera, 14) . This is Madhav's justification for the 27 lovers he had in his life. Even knowing about his numerous past relationships, Tulsi is attracted to him. She admits that it is not his charming face and features that allure her, but the "meticulous care he takes even in minutest details, his jokes". When Tulsi informs him about her marriage, Madhav becomes furious and reminds her of her successful career that would be hindered by an early marriage. Tulsi blushes at his remark feeling great about herself. She is to be married

to Vinay and there is no trace of a talk about Vinay's demand of Tulsi quitting her career after the marriage. Here Madhav gives a hint that marriage is the end for all the career aspirations of a woman. The pleasing approach of a benevolent sexist blinds her from realizing her fate. The early marriage of Tulsi and her two sisters Tamara and Mallika is also planned by the father so as to ensure their protection or more precisely, reflects on the fragile nature of the girls and therefore the act of offering the three daughters at the feet of suitable bridegrooms justifies the father's intention.

"Do you long to see him when you are apart? Crave his voice when you are alone? When you see him, do you yearn to clasp him to your heart?...And when you leave him, does the world seem bleak, empty?"
(Meera, 16)

Here Madhav is making Tulsi to accept his advances to her and a thought that she would be incomplete without him and it is in him that she is to attain her completeness. The benevolent tone that he uses makes Tulsi blind of his real motive. He comments that she has never experienced true love pointing to the fact that she is in need of help and it is Madhav who is her cure. Tulsi feels Madhav as the 'Krishna of Vrindavan' with her twenty seven lovers. Here even the status of god is in question. The fact that religion also puts forward is a benevolent one. The numerous lovers that Lord Krishna had in his life is worshipped whereas a female goddess would never be praised for the same. Madhav defends Tulsi's remark of him being a flirt is validated by attributing himself a savior position to grant his love to the devastated ladies as 'alms'. He makes his argument:

"Tulsi, I shall never refuse any woman's love. It would devastate her. If my love can make a woman happy, why would I want to deny her? You do not understand, Tulsi. They were all unhappy. They had never been loved. They had been denied love by fathers, husbands or sweethearts. I offered my love as alms. This body of mine will be eaten up by ants and worms one day. If it can be of use to another human being, why should I refuse? But be clear about this- I never desired any of them. I never demanded anything from them either. But you are different. For the first

time I long for a woman.” (Meera, 17)

The acceptance of the benevolent sexist ideology is prevalent in these lines. A man high in BS is given a high status and women easily get attracted to them. Protective Paternalism of Madhav is evinced in this justification. He confirms that women who sought him are weak and it was his duty to protect and care for them. Now he romanticizes the womanhood of Tulsi and seeks to attain his completeness in her. The intimate heterosexuality of benevolent sexism is portrayed here.

The role of a perfect man acted by Madhav being a spirited aid and companion to Tulsi's family attracts her. She tries to get rid of Madhav with the help of Vinay, but he did not accomplish the role of a benevolent sexist keeping with her expectations and thus her heart falls for the hero Madhav. Tulsi is ignorant of her weakness. She is unable to find out the highly spirited benevolent sexist within her. Here she is in search of a stereotypical romantic hero. She succumbs to the blind worship and causes her ultimate tragedy in her life. Madhav tries to idolize his deeds. He kisses her legs and questions her whether Vinay would ever kiss or love her as he does. This remark suffocates Tulsi and she decides to elope with Madhav. He resorts to interpersonal sexism by engaging with deliberate kisses and sexual advancements.

Vinay in *The Poison of Love* is an ambivalent sexist. He wavers between the stance of a benevolent and hostile sexist. When Tulsi informs him that she is breaking the engagement as they are not suitable companions, he calls her mad and remarks “too late” and cut's the phone. She feels crushed by all his conducts unlike that of Madhav's. The reason is that the hostile sexist attitudes are evident, whereas the benevolent sexist perspectives are less obvious and they allure and beguile deftly. Tulsi feels herself a ‘refugee’ needed to be helped by her fiancé or her father, seeking protection and comfort in her male redeemers. The childishness and immaturity stops Tulsi from understanding herself that she would learn only after her life been torn apart. Tulsi believes that she has to succumb to the wishes of Madhav for being in the hands of a protective man.

Marriage is the manifestation of the benevolent man's way of victimization of the woman. By the sacramental ceremony and the tying of the 'Mangalsutra' man establishes his authority over woman. Here Madhav initially pursued Tulsi from being married to Vinay reminding her of the promising future that she had being the IIT topper and rank holder and how a married life would become an obstacle in her career. That Madhav itself now asks her hand in marriage and speaks of all the preparations that he has made for the next day. Thus he is making her his object of benevolent sexism.

"Once my self- esteem was what I had felt for myself. But having fallen in love with Madhav, it had become synonymous with being adored and valued by him." (Meera, 29)

Women with the BS attitude endorse the paternalistic aspect of sexism, submitting themselves to the protective hands of man to be 'loved', 'adored' and 'valued' by man. She even becomes unaware of her potentialities and herself resulting in total submission and dependence to man. According to Dardenne et al (2006), endorsing BS attitudes in women results in the weakening of the cognitive performance and confidence in women.

The woman in Tulsi is thriving for the love, care and protection of Madhav that being an IIT graduate, after her life being tattered in the hands of Madhav she could have followed her career, instead she searches for the love of Madhav even in the eyes of a beggar, but in vain. The BS in Madhav has made Tulsi a completely dependent woman. Her whole self and her whole life are shattered. Never one feels such a thing about the life of Tulsi when reading of the love and care that Madhav gifted Tulsi. The poison of the Benevolent sexist attitude that Madhav had can be experienced here. It tore her identity apart.

"I was an earthen pot, used and thrown away. It had shattered. The pieces had scattered in different directions. It would never again recover its original form nor regain its identity. It would never again get to know fullness." (Meera, 32, 33)

Tulsi recollects that she hated alcohol, but after recognizing the truths

of Madhav she needed 'vodka' to sleep. This shows the pathetic state into which the lady is thrown after being enchanted by the false love of Madhav. She goes to frenzy and it leads to her killing her own two children. "*Madhav enveloped me like a warm cloud*". Even after being separated from Madhav, Tulsi feels being enveloped by his paternalistic hands. She is not able to stand stable of her own. It is Madhav who is guiding her in his absence. The extent to which the effect of the BS is evident here.

The BS of man considers woman to be weak, timid and immature in all the aspects of her decision making. He considers the woman to be led a man in all spheres of her life. The decisions taken by her are considered to be foolish. Such evidences are plenty especially in Kerala. The sayings like women are haste in acting and reacting but paves way to them to regret later ("*Penn buddhi pin buddhi*"). When Tulsi says that she wants to be a Meera sadhu, Ramakrishna Pandit, the temple trustee looks her compassionately and asks her why she should do it being so young and beautiful. He says her that the life would be terrible and that it would be a bad decision to take. He says "*We will give your photograph to the police. They will trace your home*" (Meera, 38).

"*Madhav's love was an acid that corroded the vessel itself*" (Meera, 45). Her identity got corroded in the love of Madhav. The poison that Madhav induced upon Tulsi made her a puppet in his hands. He says that he doesn't like to see women crying. "I detest tears" implying that it is he who is entrusted with the task of wiping away the tears of women, giving them happiness thus justifying his acts.

Female beauty is sanctified in a BS. Madhav praise Tulsi's hair, eyes, cheeks and made her a goddess of beauty. This makes her more conscious of her feminine self and duties forgetting of her career and the bright future she could have gathered meanwhile. The line "*I would lie on his chest like a tulsi leaf like a feather*" (Meera, 46) shows Tulsi's total submission upon Madhav. She becomes a woman with BS thoughts feeling sad about women who are not loved by men, expressing compassion to those women who gave birth to their children without being loved by their husbands. She herself became handmaid to

Madhav without thinking of her bright future and career.

“I, who had graduated from IIT with record marks, became the handmaiden of Madhav. I washed his clothes with affection, and ironed them with devotion. I cooked his beloved food with reverence. The places where he stood and sat, I cleaned as if they were sacred. I blissfully surrendered to him and he accepted me with compassion.” (Meera, 46)

Madhav calls Tulsi quite often and asks her to read, drink some orange juice, or to go for a walk. Tulsi feels it so pleasing. But it is the Benevolent Sexism in Madhav that insists him in making such remarks. The Poison of Love is a work that explicitly showcases the dark poisonous stings of Benevolent Sexism. A woman reading the book will for sure be attracted to the romantic partner in Madhav and becomes envious over Tulsi for the love and affection that she gets from Madhav. “*See... women are like this. They want to be cosseted all the time*” (47). Here women are pictured as mean and weak beings, thirsty to be loved and caressed by men. Madhav says to her that he will “spoil” her. The reader just feels it the utmost expression of love but instead it is the disastrous effect of BS that is seen in these lines. A HS man with his misogyny makes the woman aware that she is being ill treated. Whereas BS becomes more damaging as the kind and romantic face it takes up makes the woman unaware of how she is being exploited.

Jealousy is always a trait attributed to women. It is rarely mentioned with respect to a man. Here Madhav reminds Tulsi that she will have to pay for her jealousy and thus asks her not to question his affairs that he had with other women, thereby justifying his act. For this he takes the example from the Purana, where Lord Krishna abandoned Radha for being jealous. Later at Vrindavan Tulsi is being summoned by an elderly priest. He too praises her beauty and youth and asks her to be with him. Before expressing his intention, he regrets her plight of being amongst the tonsures Meera sadhu's and asks her to be with him as his wife is old and that he could satisfy the needs of a woman like her. There too he makes a point that his wife is old and aging but he is young.

Madhav always mentions his girlfriends as “unloved...poor creatures...” (63). Madhav needs Tulsi for the continuation of his generation. He says that she is his only wife and he legally belongs to her.

Dissent Protest and Resistances in Mullaperiyar

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Abstract

In an inter basin and interstate project like Mullaperiyar where two River basin have been interlinked through water diversion a conflict over water utilization and allocation issues is almost inevitable. However having been build 126 years ago the safety of the Mullaperiyar Dam invariably forms the Central part in the current conflict. After the state formation the Mullaperiyar issue was raised between the two southern most states of India like Kerala Tamilnadu. The fear and insecurity among the local people and the divided opinion on Dam safety at higher water level in Kerala. Kerala started warning the residents of Idukki that they had been living in ignorance of a threat which at any time could take thousands of lives. Subsequently the public discourse started in Kerala on safety of Mullaperiyar Dam was read as an attempt to claim its water. Since then the Dam have been a bone of contention between Kerala and Tamilnadu. The state government of Tamilnadu asserted that the Dam was in fact safe. However the following days witnessed several protests and hunger strikes in Idukki and the other adjoining districts. As the original conflict over Mullaperiyar deepened over time leading to frayed nerves on both sides like Kerala and Tamilnadual though we are living in a unified nation but the sub regionalism was more expressed in the Mullaperiyar struggle. The sub regionalism paved the way of linguistic polarization.

Key words - Sub regionalism,linguistic polarization,Resistance, Multiculture, Unity

Introduction

On firstNovember 1956 Kerala was formed by the unification of Malabar,Travancore,and, Cochin. After the state formation, the Mullaperiyar issue was raised between the two southern most states of India like Kerala and Tamilnadu.The fear and insecurity among

the local people and the divided opinion on dam safety at higher water level in Kerala. Because Mullaperiyar Dam are constructed in lime and mortar in 126 years ago. This fear among the people of Kerala especially Idukki, Ernakulam etc are made solidarity. The People of Idukki really fear full of the dam disputes. The people of Idukki and join districts of Kerala have been living in constant fear of losing their livelihood continues protests mark the region in favour of the construction of new Dam. People both Kerala and Tamilnadu are organized protecting movements. The situation further created the both of several social movements in the region.

Idukki recently witnessed the growth of several protest and resistance movements and the formation of a number of organizations like Mullaperiyar Samara Samithi, Mullaperiyar Environmental Protection Forum, Mullaperiyar Ekopana Samithi, Save Mullaperiyar Forum, Janadhikara Rashtria Samiti, Periyar Valley Protection Movement etc. in one way or the other this paved the way for linguistic polarization and a leading cause for interstate dispute. An attempt is made to interrogate into the dissent, protest and resistance movements in Mullaperiyar.

Rapid Growth of Protest and Resistances Movement

Mullaperiyar movement is an organized effort by mass population of country especially Idukki. Because the 126 year old dam has clearly outlived its viable age and indeed poses a threat to the downstream people and Dam in case of the Dam break. The collapse of the Dam would trigger the cascading failure or collapse of the immediate downstream Idukki, Cheruthoni and Kulamavu dams in Idukki. The resulting catastrophe would be unimaginable devastation of the downstream thickly populated districts of Idukki, Ernakulam and parts of Kottayam, Thrissur, Alapuzha and Pathanamthitta district. Studies have revealed that the Idukki Dam may not be able to hold the waters of Mullaperiyar. Mean while they had entrusted Delhi with evaluating the hydrological unsafe to withstand the impact of probable maximum flood and probable earthquake. Kerala had raised this aspect this supreme court challenging the estimation of probable maximum flood arrived at

by the CWC (2.12 lakh cusecs as per 1986 estimates) while the actual observed flood at Mullaperiyar in 1943 flood was 2.98 lakh cusecs.ii

The Mullaperiyar issue should have become the forerunner to put in place a comprehensive Dam safety act given the large number of Dam that have crossed the 50 years lifespan which is the viable age of a Dam as per international standards. A controller and auditor general report has found the structural strength of 348 large Dam suspects as they have not been inspected for over a decade. This is deputing the fact that the government spent RS 70000 core more than the estimates the report added. The working of dam safety organizations has also been questioned in the report.

In spite of the above strengthening measures the Dam has not gained adequate strength to function because of the limitation of the process and materials adopted at that period of time. More over a Dam cannot be perpetually made fit to withstand the forces for which it is originally designed through a process of periodical strengthening. Aging is a non-retrievable process especially for a Dam which is in continuous contact with water and leads to the easily soluble lime to be leached out.

The century old Mullaperiyar Dam has already outlived its useful life and consequences of any failure of this Dam could be catastrophic its outcome beyond all human imagination. Moreover, Mullaperiyar region is an area where significant tectonics activity has take place in the past. Evidence of recent tectonics is also noticed in the region. The recent earthquakes in Kerala and other parts of the country indicate an increase in the level of crustal disturbances in the form of earth tremors. In this background state of Kerala decided to ascertain the safety of the old Dam as per modern standards. Both the studies have brought out the fact that the old Dam is hierologically and structurally unsafe to withstand the impact of probable maximum flood and probable earthquake.iii

In view of the definite conclusion of the scientific studies conducted by national institution of repute and the persisted threat which the Dam poses it is imperative that the present old Mullaperiyar Dam needs

urgent decommissioning for discharging the responsibility of the state to protect the lives and properties of its citizen. From 1895 onwards state of Tamil Nadu is utilizing the waters of Mullaperiyar Dam for irrigation and drinking waters requirements. States of Kerala does not desire to deprive Tamil Nadu of the Mullaperiyar waters on which their needy farmers are greatly dependent. State of Kerala has taken a decision to build a new Dam.iv

The collapse of the old Dam will trigger a cascading failure of the Idukki group of Dam like Idukki, Cheruthoni, Kulamavu resulting an un imaginable degree of devastation in the thickly populated district of Idukki, Ernakulam etc.v The above-mentioned reasons further boosted the growth of resistance movements in the district as well as in the State.

The Mullaperiyar Dam is situated at a place which has high seismic potential. The Periyar National Park, Thekkady is located around the Periyar reservoir formed by the backwaters of this Dam. It is a highly protected tiger reserve in India. The Environmental concern that has received the attention of Kerala so far is with regard to the submergence of the Reservoir fringe area that has emerged after lowering of the water level to 136ft from 152ft.vi

According to the geological studies Kerala comes under fault zone area. Earthquake is measured with seismograph and its intensity is considered in Richter scale. The earthquake in Kerala generally comes under Monsoon induced earth quake category. Just after the period of even Kalavarsham (south west monsoon) and Thulavarsham (north east monsoon). There is a chance for earth quake everywhere in Kerala. It is peculiarity of rock layers in Kerala.

The dam is a subject of disagreement between the two neighboring states of Tamil Nadu and Kerala. Idukki district is known for frequent earth quakes. It may be a threat to Idukki Dam also. It will there by affect lakhs of lives and their properties. Five districts in Kerala state face this threat viz Idukki, Ernakulam, Kottayam, Alapuzha and Pathanamthitta.

On 12th December 2000 an earth quake of intensity 5 in the Richter

scale reported at Erattupetta, which is around 50 km away from the Mullaperiyar Dam developed major cracks following Sundays moderate tremors. The conflict between Kerala and Tamil Nadu over Mullaperiyar dam issue deepened over time. Its ramifications spread into other realms when the legal battle between Kerala and Tamil Nadu gained momentum in 2000.vii It could reach its peak in 2006 when Kerala passed the controversial amendment.

As a result the tussle came into public sphere and led to issues revolving around economic dependency. In 1976 Kerala built a mega Dam in Idukki with a height of 555 ft and water storage area of 16000 acres with a hydel power project of 800 MW capacities. Hence Parameswaran Nair, the then chief engineer of Kerala electricity board made a recommendation to reduce the level of Mullaperiyar Dam from 152ft to 136 ft water to Idukki reservoir. Hence Kerala induced K.K Thomas the then MLA of Peerumedu constituency of gather local people's support in making propaganda that the Dam was weak and its breach would cause damage in the downstream of Periyar.viii The issue has become a point of focus for within and interstate power politics.

For pressing Kerala to raise the level in the Dam several political parties in Tamil Nadu threatened to stop the food supply to Kerala and the transport between the two states. In 2006 against the amendment Tamil Nadu made a unanimous political call to block all routes to Kerala. The new Dam proposal again created similar move in Tamil Nadu towards an economic blockade against Kerala. Tamil Nadu leaders' reason out as Kerala depends on Tamil Nadu for its food supply; Tamil Nadu has the right to use the water of Kerala.

V. Gopalsamy the leader of Marumalarchi Dravida Munnetra Kazhagam (MDMK) party in Tamil Nadu involves himself in the protests against the new Dam construction. He gave a petition to prime Minister, Monmohan Singh in 2004 and 2005. He also made a protest walk in connection with Mullaperiyar Dam issue from Madurai to Gudalur in December 2006.

But the political leaders of Kerala are of the view that the farmers of

Tamil Nadu depend on Kerala for selling their produce. These moves indicate that the Mullaperiyar conflict is a sensitive issue and the emotions of local people can be exploited by politicians according to their whims and fancies. Thus, the Dam issue has much space for the party leaders in the local politics both in Kerala and Tamil Nadu.^{ix}

Political parties in both states have been active in mobilizing, and influencing, popular discontent. All political factions in Tamil Nadu have taken up Mullaperiyar as a prime issue and they have been influential in shaping the public perception and the nature of conflict in Tamil Nadu. In Kerala too, the Mullaperiyar issue overcomes the deep political divisions that otherwise exist in the state. As a result the amendment to the Kerala irrigation and water conservation act through which the Mullaperiyar water level was frozen at 136ft was promptly achieved with unanimous support of the assembly.

On the issue of Mullaperiyar Dam, the brotherly states of Kerala and Tamil Nadu abandoned their relations, because of the high pressure of political parties in both states. Some of the people of both the states raised the matter as a political issue. If any of the administration stood against their feelings, it would negatively affect their administration and their feelings will definitely be reflected in the next election. That is why the rulers of both states cannot stand against the will of their people. Neutral agencies are trying to settle the problem amicably. Perceptions over the safety of a dam have divided the people of linguistic basis such as Malayali (Kerala) and Tamilzar (Tamil Nadu). There are so many Pressure groups in Tamil Nadu to protect their interests. ^x Some of the local Pressure groups of Tamil Nadu try to start an anti Kerala campaign to protect their interest on account of Periyar dam and tries to hide the negative aspects of the dam.

Tamil Nadu government is insisting that the existing dam is safe and that it should not be decommissioned at any rate because the Tamillians water transfer from Periyar River in Kerala to Kerala to Vaigai River in Tamil Nadu. This group led to linguistic polarization. Actually the dispute between Kerala and Tamil Nadu was worsened by the local organization of both Kerala and Tamil Nadu states. ^{xi} Unfortunately

these organizations are headed by educated and highly influenced leaders. These fellows make provoking speeches and it triggers more a path among the neighboring states. When the verbal fights continue the state leaders automatically interfere and the issue is exaggerated. It is to be noted that some of the moderate Pressure group play a vital role for settling the disputes between the two states. The entire student's of Upputhara and Ayyappankoil Grama Panchayats conducted a protest rally on 27/11/2006 from St. Mary's higher secondary school stadium to Parappu junction. The farmers, students, teachers, politicians, lawyers and entire public participated in the procession. xii Their main demand is the decommission of the present dam and the construction of a new one in the nearby areas.

The Mullaperiyar Dam has been a matter of dispute between the Kerala and Tamilnadu government for a long time even though Mullaperiyar Dam is located within Kerala state boundaries, the control and operations of Mullaperiyar rests with Tamilnadu. A series of earthquake since 1979 has resulted in leaks and cracks in the 126 years old dam.

Through these organizations from both sides act as points of discussion and information sharing to the concept of sub regionalism in the country. The concepts of regionalism and sub regionalisms are not a new phenomenon in pre Indian as well as post India independence. xiii Indian constitution provide for a federal government in India. The constitutional framers adopted the federal system because of two main reasons such as the large size of the country and its socio multicultural diversity. xiv But it is under single nationalism. The concept of sub regionalism has widespread phenomenon in mullaperiyar issue. This division has mainly based on linguistic basis.

Today Mullaperiyar Dam is a matter of serious safety concern for the people of Kerala especially Idukki. It has become a burning issue between the states of Kerala and Tamil Nadu. It is the main treat of the concept of unity in diversity.

Conclusion

The Mullaperiyar issue that has been the bone of contention between the two neighboring states of Kerala and Tamil Nadu for the 126 years is apparently over the height of the water level maintained at the Mullaperiyar Dam and over the safety of the century old structure. When the situation become panicky in twenty first century so many new categories of people and people's organization in evolved in this issue. People from different parts of the state directly involved in this issue and become the part of the agitation. The polarization of view around the Mullaperiyar has hardened over the years. The Tamil Nadu government insists that the Mullaperiyar Dam is safe and that the water level must be maintained at the maximum level as per the agreement. The country like India has been formed based on the principle of 'Unity in Diversity'. The sub-regional element formed out the Mullaperiyar issue is alarming the sole foundation of the nation.

Notes and references

ⁱMangathil,Sasidharan, Mullaperiyar Anakketum Keralathinte Bhaviyum, Mathurubumi, Kozhikode, 2008, P.67.

ⁱⁱ Idem.

ⁱⁱⁱChempakapara, Santhosh, IdukkiyudeCharitramPavanatma, Murickassery, 2014,pp.25-30.

^{iv} The Hindu, January 18, 2005.

^v C.G Mathusoodhanan and Sreeja K.G, The Mullaperiyar Conflict, National Instituted Of Advanced Studies, Bangalore, 2010,p.19.

^{vi} G.O (Rt) No. 105/2001/ FR WLD (Kerala Forest and Wild life (F) Department, Date 24/03/2001.

^{vii} A.V, Anilkumar, Mullaperiyar, Papyrus, Kottayam, 2011,p.102.

^{viii} Premod, O.C, The Socio- Economic Impacts of MullaiPeriyar Dam in the Region of Kerala And Tamil Nadu States, Un Published P.hd thesis, Kamaraj University, Madurai,p.209.

^{ix} Idem.

^x Premod, O.C, Op.cit.p.210.

^{xi} C.G Mathusoodhanan and Sreeja Op.cit.p.20.

^{xii} The Hindu, december6, 2011.

^{xiii} The Hindu, December 5.

^{xiv} Mathirappalli, Manoj, Idukki DeshamCharitramSamskaram, Geo Books, Kattappana, 2017,p.22

The immediate impact of Demonetisation on Agricultural Families in Idukki District

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Abstract

PM Narendra Modi announced demonetization on November 8th, 2016. The Indian economy has been impacted by demonetisation in all areas. Agriculture is the most important industry in India since it is a growing economy. In India, agriculture provides a living for 70% of the working population. As a result, it is important to research how the government's recent reforms have affected the agricultural sector. Primary data that was gathered in 2017 as part of the researcher's UG dissertation was used to perform this study. The effect of demonetization on households that depend on agriculture is covered in this paper.

Introduction

Demonetisation is an act of making legal tender currency as illegal(Goel, 2018). Demonetized money or coins were not permitted to circulate in the nation after the demonetization process. On November 8, 2016, the Indian government demonetized the 1000 and 500 rupee notes and announced the issuance of new 500 and 2000 rupee notes(Jain et al., 2021). Demonetization was used by the government to eradicate black market activity and back money from the economy.

Almost every area of the economy has been impacted by demonetization. More than 60% of India's working population relies on agriculture for a living, making it the most impacted of these industries(Tandon & Kulkarni, 2017). The abrupt government demonetization has had a negative impact on the Indian economy's agriculture sector. This essay analyses how the Idukki district's farming households were impacted by the demonetisation(Jain et al., 2020).

Review of Literature

A review of the several research that has been done on demonetisation is provided here.

A Lahri (2020) examined the impacts of demonetization in his work “The Great Indian Demonetization.” He said that the action was only partially successful in accomplishing its intended goals (Lahiri, 2020). In his article “Impact of Demonetization on Indian Economy,” Singh Ajit (2017) claims that it has caused inevitable economic and welfare losses to the underprivileged groups of society, daily wage earners, and those who are also not tech-savvy (Singh Ajit, 2017). A Dash (2017) researched demonetization in his article “A study on the socioeconomic effect of demonetisation in India”. He also asserts that demonetization will be one of the major economic events of our time and will be remembered fondly by future generations. Every Indian citizen is affected by it. The liquidity side of the economy is impacted by demonetization. Its impact will be significant since the majority of almost 86% of the cash value that was removed from circulation was not replaced. There is a significant gap in the currency composition since there is only one denomination after Rs 100 as a result of the elimination of the Rs 500 and Rs 1000 notes (Pattanaik, 2017). “Demonetization in India: An Era for Digital Payments”, by Drs. Goriparthi Ravi Kumar and Tiwari Pankaj (2017) explain that the government’s startling decision to demonetize the high-value currencies of 500 and 1000, which make up 86 percent of the country’s in-use currency, on November 8, 2016, has indirectly bolstered the country’s developing digital payments sector (Goriparthi & Tiwari, 2017).

Meaning- Demonetization

Demonetisation is the act of stripping the legal tender status of a currency. Generally, legal tender currency means the currency which is legally accepted by the monetary authority of a country. When a country demonetizes a currency, its legal acceptance will be removed.

Historic background

The Indian government had bank notes on two prior occasions – once in 194 and then in 1978. In both cases, the goal was to eradicate tax evasion due to “black money “ held outside the economic system. In 1946 the pre-Independence government introduced the 1st demonetisation in India. In 1978, the Janata party coalition government demonetized banknotes of 1000, 5000 and 10000 rupees in the hope of curbing black money and counterfeit money(Shaikh & Deshpande, 2017).

In June, the Government of India devised the income declaration scheme, which lasted till 30th September 2016, providing an opportunity for citizens holding black money to avoid litigation and come clean by declaring their assets, paying the tax on them and a penalty of 45% thereafter(Chandrasekhar & Ghosh, 2018).

Major causes of Demonetization in India

Since 2009, the currency-to-GDP ratio in India had increased from 1:9 to 1:12. By demonetization Government got an opportunity to correct it. 97% of the transaction in India were effected in cash. i.e. were not getting routed through any bank. A parallel economy created by the holding of unaccounted money created many problems in the economy(Goel, 2018b). Through cashless transactions, more income will get disclosed and will increase direct tax collection. As direct tax increases government will be able to rationalize the indirect taxes which will create social justice. Similarly, demonetisation can make fake currency notes circulate in the economy as pieces of paper(Rajagopalan, 2019).

Demonetisation had a serious impact on almost every area of the economy. Now let us discuss the major areas, which faced the serious impact of demonetisation.

Banking: about 3 trillion in the form of old 500 and 10000 banknotes had been deposited in the banking system and about 500 billion had been dispensed via withdrawals from bank accounts, ATMs as well as exchange over the bank countries. A rise in the usage of credit and debit

card was also reported(Goriparthi & Tiwari, 2017).

Cash Storage: the scarcity of cash due to demonetisation led to chaos, and most people holding old banknotes faced difficulties in exchanging them due to endless lines outside banks and ATMs across India. ATMs were running out of cash after a few hours of being functional(Mohindra & Mukherjee, 2018).

Stock Market Crash: the day after the announcement of the demonetization BSE, SENSEX crashed by nearly 1689 points and NIFTY plunged by over 541 points by the end of the intraday trading section(Patil et al., 2018).

Impact on the Agricultural sector in Idukki District

Agriculture is the major sector in the Indian economy. More than 70% of the working population depends on agriculture for their livelihood. Agriculture contributes 17% of India's GDP. This sector provides food to the Indian economy.

Idukki is a district in the Indian state of Kerala It was constituted on 26 January 1972. Though it is regarded as the second-largest district in the region, it has the lowest population density among the other districts of Kerala; the urban population being higher than the rural. Idukki is rich in forests and also known as the "Spice Garden of Kerala". People in Idukki District depend mainly on the agriculture sector for their income. The economy in Idukki District is primarily agricultural. Cash crops like cardamom, pepper e.tc are the major source of income of families in the Idukki District(District Idukki, Government of Kerala | The Spice Garden of Kerala | India, n.d.). Now let us analyse how demonetisation affected agricultural families in Idukki District. This analysis is based on my unpublished BA dissertation submitted to Mahatma Gandhi University.

From the study conducted on the topic impact of demonetisation on agricultural families in Idukki District. I am able to reach on the following findings.

Demonetization has had a significant negative impact on food consumption for 45percent of families. For 10 per cent of households, demonetization has had a significant impact on educational spending. Eighty per cent of the 12.5percent of families were unable to buy seeds because they lacked the funds or couldn't find lower denominations of cash owing to demonetisation. Demonetisations have mostly affected the agricultural maintenance stage for 22 .5percent of families. Demonetization has mostly affected the agricultural harvesting stage for 7.5percent of families. During each stage of farming, 80% of families lacked a sufficient number of workers. 65 per cent of the families were prevented from buying essential agricultural equipment and other related items. Demonetization has mostly affected the marketing stage of agriculture for 57.5percent of families. Due to a lack of sufficient liquid funds, the market rejected 57.5percent of the families' items. Among the 57.5percent of persons, 17.39percent of the households kept their market-rejected products in safes. When their products were rejected by the market, 78.26percent of people sold them to middlemen. 88.8percent of intermediaries accepted the market's rejected items at a reduced rate. 11.11percent of intermediaries paid the market price for commodities that were rejected by the market. 62 .5percent of the households had issues with loan repayment. 80percent of the populace believes that the demonetization programme was a failure and does not support it. They have borne a heavy burden as a result of the demonetization programme.

Recommendations

Certain recommendations that have evolved from the study are given in this section.

The government could have distributed food grains and cereals through public distribution system for BPL families in addition to what is already provided. Government should have allowed educational institutions to accept old currencies. Government should have provided increased subsidies for a limited time to buy agricultural equipment and other associated paraphernalia. Government should have directly

accepted crops from farmers at base price. Government should have introduced more currencies of smaller denominations to the economy before demonetisation.

Conclusions

The Government of India introduced the policy of demonetisation to stop counterfeiting the current banknotes allegedly used for funding terrorism, as well as a crackdown on black money in the country. Demonetisation affected all the major sectors in the country of these sectors the most affected one is the agricultural sector. People in the agricultural sector are mostly uneducated and do not know in detail about banking operations, this is the reason by they are mainly affected. From the study, it was observed that the people in the agricultural sector suffered a lot because of the lack of currency.

References

Chandrasekhar, C. P., & Ghosh, J. (2018). The Financialization of Finance? Demonetization and the Dubious Push to Cashlessness in India. *Development and Change*, 49(2), 420– 436. <https://doi.org/10.1111/DECH.12369>

District Idukki, Government of Kerala | The Spice Garden of Kerala | India. (n.d.). Retrieved October 11, 2022, from <https://idukki.nic.in/en/>

Goel, S. (2018a). The big bath of demonetization in India: strike on black money for corporate governance. *Journal of Money Laundering Control*, 21(4), 594–600. <https://doi.org/10.1108/JMLC-11-2017-0063/FULL/HTML>

Goel, S. (2018b). The big bath of demonetization in India: strike on black money for corporate governance. *Journal of Money Laundering Control*, 21(4), 594–600. <https://doi.org/10.1108/JMLC-11-2017-0063/FULL/XML>

Goriparthi, R. K., & Tiwari, P. (2017). Demonetization in India an era for digital payments. *Splint International Journal Of*

Professionals, 4(1), 40–48. <https://www.indianjournals.com/ijor.aspx?target=ijor:sijp&volume=4&issue=1&article=005>

Jain, D., Dash, M. K., & Thakur, K. S. (2021). Development of research agenda on demonetization based on bibliometric visualization. *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-12-2019-1085/FULL/HTML>

Jain, D., Thakur, K. S., & Dash, M. K. (2020). Demonetization move in India: a conceptual study. *Journal of Money Laundering Control*, 23(4), 863–869. <https://doi.org/10.1108/JMLC-12-2019-0100/FULL/HTML>

Lahiri, A. (2020). The Great Indian Demonetization. *Journal of Economic Perspectives*, 34(1), 55–74. <https://doi.org/10.1257/JEP.34.1.55>

Mohindra, K. S., & Mukherjee, S. (2018). Can Short-term Economic Policies Hurt the Health of the Poor? Demonetization in India. <https://doi.org/10.1177/0020731418772465>, 48(3), 482–494. <https://doi.org/10.1177/0020731418772465>

Patil, A., Parab, N., & Reddy, Y. V. (2018). *Analyzing the impact of demonetization on the Indian stock market: Sectoral evidence using GARCH model*. <http://irgu.unigoa.ac.in/drs/handle/unigoa/5326>

Pattanaik, B. (2017). A STUDY ON SOCIO ECONOMIC EFFECT OF DEMONETIZATION IN INDIA A STUDY ON SOCIO ECONOMIC EFFECT OF DEMONETIZATION IN INDIA A DASH. *International Journal of Management and Applied Science*, 3, 2394– 7926. <http://iraj.in>

Rajagopalan, S. (2019). Demonetization in India: Superfluous discovery and money laundering. *The Review of Austrian Economics* 2019 33:1, 33(1), 201–217. <https://doi.org/10.1007/S11138-019-00465-W>

Shaikh, Dr. A., & Deshpande, S. (2017). *Demonetization and its Impact on Indian Economy - A Review*. <https://papers.ssrn.com/abstract=3990591>

Singh Ajit. (2017). Impact of Demonetization on Indian Economy.

International Journal of Engineering and Management Research (IJEMR), 7(3), 126–127. <https://doi.org/10.1108/JAMR-02-2017-0021/FULL/HTML>

Tandon, D., & Kulkarni, B. (2017). Demonetization in India: The Good, Bad and Ugly Facets. *Asian Journal of Research in Business Economics and Management*, 7(1), 41. <https://doi.org/10.5958/2249-7307.2017.00004.4>

Home Library an Ambience for Inner Joy

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Abstract

The modern world enjoys the boon of the innovation in the science and technology, which supports the reading habit of the people. Bringing on the palm, the technology, the need to do research and study has become an easy access. People working in the office and institutions have the tendency to bring home their assignments and documentation for which a minimum set of books is needed for references. Home library facility could make the people have less tension in their families bringing home the works and doing them relaxed even with the help of their better half. Spending money on moving from place to place to find references, one could keep the collection of books home that the wants of the working areas. This even leads to multiple fields of search and entertain hobbies develop. With the exchange of books between friends is another beneficiary thing that could maintain better relationship as well. This article maintains the discipline of home library and in insights.

Key terms: Home library, Blu-ray Discs, e-books, audio-books, databases, table-games, video-games, Alignment, criteria, digital library etc.

Introduction:

The needs of the human beings are satisfied by many human made means other than the nature's gift. However, a human being is different from the other beings due to their intellectual expression and the way they speak act and communicate. Under the list of categories that appease the human desires, libraries play vital role. Its atmosphere is serene and peaceful. As a library is known by its collection of materials, books and in the modern era, the media, the easy access for knowing and understanding the world better, reading is predominant among human being. Though it appears to be conceptual, still it is by nature, the human beings are in touch with the art of reading and related collection

of information from books. People move from place to place to acquire books to update their knowledge and research, and for which libraries are found to be an important environment. This article deals with the home library that could offer the human beings the needed peace and easy access to the world of innovation and convenience.

To update information in order to meet the user's needs on a daily basis on varied fields of research and documentations, it is the library that provides physical with hard copies of documents and digital access with soft copies. Materials, and may be a physical location or a virtual space, or both. As library is one of the greatest resources that the world has put at our fingertips, it a place where anything that one wants to know is available to access. Thomas Jefferson defines a library as a capital as, "Books constitute capital. A library book lasts as long as a house, for hundreds of years. It is not, then, an article of mere consumption but fairly of capital, and often in the case of professional men, setting out in life, it is their only capital." (156) In general, a library varies widely in size, which may be organized for the use of researches and reading and reference. It is maintained either by public body, as government sector, or as in an institution/ schools, a corporation, or a private individual ones. Librarians play dominant role in the library. They provide materials to the educational scholars and students even to the public who do not belong to any institutional sector. To provide the services the above mentioned sectors, librarians are trained and made as experts at finding, selecting, circulating and organizing information and at interpreting information to the needs. They were navigating and analyzing very large amounts of information with a variety of resources. The librarians by going an extra mile, they meet the need of the users. They ensure the users feel completely satisfied with proper intimation and information provided. The expected to be very vibrant and innovative person, they are trained to be especially in the digital world.

There are libraries as community hubs that are supplied with programs for people to engage in lifelong learning. With regard to the modern libraries, they extend their services beyond the physical walls of a building. There are provided material accessible by electronic means,

which enhance the common people to have the intellectual charm. The modern libraries are inter-connected between home and the library via the Internet. The world of information has become easy access due to the registered we hub provided for the libraries. People from remote areas could have log in into the library through their registered identification number of code. Having found the history of libraries as the collections of documents that are consisted of archives of the earliest form of writing found on the clay tablets, Ma. So. Victor in the book Kumari Continent, explains in detail the antiquity of writings as: The cuneiform script discovered in Sumer dates back to 2600 BC. Private or personal libraries made up of written books appeared in classical Greece in the 5th century BC. In the 6th century, at the very close of the Classical period, the great libraries of the Mediterranean world remained those of Constantinople and Alexandria. The libraries of Timbuktu were also established around this time and attracted scholars from all over the world. (143) Libraries provide physical and digital access to materials, where the personal satisfaction is accomplished. They are either in physical location and a virtual space, or both. Considering the library collection, there are books, periodicals, newspapers, manuscripts, films, maps, prints, documents, microform, CDs, cassettes, videotapes, DVDs, Blu-ray Discs, e-books, audio-books, data-bases, table-games, video-games and all other formats. Lamba has tried to show a clear demonstration of library with the observation that “today’s libraries have become increasingly multi-disciplinary, collaborative and networked” and that applying Web 2.0 tools to libraries would not only connect the users with their community and enhance communication but will also help the librarians to promote their library’s activities, services, and products to target both their actual and potential user”. (13). Libraries have been found in numbers in the cities, where the research activities have been encouraged by the support received from the libraries. Apart from the modern gadgets, the libraries do support the natural phenomena of reading and collecting the needed details with authentication and bibliography. The libraries and their kinds are classified into five kinds through which the purpose and the integrated learning is connected with the individual’s interest and the scholars’ intention accomplished as its kinds follow:

(1) General libraries (Public): General libraries are found in the cities and towns in the public places, where many public libraries also serve as community organizations that provide free services and events to the public, such as reading groups and toddler story time.

For many communities, the library is a source of connection to a vast world, obtainable knowledge and understanding, and entertainment. According to a study by the Pennsylvania Library Association, public library services play a major role in fighting rising illiteracy rates among youths. (27)

(2) Academic libraries: Academic libraries house newspapers and journals of current, reliable relevant information resources spread through all the disciplines. They serve to assuage requirements of students and faculty from the institutions. E- resources subscribe for a given institution with the back up and collaborate with other Libraries in exchange of books.

“Academic libraries offer workshops and courses outside of formal, graded coursework, which are meant to provide students with the tools necessary to succeed in their programs” (14). These workshops may include helping with citations, effective search techniques, journal databases, and electronic citation software. These workshops provide students with skills that can help them achieve success in their academic careers and in their future occupations, which they may not learn inside the classroom. Academic libraries also help the research scholars with more facilities such as;

- reference section with research orientation
- updated versions of the dictionaries to various fields such as; Psychology, Nursing,

Counselling and the modern IT sections like Artificial Intelligence.

- facility to photocopy the needed research pages from the important books that cannot be hired.
- to enhance scanning the recommended pages under various

titles that are from the most ancient and the authentication for the research.

(3) School libraries/ Children libraries: found in almost all school and on special children libraries, some European countries and in other cities around the world. School libraries have the following sections of books depending on the age and grade wise students in the schools such as:

- Picture dictionaries, grade wise and age wise
- Tiny books with limited pages to complete reading in a short time
- Hard bound books with attractive colours
- Coloured pages in the books to have the interest on reading.
- Quality papers to grab the attention of the students to create interest for reading.

Children's libraries are special collections of books intended for juvenile readers and usually kept in separate rooms of general public libraries. Some children's libraries have entire floors or wings dedicated to them in bigger libraries while smaller ones may have a separate room or area for children. They are an educational agency seeking to acquaint the young with the world's literature and to cultivate a love for reading. Their work supplements that of the public schools. (71)

(4) History and archaeological libraries: The mostly found in the metropolitan cities, which are annexed with Museum. They are bound with proof and records of the unearthed materials that are packed with evidences and with files of interpretations. Palm leaf, inscriptions, rock paintings, statues and monuments. The advantages of these libraries are affluent with records and tests such as; carbon tests.

(5) Special libraries: they are found as special libraries in specialized places such as; hospitals, corporations, corporations, private business and in government sectors. This is also an affordable facility in the

above mentioned places, through which they gain customers to their sectors, either for professional assistance or economic transactions in day to day life. When the study environment is created, the intake and the sharing of knowledge have more affluence for the academicians.

Facing all the availabilities in the library sector, there is home library that is afforded with the feasible atmosphere for working from home option and to refer for citations. Book as gifts home is proven to positively benefit the gifted children in a myriad of ways. Number of studies have revealed that the mere presence of a home library increases children's academic success, vocabulary development, attention and job attainment. Moreover, the disciplinary nature of self decision making and problem solving skills. The ambience for the creation of home libraries accord with the challenges faced at work. To make home library, the following are the better identified options as:

- a. Choosing a spot, which is quite accessible to the reading room or working area with doors.
- b. Storing the books, where there is vibe for the protection of books and files copied from them.
- c. Flooring to protect from insects, which is very much necessary to safeguard them from the insects.
- d. Storing the collection, there are number of methods suggested according to the environment, however subject wise alignment and piling in the alphabetical order.
- e. Shelving style that needs to be maintained with special setup
- f. Collections, have to be set with priorities; like encyclopedia, dictionary, series, periodicals, magazines, documents, maps (hung or pasted) etc.
- g. Allocation of books where they are the needed more
- h. Alignment with vertical order

i. Decoration and lighting to create pleasant tone for reading

j. Catalogue maintenance is easy to handle

k. E. collections, like CDs, films, documentaries, tables and games.

A home library is a collection of materials on one or more subjects related to the interest of the readers in a house. The utilities of home library are found to be the natural source of knowledge to the people in the house, which makes them work tense free environment as:

a) A reminder to read the necessary books for the people who work in official institutions and companies for regular reference and clarifications.

b) A source of reference for the thought process of related topics in the field of education and administration is the most beneficial part of scholars and professionals who always perform with proper perfection.

c) An inspiration for the children home to take and read petty novels and short stories to develop the habit of reading. Even when the parents utilize books that are viewed by the children, psychologically gives the children, readers an inspiration to read.

d) An ambience for the reading environment for the children to have easy access to the update of their knowledge other than the academic works given in the school

e) A package of mini collections helping the children home and the home makers to have continuous reading for spending their time in a useful manner.

f) A shelf of books that makes the home appear neat and a showcase of knowledge

g) A collection of newspapers and magazines in the home library is a source of reference for the children to have projects that are given in the school and for the men and women who works outside get relaxation reading in the house.

h) A handful matter of assistance to engage the guests who visits home for any work or casual kith and kin relationship.

i) A support for the old aged people to have extra joy in reading books.

Finding these above mentioned utilities, one could easily frame a home library with the scope of having multiple usages that is an extra energy for the vibrant life that has been found compact with the realities of the modern intervention. The generally included primary sources of information are found valid in the home library with the help of books. With regard to the secondary sources, it offers to maintain permanent collections and attempt to provide access to all necessary materials, which are needed for the accomplishment of works in the office or in the working environment. To have home library, within the special area in the house, it is found that it is a psychological support to the people who are involved in multiple areas of working environment.

The modern twenty first century has been finding an increase of usage of the Internet. It is to gather and retrieve data from what has been stored on the internet. There are number of studies that inform that online sources have played greater impact on the way people cannot use physical libraries. The statistics shown by the scholars show that

Between 2002 and 2004, the average American academic library saw the overall number of transactions decline approximately 2.2 percentages (177). Libraries are trying to keep up with the digital world and the new generation of students that are used to having information just one click away. For example, the University of California Library System saw a 54 percentages decline in circulation between 1991 and 2001 of 8,377,000 books to 3,832,000. (7) There are many open E-book Forum found that are close to a million e-books had been sold, which has an influence on the common people who tend to have the home library. The shift to digital libraries can be also another means of information. The home library has the utility of feasible advantages to the academicians and the student circle. Carrying out the institutionalized set up in the home environment has put forth varieties of decisions as:

a) Make the home television as a home theatre and attach it with data

connectivity for the easy access for switching on to online references that encourage the reader become close with the modern technology and advanced utilities.

b) Use audibility facility for listening to speeches and conferences when they are either recorded ones or online. This is in multiple options such as recording the life programmes online and the time setting recordings, which could be played utilized the speeches or researches in the modern world of technology. The gift of Youtube replays let the readers and researchers spend time in a valuable manner at ease without hurry.

c) Fix it with cloud storage for having the free storage options unlimited.

Though the storage options are high in size, one does not stay keen on checking the space, however, the online storage supports the reader refreshed with the availability of time management.

d) Make the availability of optical keyboard and mouse for using from any area in the house that could make trouble free facility

e) Use voice for the searches online to avoid time being wasted. This even makes the non typewriting learners to type on the search screen automatically through the usage of voice.

The above stated suggestions could be the minimum requirements for using online accessibility to have home library enacted with the storage of library in the house. This could help one enjoy the update versions of the books available on the related topics. This facility of home library makes an ambience for the younger generation to browse and get the knowledge on hand to venture into the natural phenomena of moving towards achievement. Robby Berman reveals a truth as, "Growing up with home libraries boosts adult skills in these areas beyond the benefits accrued from parental education or own educational or occupational attainment... education become as literate, numerate and technologically apt in adulthood as university graduates who grew up with only a few books". (1) Home library is a gift and this will encourage the teens and the youth have their hobbies connected with home library. Stamp collection, coin collection and newspaper cuttings could be done

with the easy availability of the books by referring them on the process of education or professional achievement. The current journals could be added to the home library, which could support the academicians and the business persons to have references and contacts in their fields of interest. Home library is a boon to the modern communities facilitated themselves with the books and journals that are required for research and hobbies.

References

1. Burnstein, Richard B. Jefferson, Thomas: The revolution of ideas, Oxford University Press, 2004.
2. Victor, Ma. So. Kumari Continent, Naller publication, 2007
3. Lamba, Manika. "Marketing of academic health libraries 2.0: a case study". *Library Management*. 40 (3/4). 2019. doi:10.1108/LM-03-2018-0013.
4. Dowler, Lawrence. Gateways to knowledge: the role of academic libraries in teaching, learning, and research, 1997. ISBN 0-262-04159-6 there
5. Modell, David A. "Children's Libraries". In Rines, George Edwin (ed.). *Encyclopedia Americana*. 1920
6. Aina, L.O. Library and Information Science Text for Africa. Ibadan, Nigeria: Third World Information Services Ltd. 2004. ISBN 9783283618.
7. Applegate, Rachel. "Whose Decline? Which Academic Libraries are "Deserted" in Terms of Reference Transactions?" *Reference & User Services Quarterly*; 2nd ser. 48 (2008): 176–89.
8. Joen, D. Classroom Management, Capecommerin Publishers, 2022.
9. University of California Library Statistics 1990–91, University-wide Library Planning, University of California Office of the President (July 1991): 12; University of California Library Statistics July 2001.

10. <https://bigthink.com/the-present/mind-brain-home-library-benefits/>

11. <https://www.sciencedirect.com/science/article/pii/S0049089X18300607#fig2>

Issues Faced by Female Cardamom Plantation Workers in the Idukki District.

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Abstract

Kerala's highlands are renowned for their wide selection of spices. One of the principal spices grown there is cardamom. The "queen of spices" is cardamom. Indian cardamom is one of the rarest and most expensive spices, and it has been used since the dawn of human civilization. This spice is thought to have originated in Sri Lanka and southern India. After saffron and vanilla, cardamom is sometimes cited as the third most costly spice in the world. India offers the ideal growing environment for cardamom. Indian cardamom is incredibly rare on the world market due to different farming practices. Cardamom comes in a variety of kinds and grades. There are three main varieties of tiny cardamom: Malabar type, Mysore type, and vazhukka type. "Black cardamom," is big cardamom. Cardamom has a variety of uses. One of the few agricultural products produced in India that is heavily focused on export is cardamom. According to Pandit Jawahar Lal Nehru's famous remark, "you can judge the condition of a nation by looking at its women's position," there is a correlation between a country's prosperity and the condition of its women. India is a historical nation with a wide range of cultures, religions, and traditions. In India, a woman's role is primarily domestic and restricted to family matters. The majority of India's unorganized workforce is made up of women. Due to their poor skill levels, illiteracy, ignorance, and excess labour, the majority of women work in unorganized sectors for low wages and undergo significant levels of exploitation. The purpose of this research is to understand the challenges of female employees on the cardamom plantation.

Introduction

According to the national commission for women, the unorganized sector employs 94% of all female workers. The fact that there are a

huge number of women working and producing in the unorganized sector, where wages are low, employment is seasonal and unpredictable, supportive services are woefully inadequate or non-existent, growth opportunities are scarce, and collective organization is weak, has emphasized how the mainstream has failed to improve their situation. While it is true that workers in the unorganized sector are exploited regardless of sex, women suffer more as a result of their gender. Women have been heavily burdened by the shifting economic development patterns of the liberalization era, which is reflected in their health status.

Women's health, nutritional status, and emotional well-being have surely been impacted by small farmers, landlessness, and forced migration on a temporary or permanent basis. Female labour has played a significant role in the development of tiny and cottage enterprises. Women labour in a variety of industries, including construction, domestic work, tanning, tobacco, cashew, coir, textiles, garments, fish processing, tea and cardamom plantations, canning, and textiles. They work long hours in all of these fields with low-paid, unskilled, or skilled employees. As a result, they deal with major health issues associated with their jobs, risks posed by pollutants to adolescent female workers, and the negative effects of childbearing on women. Despite putting in the most work, women paradoxically make the least money. Due to the additional social responsibility, they bear, their inferior position in society, the patriarchal family structure, socioeconomic deprivation, propensity for employment in the unorganized sector with low productivity, and marginalization in employment opportunities, they are at a high risk of exploitation. This limits their ability to negotiate for higher pay and any potential for career advancement.

Tea plantation workers

Plantation employees, especially women with limited incomes, have exceedingly terrible living and working conditions. Dalit migrants who speak Tamil make up the majority of the workforce in the plantations of Idukki, Munnar, and Kumily. Workers from underprivileged tribal families migrate to north-eastern India. Most of the employees are

female. Many of them reside in one-room shacks without basic amenities like drinking water or sanitary facilities. Many households suffer from malnutrition, making them susceptible to infectious infections. There are no available medical facilities. Their health may be impacted by issues relating to exposure to the pesticides used in plantation estates. Their children have few opportunities for high-quality education, and frequently, they are hired as workers. Trade unions are not present; thus, employees cannot address management issues. If there are trade unions at all, they are male-dominated and pay little attention to the concerns of female workers. The workers' lives were wretched as a result of the state's absence and the lack of trade unions, on the one hand, and the exploitative management, on the other. The plantation owners built up mini-empires on their properties. They refused to pay the workers' minimum salary. There are frequent payment defaults for the employee. The plantation labour legislation (PLA), which was passed in 1951, governs the living and working conditions of workers on tea plantations in India. It also establishes minimum requirements for housing, healthcare, and education, as well as limits on the number of hours that may be worked, overtime compensation, the use of children as labourers, paid time off for sick or maternity leave, and other working conditions. But there is no state to put the law into effect.

Scope of the Study

I. If the government is concerned with preserving the rights and minimal interests of plantation workers, the study's findings will properly attest to a major step toward achieving that goal.

ii. The application of these research findings will benefit all classes of plantation workers, and it will provide a magnificent example for a government that values democracy.

III. Democracy, which is defined as equality in all spheres, will be demonstrated by revising these conclusions, which must be overseen by a committee with administrative and judicial authority because the application of the law is more significant than its creation.

iv. The research's recommendations were developed via arduous, painstaking work, and if they are implemented into the plantation labour act and plantation labour rules with the appropriate requirements, they will demonstrate that the rule of law never dies and just sleeps. The plantation labour community will also achieve a high social position, demonstrating that everyone is equal before the law and in society.

Review of Literature

Chaudhuri RN:2000: Occupational health problems among agricultural and plantation workers: Agricultural and plantation works are associated with a variety of unique occupational health hazards in the form of physical factors like extreme weather conditions, sun rays, etc; chemical toxicological hazards in the form of pesticides/fertilisers, etc, including different forms of biological and mechanical hazards. As most of our rural people are engaged in varied types of agricultural activities, they are highly susceptible to suffering from numerous work-related health disorders. There are very little data regarding the epidemiology of occupational health disorders among agricultural and plantation workers. A clinically well-recognised group of occupationally acquired health problems may be respiratory, dermatological, traumatic, poisoning or neoplastic in nature. Prevalence of some specific zoonotic diseases and behavioural health problems are also found to be more among them. There is a lack of attention to the prevention and control of these occupational health problems. An adequately developed comprehensive occupational health care programme having all the components of preventive, curative and rehabilitative aspects can only promote and maintain the highest degree of physical, mental and social well-being in all types of agricultural and plantation workers of rural India.

Share K Bhowmik (2015) Living Conditions of Tea Plantation Workers: The strike by women workers in the tea plantations of Kerala brings to the fore the miserable living conditions of the workers in this sector across the country. With more than a million permanent workers, the tea plantation industry is the largest in the formal private sector in

the country. Yet the wages of these workers are the lowest in the formal sector and their living conditions are appalling. Though there are laws that govern the living conditions of workers, these are violated and the state seems indifferent.

Taylor & Francis (1998) *Women Plantation Workers International Experiences*: This pioneering collection of essays brings together a description and analysis of women workers and the socio-economic systems of plantations worldwide. The plantation remains a formidable force in many areas of the world and new trends towards tree farming call for further examination of its agriculture. Women have, in the past, constituted a considerable percentage of the workforce in this milieu, and continue to do so. Using specific case studies of historical and contemporary plantations, an account is given of the history of female labour, focusing on the colonial and post-colonial eras. The essays examine reasons for women's degraded status and emphasize, in particular, issues relating to migrant workers. The gradual move away from traditional family roles is, to some extent, reflected in variations in the position of the female plantation worker. However, where inequalities in class and status continue to characterize plantation life, capitalist and patriarchal control prevail. Both chilling and bracing, the sufferings of plantation labourers may seem remote to most of us, but they are still very much part of the contemporary world. Providing a close insight into the lives of the female protagonists, these essays have allowed their stories to be heard.

Scope of the Study

Both urban and rural women were more interested in working on cardamom plantations in recent years. This shift in employment can be attributed to decreased agricultural operations caused by insufficient rainfall and coshes. Since they must make a living at such high costs, women look for alternate occupations. She faces challenges in her personal life, professional life, and in her interactions with her family, coworkers, and friends. The researcher has observed several workers for tea plantations in hotspots like Kerala's Idukki District. These

women seem to be under pressure to take into account factors including job availability, commute time to a new job, their sentiments of unease about their occupations, and the late hour at which they must return home. This is why the researcher opted to research these women who work on cardamom farms. Therefore, the researcher is motivated to look into the problems. The researcher was inspired by this to look at these women who work on cardamom farms. The researcher is therefore curious to find out more about the problems that tea plantation workers deal with in their professional, familial, and private life.

Methodology

Both primary and secondary sources are used to get data. The primary cardamom growing area in the Idukki district, Chakkuppallam panchayath of Udumbanchola taluk, has provided the information. To gather information about the issue of cardamom plantation workers, 50 female cardamom plantation workers were randomly chosen from the Chakkupallam panchayath and Major cardamom trading hubs in Vandanmedu, Puttady, Kumily, and Puliyanmala were also contacted for information. Magazines, weeklies, bulletins, newspapers, and journals are used to gather secondary data.

Additionally, a test survey is used. Idukki district is chosen for a thorough investigation because it is home to a significant portion of cardamom growing. Udumbanchola, Thodupuzha, Peermedu and Devikulam, and Idukki are the four taluks that make up the district.

Limitations of study

- i. The study is solely based on the opinions of a small number of respondents, thus its findings could not apply to all.
- ii. This study's geographic scope is limited to the Idukki District alone.
- iii. The research is time-specific.
- iv. Using a practical sample technique, data from diverse tea plantations and unions are collected for the survey.

v. This study's findings apply to the method's limitations.

Data analysis

The type of Population is Women employees employed in cardamom plantations women in Idukki Kerala. Population Source List Obtained from the various tea estates records, payroll etc. Sample Source Derived from the population source of selected tea plantation in Idukki at Kerala, Sampling Unit Women employees working in cardamom plantation estates. Sampling Method Multi-stage sampling. The entire Kerala state was divided into district wise and samples were obtained from the known population of women employees belonging to tea plantations and women workers based on the method of the cluster from every tea estate the samples were drawn on a random basis in a disproportionate method. Sample Size 370 Sampling Plan Tea plantation women worker Sources of Data Both Primary and Secondary Data Sources of Primary Data Obtained from the respondents of women employees from tea estates through structured questionnaire sources of Secondary Data Gathered from the previous studies, government-related gazette, census and periodicals Nature of Questionnaire A structured questionnaire with suitable scaling.

Suggestions from the study

1. Given the low pay for women workers, they should be paid fairly to raise their skill level.
2. It is important to inform and educate women employees on their legal rights and protections.
3. It is crucial to educate female employees on the institutional resources available to them to uphold their rights.
4. To defend the rights of women employees, a comprehensive law is required.
5. It is important to avoid all forms of exploitation, including sexual

harassment of female employees, and to punish offenders seriously.

6. The social message of women's equality should be spread through the media.

7. In every organised sector, a separate women's grievance cell should be established and run by a woman. In the case of unorganised sectors, women should form self-help groups to ensure their safety.

8. Workplace regulations must be changed as needed. Unorganized sector industries need to be properly regulated to guarantee job security, a healthy work environment, at least minimum salaries, and benefits for maternity leave and child care.

Conclusion of the study

The unorganised sector of the economy includes tea plantations. Unorganized employees are individuals who have not been able to band together to advance their common interests due to a variety of obstacles, including the sporadic and uncertain nature of their employment, ignorance and illiteracy, and the small and dispersed nature of their workplaces. They are employed in a setting or culture that is unsafe. Only with government action and stringent policy implementation can the situation be changed. A strict response must be given to anyone who harasses personnel. Government programmes must be known to all employees. Women's status can only be enhanced when society undergoes a significant shift, which can be brought about by shifting one's perspective.

Additional study is needed in this area. More research is needed in this area to offer suggestions for solutions to current concerns, as well as on topics like social security and the advantages of unions and labour laws for workers.

Traditional Art Forms of Muthuvan's in Idukki District

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Abstract

The Muthuvans were a distinct tribe that lived primarily in deep and dense forests during the early periods. They had been labeled by nature's mesmerism and were forced to unite and cooperate with the natural phenomenon in a respectful manner, living very traditionally with their own heritage. The Muthuvan were rich in art forms and had their own culture. Muthuvan art forms are kummiyadi, muthuvankooth, thiponkal, kenjiyattam, mylattam, and arulnirtham. Asappattu, koothpata, and thalatupattu are important.

Keywords-kummiyadi, thipongal, kenjiriyattam, arulnirtham, mudugars, thundupidikkuva

Introduction

The 'Muthuvans' or 'Mudugars' are a tribe of cultivators in the hills of Coimbatore and Madurai. They're also found in the Adimali and Devikulam forest regions of Idukki district, Kerala. In keeping with tribal legend, the 'Muthuvan' humans have been dependable subjects of the dynasty of Madurai. When the dynasty was deposed, the remaining royal participants fled to Travancore. On their way to Kerala, the Muthuvas carried the idols of Madurai Meenakshi, the deity of the royal family, on their backs. The phrase "Muthuvar" in Tamil is used to denote the same network in Tamil Nadu. The phrase "Muthu" is way older and literal, which means "Muthuvar" is elderly. The Muthuvan are the historical tribes of this land. The Muthuvans are very unbiased and reluctant to have any interaction with the outside world. The Muthuva tribe grows ragi, cardamom, and lemon grass. Now they're also cultivating bananas and tapioca for their day-to-day usage.

Thaipongal

Thaipongal is perhaps the most important festival of the Muthuvan caste. Thaipongal is usually celebrated in association with the change of residence or dwelling place. But such practises are not common now. But it is celebrated in Tamil Nadu. Thai Pongal is a Tamil harvest festival. Thai Pongal is celebrated over four days, usually spanning January 13 to 16 in the Gregorian calendar. This corresponds to the last day of the Tamil month Maargazhi and the third day of the Tamil month Thai. The day marks the start of the sun's six-month-long journey northwards (the Uttarayanam). This also corresponds to the Indic solstice when the sun purportedly enters the 10th house of the Indian zodiac, Makara, or Capricorn. Thai Pongal is mainly celebrated to convey appreciation to the Sun God for providing the energy for agriculture. Part of the celebration is the boiling of the first rice of the season, consecrated to the Sun by the Surya Maangalyam.

Muthuvankoothu

The clan of Muthuvan also performed 'Koothu', similar to that of the Mannan tribes. As there is no one in the Muthuvan community to sing the song of Kovilan, they are simply singing the Assai song and kilapattu to perform the Kooth. Before the koothu sacrifices are offered to the gods of the forest land, Kali The sacrifices and prayers are conducted before the idol of Kali, where women are not allowed. The diety's flowers are fed to a bamboo stick, which is placed in front of the large where Koothu is performed. All the tribals are informed and invited with the help of musical instruments.

The stage is made pure with cow dung paste, and the hatched roof is full of decorations. All the members of the clan stay there because the Kooth is its owner. Compared to the other tribes, the Muthuvankoothu use a large number of musical instruments. Kidumpetti, Mathalam, Ganchirakattu, Urumi, pikki, and Chalara are the main instruments they use. Urumi and Pikki cannot be played without enough practice. Their songs have only five or ten times repeated songs twenty times to repeat during the Koothu. Kenechiyattam

Another art form of Muthuvan tribe is Kenechiyattam. It is performed as a part of Muthuvakoothu. Men and women performed in this dance separately. There is no special dress code for the Kenechiyattam. Throughout the play they have to help a corner of the sari which is referred to as 'Thundupidikkuka'. During their performance the movements are based on the rhythm of musical instruments and there are no songs. Kenechiyattam continuous for a long time and stops as the instrument player reaches the highest pitch. After a short break they continue the Kenechiyattam. After people participate this tribal art is just for entertainment. Kenechiyattam is performed by the Malayarays, paliyans and Urali. Paliyan sing songs during the kenechiyattam. No special training is required to o this kenechiyattam. Even small children can participate in it. Paliyans performs this Kenechiyatam is in accordance with the leaning of forest ceremony in February and also during celebrations like marriage and death.

Mayilattam (Peacock dance)

Mayilattam, or peacock dance, is a dance item of Tamil culture. This dance is typically associated with tribal communities such as Malayarans, Paliyans, and Muthuvans. They make a beautiful peacock with the help of cardboard and coloured paper. This is tied to the waist of the performer before the dance. The Peacock dance is performed for entertainment and to please God Muruka.

Kummikali

Kummikali is a Muthuvan community art form played by young women. They will in a rhythmic movement accompanied by kummipattu.

Arul Dance

The unique feature of this dance performance is that the dancer is possessed by the pouner God or God tears the body of the dancer and becomes one. This dance is known as Kalikottal, Kalithullal, Velichappedal, and Arulappadal. Special dress and ceremonial dress are used. It is believed that God's presence is felt during the dance. There is no specific step for this dance. Yet it is performed as a ritual. The dancer

and the god become one, or the merging with god, is the belief behind this dance.

Conclusion

The tribal communities of Idukki district have a long tradition Among the Muthuvan communities special attachment towards Tamil language and tunes. But as a result of their mingling with modern communities their traditional values are violated or neglected. All the tribal art forms are a product of their unique structure of society and life. Therefore any changes in their lives and society bring changes in their art forms as well. Nowadays, the Muthuvans look at the Muthuvankoothu. The Muthuvan community had already conducted a “muthuvan sangamam”. The uralis in Venmani have their own association. Social security and preservation of their art culture are the main objectives of this organization. more sincere and vigorous.

References

1. Dr. S.R. Chandramohanam, Idukki Adivasi Pattukal, Kottayam, DC books, 2012
2. T.Rajesh, Idukki Charithrarekakal, e-lion books, Kattappana 2008
3. Gopi Theva mannan ,Ettekkar,vattayar,Adimali on 02/04/2022
4. Personal interview with Thagappan (muppan) Thattekannan kudi on 04.12.2021.
5. Personal interview with Kumar Thattekannan kudi on 04.12.2021..
6. Personal interview with Suresh Thattekannan kudi on 04.12.2021.
7. Personal interview with Ganapathi koziyalakudi on 08.12.2021.
8. Personal interview with Ammini kuthiraallukudi on 15/02/2022
9. Personal interview with Aswathy kurathikudi on 05/03/2021.
10. Personal interview with Mutthu koomalikudi on 16.07.2022

Evolution of Agriculture and Impact of Rural Migration on Cardamom Hill Reserve (CHR)

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Abstract

The abundance of spices from Kerala has drawn the attention of orientalist and occidental lists. Idukki Hills had been planted with forest products centuries ago. Historical evidence reveals that we traded spices with foreign economies before BC 3000.

The Western Ghats' Cardamom Hills region includes the eastern portions of Periyar, the southern portions of Devikulam, and the western portions of Kumily Hill Pass. The Travancore monarch Rani Gouri Parvathi Bhai's declaration helped make cardamom farming prominent in this area. Government established the Cardamom Department and Laws as a result of this declaration. An orchestrated framing caused by extensive migration destroyed the forest's natural growth and performance in the Cardamom highlands. Records indicate that due to cardamom planting, almost 1.5 lakh Hectar of woodland disappeared. The region's sensitive climate and natural soil fertility were diminished by large-scale migration, deforestation, and high-tension pesticide use.

Key words: Cardamom Cultivation, Deforestation, Sustained Agriculture, Climatic Change.

Introduction:

Beginning in the early 20th century, social phenomena including migration to hilly areas were observed. Here, prehistoric, Stone Age, tribal, Tamil plantation, and other historical situations coexisted. Migration would be the best explanation for the current cultural situation in the area. The rapid pace of migration was prompted by the need for healthy, organic food, the eradication of poverty and disease, and the demographic characteristics of population expansion.ⁱ

A group of foreigners and Tamil people moved to the hills of the Idukki district when the plantation trade began in these areas in the late eighteenth century. Following that, a large number of residents of the state moved to this region in order to engage in trade and find employment. Immigration continued to flow continuously from 1940 to 1955 until the 1970s. The agricultural, economic, and cultural conditions in the hilly regions are a result of subsequent administrations' encouragement of migration. Idukki, the valley of spices, then began to build a completely new agro-culture area.

Idukki and the neighboring hilly areas had a bounty of profitable crops. Although forest crops like cardamom, pepper, ginger, honey, and sandalwood, among others, they became the ones for worldwide exporting goods or commodities as a result of rising migration and foreign invasion. Cardamom became very famous and in high demand among many commodities baskets. The primary focus of the topic to be discussed is the history of the cardamom hill reserve and the ecological issues Idukki, which is a part of the Western Ghats, is currently experiencing.

History of Cardamom Hill Reserve:

The area known as Cardamom Hills is located in the Western Ghats, east of Periyar, north of Kumali mountain pass, south of Devikulam, and west of Tamilnadu. This region, which is a part of the Udumbanchola Thaluk, is high-end. Since prehistoric times, tribal clans have assisted in the collection of cardamom, a private resource of this region and a vital spice in international trade. The Thiruravakoothu Decree was introduced by Rani Gouri Parvathibhaai, the ruler of Thiruvithamcore, and it made cardamom an agricultural product and its production a significant industry. As a result, the government has owned the plantations on the hills to the east of Periyar since 1822 AD.

The Cardamom hills came under the purview of a special officer in 1867. The former forest conservator U. V. Munroy was appointed the cardamom superintendent. His responsibilities included gathering cardamom and growing the cultivation. The announcement on

Cardamom Hill Research was made on August 11th, 1897. The Cardamom Hill Reserve was established in the Udumbanchola Taluk in 1893 in accordance with the second rule. The total area of the CHR is 15720 acres. The government approved the growing of cardamom in the forested areas in 1905. The

Kottayam forest division was established in 1913. When it comes to deforestation and forest protection measures, the conservatory department has reached the government. And the expansion of the farming was cited as the cause of this destruction of the forest.

In 1935, the cardamom rule was extended. In the reserves, cardamom growing was permitted. The district collector was in charge of the first ten hectares of land; the government owned the rest. The Girijans were given free access to 1.2 hectares of land.

From 1942 tenure monopoly began in the reserves. With the increasing destruction of forest regulation of the tenure monopoly was implemented. But this took a different turn with the Second World War. When famine started to increase the government encouraged food production and immigration. In the total cardamom cultivation which is about 73000 hectare in India, 41000 is in Kerala and 90 percent of this is concentrated in Udumbanchola Talukⁱⁱ.

The Present Conditions of the Cardamom Hills Reserve

The natural phenomena in the forest also started to be impacted when joint farming began in the cardamom hills, which were solely under the control of the forest service. According to statistics, 1.15 lakh hectares of forest have been lost in the highlands. This thus has an impact on the climatic factors required for cardamom farming. Additionally, increasing the use of pesticides and fertilizers to boost output invites more calamities.

Climatic changes

The research over the last thirty years conducted by the Agro Climatology department of Pambadum Cardamom Research Centre shows that there

was a considerable increase in temperature/heat in the Western Ghats.ⁱⁱⁱ The research concentrated on 2800 sq.ft area of land. Here the Western Ghats is forty five kilometer wide. This difference in temperature will also affect the production and cultivation of cardamom. It is with the help of the automatic weather station built with the assistance of ISRO that the Cardamom Research department conducted the research. During this time span the greatest climatic change is found to occur in the Cardamom hill reserve. The decrease in rainfall also had adverse effect on the cultivation. The reason for this is attributed to extensive deforestation.

Use of Pesticides

In the mountainous regions where wide range of cardamom, tea, pepper, bridle, and bitter gourd are cultivated there is an unscientific use of fertilizers and pesticides. The cardamom research conducted under the guidance of professor Muthuswamy Murugan of the Pambadum Cardamom Research Centre shows that twenty years since 1990, the cardamom production has been increased from 200kg per hectare to 800kg. This also shows that for such an increase in production there is a simultaneous increase in the use of fertilizers and pesticides.^{iv} The highest use of fertilizers and pesticides in the state is found to be in the Cardamom Hill Reserve. When the normal usage in cardamom cultivation is 400g per hectare, it is estimated to be above one fourth a kilogram in the Cardamom Hill Reserve. Researches also reveal that when it is advised that the use of pesticides and fertilizers in cardamom cultivation can only be seven times in a year, the reserve uses it in a dangerous rate of nine to twelve times a year. Water resource of the CHR cultivation area when tested was found to contain copper, cadmium, zinc, aluminum, lead and ions like nitrate, phosphate etc.⁹ in tremendously increased amounts^v. This will have unpredictable effects on humans and other living things.

Conclusion

Though migration initiated destruction of nature, it bears the stamp of the agro-culture, and a culture of the work. Adverse effects have been

expanded as part of this. There is a large scale conversion of forest areas into arable lands for past two decades. The inability of the industrial sector in the district and neighboring areas to absorb the labour force also acted as a catalyst for the large scale encroachment of forest areas. Such developments and changes are inevitable and they need to occur because time, place and people demand it. The only thing that can be said in these cases is that limits have to be kept and made for wants and needs. Every move should be with respect to our needs and not our greed. Change is inevitable but it will not be at the cost of the environment. Thereby, sustainability of nature and culture and the economic life of the people without affecting biodiversity should be the motto of any development processes of the contemporary.

Endnote

i K.T. Rajeeve “Sahyaddariyil Ninnun Matakayathra Idukki- Mannum Manushyanum”. Kerala Sahithya Academy 2007.pp 58

ii K.T. Rajeeve “Sahyaddariyil Ninnun Matakayathra Idukki- Mannum Manushyanum”. Kerala Sahithya Academy 2007.pp 65

iii A.S. Sumesh, Article- “ Malayiragunna Mazha Veyilurykkunna Mala” (as cited in Mashithande Masika- june 2014vol.1)

iv V.K. Presanth an article, “Visham vizhunna Mannum Manushanum” (as cited in Mashithande Masika- june 2014vol.1)

v Ibid.

Bibliography

Mathirappally, Manoj. “Idukki Charithravum Charithratheethavum”. Kattappana: Kazhcha Books Publication, 2001..

Rajeev, K.T. “Sahyaddriyil Ninun Matakayathra Idukki: Mannum Manushyarum”. (Local history – Malayalam). Thrissur: Kerala Sahitya Akademi, 2007.

Rajesh,T. “Idukki- Charithrarekhakal”. Kattappana: E-lion Books Publication,2008

P.K Mohanthi IAS.(Edited) “ District Handbook of Kerala- Idukki.

V.K. Presanth ,(article), “Visham vizhunna Mannum Manushanum”
,Mashithande Masika- june 2014

A.S. Sumesh, (Article)- “ Malayiragunna Mazha Veyilurykkunna Mala”
Mashithande Masika- june 2014

Websites

<http://idukki.nic.in/>

http://cardamomhillsreserve.blogspot.in/2011/01/blog-post_1104.html.
26/092014.

<http://117.239.77.10/~forusr/tckottayam/>

Representation of the ‘Otherised’ Hijra Community in Arundhati Roy’s

The Ministry of Utmost Happiness

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Abstract

Transgenders are subjected to social exclusion and alienation for a long period of time. These people are shunned by family as well as society, and face identity crisis as they could not define themselves in the conventional male and female boundaries. In every society, they are marginalized and forced to live a life of an “other.” Their education as well as public space is restricted or they themselves choose to live a life of seclusion due to certain limitations. Arundhati Roy’s *The Ministry of Utmost Happiness* deals with the transgender issues and the present paper is an attempt to unfold the unbearable bitter truths of marginalized groups of society such as Hijra Community who are victims of injustice, inequality, prejudice and humiliation.

Keywords: Transgender, Hijra, Marginalised, Injustice, Identity Crisis

‘Transgender’ in its origin is disunion between one’s feelings of who one is and how one is perceived, recognized and understood by others. The experience of being transgender complicates the relationship of the self to the body, and the self to the others. In doing so, it also creates issues of identity boundaries, stability and coherence. Transgender identities do not relate to their biological sex, and hence they differ from the stereotype of how men and women normally are. Their identity and behaviour do not adhere to the stereotyped gender norms. They constitute the marginalized section of the society in India, and thus face legal, social as well as economic difficulties. They have restricted access to education, health service and public spaces.

The Ministry of Utmost Happiness revolves around the life of Anjum,

a transgender who was born as Aftab, the son of Jahanara Begum and Mulaqat Ali. The sexual identity of the child terrifies the mother and she does not reveal it even to her husband. Both expected a baby boy but quite contrary to their conventional expectations, it was neither a boy nor a girl. Jahanara Begum thought, "In Urdu, the only language she new, all things carpets, clothes, books, pens, and musical instruments - had a gender. Everything was either masculine or feminine, man or woman. Everything except her baby" (Roy, 8). She knew that there is nothing in this world is in between but her child is trapped in between. She was anxious about her future whether she will have recognition, status and respect in the society or she will be abandoned. At first she concealed this truth from everyone, including her husband. She would not allow anyone to go near him. With the belief in God, she visited many temples and shrines. At the shrine of Hasrat Sarmad, she prays "this is my son, Aftab. I've brought him here to you. Look after him. And teach me how to love him" (16). Mulaqat Ali, his father desperately attempts to help the child become "normal" but he finds that his child is unable to fit comfortably into one sex. Anxious parents took Aftab to a sexologist named Dr. Ghulam Nabi in hope that he may give any solution to heal the girl parts of Aftab. After examining Aftab he said that Aftab is a Hijra-a female trapped in a male body. Aftab up to the age of nine, continued to attend music classes. He had sweet, true singing voice and could pick up a tune after hearing it just once. At first people were amused and even encouraging, but soon the snickering and teasing from other children began. "He is a She. He is not a He or a She. He is a He and a She. She-He, He-She Hee! Hee! Hee!" (12). When the teasing continued and became unbearable, Aftab stopped going to his music classes and refused to go school any more. Aftab finds himself physically and psychologically disturbed because others expect him to fit into the conventional system. He had a body which blurred the conventional borders of male and female. The protagonist Aftab brings to light the problems of living in a gender defined society. Judith Butler's observes: "We need not consider gender to be passively determined but it is a process of constructing ourselves" (31).

Aftab, now caught in the male-female conventional boundaries begins

to search his real place in the society. One day he saw a tall woman who walked without covering her head. She was a tall woman and wore makeup and high heels. The tall-slim hipped woman wearing bright lipstick, gold high heels and a shiny, green stain salwar kameez, was buying bangles from a bangle seller. He keeps a gaze on the woman and is pleased with her appearance. Aftab decided to follow that woman who could dress and walk as she did. "Whatever she was Aftab wanted to be her" (18). He wanted to put out a hand with painted nails and a wrist full of bangles. He wanted to lift his salwar just a little enough to show off his silver anklets. He learned that her name was Bombay Silk and that there were seven others like her, who lived together in the Haveli called Khwabgarh- the house of dreams. At first, he was driven away. After dedicated days of doing odd works for them, like accompanying to the market, carrying their bags, running errands and massaging their feet at the end of the day, he finally earned himself admission to the Haveli. It was a broken home. But the freedom to be he made it feel like heaven. One of the friends he got there was Nimmo Gorakhpuri. "Do you know why god made Hijras? She asked Aftab one afternoon, it was an experiment. He decided to create something, a living creature that is incapable of happiness. So he made us. Aftab was hit by the force of her words. He thought everyone was happy in the Haveli" (19).

By the time Aftab turned fourteen, he started to understand her words. He grew tall and muscular and hairy. In a panic, he tried to remove the hair on his face and body with Burnol ointment that made dark patches on his skin. He plucked his eyebrows. He had Adams Apple and he was repelled by it. He grew quiet and stopped singing.

At the age of fifteen that Aftab stepped permanently into another universe. With the rules and rituals initiated to formally make him a member of the Hijra community. The next night Aftab was presented with a green Khwabgah dupatta and initiated into the rules and rituals that formally made him a member of Hijra community. Here Aftab became Anjum, disciple of Ustad Kulsoom Bi, head of the household and had to live a life outside Duniya. Kulsoom Bi describes the agony of Hijra in one of her conversation with Anjum as "Ordinary people

in the Duniya-what did they know about what it takes to live a life of Hijra? What did they know about the rules, the discipline and the sacrifices? Who today knew that there had been times when all of them, including her, Ustad Kulsoom Bi herself, had been driven to begging for alms at traffic lights? That they had built themselves up, bit by bit, humiliation by humiliation, from there? The Khwabgah was called Khwabgah because it was where special people, blessed people, came with their dreams that could not be realized in the Duniya. In the Khwabgah, Holy souls trapped in the wrong bodies were liberated.” (53). Then on, Anjum was finally able to dress in the clothes she longed to wear. She learned to communicate with the signature spread-fingered Hijra clap. On Anjum’s eighteenth birthday, Hijras from all over the city came. For the first time in her life, she wore a sari, a red disco sari. She dreamed that she was a new bride on her wedding night, but in reality she appears like a man. She felt humiliated and howled like a wolf, hitting herself on her head and between her legs, screaming with self-inflicted pain. Ustad Kulsoom Bi managed to calm her. The word Hijra she said, meant a body in which the holy soul lives. Kwahgah is one such place where the Hijra’s hope to liberate their “Holy Soul” trapped in their wrong bodies. Anjum through her transformations tries to redefine her life. Motherhood is something they longed to attain, but remains as a forever dream. Anjum picked up a girl who was left alone in the streets and treated her as her own daughter. She named her Zainab. In a few weeks, Zainab began to call Anjum as Mummy. Everyone in the haveli quenched their desire for a child through Zainab. She was bathed, dressed, hair oiled, braided, toys brought, puff-sleeved frocks and squeaking shoes.

Anjum at the age of forty-six left the Khwabgah. Her father had died and her mother was bed-ridden. She found her dwelling place in a graveyard, and lived there next to her father for the rest of her life. It was the beginning of her new life. “On her first night in the graveyard, Anjum placed her Godrej cupboard and her few belongings near Mulaqat Ali’s grave and unrolled her carpet and bedding between Ahlam Baji’s and Begum Renata Mumtaz Madam’s graves. Not surprisingly, she didn’t sleep. Not that anyone in the graveyard troubles her no Jinns arrived to

make her acquaintance, no ghosts threatened a haunting”(61). Anjum was so desolate and distressed that she was least bothered of Jinns and ghosts in the graveyard. She looked like a lifeless body. Her emotions have been crushed to the ground. But she bravely fought against all the evil forces, within and outside to survive and prosper. For months, Anjum lived in the graveyard. She stopped grooming herself, stopped dying her hair. Facial hairs appeared. She no more took the hormone injection to cover her masculinity. She decided to be herself. Her old acquaintances came in search of her. They were willing to provide her with hot meals; one of them gifted her phone. Her music teacher Ustad Hameed became a regular visitor. He would sit on some grave with Anjum’s harmonium. Imant Ziauddin visits daily and requests Anjum to read papers to him. “Her tin shack scaled up. It grew first into a hut and then into a small house. She began to groom herself again and she had removed her facial hairs, hennaed her hair into flaming orange, dressed in Pathan suits and gained weight. She built a small house with a little kitchen in the graveyard. Nor of the municipality officers dared to remove her forcefully because they feared of being cursed by a Hijra. Gradually, Anjum began to enclose the graves of her relatives and build rooms around them. She began to rent them to down-and-out travellers. Anjum called her guesthouse Jannat i.e., Paradise. Gradually Jannat Guest House became a hub for Hijras who, for one reason or another, had fallen out of, or been expelled from, the tightly administered grid of Hijra Gharanas. She celebrated Eid and Diwali with great pompous nature in her paradise with her friends.

The Ministry of Utmost Happiness is a subtle and detailed depiction of hermaphrodites, untouchables and other misfits of the society. The selected novel unravels the sufferings, pain and the right of the LGBT community in contemporary India. Through the character of Anjum, Roy reveals various forms of discrimination that exists against women. The society in which she lives is a patriarchal one and therefore her mother is compelled to consider the transgender child as a boy. Her choice of recognizing the child as a boy reveals that women are considered inferior to men. Thus, the selected novel under study presents the undesired sufferings of women who have to face it silently and meekly.

Works Cited

Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity*. Routledge, 1990.

Roy, Arundhati. *The Ministry of Utmost Happiness*. Hamish Hamilton, 2017.

The Role of Oedipus Complex in the Formation of Adolf Hitler's Anti-Social Characteristics

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Hitler once said that, “learning more about an ideology is the best way to defend it.” (V P 11) Human consciousness can be viewed as a text undergoing construction. Literary phenomena are ultimately the result of the fusion of the writer’s mental attitude with that of the outside world. This means that the literary text is no longer limited to being an opaque discourse but rather a transparent space where the author’s psyche is brought to life. A psychoanalytic approach opens the door for a textual safari into the author’s mind and thereby aids in unravelling the roiling cauldron.

American critic and journalist Norman Cousins once said of *Mein Kampf*, “For each words 125 lives, 47, 000 deaths per page, 12, 00, 000 deaths per chapter.” (qtd. in V P 11) Accordingly, *Mein Kampf* is probably the most devastating book ever produced. It is possible to think of the text as his political ideologies’ and his future plans for Germany’s future. It provides an explanation of how Hitler came to be anti-Semitic and demonstrates how he used hatred as a weapon to rule the world. Hitler makes it clear in the preface to his book that he wants to talk to Nazi supporters who have given their hearts to the movement and who want to learn more about it deeply, not with strangers.

In the beginning in 1923, the French army invaded Germany, occupied the Ruhr Region, and seized control of numerous Rhineland cities. After being imprisoned in the Landsberg Fortress, Hitler was forced to write *Mein Kampf* as a result of his ongoing encounter with the events that caused emotional stress and the greatest humiliation Germany had ever experienced, somewhat analogous to the time when Napoleon had shattered the old German empire and the French army had occupied the entirety of Germany.

Hitler dreamed about the Aryan race ruling the entire planet. He thought

that they were the ones who were meant to rule the world and that everyone else was supposed to be ruled. His feelings have always been rooted in a narrow nationalism. He believed that the only way to maintain the Aryan race's purity and German culture and thereby establish the Aryans' dominance over the rest of humanity was to completely eradicate the Semitic races.

Mein Kampf offers valuable insight into how a fascist is formed. Every piece of literature can be viewed as an examination of the author's psyche. Hitler was able to cover every aspect of the human condition, including racial issues, government, nationalism, culture, Social Democracy, sculptures, Marxism, democracy, invasion, individuality, education, propaganda, art, revolution, trade unions, Federalism, security, spirituality, and dictatorship. In a sense, it is a textual fabrication of historical events in support of Adolf Hitler's barbaric actions, and it seeks to elevate Hitler to the status of a superhuman.

Hitler used the idea of "the Jewish peril," which postulates a Jewish plot to seize control of the world, in Mein Kampf. Hitler regarded Judaism and Communism as the two biggest global evils. His revolutionary objectives included the eviction of Communists and Jews from Greater Germany. Hitler became increasingly anti-Semitic as a result of the nation's persistent poverty and unemployment. Hitler thought that both Jews and Communists were to blame for Germany's demise. It is part of the human psyche to blame others—perhaps god, occasionally other nations or other races—for our problems and poverty.

This paper is thus an exploration of Hitler's Mein Kampf to identify and prove that different anti-social psychological disorders that Hitler possessed are outcomes of his repressed Oedipal Complex. The purpose of this research is to investigate the various psychological disorders that Adolf Hitler had and to consider the various circumstances that led to the development of these traits in him. Hitler was influenced by Rosenberg's Suede Science to reckon that Aryans were destined to rule the globe and that the eradication of other Semitic races was the only way to do so. Science denies the existence of the Aryan race. Rosenberg as a matter of fact regarded the Aryan theory as pseudoscience. In order

to support his violent ideologies, Hitler developed the Aryan theory. He made it up by incorporating Socialism, Capitalism, and Working Class Theory into it to make it more alluring.

The founder of psychoanalysis, Sigmund Freud, believed that a person's behaviour was greatly influenced by the unconscious part of their psyche. It is possible to establish that the unconscious psychic energy Id was what motivated the majority of Hitler's traits. Another key personality characteristic known as neuroticism, which influenced Hitler, is characterised by feelings of anxiety, fear, moodiness, worry, envy, frustration, and loneliness. Hitler's psyche developed an Oedipus complex for his mother's love as a result of his unconscious rivalry with his authoritarian father.

Any piece of literature can be examined based on the author's personality. Psychoanalysis helps us to a certain extent to decode the language of subconscious thoughts and to enter the psychic world of an author. We learn from the text that Hitler suffered from a form of neurotic illness since he was a young child. All of it was the result of authoritarian parenting, the nation's poverty, and the humiliation it experienced following the French invasion in 1923 as a result of Germany's defeat in the First World War. Because Hitler was unaware of his personality flaws, he placed a lot of responsibility for his downfalls on many authoritarian figures. During his infancy it was his father, during the adolescents it was the Jews and the Marxist. A wide variety of psychological interpretations had been applied to Hitler. Many psychiatrists has managed to describe Hitler's characteristic as "narcissistic neurotic" and "infantile personality" motivated by sadistic "childhood fixations."

An Individual's conscious and unconscious mental processes, according to Freud, are ultimately driven by psychic entities known as the id, ego, and superego. The id is said to be the source of an individual's aggressions and desires, which can push him toward destruction and even self-destruction in order to satisfy instinctual pleasures. Hitler was an adult with neurotic tendencies whose id was not restrained by the ego and the superego. Hitler's severely repressed oedipal complex can

be linked to his overactive id, which caused him to develop a narrow nationalistic, anti-Semitic, and neurotic character. Hitler possessed a rambunctious fixation towards the purity of Aryan Blood; to him they were the Prometheus of mankind.

Hitler held the view that Aryan contact with the Semitic races led to the emergence of the first civilization. They were ruled over and made to follow orders by the Aryans. The Aryans' leadership was crucial to the advancement of humanity. Before the use of animals and machinery as tools, they used people of Semitic races as the first mechanical tools in the service of expanding civilization. He believed that maintaining the purity of Aryan blood is essential for establishing Aryan dominance over the world and the emergence of a highly developed civilization.

Mein Kampf is rife with anti-Jewish statements and Aryan race supremacy theories. Hitler claimed that Jews provided the most glaring contrast to the Aryans. Aryans demonstrated their willingness to sacrifice their individual beliefs and interests for the good of society at large. Instead of working solely for their own advantages, they contribute their worthwhile efforts to the group they are a part of. Jews, on the other hand, were a lower race that poisoned Germany in order to satisfy their own greed. Jews are a single race, but this is only apparent. They act in concord only when a common danger threatens them or a common prey attracts them otherwise they will turn into rats bitterly fighting against each other.

Hitler's nationalistic fervour was just as dangerous as his racial fervour. During his school years, Hitler's favourite subjects were geography and history. One of the key moments in Hitler's nationalist development was the language conflict that took place in old Austria during his school years. The bitterest forms of the language war were fought in schools. There were three groups, as in every conflict: the fighters, the hedgers, and the traitors. The way language struggle addressed the students, saying things like "German youth, do not forget that you are a German," and "Remember, little girl, that one day you must be a German mother," greatly impressed Hitler. (Hitler 16)

Hitler joined the linguistic conflict at a relatively young age. Perhaps the young people were leading the conflict by using their own methods and tools to fight. They wore the Black- Red- Gold and Cornflower colours of Germany to public meetings to demonstrate their allegiance. They only exchanged “HEIL” greetings. They sang the German anthem instead of the Austrian anthem despite warnings and consequences. Hitler participated actively in the fight for language. His nationalism is evident at various levels of the autobiography: “I developed very rapidly in the nationalist direction, and by the time I was 15 years I had come to understand the distinction between dynastic patriotism and nationalism based on the concept of folk, or people, my inclination being entirely in favor of the latter.” (Hitler 17)

Hitler was a neurotic adult, he often experienced emotional instabilities and most of them were negative emotions like anxiety, repression, frustration and anger. In *Mein Kampf* he interpreted even the ordinary situations as threatening and the minor frustrations as hopeless. Hitler was an ambitious man. He had larger dreams for the future of Germany. The defeat of Germany in World War I struck him like a bolt from the sky. Hitler was hospitalized during the final days of the war following a mustard gas attack on his eyes. On November 10, 1918 a pastor came to the hospital and informed about the defeat of Germany. Hitler’s nationalistic fervor and neurotic character is evident in his reaction to this news, which he described in *Mein Kampf*.

Hitler to a great extent was unaware about the psychological disorders he possessed. Hitler had an outstanding unconscious defensive mechanism his ego always defends itself against unpleasant impulses, tendencies or characteristics by denying their existence in himself while he attributes them to other. Innumerable evidences for this mechanism can be traced in *Mein Kampf*. According to Freud, most of an individual’s future character gets shaped during his childhood. An individual passes through different psychosexual stages during his childhood, failing to satisfy certain vital needs during this stage remain as fixations in adult character. The parenting style and the environment in which the child is brought up plays significant role in the development of his adult character.

In the first chapter of his autobiography Hitler describes his parents as models of traditional German values: "My father was a civil servant who fulfilled his duties very conscientiously. My mother looked after the households and lovingly devoted herself to the care of her children." (Hitler 11). Like so much of *Mein Kampf* the portrait of his parents is also partial fabrication. If the above representation of his home environment is true there is no reason for Hitler to manifest the anti-social behaviours that he possessed.

In the second chapter Hitler gives us the description of a Child's life in a lower middle class family. Utilizing the available information about Hitler's childhood, we may have to accept the hypothesis that Hitler was perhaps talking about his own home environment in the above passage. Hitler once told his secretary Christi Schroeder, "I didn't love my father, but I was all the more afraid of him. He had tantrum and immediately became physically violent. My poor mother would always be very scared for me." (Haman, 18). Hitler also told his lawyer Hand Frank that his father was a heavy drunkard: "Even as a ten- to- twelve year old, I had to take my father home from the bar. That was the most horrible shame I have ever felt. Oh Frank, what a devil alcohol is! It really was via my father- the most horrible enemy of my youth." (Haman, 12). All these evidences give us a fairly accurate picture of Hitler's difficult home environment and we can conclude that these scenes did shape the neurotic character in him at an early age.

According to the description given by Hitler about his parents, it is clear that Klara Hitler, his mother was a simple, modest and kindly woman. His father was an authoritarian parent: a common man who had undergone several difficulties in his life to achieve his dream of being a civil servant. Hitler loved his mother, but he feared his authoritarian father. Many case the character of father is one of the major factor determining the character of the child during infancy, particularly that of a boy. His father was adamant and autocratic in many of his decisions. This parenting style was defined as authoritarian parenting style by Baumrid (1991). It was characterized by rigidity, obedience without questions and physical punishment. Research suggest that such

authoritarian parenting style can result in the development of neurotic character, aggressive personality and anti- social behaviors, which can be observed in Hitler's later life.

Identification of an authoritarian father and the devotion young Hitler had towards his mother developed the Oedipal Complex in him. Klara Hitler was a submissive, retiring and a pious catholic. She was the one who compensated whatever love and affection that Hitler and his sister missed in their father. Even though she had a sorrowful life with unfeeling and alcoholic husband her love for her children was deep. Young Hitler adored her, evidences indicates that there was an extremely strong attachment between Hitler and his mother. Eduard Bloch, a Jewish doctor wrote about their relation as "While he was not a 'mother's boy' in the usual sense, I have never witnessed a closer attachment." (Kershaw, 12). The result of this affection was a strong libidinal attachment between Hitler and his mother.

The immeasurable amount of affection and love that his mother showered upon him and the authoritarian character of his father served to develop the Oedipal Complex to an extraordinary degree. The more he hated his father the more he became close to his mother. His love for his mother is evident in the following words: "her death came as a terrible blow for me, I respected my father, but I loved my mother." (Hitler 21). The unconscious psyche of young Hitler searched for different ways to get to his mother. The fear of his authoritarian father and the fear of pleasures that society regarded as unacceptable gradually repressed his Oedipal Complex.

According to Freud, the repressed emotions of an individual during his childhood remain as fixation in his adult character. Hitler's love for his motherland was no less than the love he had for his mother. It is evident in his reaction to the news of Germany's defeat in World War I, "I had not cried ever since the day I stood beside my mother's grave. Whatever fate dealt cruelly with me in my young days the spirit of determination within me grew stronger and stronger." (Hitler 174). Germany was a symbol of ideal mother, like his mother, Germany was young and vigorous and held promise of a great future under

suitable circumstances. Hitler's emotions and feelings for German motherland is evident in his writings and speeches: "Travelers, when you come to Germany, tell the homeland that we lie here, true to the fatherland and faithful to our duty." (Hitler 175). It is also significant to note that Germany was referred to as "Fatherland" by most of the Germans. In *Mein Kampf* we can trace Hitler almost always referring Germany as "Motherland". All these evidences fairly gives us an idea that Hitler's repressed Oedipal desires and feeling towards his mother during the childhood was transferred onto German Motherland during the adolescent age and the unconscious hatred towards his father was transferred collectively onto the Jews. When the last war broke out, Hitler found it an opportunity to fight for his symbolic mother to prove and gain acceptance of his manhood, which was denied for him by his own mother in his childhood. Thus we can come to the conclusion that different psychological disorders that Hitler possessed was the outcome of his repressed Oedipal complex and throughout his life he was perhaps fighting against his own inner conflicts and trying to rectify the injustice of his childhood.

Works Consulted

Hitler, Adolf. *Mein Kampf*. Trans. James Murphy. USA: Create Space, 2011. Pdf.

Freud, Sigmund. *New Introductory Lecture on Psychoanalysis*. Trans. James Strachey.

London: Penguin Books. 1991

Wilfred L. Guerin, Earle Labor, Lee Morgan and John R. Willingham. *A Handbook of Critical Approaches to Literature*. USA: Oxford University Press, 1999

Freud, Sigmund. *The Ego and the Id*. London: Create Space, 2010

Jung, C.G. *Collected Works, Vol. 12 Psychology and Alchemy*. USA: Princeton University Press, 1968

Hamann, Brigitte. Hitler's Vienna: a dictator's apprenticeship. New York: Oxford University Press, 1999

Kershaw, Ian. Hitler: 1889- 1936. Hubris: W. W Norton & Company, 1999

Baumrind, Diana: The influence of parenting style on adolescent competence and substance use. Journal of Early Adolescence, 11(1) (1991): p. 56-95

A Psycho- Historical Analysis of Adolf Hitler: The Role of Personality, Psychopathology, and Development. Psychologyandsociety.org. 10 April 2018 http://www.psychologyandsociety.org/_assets/_original/2012/01/Hyland_et_al.pdf

Carl Jung. Simplypsychology.org. 10 April 2018 <http://www.simplypsychology.org/carl-jung.html>

Defense mechanism. Newworldencyclopedia.org. 10 April 2018 http://www.newworldencyclopedia.org/entry/Defense_mechanism

ചരിത്രാഖ്യാനം - 'രസവിദ്യയുടെ ചരിത്രത്തിൽ'

(എസ് ഹരീഷിന്റെ കഥയെ ആധാരമാക്കിയുള്ള പഠനം)

നിമ്മി കുര്യൻ

അസിസ്റ്റന്റ് പ്രൊഫസർ

പാവനാത്മ കോളേജ്, മുരിക്കാശ്ശേരി

പ്രബന്ധസംഗ്രഹം

ബഹുസ്വരവായനയുടെ ലോകമാണ് പുതുകഥകൾ വായനക്കാർക്ക് മുമ്പിൽ തുറന്നിടുന്നത് ആഖ്യാനം, പ്രമേയം മുതലായവയെ സംബന്ധിച്ച സാമ്പ്രദായിക പരികല്പനകളെ പിന്തള്ളി കഥ മുന്നേറിക്കൊണ്ടിരിക്കുന്നു. പുതുകഥാകൃത്തുക്കളിൽ സാധാരണയിൽ കവിഞ്ഞ പരീക്ഷണത്വം പുലർത്തുന്ന എഴുത്തുകാരനാണ് എസ്. ഹരീഷ് ജീവിതത്തിന്റെ പരുപരുത്ത പ്രതലങ്ങളിൽ അദ്ദേഹം കഥാബീജം കണ്ടെത്തുന്നു. കഥയെ സാംസ്കാരിക ചരിത്രജ്ഞാന രൂപമാക്കി മാറ്റുന്ന അത്ഭുത വിദ്യതന്നെയാണ് ഹരീഷിന്റെ ഓരോ കഥകളും. 'രസവിദ്യയുടെ ചരിത്രം' എന്ന കഥയിൽ അദ്ദേഹം ചരിത്രത്തെ വിന്യസിച്ചിരിക്കുന്നത് എപ്രകാരമാണ് എന്ന് വിശകലനം ചെയ്യുകയാണ് ഈ ലേഖനത്തിൽ.

താക്കോൽ വാക്കുകൾ : കലർപ്പുകളുടെ കലവറ, നവ സാങ്കേതിക വിദ്യ, അപനിർമ്മാണം, കൊളോണിയലിസം, മലയാള ചരിത്ര വിനിമയം, സംസ്കാരചരിത്ര ജ്ഞാനരൂപം.

പുതുകഥയുടെ പുതിയലോകം

ഹ്രസ്വരൂപിയായ ഗദ്യാഖ്യാനമെന്ന നിലയിൽ നിന്ന് അനേകം അടരുകളുള്ള വിശാല ഭൂമികയിലേയ്ക്ക് ചെറുകഥ വളർച്ച പ്രാപിച്ചിരിക്കുന്നു. ഏകഭാവകേന്ദ്രിത സ്വഭാവത്തിൽ നിന്നും കൃതി മാറി അനേകം വ്യവഹാരങ്ങളുടെ ജ്ഞാന മാതൃകയിൽ രൂപം കൊള്ളുന്ന കലർപ്പുകളുടെ കലവറയായി പുതുകഥ മാറിയിരിക്കുന്നു. പ്രമേയം, ഇതിവൃത്തം, കഥാപാത്രം, ആഖ്യാനം ഇവയിലെല്ലാം പരമ്പരാഗത അവസ്ഥാ വിശേഷങ്ങളെ പാടേ നിരസിച്ച പുതുകഥയുടെ അനുഭവ ലോകമാണിന്ന് വായനക്കാരനെ കാത്തിരിക്കുന്നത്. ആഗോളവൽക്കരണവും, നവസാങ്കേതിക വിദ്യയും, നവമാധ്യമങ്ങളുടെയുള്ള ജീവിതവും കഥയുടെ ലോകത്തെ വൈചിത്ര്യപൂർണ്ണമാക്കി. സൈബർ വ്യവഹാരങ്ങളുടെ ഇടപെടലിലൂടെ മനുഷ്യന്റെ ഭൗതികാസ്തിത്വം റദ്ദാക്കപ്പെടുന്ന സ്ഥിതിവിശേഷമാണിനുള്ളത്. ആധുനി

ക മനുഷ്യന്റെ മേൽവിലാസം തന്നെ ഇലക്ട്രോണിക് സാങ്കേതിക ബുദ്ധിയാൽ നിർമ്മിതമാണ്. ഇത്തരം അവസ്ഥാ വിശേഷങ്ങളെ മറികടക്കാനുള്ള യുക്തിയായിട്ടാണ് കഥയിൽ ചരിത്രവും പ്രാദേശികതയും കടന്നു കയറുന്നത്. അധിനിവേശത്തെയും ആധീനത്വത്തെയും ചെറുക്കാനുള്ള മാർഗ്ഗമായി ഇവ മാറുന്നു.

എസ്. ഹരീഷും രസവിദ്യയുടെ ചരിത്രവും

കഥയെ അടിമുടി പരിഷ്ക്കരിക്കുകയും പൊളിച്ചു പണിയുകയും ചെയ്യുന്ന ഒരു യുവതലമുറയുടെ കൈയ്യിലാണ് ഇന്ന് മലയാള ചെറുകഥയുടെ ഭാവി. അവരിൽ പ്രധാനിയാണ് എസ്. ഹരീഷ്. കലുഷിതമായ വർത്തമാന കാലത്തെ പ്രതിരോധിക്കാൻ വ്യത്യസ്ത കഥാപ്രപഞ്ചങ്ങളിലൂടെ യാത്ര ചെയ്യുന്ന കഥാകൃത്താണ് അദ്ദേഹം. ചരിത്രത്തിന്റെയും സംസ്കാരത്തിന്റെയും പുനർവായനകൾ അദ്ദേഹത്തിന്റെ കഥകളുടെ അന്തർധാരയായി വർത്തിക്കുന്നു. എന്നാൽ സാമ്പ്രദായിക ചരിത്രവായനകളുടെ പകർപ്പുകളായി ഇവ വായനക്കാരനു അനുഭവപ്പെടുന്നില്ല.

ഒരു പ്രത്യേക കാലഘട്ടത്തിലെ കേരള ചരിത്രത്തെ അപനിർമ്മിക്കുന്ന വിധത്തിൽ രൂപപ്പെടുത്തിയിരിക്കുന്ന കഥയാണ് എസ്. ഹരീഷിന്റെ 'രസവിദ്യയുടെ ചരിത്രം' കൊളോണിയലിസത്തിന്റെ മലയാളക്കാഴ്ചയാണീ കഥ. ശ്രീ നാരായണ ഗുരുവിന്റെ ദൈവദശകത്തിലെ ഉദ്ധരണിയോടു കൂടി തുടങ്ങുന്ന കഥ, കേരളത്തിന്റെ ഗതകാല ചരിത്രത്തെ വായനക്കാർക്ക് മുൻപിൽ പുനർനിർമ്മിക്കുന്നു.

വൈദേശികനായ ആഖ്യാതാവിലൂടെ കഥ പുരോഗമിക്കുന്നു. വിദേശികളുടെ കാഴ്ചപ്പാടിലൂടെ മലബാർ, തിരുവിതാംകൂർ, കേരളത്തിലെ ജാതിവ്യവസ്ഥ, ഇവിടുത്തെ ആത്മീയത ഇവയെല്ലാം കഥയിൽ സൂചിതമാകുന്നുണ്ട്. അയ്യാസ്വാമികൾ എന്ന മനുഷ്യൻ ഇരുമ്പിനെ സ്വർണ്ണമാക്കാനുള്ള പരീക്ഷണം നടത്തിയതായുള്ള കേരളീയ പുരാവൃത്തത്തെ ആശ്രയിച്ചാണ് കഥയുടെ മുൻപോട്ടുള്ള ഗതി. 'പത്തൊമ്പതാം നൂറ്റാണ്ടിന്റെ രണ്ടാം പകുതിയിൽ മലബാർ തീരത്തിന്റെ തെക്കേ അറ്റത്ത് അയ്യാസ്വാമി എന്നയാൾ വില കുറഞ്ഞ ലോഹങ്ങളെ സ്വർണ്ണമാക്കുന്ന രസവിദ്യ കണ്ടെത്തുന്നതിന്റെ തൊട്ടടുത്തുള്ളവരെ എത്തിയതാണ്' എന്ന് പറഞ്ഞ് കഥ ആരംഭിക്കുന്നു. അതനുസരിച്ച് അതിപ്രാചീനമായ ഒരു കാലത്തിലും ഇടത്തിലും എത്തിച്ചേരുന്ന അനുഭൂതിയാണ് വായനക്കാരനു കൈവരുന്നത്.

ദക്ഷിണാഫ്രിക്കയിലെ ഹേഴ്സ്റ്റിങ്സ് കമ്പനിയുടെ ചാരനായി അയ്യാസ്വാമിയോടൊപ്പം കൂടിയ വൈദേശികനായ ആഖ്യാതാവ്, ഹോളണ്ടിൽ നി

ന്നും തുടങ്ങിയ അദ്ദേഹത്തിന്റെ യാത്ര പൂർത്തിയാക്കി മലബാർ എന്നു പൊതുവേ വിദേശികളാൽ വിശേഷിപ്പിക്കപ്പെടുന്ന കേരള തീരത്തെത്താൻ പത്തുവർഷമെടുത്തു. മലബാറിൽ എത്തിയതു മുതൽ അയ്യോസ്വാമിയെക്കുറിച്ച് നടത്തിയ രഹസ്യാനേഷണങ്ങളിൽ നിന്നും നിരവധിയായ കാര്യങ്ങൾ അദ്ദേഹത്തിനു ലഭിക്കുന്നുണ്ട്. മലയാള ധാരാളം നിഗൂഢലിപികളുള്ളതും മനസ്സിലാക്കാൻ വിഷമമുള്ള ഭാഷയാണ്. കടലാസില്ലാത്തതുകൊണ്ട് പനയോലയിൽ ഇരുമ്പു പെൻസിൽ കൊണ്ടാണ് തിരുവതാംകോട്ടുകാർ എഴുതുന്നത് തുടങ്ങിയ വിവരങ്ങൾ അവയിൽ ചിലതാണ്.

അയ്യോസ്വാമി നടപ്പിലാക്കാൻ പോകുന്ന രസവിദ്യയെക്കുറിച്ച് അദ്ദേഹത്തിന് കൂടുതലൊന്നും അറിയാൻ സാധിച്ചില്ല. നാണുവും ചട്ടമ്പിയും അയ്യോസ്വാമിയുടെ ശിഷ്യൻമാരായി കഥയിൽ പലയിടത്തും പ്രത്യക്ഷപ്പെടുന്നുണ്ട്. ഇതിനിടയിൽ മാഗസ് എന്ന വിദേശി വൈദികനുമായുള്ള സ്വാമിയുടെ കത്തിടപാടുകൾ പുരോഗമിക്കുന്നു. അദ്ദേഹവും അയ്യോസ്വാമിയുടെ വഴിയേ സഞ്ചരിക്കുന്ന ആൽകെമിസ്റ്റാണ്. 'രോഗാതുരമായ ലോഹങ്ങൾക്കുള്ള ചികിത്സയാണ് രസവിദ്യ എന്നാണ് മാഗസിന്റെ അഭിപ്രായം'. 'ഓരോ ജീവിതവും രസവിദ്യ കണ്ടെത്താനുള്ള പരിശ്രമങ്ങളാണ്' എന്നാണ് അയ്യോസ്വാമി പറയുന്നത്. സ്വർണ്ണമുണ്ടാക്കുന്ന രസവിദ്യ നടക്കാത്തതിനാൽ മാനസികരോഗികൾ തമ്മിലുള്ള വിനിമയമാണ് അയ്യോസ്വാമിയെ കേന്ദ്രീകരിച്ചു നടക്കുന്നതെന്നു തീരുമാനിച്ചു തിരികെ പോകാനാണ് ആഖ്യാതാവ് തീരുമാനിക്കുന്നത്.

അവസാനം പലവിധ ദ്രവ്യങ്ങളും പരീക്ഷണശാലയിലേയ്ക്ക് കടന്നുപോയ്കൊണ്ടിരുന്നു. ക്ഷോഭങ്ങളും വിസ്ഫോടനങ്ങളുമില്ലാതെ വിരുദ്ധ വസ്തുക്കൾ നെയ്തു ചേർന്നു. പദാർത്ഥങ്ങളുടെ വരവും പരീക്ഷണശാലയുടെ വായുമണ്ഡലവും ഒന്നടങ്ങിയപ്പോൾ ഒരു വസ്തു മാത്രം അതിനോട് ചേരണമെന്ന അവസ്ഥയിലായി. താഴ്ന്ന ലോഹങ്ങളെ സ്വർണ്ണമാക്കുന്ന ചേരുവ പൂർണ്ണമാക്കാൻ ഒരു അമൂല്യവസ്തു അതിൽ ലയിക്കണമെന്ന സൂചന ജനക്കൂട്ടത്തിൽ പരന്ന് അപ്പോൾ നാണുവിനോടും ചട്ടമ്പിയോടുമായി അയ്യോസ്വാമി പറഞ്ഞു. ഇനി നിങ്ങളാണിതിൽ ലയിക്കേണ്ടത്. പ്രതീക്ഷിക്കാത്ത അന്ത്യത്തിൽ അസംതൃപ്തിയോടെ ജനക്കൂട്ടം പലവഴി പിരിഞ്ഞു. അതേസമയം തന്നെ ഭൂമിയുടെ മറ്റൊരറ്റത്തു വലിയ കുപ്പി വിസ്കിയുമായി രസവിദ്യയുടെ കണ്ടെത്തൽ ആഘോഷിക്കുന്ന മാഗസിനെ ചാരന്മാർ തടവിലാക്കി. നീണ്ടചോദ്യം ചെയ്യലിനു അദ്ദേഹം പറഞ്ഞ മറുപടി ഇങ്ങനെയായിരുന്നു. 'വിഡ്ഢികളായ നീചരേ! അയാൾ മനുഷ്യരെ സ്വർണ്ണമാക്കുന്ന വിദ്യയാണ് കണ്ടെത്തിയത്'.

ചരിത്രവിനിമയം രസവിദ്യയുടെ ചരിത്രത്തിൽ

പല കാലഘട്ടങ്ങളിലായി ലോകമെമ്പാടും നവോത്ഥാനം സംഭവിച്ചിട്ടുണ്ട്. സമാന്തരതയോ തുടർച്ചയോ അവകാശപ്പെടാനാവാത്ത ഒരു നവോത്ഥാന പാരമ്പര്യമാണ് കേരളീയ ജനതയുടേത്. കേരളീയ നവോത്ഥാനത്തെയും ആത്മീയാന്വേഷണത്തെയും ശാസ്ത്രബുദ്ധിയിൽ അഭിരമിക്കുന്ന യൂറോപ്യൻമാർ എങ്ങനെ നോക്കി കണ്ടു എന്നതിന്റെ സംക്ഷിപ്ത വിവരണമാണ് രസവിദ്യയുടെ ചരിത്രം. മറ്റൊരർത്ഥത്തിൽ പറഞ്ഞാൽ ചരിത്രത്തിന്റെ പുനർനിർമ്മിതി സ്ഥലകാലങ്ങളെ റദ്ദ് ചെയ്യുന്ന കഥാകൃത്തിന്റെ മാന്ത്രിക രചനാശൈലി കഥയെ ഒരേ സമയം ചരിത്രത്തിലെയും വർത്തമാനത്തിലേയും സമസ്യകളെ നിർദ്ധാരണം ചെയ്യാൻ പ്രാപ്തമാക്കുന്നുണ്ട്.

ഒരു നൂറ്റാണ്ടിനപ്പുറമുള്ള കേരളീയ ജീവിതമാണ് കഥാപരിസരം. വിദേശിയായ ആഖ്യാതാവിലൂടെ കേരള ജനതയുടെ പ്രത്യേകതകളും, സംസ്കാര സവിശേഷതകളും കഥയിൽ കടന്നുവരുന്നു. 'മലബാർ' എന്ന സൂചനയാണ് കഥയിൽ കേരളത്തിനു നൽകപ്പെടുന്നത്. കഥ പറയുന്നയാളിന്റെ കാഴ്ചപ്പാടിൽ മരിക്കുന്നതിനു മുൻപുള്ള തയ്യാറെടുപ്പു മാത്രമാണ് ജീവിതം എന്ന മട്ടിൽ അകാലത്തിൽ ജീവിക്കുന്ന വിചിത്ര സ്വഭാവികളായ മനുഷ്യരാണ് അയ്യോസ്വാമിയും ശിഷ്യൻമാരും. എന്ത് പരകായ പ്രവേശത്തിൽ വിശ്വസിക്കുന്ന ഇക്കൂട്ടരെ ഗൂഢമായ പരിഹാസത്തിൽ പൊതിഞ്ഞാണ് അദ്ദേഹം അവതരിപ്പിക്കുന്നത്. നിഷ്പഫലമായ പ്രാണായാമത്തെ പറ്റിയും അദ്ദേഹം വാചാലനാകുന്നു. അന്യനാട്ടുകാർക്ക് ഇന്ത്യക്കാരെയും കേരളത്തെയും കുറിച്ചുള്ള കാഴ്ചപ്പാടിന്റെ യുക്തികളാണ് കഥയിൽ പതിഞ്ഞിരിക്കുന്നതെന്ന് നിസംശയം പറയാം.

ഈഴവ, നായർ ജാതിയെക്കുറിച്ചുള്ള സൂചനകളും അവരുടെ തൊഴിൽ, സ്വഭാവം എന്നിവയെക്കുറിച്ചുള്ള വിവരണങ്ങളും കേരളചരിത്രത്തിന്റെ പുനർനിർമ്മിതി തന്നെയാണ്. ഇങ്ങനെ നാനാവിധ ചരിത്രസൂചനകളിലൂടെ കഥ മുന്നേറുന്നു. അക്കൂട്ടത്തിൽ വിലകുറഞ്ഞ ലോഹങ്ങൾക്ക് തുല്യം വർത്തിച്ച മനുഷ്യരുടെ അവശതകളും ബുദ്ധിമുട്ടുകളും, സ്വർണ്ണത്തിന്റെ മൂല്യത്തോടെ സമൂഹത്തിന്റെ മേൽതട്ടിൽ വിഹരിച്ച വരേണ്യരും (തോളിൽ നൂൽ ധരിക്കുന്ന ഒരു പറ്റം ജനങ്ങളും) കഥയിലെ ചരിത്ര വിനിമയത്തെ യഥാർത്ഥമാക്കുന്നു.

മനുഷ്യനെ സ്വർണ്ണമാക്കുന്ന വിദ്യയായിരുന്നു ഗുരു തന്റെ അന്വേഷണങ്ങളിലൂടെ കണ്ടെത്തിയത് എന്ന പൊരുളിൽ കഥ അവസാനിക്കുന്നു. ഗതകാലത്തിൽ നിന്നു സമ്പാദിച്ച കഥാതന്തു സമകാലത്തിന്റെ

അന്യാപദേശമായി പരിവർത്തിപ്പിക്കുന്ന ആഖ്യാനശൈലി ഇവിടെ കാണാൻ സാധിക്കും. വിലകുറഞ്ഞ ലോഹങ്ങളായി ഇവിടെ പരാമർശിക്കപ്പെടുന്നത്. ജാതിവ്യവസ്ഥയുടെ ക്രൂരദാഷ്ട്യകൾക്കിടയിൽ ഞെരിഞ്ഞമരാൻ വിധിക്കപ്പെട്ട സാധാരണ മനുഷ്യരാണ്. അവരുടെ മൂല്യവും അംഗീകരിക്കപ്പെടേണ്ടതാണെന്നുള്ള സത്യത്തിന്റെ തിരിച്ചറിവു തന്നെയാണ് സ്വർണ്ണമാക്കുന്ന വിദ്യയുടെ (രസവിദ്യ) കണ്ടെത്തൽ എന്നതുകൊണ്ട് വിവക്ഷിക്കുന്നത്. ഈ ആൽക്കെമിയിൽ രാസതരകങ്ങളായി വർത്തിച്ചവരാണ് ശ്രീനാരായണഗുരുവും, ചട്ടമ്പിസ്വാമികളുമൊക്കെ. സമൂഹത്തെ ചലനാത്മകമാക്കുന്ന രാസതരകങ്ങളായി ഇവിടെ നവോത്ഥാന നായകന്മാരെ കഥാകൃത്ത് ഉയർത്തിയിരിക്കുന്നു.

കഥ എന്ന സാഹിത്യരൂപം വൈകാരിക പ്രതികരണമെന്ന മട്ടിൽ നിന്നും മാറി ചരിത്രവും രാഷ്ട്രീയവും മിത്തും അതിന്റെ കരുത്തായി മാറുന്ന കാഴ്ച ഇവിടെ കാണാം. ചരിത്രത്തെ പുനർനിർമ്മിക്കുകയും പുനർവായിക്കുകയും ചെയ്യുന്നതിലൂടെ കഥയെ സംസ്കാര ചരിത്രജ്ഞാന രൂപമാക്കി വ്യാവർത്തിപ്പിക്കുന്ന പ്രക്രിയയായി മാറുന്നു 'രസവിദ്യയുടെ ചരിത്രം' എന്ന കഥ. കൃത്യമായ ചരിത്രബോധമുള്ള എസ്. ഹരീഷ് എന്ന കഥാകാരൻ തന്റെ സ്വതസിദ്ധമായ ശൈലിയിലൂടെ ചരിത്രത്തിലെ തെളിയാത്ത സംഭവങ്ങളെ തെളിയിച്ചെടുത്തിരിക്കുന്നു ഈ കഥയിൽ. ചരിത്രവൽക്കരണത്തിലൂടെ കഥ സംഭവമായും സംവാദമായും ബഹുസ്വരാത്മകമായി വികസിക്കുന്നു. കേവല ചരിത്രവ്യഖ്യാനത്തിനപ്പുറം യൂറോകേന്ദ്രിത വാദത്തിന്റെയും അപരനോട്ടങ്ങളുടെയും പൊള്ളത്തരങ്ങളെയും ഇല്ലായ്മ ചെയ്യാൻ ഈ കഥയിലൂടെ കഥാകൃത്തിന് സാധിച്ചിരിക്കുന്നു. നമ്മുടെ തന്നെ തദ്ദേശീയമായ മിത്തുകളിലൂടെയും കീഴാള ബൗദ്ധികാവേഷണങ്ങളിലൂടെയും കേരളീയ പാരമ്പര്യത്തിന്റെ തനിമയെ ചരിത്രത്തിൽ അടയാളപ്പെടുത്തുകയാണീ കഥ.

സഹായഗ്രന്ഥങ്ങൾ

1. ഹരീഷ് എസ്, 2005. രസവിദ്യയുടെ ചരിത്രം, കോട്ടയം, ഡി.സി. ബുക്സ്
2. ചാമക്കാല ജോബിൻ; (എഡിറ്റർ) 2019, പുതുകഥ സൗന്ദര്യവും രാഷ്ട്രീയവും, പെരുമ്പാവൂർ യെസ് പ്രസ്സ് ബുക്സ്.
3. ഷീബാദിവാകരൻ; (എഡിറ്റർ) 2021, പുതിയ കഥ പുതിയ വായന, കോഴിക്കോട്, പാവനാത്മ പബ്ലിക്കേഷൻസ്.

URL

1. <https://janamtv.com>
2. <https://en.wikipedia.org>

അസ്വസ്ഥതയുടെ ചരിത്രവും അസഹ്യതയുടെ വർത്തമാനവും അടയാളപ്പെടുത്തുന്ന സിറാജുനിസ്

‘ഞാൻ എഴുതുന്നത് എന്റെ ശരികളല്ല; സാമൂഹിക യാഥാർത്ഥ്യങ്ങളാണ്.’

ടി.ഡി.രാമകൃഷ്ണൻ

ആനസ് ബേബി
ഫോൺ : 9400768068

ഈ മണിക്കൂറുകളിൽ സംസാരിക്കുന്ന രചനകൾ

സമകാലികവിഷയങ്ങളിൽ നിരന്തരം ഇടപെട്ടുകൊണ്ടിരിക്കുകയും, യോജിക്കേണ്ടവയോട് ചേർന്നുനിൽക്കുകയും വിരോധിക്കേണ്ടവയോട് അപകടകരമാംവിധം കാർക്കശ്യബുദ്ധിയോടെ എതിർത്ത് പെരുമാറുകയും ചെയ്ത്, സ്വരചനകളിലൂടെ സാമൂഹികയാഥാർത്ഥ്യങ്ങളെ എല്ലാവിധ തീവ്രതയോടും കൂടി ആവാഹിച്ച് മലയാളത്തിന് പകരവയ്ക്കാനില്ലാത്ത വായനാനുഭവം നൽകുന്ന സാഹിത്യകാരനാണ് ടി.ഡി.രാമകൃഷ്ണൻ. ആയിരത്തിത്തൊള്ളായിരത്തിഅറുപത്തിഒന്നിൽ തൃശ്ശൂർ ജില്ലയിലെ എയ്യാലിൽ ദാമോദരൻ ഇളയതിന്റെയും ശ്രീദേവി അന്തർജനത്തിന്റെയും മകനായി ഇദ്ദേഹം ജനിച്ചു. കുന്നംകുളം ബോയ്സ് സ്കൂൾ, എരുമപ്പെട്ടി ഗവൺമെന്റ് ഹൈസ്കൂൾ എന്നിവിടങ്ങളിൽ നിന്നും സ്കൂൾ വിദ്യാഭ്യാസം പൂർത്തിയാക്കുകയും, പ്രീഡിഗ്രി, ഡിഗ്രി എന്നിവ ആലുവ യു.സി.കോളേജിൽ നിന്നും നേടുകയും ചെയ്തു. ആയിരത്തിത്തൊള്ളായിരത്തി എൺപത്തി ഒന്നിൽ സേലത്ത് റെയിൽവേ ജീവനക്കാരനായി ഔദ്യോഗികജീവിതം ആരംഭിച്ചു. റെയിൽവേ ഓഫീസിലെ പല തസ്തികകളിൽ കോഴിക്കോട്, മദ്രാസ്, പാലക്കാട് എന്നിങ്ങനെ വിവിധ സ്ഥലങ്ങളിൽ സേവനമനുഷ്ഠിച്ച രാമകൃഷ്ണൻ സാഹിത്യമേഖലയിൽ സജീവമാകുന്നതിനായി രണ്ടായിരത്തിപതിനാറിൽ, ഇന്ത്യൻ റെയിൽവേയിൽ നിന്നും സ്വയം വിരമിച്ചു.

മികച്ച തമിഴ് - മലയാള വിവർത്തകനായ ടി.ഡി.രാമകൃഷ്ണൻ, ഔദ്യോഗിക ജീവിതത്തിന്റെ ഏറിയഭാഗവും തമിഴ്നാട്ടിൽ ചിലവഴിച്ചിരുന്നതിനാൽ, തമിഴ് സാഹിത്യവുമായി ഗാഢബന്ധം പുലർത്തിയിരുന്നു. ഈ സാഹിത്യമേഖലയിലെ ഈടുറ്റ ഗ്രന്ഥങ്ങൾ പരിഭാഷകളിലൂടെ മലയാളത്തിന് പരിചയപ്പെടുത്തിയ ഇദ്ദേഹത്തിന് പ്രസ്തുതമേഖലയിലെ സേവനങ്ങൾക്ക് രണ്ടായിരത്തിഏഴിലെ ഇ.കെ.ദിവാകരൻ പോറ്റി അവാർഡ്, നല്ലിദിസൈ എട്ടും എന്നീ പുരസ്കാരങ്ങൾ ലഭിച്ചിട്ടുണ്ട്. ആൽഫ, ഫ്രാൻസിസ് ഇട്ടിക്കോര, സുഗന്ധി എന്ന ആണ്ടാൾ ദേവനായകി, അന്ധർ ബധിരർ മുക്തർ, പച്ച മഞ്ഞ ചുവപ്പ്, മാമ ആഫ്രിക്ക എന്നീ നോവലുകളും സിറാജുനിസ്

എന്ന ചെറുകഥാ സമാഹാരവും കുറുപ്പും വെളുപ്പും എന്ന ലേഖനസമാഹാരവും ടി.ഡി.രാമകൃഷ്ണൻ പൂർത്തീകരിച്ചിട്ടുണ്ട്. സാഹിത്യഅക്കാദമി പുരസ്കാരം, വയലാർ പുരസ്കാരം എന്നിങ്ങനെ നിരവധി അംഗീകാരങ്ങൾ ഇദ്ദേഹത്തിന്റെ എഴുത്തുജീവിതത്തിന് ലഭിച്ചിട്ടുണ്ട്.

വായനക്കാരുടെ വാർപ്പുമാതൃകകളെ തകർത്തറിഞ്ഞ നോവലുകൾ

സമൂഹത്തിലെ ഏറ്റവും പ്രശസ്തരായ നാല്പത്തിയേഴ് ആളുകൾ ചേർന്നു നടത്തുന്ന ഒരു പുതുലോക നിർമ്മിതിയാണ് ആൽഫ എന്ന നോവലിന്റെ പശ്ചാത്തലം.നരവംശശാസ്ത്രം മുതൽ പത്രപ്രവർത്തനം വരെയുള്ള വിവിധ മേഖലകളിലെ പ്രഗല്ഭവ്യക്തികൾ തന്നെ ഈ പരീക്ഷണത്തിന് നേതൃത്വം നൽകുകയും, സ്വയം പരീക്ഷണവസ്തുവായി തീരുകയും ചെയ്യുന്ന നോവൽ സൃഷ്ടിക്കുന്ന വായനാനുഭവം മലയാളത്തിന് തീർത്തും അപരിചിതമാണ്. അടിയന്തരാവസ്ഥയുടെ പശ്ചാത്തലത്തിലെ ഈ പരീക്ഷണശ്രമം മനുഷ്യന്റെ സ്വാതന്ത്ര്യങ്ങളിലേക്കുള്ള കടന്നുകയറ്റത്തിന്റെ പ്രതികരണമെന്നനിലയിലായിരുന്നു. പൂർണ്ണമായ അടിച്ചമർത്തൽ പോലെ തന്നെ ഉപാധികളില്ലാത്ത സ്വാതന്ത്ര്യവും ഏറെ അപകടകരമാണെന്ന വസ്തുത അടിവരയിടുന്നതാണ് ഈ നോവലിന്റെ കാതൽ. അടിയന്തരാവസ്ഥയുടെ രാഷ്ട്രീയവും അപക്വമായ പരീക്ഷണങ്ങളും ഒരുപോലെ മനുഷ്യകുലത്തിന്റെ ശുഭകരമല്ലാത്ത ഒരു അന്ത്യകാലത്തിന് ഇടയാകുമെന്ന് ആൽഫ വായനയിലുടനീളം അസ്വസ്ഥമാക്കിക്കൊണ്ടിരിക്കും.

രണ്ടാം നോവലായ ഫ്രാൻസിസ് ഇട്ടിക്കോര മലയാളനോവലുകൾക്കിടയിൽ സവിശേഷ വ്യക്തിത്വമുള്ള ഒന്നാണ്. രണ്ട് കാലഘട്ടങ്ങൾ അതിവിദഗ്ദ്ധമായി ഇണക്കിച്ചേർത്ത് കഥ പറയുന്ന ഫ്രാൻസിസ് ഇട്ടിക്കോര കുന്നംകുളം മുതൽ ലോകത്താകെ വ്യാപിക്കുന്ന ഒരു സംസ്കൃതിയുടെ കഥ പറയുന്നു. മനുഷ്യന്റെ രതിതാൽപര്യങ്ങളും, സാമ്പത്തികാസക്തികളും ലോകത്തെ ഏതുവിധം ബാധിക്കുന്നുവെന്ന് ഈ നോവൽ പറയുന്നുണ്ട്. മലയാളനോവൽ മേഖലയിലെ പതിവ് ആഖ്യാനതന്ത്രത്തിൽ നിന്നും വിമുക്തി നേടുന്ന നേവൽഘടന എല്ലാ രീതിയിലുമുള്ള കടന്നുകയറ്റത്തിന്റെയും കൈയ്യടക്കലിന്റെയും തീവ്രത വായനക്കാരനിലെത്തിക്കുന്നു. ഒ.വി. വിജയന്റെ ധർമ്മപുരാണത്തിന് ശേഷം ഇത്രയും ഭീകരമായ നരമാംസാസ്വാദനം ഒരു കൃതിയിലും സംഭവിച്ചിട്ടില്ലെന്ന് ഈ നോവലിന്റെ അവതാരികയിൽ പ്രശസ്ത നിരൂപകൻ ആഷാമേനോൻ കുറിച്ചിട്ടിരിക്കുന്നു. അനുകൂല - പ്രതികൂല വായനകൾ ഒട്ടേറെ ഈ കൃതിയെ ചുറ്റിപ്പറ്റി നടന്നിട്ടുണ്ട്.

സുഗന്ധി എന്ന ആണ്ടാൾ ദേവനായകി തുറന്നുകാണിക്കുന്നത് ശ്രീലങ്കൻ

ആഭ്യന്തരസംഘർഷത്തിന്റെ നേർക്കാഴ്ചകളെയാണ്. ചരിത്രവും മിത്തും വർത്തമാനകാലവും ഭാവനയും ഇതിൽ ഈ ചേർത്തിരിക്കുന്നു. സമകാലിക ശ്രീലങ്കയിൽ കുടിക്കൊള്ളുന്ന സമാധാനം ഒരുതരം സ്വേച്ഛാധിപത്യത്തിന്റെ പുറംമോടി മാത്രമാണെന്നും, പണം, അധികാരം എന്നിവയുടെ സ്വാധീനത്താലും അവ നൽകുന്ന പ്രലോഭനങ്ങളാലും കല - സാഹിത്യ - പത്രമേഖലകൾ പോലും ഈ വ്യവസ്ഥിതിക്കെതിരെ സംസാരിക്കുന്നില്ലെന്നും ആണ്ടാൾ ദേവനായകി പറഞ്ഞുവയ്ക്കുന്നു.

ജമ്മുകാശ്മീരിന്റെ പ്രത്യേക അധികാരം ഇല്ലാതാക്കിയതുമായി ബന്ധപ്പെട്ട് കേന്ദ്രസർക്കാരിന്റെ നിയമമുണ്ടായ കാലഘട്ടത്തിൽ മറ്റേഴുത്തുകാരൊന്നും പ്രതികരിക്കാതിരുന്ന സമയത്ത് ടി.ഡി.രാമകൃഷ്ണൻ നടത്തിയ ധീരമായ ചെറുത്തുനിൽപ്പായിരുന്നു അന്ധർ ബധിരർ മുകർ. തൊണ്ണൂറ്റിഅഞ്ചിലെ ഡാനിഷ്‌പേട്ട് ലോക്കൂർ സെക്ഷനിൽ നടന്ന തീവണ്ടി അപകടത്തിന്റെ പശ്ചാത്തലത്തിൽ ഇന്ത്യൻ സാമൂഹ്യവ്യവസ്ഥയെ അനാവരണം ചെയ്ത നോവലാണ് പച്ച മഞ്ഞ ചുവപ്പ്. അതഭൂതപ്പെടുത്തുന്ന ആഖ്യാനസങ്കീർണതകളാൽ കെട്ടിയുയർത്തിയ നോവലാണ് മമ ആഫ്രിക്ക. ഭരണകൂടപീഡനങ്ങളും അതിനെതിരെ താരയും സുഹൃത്തുക്കളും നടത്തുന്ന അതിജീവനവുമാണ് കഥാതന്തു.

ഇത്തരത്തിൽ വ്യത്യസ്ത സാഹചര്യങ്ങളിൽ അടിച്ചമർത്തപ്പെട്ടവരോടുള്ള ആഭിമുഖ്യമായും പരിധികളില്ലാത്ത സാതന്ത്ര്യബോധത്തോടുള്ള പ്രതിരോധമായും ആസക്തികളുടെ അന്തിമഫലങ്ങളെന്തെന്ന പ്രവചനങ്ങളായും ഈ രചനകൾ മാറുന്നു. വിവിധ പ്രസിദ്ധീകരണങ്ങളിലൂടെ വാനക്കാരിലെത്തിച്ചേർന്ന ഇദ്ദേഹത്തിന്റെ കഥകൾ, വലിയ ക്യാൻവാസിൽ ചരിത്രങ്ങളും വ്യാഖ്യാനങ്ങളും നിറഞ്ഞ നോവലുകൾ മാത്രമല്ല സ്വതുലികക്ക് സാധ്യമാവുകയെന്നു വ്യക്തമാക്കുന്നുണ്ട്. ഏഴു കഥകളുടെ സമാഹാരം സിറാജുനിസ പ്രദാനം ചെയ്യുന്ന വായന എഴുത്തുകാരന്റെ യോജിപ്പുകളും വിധോജിപ്പുകളും രാഷ്ട്രീയവും തുറന്നുപറയുന്നു.

ഇരജീവിതത്തിന്റെ വായ്ത്താരികൾ

ഭൂരിപക്ഷഭീകരത എപ്പോഴും ന്യൂനപക്ഷങ്ങളെ വേട്ടയാടിക്കൊണ്ടിരിക്കുന്നു. ഭരണകൂടവും അതിന്റെ മർദ്ദനോപകരണങ്ങളും രാജ്യത്തിന്റെ വർഗ്ഗീയധ്രുവീകരണത്തിനായി അക്ഷീണം പ്രയത്നിക്കുമ്പോൾ ചില മതവിഭാഗങ്ങൾ, അവയിലെ പെൺജീവിതങ്ങൾ വലിയ അരക്ഷിതാവസ്ഥയിലേക്ക് കുപ്പുകുത്തുന്നു. സിറാജുനിസയെ കേരളം മറന്നിട്ടുണ്ടാകാൻ വഴിയില്ല, പാലക്കാട് പുതുപ്പള്ളിതെരുവിൽ വീട്ടുമുറ്റത്ത് കളിച്ചുകൊണ്ട് നിന്നപ്പോൾ പോലീസ് ക്രൂരമായി കൊലപ്പെടുത്തിയ പതിനൊന്നുകാരി.

സിറാജുനിസയുടെ നേതൃത്വത്തിൽ ഇരുനൂറോളം വരുന്ന അക്രമാസക്തരായ ജനക്കൂട്ടം പോലീസിന്റെ കൃത്യനിർവ്വഹണത്തിന് തടസ്സം സൃഷ്ടിക്കുകയും അവരെ അക്രമിക്കാൻ ശ്രമിക്കുകയും ചെയ്തതിനാലാണ് ജനക്കൂട്ടത്തെ പിരിച്ചുവിടുന്നതിന് വേണ്ടി മാത്രം ഈ പെൺകുട്ടിയെ വെടിവെച്ചതെന്ന് പോലീസ് ഭാഷ്യം. ഒരു രാഷ്ട്രത്തെ അപ്പാടെ കാവി പുതപ്പിക്കുവാനുള്ള ഭാരതയാത്രകളിലൊന്നിന്റെ രക്തസാക്ഷിയായി ആയിരത്തിതൊള്ളായിരത്തിതൊണ്ണൂറ്റിയൊന്ന് ഡിസംബർ പതിനഞ്ചിന് സിറാജുനിസ ചരിത്രത്തിലേക്ക് കുടിയേറി. കാലങ്ങൾക്ക് മുൻപ് പുറത്താക്കപ്പെട്ട വരേണ്യതയും വർഗീയതയും വർധിതവീര്യത്തോടെ കേരളത്തിന്റെ സാമൂഹികജീവിതത്തിൽ തേർവാഴ്ച നടത്തുന്ന കാലത്താണ് സിറാജുനിസ ഓർമ്മയും നടുക്കവുമായി മാറുന്നത്.

പതിനൊന്നാം വയസ്സിൽ ഈ ലോകത്ത് നിന്നും നിർബന്ധപൂർവ്വം യാത്രയാക്കപ്പെട്ട സിറാജുനിസ പിന്നീട് പല കാലങ്ങളിലും കഥാകാരന്റെ ഓർമ്മകളിൽ പ്രത്യക്ഷപ്പെട്ട് പറയുന്ന കഥകളാണ് സിറാജുനിസ എന്ന ചെറുകഥ (കൾ). ജീവിതത്തിൽ ഒരു പ്രത്യേക മതവിഭാഗത്തിൽ മാത്രം ജനിക്കപ്പെട്ടു എന്ന ഒറ്റ കാരണം കൊണ്ടുമാത്രം അഭിമാനത്തിനും അതസ്സിനും ജീവനുതന്നെയും ഭീഷണി/അപായം നേരിടേണ്ടി വരുന്ന സ്ത്രീകളുടെ പര്യായ പദമെന്നവണ്ണം കഥാകൃത്ത് സിറാജുനിസയെ ബിംബവൽക്കരിക്കുന്നുണ്ട്. ഗുജറാത്ത് കലാപത്തിൽ പ്രമാണിമാർക്കും, അധികാരികൾക്കും മാംസത്തിനോടുള്ള ആർത്തിത്തീർക്കുവാൻ തിരഞ്ഞെടുക്കുകയും പിച്ഛിപ്പിന്തി ഫാക്ടറിയിലെ ഫർണസിവിട്ട് എരിച്ചുകളയുകയും ചെയ്ത് ലോകത്തിൽ ഒരിടത്തും 'ഇങ്ങനെ ഒരു സ്ത്രീ' എന്ന തെളിവുപോലും ഇല്ലാതെയാക്കപ്പെട്ടവൾ(ർ)ക്ക് രാമകൃഷ്ണൻ സിറാജുനിസ എന്നു പേരിടുന്നു. ലതാമങ്കേഷ്കരുടെ സത്യം ശിവം സുന്ദരം എന്ന ഗാനം ഒരു മുസ്ലീം വനിത പാടിയപ്പോൾ മതവികാരം വ്രണപ്പെട്ട സംഘം ഗായികയെ വേദിയിൽ വെച്ചുതന്നെ കൊലപ്പെടുത്തിയപ്പോഴും, ജെ.എൻ.യു സമരകാലത്ത് കാശ്മീരി യുവാവിനെ പ്രണയിച്ച് വിവാഹം ചെയ്തതിന്റെ പേരിൽ ഭരണകൂടഭീകരത നേരിടുന്ന അധ്യാപികയ്ക്കും രാമകൃഷ്ണൻ കാണുന്നത് സിറാജുനിസയുടെ മുഖം തന്നെയാണ്.

സിറാജുനിസ ഓർമ്മയിൽ വന്ന് പറഞ്ഞ മൂന്ന് കഥകൾ എന്ന ആമുഖത്തോടെ ആരംഭിക്കുന്ന ഈ കഥയിൽ പല വേഷത്തിൽ/ഭാവത്തിൽ/വേദികളിൽ/തൊഴിലിടങ്ങളിൽ പീഡിപ്പിക്കപ്പെടുന്നവരെല്ലാം സിറാജുനിസമാരാണെന്ന ഒരു പ്രഖ്യാപനത്തിലേക്ക് കഥ ചെന്നെത്തിനിൽക്കുന്നു. സ്വന്തം ചുറ്റുവട്ടത്ത് സമാധാനപൂർവ്വം കളിച്ചുകൊണ്ടിരുന്നു എന്നതായിരുന്നു സിറാജുനിസയുടെ കുറ്റം. സ്വന്തം ഇടങ്ങളിൽ അപരന്റെ ഇടപെടലുകൾ/

തൂരിച്ചുനോട്ടങ്ങൾ എല്ലാം സിറാജുനിസയെന്ന ബിംബത്തിലൂടെ കഥയിൽ ചോദ്യം ചെയ്യപ്പെടുന്നു. കടന്നുകയറ്റങ്ങളുടെ മേഖലകൾ വർദ്ധിക്കുന്നതിലെ അസ്വസ്ഥതയും ഈ കഥയിൽ വായനക്കാരനെ ഉറ്റുനോക്കുന്നുണ്ട്. വിവിധ മേഖലകളിൽ ഇരയാക്കപ്പെടുന്നവരുടെ എണ്ണവും പേരുകളും ഇന്നു വർദ്ധിച്ചുവരുന്നു. ഇവരുടെ പേരുകൾ മാത്രമാണ് വ്യത്യാസപ്പെടുന്നതെന്നും ഇരകളെല്ലാം നിഷ്കളങ്കരാണെന്നും അതൊരു വായ്ത്താരിപോലെ ആവർത്തിക്കുന്നുവെന്ന പരിഹാസവും കഥയിൽ മുഴങ്ങുന്നുണ്ട്.

അടിച്ചമർത്തലുകൾ അലിഖിതനിയമങ്ങളാകുമ്പോൾ

കലാമേഖലയിൽ സെൻസറിങ്ങിന്റെ കാലമാണ്. നിയമപരമായും അല്ലാതെയും കലയും കലാജീവിതവും ഇന്ന് സെൻസർ ചെയ്യപ്പെടുന്നു. മതവികാരവും അതിന്റെ വ്രണപ്പെടലും എല്ലാവിധ ആവിഷ്കാരസ്വാതന്ത്ര്യത്തെയും കടിഞ്ഞാണിടാൻ മാത്രം രാക്ഷസീയരൂപം പ്രാപിച്ചിരിക്കുന്നു. ഒരു നോവലിൽ, ചെറുകഥയിൽ, സിനിമയിൽ അനേകവർഷത്തെ പാരമ്പര്യത്തിലും ചിന്തയിലും കെട്ടിയുയർത്തിയ മതങ്ങൾ തകർന്നടിയുമെന്നു കരുതി അതിനെ സംരക്ഷിക്കുവാനും നിലക്കുനിർത്തുവാനും ഇറങ്ങിപ്പുറപ്പെടുന്ന അല്പപാരരുടെ സാഹസികകഥയാണ് വെറുപ്പിന്റെ വ്യാപാരികൾ.

കെ.എസ്.ഭഗവാൻ എന്ന എഴുത്തുകാരന് ആഭിമുഖ്യം പ്രകടിപ്പിച്ചതിന് അയാളുടെ സഹപ്രവർത്തകനും സാഹിത്യകാരനുമായ രാമചന്ദ്രനെ ഒരു സംഘം കാവിയായികൾ കാര്യാലയത്തിലേക്ക് കുട്ടികൊണ്ടുപോകുന്നു.

പ്രീഡിഗ്രി കാലത്ത് രാമചന്ദ്രന്റെ സഹപാഠിയായിരുന്ന സുന്ദരരാമൻ എന്ന സുന്ദർജിയുടെ നിർദ്ദേശപ്രകാരമായിരുന്നു രാമചന്ദ്രനെയും കുട്ടിയുള്ള ഈ കാര്യാലയയാത്ര. സുന്ദർജിയും രാമചന്ദ്രനും വാദപ്രതിവാദങ്ങൾ നടത്തുകയും യുക്തിവാദികളോടും കമ്മ്യൂണിസ്റ്റുകളോടും സംസാരിക്കാൻ കൊള്ളിപ്പെന്ന നിഗമനത്തിലെത്തുകയും ചെയ്തു. സ്വനിലപാടുകളിൽ അടിയുറച്ചുനിന്നു സംസാരിച്ച രാമചന്ദ്രനെ തിരികെ വീട്ടിലേക്കുള്ള യാത്രാമധ്യേ സുന്ദർ അനുയായികളിൽ പ്രമുഖൻ കൊലപ്പെടുത്തി.

വർത്തമാനകാല ഭാരതത്തിൽ ഇതിനു സമാനമായ നിരവധി സംഭവങ്ങൾ അരങ്ങേറിയിട്ടുണ്ട്. തങ്ങൾക്ക് വഴങ്ങാത്തവരെ അധികാരത്തിന്റെ ഇരയത്ത് ശ്വാനനിദ്രയ്ക്ക് കീഴടങ്ങാത്തവരെ ഇല്ലാതാക്കുന്ന 'ജനാധിപത്യമര്യാദയും' ശാന്തിയും സമാധാനവും ഘോഷിക്കലും നടത്തുന്ന സമകാലികഭരണകൂടത്തിന്റെ ഹിംസയുടെ മുഖവും അവർ ഉന്നയിക്കുന്ന എല്ലാ പ്രശ്നങ്ങളുടെയും പിന്നിലുള്ള ഭരണ/വർഗ്ഗീയ താൽപര്യങ്ങളും പരിഹാസ ചുവയോടെ വായനക്കാരുടെ മുൻപിലേക്ക് എല്ലാവിധ തീവ്രതകളോടും കൂടി വെറുപ്പിന്റെ വ്യാപാരികൾ വെളിപ്പെടുത്തുന്നുണ്ട്. അപരസ്വാതന്ത്ര്യത്തിന്

മേലേക്കുള്ള കടന്നുകയറ്റത്തിന് ലഭിക്കുന്ന നിയമസാധ്യതയായി അധികാരത്തെ കണക്കാക്കുന്ന ഭരണവർഗ്ഗം തങ്ങൾക്കെതിരെ ഉയരുന്നസ്വരങ്ങൾ അടിച്ചമർത്തുന്നതിന് അലിഖിത നിയമങ്ങൾ സൃഷ്ടിക്കുന്ന സാമൂഹികയാഥാർത്ഥ്യത്തെ വരികൾക്കിടയിൽ കഥാകൃത്ത് ഒളിപ്പിച്ചിരിക്കുന്നത് കണ്ടെത്തേണ്ടത് വായനാധർമ്മമായി പരിവർത്തനപ്പെടുന്നു.

വിപ്ലവത്തിന്റെ പിരിമുറുക്കങ്ങൾ

എൺപതുകളിൽ വിപ്ലവാവേശമേറി വിജയവാധയിലേക്ക് ഇറങ്ങിപ്പുറപ്പെടുന്ന രാമുവെന്ന യുവാവിന്റെ ജീവിതമാണ് ബലിക്കുടീരങ്ങളെ എന്ന കഥയിൽ അവതരിപ്പിക്കുന്നത്. സാഹസികവും ആത്മാർത്ഥവും സ്വാതന്ത്ര്യവും നിറഞ്ഞ കാല്പനിക വിപ്ലവജീവിതം കണ്ടിറങ്ങുന്നവർക്ക് ഉൾക്കൊള്ളുവാൻ ബുദ്ധിമുട്ടുള്ള അവസ്ഥാവിശേഷങ്ങളാണ് ഇത്തരം പ്രസ്ഥാനങ്ങളുടെ ഉള്ളിൽ നിലനിൽക്കുന്നതെന്ന വെളിപ്പെടുത്തലായാണ് ഈ കഥ വായനക്കാരനിലേക്കെത്തുന്നത്. ജാനകിയുടെയും രാമുവിന്റെയും ജീവിതത്തിലൂടെ പുരോഗമിക്കുന്ന കഥയിൽ ഇന്ത്യയിലെ തീവ്രവിപ്ലവപ്രസ്ഥാനങ്ങളിൽ നിലകൊള്ളുന്ന സ്ത്രീവിരുദ്ധത വ്യക്തമാവുന്നു.

പാർട്ടിനേതൃത്വം ആവശ്യപ്പെടുന്നവരെ ഒളിവിൽ താമസിപ്പിക്കുവാനും, വേണ്ടി വന്നാൽ വിവാഹം ചെയ്യാനും ഇവിടെ സ്ത്രീകളെ നിർബന്ധപൂർവ്വം ഉപയോഗിക്കുന്നു. കഥയിലെ ജാനകിയെയും കൃഷ്ണയെയും ഇതേ ആവശ്യങ്ങൾ സാധ്യമാക്കുന്നതിനായി തട്ടിക്കൊണ്ടുവന്നതാണെന്ന് ജാനകി പറയുന്നുണ്ട്. എല്ലാവർക്കും സമത്വസുന്ദരമായ സ്വാതന്ത്ര്യം ഉദ്ഘോഷിക്കുന്ന തീവ്രഇടതുപക്ഷം സ്ത്രീയെ കേവലം ശാരീരിക ആവശ്യങ്ങൾക്കും, ഷെൽട്ടറിംഗ് സംവിധാനത്തിനും മാത്രമായി ഉപയോഗിച്ചു വരുന്നുവെന്നു പറയുന്നിടത്ത് പ്രസ്ഥാനങ്ങളുടെ ആശയവും പ്രയോഗവും തമ്മിലുള്ള വൈരുദ്ധ്യം വ്യക്തമാകുന്നു.

ചട്ടക്കൂടും, പിരമിഡ്സൈലി കേന്ദ്രീകൃത ഭരണനിയന്ത്രണവും ഏറ്റെടുക്കുന്ന ദൗത്യങ്ങൾ പരാജയപ്പെടാനും പ്രസ്ഥാനത്തിനുള്ളിലെ അധികാരവടംവലി സംഘടനാപിളർപ്പുകൾക്കും വഴിതെളിക്കുന്നതെങ്ങനെയെന്നും കഥ വ്യക്തമാക്കുന്നുണ്ട്. അധികാരമോഹങ്ങൾ വിപ്ലവസംഘടനകളുടെ അടിവേരറുക്കുമെന്ന് കഥ അടിവരയിട്ടുറപ്പിക്കുന്നു. രാമു ജാനകിയുടെ മരണത്തിന് ശേഷം തിരികെ നാട്ടിലെത്തി വിപ്ലവം ഒരു കാല്പനിക സ്വപ്നമാണെന്ന തിരിച്ചറിവിൽ ഗവൺമെന്റ് ജോലിയിൽ പ്രവേശിക്കുകയും അറിയപ്പെടുന്ന എഴുത്തുകാരനായി രൂപാന്തരപ്പെടുകയും ചെയ്തു. ആദിമ ധ്യാനം ബലിക്കുടീരങ്ങളെ എന്ന നാടകഗാനം മാത്രമായിരുന്നു രാമുവിന്റെ വിപ്ലവജീവിതത്തിന്റെ കൈമുതൽ. കാലമെത്ര കഴിഞ്ഞാലും സമത്വത്തിനാ

യുള്ള ആഗ്രഹം മനുഷ്യനിൽ നിറയുമെന്നതിന്റെ സൂചനയായി ജാനകിയുടെ മകൾ കൃഷ്ണ, രാമുവിന്റെ കൂടെ മുപ്പത് വർഷങ്ങൾക്ക് ശേഷം ജാനകിയുടെ കുഴിമാടത്തിനുമുൻപിൽ നിന്ന് ഇതേ ഗാനം ആവർത്തിക്കുമ്പോൾ കഥ അവസാനിക്കുന്നു. പക്ഷേ വിപ്ലവ ആഗ്രഹങ്ങൾ തുടരുകയാണെന്ന് വായനക്കാരന് ബോധ്യമാകുന്നുണ്ട്.

മാറ്റത്തിന്റെ കടന്നുകയറ്റങ്ങൾ

പാരമ്പര്യവും ആധുനികതയും, തലമുറകൾ തമ്മിലുള്ള അന്തരങ്ങളെയും, ആരോഗ്യസംരക്ഷണരംഗത്തെ വിശ്വാസഅവിശ്വാസങ്ങളെയും - എന്നിങ്ങനെ പരസ്പരം രാപകൽ വ്യത്യാസത്തിൽ നിലകൊള്ളുന്ന സമകാലിക സാമൂഹികഅവസ്ഥകളുടെ പ്രതിഫലനമാണ് വിശ്വാസം അതല്ലേ എല്ലാം. വർത്തമാനകാലത്ത് വ്യത്യസ്തരായി ശ്രദ്ധ പിടിച്ചുപറ്റുവാൻ എന്തറ്റം വരെയും പോകുന്ന യുവതലമുറയെയും അതിനുമുമ്പിൽ ഒരേസമയം അന്ധാളിക്കുകയും പരിഹാരം കാണുകയും ചെയ്യേണ്ടി വരുന്ന മുതിർന്ന തലമുറയെയും ഇവിടെ കാണാം.

ആദിമ മനുഷ്യരെപ്പോലെ ഭക്ഷണത്തിനായി ഉപയോഗിക്കുന്ന സസ്യ മാംസാദികൾ പാചകംചെയ്യാതെ ക്ഷിക്കുന്ന സവിശേഷ രീതിയിലേക്ക് അനുപ് എന്ന ചെറുപ്പക്കാരൻ എത്തിച്ചേരുന്നത് കേവലം വ്യത്യസ്തതയ്ക്കും പ്രശസ്തിയ്ക്കും വേണ്ടിയാണ്. അതിനായി അയാൾ പാചകം ചെയ്യാതെ മാംസാഹാരം ശീലമാക്കുന്നു. അയാളെ ചികിത്സിക്കാനായി വീട്ടുകാർ കണ്ടെത്തുന്ന കഷായംവെല്യപ്പനാണ് കഥയിലെ മറ്റൊരു കഥാപാത്രം. കരിങ്കുരങ്ങ് രസായനം നിർമ്മിച്ചുവിൽക്കലാണ് ഇദ്ദേഹത്തിന്റെ ജീവിതമാർഗ്ഗം. കരിങ്കുരങ്ങനെ സാധുജീവിയ്ക്ക് യാതൊരുവിധ ഔഷധഗുണവുമില്ലെന്ന് ഔദ്യോഗിക സ്ഥിതീകരണം വന്നിട്ടുണ്ടെങ്കിലും സമൂഹത്തിലെ ഉന്നതർക്കുവേണ്ടി കഷായംവെല്യപ്പൻ അദ്ദേഹത്തിന്റെ രസായന കച്ചവടം മുറയ്ക്കുന്നില്ല. പാചകം ചെയ്യാത്ത ഭക്ഷണത്തിലൂടെ തന്നെ കഷായംവെല്യപ്പൻ അനുപിനെ കൈകാര്യം ചെയ്യുന്നു. വൈദ്യരുടെ തുടർച്ചയായ പീഡനമുറകൾക്കൊടുവിൽ അനുപ് ആധുനികമനുഷ്യന്റെ ഭക്ഷണരീതിയിലേക്ക് മടങ്ങിയെത്തുന്നു.

ഉന്നതന്മാർക്കുവേണ്ടി നിയമത്തെ നോക്കുകുത്തിയാക്കിക്കൊണ്ടുള്ള പ്രകൃതി ചൂഷണവും, ആധുനിക യുവതലമുറ വ്യത്യസ്തതയ്ക്കുവേണ്ടി നടത്തുന്ന മാറ്റങ്ങളുടെ നിരർത്ഥകതയും, പ്രകൃതിചികിത്സയിലും, ആയുർവേദത്തിലും ആധുനികലോകത്തിന്റെ ലാഭകൊതിയുടെ വ്യാപനവുമെല്ലാം ഈ കഥയുടെ പലഭാഗങ്ങളിലും ചർച്ചയാവുന്നുണ്ട്. എല്ലാം വിറ്റഴിക്കുന്നതിനായി ഒരു സംരംഭകൻ സൃഷ്ടിച്ച 'ടാഗ് ലൈൻ' കഥയുടെ പേരായി

വരുമ്പോൾത്തന്നെ എത്രമാത്രം മൂലധന ലാഭകേന്ദ്രീകൃതമായ ഒരു ലോകത്താണ് സ്വജീവിതമെന്ന് വായനക്കാരൻ ചിന്തിച്ച് തുടങ്ങും. ലാഭകേന്ദ്രീകൃതലോകത്ത് പാരമ്പര്യവും മാറ്റങ്ങളും ഏറ്റവും നിരർത്ഥകപ്രയോഗങ്ങളാണെന്നും അവ മൂലധനശക്തികളുടെ ലാഭച്ഛായുടെ പ്രതീകങ്ങളാണെന്നും കഥ സൂചിപ്പിക്കുന്നു.

തിരുത്താൻ തുനിഞ്ഞിറങ്ങുമ്പോൾ

ഭൂരിപക്ഷതീവ്രവാദത്തിന്റെ അത്രതന്നെ പ്രഹരശേഷിയുള്ളതും മനുഷ്യത്വവിരുദ്ധവുമായ ഒന്നാണ് ന്യൂനപക്ഷതീവ്രവാദം. ചെറുത്തുനിൽപ്പിന്റെ പേരിലാണെങ്കിലും കടന്നുകയറ്റങ്ങളുടെ പേരിലാണെങ്കിലും അപരന്റെ സ്വസ്ഥജീവിതങ്ങളിലേക്ക് മതസംഹിതകളുമായി കടന്നുകയറി അവരെ വിചാരണ ചെയ്യുന്നതും കൊലപ്പെടുത്തുന്നതും നഖശിഖാന്തം എതിർക്കപ്പെണ്ടതാണെന്ന് വ്യക്തമാക്കുന്ന കഥയാണ് സൂര്യനഗർ. ജാതിമതആചാരങ്ങൾക്ക് അപ്പാടെ സ്വയം വിലക്ക് ഏർപ്പെടുത്തി ജാതി/മതരഹിതജീവിതം നയിക്കുന്ന ആളുകളാണ് സൂര്യനഗർ എന്ന കോളനിയിലെ താമസക്കാർ. പ്രൊഫസർ ജോസഫിൽ മതനിന്ദ ആരോപിച്ച്, അദ്ദേഹത്തിന്റെ കൈപ്പത്തി വെട്ടിമാറ്റിയതിന്റെ പിറ്റേന്നാണ് സൂര്യനഗരിലും താലിബാനിസത്തിന്റെ വക്താക്കൾ പ്രത്യക്ഷപ്പെടുന്നത്.

മതരഹിത കോളനി ദൈവവിരുദ്ധമാണെന്നും അവിടെ സകലവിധ അനാചാരങ്ങളും നടക്കുന്നുവെന്നും തെളിവുസാഹിതം തീവ്രമതവാദികൾ കോളനിയുടെ സൈക്രട്ടറിയും പഴയ പരിഷത്ത് പ്രവർത്തകനുമായിരുന്ന ടി.കെ-യെ ബോധിപ്പിക്കുന്നുണ്ട്. ജന്മം കൊണ്ട് ഒരു പ്രത്യേക ന്യൂനപക്ഷ സമുദായാംഗമായ പെൺകുട്ടിയെ തിരികെ വിശ്വാസജീവിതത്തിലേക്കും പരമകാര്യബുദ്ധനായ ദൈവത്തിന്റെ കരുതലിലേക്കും കൊണ്ടുവരുന്നതിനുവേണ്ടി ആ സ്ത്രീയെ പരസ്യമായി വിചാരണ ചെയ്യുന്നുണ്ടെന്നും, ആ ചടങ്ങിലേക്ക് നിർബന്ധമായും എത്തണമെന്നും അവർ കുട്ടിച്ചേർത്തു. കലാരംഗത്ത് ഏറെ പ്രശസ്തയായ ഒരു പെൺകുട്ടിയെ ഒരു ഹോട്ടലിൽ നിന്നും കൃത്യമായി വസ്ത്രം ധരിക്കുവാൻ പോലും അവസരം നൽകാതെ ഭാഗികമായും പിന്നീട് പൂർണ്ണമായും നഗ്നയാക്കി വിസ്തരിക്കുന്ന ഭാഗമാണ് കഥയുടെ ക്ലൈമാക്സ് രംഗങ്ങൾ.

ലൈംഗിക സദാചാരവാദവും, സദാചാര പോലീസിംഗും വളരെ ശക്തമാക്കപ്പെടുന്ന ഈ കാലത്ത് ഇത്തരം സദാചാര ഗുണ്ടായിസത്തിന്റെ വക്താക്കളെ കായികമായി നേരിടണമെന്നു തന്നെയാണ് ഈ കഥയിൽ ടി.ഡി. രാമകൃഷ്ണൻ പറഞ്ഞുവയ്ക്കുന്നത്. അതേസമയം മതരഹിതമെന്നും, ജാതിരഹിതമെന്നും പുറമെ പരസ്യപ്പെടുത്തുന്ന പല സംവിധാനങ്ങളിലും

ഇവ ഏറ്റവും തീവ്രമായ നിലയിൽ നിലകൊള്ളുന്നവെന്ന വിമർശനവും കഥയിൽ അവതരിപ്പിക്കപ്പെടുന്നുണ്ട്. ഇത്തരത്തിൽ തീവ്രവാദവും അപരജീവിതത്തിലേക്കുള്ള കടന്നുകയറ്റവും ആരുടെ ഭാഗത്തുനിന്നായാലും എതിർക്കപ്പെടേണ്ടതാണെന്നും ഏതു സംഹിതകളുടെ അടിസ്ഥാനത്തിലായിരുന്നാലും അതിലേറ്റവും തീവ്രതയോടെ ദുരന്തമനുഭവിക്കുന്നത് സ്ത്രീകളാണെന്നും കഥാകൃത്ത് വ്യക്തമാക്കുന്നു. ജാതി - മതരഹിത നാട്യങ്ങളെല്ലാ മറിച്ച് അപരന്റെ ജീവിതത്തിനും ചിന്തകൾക്കും നേരെയുള്ള കടന്നുകയറ്റങ്ങൾക്കെതിരെ ശക്തമായ പ്രതികരണമാണ് വേണ്ടതെന്ന് കഥ ഓർമ്മപ്പെടുത്തുന്നു.

ശരീരം ആയുധമാകുന്ന കാലം

കോർപ്പറേറ്റ് മേഖലകളിലെ ചൂഷണങ്ങളും അവയോടുള്ള പ്രതികരണങ്ങളുമാണ് കെണി എന്ന കഥ മുൻപോട്ടുവയ്ക്കുന്നത്. ഉദ്യോഗക്കയറ്റത്തിനും , മികച്ച ജീവിതസാഹചര്യങ്ങൾക്കും, വിദേശവാസത്തിനുമായി വഴിവിട്ട് സഞ്ചരിക്കുന്ന യുവതലമുറയെ കഥയിൽ കാണാം. ലോകം മുഴുവൻ പടർന്നിരിക്കുന്ന ഒരു എം.എൻ.സിയുടെ ഇന്ത്യാവിഭാഗം മേധാവി അമേരിക്കയിലേക്ക് ജോലിക്കയറ്റവും ഉയർന്ന ശമ്പളവും ലഭ്യമാക്കാമെന്ന് പ്രലോഭിപ്പിച്ചുകൊണ്ട് ഇതേ കമ്പനിയുടെ ഇന്ത്യയിലെ ഒരു ബ്രാഞ്ചിലെ സോഫ്റ്റ്‌വെയർ എഞ്ചിനീയറായ രേഖ എന്ന പെൺകുട്ടിയെ രണ്ട് ദിവസം പൂർണ്ണമായും ലൈംഗികമായി ചൂഷണം ചെയ്യുന്നതും തുടർന്നുള്ള സംഭവങ്ങളുമാണ് കഥയിൽ അവതരിപ്പിക്കപ്പെടുന്നത്.

പ്രലോഭനത്തിൽ ആകൃഷ്ടയാവുകയും വഞ്ചിക്കപ്പെടുന്ന സ്ത്രീ ആവിഷ്കാരങ്ങളിൽ നിന്നും വ്യതസ്തമായി സ്വന്തം ശരീരത്തിനോട് മറ്റൊരാൾക്ക് തോന്നുന്ന ആസക്തി ആയുധമായി ഉപയോഗിച്ച് തനിക്കാവശ്യമായവ സ്വന്തമാക്കുന്ന തന്റേടിയായ സ്ത്രീയുടെ പ്രതിരൂപമാണ് രേഖ. എത്രമാത്രം കഴിവുണ്ടെങ്കിലും ബോസ്സിന്റെ സഹായമില്ലാതെ ഉദ്യോഗക്കയറ്റം അസാധ്യമാകുന്നിടത്താണ് രേഖ സ്വശരീരത്തെ തന്നെ ആയുധമാക്കുന്നത്. വീക്കെന്റ് ട്രിപ്പിനുശേഷം വാഗ്ദാനങ്ങളിൽ നിന്നും ഒഴിഞ്ഞുമാറാൻ ശ്രമിക്കുന്ന വിജയിയോട് രേഖ ഇരുവരുടെയും വീക്കെന്റ് രഹസ്യങ്ങൾ പുറത്തുവിടുമെന്ന് ഭീഷണിപ്പെടുത്തുന്നുണ്ട്.

സാങ്കേതികവിദ്യയും കൂർമ്മബുദ്ധിയും കൊണ്ട് ഒരുപക്ഷേ തനിക്കു തന്നെ വിനയായേക്കാവുന്ന ഒരു വെർച്വൽ പെപ്പൻ തന്നെ ചൂഷണം ചെയ്ത ആൾക്കുനേരതന്നെ ഉപയോഗിച്ച് അയാളെ വരുതിക്കുള്ളിലേക്ക് എത്തിക്കുന്ന രേഖ, സ്വന്തം ശരീരത്തെ പോലും ആയുധമാക്കുന്ന ഏറ്റവും ധീരയായ കഥാപാത്രമാകുന്നു. ചൂഷണാധിഷ്ഠിതമായ ലോകക്രമത്തിൽ

ചുഷണങ്ങൾക്ക് വിധേയമാക്കപ്പെട്ടാൽ തളരുകയല്ല മറിച്ച് അതിനെത്തന്നെ ഉപയോഗിച്ചു മുന്നേറുകയാണ് വേണ്ടതെന്ന ബോധം കെണി പറഞ്ഞുവയ്ക്കുന്നു.

ആസക്തിയുടെ സ്വപ്നക്കൂടാരം

സമൂഹത്തിന്റെ ഏറ്റവും മേൽത്തട്ടിലുള്ള ഒരു അധ്യാപകനും അയാളുടെ ശിഷ്യന്മാർക്കും സ്ത്രീയോടും ധനത്തോടുമുള്ള ആസക്തിയും, അവർ പരസ്പരം ചെയ്യുന്ന വിശ്വാസവഞ്ചനയും ഒക്കെചേർന്നതാണ് സ്വപ്ന മഹൽ എന്ന കഥ. തങ്ങളുടെ അധ്യാപകൻ അയാളുടെ സമ്പത്ത് മുഴുവൻ അത്രയ്ക്ക് നല്ല അഭിപ്രായമില്ലാത്ത ഒരു അനാഥാലയത്തിന് വിൽപത്രം തയ്യാറാക്കിയിരിക്കുന്നത് തിരുത്തുകയെന്നതായിരുന്നു ശിഷ്യന്മാരുടെ ലക്ഷ്യം. ഇതിനായി അവർ അധ്യാപകനുള്ള സ്ത്രീയുടെ സൗന്ദര്യമെന്ന ബലഹീനത ചുഷണം ചെയ്യുവാൻ തീരുമാനിക്കുന്നു. പത്തുകോടിയിലധികം വരുന്ന സ്വത്തിനെ ഒരു ട്രസ്റ്റാക്കണമെന്നും, ട്രസ്റ്റിൽ തങ്ങളെ ഉൾപ്പെടുത്തി വിൽപത്രം മാറ്റിയെഴുതിക്കണമെന്നും അവർ തീരുമാനിച്ചു. പണത്തിനുവേണ്ടി കുറ്റകൃത്യങ്ങൾ ചെയ്യുന്ന ഒരു സ്ത്രീയെ ഇതിനായി അവർ കണ്ടെത്തി പദ്ധതിയേൽപ്പിച്ചു.

സ്ത്രീ, ധനം എന്നിവയോടുള്ള അമിതാസക്തി എപ്രകാരം വർത്തമാനകാലത്ത് ബൗദ്ധികമേഖലയിൽ നിലകൊള്ളുന്നുവെന്ന് വ്യക്തമാക്കുന്നതാണ് സ്വപ്ന മഹൽ. ട്രസ്റ്റുകളുടെയും അനാഥശാലകളുടെയും കൈകളിലേക്ക് കുമിഞ്ഞുകൂടുന്ന ഭൂരിഭാഗം പണത്തിന്റെയും ശ്രോതസ്സുകളും, അവയുടെ ലഭ്യതക്കുപയോഗിക്കുന്ന മാർഗങ്ങളും പരിഹാസരൂപേണ ഇവിടെ തുറന്നു കാണിക്കപ്പെടുന്നുണ്ട്. വർത്തമാനകാലത്തു ഉന്നതവിദ്യാഭ്യാസമേഖലയിൽ നിലകൊള്ളുന്ന നാരി - ധനാസക്തികളുടെ പിന്നാമ്പുറ കഥകളെന്ന രീതിയിൽ വായനക്കാരനിൽ ഒരേസമയം അത്ഭുതവും അസ്വസ്ഥതയും ആകാംക്ഷയും സൃഷ്ടിക്കുന്ന രചനയായി സ്വപ്ന മഹൽ പരിവർത്തനപ്പെടുന്നു.

ഉപസംഹാരം

ഭൂരിപക്ഷഭീകരതയിൽ ഇരയാക്കപ്പെടുന്ന ന്യൂനപക്ഷവിഭാഗങ്ങളുടെ ജീവിതങ്ങൾ, കല/സാഹിത്യമേഖലകളിലേക്കും ആവിഷ്കാരസ്വാതന്ത്ര്യത്തിലേക്കും സ്വരാഷ്ട്രീയ സംഹിതകൾക്കനുസരിച്ച് സെൻസറിങ്ങിനും അടിച്ചമർത്തലിനും അധികാരത്തിന്റെ പിൻബലത്തിൽ ഇറങ്ങിപ്പുറപ്പെടുന്നവർ, സമതമെന്ന ആശയത്തിനായി പോരാടുവാനിറങ്ങി തിരിച്ച തീവ്രവിപ്ലവ സംഘടനകളിലെ അധികാരവടംവലിയും സ്ത്രീവിരുദ്ധതയും, തീർത്തും ജഡികമായ മാറ്റങ്ങളിലേക്ക് അധഃപതിക്കുന്ന യുവതലമുറ, പരലോകജീവിതം ദൈവത്തിനൊപ്പമാക്കാൻ തുനിഞ്ഞിറങ്ങി അപരന്റെ ജീവിതത്തെയും

അഭിമാനത്തെയും പീഡിപ്പിക്കുന്ന ന്യൂനപക്ഷഭീകരത, സ്വന്തം ശരീരത്തെ ചൂഷണം ചെയ്തവനെ അതേ നാണയത്തിൽ തിരിച്ചടിച്ചുകൊണ്ട് സ്വശരീരം തന്നെ ആയുധമാക്കുന്ന അതിജീവനത്തിന്റെ പോരാട്ടങ്ങൾ, ബൗദ്ധികമേഖലയിൽ ഒരു പ്രായത്തിലും ഒടുങ്ങാത്ത ധന - നാരീആസക്തികളുമായി ജീവിക്കുകയും പുറമെ കപടവ്യക്തിത്വത്തിന്റെ മുഖംമൂടി അണിഞ്ഞ് തെറ്റിദ്ധരിപ്പിക്കുകയും ചെയ്യുന്നവർ എന്നിങ്ങനെ അസ്വസ്ഥതയുടെ ചരിത്രവും അസഹ്യതയുടെ വർത്തമാനവും അടയാളപ്പെടുത്തുന്ന സിറാജുനിസ എന്ന ഈ കഥാസമാഹാരത്തിൽ സമൂഹത്തിന്റെ എല്ലാ തുറകളിലും നിലനിൽക്കുന്ന അസഹിഷ്ണുതകളെയും ആസക്തികളെയും ചൂഷണങ്ങളെയും കഥാകാരൻ വ്യക്തമാക്കുന്നു. ഈ കഥകളിലൂടെ മലയാളത്തിന് പുതിയൊരു വായനാനുഭവം തീർക്കുകയാണ് ടി.ഡി.രാമകൃഷ്ണൻ. സമൂഹത്തിലെ വർത്തമാനകാല സാഹചര്യങ്ങളെ അവയുടെ രാഷ്ട്രീയവുമായി ചേർന്നുനിന്ന് അടിച്ചമർത്തപ്പെട്ടവർക്കുവേണ്ടി സംസാരിക്കുന്ന ഈ രചനകൾ ഇന്നിന്റെ രേഖാചിത്രവും നാളെകളിൽ വരാനിരിക്കുന്ന ദുരന്തങ്ങളുടെ പ്രവചനങ്ങളുമായി വായനക്കാരിൽ അസ്വസ്ഥതയുടെ മാരിവില്ലുകൾ തീർക്കുമെന്ന് തീർച്ചയാണ്.

ഗന്മസൂചി

രാമകൃഷ്ണൻ, ടി ഡി. സിറാജുനിസ. കോട്ടയം : ഡി.സി.ബുക്സ്. 2017.

ടി ഡി.രാമകൃഷ്ണൻ. വിക്സിപീഡിയ.

ഷാജിജേക്കബ്. ദേവനായകിമിത്തും ചരിത്രവും. www.marunadanmalayali.com/pusthkavicharam.

മീന.ടി.പിള്ള. Mixing Myth and Memory. The Hindu. July 9. 2015.

രാമകൃഷ്ണൻ, ടി.ഡി./ശ്രീപാർവ്വതി. ഈ മണ്ണിൽ ഇനിയൊരു എഴുത്തുകാരന്റെ ചോര വീഴരുത്.

m.manoramaonline.com/literature/interviews. July 29. 2016.

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ആശമോൾ ജോസഫ്

അസിസ്റ്റന്റ് പ്രൊഫസർ ഓൺ കോൺട്രാക്റ്റ്

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പ്രബന്ധസംഗ്രഹം

ഓരോദിവസവും സർഗ്ഗാത്മകമായ മാറ്റങ്ങൾക്ക് വിധേയമായി കൊണ്ടിരിക്കുന്ന മേഖലയാണ് പരസ്യകലയുടേത്. ലളിതമായ മാർഗ്ഗങ്ങളിലൂടെ ആരംഭിച്ച് സങ്കീർണ്ണവും, അത്ഭുതാവഹവുമായ നിലകളിലാണ് ആധുനിക പരസ്യങ്ങൾ എത്തിച്ചേർന്നിരിക്കുന്നത്. പരസ്യ സന്ദേശങ്ങളിലും പരസ്യാവതരണ രീതിയിൽ ഉൾപ്പെടെ അടിമുടി മാറ്റം പ്രകടമായി കൊണ്ടിരിക്കുകയാണ് ഇന്ന്. ഉല്പന്നങ്ങളുടെ അതിപ്രസരവും. ഉപഭോഗസംസ്കാരവും മാറ്റി മറിച്ച പരസ്യത്തിന്റെ വികാസപരിണാമങ്ങളെക്കുറിച്ച് വിശകലനം ചെയ്യുകയാണ് ഈ പ്രബന്ധത്തിൽ.

താക്കോൽ വാക്കുകൾ : ഡയറക്ട്മെയിൽ, സൈൻബോർഡ്, ടൗൺക്രെയർ, സ്പേയ്സ് ബയർ, ടൈം ബയർ, ജിംഗിൾ, സ്കിപ്പ്.

അനുദിന ജീവിതത്തിൽ പരസ്യത്തെ ആശ്രയിച്ച് മുന്നോട്ട് പോകുന്നവരാണ് നാം. ചില സാധനങ്ങളെ അല്ലെങ്കിൽ സേവനങ്ങളെ വ്യക്തമായി മനസ്സിലാക്കാൻ, പല പല ആശയങ്ങളെ അറിയുന്നതിനും മനസ്സിലാക്കുന്നതിനും നമ്മൾ അറിഞ്ഞും അറിയാതെ യും പരസ്യത്തെ ആശ്രയിക്കുന്നു. എന്നാൽ ഇന്ന് കാണുന്ന പരസ്യങ്ങൾ ഈ നിലയിലേക്ക് എത്തുന്നതിനു പിന്നിൽ സുദീർഘമായ ഒരു ചരിത്രമുണ്ട്.

ഗൃഹകളിൽ താമസിച്ചിരുന്ന മനുഷ്യർക്ക് വിൽക്കാനോ കൈമാറ്റം ചെയ്യാനോ ഉൽപ്പന്നങ്ങൾ ഉണ്ടായിരുന്നില്ല. പിന്നീട് ഗൃഹകളിൽ നിന്ന് പുറത്ത് വന്ന് സമൂഹമായി ജീവിച്ചപ്പോൾ അവരുടെ ജീവിതത്തിൽ പല ആവശ്യങ്ങളും ഉണ്ടായി. ഈ സാഹചര്യത്തിൽ അവൻ ആവശ്യത്തിൽ കൂടുതൽ ഉള്ള മരവുരി, വേട്ടക്കുപയോഗിക്കുന്ന വസ്തുക്കൾ തുടങ്ങിയവ ആവശ്യക്കാർക്ക് നൽകി. തങ്ങൾക്കാവശ്യമുള്ള സാധനങ്ങൾ തിരികെ വാങ്ങുക എന്ന സമ്പ്രദായം അവലംബിച്ചു. ഈ കൊടുക്കൽ വാങ്ങൽ അല്ലെങ്കിൽ ബാർട്ടർ സമ്പ്രദായത്തിന്റെ വളർച്ചയിലാണ് പരസ്യത്തിന്റെ വളർച്ച.

ഈ കൈമാറ്റ പ്രക്രിയ വളർന്ന് വികസിച്ചതോടെ കമ്പോളങ്ങൾ രൂപ

പ്പെട്ടു. പതുകെ പതുകെ വിൽപ്പന ഇന്ന് കാണുന്ന അവസ്ഥയിലെത്തി. അച്ചടിയോ, അച്ചടി മാർഗ്ഗങ്ങളോ കണ്ടുപിടിക്കാതിരുന്ന അന്ന് പരസ്യത്തിനുള്ള ഏക മാർഗം 'വാമൊഴി' പരസ്യമായിരുന്നു. ഇന്നും നിലനിൽക്കുന്ന ഒരു പരസ്യരീതി കൂടിയാണിത്. ആധുനിക പരസ്യത്തിന്റെ ഉത്ഭവം വാമൊഴി പരസ്യത്തിൽ നിന്നാണെന്ന് ഇതിൽ നിന്നുമാനിക്കാം. പുരാതന ഈജിപ്തിലും ഗ്രീക്കിലുമൊക്കെ ഇതിന് തെളിവുകൾ ഉണ്ട്.

വാമൊഴി പരസ്യത്തോടൊപ്പം തന്നെ രൂപം കൊണ്ടവയാണ് പരസ്യപലകകൾ, ആൽബങ്ങൾ, ശിലാലേഖനങ്ങൾ എന്നിവ. ഇവയിലൂടെ ഒക്കെ ആദിമ മനുഷ്യർ തങ്ങളുടെ ഉൽപ്പന്നങ്ങളെക്കുറിച്ച് മറ്റുള്ളവർക്ക് വിവരങ്ങൾ നൽകിക്കൊണ്ടിരുന്നു. മധ്യകാല ബ്രിട്ടനിലും ഫ്രാൻസിലും സത്രം സൂക്ഷിക്കുന്നവർ ഒരു സൈൻബോർഡ് സ്ഥാപിക്കാൻ നിർബന്ധിതരായി. ഇതാണ് പിന്നീട് വാണിജ്യ സ്ഥാപനങ്ങളിലേക്ക് മറ്റും വ്യാപിച്ചത്.

പത്തൊൻപതാം നൂറ്റാണ്ടിന്റെ മധ്യത്തിൽ മുതലാളിത്ത സമ്പദ്വ്യവസ്ഥയിലെ ഒരു പ്രധാന ശക്തിയായി പരസ്യം മാറി. പത്രങ്ങളെയും മാസികകളെയും അടിസ്ഥാനമാക്കിയാണ് പരസ്യം വളർന്നു തുടങ്ങിയത്. ഇരുപതാം നൂറ്റാണ്ട് ആയപ്പോൾ ഡയറക്ട് മെയിൽ, റേഡിയോ, ടെലിവിഷൻ, ഇന്റർനെറ്റ്, മൊബൈൽ തുടങ്ങിയ സാങ്കേതിക വിദ്യകളുപയോഗിച്ച് പരസ്യം അതിവേഗം വളർന്നു. എന്നാൽ അച്ചടിക്ക് മുമ്പുള്ള കാലഘട്ടത്തിൽ മൂന്ന് പ്രധാന പരസ്യ രൂപങ്ങൾ ആണ് നിലവിലുണ്ടായിരുന്നത്. വ്യാപാരമുദ്രകൾ, ടൗൺ ക്രൈയർ, സൈൻ ബോർഡുകൾ എന്നിവയായിരുന്നു അവ. പത്രങ്ങളുടെയും മാസികകളുടെയും കടന്നു വരവോടെയാണ് ആധുനിക പരസ്യങ്ങൾ രൂപപ്പെട്ടത്. ആദ്യകാലങ്ങളിൽ തന്നെ അച്ചടിയുടെയും വിതരണത്തിന്റെയും ചിലവ് കുറയ്ക്കാൻ പത്രങ്ങളിൽ പരസ്യം നൽകിയിരുന്നു. എന്നാൽ പിന്നീട് പരസ്യം നൽകുന്ന ഉൽപ്പന്നങ്ങളുടെ എണ്ണം ഗണ്യമായി വർദ്ധിച്ചു. അതോടെ പത്രങ്ങളിലെ പ്രധാന സ്ഥലങ്ങൾ വാങ്ങുന്നതിനുള്ള (സ്പേയ്സ് ബയർ) കടുത്ത മത്സരങ്ങൾ ആണ് നടന്നത് ഇന്നും അതാണ് സംഭവിച്ചുകൊണ്ടിരിക്കുന്നത്. ഇന്നത്തെ പ്രത്യേകിച്ചും ഉത്സവകാലത്തെ പത്രങ്ങൾ കണ്ടാൽ പരസ്യം കാണുന്നതിന് മാത്രമാണോ പത്രം വാങ്ങിയതെന്നും, പത്രയർമ്മം മറന്നു പോയോ എന്നും തോന്നും.

റേഡിയോ വഴിയും പരസ്യങ്ങൾ പ്രചരിച്ചു. സ്വീകർത്താക്കളുടെ മനസ്സിലേക്ക് പരസ്യസന്ദേശങ്ങൾ ജിംഗിളിലൂടെയും ഇമ്പമാർന്ന ശബ്ദത്തിലൂടെയും അക്ഷരസ്പന്ദതയോടും ലളിതമായും എത്തിച്ചു. പരസ്യത്തിന്റെ വളർച്ചയുടെ ഈ ഘട്ടത്തിലാണ് വിവിധ ബ്രാൻഡുകളുടെ ആശയവും അവയുടെ പ്രാധാന്യവും ജനിക്കുന്നത്.

ടെലിവിഷന്റെ പിറവി അനുവരെയുണ്ടായിരുന്ന പരസ്യരീതികളെ മാറ്റി മറിച്ചു. കമ്പനികൾ ടെലിവിഷനിൽ പരസ്യങ്ങൾക്കായി സമയം വാങ്ങാൻ (ടെം ബയർ) മത്സരിച്ചു. ഒരേ സമയം വ്യക്തമായ സന്ദേശങ്ങളും ദൃശ്യങ്ങളും ഉപഭോക്താക്കൾക്ക് മുമ്പിൽ എത്തിക്കാമെന്നത് ഉൽപ്പന്ന നിർമ്മാതാക്കളെ ടെലിവിഷനിലേക്ക് ആകർഷിപ്പിച്ചു. അതോടൊപ്പം പരസ്യ വ്യാപ്തി വർദ്ധിച്ചു.

പരസ്യത്തെ വളർച്ചയുടെ പരമോന്നതിയിൽ എത്തിച്ചത് ഇന്നത്തെ ഡിജിറ്റൽ യുഗമാണ്. പേഴ്സണൽ ലാപ്ടോപ്പുകളും, സ്മാർട്ട് ഫോണുകളും, ഐ ഫോണുകളും, ഇന്റർനെറ്റ് സൗകര്യങ്ങളും ഒക്കെ പരസ്യത്തെ ഇന്നത്തെ ഉയർച്ചയിലെത്തിച്ചു. സാങ്കേതിക മുന്നേറ്റം മറ്റ് ഏതൊരു മേഖലയെയും സമ്പന്നമാക്കിയതു പോലെ പരസ്യമേഖലയെയും ത്വരിതഗതിയിൽ വളർത്തി. സോഷ്യൽ മീഡിയയിൽ നമ്മൾ ആഗ്രഹിക്കുന്ന ഒരു വീഡിയോ കാണണമെങ്കിൽ ഒന്നോ രണ്ടോ തവണ പരസ്യം സ്കിപ്പ് ചെയ്തെ മതിയാകൂ. അതുകൊണ്ട് തന്നെ അറിഞ്ഞും അറിയാതെയും നിരവധി പരസ്യങ്ങൾ നമ്മളെ സ്വാധീനിച്ചുകൊണ്ടിരിക്കുന്നു. പരസ്യത്തിന്റെ അടിസ്ഥാന ലക്ഷ്യമായ പ്രേരണ ചെലുത്തിക്കൊണ്ടിരിക്കുന്നു.

കമ്പോളങ്ങളുടെ വളർച്ചയും മാധ്യമങ്ങളുടെ വർദ്ധനവും, മത്സരവും പരസ്യത്തിന്റെ വളർച്ചക്ക് പ്രധാന കാരണങ്ങൾ തന്നെയാണ്. വാമൊഴിയിൽ ആരംഭിച്ച് ഡിജിറ്റൽ യുഗത്തിലെത്തി നിൽക്കുന്ന പരസ്യത്തിന്റെ പുതിയ രൂപങ്ങൾ ഇനിയും ദൃശ്യമാകാൻ ഇരിക്കുന്നതേയുള്ളൂ. ഉൽപ്പന്നങ്ങളും ഉപഭോക്താക്കളും ഭൂമിയിൽ ഉള്ള കാലമത്രയും പരസ്യത്തെ മനുഷ്യ ജീവിതത്തിൽ നിന്ന് മാറ്റി നിർത്താനാവില്ല.

സഹായക ഗ്രന്ഥങ്ങൾ

1. പരസ്യം - ജെ. വി. വിളനിലം
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