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Impact Factor:7.265

ISSN-2230-9578

Journal of Research and Development

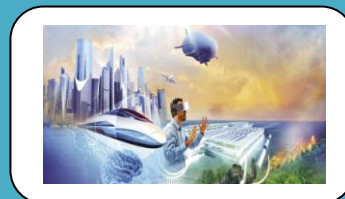
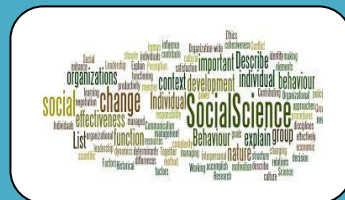
Multidisciplinary International Level Referred Journal

February-2022 Volume-13 Issue-5

Chief Editor

Dr. R. V. Bhole

**'Ravichandram' Survey No-101/1, Plot
No-23, Mundada Nagar, Jalgaon (M.S.) 425102**



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Riot: A Love Story: Upheaval History and Politics of India

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Abstract

Tharoor's *Riot: A Love Story* figures out the events of cultural activism and religious confrontation in India which appears as a spectrum of social, political, historical and cultural dimension of contemporary India. It is also a study of the EastWest cultural clash against the backdrop of the communal disturbances resulting social disharmony. The novel reflects social, political, cultural, spiritual, economic and personal diversity of multicultural Indian society with its every minutest detail. In the novel *Riot* Shashi Tharoor portrays multiplicity of themes and conflicts of people, attitudes, philosophies, religions, loves, and hatred, race and gender issues in a different and new way and gives it an organic shape. The whole novel is divided into seventy-eight sections through records, entries and letters, three interviews, conversations and interrogations. It is a remarkable sociological novel ever written in the postmodern style which artistically presents the ill-effects of the communal and immoral riots between the Hindus and the Muslims and between the East and the West culture.

Keywords: Riot, India, History, Politics, Communal Violence, Religion and Cultural Clash

The novel *Riot* (2001) is the third novel of Shashi Tharoor. The origins of this novel can be traced into two events. An IAS friend of Tharoor sends him an in-depth report on a riot in Madhya Pradesh. Coincidentally at the same time, he read a newspaper article about an American woman who was killed in a racial riot in South Africa. These two facts inspired the author to write the novel about a historical, political and communal crisis between two major Indian communities. As one of the character of the novel, Lakshman talk about India as: 'I'm an administrator not a political scientist but I'd say there are five major sources of division of India— language, region, caste, class and religion. In the novel, the two issues of the riot and history are combined to make up the main structure of the novel. The novel is an amalgam of historical incidents and creative imagination of the author. With the background of the Ram Janmabhoomi - Babri Masjid issue, the novel attempts to trace the genesis of Hindu-Muslim communal dispute in India. Through this novel Tharoor tried to present the disputed ownership of history. One reviewer of the novel observes: *Riot* is a novel about the ownership of history, about love, hate, cultural collision religious, fanaticism and impossibility of knowing the truth. In his novel *Riot* Shashi Tharoor portrays multiplicity of themes and conflicts of people, attitudes, philosophies, religions, loves, and hatred, race and gender issues in a different and new way and gives it an organic shape. The whole novel is divided into seventy-eight sections through records, entries and letters, three interviews, conversations and interrogations. Many of these sections also try to explore the socio-political situation of contemporary India. The novel depicts the turning point in the political history of India that is the communal riots in northern India in the wake of Ram Janambhumi movement. The novel is based on true historical event which is demolition of Babri Masjid Mosque in 1992. After this event riots erupted throughout the India and many innocent people lost their life. The novel narrates through various characters the version of death mystery of American student Priscilla Hart in one of these riots. She had come to India as a volunteer a non-governmental organization HELP-US in a small dusty town, Zailgarh, in the state of Uttar Pradesh. She accepted the assignment as a public health worker to complement her research for her Ph.D. in New York. She fall love with a local district magistrate, Lakshman. Through her character the novelist reveals the east-west encounter. They decided to meet on a Saturday, which never took place as the communal riots started in North India over demolition of Babri masjid. Sadly, Priscilla, who awaits Lakshman in Kotli, is one of the numerous hooligan victims. Her parents travel from U.S. to figure out truth. A series of investigations followed and representatives of the local Muslim and Hindu communities were summoned for interrogation. Characters are introduced through series of reports, interviews, transcripts, journals, diary entries and poem written by character, Priscilla's own scrapbook and journal entries of Lakshman. Tharoor made experiment with the plot-structure, characterisation and the narratology of the novel.

Tharoor gives an unbiased expression to the feelings of both Hindus and Muslims in his *Riot* through Ram Charan Gupta, a leader and religious activist, and the latter through Mohammed Sarwar, a Reader in the History Department at Delhi University. The mythical background of the novel presented through a character Ram Charan Gupta, a political figure. He narrates a mythological description and ancient origin of Lord Rama and religious significance of Ram Janmabhumi. He also points out the religious attack of Babar on Lord Rama's temple and transforming it into Mosque known as Babri Masjid.

Being a politician Ram Charan Gupta supports the cause of construction of Ram Mandir at Ayodhyaby using disputed political history of India. He says in this context: But these Muslims are evil people, Mr. Diggs. You have to understand their mentality. They are more loyal to a foreign religion, Islam than to India. They are all converts from the Hindu faith of their ancestors, but they refuse to acknowledge this, pretending instead that they are all descended from conquerors from Arabia or Persia or Samarkhand. He openly holds responsible the minority community for the contemporary anarchy in India. He talks about the rich heritage and lost pride of India. There is also a mythological reference on Lord Rama's marriage with Sita in the scrapbook of Priscilla Hart's in the novel. Here Priscilla come to know the status of Indian woman in the society. She assumes that they are the victims of Indian male dominated society. Through the conversation of Priscilla and Lakshman writer reveals the different historical aspects of Indian society. As the novel progresses Lakshman refers different division of society, Hindu doctrines and mythological influence on the Indian society. He sees contemporary critical condition in neutral way:

But who owns India's history? Are there my history and his, and his history about my history? This is, in many ways, what this whole Ram Janamabhoomi agitation is about- about the reclaiming of history by those who feel that they were, at one point, written out of the script. But can they write a new history without doing violence to the inheritors of the old?"(110)

On the other hand, Mohammad Sarwar, a Muslim scholar, teaching in Department of History, Delhi University tries to defend the minority psyche of Muslims. He points out that Muslims are part of the indivisible unity that is Indian nationality. Without them this splendid structure of India is incomplete. They are the essential element, which has gone into building India. He robustly says: Muslim didn't partition the country- the British did, the Muslim League did, the Congress Party did" (111).

Thus, Tharoor's *Riot* is a fictional departure in the career of Shashi Tharoor as a writer. Here he takes liberty with the fictional form. The story is unfolded in an unconventional style through newspaper cuttings, interviews, letters, journals, poems and even birthday card. This helps him in portraying and perceiving a single event from various angles. Several aspects of India as a nation are explored through the characters of the novel. Each character stands as an ideology articulating its views. The social condition of India is presented through many characters the foremost among them is Priscilla, an American social worker. Her father Rudyard Hart, the senior Marketing Executive with Coca - Cola, who has been in India in late seventies, explores the industrial facets of the country. Randolph Diggs, the New York journal reporter, probes into the political and religious side of India. Ram Charan Gupta is a Hindu spokesman who articulates Hindu ideology whereas Mohammed Sarwar gives vent to Muslim views. He raises his voice against the "composite culture" or "composite religiosity" (Tharoor, *Riot*, 64). Lakshaman, the District Magistrate and Gurindar Singh the Superintendent of Police are the custodians of secular democratic fabric of the country which does not make discrimination in terms of caste, creed, language, religion, region or gender. In fact, Shashi Tharoor himself stated once, "The themes that concern me in this novel: love and of hate; cultural collision, in particular, in this case the Hindu/Muslim collision, the American/Indian collision, and within India the collision between the English-educated elites of India and people in the rural heartland; and as well, issues of the unknowability of history, the way in which identities are constructed through an imagining of history; and finally, perhaps, the unknowability of the truth" (Dhir, <http://www.rupkatha.com>). Tharoor's this statement rightly expresses the core elements of the said work, *Riot*. The most important part and concern of the said novel is that Shashi Tharoor deals with the balanced and impartial scenario in which different views and opinions of the different communities have been taken into account. Every issue has been politicized and the innocent beings like Priscilla suffered.

Tharoor's *Riot: A Love Story* figures out the events of cultural activism and religious confrontation in India which appears as a spectrum of social, political, historical and cultural dimension of contemporary India. It is also a study of the EastWest cultural clash against the backdrop of the communal disturbances resulting social disharmony. It is a remarkable sociological novel ever written in the postmodern style which artistically presents the ill-effects of the communal and immoral riots between the Hindus and the Muslims and between the East and the West culture. The novel reflects social, political, cultural, spiritual, economic and personal diversity of multicultural Indian society with its every minutest detail. Thus, Tharoor ruminates over various social and political ideologies of the contemporary Indian society in the novel.

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Description of *Prosorynchoides (Neobucephalopsis) n. sp.* (Family: Bucephalidae Poche, 1907), a Digenetic Trematode parasite of fresh water fish *Xenentodon cancila* (Ham.) from pahuj Reservoir, Bundelkhand Region Jhansi.

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Abstract

The present investigation is carried out on helminth parasites of Bundelkhand Region, Jhansi. The new species *Prosorynchoides cancellansis* described from *Xenentodon cancila* (Bl.) characterized by having aspinose body; position of ovary parallel to anterior testis; position of mouth posterior third of body, leading to the pharynx; sac shaped intestine parallel to cirrus sac; anterior testis is larger than posterior one and extension of curved cirrus sac posterior margin of ovary up to the hind end of body.

Key words: Predator-prey, 70% alcohol & *Xenentodon cancellansis* (Ham.)

Introduction

Fishes are the apex of predator-prey pyramid within fresh water as well as in sea water, and therefore tend to be infected by a considerable range of parasites which occur in large number. Fish is an excellent food which is nutritionally equivalent to meat in protein, low in saturated fats and high in essential minerals besides fish production is an important source of income and employment and plays an important role in Bundelkhand region's economy.

Material and Methods

Fishes for the present investigation have been collected from Paricha Dam. Fishes were cut, open and through examination of alimentary canal, gills and urinary bladder. The parasites taken out and fixed in 70% Alcohol. These were stained in aceto-alum carmine, dehydrated and mounted in Canada balsam. Diagram was made with the help of Camera lucida and all measurements are in micrometer

Result

***Prosorynchoides cancellansis* n. sp. (Family: Bucephalidae Poche, 1907)**

Body fusiform, sub-terminal, aspinose or smooth with rounded anterior end and bluntly pointed posterior end, 0.51-0.53 mm long, 0.32-0.34 mm wide. Anterior sucker terminal or sub-terminal, spherical or sub-spherical, oval 0.08-0.1 mm long, 0.11-0.13 mm wide. Pharynx muscular, oval, post-equatorial 0.03-0.05 mm long, 0.04-0.05 mm wide. Oesophagus tubular, small 0.04-0.06 mm long, 0.02-0.04 mm wide. Intestine sac like, elongated, post-equatorial, 0.07-0.09 mm long, 0.04-0.06 mm wide.

Testes tandem anterior testis is larger than posterior testis, slightly elongated, sub-oval, 0.09-0.11 mm long, 0.6-0.08 mm wide, at 0.21-0.23 mm from anterior extremity. Posterior testis, apart, spherical or rounded, 0.6-0.8 mm long, 0.6-0.6 mm wide, at 0.3-0.32 mm from anterior extremity. Ovary, rounded, spherical, parallel to anterior testis, pre-equatorial, 0.05-0.07 mm long, 0.07-0.09 mm wide, at 0.2-0.22 mm from anterior extremity. Cirrus sac, long, cylindrical, curved, 0.21-0.23 mm long, 0.04-0.06 mm wide, extend from ovary to the hind end of the body. Vesicula-seminalis long, lobed, 0.04-0.06 mm long, 0.02-0.04 mm wide. Parsprostatica long, tubular 0.09-0.1 mm long, 0.02-0.03 mm wide, surrounded by large number of prostate gland cells. Ejaculatory duct long, 0.04-0.06 mm long terminating into genital atrium, opening through genital pore.

Vitellaria follicular, in two lateral rows, 14-16 on right side, 12-14 on left side extending from posterior margin of anterior sucker or a little posterior to it, up to a little anterior to anterior margin of testis. Vitelline ducts join lateral, opening into ootype, surrounded by a large number of Mehl's gland cells. Uterus is not seen. Egg small, spherical non operculated, 0.01-0.01 mm long, 0.01-0.01 mm wide.

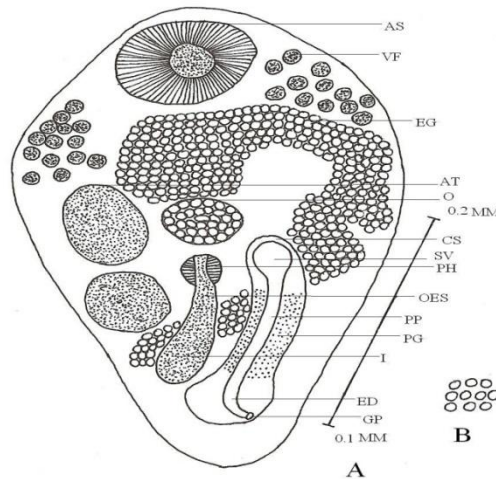


Fig A. *Prosorhynchoides canciliansis* n. sp.
Fig B. EGGS

Discussion

The present form was referred to genus *Neobucephalopsis* Dayal, 1948. Gupta, 1955 added three species of this genus *N. eutropiichthius*, *N. gauhatiensis* and *N. pseudotropei*. Bashirulla and Hafizuddin, 1976 described one more species *N. clupisomium* of this genus, but *Neobucephalopsis* placed in Family Bucephalidae, genus *Neobucephalopsis* Dayal, 1948 (Syns: *Prosorhynchoides* Dollfus, 1929, *Bucephalopsis* Diesing, 1855, *Bucephaloides* Hopkins, 1954) according to rhynchus not having tentacles. The present form resembled to *P. sp1* & *P. sp2*; *P. lamprelli*; *P. karvei*; *P. gacilescens*; *P. mizelles*; *P. carvajali*; *P. canciliansis*, in having mouth opening posterior third of the body. The new species differed from known species *P. sp1* & *P. sp2*¹; *P. lamprelli*; *P. karvei*; *P. gacilescens*; *P. mizelles*; *P. carvajali*; *P. canciliansis*, in having pear-shaped, aspinose body; oval muscular, post-equatorial pharynx; oval, pre-equatorial, tandem testes, anterior testis was larger than posterior one.

The present form resembles to *P. sp1* & *P. sp2*; *P. mizelles*; *P. erumensis*; *P. potamoensis*; *P. garuai*; *P. carvajali*; *P. apogonius*; *P. maternus*; *P. karvei*; *P. canciliansis*; in having tubular oesophagus. The new species was differ from known species *P. sp1* & *P. sp1*; *P. mizelles*; *P. erumensis*; *P. potamoensis*; *P. garuai*; *P. carvajali*; *P. apogonius*; *P. maternus*; *P. karvei*; *P. canciliansis*, oval, pre-testicular, pre-equatorial ovary, parallel to anterior testis; rounded, sac like intestine situated at middle of the body extending between ovary and cirrus sac; cirrus sac post-equatorial, curved; Pars-prostatica and ejaculatory duct tubular and vitellaria follicular into two lateral rows 9-11 on right side and 8-10 left side, extending from posterior margin of anterior sucker up to a little anterior to anterior margin of anterior ovary and spherical, non-operculated eggs.

Acknowledgement

The author was very thankful to Dr S. F. Siddiqui Ex- Senior Lecturer the department of Zoology, Bipin Bihari (P.G) College, Jhansi for her valuable aid and direction in preparation of the manuscript.

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Digital Banking Products and Services

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Introduction:

Digital Banking is the term used to indicate automation of banking services which are given in face-to-face meeting traditionally. It enables customers of bank to access banking services through an electronic / online mode. In order to eliminate consumers, need to visit a branch and substitute their physical presence, Digital banking system has been introduced in banking 4.0. In Digital banking, banking operations are performed online and services are delivered electronically to the customers. Financial data and all the related information can be easily accessed through desktop, mobile and ATM services with the help of process automation and web-based services by the banks.

Key Words: Core Banking System, Online banking, Digital banking Product and Services, Plastic Money ATM, RTGS, NEFT, IMPS and UPI

Core Banking System (CBS):

Core Banking System refers to centralized system or a network created by a bank and its branches. This allows the customers of the bank to access, manage and perform basic transactions from any branch of the bank they hold an account in. CORE: Centralised Online Real Time Exchange. Core Banking is anywhere banking with the same bank be it any location

Online banking system:

Digital banking and online banking are used interchangeably. Online banking deals with everyday essential, such as checking balances, reviewing transactions and transferring funds. This is the core operation of the bank, which is shifted to online presence with the help of online banking. Online Banking is a means to an end However digital banking is an end in itself. Digital banking is aimed at digitizing all operations of the bank, core, or non core.

Digital banking Services:

Digital Banking Services	Utility
Cash Withdrawals	ATMs – Cash withdrawals at any time. Any locality
Fund Transfer	NEFT, RTGS AND IMPS, UPI No need to issue cheque & DD
Mobile Banking	View and Download your Bank Statements for any time. Through an application for smartphone and tablets
Bill Payments	Auto debit feature for bill payments lets a user setup monthly debit in favor of regular utility payment (ECS)
Finance	Invest, Raise Loan, open fixed deposit account- all through digital banking. De-Mat A/c can be linked to your Bank a/c.
Manage Cheque	Intervene in cheque clearing process using digital banking stop the payment if the need.
Monitor transaction records	Bank send transaction alert to the linked mobile number or email.

Digital banking Product:

Plastic Money:

Plastic money consists in a shape of master card, debit card, credit card and ATM card. The basic purpose of plastic money is to facilitate the people easily and quickly. There are various types of plastic money.

Debit Card:

A Debit card is an ATM card that can be used at certain merchandised outlets to make payments. Debit cards combine the function of ATM cards and cheque. Debit Card also known as bank card, plastic card or check card. Debit card is a plastic payment card that can be used instead of cash when making purchases. It is similar to credit card, but unlike a credit card, the money comes directly from the user's bank account when performing a transaction. Debit card can be used by for shopping, paying for fuel, grocery, withdrawing money from money from the automated teller machine.

Credit Card:

Credit card is an instrument devised by a bank to provide credit facilities to its holder for purchasing goods and services. Sometime it is referred to as plastic money because it is made of plastic which is durable and convenient to carry. These has been a growth of credit card business and its

increasing use is a step towards a cashless society. Some banks issue cards to their customers and non-customers also. Any person whose income is above a minimum level (per annum) prescribed by the issuer bank becomes eligible to apply for a credit card.

ATM(Automated Teller Machine):

ATM is an electronic telecommunications device that enables customers of financial institutions to perform financial transactions. Such as cash withdrawal, deposits, transfer fund or obtaining account information, at any time and without the need for direct interaction with bank staff.

Rupay Card:

Rupay card is the Indian version of debit/credit card. It is similar to international cards such as master and visa. Rupay is an Indian Domestic Card Scheme conceived and launched by NPCI (National Payment Corporation of India) on 26th March, 2012. All major public sector banks have started issuing Rupay Card. This card transaction cost is reduced and User get alert for every transaction.

Kisan Credit card:

Kisan Credit cards is a scheme to provide timely and credit to farmers to meet their production credit need beside meeting image result for Kisan credit cards contingency expenses and expenses related to ancillary activities through simplified procedure. The kisan credit card offering cash credit and term credit.

Digital banking Services:

1. RTGS(Real Time Gross Settlement):

RTGS system was introduced in India on 25th March, 2004 and works on the basis of IFSC Code (Indian Financial System Code). RTGS which can be defined as the continues (Real Time) settlement of Funds transfers individually on an order-by-order basis(without netting). RTGS system is a Comprehensive and secure online payment mechanism. The minimum amount to be remitted through RTGS is Rs. 200000/- with no upper or maximum ceiling.

2. NEFT (National Electronic Funds Transfer):

NEFT is a nation -wide payment system facilitating one-to-one funds transfer. NEFT is an electronic fund transfer system that operates on deferred net settlement basis which settle transactions in batches. NEFT has no limit- either minimum or maximum on the funds transferred. In case of Individuals who do not have a bank account can also deposit cash using NEFT. NEFT system was set up, operated and managed by Reserve Bank of India.

3. IMPS(Immediate Payment Services):

a. IMPS is an innovative real time inter-bank electronic funds transfer system in India. Banks are allowed to set their own limit for IMPS. IMPS offers inter bank funds transfer service through mobile phones. Unlike NEFT and RTGS, the Service Available 24/7 through out the including bank holiday, weekends or festival holidays. This service is offered by NPCI.

4. UPI (Unified Payment Interface):

a. UPI is an initiative by NCPI launched in Jan 2016. UPI is a system that powers multiple bank accounts into a single mobile application merging several banking features, seamless fund routing and merchant payments into one hood. UPI is built over Immediate Payment Service IMPS for transferring funds. Per transaction limit Rs. 1 lakh.

5. CTS (Cheque Truncation System):

CTS is based on online Cheque truncation or online image-based cheque clearing system where cheque image and MICR (Magnetic Ink Character Recognition) data are captured at the collecting bank branch and transmitted electronically.

6. BHIM App (Bharat Interface for Money):

BHIM is a mobile app developed by NPCI based on the Unified Payment Interface. It was launched by Prime minister Narendra Modi at New Delhi on 30th December, 2016. The app supports all Indian banks which use that platform, which is built over the IMPS and allows the user to instantly transfer money between bank accounts of any two parties. It can be used on all mobile devices. At present there is no charges for transaction from Rs. 1 lakh. In this app customers can make direct bank payment to anyone on UPI for using VPA(Virtual Payment Address) or scan and pay using the QR code option in the BHIM App.

All the above bank products offer differential services based on the accounts chosen. Some of the services can be attained by logging onto their website whereas others require an application. All accounts are enabled for fund transfers in the form of IMPS, NEFT, and UPI.

Conclusion:

Digital banking has been a boon to mankind. It has provided not only convenience but also helped individuals to go paperless. Digital banking has eliminated disadvantages of traditional banking, no longer need to wait for the banking hours to carry out any bank work. Digital banking has enabled individuals to carry their bank work with a single click of a button on their smartphone, desktop or any other digital devices. It had helped rural population the most as they have access to the simplest of banking transactions just with a click of button.

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Rise Fuel Prices and Its Impact on Indian Economy

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Abstract

Indian is one of the world's biggest oil consumers. Among all industry lines, oil and natural gas (ONG) industry has a significant impact on the growth of the country's economy and Gross Domestic Product (GDP). Record high domestic fuel prices in India have become a major concern for citizens as it is impacting their livelihoods, either directly or indirectly. While fuel prices have been high since last year, citizens are feeling the pressure since May after OMCs went on a hiking spree.

Fuel costs have been ratcheted up to current levels by the combined effects of rising benchmark Brent prices and numerous tax hikes over the past few years. The record-high gasoline and diesel prices are leaving some Indian car owners unable to afford the cost of using their vehicles and spurring the country's transport industry to agitate for change.

Keywords- Biggest, Consumers, Significant, Citizen, Ratcheted, Spurring etc.

Introduction

There are many ways in which rising fuel prices can impact citizens in the country. The initial impact of the rise will be felt by people who own personal vehicles. India Today.in spoke to a few people with personal vehicles. All of them agreed that the recent hike in prices have increased their monthly budget on fuel, while some of them said they are ready to cut their average monthly fuel consumption to avoid spending more. The high rate of fuel prices will have an impact on the automotive sector a large source of employment in the country as vehicle sales may see a sharp drop. Passenger vehicles and two-wheeler sales have already witnessed . A further contraction in demand for vehicles will have a major impact on the automotive industry and the lakhs of MSMEs that supply goods to the sector.

Objectives of the study

1. To study the fuel prices in India.
2. To Study the factors affecting fuel prices in India.
3. To study the effects of hike fuel prices in India.
4. To study the reasons for high fuel prices in India.
5. To provide suggestions for reduce the fuel prices.

Fuel Prices in India

Volatility observed in the retail selling price of petrol and diesel can be attributed to two factors viz; international crude oil price and duties/cess levied on sale of petroleum products. India's high as well as growing dependence on imported crude oil to meet domestic demand makes international crude oil price movements a crucial determinant in domestic fuel pricing. The international price is primarily determined by the demand-supply mismatch in the global economy. For instance, during late 2015, excess supply from Russia and Saudi Arabia led to a decline in the price, production was at a record level at that time. During late 2018, production was tightly controlled by OPEC members and decline in Venezuela production led to a spike in prices which reached a high of US\$80 per barrel (bbl) in October 2018. The recent dip in oil prices and the revival since December 2020 is different from the earlier price shocks. This is because price shock in 2020 was mainly demand-driven. International crude oil prices started declining beginning January 2020 when the COVID-19 pandemic related containment measures began to be imposed in almost 187 countries. According to a survey by Local Circles, around 51 percent Indians are cutting on their other expenses to manage their spending on fuel prices. Around 21 percent of the respondents to the survey said that they are "cutting spending on essentials and it is painful" for them. Another 14 percent are dipping into savings to pay for it. The survey showed that around 43 percent of respondents said that their monthly petrol or diesel bills were lower due to limited commute or work from home among other factors. Another 2 percent reported no spending on the fuels."I write to you to convey every citizen's anguish and deep distress regarding the spiralling fuel and gas prices. On one hand, India is witnessing systematic erosion of jobs, wages and household income. The middle class and those at the margins of our society are struggling.

The petrol and diesel prices across the country continued their northward march after two days break taking its retail rates to unprecedented levels while burning bigger holes in the consumers' pockets. The oil marketing companies raised the pump price of both petrol and diesel by 35 paise per litre on Tuesday. With this, petrol is now priced at Rs 90.93 a litre and diesel Rs 81.32 a litre in the capital. Across

the country as well the petrol and diesel price increased between 32-40 paisa per litre depending on the level of local duty at the state level. Sources in OMCs said that price rise on Tuesday followed movement in product price in global markets. The crude oil is also on fire with benchmark Brent crude gaining over 2 per cent on Tuesday to reach closer to \$67 a barrel now. It was less than \$60 a barrel just a few days back.

On the question of what the respondents want their state governments to do for lowering the fuel prices, 32 percent said that the government should levy an absolute value of the value added tax (VAT) instead of a percentage of the base price, and 47 percent said the rate of VAT should be reduced. The poll showed that 79 percent of the citizens want their state governments to take action against rising petrol and diesel prices, either by lowering the VAT or levying an absolute value of the tax. Levy of an absolute VAT instead of a percentage VAT on the base price can help keep the prices relatively lower even if the base price of petrol and diesel rises in the coming months. The survey received more than 22,000 responses from citizens located in more than 291 districts of the country.

Factors affecting fuel prices in India

The rising prices of petrol and diesel have been a major concern for the citizens of the country. There are a number of factors that affect the fuel prices in India. Some of the most important factors that affect the prices of fossil fuels in India can be summed up as follows:

Cost of crude oil

Crude oil or unrefined oil is a commodity of the international market. The changes in the price of this commodity directly affect the price of petrol and diesel in our country. Whenever there is a change in the demand and supply of crude oil, the prices vary. In addition to that, international political relations and future reserves and supplies also have direct effects on the price of crude oil.

Price charged to dealers

The crude oil is acquired and distributed by the Oil Marketing Companies (OMCs). The price charged by the OMCs to the dealers is an important deciding factor of the price of the fossil fuels. This price is also based on a number of factors which include the freight charges, the refining cost, and so on.

Commission for dealers

The Oil Marketing Companies or OMCs pay a commission to the fuel dealers. The petrol pump owners have their earnings, cost, and profit covered in this commission. This is one of the components which makes up the price of the fuel.

Central excise duty

The central government levies the excise duty on petrol and diesel. It should be kept in mind that the central excise duty is a pre-defined amount of money and not a percentage. Thus, the duty does not fluctuate with the price of the fuels. Over the past few years, the Government of India has increased the excise duty manifold. The current duty charged on petrol is Rs.32.98 per litre and that for diesel is Rs.31.83 per litre. This amount is constant irrespective of the rise or fall in the price of the crude oil.

Taxes imposed by the government

The Government of India imposes a tax on both petrol and diesel. There are certain policies on the basis of which, the centre might change the tax structure. The change in this structure is mainly based on the marginal returns from the fossil fuels and the recovery of losses. The price of the fuels also changes on the basis of these taxes.

Demand for fuel

With the number of two-wheelers and four-wheelers steadily increasing on the Indian roads, the demand for both petrol and diesel have been increasing as well. As the oil refinery companies in India have to acquire crude oil from the international market in order to process the same into petrol and diesel, the supply cannot be always fulfilled. When the supply is less and the demand is more, as per the laws of economics, the price of both the fuel is bound to increase.

Consumption ratio of refineries

The crude oil imported to India are sent across to the refineries for processing. If the number of refineries is lower, then the overall quantity of petrol or diesel which will be available for sale will also be lower. This would also mean that the supply will be lower, which in turn, will make the price of the fuel higher.

Valuation of INR against USD

One major factor that is responsible for the alteration of prices of petrol and diesel in India is the value of the Indian Rupee against the American Dollar. The crude oil which is refined for petrol and diesel is bought from the international market and the transaction is done in dollars. Thus, the strength of the USD against INR is a direct factor. If the American Dollar is stronger, the cost of purchasing crude oil will be higher. This will mean that the price of the finished products will also be higher.

The Effects of Price Hike in Fuel

With price growth, there is inflation, provided the other prices don't drop heavily. If inflation is not compensated by nominal increases in income, people become poorer. Low, medium and high rates of price hikes attract the daily attention of households and decision-makers differently. The consequences of fuel hike and inflation are:

Vehicle sales may record a sharp drop due to an increase in fuel prices. The [dip](#) in the sale of vehicles and it had an effect on MSMEs who were suppliers of goods to the automobile sector. This would also result in job losses and an increase in the unemployment rate. People without private vehicles would require to pay more for public transportation. The public transport sector has already seen a hike in operational costs over the past few months. The price surge would have an indirect effect on the daily routine of the consumers. For example, ordering fruits, vegetables, groceries, etc., would become costlier due to increased delivery charges. A spike in fuel price would ultimately lead to economic inflation.

Reasons for the high fuel prices in India

1. Petrol and diesel pricing depends on several factors. Final retail price = crude oil price (international price of crude oil) + refinery charges + transport charges + dealers' commission + Central Excise Duty (Imposed by Central government) + Value Added Tax (VAT) & surcharges (Imposed by state government).
2. One of the main reasons for the high fuel prices is high taxes by central and state governments (Central Excise duty + VAT & surcharges). As of April 2021, two-third of the price we pay for petrol goes to central and state governments as taxes. India is one of the most highly fuel-taxed countries in the world. The government explained that this revenue is needed to spend on welfare schemes.
3. Petrol and diesel are still not in the ambit of GST (Goods & Services Tax). If they come under GST, taxes on taxes will be avoided and hence the retail prices will be reduced.
4. The efficiency of petroleum refineries in India is one of the worst in the world. This is contributing to the price rise of petrol and diesel.
5. India is third in the top countries that use crude oil after the USA & China. But the problem is that India does not have many oil reserves. Over 80% of the crude oil for our fuel needs is imported. So, import costs will be added to the final price. There is a lack of investment in the exploration of crude oil reserves within the country.
6. As the Rupee value is depreciating, oil refineries have to pay more rupees to import crude oil. This is also one of the reasons why fuel prices are high.

Suggestions

1. Reducing taxes on petroleum products will result in a reduction in costs of transport and thereby reduces the price of many consumer goods. This will result in an increase in markets and economy and also reduces the burden on common people.
2. Instead of depending on these taxes on petrol & diesel, the Indian government needs to create more revenue sources such as increasing the number of people that pay income tax, recovering bad loans of public sector banks etc.
3. More and more people are buying their own vehicles, especially after witnessing the pandemic and hence the demand for petrol and diesel is increasing and thereby the pressure on foreign exchange reserves and 'Trade deficit' are increasing. This will further lower the value of the rupee. To reduce the dependence on crude oil imports, there is a need to invest in the exploration of crude oil reserves in the country.
4. There is a dire need to encourage people to use electric vehicles and to use renewable energy resources. This will reduce the burden on foreign exchange reserves as well as leads us towards eco-friendly living.

Conclusion

If the crude oil prices are increased in the coming days, there will be a huge burden on people whether they own a vehicle or not. Because high fuel prices increase the cost of transport and thereby increases the price of consumer goods. To avoid that situation, the government needs to work on reforms in petroleum pricing.

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Study of Harvesting Solar energy and Solar panels

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Abstract:

No human life without electricity means energy is an important part of life. Renewable energy is an alternative energy source. Solar energy becomes more popular for commercial, home and business applications. Traditional thermal energy power stations are planned to be reduced because of environmental pollution. On demands, now a day's, lot of research is going on renewable energy. Different methods of harvesting solar energy and solar panels with special features were studied relate to solar energy in this research.

Keywords: Renewable Energy, Solar Energy, Harvesting Solar Energy, Solar Panels, etc.

Introduction:

Fossil fuels such as coal, oil, natural gases or hydrocarbons provided nearly 80% of the total energy consumed by humans [1]. Now a day's, the usage of fossil fuels is reduced slowly because of its harmful nature, energy cannot be transformed, cannot be reuse, pollutes in air, affects human health, and causing global warming. Renewable energies are the world's fastest growing energy sources such as wind, solar, hydropower systems, geothermal and biomass energy because of its various advantages including free availability, minimize pollution, the ability to prevent climate change, to reduce health risks and diseases [2]. A non-renewable energy source gives more efficiency than renewable energy source. Solar energy is a renewable energy source. The sun is having a large potential to produce energy more than renewable but it is still now impossible to transfer everything into electricity [3].

Core, Radioactive zone, Convective zone and Photosphere are the different parts uses in the sun to create energy. Core is the center part of the sun which occupies near 20 to 25% radius of the whole sun and 99.90% of the solar energy is produces due to fusion happening in the core. Radioactive zone occupies 0.70% of solar radii and no fusion happening in this zone but the solar materials will remain hot every time. Convective zone occupies the rest of 70% radius of the sun and no fusion takes place in this zone but it transfers the heat from the core and radioactive zone to the photosphere. If it is not present in the sun then the temperature of the outer layer of the sun will start to reduce. Photosphere is the final visible layer of the sun and only radiates the sunlight and heat to space, and earth. The temperature present in photosphere layer is about 4500-6000 ⁰K and the ozone layer will reduce the ultraviolet visible rays from the sun to the inside earth but it emits some rays inside the earth [4-5].

Sun power is a fusion process which converts hydrogen to helium. With incomprehensible gravitational force, the sun is forced together by all its mass. Everything is squeezing due to gravity. Things get close enough together in this nuclear compactor for nuclear fusion to happen. Some of these collisions are so powerful that atoms fuse and release energy every second. When protons bind together, they shed a small amount of mass, which is converted into energy [6-8].

B) Methods of Harvesting Solar Energy:

Photovoltaic solar panels, thermal energy harvesting, solar water heater, evacuated solar water heater and molten salt solar power are the methods of harvesting solar energy.

1. Photovoltaic Solar Panels: Solar panel is the arrangement of photovoltaic solar cells in order. These solar cells are made up of silicon called silicon wafers. Pentavalent electrons combined with tetravalent electron materials produce p-n junction. The electrons will start moving randomly if they get external energy in the junction like solar energy and the electron flows shows generation of a current.

2. Thermal Energy Harvesting: Sun produces infrared radiation at different wavelengths and heat. Thermal energy harvesting is used to convert this heat into electrical or mechanical energy. Thermoelectric generator is important part of thermal energy harvesting which convert heat into electricity. These thermoelectric devices are lightweight, less maintenance, and very compact.

3. Solar Water Heater: Solar water heater traps infrared light from the sun and heat the water. It is made up of an insulated box with a black inside. The copper pipes are installed in the form of a coil in this box and then painted black from the outside. To avoid heat loss due to convection and radiation, the box is sealed with a glass lid. The pipes ends are linked to the storage tanks, and cold water now flows into the

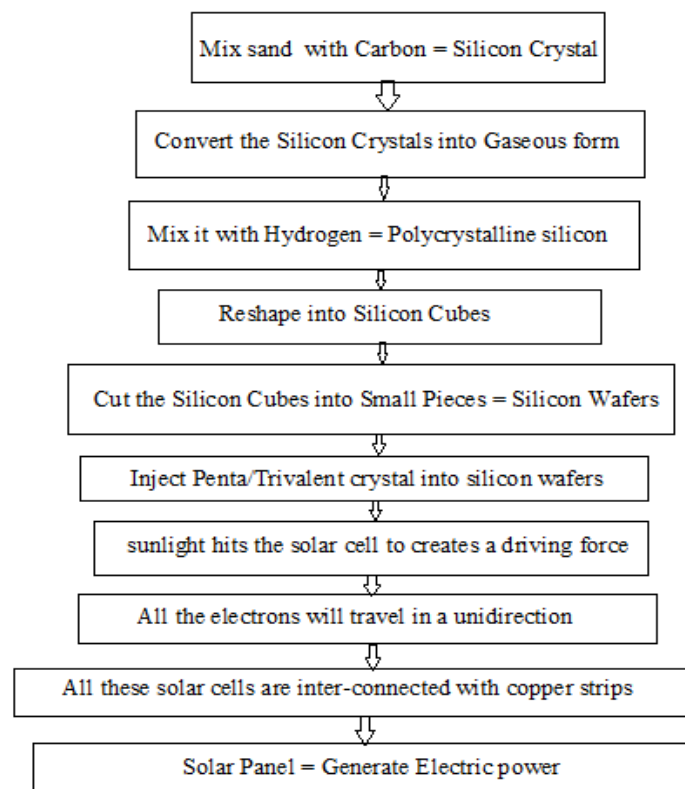
copper tubes from the bottom of the storage tank. The sun's infrared energy is contained inside the box. As a result, the water inside the copper pipes becomes lighter as it heats up. The heavier cold water from the storage tank flows down into the copper pipes at a lower temperature, while the lighter hot water goes into the storage tank. The thermal siphon effect refers to the continuous circulation of water and the mechanism by which water is heated.

4. Evacuated (Vacuum Tube) Solar Water Heater: Evacuated solar water heater works like ordinary collectors for capturing solar radiation by utilizing a flat metallic absorber plate. In vacuum collectors, the plate is split into parallel strips. Each strip is attached to a metallic tube in good thermal contact with it. This kind of tubes is manufactured with a selective coating to reduce infrared emission losses as much as possible.

5. Molten Salt Solar Power: Molten salt solar power melts the salt and transfers the water to the heat exchanger. This heat exchanger converts the water into steam. The steam from the heat exchanger is diverted to the steam turbine. Steam turbine is used to produce electricity.

Solar Panel:

Solar panel is a group of solar cell. Following flow chart shows the steps to convert the sand into 99.9% silicon crystals.



Categories of Solar Panels:

Mono-facial and bi-facial are two category of solar panel. In mono-facial solar panel, silicon wafers are attached only on one side of the plate and in bi-facial solar panels, wafers are attached both sides of the plate. The efficiency of bi-facial solar panel will be higher as compared to the mono-facial solar panel.

Therefore, there are various types of solar panel of above categories such as Monocrystalline Panel, Polycrystalline Panel, Biohybrid solar cell, Amorphous silicon solar cell, Cadmium telluride solar cell, Thin film solar cells, and Concentrated PV cell.

1. Monocrystalline Solar Panel: It is first generation solar panels with occupies very little space and made up of monocrystalline silicon. Its efficiency will be higher than other types of solar panels. It appeared to be the uniform dark color with white round edges. It has 20% efficiency rate, space efficient, higher life span, lower installation cost, non-hazardous to environment. It is quite expensive, easily covered by dirt, shade, or snow. It is used for commercial and residential solar installation like to charge mobile, laptops, cameras, fridges, power microwaves, outdoor lighting system and power gardening features.

2. Polycrystalline Solar Panel: It is first generation solar panels with occupies very little space and made up of monocrystalline silicon or polysilicon. It appeared to be square solar wafers and it has blue with a

speckled look. It is manufactured by melting raw silicon, which is a less expensive and quicker procedure. So that the efficiency will be lower than monocrystalline solar panels. It occupies a very large space so that it will be helpful for large area owners. It has 15% efficiency rate which is lower efficiency as compared to monocrystalline solar panels. It acquires large space and lower life span. It is used to supply electricity to nearby areas in traffic lights in rural areas, off-grid residences, in huge solar farms, and other applications.

3. Biohybrid Solar Cell: This kind of solar cell is manufacture to emulate the natural process of photosynthesis. It has no power loss in the conversion of solar energy into electrical energy. The lifespan of this solar panel is very less.

4. Amorphous Silicon Solar Cell: It uses triple layered technology which is very useful for thin film variety. It is used in pocket calculators and watches. It has 7 % efficiency rate.

5. Cadmium Telluride Solar Cell: Cadmium telluride technique is used to produce cells at a very low cost with a payback time of less than a year. It requires almost the very least amount of water for production. It is toxic. It has 22% efficiency rate. It requires less amount of water for production.

6. Thin film Solar Panel: It is second generation of solar panels. It is very expensive. It gives little efficiency. It has excellent flexibility and resistance to high temperatures. It efficiency rate is 10%. It is easy to manufacture and very flexible. It can be used in streetlights, solar farms, power traffic, and forest regions, installed on the roofs of buses to power tiny equipment, and Wi-Fi modems and fans.

7. Concentrated PV Cell:

It gives more efficiency around 41% comparing to other solar panels. It has curved mirror surfaces and lenses which pay the way for greater efficiency.

Future Needs:

Due to various disadvantages of non-renewable energy sources, the demand for fossil fuels such as coal, oil, natural gases or hydrocarbons is reduced very rapidly. This indicates that the demand for renewable energies such as solar energy will increase very rapidly in upcoming years. The International energy agency referred that solar energy will be going to rule the electricity world in the future and it will grow around 20 to 25% after 2025. It is more cost effective when compared to other energies. Some new innovations of solar energies come in pictures such as solar cars, solar roads, solar window, solar paint, etc.

Conclusions:

Renewable energy is an alternative energy source. Solar energy becomes more popular for commercial, home and business applications. Traditional thermal energy power stations are planned to be reduced because of environmental pollution. On demands, now a day's, lot of research is going on renewable energy. From this study, we understand the importance of solar energy. Different methods of harvesting solar energy were studied and solar panels with special features were also studied. The currently available solar panel categories and each panel type with its feature were discussed.

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An Analysis of The Perceptions of Public on The Amenities &Infrastructure Facilities Provided By Mysuru City Corporation

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Abstract:

Rapid urbanization and industries in Indian urban areas have attracted substantial number of people from rural areas. Mysuru City Corporation (MCC) is one among the fastest growing cities in India. Urban people demand for amenities and infrastructure facilities. To meet the growing needs of the city, the MCC has to develop playgrounds and parks within a distance of kilometre. Idle space need to be converted into gardens/ parks and playgrounds. Roads have to be developed according to the growing demand from expanding population. It is suggested to develop and maintain proper rain and storm water drainage system to avoid overflow of water that damage roads, particularly during rainy season. The policy makers need to focus on effective implementation of urban forestry and protection of environment. It is recommended to the policy makers to emphasize on effective implementation of AMRUT scheme, proper management of public toilets & urinals, scientific solid waste management & sewerage water treatment system and effective maintenance of public schools, colleges & hospitals. Additionally, an integrated approach is essential to deliver the crucial requirements of the growing population.

Keywords: Urbanisation, Mysuru City Corporation, Civic amenities, Infrastructure facilities, Public opinion.

Introduction:

At present, urbanization will be the most significant issue all over the world and the largest agglomerations will be in the developing countries such as India. Both the rapid urbanization and industries in Indian urban areas have attracted substantial number of people from rural areas. Several reasons like more diversified economy, economic reforms (1991), greater market & investment activities, better infrastructure facilities, economic opportunities are constantly attracting more people into urban areas. In search of livelihood the people from rural areas migrate to urban areas (Subash 2014). Urban people demand for amenities and infrastructure facilities such as street lighting, roads, parks, drainages, garbage collection & disposal system, underground drainage, supply of drinking water, issue of Birth and death certificates, issue of licence for building construction, trade and tap connection, issue of property extract and completion report, market and parking facility, burial grounds and playgrounds, auditoriums, rain & storm water drains etc. Street lighting eliminates accidents; enhance public interactions, security and business activities during night time. Road network is the back bone of the passenger transport and is very important for development of a nation (Sharmila et al., 2019). Public parks have positive impact on physical and emotional benefits of urban residents. Parks are crucial in improving the life quality and provide socio-economic benefits (Sirisha, 2019). Drainages have positive impact on health & sanitization, rain & storm water treatment. City garbage clean, collection and disposal system can influence mental and psychological health (Lincoln et al., 2016). Underground drainage and sewerage water treatment system can improve the health and city sanitisation. Sufficient supply of drinking water is the challenge for all municipal corporations. City user services like issue of birth & death certificate is more crucial for urban growth and development. Transparency in issue of licence for house construction, trade, business and power connection is essential for prosperous city development. Market and parking facility promotes smooth going of business activities and development. Sufficient burial grounds and crematoriums must be provided for all religions. Public play grounds and auditoriums are inevitable for people health improvement and it promotes sports and cultural activities. Public urinals and toilets have positive impact on environment and urban sanitation.

Objectives of the Study:

1. To study and analyse the opinion of the public on amenities and infrastructure facilities provided by Mysuru City Corporation (MCC)
2. To identify the gaps in service and suggest measures for development.

Research hypotheses: HO1: there is no significant difference in the opinion of the public on amenities and infrastructure facilities provided by MCC.

Research methodology:

The study requires primary data was collected from the sample respondents by using a structured questionnaire (using likert 5 point scale) on amenities & infrastructure facilities provided by MCC. Primary data was collected from a sample of 92 respondents and random convenient sampling method has been followed. For the purpose of data analysis, SPSS software has been used. To have a wider coverage of the universe the public are divided into property taxpayers, general public, businessmen and others of which 23 respondents selected from each.

Profile of the study area:

The study has been conducted in the city area of Mysuru City Corporation located on the southern part of the state of Karnataka, India. The MCC is responsible for the civic administration of the city, which is also the headquarters of the Mysuru district and the Mysuru division. The cultural ambience and achievements of Mysuru earned it the sobriquet Cultural Capital of Karnataka. The MCC was established as a municipality in 1888 and converted into a corporation in 1977. The functions of MCC are engineering works, health, sanitation, water supply, road construction, park, administration and taxation. The corporation is headed by a Mayor, who is assisted by commissioners and council members. The city is divided into 65 wards and the council members (also known as Corporators) are elected by the citizens of Mysuru for every five years. The council members, in turn, elect the mayor. The city population is 9, 20,550 (2011 census). Urban growth and expansion are managed by the Mysore Urban Development Authority (MUDA), which is headed by a commissioner. The city has witnessed rapid industrialization with establishment of major industrial units in and around the city.

Table 1. Show the Public opinion on civic amenities and infrastructure facilities provided by MCC (Analysed by SPSS Software).

ANOVA						
Services provided by MCC		Sum of Squares	df	Mean Square	F	Sig.
The city corporation is supplying sufficient drinking water for residents and industries.	Between Groups	3.975	3	1.325	1.942	.129
	Within Groups	60.025	88	.682		
	Total	64.000	91			
The Street lightings are maintained efficiently.	Between Groups	8.981	3	2.994	3.793	.013
	Within Groups	69.454	88	.789		
	Total	78.435	91			
An efficient smart garbage collection & disposal system is implemented in the city	Between Groups	1.684	3	.561	.612	.609
	Within Groups	80.751	88	.918		
	Total	82.435	91			
The city corporation is regularly maintaining streets clean and hygiene	Between Groups	7.573	3	2.524	3.112	.030
	Within Groups	71.384	88	.811		
	Total	78.957	91			
The city corporation is regularly maintaining markets clean and hygiene	Between Groups	10.914	3	3.638	4.540	.005
	Within Groups	70.521	88	.801		
	Total	81.435	91			
The scientific Solid Waste Management system is implemented in the city	Between Groups	12.335	3	4.112	4.493	.006
	Within Groups	80.535	88	.915		
	Total	92.870	91			
Well-connected Under Ground Drainage (UGD) systems are implemented in the city.	Between Groups	2.621	3	.874	1.081	.361
	Within Groups	71.118	88	.808		
	Total	73.739	91			
The rain & storm water drains are effectively maintained.	Between Groups	20.310	3	6.770	10.469	.000
	Within Groups	56.908	88	.647		
	Total	77.217	91			
The tap connection permission is given immediately	Between Groups	8.923	3	2.974	4.093	.009
	Within Groups	63.947	88	.727		
	Total	72.870	91			
The city corporation is providing sufficient number of Public Toilets & Urinals	Between Groups	19.294	3	6.431	7.043	.000
	Within Groups	80.359	88	.913		
	Total	99.652	91			
The city corporation is providing convenient	Between Groups	16.489	3	5.496	5.101	.003

parking Facility.	Within Groups	94.815	88	1.077		
	Total	111.304	91			
The city corporation is providing Sufficient number of dust bins for your ward	Between Groups	27.902	3	9.301	10.218	.000
	Within Groups	80.098	88	.910		
	Total	108.000	91			
The city corporation is providing convenient market facility	Between Groups	22.730	3	7.577	7.158	.000
	Within Groups	93.140	88	1.058		
	Total	115.870	91			
The city corporation is providing burial/cremation grounds & electric crematoriums	Between Groups	7.436	3	2.479	3.050	.033
	Within Groups	71.521	88	.813		
	Total	78.957	91			
Steps are taken for controlling Stray Animal Menace in the city	Between Groups	24.837	3	8.279	10.288	.000
	Within Groups	70.815	88	.805		
	Total	95.652	91			
The city corporation is providing fire services and safety measures for all residents and industries	Between Groups	12.988	3	4.329	4.549	.005
	Within Groups	83.751	88	.952		
	Total	96.739	91			
An effective implementation of social forestry and steps have been taken for protection of environment in the city area	Between Groups	16.957	3	5.652	6.028	.001
	Within Groups	82.521	88	.938		
	Total	99.478	91			
The sewerage water treatment system has been provided by city corporation	Between Groups	18.030	3	6.010	10.538	.000
	Within Groups	50.188	88	.570		
	Total	68.217	91			
The city corporation has adopted good procedure for issue of Birth and Death Certificates	Between Groups	2.621	3	.874	1.218	.308
	Within Groups	63.118	88	.717		
	Total	65.739	91			
The city corporation has adopted good procedure for issue of Property Extract	Between Groups	5.387	3	1.796	2.564	.060
	Within Groups	61.613	88	.700		
	Total	67.000	91			
The city corporation has adopted citizen friendly procedure for issue of building licence	Between Groups	19.412	3	6.471	8.018	.000
	Within Groups	71.022	88	.807		
	Total	90.435	91			
The city corporation has adopted citizen friendly procedure for issue of building completion Report.	Between Groups	12.207	3	4.069	4.087	.009
	Within Groups	87.619	88	.996		
	Total	99.826	91			
The city corporation has adopted citizen friendly procedure for issue of Trade licence	Between Groups	14.296	3	4.765	6.948	.000
	Within Groups	60.356	88	.686		
	Total	74.652	91			
City roads, bridges and flyovers have been constructed and potholes are maintained efficiently	Between Groups	18.011	3	6.004	7.567	.000
	Within Groups	69.815	88	.793		
	Total	87.826	91			
The property tax that has been levied by city corporation is fair	Between Groups	10.395	3	3.465	3.892	.012
	Within Groups	78.345	88	.890		
	Total	88.739	91			
The property tax is paid regularly	Between Groups	6.887	3	2.296	2.938	.038
	Within Groups	68.765	88	.781		
	Total	75.652	91			
The property tax which you pay is commensurate with the services that are given to you	Between Groups	10.364	3	3.455	4.033	.010
	Within Groups	75.375	88	.857		
	Total	85.739	91			
Public parks and gardens are effectively maintained by City Corporation.	Between Groups	13.074	3	4.358	4.483	.006
	Within Groups	85.535	88	.972		
	Total	98.609	91			
The city corporation is providing sufficient number of bus stops for your war	Between Groups	6.365	3	2.122	2.627	.055
	Within Groups	71.070	88	.808		

	Total	77.435	91			
An effective steps are taken for urban sanitization and prevention of COVID-19.	Between Groups	12.010	3	4.003	4.700	.004
	Within Groups	74.947	88	.852		
	Total	86.957	91			
Corporators are working very well and providing good service to citizens	Between Groups	5.005	3	1.668	1.698	.173
	Within Groups	86.473	88	.983		
	Total	91.478	91			
City pavements or walking paths are effectively maintained	Between Groups	12.801	3	4.267	3.792	.013
	Within Groups	99.025	88	1.125		
	Total	111.826	91			
Public hospitals and dispensaries are effectively maintained by city corporation	Between Groups	20.393	3	6.798	6.838	.000
	Within Groups	87.476	88	.994		
	Total	107.870	91			
City public libraries are effectively maintained	Between Groups	24.527	3	8.176	10.292	.000
	Within Groups	69.908	88	.794		
	Total	94.435	91			
An indoor and outdoor stadiums have constructed and maintained for promotion of sports activities	Between Groups	29.310	3	9.770	11.751	.000
	Within Groups	73.168	88	.831		
	Total	102.478	91			
Auditoriums have constructed and maintained for promotion of cultural activities	Between Groups	24.745	3	8.248	9.530	.000
	Within Groups	76.168	88	.866		
	Total	100.913	91			
Schools and colleges are effectively maintained by city corporation	Between Groups	30.682	3	10.227	14.392	.000
	Within Groups	62.535	88	.711		
	Total	93.217	91			
Heritage buildings are effectively maintained by city corporation	Between Groups	27.682	3	9.227	10.984	.000
	Within Groups	73.927	88	.840		
	Total	101.609	91			
The city corporation is efficiently implementing AMRUT scheme	Between Groups	21.765	3	7.255	12.122	.000
	Within Groups	52.669	88	.599		
	Total	74.435	91			
The city corporation had effectively implemented JNNURM scheme	Between Groups	25.983	3	8.661	10.772	.000
	Within Groups	70.756	88	.804		
	Total	96.739	91			
The city corporation is efficiently implementing SMART CITY MISSION	Between Groups	18.213	3	6.071	8.671	.000
	Within Groups	61.613	88	.700		
	Total	79.826	91			
Slum development schemes have been implemented successfully in the city	Between Groups	43.955	3	14.652	23.006	.000
	Within Groups	56.045	88	.637		
	Total	100.000	91			
SAKALA service has been implemented in the city	Between Groups	24.732	3	8.244	11.491	.000
	Within Groups	63.137	88	.717		
	Total	87.870	91			
The city corporation employees are working very well and providing quality service to citizens	Between Groups	12.916	3	4.305	4.160	.008
	Within Groups	91.084	88	1.035		
	Total	104.000	91			
Swatch Bharat Mission is effectively implemented in the city	Between Groups	10.339	3	3.446	4.237	.008
	Within Groups	71.574	88	.813		
	Total	81.913	91			
Indira Canteen facility is effectively implemented in the city	Between Groups	14.775	3	4.925	4.896	.003
	Within Groups	88.529	88	1.006		
	Total	103.304	91			

Source: Primary data

Table 1 depicts the public opinion on the civic amenities and infrastructure facilities provided by the MCC. **The calculated values of F (using ANOVA) for the following services were less than the table value**

($F_{0.01}=3.9493$), hence, null hypothesis is accepted as there is no significant difference in the opinion of the public on the services of water supply, street lightings, garbage collection, street cleaning, UGD, burial/cremation grounds, issue of birth & death certificate, property extract, fair property tax, bus stops, Corporators work efficiency and walking paths. MCC has done a worthy job in striving to provide the above services.

The calculated values of F for the following services were more than the table value ($F_{0.01}=3.9493$), hence, null hypothesis is rejected and alternative hypothesis is accepted as there is a significant difference in the opinion of the public on the services of market cleaning, solid waste management, rain & storm water drains, tap connection permission, public toilets & urinals, parking facility, provision of dustbins, market facility, controlling stray animal menace, urban forestry and protection of environment, Sewerage water treatment system, issue of building & trade licence, maintenance of parks & gardens, maintenance of public hospitals, play grounds and auditoriums, maintenance of public schools & colleges, Indira canteen and sakala services.

Findings of the study:

1. Lack of market facility and it must be provided nearby ward and market must be cleaned twice a day.
2. Failure in implementation of proper solid waste management system and sewerage water treatment system. There is a need for scientific & systematic solid waste management and Sewerage water treatment system to be implemented.
3. There is a need for effective implementation of urban forestry and protection of environment in the city area.
4. Lack of maintenance of parks & gardens which leads to negative impact on physical & mental health of residents.
5. Lack of maintenance of public toilets & urinals due to insufficient fund and faulty management.
6. Lack of maintenance of roads and rain & storm water drainage system.
7. There is a need for effective maintenance of public schools, colleges & hospitals.
8. AMRUT scheme to be implemented effectively so that infrastructure may be developed.

Conclusion: The results of the study describe that the public have different opinion with the services of MCC. The population of the city is growing rapidly and Mysuru is one among the fastest growing cities in India. To meet the growing needs of the city, the MCC has to develop playgrounds and parks within a distance of kilometre. Idle space need to be converted into gardens/ parks and playgrounds. Roads have to be developed according to the growing demand from expanding population. It is suggested to develop and maintain proper rain and storm water drainage system to avoid overflow of water that damage roads, particularly during rainy season. The policy makers need to focus on effective implementation of urban forestry and protection of environment in the city area. It is recommended to the policy makers to emphasize on effective implementation of AMRUT scheme, proper management of public toilets & urinals and effective maintenance of public schools, colleges & hospitals. Additionally, an integrated approach is essential to deliver the crucial requirements of the growing population.

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Cyber Security: A need of Time

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Abstract:

When we enters the world of Cyberspace, we connect our devices with internet. It gives a chance to the hackers to attack on devices, data or network. Here there is an urgent need of Cyber security. It happens only because of illiteracy of the people about accessing various apps on their devices while connecting to internet. So it is now a need of the time that the users should get aware of the AAA formula .i.e. Authentication, Authorisation and Access Control.

Keywords:Data, Information, Cyber-attacks, Cyberspace, Network, Hacking

In 21st century everyone is well equipped with electronic technology. Today each and every task can be done with the help of technology. These technologies mostly run with the help of internet only. In today's world internet connectivity gives invitation to **cyber-attacks**. Cyber security concept comes with lots of things-cyberspace, networking, threats, cryptography (encryption, decryption), information security, network security, system and application security. **Cyberspace** is a term that has widespread interconnected technology. It is an online world having its own reality apart from real world.

At a glance, single person can interact, share ideas, exchange information, give social support, run business, do actions, generate digital media, play games, engage in political sessions, and lots of, using this global network. Chip Morningstar and F. Randall Farmer, says, "Cyber space is defined more by the social interactions involved rather than its technical implementation."¹ Cyberspace offers environment that has many participants, with the ability to affect and influence one another. Dictionary of cyber contains terms as-**Access Control, Anti-Virus, Antivirus Software, Authentication, Authorization, Business Continuity Planning, Behaviour Monitoring, Blacklist, BlockCipher, CloudComputing, Computer Network Défense, Cryptography, Cyberattack, Data Integrity, Data Mining, Distributed Denial of Service, Denial of Service, Eavesdropping, Firewall, Hacker, Honeypot, IDS, IPS, Keylogger, LAN, Malware, Outsourcing, Packet Sniffing, Phishing, Ransomware, Risk Assessment, Software-as-a-Service, Sniffing, Social Engineering, Spyware, Trojan Horse, Two-Step Authentication, Unauthorized Access, VPN, Vulnerability, Worm, Zombie** etc.

Common type of cyber-attacks which raises the cyber security issues are as follows:

Attack	Area
Ransomwareattacks	Organizations, Industries-hacks user data and prevent them from accessing it until some amount is paid
IoT attacks	Desktops, laptops, mobile phones, smart security devices
Cloud attacks	Personal and Professional data
Phishing attacks	Social engineering attack often used to steal user data, including login credentials and credit card numbers
Blockchain and cryptocurrency attacks	Businesses-compromises the customer data and business operations
Software vulnerabilities	Individuals, Enterprises
Machine learning and AI attacks	Businesses
BYOD policies	Organizations have a Bring-Your-Own-Device policy
Insider attacks	Businesses
Outdated hardware	All users of hardware

Electronic devices having computerized component are vulnerable to software imperfections and vulnerabilities. Standalone devices without internet connections will never face cyber-attacks. The risk

increases, if the device is connected to the internet or a network that an attacker may be able to access. A wireless connection also raises cyber risks. Connectivity with internet provides a way for an attacker to send information to or extract information from device.

Access to internet run the risk of being accessible to others on the net along with severe data loss. Cyber Security is the term which includes defending our mobiles, computers, servers, electronic equipments, data, networks from malicious attacks. Broadly cyber security is electronic information security. From mobile till business, security comes under cyber security. Main things to secure in cyber security are-network, application, information, electronic equipment's, operations etc. Major threats countered by cyber security are 1) cybercrime 2) cyber-attack 3) Cyberterrorism. Malware are the software's created by attackers to damage computer systems. Malware includes-Virus, Trojans, Spyware, Ransomware, Adware, Botnets etc.

Phishing is an attack on email's generally asking credit card details, personal information. Man-in-the-middle attack is one of the cyber threats that intercepts communication between two parties to steal data. Cyber security can be termed as end-user security or protecting individuals. Cyber Security is based on cryptographic protocols to encrypt (hide actual details from hackers, attacker's) mail's, files, and all critical important data. Security provides protection but also secure data from loss or theft. Protocols providing electronic security deals with malware detection. Security programs continuously keeps track of user's network to analyse their behaviour and learn how to better detect new anonymous activities. Dealing with cyber security is actually understanding concepts behind risk, threat and vulnerability. **Risk** is the loss, damage or destruction of assets or data due to cyber threat. **Threat** is a process that produces negative event, such as the invitation to a vulnerability. And a **vulnerability** is a loop holes in your business, Networking or apps that exposes us to threats. With the help of **AI** and **Machine Learning** cyber security can be achieved very greatly. AI and machine Learning analyses large amount of data sets and triple down a wide range of cyber risks, from malware which going to be a phishing attack on a system. **Cyber Security can be achieved by protecting smartphones, computers, business, networks from hackers and attackers.**

Precautions like setting passwords, checking phone bills frequently, preferring only trusted web sources, regularly backup data, carefully understand app permissions before going further. It is to be keep in mind that never share bank credentials with someone on the internet, avoid opening suspicious URLs, neglect public wi-fi networks while sharing sensitive information, use security measures while opening the phone. Computers will help to resist cyber-attack chances. Prefer only google play store for trusted apps.

Cyber Security for business can be achieved by following the steps like identify business assets, protect by giving authorised access, detect risk areas, respond accordingly, make a plan to recover from attack. Cyber insurance policies provide data protection from cyber-attack. First party coverage, third party coverage protects data including employee and customer information. Email authentication will limit lots of attacks on your data.

Business protection can be done by allowing controlled access, multi-factor authentication, securing network and data. Cybersecurity is very important concern for businesses of all types as cyber criminals continuously invents new threats and malicious activities. Gartner insight projected that businesses would spend more than \$123 billion on security in 2020 and projects that figure to grow to \$170.4 billion by 2022. Hackers still manage to leak corporate data and systems easily and on a regular basis, because organizations are not continuously in touch with cyber security measures and performs poor practices that result in their data being disclosed and vulnerable to hackers and attackers. Cyber-attacks are mostly due to the remote workforces, gaps in cyber security skills, broad use of connected and internet-of-things devices. Security measures will help us from losing data, but situations may raise where we lost our money with data. In such cases, file complaint against it. The helpline was launched on April 1, 2021 for public support by Indian Govt.

The Indian Cyber Crime Coordination Centre (I4C) has taken responsibility of helpline 155260, with active support and cooperation from the Reserve Bank of India (RBI), all major banks, payment banks, wallets and online merchants. As per the Centre, the helpline 155260 has been able to save more than 1.85 crore of defrauded money from reaching the hands of fraudsters. Delhi and Rajasthan have saved 58 lakh and 53 lakh amounts, respectively.

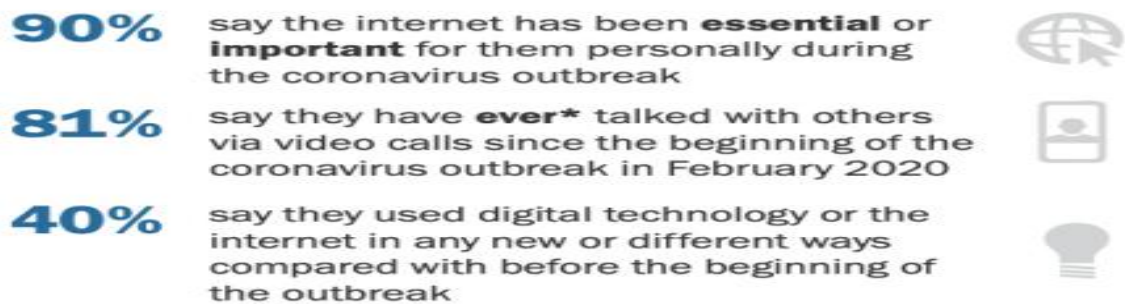
During pandemic period internet gave multiple paths to stay connected in this wearied situation. Ultimately big opportunities to attackers were launched. Before pandemic no of internet users were few. Only computer persons, business men's and some other peoples were in touch with internet. This pandemic period has given golden chance to hackers and attackers to do criminal activities in cyberspace. The International Institute of Strategic Studies (IISS), an influential London-based think-tank, published a report on 'Cyber Capabilities and National Power' which compared the cyber capabilities of 15 states including India. According to IISS report, in terms of cyber capabilities, India is in the third-tier countries along with Indonesia, Iran, Japan, Malaysia, North Korea and Vietnam. These countries are at the earlier stages in their cyber path, each having potential strengths in some of the categories but lots of weaknesses in others.

Figure: 1 Source: Survey of U.S adults conducted April 2021 "The Internet and Pandemic"

Figure 1 shows us that peoples were connected during pandemic only due to internet, social media. This ultimately raised the chances of cyber-attacks and need of cyber security during pandemic. The COVID-19 pandemic has made situation to millions of professionals work remotely all around the world which ultimately raised hacking opportunities. [International survey](#) from SailPoint Technologies Holdings, Inc., a U.S.-based tech company, says 48% of U.S. Respondents replied that they are targeted with phishing emails, phone calls, or messages, like personally and professionally also, during the six months period of work from home. Later on half or more than half of Europe, the Middle East and Africa (EMEA) survey responders, as well as those were in Australia and New Zealand (ANZ), replied about

Technology has been a lifeline for some during the coronavirus outbreak ...

% of U.S. adults who ...



phishing attacks during pandemic period—with 10% noticing phishing attempts at least once per week. Security magazine said that in the next few years cyber criminals will attack remote workers, organisations using VPNs will be targeted, health care centres will be big victims, pandemic will speed the expansion of organisations into AI and cloud technologies—during which organisations will seek to better adapt cyber security solutions in such situation.

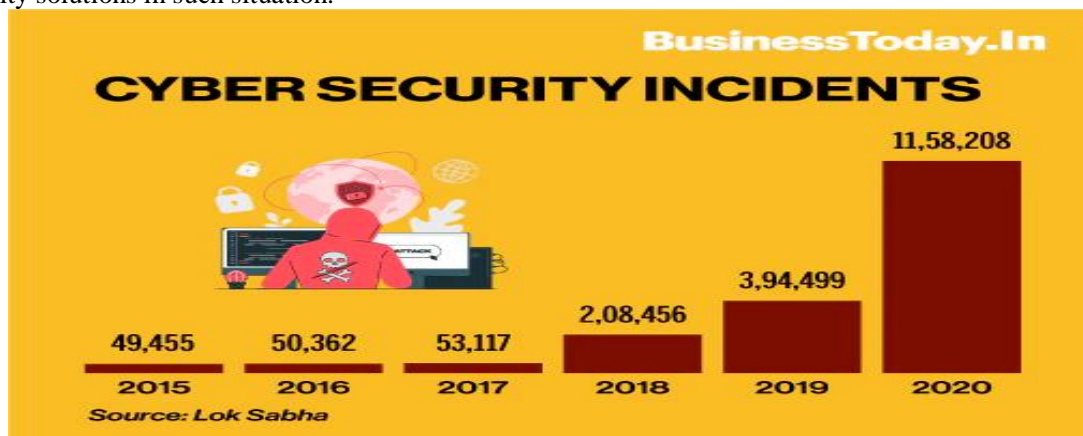


Figure: 2 Source: Lok Sabha

Figure 2 summarises the number of cyber security issues raised since 2015 till the end of 2020, including the pandemic period. As the number of internet users increases, cyber-attacks and ultimately cyber security cases will increase. This all is because of illiteracy of internet users that promotes attackers

to perform different new hacking activities. Total number of internet users in figure never increases this cyber security incidents but the illiteracy percentage in them will increase this number.

Conclusion

Cyber Security deals with securing networks, smartphones, computers, laptops and many more such electronic devices having connectivity with internet. Using password protections, access control, authorisation, authentication, encryption, decryption, anti-viruses, firewalls, VPN etc., data can be protected from unauthorised access which gives little bit guarantee of data security. Cyber Security ensures the data protections by preventing various cyber-attacks. From Pandemic period number of internet users were increased, which will give rise to cyber-attacks and more challenges in cyber security aspects. Literacy in the cyber world will give more assurance of cyber security. So it is now a need of the time that the users should get aware of the AAA formula .i.e. Authentication, Authorisation and Access Control.

Endnotes

¹ <https://en.wikipedia.org/wiki/Cyberspace>

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Interstate Conflict and Challenges to International Relations

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Abstract

Interstate conflict is one of the core areas to understand the philosophy of International Relations. Several scholars believe that interstate conflict is the result of ideological differences, political wrangling, cross border terrorism, communication failure and instinctual aggression. Besides, factors related to odd character like poor economies, corrupt governance, censorship of press, domestic violence, undocumented migrants, authoritarian policies and global mismanagement are not less important to contribute interstate conflict.

Keywords: Interstate conflict, India, ideology, terrorism, refugees

Introduction

Today, the planet is facing seemingly serious problems of odd developments related to human rights violation, environmental hazards, socio-political instability, and interstate conflict of multifaceted dimensions. War and Conflict, often inter changeable, are among the greatest fears to human life. It is often linked with deterrence, distorted ideology, political dilemma, authoritarian policy, autocratic leadership, antipathy, contradiction, incompatibility, strife, war, disagreement, dissension, strife, skirmish, and battle. Interstate conflicts are caused by political nuisance, ideological friction, destruction of institution, cross border terrorism, distorted public perception, and even cyber related crimes between nations. Hence, the sustainable efforts of varied character appeared as powerful weapons against odd global problems. Interstate fundamentally created by western diplomacy promoted new conditions of peace and security that finally worked as confidence building measures to explore new frontiers of knowledge.

Objectives

Interstate conflict remains a debated subject in international relations ever since world war II. However, cold and post cold war developments have opened wider avenues of conflict. The paper seeks to examine the following objectives:

1. Assessment of the basic roots of conflict.
2. Critiques of cross border terrorisms, undocumented migration and ideological differences.
3. Channing states of nation states and impact of globalization.
4. Issues related to India-Pakistan conflict and Kashmir as a factor.
5. Ideological differences pertaining to regional and inter-regional organizations.
6. Changing parameters of interstate conflict during post cold war
7. Power and national interest as core issues of international conflict.

Interstate Conflicts: A Historical Sketch

Historically speaking, the role of nation buildings, ideological differences, historical conflicts and misuse of dictatorial powers are centuries old. However, the interwar phase (1918-1945) witnessed repeated conflict resulted through October Revolution (1917-Russia), failure of League of Nations (1919-1939) and emergence of Fascism (1919). Interwar phase (1919-1945) is often called as 'Beginners of War' which was largely confined to Europeans states with limited and secret diplomatic activities. During Post World War II (1945-1990), hundreds of factors contributed to the rise of interstate conflicts. Major ones included: NATO as military Alliance (1949), Warsaw Pact Treat Organization: WPTO (1955) as counterweight of NATO, Korea Crisis (1950-1953), Vietnam War (1955-1973), Indo-China War (1962), Indo-Pak War (1965), Liberation of Bangladesh (1971), First Gulf War (1990) and ethnic conflict in Bosnia Herzegovina (1995). Most of these conflicts have ended in interstate conflicts in varied forms and manifestations. Some of these include: inter dependency of nation states, political inconsistencies, jurisdictional ambiguities, communication failure, asymmetrical balance of power, international Darwinism, poor Third World economies and even individual differences of Great Leaders.

During post cold war phase (1990 till date), interstate conflicts have appeared in different manifestations. Adverse and reactive factors like collapse of USSR, disintegration of WPTO, security issue of Europeans Union, democratic triumphs over socialism in Eastern Europe, controversy about Euro currency, interstate issue in Central African States, and creation of large of Islamic States in Central Asia like

Kyrgyzstan, Kazakhstan, Uzbekistan, Turkmenistan, & Azerbaijan; which all became the major source of interstate conflict.

Why Interstate Conflicts ?

Human Rights that remain the best alternative of peace, continued to have fading image as the power bargainers and national interest players undermine the legitimacy of nation states in one way or the other. Disconcerted image of superpowers (USA and Former USSR), mismanaged multi-polar world order, fading image of world policeman (USA), disequilibrium balance of power, issue related to suspicious neighbors, increased global terrorism and serious matters of energy security are major concerns. Most serious and promoting trends of interstate conflicts are influx of refugees, illegal migrants and undocumented citizens. Categories of refugees from Bangladesh (Chakma & Tipara), Myanmar (Rohingya), Afghanistan (Pathans and Pushtoons), Pakistan (Indian Muhajirs), Tibet (Lamas), Nepal (Thapa), Sri Lanka (Tamil Tigers), Rwanad (Hutu Tribes) etc., are some notable cases of interstate conflict.

Issues related to interstate conflicts also include territorial sovereignty like India (Terrorism in J&K), Afghanistan & Iraq (Freedom Fighters), Nepal (Mao insurgency), Israel (PLO Issue), Russian Federation (Chechen Rebels), Ethnic Cleansings in Bosnia-Herzegovina (Serbs and Croats), Uganda (Bugandan Tribes), South Africa (Blacks and Whites), Syria (Muslims & Christians), North South Korea (Dictator versus Democrat), Sri Lanka (Tamil Tigers), etc. Unfortunately, however, other factors related to media, information revolution, intelligent services, and diplomatic wrangling, egoistic leadership, prestige consciousness, communal fringes, and negative attitude are also responsible causes. Similar inter related factors like conflicting needs, zero or poor perception, political pressure, role of groups, values and polices are not less important to assess the hidden contents of interstate conflict. In a nutshell, International Relations are shaped by territorial aggrandizement, energy challenges and humanitarian crisis.

Interstate Conflict: Theories and Applications

International Relations continue to face challenges against the interstate conflict. Issues related wars of varied categories: civil, guerilla, ethnic, racial and class are frequently linked with interstate conflict situations only. It often occurs at two different levels: Single State and Multiple or multilateral states. Single or unilateral interstate war include: Iraq versus Allied Powers (NATO and USA: 1990 Gulf War), Libya versus USA with Coalition Partners, Palestinians versus Israeli (with support of Western Allies), North Korea versus South Korea (with US Allied), etc. In case of multiple problems, there are several sensitive examples like Soviet Intervention in Afghanistan (1978-1988), Iran-Iraq War (1980-1989), 2nd Gulf War (2003-2004), and Syrian Crisis (2010-2015). Varied factors related to competing leadership, corrupt governance, misinterpreted version of Islamic Jihad, cyber terrorism, environmental disasters, breakdown of legal norms, and corrupt policy are directly responsible for interstate conflict. Some critiques have gone to an extent of blaming global trade policies of WTO, WB, IMF, APEC, SAFTA, etc as the logics of interstate conflict. Several states are heavily dependent on trade and energy polices where third or intermediate actors play decisive role in decision makings. For example, India and several third world countries are heavily dependent on energy supply (Petroleum) from Gulf where OPEC play crucial role in making laws in favour of big powers. In the same, China Economic Model is an ideal example and lesson for India and the world. US, UK, India or West has to think ten times before applying any diplomatic, political and economic pressure on China. After all, China's economy is safer, balanced and well manageable to global system, no matter where USA, Pak, India stand as mediators only. China is talent and smart enough to create any situation of interstate conflict along with readymade solution of problem.

Interstate Conflict: Conventional and Non Conventional Threats

Large number of factors in international relations are inter related to interstate. It is rather difficult to highlight each and every dimension of conceit. The following table gives on overview of some of these factors.

Table: Interstate Conflicts: Conventional and Non-Conventional (An Overview)

SL. No.	Conventional Threats	Non-Conventional Threats
1.	Migration: Exodus, Illegal Movement, Undocumented, Refugees, Asylum Seekers	Challenges for mediation and humanitarian action
2.	Border Disputes: Territorial Aggrandizement, Breach of Sovereignty, Cross Border Dalals	Drug Use, Narcotics and Cookies, Failure of E-Governance,
3.	Insurgency: Active Revolt against	Use of Missiles, Modern Warfare, Bombers,

	domestic policy	
4.	Racial War: Related nationality, colour, creed,	Intelligence Services, Communication Failures, International Darwinism, Asymmetrical Balance of Power,
5.	Multi Religious Institutions & Ideologies: India, USA, France, Australia, Canada, etc	Oil diplomacy, Transaction of Gold and Diamond, Trade patents & Policies
6.	Linguistic & Ethnic Conflict: India, Pakistan, Sri Lanka, Brazil, Kyrgyzstan, Bosnia-Herzegovina	Modern Conflicts, ICT Services,
7.	Erosion of Moral Principles: India (Hindu Muslim Controversy), Myanmar (Rohingyas),	Terrorism, cross border activities,
8.	Nationalism, Citizenship and Migration: India (NRC & Hindu Nationalism), Tibetans in India, Muhajirs (Sind: Pakistan), Bangladeshi Refugees in India, Uzbeks in Kyrgyzstan, Sikhs in Canada.	False version of Internationalism, Misuse of IT Cells, Violation of Human Rights,
9.	Traditional Wars: Guerilla, Civil, Racial, Ethnic	Cyber Techniques, Online Frauds,
10.	Miscellaneous Factors: Use of Traditional Guns and Artilleries, etc	Competition, Crime, Modern Conflict

Suggestions to overcome Interstate Conflict

Interstate conflict needs new orientation of perception and direction. Factors related to multilateral dialogues, strengthening trade and business opportunities, building investment linkages, promoting innovation reshaping global financial and social structure are the powerful imperatives. A greater need is felt for consultations, cooperation on peace, and security matters which are being increasingly felt to end prolonged conflict. World's hot spots and some sensitive regions like Afghanistan, Syria, Iraq, North Korea, Myanmar, and India (J&K), Balkan Republics, African Frontline States, and China-Pacific need comprehensive vision of cooperation through sustaining and creating deeper bonds with major global players. Issues related to refugees, terrorism, proliferation of weapons, fraudulent sanctions, forceful expulsion, misuse of autocratic polices and misuse of veto power are significant factors to analyzed interstate conflict.

Institution building based on strong democratic warless world, nation- to- nation contact, progressive economic policy, inter-regional dialogues, human rights, spirit of media, civilian energy security, collective peaceful bargaining and inter-regional harmony are important tools to minimize or end interstate conflict. The best way to end interstate conflict is to form 'Global Dialogue' based on collective leadership, good governance, non-censorship of media, corporate social responsibility, global parliament, and international understanding.

Inter-State Conflict: An Appraisal

Time has come to change the destructive and hostile character of interstate conflict. Today's peace initiatives in forms of new correction of interstate conflict are increasingly important. Though large number of nation states are coming closer through multilateral dialogues, problems of conflict and fear still persist in India, Pakistan, Afghanistan, China and several other nations due to lack of clear-cut peace policy. Alternatively, the progress of peace and human right advocacies are being replaced by conflict to strengthen and determine the democratic building. As such, several sensitive regions of world need to be scrutinized within the broader framework of peace movements. Cold war experience should never be repeated for imperatives of political security and peace building. Much research needs to be done to find better means and ways to promote peace policies across South Asia and the world. If nation states dedicate to justice and peace, many doubts and ambiguities of interstate conflict many be minimize if not ended.

Conclusion

War and interstate conflict have always been a debated and controversial feature of international system that worked against the backdrop of peace and human rights. Arms race, national interest, trade barriers policies (patents & intellectual property rights), and transfer of technology have

been frequently associated with interstate conflict. Impact of power bargainers (USA, Russia, China, North Korea and Israel), have added more risks to interstate conflict. It briefly involves dispute settlements, cross border activities, interstate brokers, narcotic business, and greater economic interdependence. The process goes on uninterruptedly. Greater need is felt the activation of human right agencies in forms of controlling transnational activities, resource regulation, strengthening state capacity, and integration of weaker states into the mainstream of global trade and political security. But the entire process needs the power to evolve a dynamic socio-economic policy to minimize interstate conflict. India, being the largest democracy, can effectively control interstate conflict provided all regional problems with Pakistan, Sri Lanka, Bangladesh and China are amicably settled. Domestic policy needs to be regulated within the consent of media, social issues, communal harmony and patriotic nationalism.

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History of Feminist Movements within the Indian Context.

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Abstract:

Social movement is a broad networking and coming together of large number of people who may be connected through common interest in bringing about social change or blocking it. In other words we can say that it is a flexibly organized but sustained campaigning in support of social goal, either in implementation of or preventing a social change in the structure and values. As mentioned earlier they are flexibly organized, may differ in size but it's a collective efforts.

Keywords: Feminism, Social Movements, Human Relations, Waves, etc,

Introduction:

The women's movement also known as feminist movement refers to a series of campaigns for reforms on issues such as reproductive rights, domestic violence, maternity leave, equal pay, voting rights, sexual harassment, and sexual violence. The history of women's movement or feminism involves the story of feminist movements and of feminist thinkers. The goals of the movement vary from country to country. Most of the western feminist historians assert that all movements that work to obtain women's rights should be considered feminist or women's movements.

Feminist Movements in Indian context:

There were and are different perceptions about women's oppression in India and every social thinker and feminist has expressed different views about ways to overcome the problems of women in India. However, as per the history of women's movement it seems at first instance that these different perceptions, ideas and thinking have not led to the formation of a single movement related to feminism. Instead, there have been to divisiveness and localized type of tendencies that occurred within the movement. This has led to the inclusion and exclusion of certain issues as women's issues thus creating and prioritizing of issues in the process. The term Indian women's movement is highly the matter of discussion. When the identification as Indian women's movement is concern it states the singularity that not known by many people about the movements diversity, differences and conflicts. As compared to the women's in other developed countries in the world, women in India are the most oppressed and depressed. This is due to the social structure of the Indian society which with few exceptions has always remain a strong patriarchal in form and this had not changed whether they are in the 18, 19, 20 or 21st century. The 21st century has evidenced different form of patriarchal nature of the society which seems as strong as it was in the earlier stages so called fundamentalists are deciding what the woman should wear and how she should behave this is totally avoiding their human rights.

As we look back we find that women's began to organize in the end of 19th century and in the early parts of 20th century which is said to be the era of social reform movement in Indian concepts and this was done with the leadership of men's. They tried to bring changes in the lives of Indian women's. Many issues related to education, working conditions and reforms in the religious believes were taken up. Women's participation in all this was overwhelming and this later on made women's more active to participate in the freedom struggle. The Independence has brought many bright dreams for the overall people of India and among them were the SC, ST, Minorities and the women. The dreams of Indian women's at the eve of Independence were that of equal share in every resources of the country and their voice should equally be heard by the society as that of the male counterparts. Indian society with caste, religion, ethnicity and gender has differentiated it from the societies in the developed world. Gender and the term "women" have always been used to raise issues of equality in the society not only in Indian context but in the world. The colonial rulers justified their rule in India as to debar the brutal and barbaric patriarchal practices towards women done by the Indian society. The gender issue has always been the basis of women's movements in India mobilizing against violence and discrimination, improved living conditions and their human rights, amongst others. The women's movements have, throughout the whole period of colonial and post colonial rule, not been one movement, but several movements. The movements have been contested for representing "women" as a cultural and politically uniform group, simply because women's challenges are not uniform, and depend more on caste, religion, poverty and other social factors like education, rather than their sex.

The early 20th century has witnessed the growth of various women's organizations at national as well local level. The women's India Association in 1917, National council for women in India in 1925, All India women's conference in 1926 are the few names to be mentioned. Despite women not being a uniform group as is it in the developed countries, some still use the term women's movement when describing and analyzing gender issues. This has also happened in the developed countries at the initial stage of women's struggle. India being a country with variety of culture and traditions this is true that women's get together to fight for their rights however there has been felt need that there should be a uniform singular national level women's organization which would raise their voices against discrimination and injustice being done to them from generations.

During the British rule in India some of the Indian men got English education which gave them the exposure to a modern view on the problems of society in general. From this educated elite the Social Reform Movement started to address the evils being done by the patriarchal society. The movement achieved in changing some of the easily observable atrocities practiced against women like abolishing sati in this matter Raja ram Mohan Roy played very important role who asked the British government to make a law against it and also providing widows the right to remarry, but the main focus was on changing the negative elements of the old traditions rather than introducing rights equal to that of men. Men who belonged to the socio religious reform associations began the first organization for women. In this regard women's journal was started, regular prayer meetings were organized and also certain educational programmes were organized so that women's could get together and organize themselves against the evils within the society. The very example to quote is that of the Savitribai and Jyotirao Phule, through their Satyashodhak Samaj, even though was opposed by the society they did not change their stand and continuously worked for betterment of women's as well as the deprived people from the society.

The campaign for the Child Marriage Bill, throughout the country made to think various groups, organizations, associations to come together and make consensus for strong women's movement. Women's participation by this time in political activities increased and more and more educated women got involved with the to make changes in the societal behavior of the people in India. This made a broader base for the women's organization also because associations and organizations started during this period, not all merged in the larger political parties but some still have maintain their identity and existence even after so many years.

Objectives of study:

- 1] To study the role of women's movement.
- 2] To study the issues taken up by the women's movement.
- 3] To take a review of feminist movement within the Indian context.

Hypotheses:

- 1] Indian women's movement has made great impact on Indian women's life.
- 2] Women's movement in India has a influence of western thoughts and culture.
- 3] Women's movement in India is mainly a form of radical feminism.

Methodology:

For this particular study descriptive research design was use and data collection was done mostly using the secondary sources.

Conclusions:

1. Indian feminist movement has made great contribution for the women's development.
2. Pace of development in Indian context may be slow but now there is definite growth as compared to the earlier participation of women in the movement.
3. Women's movement should focus on wider perspective rather than regional issues.

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Impact of Social Media on Libraries

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Abstract

Academic libraries are increasingly engaged on social media in order to connect with diverse community groups and move beyond the traditional bounds of the library. Social media postings included ten different codes: archives; collections; events; exhibits; facility; library community; sentiments; services; site management; and university community. These codes were tied to three different themes: libraries create a sense of outreach and advocacy with the goal of establishing community connection, providing an inviting environment, and access to content as needed or desired.

Key words: Social Medias , Library services, Social Media Networks, Communication,

Introduction

The information explosion continuously to un stop one place to other place or one person another person to the changing dimensions of the present day reshaping human interaction is the social media networks. Social media comes in many forms like blogs, forums, chat apps, business networks sharing them feeling and education information, social problems in the platform. Social media network is a powerful tool for sharing information with others. Present day the most population is communicating their needs and ideas through such amazing social media. Any information accessible through these tools will reach more people in the shortest possible time. The Librarians and other institutions can continue to have good relationship with their users or members. Similarly, libraries also need to use such social media tools to reach the top to integrated them users communities within the library. The librarian is Knowledge manage, information Scientist, Technology gatekeeper, and library staff must have technical knowledge and they need to know about present technologies. There are so many of social networking sites available internet to the share of the knowledge. In the future social media tools features may change, but it is clear that it will exist in some form as long as humans are alive.

Objectives of using Social Media in libraries

1. Librarians can tweet about events of daily activities in the library.
2. To update the new books, journals and other and new arrivals in library members of interest.
3. The Using instant messenger apps also library staff can send alert messages to the library patrons for discharge of books and fine reminder
4. The you tube channel for the library and host events and live Programmes taking place in the library.
5. Sharing library programmes photos using with photo sharing tools like flickr, pinterest.
6. Create a library patron groups for sharing information by using tools like WhatsApp, Telegram.
7. To share the public or private messages related to the library and its services
8. To create groups between the library and users to discuss the new age of information or services.

Define Social Media

According to the Wikipedia (2021) "Social media are interactive digitally-mediated technologies that facilitate the creation or sharing/exchange of information, ideas, career interests, and other forms of expression via virtual communities and networks". websites and applications that enable users to create and share content or to participate in social networking. Social media is the collective of online communications channels dedicated to community-based input, interaction, content-sharing and collaboration.

Photo Sharing Networks

Flicker has millions of members and over 10 billion photos. Photobucket has over ten billion photos and it has over 100 million members.

MySpace:

Here library users can use html to customize their profile and they can add new graphics and videos on it. Face book: -With the help of Face book, library users can be informed with different upcoming events and share the information about their new arrivals and editions of books.

Face book

Mainly helps in marketing of services and products. Photo can be tagged through the use of it. Ask-A – Librarian service can be exploited by using it. Twitter: - Twitter is a free social networking used to send and read messages known as tweets. At present librarians share all kinds of news regarding library through

the use of twitter. Librarians can highlight new materials, new groups, meetings and more with some of these suggestions through twitter.

LinkedIn:

It is a professional networking site. It can be used by the librarians to create professional connections and to market library services among other library professionals spread all over the world and can also share their ideas and professional experiences.

WEB 2.0:-

The term was coined by Darcy DiNuccie in 1999 and the term was popularized by Tim O'Reilly4 . The term includes weblogs, wikis and syndications. It is nearly synonymous with social media.

Blog:

Libraries can use Blogs to keep their users aware with the latest developments in the field of library related matter. Blogs can be subscribed through RSS feeds. Blogger and Word Press are the examples of blog.

In addition to this blog can be used as follows— • Notice Board • Latest arrival • Current Awareness Service • User Orientation Programme can be uploaded

Wikis: - The most recognized wiki is Wikipedia. A few other wiki services are wikia, wiki how, wiki dot, Wikimedia, wiki news, PB works. Wikis can be used for---

Other Services:

- 1.OPAC search facility on Mobile Phone and Access to own database and resources
- 2.fulltextJournal Magazine and Newspapers content finers
- 3.Event of Library Activities and New books arrival in Library.
- 4.Reference Services and Wi-Fi and internet Services.
- 5.Updated News for Library Users:

The Libraries will produce alert victimisation of google alert by giving keywords involving institute, subject domain the user groups is interested, the new to[opic within the news and etc, The Chosen alerts from these will be shared with the user communities, it may enhance the visibility of the library facebookpage.Virtual Tour for online workshops and other services

Instant messaging system

This System helping to answer user queries over chat. It will helping to attend to reference queries from the libraries and also help to attend to users beyond desk hours. This system remaining the 'status' of help to inform the users about the availability of library staff for providing services.

Developing of user Information:

Victimization the feature to make teams, libraries may have the students profile beneath totally differende class like as UG, PG Faculties, other staffs alumni association and guest. Event Alerts The Libraries will conduct online programmes during which users will share their thaoughs related to the National Book Day, Library weeks, Librarian day, copyright day, father day, teacher day, mothers day and frindshipday.The another one milestone of service of birth or death anneversaries of the outstanding authors, forthcoming institute events are often conducting in the libraries.

Photo Archeves for Feature purpose:

The Share the Photographs relevant of programmes or events photographs captured throught the libraries or student achievemetsprogrammes, faculties programmesduring the some programmes,it will help to archieve the knowledge over the time line.

Purpose Of Using The Social Media In Libraries:-

1. To attract potential users of the library by making general announcements, providing reference service, networking with other libraries, promoting general library services, providing quick updates to users and their query and to develop communities.
2. To cater information about latest arrivals and news about the library to encourage discussions among users about new arrivals to build discussion groups.
3. Users are to be given links to recommended Internet Resources, Book reviews, latest arrivals, etc.
4. To communicate among the librarians about their professional development.
5. To build an e-reputation of LIS domain.
6. To modernize the library & information centre.

Conclusion

By using social media libraries can promote their users, services, resources, events and communication. Study concludes that according to the changing needs of library users, libraries need to be changed accordingly. Libraries should be facilitated with internet service and develop their web page and social media page. In order to grow social media usage trend in libraries librarians should be trained and

educated regarding social media use for marketing library resources and services and all the problems that hinder in social media usage in libraries should be resolved.

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Information Technology In Commerce

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Abstract:-

Information technology increases the business through with support of telecommunication. Information technology has power to develop the industry and transform how business is run. Used of information technology in business having benefits smartness, co-ordination in staff also increase, decision facility also better, quick information are available for management, data saved in long time, good relation with customer, online advertisement is possible used of through email, Facebook and website. E –commerce means commercial transactions conducted electronically on the internet.

Key Words: - Information technology (IT), E-Commerce, Internet, Mobile Applications, Web.

Introduction:-

Information Technology is used for computers and it also include as television and telephones. Information technology is also known as IT. Business is the conduct of trade among various agents. Information technology only does it help connect sellers and customer on mobile and web platforms, but also enables the effective management of customer orders, deliveries, returns and payments of purchased goods. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems.

Objective Of Research Paper:-

1. To study and understand the advantages of technology in business.
2. To study and understand problem with information technology in business.

Research Methodology:-

3. The type of research presented is descriptive and analytical.

Advantages Or Benefits Of Technology In Mordern Business

4. Improved Business Agility or smartness

Information technology allows businesses quick to respond to change within the markets. Information technology provides valuable information to business for decision making. After receiving information management take proper decision for business making smart for achieving his profit target.

Improved Staff Coordination

New technological equipment's are effective for good communication. This equipment include various mobile applications. This equipment is fast transfer information from one source to another.

IT Allows business to make better decisions

In information technology some software provide in build decision system. They guide for decision making process of organization.

Automation and Productivity

By used of new technological solution in business is increase efficiency of machinery, labour and raw material. Tapping into the benefits of high-speed internet and automation software allows for better handling of vital tasks.

5. Better Storage Solutions

Cloud storage systems are reliable, allowing for restricted access to business information from any place in the world.

6. Improved Data Security

New technology helps to protect organizational valuable data from outsiders.

7. Better Customer Experience

In mobile application and web design is available good facility for customers. Transaction history saved in application and web design.

Problem With Information Technology In Commerce

1. Always required internet connection:-

All transaction or advertisements are not possible without internet.

2. Lack of security and reliability:-

Poor implementation in software or other tools then customer feel unsecured for business transaction then organization loses reliability. Online portals have been in the news a lot because of hacks by cybercriminals and hackers. It is a very serious issue as your account might be hacked because of negligence and wiped out clean of the existing cash.

3. Lack of privacy:-

Lack of privacy is a serious disadvantage of in IT commerce. A customer has to provide his personal details before making a purchase like address, name, and phone number and so on.

4. Technological Cost:-

High cost required for internet and other related software and mobile applications.

5. Cloud Confusion :-

When investing in cloud-based services, you need to inquire about the level of security across several platforms. This is because a multi-cloud approach involves managing different security systems.

Conclusion:-

The understand advantages of information technologies in business. The essential problem of the e-commerce is internet/data privacy which is at risk in a high security environment, which is the current case worldwide.

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A Study of Unlocking an Inclusive Circular Economy Approach for Dry Waste Industries in Pune, India

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Abstract:

There is a strong need to treat waste as a valuable resource thereby evolving innovative technological options coupled with research and developmental activities to transform waste into value added products with economic benefits to provide sustainability. The authors of the present paper have elaborated scope of the dry waste industries for overcoming the problem of segregation of dry wastes, and quality of the dry waste items, resulting in economical solutions that meet environmental impacts and to optimize waste as a resource. The authors have described various economical options to transform municipal solid waste into usable products in the form daily use household products with comparison of economic benefits and their sustainability. An effort has also been made so as to how the various dry waste items are been used which have economical value which not only cleans the environment, but also develops a valuable resource and provides local jobs. Similarly, authors in the present paper have also described how the waste items are collected and transported to industries producing recycled waste items. Such wastes are usually being disposed with economic benefits.

Keywords: Dry waste Industries - The industry which consume the dry waste items. i.e. they convert dry waste into usable item, 1 Ton mean 1000 Kg, RDF refuse derived fuel, MRF Material Recovery Facility

Introduction:

The Commercial Industries, Hospitals, Hotels and Residential buildings in Pune create approximately 2,200 tonnes of municipal solid waste daily. By 2025, the projected total amount of municipal solid waste that will be generated and managed by PMC will rise to 3,255 tonnes per day. The composition of the solid waste is categorized into three groups: compostable, recyclable and inert.

According to the report, closing the loop, case study- Pune, India; Pune produces about 2000 tonnes of Municipal Solid Waste every day out of which 74.2% is Wet Waste and Dry waste consists of Plastics 8.31% (166.2 ton), Paper-7.57% (151.4 ton) , Glass-2.47% (49.4 ton) , Cloth- 1.66% (33.2 ton) , Other- 1.30% (26 ton) , Shoes-0.54% (10.8 ton), Metal- 0.33% (6.6 ton), Electronic- 0.06% (1.2 ton) The domestic hazardous waste consists of inert- 1.14% (22.8 ton) , Sanitary waste- 2.42%. (48.4 ton).

There are 14 PMC's Dry Waste Segregation Plants for recovery of the Dry Waste Items. Out of these plants 18-20 items are sorted for sell and remaining goes to RDF(refuse derived fuel)

As per the survey, only 5-10 % dry waste is recycled in Pune City remaining goes out of the state. Here there is a huge scope to start new industries in different dry waste Items and need of the industry with respect to regeneration of income from available raw materials.

Objective of the Study:

1. To study the current segregated dry waste quantity.
2. To study the Market Value of each dry waste item.
3. To study the current dry waste recycling industries in Pune city
4. To study the scope of the new business opportunities in dry waste streams.

Scope of the Study:

1. The study attempts to cover the administrative system of dry waste recycling units in Pune City Area only.
2. The study focuses only on dry waste recycled by these recycling units. Other waste recycled by these units is not covered in this study.
3. Technical study of process on dry waste will not be considered.

Statement of the Problem:

How to boost economy through dry waste industries.

Hypothesis:

All Dry waste items properly segregated.

All Dry Waste Items have enough recycling plants.

Research Methodology:

We will be using qualitative and quantitative research method. We will use systematic review for collecting content through research literature.

a) Primary data: For collecting primary data, researcher selected the entire Pune Municipal Corporation. Based on survey researcher will formulate the research strategy to gather the information. We will use questionnaire method, in-depth interview.

b) Secondary data: Secondary data is collect from different published sources of various Government Departments, other Agencies and Municipal Authorities. And also secondary collection is all over the online publication, articles, magazines, Books & private recycling units Published & non Published data , also Government Published & non published data.

Contents of Research:

14 MRF plants Total 1500 dry waste segregated out of that 1125 tone were segregated and send to recycling industry. 375 waste going to landfills / RDF through this research most of the material not properly segregated so 40% of material where not segregated. Out of 14 plants 2 plants where not working for 1-2 alternate months. Thus Out of total dry waste 40-50 % were goes for recycling industry. Remaining goes for rdf/ landfills.

As per the data only 18-20 dry waste items were segregated. Remaining material were not used for recycling. The actual cost is not been verified but the approximately 400 tone waste is unprocessed and here is the scope of circular economy to form a commerce in segregation, transportation, pr-processing. Some waste E-Waste, Tube Light, Thermocol, were not accepted this plant.

Table No. 1.1 Market rate of dry waste items:

Dry waste Items	Rate	Dry waste Items	Rate
LD- White	9	Aluminum Foil	150
LD- Color	10	Milk LD	13
Card Board	8	Iron Mix	35
White & Color Pet Bottle, PP Disclosure(Parcel Black container)	10	Oily (Water multicolor Bottle)	12
HDP (Bottle Lid)	15	Rafiya, Jute, Gunny Bags	10
Mix - Hard Plastic	16	Cotton- Clothes	0.5
Chappal & Sole	4	Glass	3
Aluminum Can	40	coconut	0.5
Paper	8		

There are mainly clothes, plastics granules, plastic bags, Tyre shoes private industries which manufacture the products through dry waste material. But these all startups are small scale so very small quantity of material were used for production. So Pune’s dry waste goes out of the state or within the state for reprocessing.

Table No. 1.2 Plant Capacity vs actual recovery of dry waste items:

Name of Plant	Capacity of the plant	Daily segregation	Not Segregated	Name of Plant	Capacity of the plant	Daily segregation	Not Segregated
New Global Solutions	25	10	15	Wadgoan Bu.- RDF	50	25	25
Aditya wadgoansheri - MRF	25	10	15		100	50	50
Aditya-Sukhsagar MRF	50	40	10	Green Solutions	25	20	5
Aditya-Keshavnagar RDF	100	50	50	A D Eco Solutions	50	10	40

Aditya-Keshavnagar - MRF	50	30	20	Rocem	250	200	50
Adarsh	50	35	15	Nobel	200	100	100
Construction	25	17	8	Total	1000	597	403

Above data explain us that around 403 ton waste not goes in to processing cycle. Also very few Capacity industries are running so having the opportunity to form a business in this area.

Conclusion and Recommendation:

Conclusion:

Segregation Quality: It is necessary to strengthen the segregation in MRF plant so this plant will effectively forward all the dry waste in to the processing unit.

Market valuation:

1. Public awareness about waste segregation goes up with exchanging the value of their waste and then automatically the waste is converted into useful resources.
2. The first chain in waste picking is informal so there are only focuses on valuable items if the informal workers get good price of each item then the dry waste pick up will have higher segregation.

Recommendation:

1. Strengthening the Segregation systems for quality and all waste generated in Pune city
2. Strengthening the Market rate of the dry waste items on ground level or retailers. Every dry items needs to be valued.
3. Need of increasing number of industries in dry waste processing
4. Need of Start up of new business model for unused dry waste items
5. To Study new trends in the dry waste recycling industries and how to convert the traditional concept in commercial point of view.

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Human and Technology

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A historical review of human life reveals that it has a history of billions of periods. In these billions of years, human beings seem to have used their sharp intellect to brighten their lives from time to time to make their lives prosperous and simple. Humans are the only creatures in nature that have been used technology from time to time to make life richer and easier. From the Stone Age to the Modern age, humans seem to have advanced technology. Today, human life, which has been in turmoil for thousands of years, seems to be evolving and glorious due to technology. Humans are the only intelligent creatures who use technology to shape their life. In the present research paper an attempt has been made to briefly review the development of "Human and Technology".

Research Methodology:

While writing a research paper on "Human and Technology ", it is seen that human life has become rich and developmental due to technology. Descriptive, historical and analytical research methods have been adopted while writing this research paper. From ancient times till today human beings have been using technology for their comfort while evolution has developed our life in a prosperous and comfortable way. This paper seeks to take a closer look at how the use of technology in human life evolved and how humans are the only animals that have used technology in human life as a test of intelligence. Descriptive, historical and analytical research methods will appear in this research work as follows.

Objectives:

The purpose and objectives of the research paper on "Human and Technology" research can be explained as follows.

1. To explain that humans need technology from ancient times to the present day.
2. Using technology in human life and reviewing developmental human life.
3. To review the development of human life and technology from the Stone Age to the Neolithic Age.
4. To explain the evolution of human cultural life and technology.
5. To explain the use of human and technology in medieval times and review the development of modern human life and technology.
6. To explain the importance of continuous research in technology to meet the needs of human beings.
7. To explain the scope of human and technology until today.
8. To explain the development of technology and the duties of human beings regarding environment and ecology.

With a view to the above objectives, the review of the research paper "Human and Technology" can be explained as follows.

Technology in Human Life - A Necessity: As the meaning of the proverb "Need is the mother of invention" numerous needs with the help of technology man has been advancing in technology from the Stone Age to the present day. Humans have been living a nomadic life since ancient times. Since human beings are intelligent beings, they are perceived to meet their needs. He gradually started using technology to make his life convenient and easy. Therefore, along with the evolution of human life, technology also evolved in an evolutionary form. From ancient times to modern times, humans seem to have used technology extensively in their lives. It can be explained as follows.

Stone Age - Humans and Technology: Humans are just like any other animal, but human beings have been endowed with brilliant intelligence and accurate knowledge of the environment since the Stone Age. The longest period of the Palaeolithic human evolution can be called the dark period from a technological point of view, yet humans seem to have used technology to make a living during this period. The technology first appeared in stone as they developed stone tools and useful stone tools in the form of technology. Humans developed their technology from rough stones. While wandering, human beings began to live in groups, and it is seen that human beings used stone tools, bones and horns of large animals as technology in the Stone Age. Although the Stone Age is a long period of dark human life, it can be said that this stone technology is conveniently seen in various aspects of human life today.

Neolithic Period - The Discovery of Fire and Wheels: The age of B.C. Forty thousand years to B.C. Ten thousand years is considered to be of Neolithic age. The use of fire in this age as the use of technology in human life became widespread, which gave man a new technology. Egypt, Mesopotamia, India, China,

in four regions, the influence of this Neolithic age began to be seen. The importance of fire in human life began to develop during this period. Man began to use fire in his life on a large scale, which gave stability to his life. Further, human life gained momentum due to the stone circular wheel. Due to the stability of fire and the speed of the wheel, human life developed and accelerated in the Neolithic Age. From stone to wood, man began to use wheel technology. Copper was given to mankind in this age as a boon in technology. The invention of fire and wheels added to human technology. Human agriculture turned to primary industry. With the rapid emergence of human culture along the major rivers of the world, the discovery of fire and wheels seems to have turned the tide and direction of human life.

Ancient Times - Human and Technology: The technology gained momentum in ancient times with the introduction of human technology from the Neolithic Age. Large quantities of metal began to be used in ancient times. Metal, stone, baked concrete bricks along with metal were used in construction to build human structures and houses. Language, culture began to emerge around the world. Human needs such as food, clothing and shelter have received a unique confluence of technology. Metal, crafts, handicrafts, etc., evolved human life through technology. The technical effects of horse carriage and bullock cart transportation began to appear during this period. Early inventions of writing, linguistics, and literature began to appear in the ancient human community. Through the confluence of man and technology, human life began to appear stable and urban. Culturally, the influence of technology on society was easily seen in cultures around the world in ancient times. In ancient cultures like India, Greece, China, Rome, Egypt, etc., due to technology, trade, industry and technology began to be exchanged. The study of ancient social life shows that technology is useful for evolving human life.

Medieval Period and Human Technology: Imperialism began all over the world in the medieval period. This shows that humans have used technology in places like water and lands. During this period technologies such as floating ships and shipbuilding were developed. During this period, human beings became aware of the in depth knowledge of human geography. This led to the emergence of imperialism on a large scale. Technology is being used extensively in sharpening metal tools, agricultural implements and everyday human objects. The textile industry and the agro-industry saw the development of a large number of technologies. As human life became more stable but ambitious, technological advances were made in the Middle Ages. In the European continent, human intelligence is seen exploring various aspects of technology. The use of technology in everyday human life along with political - socio - economic and religious concepts is seen in this era. It is in this period that the sailors made a concerted effort to connect the world with the important ones in Europe. The development of technology in human life seems to have been mild but very effective during this period.

Modern Age - The Invention of Technology in Human Life: Human life and technology happened in the modern era of equations. During this period, modern means of railway, airplane and transportation were developed and in the field of textile and metal industry, there was a great deal of technological progress. The Industrial Revolution in Europe accelerated the development of technology. Technology has accelerated trade and commerce. Humans came to realize the use of technology along with astronomy and geography. Human life became prosperous and dynamic and human technology was used in every aspect. The influence of technology on paper, lead, metals, petroleum and agricultural matters and all aspects of human life began to show in modern times. Technology began to be invented in all fields like communication, messaging, electrical equipment, manufacturing, trade and industry. Man came forward as a great researcher and inventor. The modern age was known as the age of technology. From bicycles to the motor industry, the invention of technology is seen in all areas of human daily life. The range of human technology ranges from basic necessities to physical development, from television, railways, airplanes, household goods, messaging, astronomy, agribusiness, metallurgy, textile industry and food, clothing and shelter to human life. So the modern age has to be called the age of technology.

Twentieth Century - Human and Technological Century: The evolutionary chart of human life shows that the 21st century is the century of man and technology. This century has seen the advancement of technology in all areas of humankind. Human beings seem to have reached heights in all areas like audio - visual means of communication, messaging, catering, and living. With the help of technology, human beings have acquired the orbit of modernity and innovation all over the world in this century. The world seemed to be a city in this century. Humans from all over the world began to study each other's languages and cultures. Political, social, religious, cultural, economic, and administrative concepts all began to emerge anew. Technology has brought new prosperity to human life everywhere in terms of education and technology. Home - Electrical appliances and new appliances in the house gave a pleasant dimension to human life. The massive use of television, airlines, high speed trains, automobiles, printing presses and

consumer goods made human life more prosperous and dynamic. So the twentieth century can be said to be the greatest power of man and technology.

The Beginning of the Computer Age - Human and Technology: Computers emerged in the twentieth century, but literally began in the late twentieth and early twenty-first centuries. With the advent of computer systems and mobile phones, the test of technology has become wider. The computer age has created a huge dimension of information and technology. The research and discovery tests of human life became very extensive. In countries like Japan, USA, England, France, robots started to be used in manufacturing and administration. From developed countries to developing and underdeveloped nations, technology began to be exchanged on a large scale. The concept of "digital" was introduced in many countries due to computer technology. The scope of the Internet is growing. Humans began to enjoy all the comforts at home. There was a kind of revolution in the mobile sector, with computers and similar technologies reaching from cities to villages around the world. The idea of digital governance, digital finance, and digital comfort is everywhere. From the Stone Age onwards, technology seems to have evolved into the perfect computer age.

Human and Technology: Awareness towards Environmental Duties

Today, in the 21st century, humans seem to have reached the pinnacle of technology. Along with the human needs for food, clothing, shelter, technology is the fourth human need. Nothing seems to be aware of human beings without technology. Technology seems to be an integral part of human life today. Due to the electric revolution, human beings have come to dominate in all fields with the help of technology. But if this empire exceeds the limits of both the environment and nature, human existence could be threatened in the future. With the help of technology, human beings seem to have interfered a great deal in nature and the environment. It is a matter of concern that the basic technology of global warming or pollution, water pollution, air pollution due to the increasing number of plants cutting technology in one hour, and increasing industrial technology. Therefore, the technology created by human beings to meet their needs can pose a threat to the ecosystem of life and human existence.

Summary / Conclusion: While writing this research paper on "Human and Technology", the paper seeks to broaden the need for the creation of technology from stone tools to computers in order to sustain human existence from the Stone Age to the present computer age. Man, who behaved like any other animal in the Stone Age, gradually became stable in the Neolithic Age and society was formed from human groups. But while he was doing all the things that accelerated his life from the discovery of fire and wheels, the technology he evolved changed with human evolution. In ancient times, technology along with political, social, religious, cultural, economic concepts was a great need of human beings. In the Middle Ages, with the help of technology, human beings created their dominions in areas like water and land. In modern times, humans have reached the pinnacle of technology to make their lives happier. The twentieth century emerged as the century of technology. At the end of the twentieth century and the beginning of the 21st century, in the computer age, the world became a village for human beings. Even though human beings are in the age of technology today, they should not interfere too much in the environment and human existence may be endangered. This research paper seeks to provide an accurate overview of "Humans and Technology".

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Variants of Relationships In Modern Life: With Special Refence To Partner, The Translated Novel of V.P. Kale

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Abstract

V. P. Kale very effectively shows the various threads of relationships and the complexities of it caused by the egos, jealousy, innocence, destiny and helpless efforts of man to control it. In past, every relation of human beings has its own purity, simplicity and honesty. There was always a warmth of love, sympathy, empathy and well-wishes in the minds of the family members. In modern era, the situations have been renovated a lot. Love, sympathy etc. have been replaced by jealousy, brutality and absurdity. Relations, instead of bond of affection, has become a burden, compulsion and inevitable part of life. The family members cannot live together with happiness. They feel uncomfortable, jealous and want to get rid of each other. These new variants of relationships may exists because of urbanization, modernization and empowerment of woman but they are dangerous and proceed towards the decentralizations of family at the extreme end. The writer does not show any ray of hope in the modern changing scenario but as a social reformer suggest the readers the importance of relation and how to take care of it in proper time.

Key words: translation, modern novel, urban area, middle class, relations with its variants, changing scenario

As an eminent short story writer and the novelist, V. P. Kale paints a fine picture of Maharashtrian middle class families. He handles the thoughts, cultures, belief as well as disbelief, aspirations and realities of the family members. V. P. Kale very effectively shows the various threads of relationships and the complexities of it caused by the egos, jealousy, innocence, destiny and helpless efforts of man to control it. He as a social reformer suggest the readers the importance of relation and how to take care of it in proper time. For him, more than situations, relations are important. Situation can be handled, modified or altered; but the relation can not be improved once it is disturbed or destroyed. In Partner, the novelist has presented various relation like mother-father, sons, daughters, brothers, in-laws, friends and well-wishers.

The very first relation of an infant begins with mother. It is considered to be the most sacred, loving and altruistic relation. It can be seen in the form of Kiran and her mother as well as Kiran and her son, Amit. Even Mai, the external member in Shri and Kiran's family, who has lost her children becomes the mother of Kiran and Shri. She helped, supported and tolerated most of the things for the betterment of Shri and Kiran. She cares for Amit and doesn't mention her painful memories of the past. She accepts her dependance and also care of Kiran and Shri. She is contented and tries to content other with out any ego. Kiran's mother is also a very gentle and tender hearted lady. She believes that more than money, understanding husband is important to make the life happier. Without any hesitation, she approves of Kiran's marriage to a middle class bureaucrat like Shri. Her sudden death is a shock for Kiran and Shri.

As compared to these motherly images Shri's mother is different. She is always complaining about her dependency and discontented with everything that Shri does. She is always more inclined to Arvind, her elder son. She is very calculating and hypocrite while supporting Arvind. Her concern for Arvind is due to his weakness and sickness but because of this she can not understand or pay attention to the needs of Shri. She always takes Shri granted for everything that comes in her mind. She does not approves of Shri's registered wedding and so does not attend the party in Taj Hotel. She never wants to live forever with Shri. Her ego, does not allow her to adjust with Kiran. She neither helped Kiran in her pregnancy nor after the birth of Amit. She should have understood the dire need of Kiran as her mother is dead. The mother ironically taunts Shri about the well-wishers who help him. The extremity lies in her satanic pleasure in finding Ranjan lucky than Amit for not participating in the competition and getting dead. Her brutal and vicious pleasure is intolerable for Shri and he wants to cut the mandatory but unavoidable bond with her.

The writer has also depicted the acceptable images of Father in the form of Shri's father, Kiran's father, Arvind as a father and even Shri as a father. These four images of father are very different from each other. Shri's father on the deathbed realized his mistake about his continuous injustice to Shri, while taking care of tender Arvind. He requests Shri to enjoy the life and doesn't bother about anyone. His such realization at the end does not affect Shri much as it is of no use. Kiran's father is a spiritual man and does

not indulge in the materialistic life. After the death of his wife, he handover the responsibility of Kiran on the shoulders of Shri and goes out of their materialistic life. As a father, he is neutral to Kiran and Shri. Arvind, being a father of Ranjan is not capable to handle the whole responsibility. He always takes help of Shri or the mother. Due to his irritating nature, he is unable to establish a bond between him and Amit. Ranjan is adjacent to Shri more than Arvind. Whereas there is a nice bond between Shri and his son, Amit. He admires the son, confidently he makes Amit ready to participate in competition and goes through extreme pains after the death of Amit. There is slight refence of the father of the partner whose 'look' made him to runout from the house and live independent person. The 'look' of the father develops a philosophy in Partner, "I could not avoid being someone's son, I will certainly avoid being someone's father." (Partner, 67).

V. P. Kale has very skillfully handled and depicted the relationship between husband and wife in modern context. The picture of the relations between the mother and the father is not revealed much but the ample and artistic narration of the relation of Arvind-Manorama, Shri-Kiran have explained properly. Manorama, is the beloved of Arvind who got married to Arvind without any obstacles from both families. Shetakes an advantage of the illness of the husband and treats the other family member as per her whims. She aways misguides Arvind and spoils the happiness of the home. Still she is very compactable wife who has turned Arvind as henpeck husband. The love story of Kiran and Shri ends with their happy marriage with edge of grief for the lose of their only son. Without a calculating mind, they fall in love, get married and begin their newly married life in their own flat. Shri does not want Kiran to consider her God. He suggests her, "while being my wife, always be my valentine. I want you as my friend as well". (Partner,83). Without welcome and blessings of the other family member, they begin and served the other without complain. Their love, understanding and efforts to make their life happier is appreciable.

The beauty of Kiran and hardworking, honest nature of Shri is just an asset of their happy lives. Their belief for each other is enough to be happy with each other. The estrangement occurs in their life when Shri accepts and never cross questions his relatives. Kiran explains the hypocrisy of his mother, brother and sister-in-law. It hurts Kiran and makes her angry with Shri. Shri knows his relative, their reluctance. Being helpless, he keeps mum and continues till the pregnancy of Kiran. When the mother denies to stay with Kiran and take care of her, he agrees all the terms of Kiran and follows her ideas. Shri was estranged from Kiran more when she blames him for the death of their only son, Amit by saying "Go away! I don't want to see your face hereafter. After marriage, you killed my mother and now you have.." (Partner,179). It hurts Shri and he feels, "...I am unable to understand anything. Mother, brother, father, sister-in-law, nephew, mother-in-law, father-in-law, wife...are these just relations...or illusions?" (Partner, 179). It shows that though they loved, married each other, they cannot understand each other. There relation remains absurd due to the grief which is actually the same for both. The innocent, tender and happy married life of these two have been disturbed or may be destroyed by the calamity of the death which takes them away from each other.

Arvind is the elder brother of Shri but does not have any concern for Shri. After the marriage, very soon, 'Arvind made it clear that I would have to make some arrangements for my bedding that night onwards' (Partner, 34). It makes Shri to think, 'My convenience would mean inconvenience for someone else.' (Partner, 34). Forcefully Shri has to leave the house every night and to take shelter at the house of Partner. He is jealous of Shri's job, ownership of flat and the overall settlement in life. Even after the death of Amit, Shri feels that his own elder brother, Arvind is laughing at him. Shri compares Arvind with Partner and finds Partner more close to him than anybody in life. Thus the relation between these brothers is also not very happy or healthy.

The members who does not belong to the family of Shri are more caring, helping and supportive for Shri and Kiran for example Damayanti, a close friend of Kiran offers an opportunity to purchase a flat in Chandrakiran Housing Society. She also offers some of the new furniture to Kiran as she is going to settle in Canada with her husband. Partner a friend, philosopher and guide of Shri sold his place to offer money to Shri to pay the down payment of the flat. Partner in many ways helped Shri at various levels. He consoles Shri, calms him down, gives suggestions to save his married life. He has lot of concern for Shri. At the funeral of Amit, Partner is the only person who can understand the grief of Shri, so he supports him and asks him to go and talk to Kiran. Unfortunately life of Shri crowded with his own selfish, brutal and vicious relatives but the only existence of Partner has made Shri to understand, enjoy, express each and every feeling of life. Even Mai can be the outsider in Shri's life but she supports Kiran and Shri at the time of need, perhaps more than his own mother. It shows that more than blood relations, Shri gets comforts, calmness, love, care and solace in the company of the other.

In past, every relation of human beings has its own purity, simplicity and honesty. There was always a warmth of love, sympathy, empathy and well-wishes in the minds of the family members. In modern era, the situations have been renovated a lot. Love, sympathy etc. have been replaced by jealousy, brutality and absurdity. Relations, instead of bond of affection, has become a burden, compulsion and inevitable part of life. The family members cannot live together with happiness. They feel uncomfortable, jealous and want to get rid of each other. These new variants of relationships may exists because of urbanization, modernization and empowerment of woman but they are dangerous and proceed towards the decentralizations of family at the extreme end. The writer does not show any ray of hope in the modern changing scenario but as a social reformer suggest the readers the importance of relation and how to take care of it in proper time.

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A Tehsil Level Study of Agricultural Development in Ahmednagar District

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Abstract: -

Agriculture plays important role in economic development of the country or region. Agricultural development is an essential part of economic development in the country of India. Agricultural modernization and commercialization are essential for agricultural development. Infrastructure is important for good agricultural development. The lack of proper distribution of agricultural infrastructure at local, national and international levels is mainly responsible for creating regional disparities in agricultural development. Ahmednagar district also has a large regional disparity in agricultural development. Therefore it is importance to highlight the less development agricultural region and tray to promote the agricultural development. The present work is a guideline for agricultural development with guidelines in tehsil level. The level of agricultural development in Ahmednagar district is has determined on the basic of ten indicators and the level of agricultural development is measured using the Kendall's method of ranking Co-efficient index.

Key Words: Agricultural development, co-efficient index, Kendall's method, Regional disparities, Ahmednagar District.

Introduction:

Agriculture development is a much more comprehensive concept than generally understood. It is manifestation of the combined effect of many factors viz; environmental, technological and industrial. It also implies a process through which the real income of farmers is increased over a long period of time. Obviously, the term agricultural development refers to the growth and overall changes of agriculture resulting in vertical expansion. The level of agricultural development, therefore, may be considered as the degree to which agrarian structure gets strengthened leading thereby to increased production. Productivity of agricultural is one of the dimensions of agricultural development. In true sense, therefore agricultural development denotes the quality of agricultural system of region in terms of productivity, diversification and commercialization (Gopal Krishnan). This also includes increase in the income level of farmers thereby promoting socio-economic transformation.

The study of agricultural development has received attention in agricultural geography recently. There are regional disparities in the levels of agricultural development. The Geographers role lies in primarily identifying, describing and interpreting the regional variations in the levels and the rate of agricultural development. Balanced regional development has been one of the proclaimed goals of our planning for the long time (S. Shastri, 1988). Besides, the reduction in imbalances between various regions has become the foremost objective of planned development in the country (Singh, 1984). Despite many efforts made in this direction, the district of Ahmednagar is still witnessing regional imbalances in agricultural development. Emphasis was given on development schemes i. e. soil conservation, plantation of fruit crops, animal husbandry, minor irrigation, road construction and pasture development of agricultural plans. The study of agricultural development is of immense importance in agricultural planning as it helps to identify problem areas which might give a clue to the planners to adopt proper remedial measures for correcting imbalances. The present paper therefore, proposes to map and analyze regional disparities in the level of agricultural development during the 2015-16 in the district of Ahmednagar.

Indicators of a Development of Agricultural;

There are different variables which determine the development of agricultural. They can be grouped as environmental, technological and institutional. Among the environmental variables, the amount of rainfall can be regarded as fundamental component effecting spatial dimensions of agriculture. Amount of rainfall refers to the rate at which rainfalls are obviously related to problems of runoff, soil percolation, evaporation, soil erosion, and flood control (Monkhouse and Wilkinson, 1989). The technological variables comprise intensity of irrigation, fertilizer consumption, intensity of farm mechanization etc. Irrigation however remains a basic input which stimulates crop output by extending or intensifying cropping of pattern and enhancing crop productivity (Bawa and Kainth, 1984). The instructional parameters included proportion of literate rural population, diversification of crops and concentration of agricultural markets and societies. Commercialization of agriculture is an important dimension of

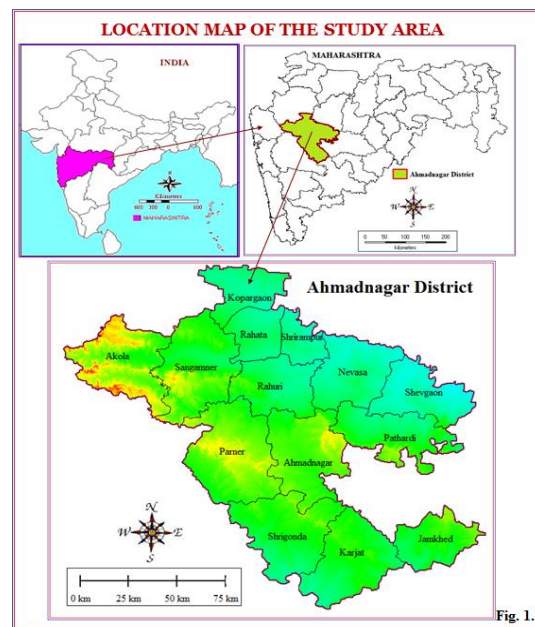
agricultural development. The proportion of area under cash crops may be a useful parameter to measure the rate of commercialization. Moreover, Cash crops, Sugarcane, Onion, & other Vegetables contribute a major share in the process of commercialization in the district. In the present study, the following parameters have been selected. They are- X1- Average Rainfall, X2=Percentage of Gross cropped area; X3=Percentage Irrigated area; X4 =Percentage of Number of Tractors; X5=Percentage of Iron Plough; X6= Use of Electricity for agricultural in Percentage; X7= Number of agricultural credit society in Percentage; X8= Use of fertilizers for agriculture in Percentage; X9 = Number of Electrical Pump used for irrigation in Percentage; X10= Percentage of Major cash crops.

Objectives: The main objectives of the present paper are as fallows.

1. To analyzethe tehsil level of agricultural development in Ahmednagar district.
2. To examine the interrelationships of those variables which influence the level of agricultural development?
3. To analyze the problems of agricultural development in Ahmednagar District.

Study Area:

Ahmednagar district has been selected for the present study.The district comprises of fourteen-tehsil spread over a total geographical area of 17048 sq. km. It extends between 18° 20' and 19° 59' north latitudes and 73° 40' to 75° 43' east longitudes. The district is very dense in shape and length of 200 km. a width of 210 km. This study region is divided into three physical divisions namely, Sahyadri moutons ranges, Plateau and plains area. The Godavari, Bhima River is the main rivers in this district with the major tributaries are Paravara,Mula, Sina, Dhora, Kukdiect. The average annual rainfalls is 578.8 mm. and mean daily maximum temperatures is 39°C and mean daily minimum temperature is 11.7° C. In study region 71.10 percent area under cultivation area out of them 32.40 percent is irrigated and 67.60 percent rain fed or rain shadow area. The population of the Ahmadnagar district according to the 2011cesus is 4543159 with about 51.57% as male and 48.43 % as female population. The density of population was 266 persons per square kilometers. The economy of the district is mostly depends on agriculture activities. The variations in climate, soil, drainage, irrigation facility have a predominant influence on agricultural in study area. The cropping pattern is different each irrigated and rain fed areas. Ahmadnagar district lies in rain shadow zone of the Maharashtra; About12.00 percentage of the net shown area is under irrigation, which provides the base for major source of income.



Data & Methodology:

The data have been obtained mainly from published records district Socio-economic abstract 2015-16. In order to get accurate and average results of the levels of agricultural development, the statistics of five year, i.e. 2013-18, have been considered. The present tehsil level study pertains to 14 tehsils. For computation of composite index rank value of each variable for each tehsil were added. Then they were divided by the number of variables. Thus, tehsil's have been ranked in terms of each variable and father these ranks have been added and averaged to produce composite index. The index values were computed

for each of the ten parameters selected for analysis. Further composite index values were calculated to develop integrated picture, for each tehsils, by employing following formula. The empirical expression of measurement is –
 $X1+X2+X3+X4+.....X10$

 10

The composite index values of the tehsil (Table1) were classed and arranged in descending order to delineate the zones indicating the levels of agricultural development viz. High, Medium and Low (Table-2). Further, correlation matrix is attempted to highlight interrelationship of selected variables by employing Kendall's method of ranking Co-efficient index. Despite the spatial variations within the limits of each tehsil the study proposes to present aggregate picture of each tehsil as an aerial unit.

Table – 1 Tehsil wise Ranking Co-efficient Index of Agricultural development.

Sr. No	Tehsil	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	Total of Rank	Co-efficient Index
1	Akola	7	7	13	9	10	3	12	10	14	10	1	96	9.6
2	Sangamner	13	4	9	2	5	5	1	2	4	2	4	51	5.1
3	Kopargaon	12	11	10	1	4	1	4	5	12	4	2	66	6.6
4	Rahata	12	12	3	5	2	10	9	8	9	5	3	77	7.7
5	Shrirampur	10	13	4	11	3	8	11	7	7	8	5	87	8.7
6	Nevasa	4	1	6	4	7	7	2	1	1	1	8	42	4.2
7	Shevgaon	2	8	2	3	13	4	10	4	11	13	12	82	8.2
8	Pathardi	3	6	11	10	11	14	8	13	8	9	11	104	10.4
9	Nagar	5	2	1	12	1	2	5	9	2	14	7	60	6.0
10	Rahuri	8	10	5	8	6	11	6	3	3	3	9	72	7.2
11	Parner	9	14	7	6	9	6	7	11	10	6	10	95	9.5
12	Shrigonda	11	3	8	14	8	13	3	6	6	7	6	86	8.6
13	Karjat	5	5	14	7	12	9	14	12	5	12	13	108	10.8
14	Jamkhed	1	9	12	13	14	12	13	14	13	11	14	126	12.6

Source: completed by Researcher

Agricultural Development Region:

Three distinctive region have emerged which indicate the differences in the level of agricultural development in the study area. They are-

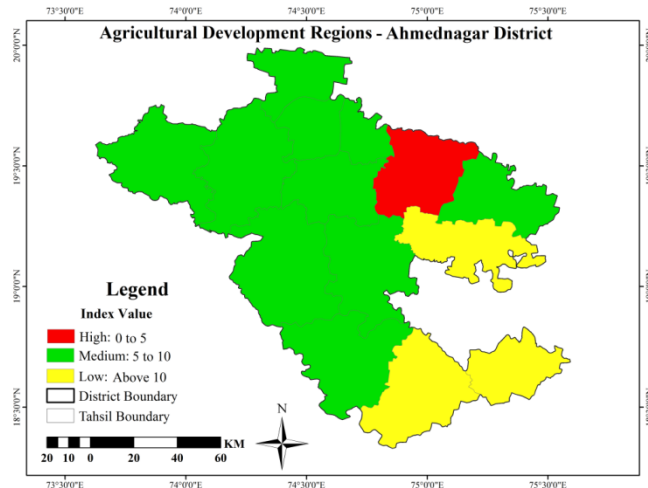
1. High Level Development:

Nevasa is only one tehsil under in this category. The tehsil is dominated by a number of parameters. These tehsil achieved high agricultural development due to well development agricultural infrastructure. It includes gross cropped area (X2), Use of fertilizers for agriculture in Percentage (X8), number of electrical pump used for irrigation (X9), major cash crops (Grapes, Sugarcane, Onion ,& other Vegetables (X10), these facilities are first position on available in Nevasa tehsil. And second position number of agricultural credit society(X7). Agricultural infrastructure well development in this tehsil because share five parameters out of ten parameters, due to high level development of agricultural. This cash crop gives good income back to farmers.

Table – 2 Region showing the level of agricultural development in Ahmednagar district.

Sr. No.	Index Value	Level of Agricultural Development	Name of Tehsils	Number of Tehsils
1	0-5	High	Nevasa	01
2	5-10	Medium	Nagar, Rahata, Rahuri, Shirampur, Akole, Sangamner, Kopargaon, Shevgaon, Shrigonda, Parner.	10
3	Above 10	Low	Karjat, Jamkhed, Pathardi,	03

Source: completed by Researcher



Medium Level Development:

The moderate level of agricultural development is observed ten tehsils Akola, Sangamner, Kopargaon, Rahata, Rahuri, Nagar, Shrirampur Shevgaon, Shrigonda, and Parner. Due to three to five parameters, agricultural development in this tehsil has become moderate. Main parameters for moderate agricultural development in these areas are increasing the area under cash crops and developing agricultural infrastructure. Shrirampur tehsil irrigated area X2 second position but other variables not good positional developed. Because of pravara lift canal effects on agricultural irrigation but other agricultural elements are not good development.

Low Level Development:

In this category consists of five three tehsil i.e Pathardi, Karjat, and Jamkhed tehsil. Each tehsil is different parameters situation. In the Pathardi, Karjat and Jamkhed tehsil all agricultural parameters are not a good situation because of these all area located in drought prone area on Ahmednagar district. This whole area has been characterized by adverse conditions like hilly, poor soils, less accessibility and low income of farmers with very less development of irrigation facilities. This all conduction effects on agricultural development.

Conclusion:

The development any region depends on the five basic elements of the development of Physical resources, degree of technology advancement, social structure, economic setups and lastly Policy. The present study has shown that the regional agricultural development in Ahmednagar district is not well developed. The majority of the tehsils come under medium agricultural development. It is laying in the central, eastern and south part of the study area. Where physical elements and environmental elements are unfavorable and agricultural infrastructure is less development. The Nevasa tehsil is highly developed due to enjoying the many agricultural infrastructural facilities. Low development agricultural area where making situation on agricultural e.g. irrigation, agro-based industries, agro- tourism etc. The situation is good in terms of tourism development in Akola tehsil; therefore, basic facilities are available for large scale tourism development. This is beneficial in terms of increasing the crop intensity of the region. Adequate attention must be paid to market promotion in the attribute medium development region. There are some occupations related to agricultural in the less development region, for example, animal husbandry and developed irrigation facilities. Post-harvest management and marketing linkages are also important for the overall development of the agricultural region. Therefore, crating awareness among the farmers is very important role in terms of agricultural development. In a region with low developed, the government has a very important role to play. To ensure balanced agricultural development in the region, the government should promote an irrigation facilities and other agricultural infrastructure.

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Design Pedal operated Groundnut (*Arachis hypogea*) Decorticator

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Abstract

Groundnut shelling is done by either by hand shelling, peddle and power operated decorticator. Hand or pedal operated decorticator has low capacity (below 80 kg per hr) and have no facility to separate kernel or husk. Whereas power operated decorticator has these facilities but they are costlier. The pedal operated groundnut decorticator cum cleaner was developed to bridge these two extremities. The machine consists of main shaft which is driven by chain and sprocket through pedaling which rotates its rotary unit in decorticating cylinder where decortications take. A blower driven by pulley blows husk and separates kernels. Tests indicate that weight of machine was 85.5 kg. Its average decorticating capacity was 120 kg pods/h, average output capacity was 58 kg kernels/h, average decorticating efficiency was 82.77%, average cleaning efficiency was 87.37%, breakage was 5.22% and its cost of operation was found to be Rs. 34.60/100 kg kernels.

Keywords: Decorticating, efficiency, damage, cylinder, cleaning.

Introduction

Groundnut (*Arachis hypogea*) is cultivated in many tropical and temperate countries from its seeds, which contain 50 per cent non drying oil and about 35 per cent protein (Singh *et.al.*1978). Indian ranks first in both area and production of groundnut in the world and contributes about 16.43 per cent of the world groundnut production (FAO 2006). Traditionally, groundnut is shelled after drying either manually by hand or by bearing or rubbing with wooden plank which consumes considerable human energy and time. Agricultural operations have to be mechanized not only to increase the productivity but also to cope with non-availability of Agricultural Labour.

Review of Literature

Singh (1976) studied the groundnut decortications and concluded that for seed purpose damage may be reduced by operating with moisture content of 15 to 18 per cent and clearance of 15 mm giving an efficiency of 91.5 per cent. **Gore *et al.* (1990)** classified the groundnut sellers as manually operated and power operated depending on their power source. Based on shelling action, the spellers would be classified into reciprocating type and continuous or rotary type. **Nikam and sonawane (1994)** developed pedal operated, two persons driven groundnut decorticator. It consisted of four major components, *viz.*, and decorticator box, oscillating unit, transmission unit and main frame. The decorticating efficiency was 84.26% and breakage percentage was 12.66. However, fluctuations in the machine were a major problem.

Materials And Methods

The machine was developed for medium, small or marginal Farmer and small industries by keeping the following points in view.

1. The initial cost of Decorticator cum cleaner should be well within the reach of the user for whom it is being developed
2. Its capacity should be higher than manually operated decorticators presently available.
3. It should be easy to operate and to move from one place to another.
4. It should let to sense minimum vibrations to the operator
5. It should reduce the labors requirement
6. It should separated husk from kernels.

Development consideration

1. Seed losses should be minimum
2. Micro and macro breakages of kernels should be minimum
3. Decorticator should required minimum labour
4. The machine should be safe to operate

Operational Principles of the decorticator

The machine decorticated the pods by impact action. The pods are fed by gravity into the decorticating cylinder. The cylinder rotates clockwise, impacts the pod until it is decorticate. The pods got crushed in between the shoes of the rotary unit and fixed concave sieve in the decorticating cylinder. After crushing the pods cover, as size of kernel were smaller than slot of sieve, fell through the sieve in to the decorticating material receiving hopper

Crushed pods fell due to gravity, was passed through the blast air. Blower fan of high speed threw air axially which was used to separate kernels and husk as was lighter than kernels, it was blown and kernel were separated. Finally fan was also rotated with higher speed generating blast of air having velocity of about 6 m/sec. The decorticating and cleaning operation could be stopped by stopping the pedaling whenever desired.

Table 1 Observation of short duration test of developed groundnut decorticator

Sr.No	Particulars	Test		
		1	2	3
1.	Place of test	Jalgaon	Jalgaon	Jalgaon
2.	Variety	SB-11	SB-11	SB-11
3.	Moisture content %	6	6.38	6
4.	Weight of pods, kg	30	30	30
5.	Weight of kernels at outlet, kg	58	56	58
6.	Weight of unshelled pods at kernel outlet, kg	5	4.5	5
7.	Weight of unshelled pods at blower outlet, kg	0.17	0.16	0.17
8.	Weight of husk kernel outlet, kg	8.4	7.5	8.4
9.	Weight of broken kernel at outlet, kg	3.2	3	3.2
10.	Labour	2	2	2

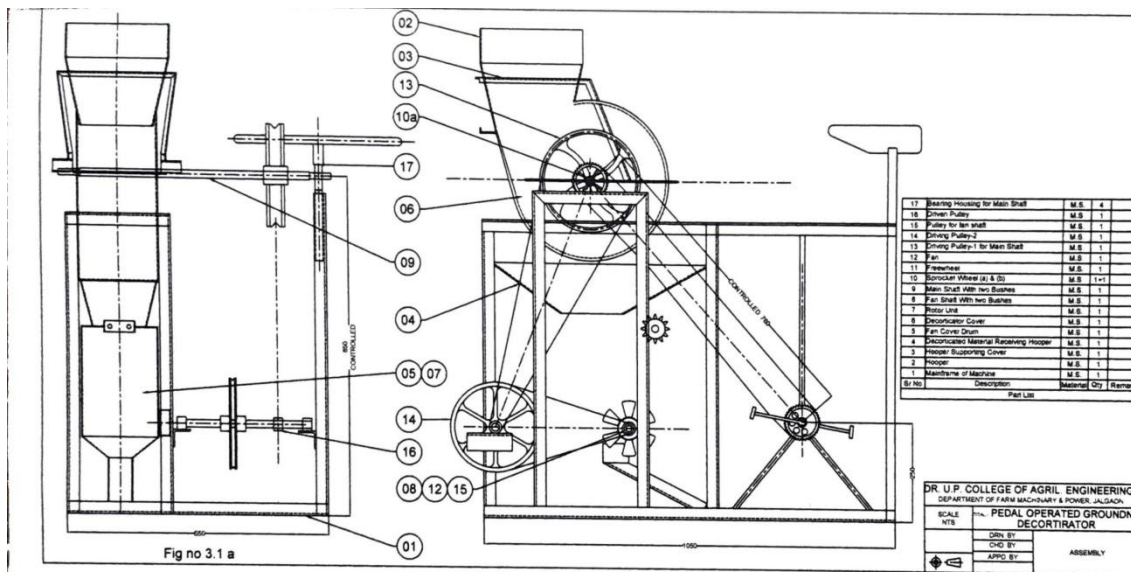


Fig.1. Auto cad fig. Pedal operated groundnut decorticator

Result and Discussion

The newly developed pedal operated groundnut decorticator was evaluated in the laboratory with different parameter. The analysis and interpretation of the data obtained during the laboratory tests conducted.

Table 2. Comparative performance of hand & pedal operated groundnut decorticator

Sr. No.	Particulars	Hand operated	Pedal operated
1	Decorticating capacity kg/hr	53.22	117.3
2	Output capacity kg/hr	25.26	56.79
3	Decorticating efficiency %	83.47	82.39
4	Cleaning efficiency %	-	87.09
5	Unshelled pods %	16.52	17.24
6	Broken kernels %	13.80	5.14
7	Labour requirement (man/hr/100kg kernels)	7.9	1.75
8	Cost operation (Rs/quintal kernels)	63.33	34.62

Summery and conclusion

1. The groundnut decorticator was operated at a constant speed of 35rpm of pedaling with a shelling decorticating capacity of 120 kg of groundnut of SB-11 variety per hr.
2. The decorticating efficiency of the developed decorticator 82.76% was considered as more satisfactory as it was greater than decorticating efficiency of hand operated 80.47%
3. The cleaning efficiency 87.34% of the decorticator was much satisfactory as hand operated decorticator.
4. The average % broken kernels in respect to developed decorticator was 5.22%. Whereas it was 13.80% for hand operated decorticator.
5. The man hour requirement of the developed groundnut decorticator was 1.72/kg kernels. Thus the use of the developed machine reduced the man hour's requirement per quintal kernel output by 76.82% as compared to man hours required for hand operated decorticator.
6. The cost of operation of the developed machine was found to be Rs. 34.62 per quintal kernels.

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The Role of Youth towards National Integration in Indian Democracy

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Abstract

Democracy is a form of government that is cherished by many countries around the world due to the dividends that accompanied its practice. Though National Integration is regarded as an indelible mark of unity, India's democracy has the greatest problem of disharmony among the different cultures that make up its population, which has harmed the process of National Integration. This article aims to initiate a discussion about India's democracy and the role of youth in National Integration, with an emphasis on the challenges. The study included qualitative data collection methods such as journal articles, internet resources, books, newspapers, magazines, and podcast and television documentaries as part of its methodology.

Keywords: Youth, Democracy, National Integration, Communalism, Regionalism.

Introduction

First Prime Minister, Shri Jawaharlal Nehru, convened National Integration Conference in September-October, 1961 to find ways and means to combat the evils of communalism, casteism, regionalism, linguism and narrow-mindedness, and to formulate definite conclusions in order to give a lead to the country. This Conference decided to set up a National Integration Council (NIC) to review all matters pertaining to national integration and to make recommendations thereon. (MHA, 2013). National integration assumes significant importance in society like ours, where people have widely disparate cultural, social, regional, linguistic, values, and economic standing (Minocha, 1985). Democracy is a form of government that is cherished by many countries around the world due to the dividends that accompanied its practice. Though National Integration is regarded as an indelible mark of unity, India's democracy has the greatest problem of disharmony among the different cultures that make up its population, which has harmed the process of National Integration (Mailumo, 2019). In light of recent events in many sections of the country that are jeopardizing national unity and harming the very fabric of our society, National Integration has taken on increasing importance. Although 'unity in diversity' has been a long-sought element of Indian society, religious, linguistic, cultural, and caste diversity, as well as a large population and enormous distances, have sometimes proved obstacles to political unity and national concord. (Ahmed, 1996). As a result, it is critical that we investigate the causes and elements that present themselves in the form of communal disruptions on a regular basis. The youth are the nation's strength, In fact, the youth abundant strength, stamina, Energy, enthusiasm and adequate time to work for the welfare of the society (Mohanty, 2014). Recognizing the potential of youth, Mahatma Gandhi gave the idea of youth social service to incorporate them in the nation's reconstruction for national progress the existence of a relationship between youth and National Integration is self-evident to Indian Democracy. As a result, the importance of youth in national development cannot be overstated. The wheel of development of any country lies on the shoulder of how productive and creative the youthful populations are (Idike, 2015). Youth remains the engine for national development and their ability to use own potentials, skills and values depend largely on healthy mental state, ability to make right decision and healthy behavior.

Methodology

This research uses a secondary method of data collecting in the form of content analysis of papers, records, reports, and periodical articles to achieve its objectives. Several literatures on the topic of national integration and democratic consolidation have been consulted for this purpose.

Youth concepts & Definition- India and the World

Age Constitute the determining characteristics in the definition of youth by various agencies. United Nations adopted the age group 15-24 for defining youth. National Youth Policy (2014) defined youth as person in the age group of 15-29 years (Ministry of Statistics, 2017).

Understanding National integration

Before discussing on role of youth in National Integration, it will be better to understand the meaning of National Integration. This term has two words: Nation and Integration. What do we mean by the term nation? A country having a cohesive socioeconomic and political framework is referred to as a nation. It refers to a group of individuals who share a sense of belonging, based on shared history, society, culture, and values. This sense of belonging brings people together to form a nation (NIOS, 2021). In general, this sentiment is referred to as National Integration. The knowledge of a common identity among a

country's population is known as National Integration. It indicates that although though people come from many communities, castes, faiths, cultures, and places, and speak various languages, they all understand that they are one (NIOS, 2021).

Challenges to National Integration in Indian Democracy

Communalism has been one of the most complex problems that India has been facing. This occurs when people of a certain religion acquire a strong attachment to it and a strong dislike for other religions. This kind of sentiment encourages religious fundamentalism and fanaticism, which is harmful to the country's unity and integrity. Another roadblock to national unification is regionalism. It frequently encourages people to advance regional interests at the expense of national concerns. It becomes problematic when regionalism disregards national interests. India is a multilingual country, as we all know India's population speaks about 2000 different languages and dialects. Every country needs a single official language, but India has found this to be a difficult challenge. Despite the fact that the desire for language-based states was met comprehensively when the states were rebuilt on linguistic grounds in 1956, new movements are taking place in some sections of the country. Such movements pose numerous obstacles to National Integration. Extremist movements in various sections of the country are posing a new threat to the country's integration.

Analysis of Youth-led National Integration

In India, the youth are a group that is rapidly growing. This group has a more contemporary approach. It is more tech-savvy, rebellious, broad-minded, open to ideas and cultures other than its own, more knowledgeable of world affairs, and more vocal about the socio-economic concerns that are currently affecting India (Sharma 2021). The youth of today are the leaders of tomorrow, and any change fostered in the large-scale psyche of a nation is largely led by its youth. Our country has advanced in many ways, but our youths must understand that the spirit of unity must sometimes confront tremendous obstacles. Extremism and fanaticism have the potential to undermine a country's and a person's cherished beliefs. Today, the spirit of separation is prevailing in many places like Kashmir and the North-East (Sharma 2021). There have been frequent riots among various communities, posing a threat to the country's unity and integrity. National conservatism, regionalism, ethnicity, casteism, and communalism are all impediments to national integrity that must be overcome. India is a big country separated into various castes and sub-castes based on distinct languages (Singh, 2017). Youth can play an important role in encouraging national integration. Young people make up over 66 percent of India's population; therefore their contribution to national unity is critical. Young people's contributions to the independence struggle have a long and rich history. Although corruption is rampant in today's political circles, most political parties seek to expand their influence by dividing the country along caste, creed, and religious lines (Sharma 2021). This implies that the youth should form a big number of social and political parties in order to guide the country in the proper direction. The new generation of young men and women has the potential to make a significant contribution to society's socio-economic advancement. If young people's ideas, ideologies, and ideals are put to good use, national unity will be a breeze, and the country's future will be bright. Education is one of the most powerful mobilizing elements. The medical and technical professions are no longer the only options for today's youths. Other fascinating areas such as pharmacy, journalism, research, biotechnology, bioinformatics, event management, media, and mass communication are now seeing an influx of youths (Singh, 2017). This foray into various fields is ensuring a mind and mentality widening like never before. If the youth are given a liberal attitude, they may be the catalyst for change, encouraging people to put aside their differences and live as one society, regardless of caste, creed, religion, or race. Another significant mobilizing factor that can bring communities together is social media. The ability of social media to disseminate change is vastly undervalued. A new generation of tech-savvy young people is learning how to use social media to preach the message of peace and love. Following the December 2012 Delhi rape case, social media platforms such as Facebook, Twitter, WhatsApp, and blogs played a significant role in bringing about change (Sharma 2021). People pay more attention than we may imagine to what they see and read on social media. This is a crucial instrument for achieving societal harmony. The importance of urbanization cannot be overstated. If we look at the youth culture in a major city like Mumbai or Delhi, we will see that these educated, open-minded, and intelligent young people are more concerned with talent, financial security, job paths, and the newest fashion trends than caste or religion. These self-sufficient and upwardly mobile minds have the ability to teach others how to think like them. The importance of art in promoting a message of peace and fraternity cannot be overstated. Books, movies, plays, street plays, dance, and other fine arts are more than enough to make Indian residents aware of the country's complex polity. Young authors, artists, playwrights, poets, and others must band together to instill a sense of "unity in diversity". India's youth can create a new society by eliminating the evils,

rectifying the deficiencies and facilitating the rein-statement of the highly cherished moral values, for which this country has stood through the centuries. High moral values, however, cannot by themselves ensure the requisite resurgence. They can lay the basis of development which would have to be in social, economic and political arenas also (R.P, 2009).

Conclusion

Because India is a federal-democratic country, all aspects of its Integration should be done democratically. Every ethnic, caste, tribal, religious, and linguistic group should be able to safeguard and promote their own culture and traditions. Prof. Rasheeduddin Khan has observed that National Integration in India entails cohesion rather than fusion, unity rather than uniformity, reconciliation rather than merger, agglomeration rather than assimilation, and solidarity rather than regimentation of the people who make up our political community. Separatism, regionalism, and secessionism are discouraged by emotional integration and the formation of a great brotherhood among the people. Any country's cohesiveness is dependent on the youth of that country. After all, they are entrusted with the critical task of resolving national security issues. In terms of national unity, they must seek to treat all diseases in order to maintain a sense of oneness among the country's population.

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A Study on Recruitment And Selection Process of Atma Malik Hospital and Sai Baba Medical Hub

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Abstract

To put a light on the recruitment and selection process, this paper was investigated to provide a deeper insight into recruitment and selection strategies. This research paper tries to find out general practices that organizations use to recruit and select employees, and to find out how these practices affect organizational outcomes at Atma Malik Hospital and Sai Baba Medical Hub, Kokamthan. Human resources entry point is recruitment and selection, the most important factors to success. Identify general hiring practices used by Atma Malik Hospital and Sai Baba Medical Hub, Kokamthan, in order to recruit and select employees is the main objective of this paper. In addition to examining how organizational outcomes are affected by recruitment and selection practices, the study offers some suggestions that may help. Data analysis tools such as tables, graphs, and pie charts are used for analysis. Both primary and secondary data is used for this research paper. Primary data was collected from 35 employees using questionnaire method. The results were obtained from percentage method. The data analysis shows that Atma Mailik Hospital, Kokamthan follows best recruitment and selection process and employees are satisfied with the organizational climate

Keywords: Recruitment, Selection, satisfaction, reference recruitment policy

Introduction

A key function of organizations is human resources management. People are integral part of any organization today. No organization can run without its human resources. Recruitment sources are closely linked to the organizational activities as performance of employees, employee turnover, employee satisfaction, employee wishes and the commitment of the organization (Burack 1980). Recruitment is the first step then after selection and placement comes in the employment process (Rao, 2010). The recruitment process consists of searching for prospective employees who are qualified to apply for job openings in the Atma Malik Hospital and Sai Baba Medical Hub. The selection process involves selecting a suitable candidate from the applicant pool. According to the Burack recruitment sources are closely linked to the organizational activities as performance of employees, employee turnover, employee satisfaction, employee wishes and the commitment of the organization (Burack, 1980). The research professionals and scholars say that there is a close linkage between the recruitment selection employee satisfaction organization performance and HR practises (Gorter, 1996). As a professional organization, recruitment and selection policies needs to adhere to ethical standards if it is to compete in a competitive environment. According to Yoder "Recruitment is a process to discover the sources of manpower to meet the requirements of the staffing schedule and to employ effective measures for attracting that manpower in adequate numbers to facilitate effective selection of an efficient working force." According to Edwin B. Flippo recruitment is the process of attracting the candidates and making them to apply for the job. In the recruitment process, [job analysis](#) is the first stage within the organizations. The literature says that employers are doing the traditional method of recruiting rather than the modern technologies (Schmidt, 1998). Chris Piotrowski and Terry Armstrong say that in their article that around all the organizations are using traditional recruitment sources and 30% of organizations are screening candidates honestly (Armstrong, 2006). It is very important to gather data about the whole situation of organization positions' nature and structure. There are two sources of recruitment, internal source and External source. Few factors affect the recruitment process like management decisions, organization culture, working hours, facilities, salary, welfare, brand image, goodwill, location and etc. Now a day's recruitment process is change with change in technology. Now many organizations are using modern methods like social media or electronic media for recruitment of the vacant seats. Atma Malik Hospital and Sai Baba Medical Hubs maximum recruitment are depends on traditional methods. After recruitment next step is selection of employee. Selection is the process of choosing the appropriate candidate which matches the candidate skills and the job requirements (Bhattacharyya, 2010) Selection process varies according to type of organization. **Dale Yoder has defined**, "Selection is the process by which candidates for employment are divided into two classes those who will be offered employment and those who will not" various things are consider for selection process. Atma Malik Hospital and Sai Baba Medical Hub follows the scientific method of selection.

Objectives Of The Study

1. To study and analyses the Recruitment and Selection process followed at Atma Malik Hospital and Sai Baba Medical Hub.
2. To study recruitment and selection methods at Atma Malik Hospital and Sai Baba Medical Hub
3. To observe the procedure to select the candidates from internal as well as from external sources in the industries
4. To study the employee satisfactory level with the existing recruitment policy in the industry

Scope Of The Study

1. This research paper study the recruitment and selection process followed by Atma Malik Hospital and Sai Baba Medical Hub.
2. This study analyses the satisfactory level of employees regarding recruitment and selection process, welfare schemes provided by organization, organization culture and working condition, etc.

Research Design

Data collection, statistical methods, and interpretation and conclusion drawing are all part of the research methodology. As per the study objectives, data is collected from different sources. There are two types of data sources available to the research processes. The primary data is collected by using primary methods such questionnaires, observations etc. Secondary data is collected from various Journals, books, websites and other research reports.

Limitations of the Study:

1. Because of the time constraints, it has become difficult to collect data properly from employees.
2. Busy schedule of the employees due to covid 19 pandemic also effected to some extent.
3. A possibility of bias exists in the information provided by respondents
4. The study was based on sample hence results were not fully absolute

Result and Discussion

According to Figure A, 65.71 percent of respondents were recruited from an external source, whereas 34.29 percent of applicants were recruited from within the company. Thus according fig. B, 85.7 percent of respondents have worked at the same hospital for less than 5 years, 14.2 percent have worked here for more than 5 years, and no one has worked here for more than 10 years. According to fig. C, 82.85 percent of respondents believe management's approach to recruitment is serious and positive, implying that they take due care during recruiting, whereas 14.28 percent believe the approach is casual, and just 2.85 percent believe management's approach is bad. According to fig. D, 76.95 percent of respondents think HR is efficient in terms of selection policy, whereas 17.1 percent think HR is inefficient in terms of selection policy. According to fig. E, 14.28 percent of respondents are content with their wage, while 51.3 percent have an average attitude. However, 34.2 percent of respondents are dissatisfied with their present salary package. As shown in fig. F, 79.8% of respondents are content with their present recruiting policy and do not wish to alter it. Only 11.4 percent of respondents want to modify their recruitment strategy, and the remaining 8.55 percent are neutral. As shown in fig. G, according to 82.65% of respondents, the hospital uses a regular way of selection, so personal biographies and partiality are not used in the selection process, and only 17.15 percent of respondents claimed that selection is based on prejudice. According to Figure H, 8.57 percent of respondents indicated that working conditions in their company are exceptional, 28.57 percent said that working conditions are good, and 45.71 percent and 17.14 percent respondents claimed that working conditions are ordinary and poor, respectively..

Fig A: Analysis of source from which employees come to know about the job

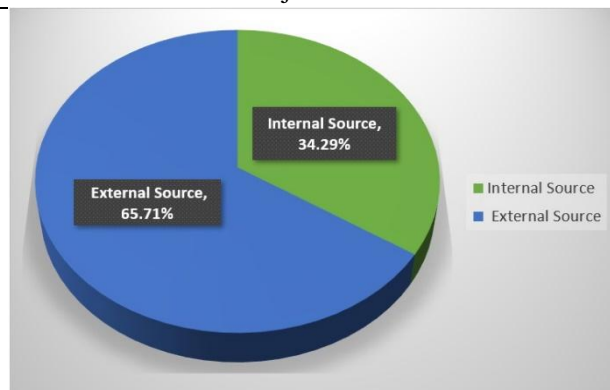


Fig B: Analysis of working tenure with this organization

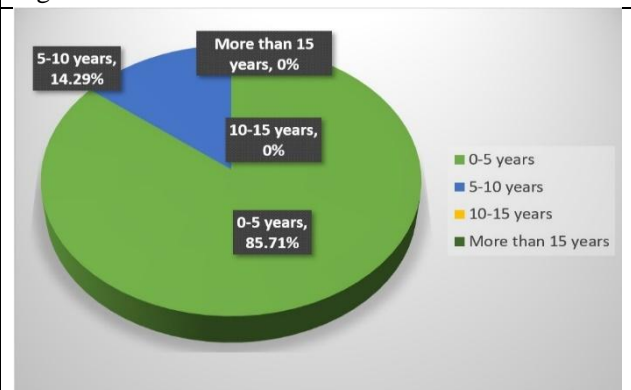


Fig C: Analysis of opinion about the approach of

Fig D: Analysis of opinion about the efficiency of

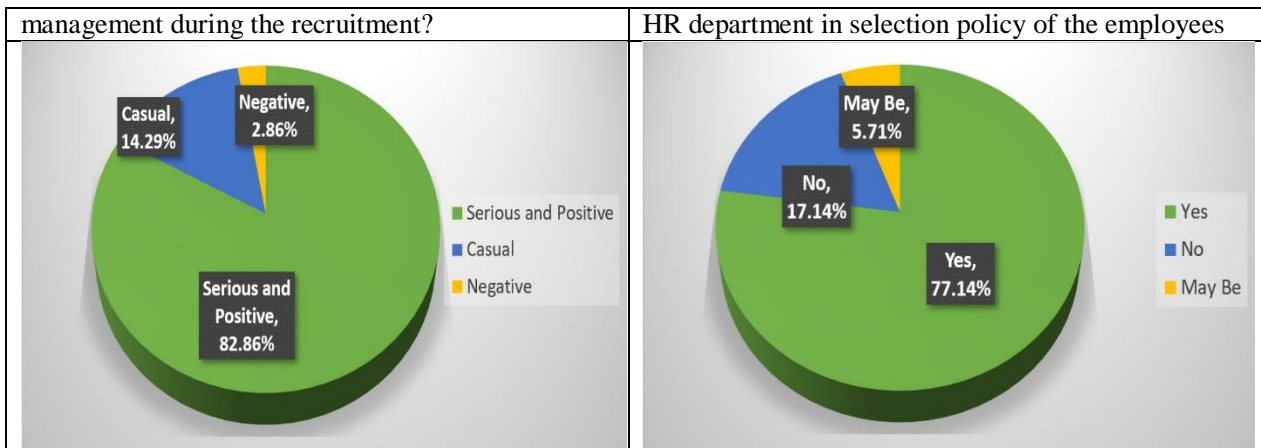


Fig E: Analysis of opinion about the satisfaction with salary package

Fig F: Analysis of opinion about the need to change selection policy of the organization

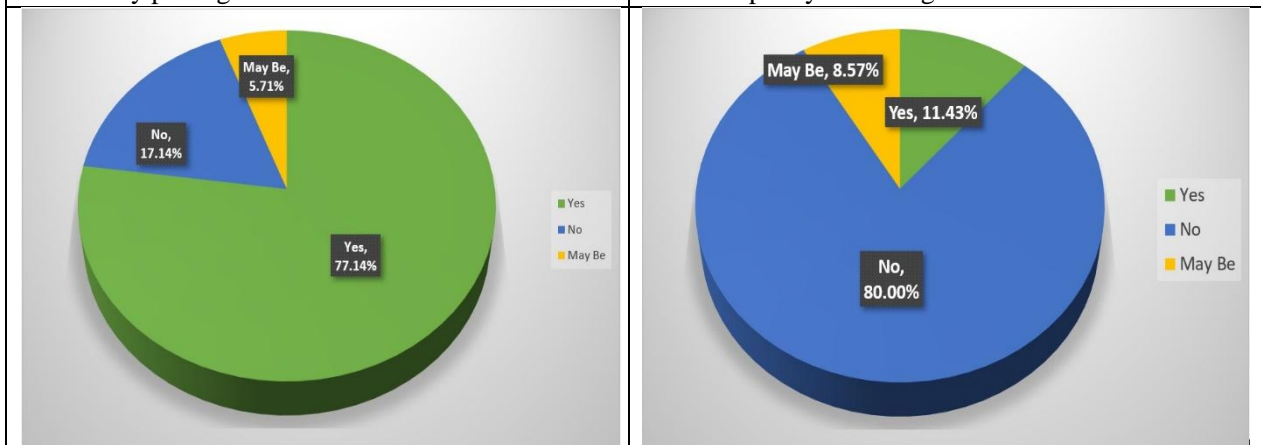
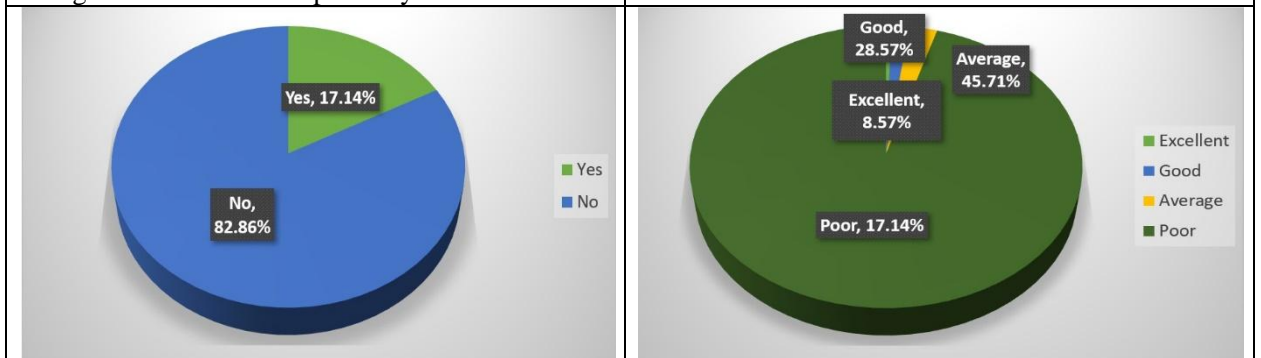


Fig G: A comparative analysis of opinions about selection in organizations based on partiality

Fig H: Analysis of opinion about working condition in organization



Future Scope Of Research

The current study focuses on recruitment and selection practices, but there is scope to study HR practices and organizational work not only at the Atma Malik Hospital and Sai Baba Medical Hub, but also considering other sectors. The different HR practices might also be linked to aspects of recruitment and selection like organization performance, employee satisfaction, and so on.

Conclusion

The study was conducted among the workers of The Atma Malik Hospital and Sai Baba Medical Hub, Kokamthan, covering 35 respondents. The data was collected by means of questionnaire and the data was classified and analyzed carefully by all means. From the analysis, it has been found that the most of the employees in the hospital were satisfied with recruitment and selection process, working condition but they are not satisfy with salary package. According to the changing scenario of recruitment, changes must be made to the recruitment process, which will impact on company operations as the new talent will give the company a fresh perspective. Selection process is also good and the company's recruitment

department is doing well in placing the candidates and filling the job vacancies for all levels of positions. Some of the suggestions were mentioned to enhance the organizational policies, strategies, procedures and process

Furthermore, the company's recruitment department is doing a good job placing candidates and filling job vacancies for all levels. A number of suggestions were made to enhance the organization's policies, strategies, procedures, and processes

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A Study of Deborah Ellis's Novel Parvana's Journey As A Political Thriller

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Abstract

This research paper focuses to analyse and explore features of a political thriller reflected in Deborah Ellis's novel, Parvana's Journey, a sequel to the award won novel of Deborah Ellis, The Breadwinner. The novel pictures various aspects of political thriller. A political thriller is a shocking and terrific story which pictures political power fight, uncompromising and suspense situation resulted by the political reasons. Common issues in such stories are insurgency, warfare, corruption in politics and crime. All the above aspects of political thriller have been reflected in the novel, Parvana's Journey. The researcher attempts to explore various aspects of political thriller in Deborah Ellis's novel, Parvana's Journey.

Key Terms: political thriller, warfare, suspense, crime, uncompromising, insurgency

Research Methodology: Analytical, Interpretative and Evaluative

Introduction

A Canadian novelist of international fame, Deborah Ellis revived and continued the traditional postmodern trend by writing her political thriller *Parvana's Journey*. It reflects all the features of political thriller such as power fight, uncompromising and suspense situation, insurgency, warfare, corruption in politics.

Features of Political Thrillers reflected in the novel *Parvana's Journey*

Political Power Fight

Political power fight is one of the aspects of a political thriller that is reflected throughout the novel. This aspect causes much to become any story a political thriller. It affects adversely on nation, state, society and even an individual living in such situation. Parvana, a 13-year old young girl living in Afghanistan, under the regime of the Taliban, went for the search for her mother and her other members of family. In the book review about the novel, Ballaston Spa writes "Throughout the story, bombs from Americans begin to drop all around them. Parvana continues on through many challenges with her two friends in hope to find her missing mother".

Uncompromising

It is a policy to refuse to discuss or change any decision. The insurgent groups in the novel are always uncompromising over their so-called rights. They don't adjust and understand others' views or opinions even though those opinions are right. The insurgents are terrorists who believe that whatever they say is right. And others have no right to say that they are wrong. If one says they are wrong, he will be killed. This is the principle followed by the insurgents. Deborah Ellis has shown this very fact in the novel, *Parvana's Journey*. One of the terrorists warns as: "Rise yourself up now, boy", one of the men said to her. Parvana's hair was clipped short, and she wore the plain blanket shawl and shalwar kameez of a boy. "There is no point staying in the dirt." "Leave him alone," another man said. He is mourning for his father "We all have dead to mourn, but we do not have to do it in the dirt. Come on, boy, get to your feet. Be the strong son of your father would be proud of you". (152) These are the warnings of the insurgent groups and others have to follow those warnings, otherwise the disobedient is killed. Kenneth Opiel puts it as: "Parvana's adversity is the landscape, both political and physical: the fearful reign of the Taliban still looms, bombs fall from the sky, minefields block her path; food, water, and shelter are always scarce".

Suspense Situation

The novel *Parvana's Journey* is full of suspense. The simple characters like Parvana, Hassan, Asif and Leila are unaware of the political plots of the terrorists' organisations and others. They have no guarantee of their lives. They are living with the shadows of death from the very beginning to the end of the novel. It is suspense that from where the terrorists and insurgents appear with deadly weapons in their hands. No one knows about international politics, conflict between the Christians and the Muslims that lie behind the simple story of Parvana. The novelist, Deborah Ellis has resolved this suspenseful situation at the end of the novel. Ellis describes the ruined city of Kabul as: A small group of mud huts—a tiny village—was in ruins. Parvana recognised the sort of damage that came from bombs. There had been a war going on in Afghanistan for more than twenty years. Someone was always bombing someone else. Lots of bombs had fallen on Kabul. Bombs had fallen everywhere. (166). In her article, entitled 'Moral Issues, Suspense,

Surprise Make Book a Must Read', Helen Norrie writes: "This is an action-packed contemporary novel for 12 to 16-year-olds that has real nail-biting suspense".

Insurgency

The present novel, *Parvana's Journey* represents insurgency and insurgents' groups. Those insurgents are performing insurgent activities against the Afghan Government to achieve political power. These groups have been born out of the refugee camps which are on the Afghanistan and Pakistan borders. The insurgents are connected to national and international terrorists. The novel has many instances of such insurgent activities. Ellis represents such insurgency through the following dialogue.

"Parvana, who's under the bombs? Leila asked again.

"I don't know," Parvana whispered back.

"People like us, I guess."

"Why do the bombs want to kill them?"

"Bombs are just machines, Parvana said. "They don't know who they kill"

Anita Cutic (from University of Alberta) comments about the novel, *Parvana's Journey* as, "Parvana's father dies during a voyage across the country in the attempt to reunite with the rest of her family, her mother, two sisters and a younger brother". This is the result of insurgent activities present in Afghanistan.

Warfare

Warfare or warlike situations and hostilities are common in Deborah Ellis's novels. The war between Afghan Government and the terrorists group like the Taliban has destroyed Afghanistan as a whole. The local terrorists groups are supported by international terrorists' organization and superpowers in the world. The Russian Government supported the democratic president of Afghanistan and the American Government supported the group of rebels i.e. the Taliban. The novel is full of warfare situations which was fought to get political control of Afghanistan. The purpose of the Afghan War to drive the Russian forces out of the country. After ten years war the Russian Forces left Afghanistan and the Talibani groups took control of Afghanistan. The common people living in Afghanistan lost their family members, houses and experienced wretched life in the Refugee camps. The present novel, *Parvana's Journey* represents the plight of Afghan refugees through Parvana and Hasaan. Ellis writes:

"I think people get to do what they want after they die," Parvana said. "Your grandmother wanted to read, so she's probably sitting in the warm sun surrounded by books, reading and smiling." (275). The Literary Omnivore writes in the article entitled Review: *Parvana's Journey* :

"Separated from the rest of her family and masquerading as a boy, Parvana has little choice but to carry on in their original mission-finding her mother, currently located in one of the many refugee camps in Afghanistan. Along the way, Parvana finds other children scarred by war. They make their own family for a while, but few things are stable in a country torn apart by war".

Corruption in Politics

The present novel represents corruption in politics in large scale. When all the resources of livelihood were destroyed in Afghanistan, people started criminal enterprises like drug trafficking. The Talibani Government misuses its power to repress political opponents, to destroy monuments, schools and temples and it recruits young boys as terrorists. Lakhs of terrorists come from the land from where the second Gandhi came Abdul Ghaffar Khan as a freedom fighter. Ellis's novel represents such type of political corruption. Parvana dreams:

Two days ago there was a rumor that someone was in the camp to choose people to go to Canada. I stood in that line all day, but nothing happened. The line fell apart, and I never found out if the Canada people were really here or not. Either way, I missed lining up for bread that day. (290)

Crime

Crime is an unlawful activity which is punishable by law. The Talibani rulers implement Sharia law strictly. The present novel represents many crimes such as bombing the schools, preventing women to appear in public schools colleges and places of employment. Breaking of statues, images of Gods and monuments is common in the present novel, Parvana writes: We hear a lot rumours. Some people say the Americans are doing the bombing. Some people say the Taliban have left Kabul. People say a lot of things. They even say that someone sitting comfortably in one city can press a button and destroy another city, but I know that can't be true. (301) Paulo Jessop highlights the criminal activities present in the novel, *Parvana's Journey* by saying as: "Parvana's Journey follows her search for her mother and siblings after her father's death. Like her identity, she recognizes truth must be hidden too. "the truth could get her arrested or killed".

Conclusion

The novel, *Parvana's Journey* depicts the essential features of a political thriller. The trend of political thriller i. e. being continued from the 18 th century from the beginning of history of British, American and Canadian novel. What Deborah Ellis has done is the research on the international politics, geopolitics, international terrorism, especially in the Afghanistan. Deborah Ellis has visited Afghanistan many times and interviewed the common people living in the refugee camps. She has witnessed the effects of the civil war and completion to get political over Afghanistan among the super powers in the world i. e. America and Russia. The rivalry between these two superpowers resulted in the emergence of the terrorist organizations like Al Qaida and the Taliban. After that when Taliban became the rulers of Afghanistan, they began to ask recognition to their government in the UNO. America opposed that demand and it resulted in the terrorist attack on the World Trade Centre of America. The novel, *Parvana's Journey* though it is simple story of the poor girl Parvana, on the deep level it exposes the world politics which is done for political and economic control over the countries like Afghanistan.

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The Revival of Cliffhanger Technique In Peter Robinson's Novel A Dedicated Man: An Exploration

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Abstract

This paper intends to analyze the Cliffhanger technique reflected in Peter Robinson's novel 'A Dedicated Man'. The term 'cliffhanger' was first used in 1937. It is plot device which shows the main character i.e. the protagonist (hero) of a novel in dilemma which is solved at the end of the novel. The audience witness how the dilemma is resolved by the prominent character at the end of the novel. Cliffhanger technique was used in medieval works and in Victorian serial novels. It is revived by the late 20th century Canadian novelist Peter Robinson. So, the present researcher honestly explores the reawakening of this cliffhanger technique by analyzing the end of Peter Robinson's novel 'The Dedicated Man'

Key Terms: Revival, Cliffhanger Technique,

Research Methodology: Interpretative, Analytical, and Evaluative

Introduction - Cliffhanger is a plot device that was first introduced in 1937. But its etymological history shows that it was first used in the medieval literature and in the Victorian serial fiction. Simply, Cliffhanger is a plot device in which the protagonist of a novel faces a dilemma from the beginning of the novel till its end. At the end the hero or the protagonist, resolves the dilemma to the satisfaction of the audience or the readers. The readers or the audience witness that resolution of the crime or intrigue at the end of the novel. Peter Robinson's novel '*The Dedicated Man*' is no exception for it. This Paper analyses how a dedicated man, Harry Steadman is murdered at the beginning of the novel and how it remained a mystery till the end of the novel. The protagonist of the novel Chief Inspector Alan Banks resolves the mystery of the murder of the Professor, Harry Steadman at the end of the novel. The novel reflects the Cliffhanger technique which the present researcher intends to explore as the revival of the traditional plot device used by Peter Robinson in the 20th century.

Cliffhanger Technique Used by Peter Robinson at the End of the Novel *The Dedicated Man*

Peter Robinson's second novel *The Dedicated Man* is published in 1988. *A Dedicated Man* is simply a story of the mysterious murder of a local archeologist named Harry Steadman. His dead body is found half buried under a dry stone wall near the village of Helmthorp, Swainsdale. The suspects are Penny Cartwright, a beautiful folksinger with mysterious past, Harry's editor and local thriller writer Michael Ramsden and his drinking mate Jack Parker. All these figures were in contact with Harry Steadman in a summer in the past. A young girl Sally Lumb knows more than she lets know and is murdered mysteriously. Chief Inspector Alan Bank is called from London to investigate this case of mysterious murder.

Peter Robinson has written this crime thriller like the traditional crime writers and detective novels of Edgar Allan Poe, Agatha Christie, P.D. James, Reginald Hill and Ruth Rendell. But Robinson has added the countryside and village setting to his crime themes. He has one more important thing which Peter Robinson does through the investigation of case of murder is the character analysis of different characters. According to Dennis Lehane "the novels of Peter Robinson are chilling, evocative, deeply nuanced works of art." The resolution to all the mysterious is given by Alan Banks as Michael Connelly puts it as "Inspector Banks is a man for all seasons, he knows that often the answers to the clues are hidden in his own heart." Peter Robinson has achieved it by making Alan Banks to use the technique of cliffhanger at end of the novel in the following ways. Peter Robinson has skillfully used the Cliffhanger technique to resolve the mystery of the murder of Harry Steadman in the end of the novel through Alan Bank's investigation. Krishnan Das and Deepchand Patra put it "Postmodernist writers often point to early novels and story collections as inspirations for their experiments with narrative and structure." (Das and Patra, 22). Peter Robinson has revived the Cliffhanger technique used by previous writers very powerfully in the present novel. Stuart Miller reviews this novel as "This story makes you understand why readers get addicted to genre Mysteries – when they are good, they are very, very good." (Booklist 1988) Alan Banks arrests Emma Steadman and Michael Ramsden at the end of the novel in (ch 12). Ramsden talked as willingly as a sinner in the confessional. Bicky writes "In fact this is a perfect police procedural as you are completely along with banks as he follows one lead and theory after another by questioning the available

suspects again and again not only as to alibis but to the perplexing questions about motive and you right there when gets crucial insights.” Michael Ramsden is ambitious but he is weak. He is not good with people. He shared Steadman’s interests. Ramsden resented Harold Steadman, and Penny resented Steadman in the way many of us come to detest people. He hated always playing second fiddle. Ramsden recognized Steadman’s meanness and his lack of consideration for anybody with interest other than his own. He was always, deep down, irritated at the way Harold could communicate so easily with Penny, how fond they were of one another. So Jeffrey Keeten aptly comments “As Banks begins to investigate the man more than the murder itself, he starts to realize the key to this crime must exist around something from Steadman’s past.” Emma Steadman used Ramsden, manipulated him without doubt. But that doesn’t absolve him from blame. She introduced the idea of murder to him and helped him over his initial resistance and nervousness. She did thus partly by playing on his existing feelings about her husband and partly through sex (279). Emma is the first suspect so she had to be sure of an airtight alibi, which she had. Ramsden seemed to have neither motive nor opportunity, no matter how I went at him, until the connection with Emma who finally came into focus. Ivonne Rovira calls Emma Steadman as “frumpy wife” who is relentlessly questioned by Inspector Allan Banks. These are the clues as Jonetta puts it “This was an interesting case as it was first digged police work , assembling lots of clues and combinations...the narrator effectively distinguishes the characters in a way that seems consistent with their personalities” This is the distinguishing quality of Peter Robinson. This novel expresses as *New York Times* writes “Robinson’s profound sense of place and reflective study of human nature give fine depth to his mystery.”

Peter Robinson has used the cliffhanger technique which features Allan Banks the mystery of the murder of Harry Steadman. The readers witness how Alan Banks discovers that on the Saturday that Steadman was killed. Ramsden drove close to Gratly. He parked his car in those old barns on the minor road just east of the Steadman house, the one Emma always used to get to York. Ramsden had been brought up in Gratly, he knew every twist and dip in the dale. Harry Steadman always loved village life. Marcel Burlin writes about the suitability of the setting as “The atmosphere of the drowsy and slow moving countryside disturbed by alien violence is splendidly evoked.” (The Times London 1988).

Peter Robinson’s cliffhanger technique further reveals how Ramsden wouldn’t have taken the bus; anyway too many people might have noticed him. Emma Steadman drove him back she picked him up on the road at a prearranged time -fairly isolated spot so there’d be no chance of their being seen. Then she dropped him off at the end of his lane and went shopping in York. Emma Steadman often spent afternoons shopping in York. After all, she was a lady of leisure. They just had to be careful not be seen. Even If they had been, Ramsden looked enough like Steadman from a distance through a car windows, so nobody would have thought twice about them’ (280). Alan reveals actual murder of Harry Steadman that is done by Ramsden. Allan says, “Remember he (Steadman) was a dedicated man, and Penny was the only person he allowed to make emotional inroads into his valuable time. So he did exactly what he intended , he drove to York . Ramsden Killed him. He hit Steadman from behind with a hammar , wrapped his body in the sheet, bundled it in the boot of Steadman’s own car, drove it up near crow Scar and buried it. He couldn’t burry him in the plastic because that might have given too much away, but he told us where he buried it and we have dug it up’. (281) Ramsden parked his Steadman’s car back in the car park when it was midnight and the village was deserted. Then the car drove to his own car home to York. The whole thing was carefully planned to throw all suspicion away from Ramsden and Emma Steadman, who had the best motive. Ramsden tries his best to hide the evidence of the crime committed by him. Alan Banks makes it clear through the cliffhanger technique that Sally was not the part of the plan at all. She was just one of the innocent bystanders whose memory got jogged too much for her own good. Ramsden said that Sally said she saw him and Emma together in Leeds. They were very careful they had never think of going out in York or Eastvale, but Leeds seemed safe enough. None of Steadman’s old colleagues would have recognized Emma and they knew the kind of places they went to, the places to avoid Sally was there with her boyfriend. I’ve talked to him again and he said they did go to Leeds, once when he borrowed a friend’s car. Sally pulled him out of a pub, Whitelocks , pretty sharpest when she spotted someone she knew. But she didn’t realize who it was at the time she was more concerned with Ramsden not seeing her than about who he was with. According to Alan, Sally was perspective and imaginative. Jeffrey Keeten comments on Sally as “Banks has a second problem in the person of Sally Lumb, who is an aspiring actress and amateur detective who is being moved by her reading of *Wuthering Heights* to ascribe motives to the crime. “She was reading the wrong book book” as Parker said; “and misreading it, at that, she would have been reading *Madam Bovary*.” Alan exposes Sally by using the cliffhanger technique as follows:

But it wasn’t until I’d managed to link Emma and Ramsden that I knew how Sally fitted in at all. One thing I noticed when I saw her was that she seemed very skilled with make-up for a girl of her age,

and she was interested in the acting. Sally became that convinced it was Emma, carefully made up, she had seen with Ramsden. So Sally phoned her. That was where she went wrong. Emma Steadman told Ramsden later that Sally had gone on about Wuthering Heights on the phone, and about how she thought Ramsden had killed Harold Steadman. So he could marry Emma just to get his hands on the huge and marry Emma just to get his hands on the house and money. Sally was convinced that Ramsden would murder Emma too, after he had married her. She seemed to think the Ramsden had gone down in the world and that Michael must resent Steadman tremendously for buying a house for his family and taking over. (283) She suggested a secret meeting to discuss things and see if they could find a way to deal with the situation. She thought that they could solve the case and make the police silly. Emma was terrified of anything that could link her with Ramsden. She killed the girl, Sally Lump. Said Penny and hid her body under the bridge- the water was low then- and piled stones on it. (284) Alan says "Murder is the one crime that can't be put right. It upsets the balance. The dead can't be restored like stolen property. Death doesn't heal like physical or emotional scars left by assault or rape. It's final. The end Sally made a mistake and she died for it." (284). Emma Steadman was far more powerful than any of us had imagine. She also had a solid alibi for her the most dangerous combination of all, a passionate and calculating nature. Thus this is the realistic novel as M. H. Abrams puts it "... the fictional attempt to give the effect of realism, by representing complex characters with mixed motives who rooted in social class..." (Abrams 254)

Conclusion –

Crime fiction is the product of postmodern age and Cliffhanger technique is one aspect of crime novel. It is most perfectly used by Peter Robinson. Alan Banks concludes his investigation of murder of Harry Steadman by saying "All traces of the sun disappeared, crow scar began to gleam like bone in the light of the rising moon". The Publishers Weekly writes as "Robinson evokes the English village life and passions animating both its residents and the police who protect them. The plot contains all the ingredients of the first class mystery- desire, greed, deception and adultery." All those crimes have been investigated and the criminals have been exposed and caught by Inspector Banks by applying the cliffhanger technique systematically.

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Dr. Ambedkars Role In Indian Independence Movement

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Introduction:

Dr Ambedkar's role in Indian independence struggle is of immense importance. As per the moderates philosophy in modern India, social liberation, reformation was very much important before India gets the freedom. Dr Ambedkar was greatly influenced by Booker T Washington Social Reformation. He was a staunch follower of Democratic principles in India. In the political war of independence, he was closely associated with the war of political independence of suppressed and depressed classes as follows:

1. The act of 1919.
2. Simon Commission 1928:
3. Round Table Conference 1930, 1931, 1932
4. Poona Pact, 1932
5. Announcement of August 8, 1940.
6. Proposals for Sir Stafford Cripps
7. Cabinet Mission Plan 1946
8. Constituent Assembly, 1946-50
9. Indian Constitution of 1950

Dr Ambedkar, while giving his evidence before the Southborough Franchise Committee fearlessly pointed out that even in the British rule there was no change in the inferior status of the downtrodden. He pleaded for right to citizenship before the committee. Dr Ambedkar was one, who strongly emphasized for the political rights of downtrodden during the independence struggle of India. He tried to mobilize the Indian society towards socialization. Dr Ambedkar submitted a memorandum to the Simon Commission demanding joint electorates with reservation of seats for the depressed classes. Before the Simon Commission Dr. Ambedkar explained the grievances of the depressed classes and suggest ways of improving their position by having a cabinet post and seats in legislature reserved for them In spite of his strong plea the Simon Report rejected this in 1930.

Dr. Babasaheb Ambedkar had a fearless and firm mind. At the Round Table conferences in the year 1930, 1931, and 1932 in London, he angrily charged the British government that the backward and the weaker section were deprived of the equal rights and there is no change in the life - style of downtrodden. He had always thought of well being of his nation. He pointed out the shortcomings of the administrators in free India. Dr Babasaheb Ambedkar declared in the Round Table Conference that he represented the view points of one - fifth of the total population of the British India, which was reduced to a position worse than that of a serf or slave. He also declared that the untouchables in India were also for replacing the existing Government by a Government of the people, for the people, and by the people. He ridiculed the British Government for having remained silent and helpless in regard to ameliorating the innumerable problems of the depressed classes. He also prepared the Declaration of Fundamental Rights safeguarding the cultural, religious and economic rights of the depressed classes and submitted it to the minorities sub-committee for being included in the future constitution of India. At the early stage the British were highly influenced by Dr Babasaheb Ambedkar's patriotism and they thought that he was the Mahatma Gandhi of India. Dr. Babasaheb Ambedkar, while signing the Poona Pact showed his love for the nation's unity. In spite of pressure imposed upon him by his caste leaders, he not only signed the pact but also saved the life of Mahatma Gandhi, who was on fast unto death on the issue of separate electorates.

Dr Babasaheb Ambedkar in the national turmoil of politics played a very important role. His evidence before Cripps Commission and Cabinet Mission is of prime importance. Dr Ambedkar through his political parties viz. Independent Labour Party, the All India Scheduled Caste Federation gave a new dimension to the Indian politics and represented the grievances of depressed and suppressed classes in India.

The British parliament passes the Act of Indian Independence on July 15, 1947. The constituent Assembly became a sovereign body. Ambedkar was first elected to Constituent Assembly from Bengal, which was partitioned and so many of its Members lost their seats in the Constituent Assembly. Later on Ambedkar was chosen by the Bombay Legislative Congress Party. India became a free nation on August 15, 1947. Ambedkar became the first Law Minister in the Government of India headed by Pandit Jawaharlal Nehru. Ambedkar became the Chairman of the Drafting Committee of the Constitution. He

put forth his efforts and prepared the Constitution . He introduced the Draft Constitution on November 4 , 1948 , Speaker after Speaker paid glowing tributes to Dr. Ambedkar in Constituent Assembly chaired by Babu Rajendra Prasad . The Indian Constitution is an embodiment of knowledge . excellence , humanism , socialism , secularism and democratic values .

Dr. Ambedkar is head as the chief architect of the Constitution of free India . He was a legal luminary . His concern was not just to draft a formal and legal document for the Governor of the country but to make it a fundamental instrument for social transformation . In fact the explicit purpose for which he entered Constituent Assembly was to protect the interest of the downtrodden . In conformation to this objective he incorporated in the list of fundamental rights the abolition of untouchability . Affirmative action for the schedule Caste and Tribes was also provided to better their existing socio - economic conditions . The extension of this provision to the neo - Buddhists was also a step in the direction of fulfilling the dream of Dr. Ambedkar .

The successful adoption of the Constitution and more so its spectacular functioning during last four decades owe a lot to the vision and foresight of Dr. Ambedkar . The fact that the constitutional mechanism all over the developing world has not registered success to the extent India has achieves proves beyond doubt the sagacity of the architect of the Constitution . Indian independence Movement was influenced by many ideologies of them two important ideologies are extremists ideology and another is Moderates ideology . India was under the clutches of British since 16th Century and was never a free country . In order to liberate India from the slavery of British rule , moderates and extremists posed different views . Extremists were of the view that India should be liberated from the British rule at first and gain the political freedom while Moderates were of the view that social reformation was essential before gaining the political freedom . The extremists were mainly influenced by the views of " Lal . Bal , Pal " . Gopalkrishna Gokhle . Gopal Ganesh Agarkar and many others are studied in moderate's History , but Dr Ambedkar has deliberately been not considered as one of the important moderates in the history of Indian independence movement .

Dr Ambedkar played a vital role in the Indian independence Movement . He is one among the very few illustrious figures in the world history , who fought and succeeded in establishing the human rights of depressed suppressed and exploited classes . His love for freedom of India has not been highlighted properly by the various intellects . Before the commencement of the Dr Ambedkar's era of equality , fraternity and liberty , untouchable Hindus in India remained socially isolated , economically impoverished , politically depressed and religiously ostracized . They were condemned to the lot of serfs and were deprived of all human rights . It was Dr Ambedkar who took up their cause in the Indian independence Movement .

Right from 1885 , since the formation of the Indian National Congress , there was no one to look after the political interest of millions of untouchables . The Congress . The Muslim League , The Hindu Mahasabha linked their political aspirations with their culture and religion . Tilak wanted that the various sections of the Hindus should untie into a mighty ' Hindu Nation ' . He declared that " Indian nationalism could not be purely secular it must be based on Hindu orthodoxy " Aurbindo Ghose went a step ahead and declared : " Independence is a goal of life and Hinduism will alone fulfill this aspirations of ours . " 2

The emergence of the communalism might be attributed to the role of Hindu revivalists the patriotic and nationalists fervour of Tilak , Pal , Lajpat Rai and the Ghose brothers , was based on Hindu ideology . It was this religious approach to the nationalists movement was danger for the emancipation of depressed classes .

Dr Ambedkar had different views about the Indian independence . He wanted political representation and social freedom of the untouchables . He linked nationalism with the social and political aspirations of the untouchables . Hence Dr. Ambedkar's approach represented a dynamic fusion of two powerful trends , the revolt advocating the untouchables , political claims and the efforts preserving the unity with the national mainstream during the freedom struggle . His role in the national movement was that of a messiah for the suppressed and depressed classes . He loved India from the core of his heart and dedicated his life to securing for her political freedom from British Domination . At the same time he loved the most degraded people and his fight for India's independence was a fight on their behalf . It was a struggle against oppression and exploitation of one community by another . Dr Ambedkar like a lightning wave , petrified the British rulers by accusing them of betrayal of the cause of the downtrodden classes in particular and the country as a whole . He warned the Britishers on the soil of their own country that " the time when you were to choose and India was to accept is gone , never to return . Thus Dr Ambedkar was true and fearless nationalist from the core of his heart . According to Dr Ambedkar , traditional Hindu books had political tendency . From the point of views of effects of social system on politics , he examined

the nature of Hindu social system and traced the origin of castes , Shudras and of untouchables . he found that the Shudras and untouchables were the outcome of political and social struggles for supremacy between Brahmins and Kshatriyas and Brahmanism and Buddhism respectively . His deep rooted study of Hindu social structure reveals its very nature which has influenced politics as a whole .6

According to Dr Ambedkar , in deed what the British imperialism was to Indian , Hindu Imperialism was to untouchables . His movement was for perpetual war against any injustice and imperialism in any part of human society whether in India or elsewhere . He also said , " that although we are today riven by sets and atomised by castes our ideal is united India . " Dr Ambedkar was a bitter critic of the Hindu social imperialism as well as British political Imperialism .In fact the policy of Gandhi and Congress leaders was aimed at making Dr Ambedkar and the depressed classes to be subservient to them so they could be used to the advantage of the Congress interests in the fight against British government . For Dr Ambedkar , the Congress's declaration of fight for freedom or QUIT INIDA was really a desire for political power to be grabbed as soon as possible by the upper castes . About this decisive role of the congress leaders , he said , " whatever may be its title it is beyond question that the congress is a body of middle class Hindus supported by the Hindu capitalists whose object is not to make Indians free but to be independent of British control and to occupy places of power now occupied by the British" 8

However , the Gandhian offensive against Dr Ambedkar and his movement did not succeeded in extinguishing the independent spirit and approach of the entire depressed classes . But Gandhi found a new technique of playing untouchables against untouchables . He and other congress stalwarts brought Jagjivan Ram at the congress platform as the Congress answer to Dr Ambedkar , Jagjivan Ram put his fate in the hands of Gandhi , Patel , Rajendra Prasad and Nehru . He started opposing Dr Ambedkar during the national movement . The Congress Harijans were called nationalists while Dr Ambedkar and his followers were called anti - national . " 9

Gandhi and the Congress leaders did every thing to defeat Ambedkar in the elections to the constituent Assembly . Patel claimed that he had locked every door of the Constituent assembly so that Dr Ambedkar could not enter it . On the question of the inclusion of certain provisions relating to reservation for SC and ST in the Constitution of free India . Dr.Ambedkar was strongly opposed by Nehru . Patel , S.P. Mukharjee etc .. Only when Dr Ambedkar decided to walk out from the C.A. Then did they agree to accept these provisions to a certain extent . 10

While building an independent political struggle under the leadership of Ambedkar the Depressed Classes developed a sense of self - help and self - reliance . At the same time they also developed a spirit of mutual accommodation and co - operation with other communities on the principle of equality and liberty for mutual benefit Dr Ambedkar's struggle had borne good fruits and as a result , the Depressed Classes now have an independent place and prestige in the mainstream of national life . He enthusiastically enabled the people to extricate themselves from all sorts of subjugation and lead independent and creative lives in the common stream of the country .The commitment of Dr Ambedkar , the founding father of the Indian Constitution to social revolution through Constitutional devices eloquently finds place in preamble to the Constitution . The Constituent Assembly , recalling the injustice social economic and political leading to almost denial of basic human values and amenities to lowest stratum of the Indian society and inhuman treatment met by the under - privileged and have nots segments of the society and realizing immediate redressal thereof , in preamble to the Constitution contemplates a new society with the cherished goals of justice social . economic and political , liberty of thought expression , belief , faith and worship . equality of status and of opportunity and fraternity assuring the dignity of the individual and the unity of the nation . 11

The values of justice , liberty , equality befitting the human dignity and individual outlined in the Preamble are made more elaborate and substantive in parts III and IV of the Constitution Part III deals with fundamental Rights while part IV deals with Directive Principles of state policy . A fleeting glance at part III and part IV eloquently reveals the quest of the founding fathers for social revolution solemnly resolved in Preamble . " Ambedkar played a vital role in shaping the constitution of India . It is also one the greatest contribution to the nation . Dr According to Dr. Ambedkar , " Democracy is a mode of associated living . The roots of Democracy are to be searched in social relationship , in terms of the associated life between the people who form the society . 1 faith in democratic machinery as necessary for the management of social relations . Due to Dr. Ambedkar is a practical democrat with an ardent Chaturvarnya system in India there was no mode of associated living in Indian society , as the society was itself divided into various castes . There was no possibility of any social relationship amongst these castes since there were various restrictions were imposed on Untouchables . In India , Dr. Ambedkar founds caste system , Chaturvarnya system and untouchability as danger for the democratic society in India .

Dr. Ambedkar's concept of ideal society is casteless and classless society . He said very categorically that political Democracy can not be successful unless there lies at the base of it social Democracy . Further , he gave a warning that , " On the 26th January 1950 , we are going to enter into a life of contradictions . In politics we will have equality and in social economic life we will have inequality . In politics we will be recognizing the principle of one man one vote and one vote one value . In our social and economic life , we shall , by reason of our social and economic structure , continue to deny the principle of one man one value . How long shall we continue to live this of contradictions ? How long shall we continue to deny equality in our social and economic life ? If we continue to deny it for long , we will do so only by putting our political Democracy in peril . We must remove this contradiction at the earliest possible moment or else those who suffer from inequality will blow up the structure of political Democracy which this Assembly has so laboriously build up " .14

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Comparative Toxicity Of The Datura On Fresh Water Fishes Channel Catfish (*Ictalurus punctatus*)

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Abstract: The present study deals with the identification of those plants which are used as natural toxins for capturing fishes. In different districts have their own toxicant plants which can be used for capturing fishes. Fishes are the important source of protein for humans and other animals. During study, toxicant plants are found out with the help of the fisherman. These plants are identified taxonomically with the help of a botanist. Comparatively the Datura root extract is highly toxic (LC₅₀ 50.09 ppm) than seed extract (LC₅₀ 12.5 ppm), leaves extract (LC₅₀ 16.5 ppm) and flower extract (LC₅₀ 20 ppm).

Introduction:

The fish is very much preferred for cultivation in ponds because of its excellent growth rate, omnivorous habit, breeding in confined waters, hardy nature and easy adaptability to artificial feeds.

The main principle behind using fishes as bio-indicators is due to its sensitiveness towards water quality and thus is being used extensively to assess the water quality of aquatic ecosystem. The family is also extremely important as a source of drugs in medicine, pharmacology but many are poisonous when used in excess.

Datura stramonium which is commonly called thorn apple, jimson weed, Angel's trumpet is a wild growing plant that is entirely toxic. *Datura stramonium* seeds are flat, disc-shaped and brown in colour and



appear similar to tomato's seeds. All parts of the plant contain a variety of alkaloids including atropine, hyoscyamine and scopolamine having hallucinogenic and anticholinergic effects. In which the anticholinergic effects are dryness of mouth, thirst, slurred speech, dry hot skin with flushing, hyperpyrexia, dysuria, urinary retention, bladder distension, death, coma, respiratory depression. Many people use Datura in herbal medication to manage common illnesses such as asthma, chronic bronchitis, flu symptoms and pain.

The present study evaluated the effect of *Datura stramonium* plants seed, root, flower, leaves extract on fresh water fishes.

Material And Method:

Fish acclimatization: The fishes were fed twice daily with pellets commercially available fish feed throughout the acclimatization period. The water was renewed after 24 hrs daily. The fish were stocked in 500 litres tank containing dechlorinated tap water and were acclimatized for 15 days.

Preparation of aqueous leaf, seed, flower, root extract of *Datura stramonium*:

The *Datura stramonium* plants were collected from our farming area to collect the fresh leaves, root, fruit and flower. The leaves were thoroughly washed and pulverized in an electric blender. Aqueous leaf extract prepared by dissolving 1 gm of leaves in 1000 ml of distilled water, the mixture was filtered and the extract was used immediately in experiment. As like that the other seed, root, and flower extract of datura prepared

Determination of 72 hrs. LC₅₀ and sublethal toxicity testing:

The fish were divided into 5 group each group 10 fish in glass aquaria containing 5 litres of dechlorinated tap water. 24hrs. before the commencement of LC50 testing, we stopped feeding of the fishes. The concentration of *Daturastramonium* leaf extract in the aquaria was 5.00ppm, 10.01ppm, 15.01ppm, 20.02ppm respectively and 5th group served as the control. The aquaria were observed for 24 hrs. 48 hrs. and 72hrs. For clinical sign like skin pigmentation, swimming pattern, response to stimuli and mortality the 72hrs LC50 value have recorded. We are same procedure followed for datura root, seed, flower and above the experiment the 72hrs. LC50 value have recorded.

LC₅₀ the concentration of substance that is the lethal to 50% of the organism expose to it and a toxicity test is a useful tool because it can predict the effect of a potential toxin in aquaculture system. LC₅₀ data can also help define maximum allowed toxicant concentration.



Result And Discussion:

After the experiment we observe the swimming pattern of fishes and their mortality. In the present study, the *Ictalurus punctatus* exposed to aqueous leaf extract, seed extract, flower extract, root extract of *Daturastramonium*.

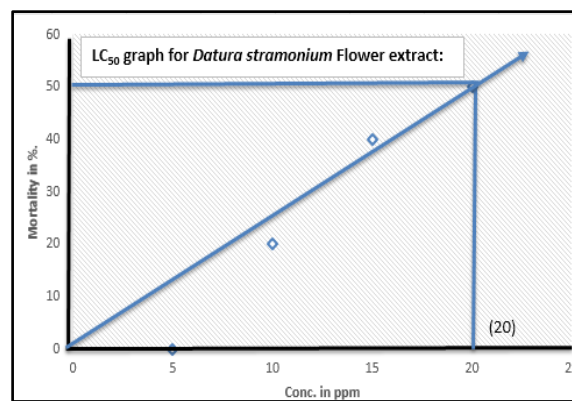
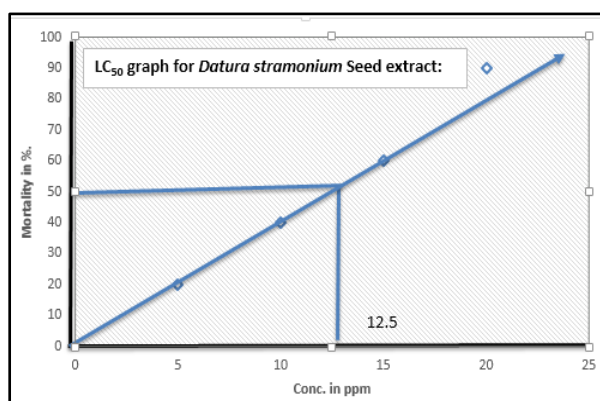
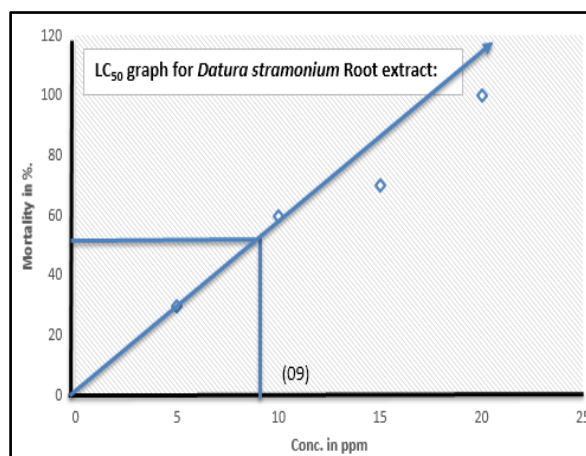
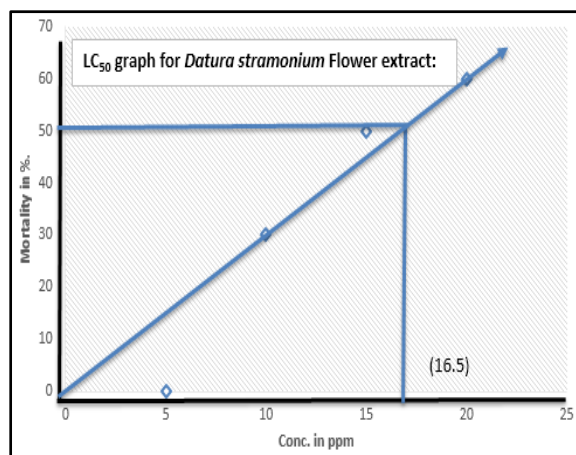
The mortality rate of the test fish and concentration of *Daturastramonium* fruit, seed, leaves, flower extract are positively correlated. This shows that the mortality rate of the fishes increased with increase in the concentration of these extract

The test fish exhibited that various behavioral pattern before death occurred. Restlessness, loss of balance, air gulping and convulsions was frequently observed.

Observation table:

Sr. No.	Conc in ppm	No. of fish	Mortality in %											
			24hrs.M in %				48hrs. M in %				72hrs. M in %			
			Leaves	Flower	Seeds	Roots	Leaves	Flower	Seeds	Roots	Leaves	Flower	Seeds	Roots
1	5.00	10	-	-	-	-	-	-	10	20	-	-	20	30
2	10.01	10	-	-	10	20	10	10	20	50	30	20	40	60
3	15.01	10	10	10	30	40	30	30	50	50	50	40	60	70
4	20.2	10	20	10	30	20	40	30	50	50	60	50	90	100
5	Control	10	-	-	-	-	-	-	-	-	-	-	-	30
LC 50 after 72 hrs by Graph:											16.5	20.0	12.5	09.0

❖ LC 50 by Graph: *Daturastramonium*



Conclusion: -

It is observed that the fresh water fish *Ictalurus punctatus* exposed to extract of *Daturastramonium* leaves, seeds, flowers, and roots, the *Datura* root extract is having highly toxic effects on fish comparatively to flowers, seed and leaves extract.

Therefore, it is concluded that the use of the *Datura* extract can be used as a biological pesticide in eradicating predators and unwanted organism in the pond by the farmer instead of using agrochemical, although because of its toxicity its usage should be monitored well.

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Theoretical Characteristics of A Bundle of Carbon Nanotubes P – N Junction

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Abstract :

In this paper, we have studied about the theoretical characteristics of a bundle of carbon nanotubes P – N junction for which is used the continuous surface charge distribution on the surface of bundle. The energy state is occupied by electrons according to Fermi function. The density of state and energy gap at potential and charge away from junction represent the semiconducting CNTs and we have found the general characteristics of a bundle of carbon nanotubes P – N junction and negative differential resistance.

Keywords: A bundle of CNTs P – N junction, Charge distribution, Fermi function, Density of state, Energy gap.

Introduction: Carbon nanotubes are used as active elements in nanoscale electronic devices from two terminal rectifiers to field effect transistors [1,2,3] and CNT P – N junction is obtained by fabrication [4] or doping. The electrostatic potential is created at the junction and the transformation of a P – N diode to a N – P diode and a transistor [5] and the ideal equation [6] for resistance of 18 m Ohm is introduced. J. U. Lee [7,8] gave calculation for doping fraction and curve of I – V for CNT P – N junction which is formed along SWCNTs with energy level of P – N structure shown by negative differential resistance and the charges transfer from electrodes [9]. A. Bachtold et al., [10] introduced the current between the metallic and semiconducting CNTs which shows rectification as band gap or energy gap semiconducting CNT around Fermi points of graphene. Takshi Nakanishi et al., [11] studied the tunnel conductance with Schottky barrier with P – doped and N – doped region depends on difference between the Fermi level electrode and energy gap of CNTs. The Schottky barrier at the crossing point between two carbon nanotubes which is used in creation of intratube metal semiconductor junctions [12].

Method and Theory :

The continuous charge distribution on the surface of a bundle of carbon nanotubes is given by

$$\sigma(z) = \frac{q}{\epsilon} (n - \int S(\epsilon, z) f(\epsilon) d\epsilon) \tag{1}$$

where, ϵ is dielectric constant for medium and in this medium a bundle of carbon nanotubes is embedded, n is doping fraction, $S(\epsilon, z)$ is the density of state of a bundle of carbon nanotubes along z – direction and $f(\epsilon)$ is the probability function for Fermi level. The Fermi function is given as –

$$f(\epsilon) = \frac{1}{e^{\frac{\epsilon - \epsilon_f}{k_B T}} + 1} \tag{2}$$

At $T = 0$, if $\epsilon < \epsilon_f$, $f(\epsilon) = 1$ i.e., the energy state is occupied by electron. The Fermi energy ϵ_f for the N –type material as $-\epsilon_f = \epsilon_c - k_B T \log_e(n_c/n_d)$ where, n_c is number of electrons in conduction band and n_d is concentration of donor and the Fermi energy for the P – type material as $-\epsilon_f = \epsilon_v - k_B T \log_e(n_v/n_a)$ where, n_v is the number of electrons in valence band and n_a is the concentration of acceptor. The density of state for carbon nanotube P – N junction is given as –

$$S(\epsilon, z) = \frac{a R \sqrt{3}}{\pi A V_0} |\epsilon + eV(z)| \left\{ (\epsilon + eV(z))^2 - (\epsilon_g)^2 \right\}^{-\frac{1}{2}} \tag{3}$$

where, R is the radius of a bundle of carbon nanotubes, A is the cross sectional area of bundle, $V(z)$ is the potential and ϵ_g is the energy gap. The produced electrostatic potential by charge density is expressed as –

$$V(z) = \int C(z - z') \sigma(z') \tag{4}$$

where, σ is the surface charge density on bundle and $C(z - z')$ is Kernel for electrostatics in free space which is expressed for a bundle of CNT as –

$$C(z - z') = \frac{1}{4\pi\epsilon_0} \int_0^{2\pi} R \left((z - z')^2 + 2R^2 \left(\sin^2 \frac{\theta}{2} \right) \right)^{-\frac{1}{2}} d\theta \tag{5}$$

The energy gap is expressed as –

$$\epsilon_g = \frac{\sqrt{3}|t|\pi}{3\sqrt{mn + m^2 + n^2}} \tag{6}$$

where, m and n are chiral indices and t indicates the overlap between wave functions in tight binding. If $t = 3g + 1$, For semiconducting bundle of carbon nanotubes the energy gap is given as –

$$\varepsilon_g = |3g + 1| \left(\frac{aV_0}{2R} \right) \quad (7)$$

From the Eq. [1], [2], and [3] we have

$$\sigma(z) = \frac{qe}{\epsilon} n - \frac{qe a R \sqrt{3}}{\pi A V_0 \epsilon} \int |\varepsilon + eV(z)| \left\{ (\varepsilon + eV(z))^2 - (\varepsilon_g)^2 \right\}^{-\frac{1}{2}} d\varepsilon \quad (8)$$

Expression [8] represents the standard characteristics of a bundle of carbon nanotubes P – N Junction. For doping on bundle of CNTs [5] and [8] are self – consistent. The current expression for a bundle of carbon nanotubes is given as –

$$I = \frac{2e^2}{\pi \hbar} \int (f_L(\varepsilon) - f_R(\varepsilon)) T(\varepsilon) d\varepsilon \quad (9)$$

where, $f_L(\varepsilon)$ and $f_R(\varepsilon)$ are Fermi functions to left and right leads and $T(\varepsilon)$ is transmission probability across the P – N junction.

Results and Discussion: The Fig;1 represents the doping fraction in the variation of the energy and distance from junction. The band banding in bundle of CNT is observed at the charge distribution along a bundle of carbon nanotubes P – N junction shown in fig:2. Therefore, for bundle, there is significant charging and potential decays away from the junction. Fig:3 represents the negative differential resistance between 0.24 V and 0.59 V in variation of I – V curve.

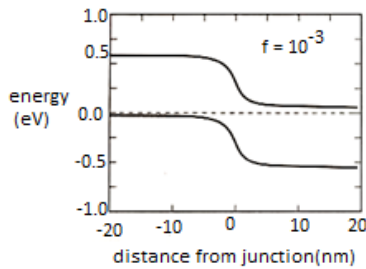


Fig:1 self consistent band bending

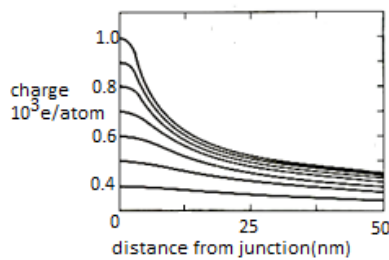


Fig:2 charge distribution along a bundle of carbon nanotube P - N junction

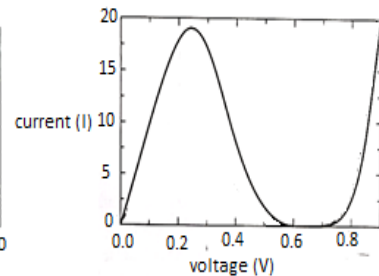


Fig:3 current voltage curve for a bundle of carbon nanotube at high doping

Conclusions: We have concluded that

1. the general characteristics of a bundle of carbon nanotubes with Eq. [8].
2. in a bundle of carbon nanotubes the band bending is same as in planar devices i.e., potential and flat band away from junction.
3. the potential must be constant.
4. to keep potential from falling carbon nanotubes must add charge.
5. the current – voltage curve for negative differential resistance with Eq. [9].

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Mutation Breeding of Pigeonpea [*Cajanus cajan* (L.) Millsp] for Green Vegetable

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Abstract

Pigeonpea [*Cajanus cajan* (L.) Millsp] is one of the major pulse crop of Maharashtra grown in Kharif season. It is cultivated in 35.54 lakh hectares in Maharashtra. In spite of its demand the yield of the pulse is low. In the present investigation an effort was made to develop and use Pigeonpea pods as green vegetable by mutation breeding. The Vegetable type indeterminate mutant seems to be very promising and used as vegetable and provide continuous supply in the market as green vegetable can be release as variety after appropriate field tests.

Key Words: Mutation Breeding, Pigeon Pea, *Cajanus cajan*, Gamma rays, EMS.

Introduction:

Food legumes are of prime importance in human diet and animal feed contributing the major source of vegetable protein. They are an economic source of not only protein but of carbohydrate, minerals and B-complex vitamins particularly in vegetarian diet (Salunkhe et.al. 1985). On an average, pulses contain 20-25 per cent of protein in their dry seeds, which is almost 2.5-3.0 times the value normally found in cereals. Thus, it ensures nutritional security to the poor masses of the country (Chaturvedi and Ali, 2002).

Pigeonpea [*Cajanus cajan* (L.) Millsp] is one of the major pulse crop of Maharashtra grown in Kharif season. It is consumed as split Dhal, It is also consumed as fresh green pods in many Caribbean and Latin American countries and also to some extent in India especially in Gujarat state. Recently its use as a fodder crop has increased. Seed and Fodder contains approx 20-22% protein. Seeds are rich in Iron, iodine, and essential amino-acids like Lycine, Cystine and Arginine. It is cultivated in 35.54 lakh hectares with a production of 18.36 lakh tones in Maharashtra (Asewar and Bainade, 2005). In spite of its demand the yield of the pulse is low. In the present investigation an effort was made to improve the yield of the crop by mutation breeding.

Green seeds of Pigeonpea are consumed as a vegetable. This green seed is more nutritious than the dry seed because it contains more protein, sugar, vitamin-A and fat than the mature seeds (Faris *et al.*, 1987). In addition, the protein and starch digestibilities of green seed are higher than those of the mature seed. Also the green seed contains lower quantities of flatulence-causing sugars, and of trypsin and amylase inhibitors (Singh et al., 1984a). Green Pigeonpea is a good source of iron (Singh *et al.*, 1984b) and better source of calcium than Dhal. The seed of pigeonpea can be used immature or green as a vegetable. Pigeon pea pods used as a vegetable are normally picked when their seeds have reached physiological maturity that is, when they are fully grown and start loosing green color (Saxena, 2008) At this stage it has accumulated most of its dry matter, but has not completed converting sugar to starch and is still some what tender. The pods are usually hand picked. For obtaining mutant, Physical mutagen i.e. gamma at different doses are administered of dry seed of Pigeon pea and Yield contributing traits like, Plant Height, Number of Branches per plant, Number of pods per plant, Pod length, Number of Seeds per Plant, 100 seed weight and Yield per Plant. M2 Progeny were also screened for useful mutants.

Material and Methods:

The experimental material selected for the present study is ICPL-87 of Pigeonpea [*Cajanus cajan* (L.) Millsp]. The germplasm of said variety was procured from Pulses Improvement Division of Mahatma Phule Agricultural University (M.P.K.V.), Rahuri, District: Ahamednagar (Maharashtra). The variety is desi type; commercially and widely cultivated extensively in various part of Maharashtra. The cultivar is renowned for its features like extra early maturity, determinate growth habit and average yield of about 18-20 q/hector. Two mutagens, one physical (Gamma rays) and another, chemical (EMS) were used in the present investigation to create genetic variability in Yield contributing traits. The germplasms of Pigeonpea were irradiated with different doses (10, 20, 30 and 40 kR) of Gamma rays or different concentrations (10, 20, 30 and 40 mM) of Ethyl Methane Sulphonate (EMS). The seeds thus treated with physical or chemical mutagen were sown in randomized block design (R B D) in rows of 5M long and 45 cm between rows, at a spacing of 20 cm between plants in the experimental

fields of Padmashri Vikhe Patil College, Pravaranagar during the Kharif season of 2016. M₂ progeny was raised from M₁ seed.

Seeds from M₁ progeny were harvested separately and carefully from each treatments as well as control and sown for M₂ progeny. In M₂ progeny plants are carefully screened for Morphological mutations such as early mutant, high yielding (Robust) mutant, tall mutant, late maturing mutant, Vegetable type Indeterminate mutant etc.

Results and Discussion:

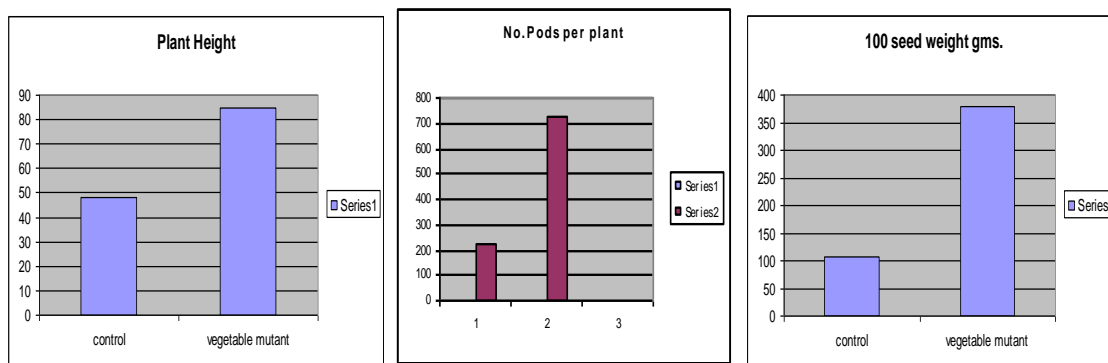
Results indicated that genetic variability in Yield contributing Traits, and viable mutants could be observed only at M₂ generation. The M₂ progeny raised from seeds treated with 30 kR dose of Gamma rays produced novel mutants showing the indeterminate growth with flat pods and raceme type of inflorescence. The similar vegetable type of mutant was also noted by (Saxena, 2008.,Jain et al. 1981). These mutants also showed two fold increases in number of branches per plant and threefold increase in Number of Pods per Plant and Yield per Plant (Table and in graph). No significant variation in pod length, number of seeds per plant and 100 seed weight could be observed between the control and the mutant. This mutant was named as Vegetable type indeterminate mutant. Differences observed between the Vegetable type indeterminate mutant and corresponding control plants is shown in the table.

At present, efforts are also being made to popularize pigeon pea for human food, especially as green peas. Chinese food technologists have developed a number of snacks, food items, and drinks using dry and green seeds of pigeon pea. The Vegetable type indeterminate mutant seems to be very promising and can be used as green vegetable and provide continuous supply of green pods in the market as green vegetable can be released as variety after appropriate field tests.

Table: Effect of 30 kR dose of gamma rays on Yield Contributing traits in pigeon pea.

Yield contributing trait	Control	Vegetable type Indeterminate mutant
Plant Height (inches)	48	85
Number of Branches per Plant (No.)	18	27
Number of pods per plant(No.)	223	727
Pod length (cm.)	6.4	5.6
Number of Seeds per Plant (No.)	4	4
100 seed weight (gms.)	12	13
Yield per Plant (gms.)	108	378

Graphs showing Plant height, No. of pods per plant and 100 seed wt. of both control and vegetable mutant.



Acknowledgements:

Author is very thankful to Dr. P.M. Dighe, Principal, Padmashri Vikhe Patil College of Arts, Science and Commerce, Pravaranagar, for providing facilities to carry out research work.

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Comparative Analysis Of Protein And Carbohydrate Concentration In Different Grains And Cattle Feed Available In Local Market.

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Abstract :

Cereal grains are the major component of diet for both human and domestic animals as they forms the building blocks of body. In present study, protein and carbohydrate concentration in different food grains and cattle feed was estimated for comparative analysis. For this purpose cereal grains like Bajara, Jowar, Maize, Soyabean, Wheat and Cattle feed was used. Estimation of protein was carried out by Lowry's method while carbohydrates was estimated by Anthrone method. Study indicates that, as compare to the any other substance; the concentration of protein (1.867 mg/ml) and carbohydrate (0.276 mg/ml) is more in soyabean and groundnut cake respectively.

Keywords : Grains, Proteins, Carbohydrates, Concentration, Nutrition.

Introduction:

Cereals grains are the dietary mainstay of mankind and provide more than three quarters of man's energy needs and more than one half of his protein needs. The plant breeders have succeeded in improving the quantity and quality of protein in different grains during the early 1960s two important mutants of maize, opaque-2 and floury-2 were discovered (Nelson et al.1965). These had a higher protein content and protein quality than the normal maize varieties. (RanaI.A.,et al.1985). Analysis of protein, carbohydrate, starch and oil content are very important for estimating nutritive value of food (Khan A.H.,et al. July 2014). Grains also have availability of the various minerals, vitamins and dietary fibers, which are of immense significance from both health as well as nutritional point of view. There are various grains available in market. The ratio of different macromolecules varies in different types of grains (SononeA. P., 2014). The protein content of the cattle feed concentrate vary with type of animals The protein content of the concentrate should be in equilibrium with protein content of forage. The nutrient content is more important than the individual ingredient composition. Concentrate are usually high in protein and carbohydrate (Feeding the dairy cow (concentrates) by Siobhan Kavanagh section 6, chapter 35). For an animal to grow normally and to gain weight efficiency. The amount that it eats in one day must contain enough energy and protein for body maintenance, growth and reproduction. Different types of cattle food concentrate contains different nutritional value. The cattle feed concentrate like Valis A, Valis B, Maize A, Maize B, Groundnut cake Pellet (Godrej), Pellet (Indranil) and cotton cake have different nutritional value. They are used in different concentration according to daily need of the cattle.

Material And Method:

Material:

The grains and cattle feed concentrate collected from the local market

1. Grains like wheat, jawar, Bajara, Maize Red and White, Soybeanetc
2. Cattle feed concentrate like Valis. Maize, Groundnut cake, Pellet (Godrej), Pellet (Indranil) and Cotton cake.

Grains:

Maize (*Zea mays*) -

Maize is the world's most important feed grain because of its high nutritive value and good agronomic features.

Nutritive value:Maize is a high energy grain because it is high in starch and oil and low in fiber. Maize contains starch and protein. The grains should be ground before feeding to the ruminants, otherwise they will escape digestion. Maize contains starch, which composed of about 25% amylase and 75% amylopectin. The starch in maize is more slowly digested in the rumen than that of the other grains and at high levels of feeding a proportion of starch passes in to the small intestine, where it is digested and absorbed as glucose. This may have advantages in conditions such as ketosis.

Sorghum (*Sorghum bicolor*) Jawar -

Sorghum resembles in feeding value to that of maize It is more drought resistant than maize. The kernel of sorghum is very similar to that of maize, although smaller in size

Nutritive value:Sorghum grain is very similar to maize in composition, it generally contains more protein but less oil than maize and has no pigmenting xanthophylls. Sorghum contains starch and protein. Grains

are slightly less palatable than maize because of the presence of tannins. The grains should be ground before feeding the ruminants, otherwise they will escape digestion. Care is needed in the grinding process as this may produce a fine powder, which is partly and unpalatable

Wheat (*Triticum aestivum*) -

Wheat is the world's most important crop. It is grown primarily for human consumption.

Nutritive value: Though wheat is a good source of energy, it is rarely used for livestock feeding in India due to its higher cost and higher demand for human consumption. Only damaged wheat is used for feeding animals. Grain of wheat is highly variable in composition. Wheat is superior to maize in protein content and quality. Climate, soil fertility and variety influence the protein content.

Pearl millet (*Pennisetum typhoides*) Bajara -

Pearl millet is the most widely grown type of millet. Grown in Africa and the Indian subcontinent since prehistoric times, it is generally accepted that pearl millet originated in Africa and was subsequently introduced into India.

Nutritive value: It resembles in feeding value to that of sorghum. It is rich in tannins. It can be used in place of maize in livestock feeding.

Soybean (*Glycine max*) -

Soybean is the oilseed crop that is produced in the largest amounts in the world. In South Asian region, India ranks first in the production of soybean seed. Soybean is an annual legume that grows in a wide range of conditions. Soybeans contain oil and are normally solvent extracted. The residual meal has an oil content.

Nutritive value: Soybean meal is an excellent feed for livestock, it is very palatable, highly digestible and contains a high amount of digestible energy. The protein contains all the essential amino acids. Soybean meal is a better source of calcium and phosphorus than the cereal grains.

Concentrate:

Groundnut meal (*Arachis hypogaea*) -

Groundnut meal is an important source of protein for livestock feeding in India. Three types of oil cakes are available in India namely ghani pressed, expeller pressed and solvent extracted cake.

Nutritive value: The content of oil is variable according to the process of extraction of oil. The groundnut cake may be decorticated or undecorticated. In undecorticated groundnut cake the fibre content is very high.

Cotton Cake (*Gossypium*) -

Cotton belonging to genus *Gossypium* is widely distributed in temperate and tropical regions. It is a native of Northwest India and Pakistan. Like groundnut cake, ghani pressed, expeller pressed and solvent extracted cotton seed cakes are available for feeding the livestock.

Nutritive value: Nutritional value of cottonseed meal depends up on method of extraction, proportion of husk and lint and degree of decortications. The protein content of cottonseed meal is less in meal made from undecorticated cottonseed too high in meal made from decorticated seed (Animal Nutritional Group, National Dairy Development Board, Anand-388001, July 2012)

Pellet -

Pelleted feeds have been defined as "Agglomerated feeds formed by extruding individual ingredients or mixtures by compacting and forcing through die opening by any mechanical process". Basically, the purpose of pelleting is to take a finely divided, sometime dusty, unpalatable and difficult to handle feed material and by using heat, moisture and pressure usually result in improved feeding result when compared to the unpelleted feed.

Nutritive value:

Protein: Normally, the production rate or pellet quality of a formula can be predicted when the factors of protein and density are considered. Ingredient with high natural protein will plasticize under heat, which will give good quality pellets

Fats: The fat content of an ingredient or feed can mean either natural fat or fat added. Both are an aid in increasing production rates. The pellet quality could be seriously affected with the addition of too much fat. The added fat can be two kinds animal fat and or vegetable fat. The pellet also contains fiber, texture, starch and moisture. (Animal Feed Pelleting, Booklet California pellet Mill.co)

Method:

Grains were cleaned and soaked in portable tap water for 12 hrs. at room temperature 27°C. Grains were dissolved in three parts of water (1:3). Then dried initially at 80°C for 15 min. pulverized to fine powder or flour. 500mg of grain flour was homogenized in 5ml, 10% TCA solution in homogenizer for 15min. Similarly the process of homogenization were obtained in cattle feed concentrate. TCA breaks the cell wall.

Then the sample was centrifuged at 6000 rpm for 20min. The supernatant was further used for estimation of protein and carbohydrate

Estimation of Protein: Protein was estimated according to Lowry's method as described by Lowry et al. (1951) Using Bovine serum albumin as standard protein.

Estimation of Carbohydrate: Anthrone method was used to estimate carbohydrate contents in different grains and cattle feed concentrate.

Result And Discussion:

The result showed that the protein and carbohydrate contents in grains and concentrate having the variation in their nutritive value. This variation in grains and concentrate are given in tables.

Sr. No.	Grains	Protein (mg/ml)	Carbohydrates (mg/ml)
1	Bajara	1.126	0.255
2	Jawar	1.505	0.24
3	Red maize	0.99	0.225
4	White maize	1.575	0.212
5	Soyabean	1.915	0.21
6	Wheat	0.675	0.105

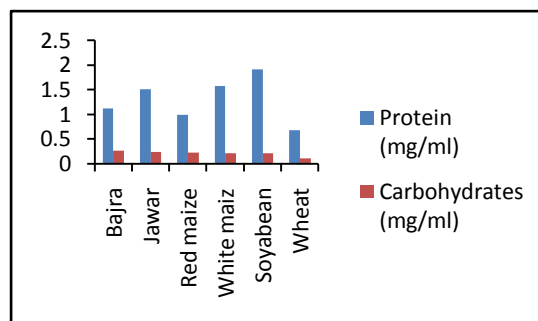


Table : 1 showing protein and carbohydrate content in grains
Graph 1 : showing protein and carbohydrate content in grains

Sr. No.	Cattle feed concentrate	Protein (mg/ml)	Carbohydrates(mg/ml)
1	Valis A	0.113	0.186
2	Valis B	0.493	0.015
3	Maize A	0.405	0.12
4	Maize B	0.337	0.1
5	Groundnut cake	1.437	0.276
6	Pellet (Indranil)	1.867	0.166
7	Pellet (Godrej)	1.617	0.16
8	Cotton cake	1.462	0.11

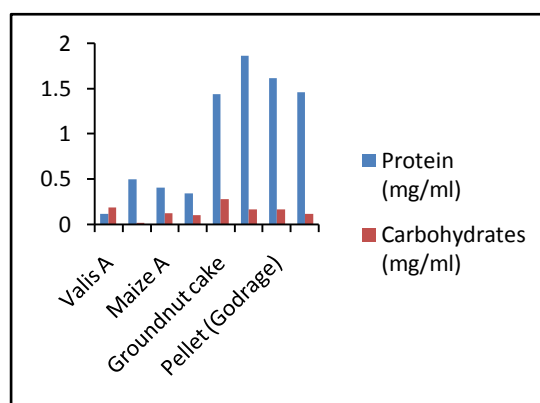


Table : 2 showing protein and carbohydrate content in cattle
Graph : 2 showing protein and carbohydrate content in cattle feed concentrate

Conclusion :

The present study showed that the Soyabean contain higher protein concentration is 1.913 mg/ml as compare to other grains and the Bajara contain higher carbohydrate concentration is 0.255 mg/ml from other grains. The present study showed that the Pellet (Indranil) contains higher protein concentration is 1.867 mg/ml from other concentrates. Similarly the higher carbohydrate concentration is 0.276 mg/ml from other concentrate. Therefore we can conclude that the carbohydrate and protein are present more in grains as compare to concentrate. Grains are easily available and easy to provide to animal. The concentrates are expensive and not affordable to each and every farmer.

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A Study on where is Happiness in Human Life: A Social Work Perspective

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Abstract

This paper mainly aims to understand the human happiness in the society, people are how to lead quality of life with involvement, adjust mental attitudes, and understand levels about human relations and face to face interaction with a person, group and community. the present study analyze how to lead a happy life in a family, community as well as facing critical condition in the emergency period, people need a peaceful environment, entertainment, moral legislation and good human relations. This study light on what are the roles of social workers with a person, group community regarding happiness in human life. How to create a happy environment in the society through social work education and understand the psychological issues in the present situation, Present study conduct only for secondary data based on Articles, Books, Journals, In this article find out how to lead a happy life in the society

Keywords: Happiness, Quality life, Human relations, Life satisfaction

Introduction

What is happiness: People use a variety of words to describe how well they are doing or feeling. Commonly used terms are “well-being,” “quality of life,” or “happiness.” These entire have different - but sometimes partly overlapping - meanings. Veenhoven (2000) the sum of pleasures and pains, which also involves the notion of an ‘affect balance’ a contemporary variation on this theme is proposed by Daniel Kahneman’s (2000) life satisfaction, creativity, leisure, peaceful mind, adjustment these are all best components of happiness, who are the developing mentally, physically, socially, economically and knowledgeable healthy growth in the community there are very person, group, community in the society, each person to understand the what is happiness, where is happiness and how is happiness then every person feel in life how is my life happily.

We see happiness in a person, group or community the meaningful relations, personality development activity, sympathy and empathy, social service, solving social problems, creating a good environment, formation of useful social policy and legislation, etc.. mainly the effect components of happiness of person group or community mentally shoes the emotions, subjective well being, culture, knowledge, positive thoughts, life satisfaction, quality of life, welfare, flourishing and blessedness, such more needful options. “The best moments in our lives are not the passive, receptive, relaxing times . . . The best moments usually occur if a person’s body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile” (Csikszentmihalyi, 1990).

Facts of Happiness

1. Poverty is not only a lack of money
2. surrounding yourself with happy people will cause that happiness to rub off on you
3. Money is not the only support that human needs. People need social support too.
4. Not only do poor people need support, but even rich people also need support. They need
5. Social support for their happiness
6. Poor people need financial support, while rich people need non-monetary support.
7. People who spend a portion of their income towards charities and buying gifts for loved ones have a happier disposition than those who don’t.
8. Indeed, money can buy happiness, but only if you spend it on other people
9. Higher-income is associated with less daily sadness but not more daily happiness.
10. Life experiences like trips, fancy dinners, and spa treatments - provide more satisfaction in the long run compared to material things and money
11. Giving to people or organizations in need “has a direct correlation effect on happiness that is basically equivalent to a doubling of household income,”
12. According to research from a Gallup World Poll How you give matters, too, you’ll get more of an emotional reward by supporting groups you feel closely connected to, or when a close friend asks for your help.

13. Humans are social beings – dependent on others for recognition, mutual care and support. In the same way that we literally see reality through our bodies, we also see the world Through other people

Why the Smile Campaign

1. To raise awareness in the community that happiness in life is not about money only
2. To educate the community that poverty is not only a lack of money. Poverty is also lack of vision, lack of dreams, lack of happiness, etc.
3. To bring joy and hope for people, especially those who really need it.
4. To help people to cope with their challenges in life
5. To promote peace by uniting people of different classes.
6. To promote and facilitate collaboration and unity during happy and sad times.
7. To promote Sustainable Development.

Theories of Happiness

Maslow's theory explained basic human needs, psychological, and physical. Self-actualization is profound moments of love, understanding, happiness, during which a person feels more whole, alive, self-sufficient and yet a part of the world.

According to Mihály Csíkszentmihályi, the concept of flow is the idea that after our basic needs are met we can achieve greater happiness by altering our consciousness by becoming so engaged in a task that we lose our sense of time. Our intense focus causes us to forget any other issues, which in return promotes positive emotions in life satisfaction

Social work perspectives of this study

Social work is a practice-based course and Social workers are also social engineers in the community, professional social workers provide the skills, values, worth and dignity of man and adjustment to the individual, family, group and community levels of a social worker. Social workers to study the individual level, group level and community level of present problems of the Clint, assess the problem, diagnosis of the problem, treatment, counselling follow up and otter care service, when I social worker and Clint complete these process then Clint is very happy because of solving the problems of Clint systematically.

Review of Literature

Ruut Veenhoven, (2005), In this article, researchers take stock of the findings on social conditions for happiness and distinguish between conditions at the macro-level of society, the meso level of organizations and the micro-level of individual conditions.

Shier, et al, (2013), this article found to impact social workers subjective well-being. And cultural characteristics of that practice environment. To expand this knowledge domain a qualitative inquiry has been undertaken to understand what aspects of the socio-political environment impacted social worker well-being. This study found three themes related to the socio-political environment that can contribute to practitioner well-being. The high light of this study related to perceptions of practitioners by community members, conflict with social work program mandates and changes with the social welfare system. These are all focused on how to lead a happy life in the community

Objectives of the Study

1. To understand the human beings in the current society
2. To Study human happiness in the human society
3. To suggest the improvement the quality of life in human society

Research Methodology

The present study was used only secondary data. Secondary data was collected through articles, journals, Internet sources such as online, Wikipedia, encyclopedia, books, newspaper, E-library, Google Scholar, reports, etc.

Findings of the Study

1. Happiness is the coordination of individual, group members and community level
2. Happiness is analyzed person pace expression, attitude, healthy, including physically and mentally
3. Suggest to medication, yoga, sports, hard work, etc..
4. Creative the good habits regarding well being of human life.
5. Involve with the recreational activities with the family members, friends, colleagues etc.
6. Good source of income, job, social status, social valves, good relationship with community etc...

Conclusion

The present article focused on understand the how to build a good human relationship at the individual, group and community level through the social work method/social work intervention. Social

workers are implementing the main role of creating sustainable development goals to solve the social problem

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Reflection of Psychic Reality in James Joyce's Novel A Portrait of the Artist as a Young Man

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Abstract

The present research paper aims to analyse the term "Psychic Reality", reflected in James Joyce's novel *A Portrait of the Artist as a Young Man*. The term Psychic Reality was first used by Sigmund Freud in his book *Interpretation of Dreams*. Freud wanted to denote the level of reality specific to unconscious process. He indicates psychic reality from an epistemological standpoint. The term was first referred to the force of reality that is associated to the subject's internal fantasy life. It suggests that the internal life of subjects might be different in reality from the life of subject in his psychic reality. The present research paper attempts to find the reflections of psychic reality in James Joyce's novel *A Portrait of the Artist as a Young Man*. The protagonist Stephen Dedalus shows the reflections of psychic reality of James Joyce himself in many ways in the novel. So the present paper analyses the personality of Stephen Dedalus in the light of his relations and responses to the external world, especially, people, places that come into his life. The interior monologue and psychic reality of Stephen Dedalus have been analysed, interpreted and evaluated.

Key Terms: psychic reality, internal fantasy, interior monologue, stream of consciousness.

Research Methodology: Interpretative, Analytical and evaluative

Introduction

The greatest psychologist Sigmund Freud first coined the term '*Psychic Reality*', to denote the level of reality specific to unconscious process. Arlow argues that, "Freud coined the phrase *Psychic Reality* to indicate how neurotic patients and others treat unconscious psychic concepts and fears, as if they are real. They respond to the challenges of everyday life not in terms of objective reality but rather in keeping with their inner *Psychic Reality*". Arlow points out that *Psychic Reality* as a part of the subject's internal life which might or might not exist or present in real life of the subject. But the subject himself believes that whatever is happening in his psychic reality he believes that it is real. The individual who experiences the psychic reality is influenced by it totally and his outer reaction has also been controlled by it.

Reflection of Psychic Reality in James Joyce's Novel *A Portrait of the Artist as a Young Man*

James Joyce is widely considered to be one of the most influential writers of the 20th century. He was born in a well-meaning family but his father was in debt. His father's financial debt made his family live in poverty. James Joyce attempts to show his tempestuous early relationship with the Irish Roman Catholic Church. His liking of the Roman Catholic Church is reflected through a similar inner conflict in his alter ego, through another similar personality, Stephen Dedalus, the hero of his first novel, *A Portrait of the Artist as a Young Man*. So, this novel has been considered as an autobiographical novel of James Joyce. The external experiences of Stephen Dedalus are expressions of the inner realities of James Joyce's psychic reality. The novel explores Stephen's psychological process and spiritual development from an immature child to a young man which are indirect expositions of James Joyce's psychic realities. In other words, it is the demonstration of the psychic reality of James Joyce's personality. In short, Stephen Dedalus is a psychic metaphor or an image of James Joyce himself.

The beginning of the novel reflects the psychic reality of Stephen Dedalus who shares his childhood memories in a very childish pattern as:

Once upon a time and a very good time it was there was a moocow coming down along the road and this moocow that was coming down along the road met a nice little boy named baby tuckoo....

His father told him that story: his father looked at him through a glass: he had a hairy face. He was baby tuckoo. The moocow came down the road where Betty Byrne lived: she sold lemon platt.

O, the wild rose blossoms

On the little green place.

He sang that song. That was his song. O, the green wothebotheth.

When you wet the bed, first it is warm then it gets cold. His mother put on the oilsheet. That had the queer smell.

His mother had a nicer smell than his father. She played on the piano the sailor's hornpipe for him to dance. He danced:

Tralalalala,
Tralalalalaladdy,
Tralalalala,
Tralalalala

This narration explores psychic reality of James Joyce himself when he was a child. How Stephen Dedalus attempts to identify himself with the outside world, with members of his family, world of language; his father's hairy face, his mother's sweet smell, the uncomfortable experience of wetting the bed, and certain special and fancy words, such as "baby tuckoo" and "moocow, his favourite song is about wild roses — not tamed, cultivated roses, but wild roses. Those who reads James Joyce's Ulysses won't relate this narration could be of James Joyce, but as it's a reflection of psychic reality of the writer who expresses as if he himself is a child Stephen Dedalus.

APA Dictionary of Psychology defines the psychic reality as "The internal reality of fantasies, wishes, fears, dreams, memories and anticipation as distinguished from the external reality of actual events and experiences."

The definition clarifies that psychic reality is an internal reality of the individual in many aspects of life. It could be fantasies, wishes, fears, dreams, memories or anticipation of the individual but it does not have any relation or resemblance with external reality or actual events or happening of the individual.

Another incident from the novel reflects the psychic reality of Stephen Dedalus who feels depressed by his illness. He wants to comfort himself by creating a mock death and mocking funeral ceremony with his friends. He creates the scene of his own burial ceremony and Wells' great remorse for having caused Stephen's unfortunate death. Then Stephen falls into a fitful sleep; he is lulled by "waves" of light, the sounds of imaginary sea waves, and the words which Brother Michael is reading about the death of the young, romantic Irish hero, Charles Stewart Parnell. As L. A. Kirshner writes "nature of psychic reality is necessarily incomplete and indeterminate, there are inherent limitations and dangers to any psychoanalytic attempt to discover historical and experiential truth." Stephen Dedalus although a child and he does not understand what death is, in his psychic reality mere a fitful sleep is a death for him. Stephen's father tells him the stories of his childhood and he relates himself with the character of tales Baby Tuckoo and he makes his own song which he used to listen in his childhood. In his psychic reality he lives a different life, he behaves like it, as if, it is he whose sings the song which is not, actually, his song but he considers his own song.

Joyce has managed to depict Stephen's thought process throughout the book, by using his psychic reality. He attempts to show to the readers how the events of his psychic reality affect his life and portray Stephen's subjective experience through language rather than explaining of exploring what occurs in the reality. Another important aspect of psychic reality of the novel is sexual experiences he has with the prostitute of Dublin which makes him feel guilty and shame on himself as he believes in his psyche about Christian morality. He wants to fulfil his sexual desire, but within the limits of Catholic church's morality. But he uncovers this Christian morality and favours his physical desires over it. It was the beginning of Stephen's attempts to overcome his psychic reality and his preference to live in reality rather than pleasing himself in his fantasy and desires. This conflict has been set in the psyche of Stephen Dedalus. This internal conflict presents a dilemma in his psyche over the choice between his sexual desire and his Christian morality. Being a young man, he prefers sexuality over Christian Morality. There might be some misunderstanding in Dedalus's mind about sex, so he feels guilty after his sexual intercourse with the young Dublin prostitute. In this connection, H.F. Faimberg writes, "The other is present from the outset in the constitution of the psyche." She discusses the relations between intersubjectivity in the transference and concludes that through the functions of listening, misunderstanding becomes the royal path to the discovery of patient's psychic reality.

When he was a child, his upbringing was under the circumstances of Christian beliefs that visiting prostitute and masturbation are sin, but as a young man he not only visits prostitutes again and again but also, he often masturbates. The impact of his upbringing and his belief on his psyche are not tasted with time. So, he sets aside the thoughts of sins and virtue. Finally, He comes out of his psychic reality that was not in existence and prefers material world and its pleasure.

Conclusion

Thus, this paper makes it clear that Dedalus is the external representation of the psychic or internal reality of James Joyce. On the contrary, James Joyce is the internal or psychic origin of Stephen Dedalus' external actions. This paper asserts that the external reality and internal reality are the same sides of two coins and they are inter-dependent. Both external i.e., material reality depends on the internal i.e., psychic reality.

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Public Expenditure and National Income in India: A Time Series and Panel Analysis

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Abstract:

The article examined the causal relationship between public expenditure and national income in the time series of India. The suggested regression tests from national government income (GDP / P) to GE support Wagner's proposition. We use the time-series data methodology during the period 1980 to 2020, using Co-integration and regression tests. It is clear from experience that public expenditure is growing faster than the economy's income and therefore validates Wagner's law in the case of India. The observed increase in public expenditure share for GDP results from continued growth in the expenditure of revenues on subsidies, interest payments, administrative and defense services.

Keywords: Wagner's law, Regression, Public Expenditure, Economic Growth.

Introduction:

Economic development refers to increasing the country's per capita income and economic welfare over time. Public spending is of utmost importance to all economies. Refers to determined by many factors, of which public expenditure is essential. The government undertakes various expenditures to ensure rapid social and economic development and meet its citizens' aspirations and economic well-being. It includes all categories of resources used for clean and eligible and qualifies public goods and services and financial services. These goods and services include defense, judicial services, internal security, welfare, education, health, and financial services. The provision of new, improved, or enlarged public goods and services by the government is essential to the expanding functions of the state, especially in every economic and developmental stage of society. Over time, the proportion of both public expenditure and income is undergoing growth and structural transformation in all countries, partly because of the continuous increase in the activities of the state and other public institutions. Concerning the causal link between public spending and national income, there are two theories broadly, viz. Wagner's law and Keynes's hypothesis, on the one hand, Wagner's law deals with the increasing state activities in the size of the modern public sector due to the economic growth of the society. According to Wagner, per capita income increases during the nation's industrialization and its share of public sector expenditure E. ChukeNwude and TarilaBoloupremo (2018). On the other hand, the Keynesian thesis deals with the growth of national income due to rising public sector spending, seen as autonomous and external. According to the Keynesian proposition, public spending becomes a policy variable influencing economic expansion. The primary purpose is to analyze Wagner's and Keynes' hypotheses for India employing entire government expenditure (GE) variables for 1980-2020. The empirical method of a time-series analysis includes unit root tests, cointegration analysis, error-correction modeling, and regression tests to verify that Wagner's law and Keynes' hypothesis hold for the case of India.

Empirical Reviews:

Adebanwa Ayowole Abayomi et al. (2020), in this study, examines the pattern of the Federal government's expenditure in Nigeria, analyzed adopted time-series data from 1980 to 2018, and they used some econometric models like Ordinary Least Square (OLS) method and Unit root test. These overall results show that the pattern of government expenditure responds efficiently to the economic growth in Nigeria. Maku (2009) examined the link between government spending and economic growth in Nigeria over the last three decades (1977-2006). The results found that private and public investments have an insignificant effect on economic growth during the review period. Richa and Bhanu (2017) examined the link between public expenditure and economic growth in India; they used panel data from 1981 to 2012 and statistical tools like Fully-Modified Ordinary Least Square (FMOLS) and Dynamic Ordinary Least Square (DOLS). Results showed that public expenditure leads to increase economic growth in the long run, and in the short-run, economic growth causes inflationary pressure in the economy.

Reviews of Literature:

Several studies focus on public expenditure in India. Some of them are:

Chuke and Tarila (2018), in this study, investigated the relationship between government expenditure and national income in Nigeria. Study based on two hypotheses one Wagner's Law and Keynes's Hypothesis hold for the case of Nigeria. Found a long-run equilibrium relationship between the government expenditure and national income and the unidirectional Granger causality, running government expenditure and national income in Nigeria. Wagner's hypothesis found that public expenditure is enormously valid for Nigerian countries. This paper concludes that inadequate government expenditure on critical sectors of the Nigerian economy. Deepti and Deepak, (2020) this study states a positive relationship between government expenditure and economic growth. They used panel data set covering 59 countries in 1990-2019. Empirical results showed the unidirectional causality between economic growth and government expenditure, where the causation runs between public expenditure and gross domestic product growth. Balvir and Balbir (1984), in this study, entitled on causality between public expenditure and national income. This paper used the time-series panel data Granger causality method to determine the directions and patterns of causality between national income and government expenditure. This study is jointly dependent on Wagner's law and Keynesian hypothesis, and public finance and macro-econometric, the public expenditure role in the economy necessarily. Alimi, R. Santos (2014), in this study entitle on a time series and panel analysis of government spending and national income. The current study examines the causal relationship between government expenditure and national income in three African countries like Nigeria, South Africa, and Ghana. This paper used panel data from 1970 to 2012, using Johansen Fisher Panel Cointegration test and then on a country-by-country basis using time series Johansen-Juselius cointegration techniques. They have concluded that government spending enhances national income enormously and vice-versa in the short run for Nigeria and South Africa. Pratap and Rosalin (2016) current paper examine the effects of public expenditure on economic growth and poverty in Odisha. The study-based secondary data methodology used the annual data from 2000-01 to 2014-15. The current study used the econometric tools of regression and causality test. The study concludes that among the public expenditure (plan, non-plan, and total expenditure), only the plan expenditure has a significant relationship with the economic growth (GSDP) of Odisha. Seshaiiah et al. (2018), in this study, entitled on general government expenditure and economic growth in India: 1980-81 to 2015-16. The current study used simple regression analysis and multi-co linearity tests. This paper concludes that all the explanatory variables positively affect the GDP growth rate except the FDI growth rate. Lahirushan and Gunasekara (2015), in their study on the impact of government expenditure on economic growth: A study of Asian countries. Government expenditure causes economic growth in Asian countries vice versa. The study is based on the secondary data methodology, and they used econometrical techniques of cointegration, panel data of Asian countries. This study finds that public expenditure positively impacts gross domestic product in the Asian region. Conclude that public expenditure is unidirectional causality from economic growth to government expenditure in Asian countries.

Empirical Model:

For the main aim of this study, three different models of Wagner's law are employed to test the validity of Wagner's and Keynes's hypotheses. The period analyzed is from 1980 to 2020. The three empirical models are the follows:

$$GE=f(GDP) \quad (1)$$

$$GE=f(GDP/P) \quad (2)$$

$$GE/P=f(GDP/P) \quad (3)$$

Where: GE=Total government expenditure (current + capital), GDP=Real gross domestic product, GDP/P=Real per capita gross domestic product, GE/P=Per capita total government expenditure, P=Population.

Wagner's Law and Keynes's hypothesis of GE and GDP test whether or not they have a long-term balance Relationship (co-integrated). If these conditions are met, Wagner and Keynes's hypotheses are examined. Examination of these Economic relationships is based on annual time-series data 40 years (1980-2020), taken from World Development Indicators and National Population Commission, World Bank, Reserve Bank of India. All variables are expressed in terms of natural logarithms for testing purposes.

Methodology:

The methodology used in this research consists of three main steps: unit root tests, cointegration analysis, and regression model.

Unit Root Tests:

The first step in the time-series analysis is to examine unit roots as in this study. It is necessary to check whether the variables under analysis are stationary or non-stationary. If the variables are stable, classical-environment measurement methods are sufficient to study equilibrium. However, if they appear

to be non-stationary at their level's one must apply cointegration tests. Otherwise, the application of classical regression analysis would be invalid. When a variable has a unit root, it is a non-stationary or integrated order 1 (denoted by I [1]). The refers to a property that variables must meet to require cointegration analysis.

Cointegration Tests:

The existence of a long-run equilibrium relationship between economic variables is called cointegration in the literature. The economic interpretation of such a relationship is that although the two variables tend to wander over time without returning to a fixed mean, the economic forces do not allow the series to wander forever. After examining the order of integration of the variables, and all variables under analysis I (1), Co-integration analysis can be applied to examine whether or not there is a long-run equilibrium relationship between the variables and, if so, their short-term dynamics.

Empirical Results and Discussion:

Table 1 reported the results of the static tests at one level and the first difference for all variables. Included in these tests are static and trend terms. As shown in Table 1, after taking the first difference, each series appears to have stationary with the cointegration test. However, the unit root test result indicates that the variables are combined by order one and that the series under study is consistent with the first difference. The optimal lag length of each case is selected for cointegration tests using regression after examining the high-order serial correlation residuals.

After estimating the unit root for the data series, whether there is some long-run equilibrium relationship between the variables, the existence of a long-run equilibrium relationship between economic variables is called coin cointegration. The cointegration results are based on all three formulations reported in Table 1. Results were analyzed based on trace and maximum regression statistics. These results suggest that total GE and GDP, total GE and real per capita GDP, and capita GE and real per capita GDP are co-linked or have long-run equilibrium relationships. Based on these findings, the researcher examines the direction of causality in the Wagner and Keynesian sense in the third phase of the procedure. In inversions two and three, the direction of regression tests from national government income (GDP / P) to GE supports Wagner's proposition. The results show that growth in total GE (governance, financial services, social and community services, and transfers) is explained in accordance with Wagner's law.

Table-1. Empirical Results:

Dependent Variable: Government expenditure Method: Least Squares Date: 01/19/21 Time: 19:06 Sample (adjusted): 2 40 Included observations: 39 after adjustments				
Variable	Coefficient	Std.Error	t-Statistic	Prob.
C	13742.47	10440.28	1.316293	0.1964
GDP	3807.691	605.3135	6.290444	0.0000
Per capita	-4408.686	795.8526	-5.539575	0.0000
R-squared	0.641380	Mean dependent var		68598.92
Adjusted R-squared	0.621457	S.D. dependent var		79141.60
S.E. of regression	48692.56	Akaike info criterion		24.49824
Sum squared resid	8.54E+10	Schwarz criterion		24.62621
Log likelihood	-474.7158	Hannan-Quinn criter.		24.54416
F-statistic	32.19240	Durbin-Watson stat		1.314072
Prob(F-statistic)	0.000000			

Conclusion:

To analyze the relationship between India on GE and national income, this has been originated that there is a long-standing equilibrium relationship between variables to test whether or not Wagner's law and Keynesian others hold in India. Unidirectional regressions that move from GDP to government-expenditure variables can be established between them. Therefore, only Wagner's hypothesis is valid for India. The outcome may be due to general decline and GE inadequacy in critical sectors of the Indian economy. The direction of government expenditure over the period studied may be a non-existent aspect of the Keynesian hypothesis, as large percentages of recurrent expenditures and misuse of budget funds are a

militant struggle against the economy's economic growth. GE is generally viewed as a tool to stimulate economic growth, especially for emerging economies. It is clear from experience that public expenditure is growing faster than the economy's income and therefore validates Wagner's law in the case of India. The observed increase in public expenditure share for GDP is the result of continued growth in the expenditure of revenues on subsidies, interest payments, administrative and defense services. regression found national government income (GDP / P) to GE support Wagner's proposition (explained in accordance with Wagner's law.)

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Recent Trends in Commerce and its Benefits

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Abstract:

E-commerce involves buying and selling of goods and services or transfers of fund or data over an electronic network. Ecommerce relates to the website on the internet who dealings with products and services directly to customer from the portal. It creates value-based relationship between customers and businesses by using electronic communications and digital information processing technology. This paper attempts to highlights the present scenario of ecommerce in India. This paper also highlights various types of emerging trends of ecommerce business in present position and their advantages to customer and businesses for their future growth of expansion

Introduction:

Information technology has transformed the way of people work. Electronic commerce has unleashed yet another revolution, which is changing the way businesses buy and sell products and services associated buying with selling of information, products, and services over computer communication networks. Electronic commerce helps conducts traditional commerce through new ways of transferring and processing information since it is information which is at the heart of any commercial activity. Information is electronically transferred from computer to computer, in an automated way.

Electronic commerce refers to the paperless exchange of business information using electronic data interchange, electronic mail, electronic bulletin boards, electronic fund transfer, World Wide Web and other network-based technologies. Electronic commerce not only automates manual processes and paper transactions but also helps organizations move to a fully electronic environment and change the way to operate. Electronic commerce is a wide range of online business activities for products and services. It is a form of business transactions in which the parties interact electronically rather than by direct physical contact.

Objectives:

1. To study the recent changes and growths in electronic commerce.
2. To study the advantages and benefits of E-commerce in businesses in India.

Review of literature:

Shettar (2016) highlights those different challenges faced by the e-commerce businesses, understand the essential growth factors and prosperity required for e-commerce. He also reveals that the existence of the wholesalers is at the greatest risk because the producer can easily ignore them and sell their products to the retailers and the consumers.

Sharma & et.al. (2015) reveals that benefits of e-commerce received by those companies which are willing to change their organizations and business processes to fully exploit the opportunities offered by e-commerce. It also indicates that the role of supply chain management in success of e-commerce business.

Mahipal (2018) examines the growth and different segments of electronic commerce in India.

The study concludes that there would be prospective growth of e-commerce in India, if government provides a legal security and framework for e-commerce and the domestic and international trades are allowed to expand their basic rights.

Nisha Channa & Sangita Goele (2012) described the overview of the future growth of e-commerce in India. The various segments like travel and tourism, electronic appliances, hardware products and apparel would grow the future of e-commerce. He also states that boom factor of e-commerce such as replacement guarantee, M-Commerce services, location-based services, multiple payment option and quick services etc.

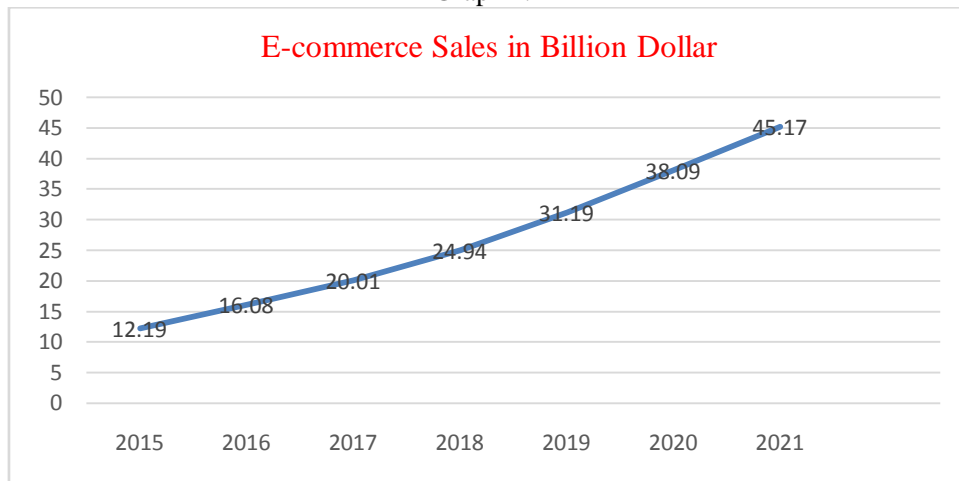
Growth of E-commerce in India:

E-commerce business in India has seen exponential growth over the last decade. This growth is due to many contributory factors, including rapid adoption of technology by Indian consumers, large increases in the number of internet users, new enabling technologies, innovative business models and alternative payment options offered by E-commerce companies.

India's e-commerce festive sales seasons from October 15 to November 15 (2020) recorded gross sales worth Rs.58,000 crore for brands and sellers up 65% from Rs.35,000 crore last year. The Indian e-commerce sector has ranked 9th cross boarder growth in the world according to payoneer report. Indian e-commerce is projected to increase from 4 % of the total food and grocery, apparel, and consumer

electronics retail trade in 2020 to 8% by 2025. As most Indians have started shopping online rather than stepping outside their houses, the Indian e-commerce sector witnessed an increase. Huge investment from global players such as Facebook, which is investing in Reliance, Jio is being recorded in the e-commerce market. In October 2020, Minister of Commerce and Industry invited start-ups to register at public procurement portal and offer goods and services to government organizations and public sector units.

Graph 1.1

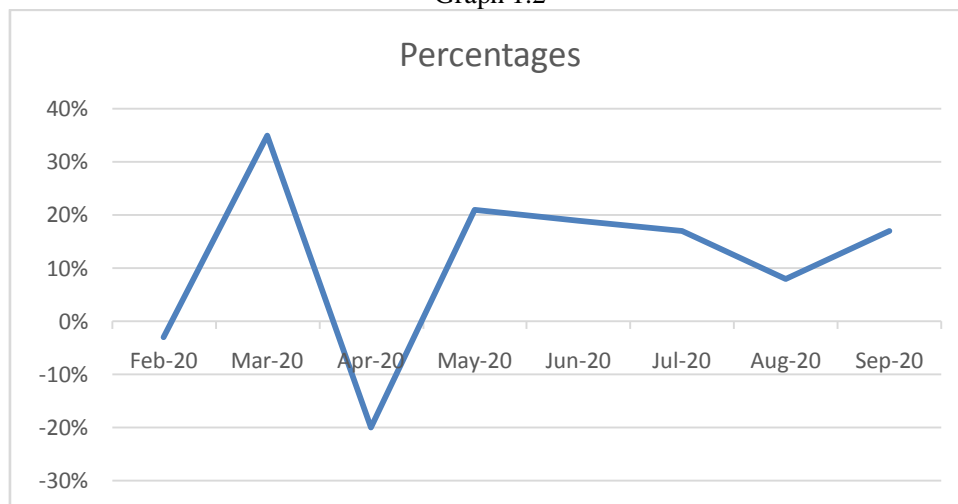


(Source – Statistics 2017)

The above graph highlights that the growth of e-commerce in sales from 2015 to 2021 an increasing trend. The growth of e-commerce has been increased by year to year. It was 12.49 billion dollars in 2015, which increased in 45.17 billion dollars in 2021. It is also expected to increase in future period.

India Spending on online commerce in percentage (Feb to Sep 20)

Graph 1.2



(Source- Media Source, Global Internet e-commerce)

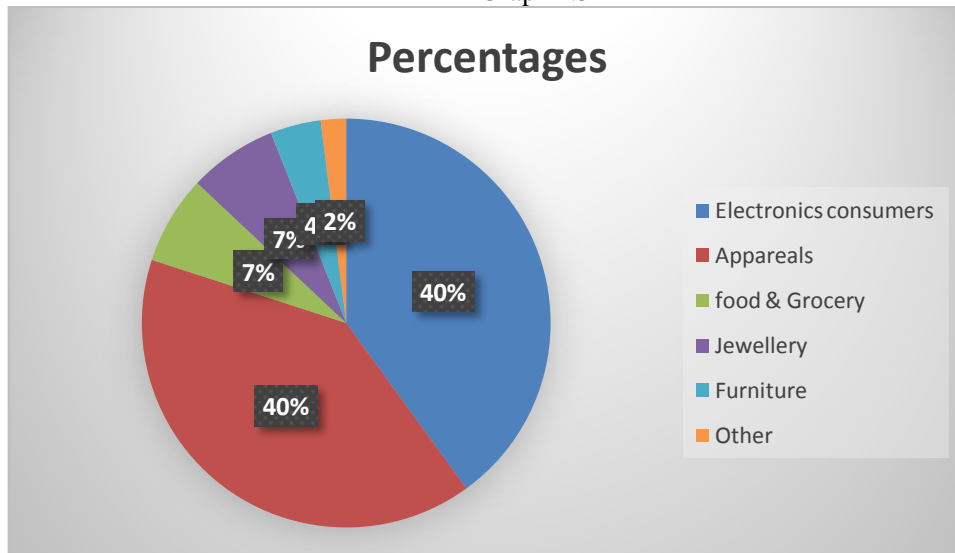
In the above diagram shows that India spending on online commerce during Feb 2020 to Sep 2020. In the beginning period it has -3% then which is increased by 35%. After some period, it has continuously decreased.

As of August 2020, the number of internet connections in India significantly increased to 760 million driven by the digital India programme. Out of the total internet connections 61 % connections were in urban areas of which 97% connections were wireless. Internet penetration in rural India is expected to grow at a rate of 45% by 2021 compared to the current rate of 22%. Number of active internet users in the country is the second highest globally and is also one of the largest data consumers globally. According to Bain & Company report, India's social commerce gross merchandise value stood at US\$ 2 billion in 2020. By 2025 it is expected to reach US\$ 20 billion, with a potentially monumental jump to US\$ 70 billion by 2030, owing to high mobile range.

Online Retail Market:

Shares of various segments in e-commerce retail by value in 2020 has been explained as follows.

Graph 1.3



(Source: Report by eMarketer)

In the above diagram has been shows that shares of various segments in e-commerce retail by value. The online retail market in India has maximum 40% segmented in electronics consumers and appareals, minimum 4% segmented in furniture and other segments.

Recent trends in E-commerce:

The various types of trends in e-commerce have been discussed as follows



Drops shipping:

In these types of e-commerce business, the retailers provide variety of products from different suppliers. If customer wants to purchase,he transferred either wholesaler or company itself.

Mobile:

It has been found that more 80% online customers use their mobile phone for collecting the information about products. Top e-commerce websites in India have adopted ecommerce mobile trend in market.

Chatbots:

In these types of e-commerce business, minimized the amount of time of a customer, they are helping to coded products in a list of more than a thousand products and provide real time answers to their queries.

Video Content:

In these types of trends make a video explaining about the product to the customer in few minutes.After watching the video, the customers get detail information about the product and finally he can take decision regarding the purchasing of products.

Direct to Consumer Model:

In this model the manufacturer direct dealing to the customers and save the money which has incurred on middleman. One of the important benefits of this model, the customers gets their products at much better price.

Voice Assisted Search:

In these types of trends, the buyers would not have to waste to plenty of time of reading a product. They must read to product description by voice assisted search.

Social Media:

It is the trend that has made the world to become a global a village. By using different types of social media app such as Facebook Twitter, Instagram etc. buyers complete their whole transactions about viewing and paying of the product.

Advantages or Benefits of E-commerce Business:

1. The customers get products at affordable prices. This is one of the huge benefits of e-commerce business to customer.
2. E-commerce businesses also give consumer access to a wealth of comparative information.
3. Companies can increase customer value and satisfaction through product and service refinements.
4. E-commerce business avoids the expenses of maintaining a store, costs of rent, insurances etc.
5. A customer gets opportunity to buy wide range of products and services at one place.
6. Consumers can easily compare their products to other brands based on prices and discounts and finally take a decision relating to purchase of products.
7. In e-commerce transaction customer saves their lot of times which is incurred on shopping.
8. E-commerce business collect the information about the customer behaviour, needs and their wants and using them for marketing planning in future period.
9. E-commerce business provides twenty-four hours buying and selling facility to customers.
10. E-commerce business saves the cost money incurred on middleman, which generally falls on consumer.

Conclusion:

The ecommerce has an online trading activity of business. Buying and selling the goods and services over the internet, computers, smartphones, tablets and other social media applications. Electronic commerce operates their businesses in different types of segments such as business to business, business to consumer, consumer to business&consumer to consumer. Ecommerce provides cheaper and more efficient distribution channels of their product and services. It provides wider selection of goods and services according to customer wants, needs and behaviour. In this running world ecommerce has tremendous scope in future period.

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Role of Women Organizations During Colonial India

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Introduction

Impact of modern Western culture gave birth to a new awakening in India. Thoughtful Indians began to look for the defects of Indian society and for ways and means of removing them. They were impressed by modern science and the doctrines of reason and humanism. The educational experiments of the late nineteenth century produced a 'new woman'. For the first time in Indian history women began to communicate with women outside their families and local communities. On the one hand there was a small group of women who share English as a common language. On the other hand, there were growing numbers of women literate in the vernaculars which enabled them to learn about women's issues in the new journals. Both groups, marginalized by more traditional society, sought championship of women like themselves, with the support of their male they joined the new clubs and associations formed for women. From small local clubs and women's auxiliaries of the Indian National Congress & the National Social Conference came a variety of organization and associations that reflected women's concerns. By the eve of Independence in 1947 a coalition of national women's organisations would rightfully claim it was the second most representative body in India. This research paper critically analyzed the need and emergence of women organization in pre-Independent India.

Meaning Of Feminism

The emergence of various women organizations was understood as feminism by some section of the people. So, it is imperative to know what is Feminism. The term 'Feminism' is derived from the Latin word Femina means 'Having the qualities of female'. Feminism is commonly used to all those who seek struggle to end women's subordination. Feminism is an ideology for women's liberation. It sees women as an oppressed section and it motivates women's struggle against their oppression. It believes in the principles of equal work of all human beings. It says that women's issues are political issues and consider those issues as the problems.

Historical Perspective Of Human Rights

The idea of women's human rights is often cited as beginning in 1792 with Mary Wollstone Craft's book Vindication of the Rights of Women, argued that the women should have equal rights to education, employment, property and the vote. Half a century later women's rights convention was held at Seneca Hall in America in 1848. James's influential History of British India argued that women's position could be used as an indicator of society's advancement. Mill explained that as societies advanced "the condition of the weaker sex is gradually improved, till they associate on equal terms with the men and occupy the place of voluntary and useful coadjutors. The subjection of Women first published in 1869, provided a full-scale analysis of women's situation and the advantages to society of giving them full legal and political equality with men. He advocated women's rights and political equality. Protection of their rights is prerequisite of their development. The Preamble of United Nations Charter begins by referring a 'faith in fundamental human rights, in the dignity and worth of human persons, in the equal rights of men and women and of nations large and small. The UN Charter was the first instrument, which recognized 'the equal rights of man and woman' and the member states adopting the aims and principle of the UN were supposed to bring an end to any discrimination on the ground of sex. The human rights of women and of the girl child are an inalienable part of universal human rights.

Role Of Women Organisations During Colonial India

The first organisations for women were founded by Keshub Chandra Sen in Bengal, leader of Brahma Samaj to improve women's status. In the same way Pandita Ramabai Saraswati wife of Justice Ranade set up the Arya Mahila Samaj in 1882 for the upliftment and enlightenment of women. The first meeting of the Bharata Mahila Parishad was held lady Bhalachandra was the President, Ramabai Ranade and Mrs. Abbas Tyabji were the speakers. The main topics were female education, abolition of Sati etc., evil social customs. Women's associations called by various titles, sprang up all over India in the nineteenth and early twentieth centuries. Saraladevi Chaudhari planned a permanent association of Indian women. The Bharata StreeMahamandal planned to open branches in all parts of India to promote female education. These people regarded purdah as the main hurdle to female education.

Women's Indian Association

This association is a combination of Indian and Foreign women members. Indeed, Tamil Madar Sangam had joined with British women and formed Women Indian Association and they gave membership to both Indians and Europeans. Annie Besant was the first president, Margret Cousins, DorthyJinarajadasa, Malati Patwardhan, Ammu Swaminathan, Dadhabhoy, Ambujammal are. as honorary secretaries . Within five years it had -three branches, twenty centers and 2,300 members. Each branch accepted the main aims of the association and they exposed the women opinion. This organization defined women a religious 'by nature' and encouraged non-sectarian religious activity. To spread education to women they set up adult classes, sewing and first aid. This association had been politically active, they sent a delegation to meet the Secretary of State Lord Montague in 1917 to request the franchise for women. They also started philanthropy and involved in feeding poor widows. They published STRI DHARMA monthly journal to propagate women's conditions. This association competed with self-respect movements.

National Council For Women

National Council of Women in India was established as an All-India Women's Organisation. By 1925 women of Bombay, Calcutta and Madras had link with the council. This council became a branch to the International Council of Women. Meerabai Tata, as Chairman viewed purdah, caste differences, female education to change social conditions. She urged men to support female education and freedom of movement for women. This organization looked to government for the improvements they desired. Their main concern was that India 'measure up' in international terms, to minimum standards for health and welfare found elsewhere

The All-India Women's Conference

This organization was first met in Poona in January, 1927. Mr.Oaten, Director of Public Instruction in Bengal urged women to decide what kind of education was suitable for Indian girls and then tell the government 'with one voice what they want, and keep on telling us till they get it'. Margret Cousins sent circular letters to women leaders throughout India suggesting they organize local conferences to discuss educational issues. Each conference would prepare at an All-India Conference to be held at Poona. Maharani Chinnaabai Saheb Gaekwad of Baroda was the first president of its conference and Rani Saheb of Singli gave opening remarks and stated that education will help them to understand their position as 'supplemental' to that of men. They focused on purdah, child marriage and female literacy. It didn't advocate mass education for all women, they agreed that the educational system should concentrate as producing educated wives and mothers but they also wanted women doctors, professors, lawyers. The 1928 conference of this organization decided that unless harmful social customs were eradicated no progress in educational matters would develop. This conference faced a series of challenges between 1930-1940. Amit Kaur, one of the Gandhi's followers wanted the organisation to emerge as a political force for women. This organization was commuted to a comprehensive legal bill for women.

Women Organisations In Andhra

Though early National Women Associations emerged in 1917, the women associations came in 1902 in Andhra. In 1902 ASIKA STREE SAMAJAM was established by Burra Buchi Bangaramma in coastal Andhra. In 1909 Bharata Mahila Sarada Samajam was established in Anantapur. In 1927, Andhra Rastra Mahila Association was established and Ramasubamma a famous leader of the association condemned the purdah system and stress the need of female education. The above all associations worked for female education, fight against child marriages, Divorce Act. They proposed marriage age for girl to be enhanced to 16 years by amending the Sarada Act of 14 years

Conclusion

We can conclude with various questions who benefited from these organisations? The answer would be that the large numbers of middle-class women gained experience in working with organisational structures. They learned the dynamics of the politics of the world, they put their new-found wisdom about petition politics to good use as they fought for women's franchise and woman's legal rights. Women like MirabenKara, Ramasubamma of Kadapa, Begum Amiruddin put hard work for the upliftment of women pitiable conditions. Hence, the history of the ogranisationsis of the notable accomplishments and severe limitations. Women as a class, suffer acute deprivation in all respects of their lives, so, women need more consideration. Protection of their rights is prerequisite of their development. Women rights are human rights, which need to be protected particularly in relation to violence sexuality and reproductive healthy women should have equal rights in inheriting land and property. Human rights discourse had traditionally been male dominated in the sense that, in what is essentially a man's world, men have struggled to assert their dignity and common humanity against overbearing state apparatus. In the words of UN Secretary

General, Kofi Annan, “Women’s rights are the responsibility of all humankind; combating all forms of violence against women is duty of all humankind and achieving the empowerment of women is the advancement of all humankind.” Some major conventions and conferences have been held at the international and national levels. Many acts and laws are being made by government to make women legally strong and give them protection against any type of discrimination.

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Recent trends in English literature

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Abstract-

This paper aims to study and illustrate how the recent trends such as digital media, blogging, vlog, electronic technology and other forms of social networking taking important place in recent literature. There are writers who are using this recent trends in the literature. Many writers who are writing, translating and transcreating into English. Creativity, translation, life skills, social skills, dalit literature, diasporic writing, post modern, post colonial and feminist writing is growing in Indian English literature. The elements of communication like reading and writing has been changed to blogging, twittering, vlogging and micro blogging. Today the habit of reading is decreasing so the writers are also replacing themselves with technology. Literature is available on the social media.

Keywords- social networking, digital media, diasporic, communication, translation.

Introduction-

Main trend has happened in the postmodernism and postcolonial literature which reflects society in the postmodern way. The trio Raja Rao, Mulkraj Anand and R. K. Narayan, witnessed a talented writers. The writers of Pre independence dealt mostly with patriotism and nationalism in their writing. They also wrote about freedom struggle, writers like M. K. Gandhi, Jawaharlal Nehru particularly focused on prevalent tradition of society in their writings. But the writers of post independence like Shashi Deshpande, Shashi Tharoor, Chetan Bhagat, Arundhati Roy and Bharati Mukherjee have written literature about separation, heroism, power, illiteracy, terrorism, naxalism, socialism and feminism. Most of the writers focused upon married women's life about transcultural alienation.

Modern Trends-

Fundamental advancements in the present day Indian literature has been the increase of women's activist, reflect the history, society, political area, monetary status and convention of Indian subcontinent.

Diaspora Writing-

Indian diaspora had a noticeable influence in Indian English writing V. S. Naipaul, Salman Rushdie, Amitav Ghosh, Vikram Seth, Bharati Mukherjee, Arundhati Roy are noticeable names among them. Diaspora literature involves the idea of homeland a place from where the displacement occur and narratives of harsh journeys undertaken on account of economic compulsions. Post colonial writers mainly focused on diasporic theme in the literature. During the post independence period Indian English literature has undergone many transformation be it in the field of poetry, drama and fiction. These got an enormous change on its surface and offer. The genuine interest and mindset of the propelled people particularly in 21st century have changed.

Translation as a new trend in literature-

In today's globalised society, translation and interpreting are gaining rapidly and relevance as a means to foster communication and dialogue in increasingly multi-cultural and multilingual environment. Translation plays a great role in literature. Translation has played a very important role to understand the literature and culture of different languages without which we cannot do a study of various literary works written in different languages thus literature and translation humanize relationship between people and nation.

What is Translation-

Translation is the process in which the written communication or text in the first language is produced as the written communication or text in the second language interpreting in the same meaning here the text in the first language is called 'source text' and the equivalent text that communicates the same meaning in other language is called 'target text'.

Emergence of dalit and women's autobiographical literature-

Dalit literature and dalit writers are the found in the post independence period. Dalit literature is a new phenomenon in the modern era of literature where tormenting experiences of dalit, untouchable writers are exposed to present the contemporary social, mental condition before dalit and non-dalit readers. Mulkraj Anand was the first to write about flight of dalit people's condition through his novels like 'Untouchable', 'Coolie' in English and there are simultaneously translated in English and different languages. The style of dalit literature covers wide range of literary genres.

There is a plenty of dalit poetry expressing violent nature of society. Narayan Survey was popular poet who has returned 'Vidyapeeth', Keshav Meshram who has written 'Utkhanan' (Excavation), Namadev

Dhasal – ‘Golpitha’ (The red light zone). The new generation of dalit poetry emerged in contemporary period as a revolt or protest against exploitation and oppression. The term ‘Autobiography’ as a genre has emerged in the late 18th century. Women’s autobiographical studies are among the most recent development of autobiography theory. It emerged in the 1980 at the intersection of feminist theory and autobiography theory with the publication of Jelinek’s edited collection of studies ‘Women’s Autobiography: Essay in Criticism’ (1980), in which gender was introduced as an analytical tool in reading woman’s autobiographies. Smith and Watson who in their women, ‘Autobiography Theory’ (1998), transported autobiography beyond limitations of prose writing, discussed through such notions as: identity, experience, agency pedagogy, genre, memory, gender, sexuality and the body.

Conclusion-

This paper presents an overview of trends in English literature. We are living in a world where everyone wants knowledge but with minimum words. The present world is full of signs, concepts and words.

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A Survey on Big Data Analytics: Challenges, Open Research Issues and Tools

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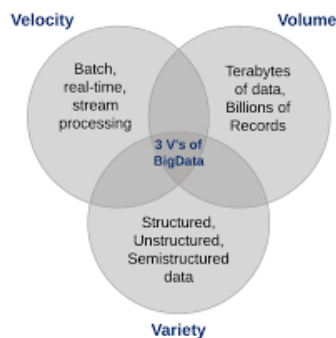
Abstract

A huge repository of terabytes of data is generated each day from modern information technology and digital technologies such as Internet of Things and cloud computing. Analysis of these massive data requires a lot of efforts at multiple levels to extract knowledge for decision making. Therefore, big data analysis is a current area of research and development. The basic objective of this paper is to explore the potential impact of big data challenges, open research issues, and various tools associated with it. As a result, this article provides a platform to explore big data at numerous stages.

Introduction

In digital world, data are generated from various sources and the fast transition from digital technologies has led to growth of big data. It provides evolutionary breakthroughs in many fields with collection of large datasets. In general, it refers to the collection of large and complex datasets which are difficult to process using traditional database management tools or data processing applications. These are available in structured, semi-structured, and unstructured format in petabytes and beyond. Volume refers to the huge amount of data that are being generated everyday whereas velocity is the rate of growth and how fast the data are gathered for being analysis. Variety provides information about the types of data such as structured, unstructured, semi structured etc. The fourth V refers to veracity that includes availability and accountability. The prime objective of big data analysis is to process data of high volume, velocity, variety, and veracity using various traditional and computational intelligent techniques

1. The following Figure refers to the definition of big data. This will help us in obtaining enhanced decision making, insight discovery and optimization while being innovative and cost-effective. It is expected that the growth of big data is estimated to reach 150 billion by 2021



2. From the perspective of the information and communication technology, big data is a robust impetus to the next generation of information technology industries

3. The key problem in the analysis of big data is the lack of coordination between database systems as well as with analysis tools such as data mining and statistical analysis. These challenges generally arise when we wish to perform knowledge discovery and representation for its practical applications.

4. Additionally, the study on complexity theory of big data will help understand essential characteristics and formation of complex patterns in big data, simplify its representation, gets better knowledge abstraction, and guide the design of computing models and algorithms on big data

5. Much research was carried out by various researchers on big data and its trends. However, it is to be noted that all data available in the form of big data are not useful for analysis or decision making process. Industry and academia are interested in disseminating the findings of big data.

6. Recent technologies such as hadoop and mapReduce make it possible to collect large amount of semi structured and unstructured data in a reasonable amount of time. The key engineering challenge is how to effectively analyze these data for obtaining better knowledge. A standard process to this end is to transform the semi structured or unstructured data into structured data, and then apply data mining algorithms to extract knowledge. A framework to analyze data was discussed by Das and Kumar

7. The major challenge in this case is to pay more attention for designing storage systems and to elevate efficient data analysis tool that provide guarantees on the output when the data comes from

different sources. Furthermore, design of machine learning algorithms to analyze data is essential for improving efficiency and scalability.

8. Knowledge Discovery and Computational Complexities Knowledge discovery and representation is a prime issue in big data. It includes a number of sub fields such as authentication, archiving, management, preservation, information retrieval, and representation. There are several tools for knowledge discovery and representation such as fuzzy set, rough set, soft set, near set, formal concept analysis, principal component analysis etc to name a few.

9. Additionally many hybridized techniques are also developed to process real life problems. All these techniques are problem dependent. Further some of these techniques may not be suitable for large datasets in a sequential computer. At the same time some of the techniques has good characteristics of scalability over parallel computer. Since the size of big data keeps increasing exponentially, the available tools may not be efficient to process these data for obtaining meaningful information.

11. Here the challenges of big data analytics are classified into four broad categories namely data storage and analysis; knowledge discovery and computational complexities; scalability and visualization of data; and information security. We discuss these issues briefly in the following subsections.

1. Data Storage and Analysis In recent years the size of data has grown exponentially by various means such as mobile devices, aerial sensory technologies, remote sensing, radio frequency identification readers etc.
2. These data are stored on spending much cost whereas they ignored or deleted finally because there is no enough space to store them. Therefore, the first challenge for big data analysis is storage mediums and higher input/output speed. Additionally, we state open research issues in big data.
3. Furnishes the open research issues that will help us to process big data and extract useful knowledge from it.
4. Provides an insight to big data tools and techniques to summarize outcomes.

Challenges in Big Data Analytics

Recent years big data has been accumulated in several domains like health care, public administration, retail, biochemistry, and other interdisciplinary scientific researches. Web-based applications encounter big data frequently, such as social computing, internet text and documents, and internet search indexing. Social computing includes social network analysis, online communities, recommender systems, reputation systems, and prediction markets where as internet search indexing includes ISI, IEEE Xplorer, Scopus, Thomsonand inconsistencies. It leads to a great challenge to develop techniques and technologies that can deal computational complexity, uncertainty, and inconsistencies in a effective manner. Scalability and Visualization of Data The most important challenge for big data analysis techniques is its scalability and security. In the last decades researchers have paid attentions to accelerate data analysis and its speed up processors followed by Moore's Law. For the former, it is necessary to develop sampling, on-line, and multiresolution analysis techniques. Incremental techniques have good scalability property in the aspect of big data analysis. As the data size is scaling much faster than CPU speeds, there is a natural dramatic shift in processor technology being embedded with increasing number of cores. This shift in processors leads to the development of parallel computing. Real time applications like navigation, social networks, finance, internet search, timeliness etc. requires parallel computing. The objective of visualizing data is to present them more adequately using some techniques of graph theory. Graphical visualization provides the link between data with proper interpretation. However, online marketplace like flipkart, amazon, e-bay have millions of users and billions of goods to sold each month. This generates a lot of data.

Open Research issues in Big Data

Big data analytics and data science are becoming the research focal point in industries and academia. Data science aims at researching big data and knowledge extraction from data. Applications of big data and data science include information science, uncertainty modeling, uncertain data analysis, machine learning, statistical learning, pattern recognition, data warehousing, and signal processing. Effective integration of technologies and analysis will result in predicting the future drift of events. Main focus of this section is to discuss open research issues in big data analytics. The research issues pertaining to big data analysis are classified into three broad categories namely internet of things (Iot), cloud computing, bio inspired computing, and quantum computing. Iot for Big Data Analytics Internet has restructured global interrelations, the art of businesses, cultural revolutions and an unbelievable number of personal characteristics. Currently, machines are getting in on the act to control innumerable autonomous gadgets via internet and create Internet of Things (Iot). Iot presents challenges in combinations of volume, velocity and variety. In a broader sense, just like the internet, Internet of Things enables the devices to

exist in a myriad of places and facilitates applications ranging from trivial to the crucial. Knowledge acquisition from Iot data is the biggest challenge that big data professional are facing. Therefore, it is essential to develop infrastructure to analyze the Iot data.

Machine learning algorithms and computational intelligence techniques is the only solution to handle big data from Iot prospective. Key technologies that are associated with IoT are also discussed in many research papers .The final phase is to apply discovered knowledge in various applications. It is the ultimate goal of knowledge discovery. The knowledge exploration system is necessarily iterative with the judgment of knowledge application. For better visualization, knowledge exploration system Cloud Computing for Big Data Analytics. Big data application using cloud computing should support data analytic and development. This can help to solve large applications that may arise in various domains. In addition to this, cloud computing should also enable scaling of tools from virtual technologies into new technologies like spark, R, and other types of big data processing techniques. Big data forms a framework for discussing cloud computing options. Depending on special need, user can go to the marketplace and buy infrastructure services from cloud service providers such as Google, Amazon, IBM, software as a service (SaaS) from a whole crew of companies such as Net Suite, Cloud9, Job science etc.

Bio-inspired Computing for Big Data Analytics Bio-inspired computing is a technique inspired by nature to address complex real world problems. Biological systems are self-organized without a central control. A bio-inspired cost minimization mechanism search and find the optimal data service solution on considering cost of data management and service maintenance.

Tools for Big Data Processing

1. Map Reduce
2. Apache Spark
3. Storm

Most of the available tools concentrate on batch processing, stream processing, and interactive analysis. Most batch processing tools are based on the Apache Hadoop infrastructure such as Mahout and Dryad. For example Dremel and Apache Drill are the big data platforms that support interactive analysis. These tools help us in developing the big data projects.

The different companies those who have implemented scalable machine learning algorithms are Google, IBM, Amazon, Yahoo, Twitter, and facebook .

The foremost advantage is that in addition to MapReduce, it also supports streaming data, machine learning, and graph algorithms.

Another advantage is that, a user can run the application program in different languages such as Java, R, Python, or Scala.

Suggestion for Future Work

The amount of data collected from various applications all over the world across a wide variety of fields today is expected to double every two years. It has no utility unless these are analyzed to get useful information. This necessitates the development of techniques which can be used to facilitate big data analysis. The development of powerful computers is a boon to implement these techniques leading to automated systems. The transformation of data into knowledge is by no means an easy task for high performance large-scale data processing, including exploiting parallelism of current and upcoming computer architectures for data mining. These models are also very much fruitful for analysis.

Machine learning concepts and tools are gaining popularity among researchers to facilitate meaningful results from these concepts. Different techniques used for the analysis include statistical analysis, machine learning, data mining, intelligent analysis, cloud computing, quantum computing, and data stream processing. We believe that in future researchers will pay more attention to these techniques to solve problems of big data effectively and efficiently.

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The Role of Human Resource Management in Organizations

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Abstract:

Human resources have evolved from a typical hire-and-fire function to a strategic partner at the table alongside finance, operations, and other business units that are not profit centers for the company. HR's role, like that of all other departments, is to make sure that the company gets the most out of its people. In this paper, we'll look at why companies need an HRM strategy, as well as the business factors that make it so important for the company's success. Firms must continually innovate and remain "ahead of the curve" in terms of business practises and strategies in order to flourish in the unpredictable and volatile commercial climate. HRM becomes a vital instrument for management to assure success as a result of this desire to be at the front of the pack.

Keywords: Organization, Business, Environment, Human Resource, Management

Introduction:

Human Resource Management includes conducting job analyses, planning personnel needs, recruiting the right people for the job ,orienting and training, managing wages and salaries, providing benefits and incentives, evaluating performance, resolving disputes, and communicating with all employees at all levels. Examples of core qualities of HR management are extensive knowledge of the industry, leadership, and effective negotiation skills, formerly called personnel management. Any organization, without a proper setup for HRM is bound to suffer from serious problems while managing its regular activities. For this reason, today, companies must put a lot of effort and energy into setting up a strong and effective HRM. Aristotle told us that 'the whole is more than the sum of its parts', this is certainly true when it comes to having all managers fully understanding the organization's documented Business Plan and ensuring the alignment of management thinking... simply the process of ensuring that all managers are working and driving the organization in the same direction.

Objective of Study:

1. To investigate the need of Human Resource Management.
2. To investigate the functions of Human Resource Management.
3. To investigate the importance of Human Resource Management.

Research Methodology:

The research is primarily based on secondary data. Books, research articles, and research journals are some of the data sources.

Literature Review:

Recruitment and selection, training and development, performance assessment, career planning, Job description, remuneration and reward, and employee involvement were recognized as nine fundamental HRM activities based on a review of the literature. To attain competitiveness, recruitment and selection essentially strive to attract the largest number of highly qualified candidates and choose the best.

Because of the acquisition of extra information, skills, and talents, training and development produce both concrete (increased productivity, quality of goods and services, and resource optimization) and intangible (elevated self-esteem, high morale, and employee happiness) effects. Kun (2000) emphasized the need of corporations investing extensively in worker training in order to execute customer-focused strategies. Blair and Sisakhti (2007) discovered that investing in training and development pays off handsomely. According to research, investing in training provides firms with a strategic edge Bitner and Zeithmal, (2001).

Need for HRM:

Human Resource Management is needed to achieve the following objectives:

1. To offer, generate, use, and inspire people in order to achieve organizational objectives.
2. To give opportunities, facilities, and required motivation to individuals and groups in order for them to grow in tandem with the organization's growth through training and development, compensation, and other means.
3. To effectively exploit the workforce's skills and abilities, i.e., to make good use of human resources
4. To foster a sense of belonging and team spirit among employees, as well as to stimulate employee suggestions.
5. To maintain a high level of morale and good human relations inside the company.

6. Ensure individual and group integration in ensuring organizational effectiveness
7. To maximize employee job happiness and self-actualization by prompting and stimulating each individual to reach his or her greatest potential.

The beneficial effects of these functions are discussed here:

Recruitment and Training:

One of the key roles of the human resource department is this. HR managers devise plans and tactics for attracting the best candidates. They create the criteria that are most suited to a certain job description. Formulating an employee's duties and the extent of work allotted to him or her is one of their other recruitment jobs. An employee's contract with the firm is produced based on these two considerations. When necessary, they also give training to staff in accordance with the organization's needs. As a result, employees have the chance to hone their present talents or learn new ones, which will enable them to take on additional responsibilities.

Performance Appraisals:

HRM promotes employees in a company to perform to their full capacity and provides them with ideas that might assist them enhance the company. The team meets with each member of the staff on a regular basis to present all relevant information on their performance and to clarify their unique tasks. This is advantageous since it allows them to develop a clearer picture of their expected goals, allowing them to execute them with the best possible effort. Employees are motivated by performance reviews when they are given on a regular basis.

Maintaining Work Atmosphere:

This is an important part of HRM since an individual's performance in an Organisation is primarily influenced by the work environment or culture that exists at the workplace: One of the benefits that an effective human resource staff may provide to employees is a good working environment. An employee's greatest qualities may be brought out in a safe, clean, and healthy setting. Employees like their jobs more when they work in a friendly environment.

Managing Disputes:

There are various areas in an Organisation where employees and bosses may have disagreements. It's safe to state that disagreements are nearly unavoidable. In such a situation, the human resource department serves as a consultant and mediator to effectively resolve those concerns. They begin by listening to the employees' complaints. Then they devise effective methods for resolving the issues. To put it another way, they respond quickly and prevent situations from getting out of hand.

Importance of HRM:

Ten Reasons Why the Human Resources Department Is Important:

1. **Human Capital Value:** It is critical to have an in-house human resources department. An in-house human resources team or a human resources professional on staff can help raise awareness of the value of human capital to a company's bottom line. Human capital is especially important for small organizations since many of them have workers who perform many functions. When a firm has a smaller staff, even one employee leaving presents a significant hole to replace, posing a risk to the company's viability.
2. **Conflict Resolution:** Given the range of personalities, work styles, backgrounds, and degrees of experience among employees, workplace conflict is unavoidable. A human resources manager or a member of staff who has been professionally trained to deal with employee relations issues can recognize and resolve disagreement between two employees or between a manager and an employee, restoring healthy working relationships.
3. **Training and Development:** Human resources assesses the organization's present workforce to identify the kind of skills training and employee development that are required to improve skills and credentials. Identifying training needs for current employees can help companies in the early stages of development or growth. It's a lot less expensive than hiring more people or finding more competent individuals. It's also a method that can help with staff retention and reducing turnover.
4. **Employee Satisfaction:** Human resources professionals are frequently tasked with measuring the degree of employee happiness, which is sometimes an unclear metric at best. Human resources determine what causes employee unhappiness through carefully planned employee surveys, focus groups, and an exit interview technique, and then solves those concerns to inspire workers.
5. **Performance Improvement:** Human resources is in charge of creating performance management systems. Employees may end up in occupations that aren't ideal for their talents and experience if there isn't a human resources staff member to create a strategy that assesses performance. Furthermore, employees whose performance falls short of the employer's expectations might remain on the payroll, wasting money on ineffective staff.

Conclusion:

HRM must be seen through the lens of the organization's broader strategic goals, rather than as a stand-alone department with a unit-based or micro approach. The objective is to take a holistic approach to HRM, ensuring that there are no fragmented tactics and that HRM policy is properly integrated with the organization's goals. For example, if employees' training needs are merely fulfilled with haphazard trainings on a variety of topics, the company risks losing not just the time spent in training but also the employees' sense of direction. As a result, a company that takes its HR regulations seriously will guarantee that training is targeted and current.

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‘An Articulation of Indian Ethos Through Indian English Novels’

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Abstract

Identifying a stand-alone Identity of a country is not easy at all given the impact that globalization has led on the lives and culture of people in today's world, Now the time has come to teach and learn our Indian values with the help of such modern versions to the epics so it would be easy for this young generation to relate with it in the age of digitalization. These epics are the treasure of knowledge about humanity, morality, philosophy, culture, and religion. There is a lot of scope for studying the values and ideals of Indian tradition. There is ample scope to study the family values as this particular research offers us teachings of how an ideal king, ideal father, ideal mother, an ideal son, an ideal brother, an ideal husband, and an ideal wife should behave in life. This is an interesting, unique investigation of Indian ethos as a representation of culture, communication, identity, religion, and Philosophy.

Key Words: articulation, digitalization, identity, culture, values.

Introduction

Before we go through the Indian ethos, it is really important to understand Ethos ,it can be simply defined as a set of beliefs, ideas, and philosophies. Ethos is all about the social behavior and relationship of a person or group. The word ethos is derived from the Greek word, 'ethikos' which means civilized, viewing honest temperament, accustomed place, morality, showing moral character. Ethos is a Greek word meaning, 'character' that is used to describe the guiding beliefs, morals, and ideals that characterize community, nation, or ideology. The Greeks also use this word to refer to the power of music, to influence emotions feelings, thoughts, behaviors, and even morals.

What is ethos?

The Use of this word ethos in rhetoric is closely associated with the Greek terminology used by Aristotle in his concept of three artistic proofs or modes of persuasion. Aristotle described three artistic proofs 1) Useful skills and practical wisdom 2) Virtue and goodwill and last but not least 3) Goodwill towards the audience.

According to TS Eliot ethos is the spirit which motivates ideas and customs. in 1940 he wrote the general methods of the people they have to govern determines the behavior of politicians (T.S.Eliot, P-25) Similarly the historian Orlando Figes wrote in 1996 that in Soviet Russia of 1920 the ethos of the Communist party dominated every aspect of public life. Cambridge Advanced Learner's Dictionary defines ethos as a set of beliefs, ideas, and others about social behavior and relationship of a person or group. Whereas Oxford Advanced Learner's Dictionary Defines ethos as the moral ideas and attitudes that belong to a particular group of society. According to Oxford Concise English Dictionary ethos is the characteristic spirit of a culture or community as it is reflected in its attitudes and aspirations.

Oxford English Dictionary defines ethos as a means of habitual character disposition and tendency of a set of people or races. In simple words, ethos stands for human society that embodies a certain culture or system based on human and other natural values of life. In short, ethos is the disposition of character or set of fundamental values particular to a specific person, people, culture, or movement. It is associated with the geographical locations, languages, race, religion, and culture of a nation.

What is Indian ethos?

When it comes to Indian ethos, it is all about what can be termed as National Ethos. Indian ethos refers to the principles of self-management and governance of society, an entity assisting by wisdom as revealed and brought forth by great scriptures like Vedas, Upanishads as The Gita, The Mahabharata, The Bible, and The Quran. This wisdom evolved through the old practices of Indian history, philosophers, and religious groups, and It is now found to execute for self-management and good governance of a stormy society and business environment or even a politically divided world. Alexander the Great, Tsang Hi from China, Abdul Razzak from Iran came to India and observes the exceptional importance of the Indian ethos in its social institutions, religious structures, moral framework, and peculiarities of food ornaments and garments. The Vedic culture is prominently reflected in Hinduism, the scriptures like Vedas and Upanishads as the Puranas and the Bhagavad-Gita have impressed the lifestyle of the majority of the people in India. Due to the intermingling of many cultures for centuries after century's Indian society is identified as unity in diversity. It is the amalgamation of complex customs and traditions representing

different religious identities, there is a multitude of beliefs and convictions; they are interlinked features of an integrated diverse society. The Indian Constitution celebrates tolerance towards various religious identities along with their linguistic differences. People living in India as a whole explore various cultures, languages, and customs. Muslims, Sikhs, Jains, Christians, and Zoroastrians also reside amicably in India exploring their own identities. Such complex structure of society, philosophy, religions, and languages has led to the creation of Indian ethos. The crux of Indian ethos lies in its oral literature and legacy of folk lyrics. Stories have been transforming from generation to generation. Some of the oral literature was preserved in a written form in the languages like Pali, Prakrit, Sanskrit, etc. Through this evaluative research work, we will understand the articulation of the Indian Culture, Communication, Religious concepts, Family values, Moral values, Identity, and most important of all Philosophy.

An articulation of Culture, Communication, Religion, Identity, and Philosophy

Ethos in India has a specific understanding and impact and territory covers different geographical areas, languages, culture, religion, tradition, society, and philosophy. The purpose of human life is enshrined in the opposition as for the good of all. There was an apple philosophy behind this which stated that the whole world is one family one understanding, underlying Idea behind this may require scholarly rigor and erudition given the deep philosophical essence of the Vedic text, there are simplistic explanations that makes sense. Kabir the famous saint of India for instance can be read to get insightful fractions of Indian ethos in his simple and early style. Famous and often repeated quote of Kabir is, "Sai itna dijiye, ja mein Kutumba samaye, main Bhi bhukha na rahoon, sadhu na bhukha jaaye" translating this in English becomes, ' O God, give me that much so that I can take care of my family; I do not remain hungry, nor the person who comes to me for or alms.

In the Hindi popular title song of Bollywood hit of the 1950s, Jis Desh Mein Ganga Bahti hai, this idea was beautifully and melodiously brought out, translating those lines in English becomes, 'We Indians love our guests more than ourselves and we do not crave for more, rather enjoy with little'. The Indian ethos has always valued Parmartha for the good of others. The richness and the depth of this ethos are gradually being lost as we are becoming too preoccupied with self-interest under the influence of alien values and cultures that do not hold humanity on the same pedestal as Indian ethos. Indian ethos has always been talked about and practiced as well.

Indian writers celebrate Indian ethos and try to project through the novels like Ram Mehta's Inside the Haveli and Kamala Markandaya in her novels. Amitav Ghosh, Shashi Tharoor, Amish Tripathi, etc. are some of them. Perhaps the most well-known writer of mythology is Dr. Devdutt Pattanaik who is famous for mixing traditional ideas with the modern world. His works are well researched and show the age-old tales in a new light, for instance, Myth= Mithya, Jaya: An illustrated retelling of the Mahabharata and Sita: An illustrated retelling of the Ramayana. Kavita Kane is an Indian women author who is a favorite among women readers, She wrote about the forgotten female characters of great Indian epics and retells the tales through the point of view of women, for instance, Karna's wife: The outcast queen, Sita's sister; Menaka's choice and Lanka's princess, etc. Chitra Banerjee Divya Kumari who is a professor of creative writing at the University of Houston retells the story of the Mahabharata from Draupadi's point of view in her novel, 'A Palace of Illusions'. Ashok Banker is an Indian author and screenwriter, famous for crime thrillers, essays, literary criticism, fiction, and mythological retellings. His works on the Ramayana series contain eight volumes, an imaginative retelling of the ancient Sanskrit epic poem. His Krishna series also contains eight parts and the Mahabharata series has six parts that are quite famous. Amish Tripathi is famous for the Shiva Trilogy which focuses on a man's journey and how his legend turned him into a God. After this successful trilogy he came up with the trilogy called Ramchandra Series which contains 1) Ram: Scion of Ikshvaku 2) Sita: Warrior of Mithila 3) Ravan: Enemy of Aryavarta. This Ramchandra Series explores the life of Ram, his band of brothers, and his wife Sita, as they lead India out of the darkness of chaos and into the light. Amish believes that the Hindu gods were not mythical beings or a figment of rich imagination. According to him, they were creatures of flesh and blood, like you and me and they achieved Godhood through their karma, their deeds. He also believes that their blood runs in our veins as they were our ancestors.

Amish thinks that the words Vishnu and Mahadev are not individual names. They are in fact titles, given to persons who are the greatest of leaders, who become God-like. Amish Tripathi's novels are not only about captivating Adventures, Myths, History, and the use of symbols but also they touch on the issues, Honesty, Goodwill, Sacrifice, and above all family values. Indian ethos as a representation of culture, religion, identity, and philosophy through the Ramchandra series of Amish Tripathi is a modern take or representation of the epic Ramayana which not only deals with myth, history, and philosophy but also honesty, morality, family values, culture, religion, and sacrifice. With this topic, there is scope to

present the need and importance of Indian ethos in the age of globalization. This research can strengthen the positive view about learning our Indian heritage that leads to wisdom, liberalism, pluralism, and knowledge. It helps to understand the quality of writing any work of literature in modern style which can connect to the common people easily.

Conclusion

Thus, revisiting our Indian heritage and articulation of Indian ethos through the Indian mythological novels is an enriching experience. The everlasting appeal of these treatises still influences to a great extent of cultural life and behavior patterns of Indians. India is probably the only country that has such a rich heritage that has been showcased in epics such as The Gita, The Ramayana, and The Mahabharata.

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Democratic Governance: What role do citizens play?

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Abstract:

Government in modern era allows citizens to exercise and enjoy many rights and freedom and on the other hand, it gives them responsibilities too. Democratic governance is almost a gift for the citizens if they are born in democratic country and that is why, citizens must do everything to save democracy at any cost. To be active and effective citizen people need to be aware and understand their rights and responsibilities. All citizens living in a democracy have their civil and political rights which are articulated in the highest laws document of the country. There are strong debates about the rights and responsibilities of the citizens and the rules and responsibilities of the government. In democracy citizen must be aware of their rights and responsibilities, as without awareness among the citizens a government may turn into monarchy. These documents explain the rights and responsibilities and contribution of the citizens toward democratic government.

Key Words: Democratic Governance, Citizens, Citizens' Rights, Citizens' Responsibility

Introduction:

Now a days democratic government is the most popular system and there are various forms of democracy found worldwide. During this time different forms of perception of citizenship have also emerged and expectation of citizens from government have changed. The notion of democracy has evolved over time considerably. The original form of democracy was direct democracy appeared in 5th century BC to denote the political system then existing in Greek city state, notably classical Athens to mean rule of the people. Nearly all modern western style democracies are as same as representative democracy.

A discussion on democracy inevitably reaches the subject of citizenship. Like democracy, the meaning of citizenship is also open to debate. For example, some political theorists argue that a good citizen is he who keeps trust and conveys obedience towards government, whereas some believe that common people lack sufficient judgement and knowledge and should therefore rely on their leaders to have the problems solved. Moreover, more involvement by people, other theorists think, in decision-making improves both the government and people's quality of life. Debates about citizenship are shaped by our understanding of the rights and responsibilities of citizens and roles and responsibilities of government. People's struggle for dignity has produced multiple definitions of citizenship emphasizing different dimensions of rights, likewise, with responsibilities. Method: The searching method of this study is carried out using a qualitative method. Interview, observations and analysis of written documents are the most widely used data collecting methods in qualitative research. The opinions of the people are received using questionnaire consisting of open-ended questions. There are two sets of questionnaires prepared: (a) the first one is about the demands and needs of the people from democratic governance and (b) the second one is about the role of the citizens towards government.

The study is carried out with 150 participants in total. Based on inadequacy, some meaningless data is eliminated and some data of 145 participants is accepted. All of the data having been gathered, content analysis method is used as part of the document analysis.

Finding:

Questionnaire Set 1: What is the demand and needs of the people from democratic governments?

Table – 1

Theme	Category	Frequencies
Civil Rights	a)Right to Life	168
	b)Right to Family Life	48
	c)Right to Education	9
	d)Right to Personal Freedom	22
	e)Right to Religious Freedom	13
	f)Right to Freedom of thought and expression	15
	g)Right to Freedom of Movement	11
	h)Freedom of Press	10
	i)Right to Justice	9
	j)Freedom to form association	4
	k)Right to Cultural Freedom	8
	l)Right to Contract	10
	9	
Economic Rights	a)Right to Work	108
	b)Right to adequate wages	45
	c)Right to Property	8
	d)Rights to Rest and Leisure	30
	e)Rights to Economic and Social Security	5
	f)Right to fixed hours of work	11
		9

Political Rights	a)Right to Vote	110
	b)Right to Elected	44
	c)Rights to hold Public Office	13
	d)Rights to Form Political Parties	8
	e)Rights to Criticize	4
	f)Rights to Oppose the Government	12
		29
Total 3 Rights	24 Categories	386 Frequencies

In the table above the questionnaires have three themes and different types of categories. All the categories above 'the demands of Right to Life' towards the Government is the highest (f – 48), 'Right to Work' (f – 45) ranks second and 'Right to Vote' (f – 44) ranks third . When the categories are directly examined, 'demands of citizens' is defined at first at the civil rights, 'economic right' second and 'political rights' final.

Questionnaire Set 2: The duty/responsibilities that citizens play towards democratic governance.

Table -2

Theme	Category	Frequencies
Mandatory Responsibility	a)Obeying the Law	99
	b)Paying Tax	24
	c)Respect to National Flag, Anthem etc.	12
	d)Support and Defend the Constitution	13
		50
Voluntary Responsibility	a) Participate in the Democratic Process	106
	b)Community Involvement	49
	c)Practising Tolerance	9
	d)Patriotism	10
	e)Serving in Military	10
	f)Being a Good Individual	10
	g)Passing it on	5
	13	

Total 3 Themes	11 Categories	205 Frequencies
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In the table above (Table 2) the questionnaires contain 3 themes and different types of categories. In this table the responsibilities of all the citizens towards ‘support and defend the constitution’ (f - 50) rank first and then ‘participate in democratic process’ (f - 49) second and ‘obeying the law’ (f - 24) third. According to Table 2 under the theme of loyalty citizen is defined as being loyal to country or government. But they do not think paying taxes is one of the most important duties of citizens.

Results and conclusion

According to the study the democratic governance which stems upon representation and popular sovereignty involves equal rights to speak within the context of governance with the emergence of rights and liberties. In this research democratic governance is defined both as form of government and being governed based on representation. According to the outcome of this study we can say that democratic governance seems to be a form of regime the fundamental characteristics of which give citizens freedom, justice, protection and other civil, economic and political rights.

On the other hand the role of the citizens towards democratic governance is defined within the context of duties and responsibilities rather than right and liberties. The good citizen is defined as being aware of his/her responsibilities and fulfilling those responsibilities, being a part of his/her community and country. The roles of the citizens are seen to be positive when he/she is being loyal towards the democratic government. The result suggests that democratic governance’s basic values are ----- freedom, equality before law, justice, human rights, rights to elect and to be elected, participation in policy making, tolerance, rule of law towards its citizens. From the political aspect democratic government aims to ensure that citizens are free from opposition and citizens’ participation in administrative policy making. That is result of the study which shows that citizen should be aware of their rights and duties and must fulfil duties and responsibilities to their nation because they are also the part of the government. The fulfilment of their responsibilities and duties makes government more accountable. At this point we can say that liberties and duties/responsibilities are dependent values of each other. Communitarian approach focuses on the rights and responsibilities of the citizens and balance between right and the responsibilities.

From the data it is concluded that democracy should exist in order to fulfil the duties, responsibilities and most importantly participating in democratic ritual. It is also important to the citizens to obey law and order. Citizens must be aware of what is going on in the country and what the situation of the country is as well. In a country the most important resources are human resources, so it is duty of the citizens that improves their morality, humanity to construct a better democracy. Of course the democratic governance should protect its citizens and give basic rights and opportunities that are needed for improvement of citizen efficiency.

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Research methods in social philosophy

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Preface-

Philosophy is a English word. The word philosophy is derived from 'philos' meaning love and 'sophia' meaning knowledge or wisdom. So love for knowledge or wisdom is philosophy. Usually we love something or someone. That object or person have color, physical properties, length, width, weight, shape, taste, touch, etc. It is easy to fall in love with those things which we experience first through the senses. But how is it possible to love the abstract formless concepts of mind, soul, God, truth, Shiva, beauty, numbers, mathematics, etc.? Those are mental substances. According to the Greeks, wisdom is a similar mental concept. To love it is philosophy. Philosophy is a very broad subject. Because every experience in human life as well as all kinds of facts, phenomena in the universe, philosophy works to think and reflect.

Social Philosophy's Background-

Moral values are very important in the context of Indian social structure. For Indians, social philosophy is not just a matter of curiosity. Nor is it the purpose of social philosophy to satisfy the intellectual appetite. The important purpose of social philosophy is to create an ideal life system from the role of philosophy. That is to say, there is a great connection between philosophy and life in social philosophy. The purpose of social philosophy is to make social philosophy not just a system of thought but a system of conduct and to create an ideal society by upholding ethical values. Philosophy conveys the ideal life values that man needs to live as an ideal human being.

Definition of Social Philosophy-

“Social philosophy is the philosophical thought or treatment of society.” The question of what society ultimately wants to achieve is considered in social philosophy. Social philosophy also deals with the question of the nature of the individual and society and how they should relate. The secret of human social life seems to be revealed in his philosophy. In particular, his mental values and intellectual endeavors were the epitome of social philosophy. Man's efforts are not complete without knowledge. Philosophy is one of the most important tools in the development of human knowledge. In a society where knowledge is more, philosophy is more advanced.

The work of social philosophy-

The function of social philosophy is to derive the origin of every human experience. Everything we experience, see, know, expect is useful by proving the principles of philosophy. Social philosophy is the rational, subtle, and relative thinking of the whole of life in a rational way.

Social philosophy studies the basic relationships in society. The man who exists in society is the focal point of social philosophy. As a social animal, man has to observe certain moral obligations. Since social philosophy and moral values are closely related, each person has to play a role by studying the social background in terms of norms and traditions. When studying today's social conditions, some of the elements of society seem to be neglected due to birth, education, skills, age, gender, occupation and wealth.

'Study of Social Philosophy'-

Social philosophy studies the interaction and inter-relationship between individuals and their groups. Social philosophy studies the behavior in society. Social institutions like family, educational institutions, employment as well as religious institutions are considered in social philosophy. This philosophy of social classification is based on race, caste, gender makes social philosophy.

'Research Definition'-

Research is the process of finding out the final or conclusive answers or deciding the facts by treating a question from a truth-seeking role with a curious attitude. Or research is a careful examination. “The term Anusandhan is used interchangeably with the English term research. Also the word research is used in Hindi as “Anusandhan”. This is called ‘Parishilan’ in Sanskrit. Research is a branch of knowledge, it is an intellectual process. The nature of this intellectual process is to discover the facts or to decide the facts. The word ‘research’ in English means inquiry or discovery. Research is about finding out some facts by carefully researching a subject. The process of discovery began with the constant selection

of new things by human beings on the strength of their intellect. At the root of the intellectual process is man's curiosity. Man began to live by society. Since then, social relations have been established. The thinking system of the interrelationship between man and society became evident. The intellectual process of discovering facts or inquiring into facts began in social philosophy.

Research Concepts – Acquiring knowledge of what is unknown. The meaning of research is to make available what is unavailable or to discover a new principle, to come up with a new theory or to unravel a mystery. Doing research is an attitude. Curiosity is a tendency to seek truth or to decide facts. This tendency is the beginning of the intellectual process of research. Many questions arise because of human curiosity. Trying to find the answer by treating those questions is revealed in the scriptures. This is called scientific research. Research is not a means to an end or a means to an end. Curiosity, honesty, diligence, perseverance, fearlessness are all qualities required of a researcher. Research begins with a question created by a curious attitude and ends with a credible standard answer to that question that ends the search process.

Importance of research method-

Social research costs labor and money. So the question is, how useful are all these things? When researching anything in the society, human beings get to see the material benefits from it. It increases science, it increases knowledge. Social research is aimed at enhancing knowledge, examining old knowledge. As a result, our knowledge of social events, social processes, social systems, etc., develops and benefits the society. This shows the importance of research.

The importance of research becomes clearer with the following.

1) **Help for social welfare-**

If any research gained knowledge while studying various aspects at the social level, it will benefit the society. Example. Ration has consumer problems. In such a case, his social information will have to find out what are the causes of the nature of those problems. It will be possible to solve the problem of the customer in a proper way by collecting the complete information.

2) **Removal of ignorance-**

It is said that knowledge removes ignorance. This is true. Just as it is true that darkness will not go away without light, so darkness will disappear after research or knowledge. That knowledge should be disseminated by acquiring knowledge of any matter in the society. Many questions in society are caused by ignorance. Social research removes ignorance about the subject by acquiring knowledge of the subject.

3) **Theoretical utility-**

If it is researched in an objective manner considering various elements of the society, the knowledge of the people in the society will increase. This process will be credible. It is on this knowledge that new theories can be put forward which will lead the society in the right direction.

4) **Development of social sciences-**

In the social sciences, anthropology, political science, economics, sociology, philosophy, all the sciences are related to society. Although these scriptures are different, they are interrelated. One script benefits another scripture. As these sciences evolve, so does society evolve.

5) **Help for social planning-**

It is used to guide community planning. Social research can guide planning. Helps to create its outline. Considering the population of the society, planning can be done on how to use the resources of the country.

6) **Social control-**

The knowledge gained from research helps in controlling the society. Knowing the problems of the society and having the right knowledge available on them, then those questions are solved. In short, research makes it easier to establish social control more effectively.

7) **Help in social progress-**

The transformation that is done to create good things in the society is called social progress. Social progress is a kind of change. This change is beneficial for the society. This knowledge will be useful for those who have a true knowledge of the elements of change and the situation and will be able to adapt to the whole society. Location of craft study method in social philosophy-

Interpretation- Craft study is a method of systematically gathering enough information about a person to understand his work as a component of society. Or social researchers use their skills to study a person in depth. In short, the term 'individual study' is used to refer to the holistic study of an individual, a group, a system, a community. Types of Craft Studies-

1) **Individual Study** A detailed study of a person based on his or her specific work is called person-centered study. This type of person-centered study is mainly done for M.Phil and Ph.D degrees in

language subjects. This is a detailed study of all the material, his photos, his diary, his life style, his personal life events and happenings.

2) **Collective Study**

In this case the scope of the study is increased. A group study is a method of studying in detail the factors that involve many people, not just one person. E.g. When studying a caste, it includes the study of the background of the caste, industrialists, educators, employees, farmers, doctors, people in other professions, economic status of the people of that caste, philosophy of living, attitude of going abroad, etc.

Compared to individualistic individual studies, of course, group-based individual studies are a more difficult type. All the work of a researcher is done here. The researcher has to put all his skills to the test while studying hopefully. Such a comprehensive study would be possible if there was a researcher of that ability.

The following are some of the characteristics of social research:

1) **Knowledge of the subject-**

The researcher should have a thorough knowledge of his subject and should have studied the subject in depth. It is very useful for research. If he has incomplete knowledge, the conclusion is likely to be wrong.

2) **Personal interest in research-**

The researcher needs personal interest so he gains more knowledge. So his research attitude becomes more profound.

3) **Impartiality-**

Research should be impartial. He should not have any prejudiced thoughts in his mind regarding research. He should not have any special attachment in his mind while doing research. The researcher should not be debating this. He must express his views impartially.

4) **Knowledge of research method-**

The researcher should have knowledge of the subject. He should also have knowledge of research methods. He should study the research method. We need to know what its limitations are. If there is no such information, he can do research in a wrong way. Alternatively, he may draw the wrong conclusion.

5) **Experience-**

The researcher cannot be said to have research experience, but he needs to pay attention to it gradually. This enhances his experience. Experience develops his intellect and organizational strength. He can tell from experience what problems come up in research work.

6) **Curiosity-**

Curiosity is a very important quality. The researcher should be inquisitive. He needs to know a few things. So we can discover some new things. Can gain new knowledge.

7) **Organizational skill:**

The researcher must have the organizing power to be successful. It is definitely used in research. If he has organizational skills, he should have organizational strength to know which work can be completed by whom, what information can be obtained.

8) **Scientific tendency-**

The researcher must have a scientific disposition. Scientific instinct is the natural motivation that leads to the path of knowledge in the right way.

9) **Perseverance-**

The researcher must be persistent. Research needs this. Doing social research requires years of hard work, perseverance. Only when the researcher has to do his work persistently can that work be completed.

10) **Insight and imagination.**

The researcher should have insights and his huge imagination can be useful in research. One can discover new elements in research on the strength of imagination. Can think deeply about everything. One can find out the truth from it. The researcher must have insight as well as imagination.

Conclusion -

Social research deals with society. It has to do with human life. So there are different opinions or streams about the research topic. If a conclusion is reached in a matter, it cannot be said with certainty that it is correct. Not all science rules apply to research. Sometimes we have to think about human life, emotions, thoughts, behaviors, etc. That is why the findings of social research are relative to time and place.

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Impact of Union budget 2022-23 on Rural Development

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Abstract

The ministry of rural development plays an important role in the development of the rural population of the society. The main purpose of ministry of rural development is to provide number of facilities to the rural people and rural development plays an important role in the improving the standard of living of rural people. The union budget of 2022-23 made the various provisions in respect of rural development and it will definitely boost to the rural sector.

Introduction

Being the nodal Ministry for most of the development and welfare activities in the rural areas, the Ministry of Rural Development plays a pivotal role in the overall development strategy of the country. This is expected to improve quality of life in rural India and to correct the developmental imbalances, aiming in the process, to reach out to most disadvantaged sections of the society. Thus, the ministry of rural development plays an important role in the improving the living standards of majority of the Indian citizens, thereby it deserves special attention in the union budget.

Objectives of the study

1. To study the provision made in union budget 2022-23 for rural development.
2. To study the major highlights in the provision of budget for rural development.
3. To study the various schemes and provisions for the schemes made in union budget 2022-2023.
4. To suggest an appropriate remedies for rural sector.

Research Methodology

The present study is depends upon secondary data. The secondary data were collected from the Govt. authorities, Expenditure Profile 2022-23, Newspapers & Internet.

Limitations

The present study is related with provision made in union budget 2022-23. In the present study only the provisions made to the rural development are consider. The other provisions are not considered for the study.

Highlights:

1. In all 53% of the total provision made for rural development goes to MNREGA
2. There is a 36% growth in the provision made for PradhanMantri Gram SadakYojna as compared with the previous year's provision made for the same.
3. Provision in total budget for rural development

Sr.No	Total Budget estimate	Provision for Rural Development	Share in %
1	3944908.67	1,35,944.29	3.44%

Provisions made in 2022-23 budget:

1. The financial provision made for rural development is Rs. 1,35,944.29 Crores which is less by Rs. 17,613.78 Crores as compared with last year's provision in the budget.
2. **Provision for Centers expenditure**(including secretariat, management support to rural development program, socio-economic and cast census survey and grants to national institute of rural development) is Rs.212.20 crores out of Rs. 1, 35, 955.29 Crores which is 0.15% of the total provision made for rural development.
3. **Provision for Other central sector expenditure** (including National Institute of Rural Development and Panchayat Raj Hyderabad and grants) is Rs. 135.46 Crores out of 1,35955.29 which is 0.09% of the total provision
4. **Provision for Centrally sponsored schemes** (including Indira Gandhi National Old Age Pension Scheme, National Family Benefit Scheme, Indira Gandhi National Widow Pension Scheme, Indira

Gandhi national Disability Pension Scheme, Annapurna Scheme, Administrative Expenditure and DBT to women account holder) is Rs. 9652.31 Crores which is 7.10% of the total provision.

1. **Provision for Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGA)** is Rs 73,000 Crore which is 53.69% of the total provision.
 - a. This Program covers more than 50% of the provision made for rural development.
2. **Provision for PradhanMantri Gram SadakYojna** is Rs.19,000 which is 13.97% of the total provision.
3. Provision for National livelihood mission-Ajeevika. Is Rs. 13,336.42 Crores which is 9.81% of the total provision made for rural development.
4. Provision for ShamaprasadMukharjiRurban Mission is Rs. 550 crores which is 0.40 % of the total provision made for rural development.
5. Provision for PradhanMantriAwasyojna is Rs. 20,000/- crore which is 14.71% of the total provision made for rural development.

Points to be noted:

1. **Indira Gandhi National Old Age Pension Scheme (IGNOAPS):** Under the scheme, assistance is provided to persons of 60 years and above and belonging to family living below poverty line as per the criteria prescribed by Government of India. Central assistance of ₹.200/- per month is provided to person in the age group of 60-79 years and ₹.500/- per month to persons of 80 years and above...

2. **National Family Benefit Scheme:** Under the scheme a BPL household is entitled to lump sum amount of money on the death of primary breadwinner aged between 18 and 59 years. The amount of assistance is Rupees 20,000/-.

3. **Indira Gandhi National Widow Pension Scheme (IGNWPS):** Under the scheme Central assistance at the rate of Rupees 300/- per month is provided to widows in the age- group of 40-79 years and belonging to family living below poverty line as per the criteria prescribed by Government of India. After attaining the age of 80 years, the beneficiary would be shifted to IGNOAPS for getting pension of Rupees 500- per month.

4. **Indira Gandhi National Disability Pension Scheme (IGNDPS):** Under the scheme Central assistance at the rate of Rupees 300- per month is provided to persons aged 18-79 years with severe or multiple disabilities and belonging to family living below poverty line as per the criteria prescribed by Government of India. After attaining the age of 80 years, the beneficiary is shifted to IGNOAPS to get enhanced pension of Rupees 500- per month.

5. **Annapurna Scheme:** Under the scheme, 10 kg of food grains per month are provided free of cost to those senior citizens who, though eligible under IGNOAPS, are not receiving pension under IGNOAPS.

6. **MGNREGA-Programme Component:** The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) aims at enhancing livelihood security of households in rural areas of the country by providing at least one hundred days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. In the first phase, Mahatma Gandhi NREGA was implemented in 200 most backward districts with effect from February 2nd 2006 and was expanded subsequently to additional 113 and 17 districts with effect from April 1st 2007 and May 15th 2007 respectively. The remaining districts were included under the Act with effect from April 1st 2008 respectively. Thus the Act now covers all the rural districts of the country. The objectives of the Scheme involves providing upto 100 days of unskilled manual work in a financial year to every household in rural areas as per demand resulting in creation of productive assets of prescribed quality and durability, strengthening the livelihood resource base of the poor, proactively ensuring social inclusion and strengthening Panchayati Raj Institutions (PRIs)

7. **Pradhan Mantri Gram SadakYojna:** Launched in 2000, PradhanMantri Gram SadakYojana (PMGSY) for providing all weather road connectivity to all eligible habitations of designated population size (500 plus in plain areas, 250 plus in NE, Hills, Tribal and Desert Areas, 100-239 population size in LWE areas as per Census 2001) is one of the most successful initiatives in Rural India. Since Inception till 20th January, 2021, a total of 1,70,034 habitations have been provided connectivity. Subsequently, new intervention verticals namely, PMGSY II, Road Connectivity Project for Left Wing Extremism Areas (RCPLWEA) and PMGSY III were added under the ambit of PMGSY for upgradation of rural roads and construction of strategically important roads in LWE Areas.

Since, inception till 20th January, 2021, a total of 7,47,990 Km road length has been sanctioned and 6,43,999 Km completed under various interventions/verticals of PMGSY.

8. Shyama Prasad Mukherjee Rurban Mission:..Shyama Prasad MukherjiRurban Mission (SPMRM) is a unique programme, designed to deliver catalytic interventions to rural areas, on the threshold of growth. The Mission is an attempt to make the selected rural areas socially, economically and physically sustainable regions and strives to strengthen by providing economic, social, basic and digital amenities, thus leading to sustainable and balanced regional development in the country.

9. Pradhan MantriAwasYojna (PMAY)- Rural:Under PMAY-G, 1.00 crorepucca houses are to be constructed in rural areas of the country by March, 2019. Training of rural masons, development of locally appropriate house design typologies and dedicated structure for monitoring at various levels have led to quality and timely completion of houses. The Cabinet had considered 2.95 crore households with housing deprivation under PMAY-G. Further, construction of 1.0 crore houses was set over a period of three years from 2016-17 to 2018-19 in first phase. Remaining 1.95 crore households is to be covered in the next three years (i.e. 2019-20 to 2021-22) with a financial implication to central government of. .`1,56,634crore

How rural sector will be benefited of the financial provisions made in union budget 2022-23

1. As there is a substantial provision (53%) made for MNREGA, maximum possible proposals for funding under this scheme should be submitted.
2. So far as the considerable provision is made for PradhanMantri Gram SadakYojna, maximum benefits should be taken.
- 3.Indira Gandhi National Disability Pension Scheme is applicable to the individuals with age from 18 to 79. Institutions of rural sector should take initiatives in submitting proposals of the disabled person.
4. Benefits of Indira Gandhi National Widow Pension Scheme should be taken and local authority should take proper initiative for such proposal.
5. Indira Gandhi National Old Age Pension Scheme is available for the senior citizens (Having age above 60 years and BPL)

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Effects of Organizational Factors, Environmental Factors and Accounting System Quality on Accounting Information Quality on ERPs Environment: Evidence in Yemen

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Abstract

This article aims to analyse the effects of organisational factors, environmental factors, and accounting system quality on accounting information quality in ERP environments in Yemeni large-scale industrial companies. The authors examine the influence of contingency theory (organisational and environmental factors) and Accounting System Quality on accounting Information Quality in the ERP context based on comprehensive literature research. The study takes a quantitative approach to its research. A total of 206 responses were collected from managers, accountants, financial managers, information system employees, financial employees, and managers for the study. The Smart PLS-SEM version 3.3.3 was used to analyse the data of the larger-scale industrial companies of Yemen in 2021. The study's findings suggested an association between accounting system quality and accounting information quality, implying that the higher the system quality, the better the information quality of the ERP's accounting information system. demonstrated, on the other hand, that the dimensions of contingency theory (organisational and environmental factors) do not influence the quality of accounting information provided by ERP's accounting system.

Keywords: Organizational Factors, Environmental Factors, Accounting System Quality, Accounting Information Quality.

Introduction:

Accounting is regarded as the "language of business" by professionals (Romney & Steinbart, 2018). The organised collecting, processing, transmission, and distribution of information in line with defined protocols, whether automated or human, is referred to as "information systems" (Poore 1999 cited on Riad, 2009). Furthermore, an information system is a collection of systematic methods for collecting, processing, and distributing data to users (Hall, 2008). Furthermore, "accounting information systems" might be defined as "a collection of data and processing procedures that creates needed information for its stakeholders" (Simkin, Rose, & Norman, 2012). AIS, on the other hand, has typically concentrated on gathering, processing, and disseminating financial-related data to both external and internal stakeholders, such as investors, creditors, and tax officials. AIS, on the other hand, today deals with both financial and non-financial information and data (Riad, 2009). Today's accounting software sector is made up of small business systems, midmarket business systems, entry-level ERP systems, and top global ERP systems. The revenue amount of the business defines which group it belongs to (Simkin, Rose, & Norman, 2012). A company's information systems must do more than simply process financial data. The ability of accounting software programmes to process enterprise-wide data rises in lockstep with the software's cost and complexity. Software in this category, often known as enterprise resource planning (ERP) systems, enterprise software, and business application suites, includes Microsoft Dynamics AX, SAP All-in-One, PeopleSoft, and Oracle. This system's two most important components are integration and a central database. CRM, business services, human resources (HR), and supply chain management (SCM) software are typically connected with financial or accounting software (Simkin, Rose, & Norman, 2012).

During the last decade, organisations all over the world have embraced enterprise resource planning (ERP) systems. (Kanellou & Spathis, 2013) Summarize the accounting benefits of ERP systems, including real-time information and integration requirements, as well as information and decision creation, complete reasons for implementing ERP, ERP systems assist in making better decisions and planning operations, ERP systems improve accounting services and the next delay in preparing reports, produce more reports and accounts statements, reports are no longer required, reports are submitted, and data is presented. The expanding academic interest in evaluating the accounting information system on numerous

elements and industries may be seen in the current literature. Researchers also employed a variety of models and theories, including the DeLone and McLean IS model from 1992, as well as its revised version from 2003, contingency theory, and Gable et al's (IS-Impact) Model. However, academics and practitioners continue to validate these models regularly, resulting in a large body of current work on accounting information system evaluation. As a result, these studies that do not study the association between the external environment (contingency dimensions) and IS success models are lacking. As a result, the purpose of this work is to bridge that gap. This research aimed to provide insight on the potential effects of organisational factors, environmental factors, and accounting system quality on accounting information quality in ERP environments. In addition, this study focuses on the large-scale companies that are engaged in the industrial sector in Yemen.

Literature review and Hypothesis development:

Organizational and Environmental Factors:

Contingency theory, developed in the late 1960s, is a behavioural theory that studies how external factors impact organisational behaviour (Lawrence and Lorsch, 1967; Franks, 2000; Chandra and Kumar, 2000 cited in (Hwang, 2011)). According to contingency theory, there is no one optimum way to make decisions or manage a business. Internal and external circumstances influence an organization's decisions and actions. To put it another way, the organisational strategy is shaped by the endogenous and external business settings in which it operates (Donaldson, 2001). Previous research classifies contingency theory into organisational, technological, and environmental aspects for accounting information system assessment. Several perspectives have been utilised to explore the impact of the organisational dimensions on AIS success. Several studies have used terminology such as contexts, variables, and factors when referring to organizational factors (Hussein, Abdul Karim, Mohamed, & Ahlan, 2007). Academics have discovered several elements related to organisational features, such as mission, size, goals, top management support, and so on. Ang et al. also uncovered organisational characteristics that impact IT usages, such as organisational structure, organisational size, managerial IT skills, top management support, financial resources, objective alignment, and budgeting strategy. Five organizational elements that impact AIS performance were determined to be employed in this study based on a complete list of organisational factors from similar studies (Zhang, Lee, Huang, Zhang, & Huang, 2004, Bhatti, 2005, Wu, 2007, Ifinedo, 2008, Nizamani, Khoubati, Ismaili, & Nizamani, 2013, Daoud & Triki, 2013, Saravanan, 2014 and Al-Muhrafi, 2014). Top management support, training and education, corporate vision, mission, and goals, project management, and individual involvement are the five aspects.

Differences in the usage of accounting information have also been attributed to environmental factors. Several components connected to environmental aspects have been found by researchers. In addition, based on a comprehensive list of environmental factors from comparable research, four environmental factors that affect AIS performance were selected to be used in this research. The research environmental factors include vendor competence, consultant competence, vendor communication, and vendor skills (Sedera, 2006, Dey et al, 2010, Tsai et al, 2010).

Accounting System and Accounting Information Quality:

DeLone and McLean (1992) suggested six elements to assess a successful information system: system quality, information quality, use, user satisfaction, individual impact, and organisational impact. When evaluating the success of information entire system, the quality characteristics of the information system process (i.e., system quality), the quality of the information system output (i.e., information quality), the usage of the information system output (i.e., use), the response of users of the system and information to the information system (i.e., user satisfaction), and the impact of the information system on user behaviour should all be considered (i.e., individual impact). performance in real-time (i.e., organisational impact). Users' use and satisfaction with the information system are positively impacted by system and information quality, and users' use and satisfaction affect each other and, as a result, their behaviour, ultimately affects the organization's performance.

A high-quality IS, according to (Susanto, 2013), is effective and can be utilised to increase system users' control, efficiency, and speed. (Gable et al, 2008) examined the technical and design aspects of IS

system quality. As a result, user assessments of IS from a technical and design standpoint might be described as perceptions of system quality. Technically, the information system and its accounting information system can be evaluated by looking at key indicators for each system's quality, such as flexibility, reliability, security, system fit (customization), efficiency, meets user requirements, response time, accuracy, auditability, ease of learning, ease of maintenance, sophistication, business process reengineering (BPR), integration, adaptation, and up to date information (Seyal & Abd Rahman, 2015, Kutlu & Alkaya 2015, Galanis, Chatzoglou, 2015, Wisna,2015, D&M,2016, Sirsat, Sirsat, 2016, Shagari, Abdullah, Saat,2017). Data that has been structured and processed to offer meaning and aid in the decision-making process is referred to as information (Romney and Steinbart, 2012). Users want high-quality information that meets their needs in terms of traits and qualities. The ability to use information in decision-making to achieve organisational goals is closely tied to the quality of information (Fitriati et al, 2020).The quality of the output produced by IS is referred to as information quality (D&M, 1992). The accounting information system was evaluated technically by looking at essential indicators of information quality, such as Accuracy, Timeline, Reliability, Comparability, Understandable, Usefulness, Useable, Important information, Concise, Completeness, Relevance, and Availability.

This study establishes the following hypotheses based on the aforementioned discussion:

H1. accounting information quality is significantly and positively affected by organizational factors in the ERP systems environment.

H2: accounting information quality is significantly and positively affected by environmental factors on the ERP systems environment

H3. accounting information quality is significantly and positively affected by accounting system quality on the ERP systems environment

Research model and methodology:

Research model:

A survey of the field's literature was used to develop the model for this study. As a result, the association is depicted in Figure 1 below. As a consequence, it has three independent variables that have a positive influence on the quality of accounting information (the dependent variable): organisational factors, environmental factors, and accounting system quality.

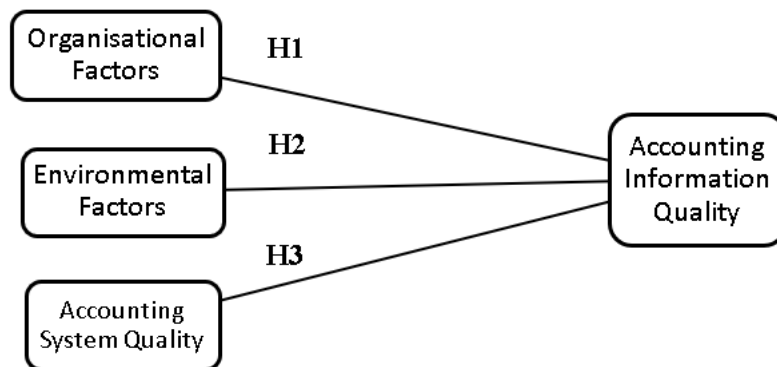


Figure 1 Research Model

Research Methodology:

Sampling and data collection

This study was designed with a goal in mind: to learn everything there is to know about how organisational variables, environmental factors, and accounting system quality impact accounting information quality. The study's target audience was large-scale companies in Yemen, which is located in Southeast Asia. The goals of this research are outlined in the "introduction" section. The random sample strategy was adopted and implemented in this investigation. This research was carried out between May and August of 2021. The study employed a quantitative approach and used primary data from the survey to do statistical analysis using questionnaires. The five-point scaled Likert questionnaire was used in this investigation. Accountants, financial managers, information system employees, financial employees, and

managers were the target responders. The questionnaire was created using previous studies as a guide and then modified to meet the study environment. Experts verified the questionnaire's major content to verify its clarity and comprehensibility. Following that, pilot testing was carried out to ensure that the survey was complete and ready to be entered into the main survey.

The preliminary sample size for this study was 250. The survey was completed using the Google form system for the convenience of the participants in the setting of an unexpected pandemic such as the current outbreak. Following the survey, 206 questionnaires were received, giving for an 82.4% response rate. The acquired data were analysed statistically. The descriptive statistics for the samples are shown in Table 1, and the statistical findings are shown in Section 5 below, "Results and Discussions".

Table 1 Sample Characteristics

Characteristics	Distribution	Frequency	Percentage
Gender	Male	201	97.1
	Female	6	2.9
Age	18 to less than 26	4	1.9
	From 26 to less than 37	96	46.4
	From 37 to less than 47	80	38.6
	47 and more	27	13.0
Years of Experience	Less than 5 Years	4	1.9
	From 5 to less than 10 Years	69	33.3
	From 10 to less than 15 Years	40	19.3
	15 years and more	94	45.4
ERP system Experience	Less than 2 Years	3	1.4
	From 2 to less than 5 Years	7	3.4
	From 5 to less than 10 Years	96	46.4
	10 years and more	101	48.8
Specialization	Financial employee	37	17.9
	Manager	19	9.2
	Accountant	116	56.1
	Information system employee	28	13.5
	Other	7	3.4
Education level	Secondary certificate	2	1.0
	Bachelor	192	92.8
	Master	10	4.8
	PhD	1	0.5
	Other	2	1.0
ERP software	Oracle	59	28.5
	SAP	135	65.2
	Onyx-Pro	9	4.3
	Microsoft	4	1.9

Data analysis:

To analyse the acquired data, this study employed a "variance-based structural equation model" (SEM) approach dubbed "smart partial least square" (Smart-PLS). The many approaches to SEM model development are discussed in the sections that follow, followed by the results of the design and evaluation of the Measurement Models. Depending on the results of the Measurement Models, Structural Models are then constructed and tested using the available data. The recommended hypothesis testing findings and conclusions are then provided, based on the statistical values derived from the aforementioned SEM Structural Models. Finally, there is a summary of the findings and some closing remarks.

Results and discussions:

Measurement model assessment

The measuring model for this investigation is based on four Reflective latent constructs. As a consequence, the structural equations model SEM was used to analyse the measurement model and enhance the Structural Model. Indicator item reliability, Convergent Validity, and Discriminant Validity were used to assess the measurement model and strengthen the Structural Model. The first step in running

the measurement model is to make sure it can be recognised, which means you can get estimates for all of the model parameters. According to (Hair, Black, Babin, & Anderson, 2014), each latent variable should have at least two indications, with three or more recommended. The reliability of the 17 indicators was acceptable (Table no. 2), with loading factors ranging from 0.940 to 0.691, as recommended by (Hair, Tatham, Babin, & Black, 2009), who said that an indicator must have a loading equal to or more than 0.50 to be approved (Hair, Tatham, Babin, & Black, 2009). While (Hulland, 1999) recommended that manifest variables with an outer loading of 0.70 or above be considered extremely desirable, 0.50 is an acceptable loading value, and items with loadings of less than 0.50 should be eliminated. All elements with loadings less than 0.600 were eliminated from the model. The starting and ending components for each dimension are shown in Table No.2. Cronbach's Alpha, composite reliability, and average variance extracted (AVE) results were used to validate the reliability of the scales and validity of the items, convergent validity, and discriminant validity, as shown in table 2. Cronbach's alpha and composite reliability values were used to assess the reliability and validity of items from the measures of "organisational factors" (OF), "environmental factors" (EF), "accounting system quality" (ASQ), and "accounting information quality" (AIQ). According to (Hair, Risher, Sarstedt, & Ringle, 2019) & (Hair, Black, Babin, & Anderson, 2014), the Cronbach's alpha and composite reliability values were all more than 0.7, implying that the reliability of all scales and the validity of all items were accepted.

Cronbach's Alpha, composite reliability, and average variance extracted (AVE) results were used to validate the reliability of the scales and validity of the items, convergent validity, and discriminant validity, as shown in table 2. Cronbach's alpha and composite reliability values were used to assess the reliability and validity of items from the measures of "organisational factors" (OF), "environmental factors" (EF), "accounting system quality" (ASQ), and "accounting information quality" (AIQ). According to (Hair J. F., Black, Babin, & Anderson, 2019) & (Hair, Black, Babin, & Anderson, 2014), the Cronbach's alpha and composite reliability values were all more than 0.7, implying that the reliability of all scales and the validity of all items were accepted. The average variance extracted measures the overall amount of variance in the indicators accounted for by the hidden variable (AVE). AVE is commonly recognised at 0.50 and above (Hair, Black, Babin, & Anderson, 2014). The AVE is larger than 0.50, and the products' dependability (load factor) exceeds the standards (Table. 3). Furthermore, Cronbach's alpha value ranged between (0.744 - 0.917), which is greater than 0.60, demonstrating the scale's stability (Hair, Black, Babin, & Anderson, 2014).

Table 2 Average Variance Extracted (AVE), Composite Reliability and Cronbach's alpha

Dimension		Items	Factor loading	Average Variance Extracted (AVE)	Composite Reliability	Cronbach's alpha
Organizational Factors	OF	A2	0.811	0.651	0.848	0.744
		A3	0.813			
		A5	0.795			
Environmental Factors	EF	B1	0.926	0.807	0.893	0.766
		B2	0.87			
system quality	ASQ	C3	0.758	0.6	0.931	0.917
		C4	0.743			
		C5	0.76			
		C6	0.752			
		C7	0.769			
		C9	0.814			
		C10	0.846			
C11	0.691					

		C17	0.827			
Information quality	AIQ	D1	0.926	0.82	0.932	0.887
		D2	0.94			
		D3	0.847			

Validity that differs the degree to which a concept or variable is unique from other concepts or variables is referred to as discriminant validity (Hair J. F., Black, Babin, & Anderson, 2014). Strong discriminant validity indicates that a construct is distinct and captures data that other measures do not (Hair J. F., Black, Babin, & Anderson, 2019). Fornell–Larcker criterion Discriminant validity is a statistic that compares shared variation between constructs to shared variation within constructs (Hair J. F., Black, Babin, & Anderson, 2019). The Fornell–Larcker method. As a consequence, the validity indicated by the diagonal in Table 3 was examined, and the variables met the required criteria. Because each indicator relies more on its latent constructions than the others, discriminant validity implies that each indicator is firmly tied to the construct to which it is linked.

Table 3Fornell–Larcker Discriminant Validity Results

Latent Construct	Organizational Factors	Environmental Factors	system quality	Information quality
Organizational Factors	0.905			
Environmental Factors	0.690	0.775		
system quality	0.381	0.386	0.899	
Information quality	0.605	0.691	0.483	0.775

Structural model assessment:

The findings obtained after analysing the requirements and criteria for the verification of Convergent Validity and Discriminant Validity indicate that the measurement model is of sufficient quality to test hypotheses and assess the study's structural model. After a thorough assessment of the reliability and validity of each component of the measurement model, this section continues with the statistical technique's criteria by focusing on route analysis using PLS-Graph. Each path in the conceptual model is examined to see whether it is statistically significant. The preceding evaluation findings meet the requirements for a structural model evaluation. The hypothesised hypotheses and path coefficients were tested using the bootstrapping approach. The variance inflation factor (VIF) was used to evaluate multicollinearity and common method bias following the multicollinearity and common method bias evaluation stage. This study used (Hair J. F., Black, Babin, & Anderson, 2019)'s suggested acceptance levels for VIF, which is 3 as an upper bound. The statistical findings of this investigation showed that VIF values are all less than 3, implying that the multicollinearity and common method bias problems were not present in the suggested conceptual model of this study (Hair J. F., Black, Babin, & Anderson, 2019).

The structural model is the next step in the PLS-SEM data analysis process. Standard assessment criteria that addressed include the coefficient of determination (R^2), the blindfolding-based cross-validated redundancy measure Q^2 , and the statistical significance and relevance of the path coefficients. The PLS predict technique should also be used by researchers to assess their model's out-of-sample prediction capabilities (Hair, Risher, Sarstedt, & Ringle, 2019).The partial least squares technique is used to test the quality of the structural model, and the attention will be on the most important of them, as well as the regions of acceptability, as shown in Table4 below.

Table 4Structural Model Checks - Developed by the Researcher

Indictors	acceptable level
R^2 Coefficient of Determination	The R^2 value is a number that varies from 0 to 1, with 0 indicating no relationship and 1 suggesting a perfect one (Hair J. F., Black, Babin, & Anderson, 2019). In PLS-SEM, an R^2 value of 0.60 and above is considered substantial, 0.33 is considered moderate, and 0.19 is considered weak (Chin, 1998).
f^2 Effect size	Small, medium and high impacts of an exogenous construct are represented by f^2 values of 0.02, 0.15, and 0.35, respectively, whereas effect sizes of less than 0.02 imply no effect (Hair J. F., Black, Babin, & Anderson, 2019).

Q^2 Blindfolding (Predictive relevance of the model)	The predictive relevance of the model has been confirmed if Q^2 values are above zero (Henseler, Ringle, & Sinkovics, 2009).
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This result meets the criteria for moving on to the next step of evaluating the study hypotheses using path coefficients and p-values.

Using smart pls software 3.3.3, SEM-PLS was used to test and analyse the proposed study model, where a bootstrapping technique with 5000 samples was used to estimate the path parameters and test the significance of the structural paths based on the value of T, which must be greater than 1.96 to be significant, and the coefficients of the path parameters are similar Partial least squares (PLS) method with standard regression coefficients in the Ordinary Least Squares met (OLS). Furthermore, the significance of the paths was assessed using a significance level of 0.05, and the calculated level of significance was compared to the value of the accepted significance level, with the effects being significant if the significance level value was less than 0.05, and vice versa.

Table 5 Structural Model Path Coefficient Estimates and Quality Evaluation Indicators

Hypothesis	Causal Relationships	Summary of the path Coefficient Estimates				Quality Evaluation Indicators				
		Path Coefficient	T-Statistics	P-Values	The Decision	f^2	Effect size	R^2	Adjusted R2	Q^2
H1	Organizational Factors - > Information quality	0.127	1.927	0.054	Not acceptable	0.019	No Effect	0.501	0.493	0.413
H2	Environmental Factors - > Information quality	0.113	1.841	0.066	Not acceptable	0.021	Small			
H3	system quality -> Information quality	0.567	6.844	0.000	Acceptable	0.382	Large			

In summary, the statistical results shown in Table 5 below showed that the path from organisational variables to accounting information quality was positive but not significant, according to the t-test ($\beta = 0.127$, $T = 1.927$, $p > 0.05$). The path from environmental factors to accounting information quality was positive but not statistically significant ($\beta = 0.113$, $T = 1.841$, $p > 0.05$), contradicting the study's first and second hypotheses H1 and H2, whereas the path from accounting system quality to accounting information quality was positive and statistically significant ($\beta = 0.567$, $T = 6.844$, $p < 0.05$), indicating that accounting system quality has a positive and significant impact on accounting information quality. The coefficient of determination R^2 was 0.501, indicating that the independent factors explain 50.1 percent of the variations (variance) in the dependent variable shown in accounting information quality, which is a reasonable interpretation (Chin 1998). Based on the f^2 value, it is obvious that the system quality variable has the greatest influence on the value of the coefficient of determination, while environmental factors had a little impact and organisational factors had no effect on explaining the variance. The Q^2 value was 0.413, which was more than zero (the cut-off point), suggesting that the predictive significance of the path model for the dependant latent is adequate.

**Conclusion and implications:
conclusion**

The main purpose of this research was to look at the effects of organisational factors, environmental factors, and accounting system quality on accounting information quality in ERP systems. The study hypotheses were accepted partially. Since the hypotheses were H1: accounting information quality is significantly and positively influenced by organisational factors in the ERP systems environment, H2: accounting information quality is significantly and positively influenced by environmental factors in the ERP systems environment, and H3: accounting information quality is significantly and positively influenced by accounting system quality in the ERP systems environment, The findings demonstrate that

organisational variables have a positive but non-significant impact on accounting information quality (H1), as well as a positive but non-significant impact of environmental factors on accounting information quality (H2), contradicting the study's second hypotheses H1 and H2. Accounting system quality has a positive and statistically significant influence on accounting information quality (H3), showing that accounting system quality has a positive and statistically significant impact on accounting information quality. Furthermore, based on the f^2 value, it is clear that the system quality variable has a large contribution to the value of the coefficient of determination, whereas environmental factors have a small contribution and organisational factors do not affect explaining the variation, implying that in the Yemeni large-scale companies' ERP system environment, there is a strong link between accounting system quality and accounting information quality. This finding is consistent with earlier studies. Meanwhile, there is little evidence of a link between organisational and environmental variables and accounting system quality in Yemeni large-scale businesses. Organizational considerations, according to (Anggadini, 2013), have a positive influence on accounting information systems. Furthermore, Ifinedo (2008) shows in his study that, because information quality is a component of information system success, there is a positive association between organisational characteristics and information system performance, which contradicts the study findings.

Implication:

This study's findings made some significant theoretical contributions to the present literature. To begin with, it added to the body of knowledge on the quality of accounting information by expanding study into the domains of organisational and environmental impacts. Furthermore, investigating the role of accounting system quality in enhancing the quality of accounting data in the context of the ERS system. Second, the outcomes of this study corroborated the researchers' conclusions that accounting system quality has a significant and positive impact on accounting information quality in the Yemen region's ERP system.

Limitations and future research:

There are several limitations to this study. To begin, this research focused on Yemen. As a result, the results of this research may not be relevant in other countries. As a result, future studies should look at different countries or regions. Second, this study focused on the industrial sector in an ERP system environment; nevertheless, the nature of each sector may change, affecting the research results. As a result, future studies should investigate various sectors. Third, while this study focused on large-scale enterprises, the company level may differ from one another, affecting the research results.

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India's Contribution on The Saarc And Bimstec Initiatives: A Comparative Analysis

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Introduction: India is the fastest growing country in the World which focuses to develop itself and preserve to the other nations both regional and World-wide platform. All the countries from the world (around 193 countries)¹ should made mutual agreements in the form of organizations. A nation would not ascertain other nations support and aid both economic and political phenomena. After First World War, the countries from the earth have thought that the only solution for the peace was to found organization World-wide. At once, the countries had establish peace organization in namely 'League of Nations', after the tireless effort of American president Woodrow Wilson. However, the Second war outbreak with failure of the peace settlement and the organizations.² Indeed, the organizations would give positive ramification the Second World War never broke out within 21 years. The blue water (oceans and sea) is the biggest platform of the countries growth and development. Being a largest bay of the world,³ Bay of Bengal is played vital role of development in the regions and implications of Asia and the global order. Once, the Bay of Bengal acted as the heart of the world regarding trade.⁴ The BIMSTEC and SAARC are the coherent regional organisation in Asian continent which movet towards the the priorities of commerce, connectivity and security.⁵ This article has focused to evolve the contribution of India on regional organizations like BIMSTEC and SAARC with comparative analysis.

South Asia

The Asian continent consisted heavy population with heterogeneous cultural human population. Across the core group of countries typically designated as being part of South Asia, over 30 official languages are spoken (with 700 languages).⁶ There are additional cleavages that differentiate South Asian countries, the religious and ethnic distinctions. The regional relationship has grown the on the path of cultural heritage a good sign in this region. All the countries in South Asia are low-income countries. They also share other domestic attributes and characteristics. In may prove impossible to trace the exact etymology of the term "South Asia". Nevertheless, South Asia began to be viewed as an entity that was distinct from the geographic unit under the colonial tutelage of Britain. As such, early academic usage of the term South Asia (or Southern Asia) highlighted a sense of disconnecting between a new conception of the region and its previous configuration. The linkage of South Asia and South East Asia was an common academic usage with subsequent region., and economic development problems but distinctive colonial heritage. Development economists began to write about South Asia as parallel developmental challenges to South East Asia. Some other included Burma, Tibet and Afghanistan. For historical, linguistic, cultural, and tribal connections to Pakistan and could reasonably be included as being part of South Asia, although typically it is depicted as being a Central Asian nation. The inclusion of Burma (or Myanmar) stems from the fact that Burma formed part of British India and only became a separate colonial entity in 1937.

Founding of SAARC

In 1983, the first abroad meeting of minister's accord held in New Delhi and forming the regional institution. The foundation of SAARC summit held at December 07.08.1985⁷. The President Zia of Bangladesh, the first SAARC summit took place in Bangladesh. However, president Zia has been assassinated in May 1981. So the institutional leadership for this assembly was carried by Hussain Muhammed Ershad, the new president of Bangladesh. The heads of the state from the various South Asian countries represented at the first SAARC summit embodies a full spectrum of institutional governance frameworks and political systems. Two kings, Jigme singye Wangchuk of Bhutan and Birendra Bir Bikram Shah Dev of Nepal, were among these heads of state represented at the summit. Within the exception of India and (to a lesser extent) Sri Lanka, most countries in South Asia have not enjoyed a legacy of uninterrupted democratic rule. Rajiv Gandhi made visit during first summit regarding liberal democracy for the region. Meanwhile, Julius Richard Jayewardene, president of Sri Lanka at the time of the first SAARC summit, had been elected by popular vote in 1977, but then helped to restructure the Sri Lankan constitution to enable him to serve as executive president. Having granted himself unprecedented constitutional powers, President Jayewardene then barred the opposition presidential nominee, Sirimavo Bandarike, from running for office. Moreover, he called a referendum to annual the result of the 1982 parliamentary election. The president of the Maldives, Maumoon Abdhul Gayaoom, had been nominated

and selected by an intermediate electoral college called the Majlis. At the time of the first SAARC summit, president Gayoom had been re-elected with 96.62 percent vote in a referendum where he was the sole candidate for the presidency. In general, the significant variation in the institutalization of democracy across South Asia, as exemplified by the delegates to the first SAARC summit, poses a challenge to SAARC given that political consensus among the participant member states is likely to be required.

Emergence of BIMSTEC

The littoral, adjacent and regional countries of South Asia, particularly close to Bay Bengal united to establish an organization which names BIMSTEC. It comprises five South Asia countries and two from Southeast Asia which are the neighbors of India. The BIMSTEC member States are India, Nepal, Sri Lanka, Bangladesh, Thailand, Bhutan and Myanmar dependent on the Bay of Bengal.⁸ This organization established with the aim of development of south Asian countries and helping each other. Earlier, it was started four economic bloc formed a group with the name of 'BIST-EC' comprising Bangladesh, India, Sri Lanka and Thailand. Later this group renamed as BIMST-EC comprising Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation where the special ministerial meeting conducted in Bangkok on 22 December 1997⁹. Few years later, the BIMSTEC the 6th ministerial meeting held at Thailand on 2004 where Nepal and Bhutan admitted on this organization, Finally, the name of this organization attained the name 'Bay of Bengal initiative for Multi-Sectoral Technical and Economic Co operation which popularly known as BIMSTEC. After ASEAN and SAARC, BIMSTEC has played a crucial role inter- regional relationship in Asian countries. Moreover, BIMSTEC countries possess 22% of Global population with 1.5 billion people and combined gross domestic product (GDP) of 2.7 trillion economy focused by the world countries¹⁰. In this regard India and Nepal played the important role and keep this organization on successful way.

In a current decade India adopting the new policy to extent his relationship with neighbor countries called 'Neighborhood first policy'. These policies have focused the commitment of developing friendly relationship with neighbors involved several active projects. It also concentrated the ideas of creating mutually beneficial, people oriented, regional frameworks for stability and prosperity.¹¹ However this policy need not include errant neighbor like Pakistan. The first neighborhood policy has been one of India's key foreign policy improve the meaningful relationship on neighbor countries. More over this policy reflects the BIMSTEC and SAARC countries in South Asia¹²

SAARC, SASEC & BIMSTEC: A COMPARATIVE ANALYSIS

S.No	SAARC (1995)	SASEC (2001)	BIMSTEC (1997)
1	Afghanistan		
2	Pakistan		
3	Maldives		
4	Sri Lanka		1 Sri Lanka
5	India	1 India	2 India
6	Bhutan	2 Bhutan	3 Bhutan
7	Nepal	3 Nepal	4 Nepal
8	Bangladesh	4 Bangladesh	5 Bangladesh
			6 Myanmar
			7 Thailand

Conclusion

World organization has genesis for dynamism of peace and assimilate theoretical consensuses. The objective of the organization has to coordinate with other nations (both neighboring and others) on happiest and saddest movements. The nations are sharing happiness on the festive occasions, and given the hope to the nearby nations for the calamities. On the path, the regional cooperation are needed for uplift the current positions into the next level. Moreover, the world countries take an oath to fulfill the nation's requirement with biggest goals and uniformly without disturb the nature and safeguarded the wealth to the next generations, the programme termed as "sustainable goals (2030)". Thus, the BIMSTEC and SAARC are helped to growth and development of India and its neighboring countries over the years.

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Challenges & Prospectus of Indian Economy

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Abstract:

India was an agrarian economy with a weak industrial base, low level of saving and investment & absence of industrial facilities. There existed considerable inequalities in income, low level of employment & imbalance in the economic development. Thus India had to speed up its economic growth & maintain it in the long run at a steady level. After the independence in India there were few sector of the country need of change their policies for the development. In 1951 India adopted planned economic development policies for the development of primary, secondary & tertiary sector was consideration as an instrument of growth in Indian Economy. The growth of these sectors has been guided by the government which gave the strategic role in the development of the economy. At the current situation India lead to take change in the decision making process for long lasting survival of Economy for India found to be as developed country. In this paper we study the challenges and prospectus of Indian economy.

Key Words:

Economy, Agricultural Sector, Service Sector, Unemployment, Economic inequality, development, per capita income.

Introduction:

The Indian economy is developing economy. Before studying the Indian economy and the current problems facing it one should also consider how it is. In India 58 percent people are depend on agricultural sector that's why the economy also called as agrarian Economy. India gained independence on 15th August 1947. India was ruled by the British for 150 years. The resources available in India are utilized in a perfect and proper manner had it happened, India would have been one of the most developed nations in the world today. In 1951 India started implementing the Five Year Plan. The government adopted many models of development & they have tried to increase the overall growth rate of the economy. The objectives of Indian planning were to reduce economic inequality, reduce unemployment, achieve balanced regional development, and eradicate poverty. During the planning period the dependence of the population on agriculture in the Indian economy has decreased. The pace of industrial development & Service Sector will increase. The government has succeeded in shifting the additional population from agriculture to the second and third sectors. This shifting of the labor increases per capita income levels. The standard of living should be increased the transportation, roads, banking, educational and health facilities were improved in the economy but the Indian economy today faces many challenges.

Challenges of the Indian Economy: In India 58 Percent people are involved in the agricultural Sector. Unemployment and latent or hidden unemployment are clearly felt and the labor force is steadily increasing due to the horrendous growth of the population. In comparison with developed countries the economic growth rate is much slower. Recently the growth rate of Indian economy in 2018 was 6.8% and in 2019 it was reduced to 6.1%. In 2011-12, the proportion of population below the poverty line was 21.9%. In terms of numbers 21 crore people live in poverty. The wealth and economic power are inextricably linked. According to the World Bank report 90% of India's wealth is in the hands of only a handful of 5% people & 95% of the people have only 10% wealth. After independence the Indian Union enacted its own independent constitution. In the title of this constitution a sovereign, socialist, secular, democratic, republican state was created. Give freedom and equal opportunity to all citizens in social, economic, religious and political justice, freedom of thought, expression, belief and worship. India is a democratic country. In a democracy the welfare of the people is the essence of democracy. No distinctions of religion, caste, creed, sex all are given equal rights under the Constitution. The challenges facing the Indian economy in this process include unemployment, poverty and it is important to eliminate economic inequality.

Challenges of Indian Economy:

1) Large number of People depends on Agriculture:

The Indian Agricultural Sector has managed to live up to the demands of the increasing population of the country. Although India is an agrarian country the growth rate of agricultural sector in the

national income is very low. In 1950-51 the participation of agricultural sector in the national income was 58.7% and in 2013-14 it was decrease with 13.9%. This is an drastic change in agricultural production & income of the farmer because of agricultural sector facing the large number of problems like capital, natural calamities, Electricity, Price of Production, intermediate etc.

2) Low per capita income:

The growth in the country's per capita income is also known as important indicator of economic growth. In 1950-51 India's per capita income at fixed prices was Rs.7513 & in 2019-20 it was Rs.94,954 corers. It shows that per capita income is increased but it cannot increase the level of slandered living & fulfillment of essential needs of daily life. India is a developing country has the low growth rate of per-capita income. Apart from the low per-capita income India also has a problem of unequal distribution of wealth. This problem makes the problem of poverty and big obstacles in the economic progress of the country. Therefore low per-capita income is one of the primary economic issues in India.

3) Large number of increasing population:

In India the large numbers of increasing populations creates the issues of development. Today India is a second most populated country in the world. India has high level of birth rate & low level of death rate. These increasing populations needs to take of the basic requirement of food, Cloth, Shelter, medicine, School etc. hence there is an increased economic burden on the country.

4) Issues related to Unemployment:

In India increasing population creates the large number of unemployment. This unemployment is the aspect which contributes the economic issues & problems in the economy. There is an abundance of the labor in the country which makes it difficult it provide gainful employment to the entire population. The deficiency of the capital has led to the inadequate growth rate of secondary & tertiary sector occupations. This has further contributed to chronic unemployment in India.

5) Slow rate of Capital formation:

India always had a deficiency of the capital in all the sectors of the economy. However in the recent years India has in all the sects of the Edom experienced a slow but steady improvement in capital formation. We experienced a population growth of 1.6 percent during 2000-05 and needed to invest around 6.4 percent to offset the additional burden due to the increased population. Therefore India requires a gross capital formation of around 14 percent to offset depreciation & maintain the same level of living. The only way to improve the standard of living is to increase the rate of gross capital formation.

6) Inequality in wealth distribution:

The wealth and economic power are inextricably linked. According to the World Bank report 90% of India's wealth is in the hands of only a handful of 5% people & 95% of the people have only 10% wealth. The unequal distribution of wealth is certainly one of the major economic issues in India. Eliminating economic inequality in society is considered to be one of the major objectives of economic planning in India. In Industrialized countries greater economic inequality can be achieved by adopting public finance & pricing policies & making necessary change in the distribution of national income. But in India development must be accelerated to achieve the goal of social & economic equality.

7) Poor Quality of Human Capital:

The rate capital formation includes the use of any resource that enhances the capacity of production. Therefore the knowledge and training of the population is a form of capital. Hence the expenditure on education, skill, training, research and improvement in health are a part of human capital. To give you a perspective the United Nations Development Program ranks countries based on the Human Development Index. This is based on the life expectancy, education & per-capita income. India has been positioned at 131 out of 189 countries and territories, according to Human Development Index report 2021.

8) Low level of adoption of technology:

In the current situation the new technologies are being developed every day. However they are expensive and require people with a considerable amount of skill to apply them in production. These new technology requires the large number of capital & trained and skilled labor. Therefore, the deficiency of human capital and the absence of skilled labor are major hurdles in spreading technology in the Indian economy. India's poor farmers cannot buy essential things like improved seeds, fertilizers and machines like tractors etc. Further most enterprises in India are micro or small. Hence they cannot afford modern and more productive technologies in their business.

9) Lack of access to basic amenities:

In 2011, according to the Census of India, nearly 7 percent of India's population lives in rural and slum areas. In India only 46.6 percent of households have access to drinking water & 46.9 percent of households have toilet facilities. This leads to the low efficiency of Indian workers, also dedicated and skilled healthcare personnel are required for the efficient and effective delivery of health services. However ensuring that such professionals are available in a country like India is a huge challenge.

10) Underutilization of natural resources:

India is rich in natural resources like land, water, minerals and power resources. However due to problems like inaccessible regions, primitive technologies and lack of capital these resources are largely underutilized.

11) Lack of infrastructure:

The lack of infrastructural facilities is a serious problem affecting to the Indian economy. These include transportation, communication, electricity generation, distribution, banking and credit facilities, health and educational institutions etc. Therefore the potential of different regions of the country remains underutilized.

Prospectus of Indian Economy:

India is second fastest growing economy. The demand in the domestic market as well as international market is picking up which should help the Indian economy. India has emerged as the fastest growing major economy in the world and is expected to be one of the top three economic powers in the world next 10-15 years backed by its robust democracy and strong partnerships. India needs to increase its growth rate of employment and create 90 million non-farm jobs between 2023 and 2030's, for productivity and economic growth. The net employment rate needs to grow by 1.5% per year from 2023 to 2030 to achieve 8-8.5% GDP growth between 2023 and 2030. With an improvement in the economic scenario there have been investments across various sectors of the economy. The Union Budget of the 21st century was presented by Ms. Nirmala Sitharaman, Minister of Finance & Corporate Affairs in the Parliament on February 1, 2020. The budget aimed at energizing the Indian economy through a combination of short, medium and long term measures. In India there is an increasing government expenditure is expected to attract private investments with production linked incentive scheme providing excellent opportunities. Consistently proactive, graded and measured policy support is anticipated to boost the Indian economy. In the manufacturing sector the numbers of foreign companies are setting up their facilities in India on account of various Government initiatives like Make in India, Start-up India, Stand-up India and Digital India. The Prime minister of India Shri. Narendra Modi launched Make in India initiative with an aim to boost country's manufacturing sector and increase purchasing power of an average Indian consumer which would further drive demand and encourage development. Under the Make in India initiative government of India trying to boost the contribution made by the manufacturing sector with an aim to take it to 25% of the GDP from the current 17%. Besides the Government has also come up with Digital India initiative which focuses on three core components like creation of digital infrastructure, delivering services digitally and increase the digital literacy.

Conclusion:

After this study we appreciate that India need to change their policy to increase the overall growth rate of Economy. Nobody say that I am not the part of this. Every person of the country is responsible to do their duties assigned with government of non-government sector which can be increased the growth rate of the economy. The government has taken lead to shifting of the additional population from agriculture to the second and third sectors for increase the employment level which also useful to increase the per capita income levels which can be increased the standard of living of the people. The government and all people are doing their best performance then India found to be as a developed country in the world. In this paper we have discussed the major issues & development in the Indian Economy. All these can be resolved in terms of three leading issues viz. poverty, employment & inequality. Some of the issues are the nature of strategies to find the solution to the basic problem of poverty & inequality.

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Shifts In Direction of Export of India's Foreign Trade

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Introduction:

The direction of Indian foreign trade has changed in last few years. Direction of foreign trade refers to the relative share of various countries or country group in our imports and exports. "Prior to our independence the direction of India's foreign trade was determined not according to the comparative cost advantages of India but by the colonial relations between India and Britain when we were under British trade with countries of Asia & ASEAN and Africa has gone up substantially. Apart from that, India is now a major player in global trading system and all the major sectors of Indian economy are linked to world Outside either directly or indirectly through international trade" (Mane, V.H., 2011, p. 1). "There has been significant market diversification in India's trade. Region wise, while India's exports to Europe and America have declined its exports to Asia and Africa has increased. India's top 15 trading partners have nearly 60 percent in share in its trade with top three contributing nearly half of this share. While Iran and UK are out of this 15 list in 2011-12, Iraq and Kuwait are the new entrants" (Bhalla, V. K., 2013, p. 954). "The shifting patterns of trade are associated with the rapid industrial growth of a range of developing countries. Moving from agricultural and other primary production to manufacturing tends to drive up the import intensity of production; moreover, global trade increasingly involves value chains with different geographical locations contributing various parts to the production processes. While recent import demand in most developing countries has remained vigorous, only a few of these countries have succeeded in climbing up the global value chain and diversifying their export base to cater to markets previously dominated by developed economies." (Agrawal, A. N., 2011, pp. 596-597).

Review of Literature:

Patel S. J. (1959) in his research article entitled "Export prospects and Economic Growth in India", argues that India's has tangency in export over the years and decline world demand for Indian exports. During the 1960s India's foreign trade in Eastern Europe countries, most dynamic and payment arrangements under trade for its impact from East Europe Countries were in non-convertible rupees. **Katti, Vijaya (2005)** her paper on "Foreign trade policy - An appraisal", has observed that the India is to become a major player in the world trade. According to her, the EXIM policy was renamed as the new foreign trade policy. The main objectives of the foreign trade policy are to double our percentage share of global merchandise trade within the next five years and to act as an effective instrument of economic growth by giving a thrust to employment generation. **Bhatt P. R. (2008)** in his article entitled, "India's Trade Competitiveness and Exchange Rate Policy, observed that India's GDP growth rate during 1980-2000 at 6 percent was lower than most other Asian countries. However, the share of India's exports in GDP has improved from 4 percent in 1985-86 to 10 percent in 2000-01. India's main competitors that considered in this study are Indonesia, South Korea, Malaysia, Pakistan, Philippines, Singapore, Sri Lanka, Thailand and Kenya. India's major export marketing centers are the United States (US), Japan, France, West Germany and the United Kingdom (UK). **Mane V. H. (2011)** studies, "the India's direction and composition of foreign trade in the last sixty years." He concluded that the foreign trade plays crucial role in every nation's economic growth. India accepted globalization and liberalization in the year 1991. India's major exports include manufacturing and engineering goods. Economic development required setting up of new industries, modernization of agriculture and industry.

3. Objectives of the Study:

To assess shifts in direction of India's foreign trade in pre and post reform period.

4. Research Methodology:

The Present research study is of the type of Analytical research the present study rely on Secondary data The secondary data have been collected for the period from 1980-1981 to 1990-91, and 1991-92 to 2014-15. The data consist of direction of trade through the publications such as economic surveys, ministry of finance, government of India, RBI Annual reports and Monthly reports, Ministry of External Affairs etc

5. Data Analysis and Interpretation:

Table No.1.2
Direction of Total Export of India in Pre Reform Period

(Values in crore)

Year	I) OECD Countries	II) OPEC of which	III) Eastern Europe	IV) Developing Countries	V) Others/ Unspecified	Total Direction of Exports
1980-81	3126.24 (46.78)	744.63 (11.14)	1486.33 (22.24)	1285.75 (19.24)	40.22 (0.60)	6683.17 (100.00)
1981-82	3427.1 (43.90)	940.25 (12.05)	1974.92 (25.30)	1232.49 (15.79)	231.14 (2.96)	7805.9 (100.00)
1982-83	3557.6 (40.41)	820.2 (9.32)	2024.7 (23.00)	1068.4 (12.14)	1332.5 (15.14)	8803.4 (100.00)
1983-84	4366.8 (44.69)	881.5 (9.02)	1610.3 (16.48)	1563.3 (16.00)	1348.7 (13.80)	9770.7 (100.00)
1984-85	5272.4 (44.90)	944 (8.04)	2241.9 (19.09)	1440.8 (12.27)	1844.7 (15.71)	11743.7 (100.00)
1985-86	5531.8 (50.78)	835.1 (7.67)	2293.8 (21.05)	1463.4 (13.43)	770.7 (7.07)	10894.6 (100.00)
1986-87	7043.5 (56.56)	773.6 (6.21)	2380.2 (19.11)	1871.1 (15.03)	414.9 (3.33)	12452.4 (100.00)
1987-88	9233.9 (58.91)	961.9 (6.14)	2593.9 (1.55)	2228.6 (14.22)	655.3 (4.18)	15673.7 (100.00)
1988-89	11776.5 (58.21)	1192.8 (5.90)	3355.9 (16.59)	3395.1 (16.78)	511.2 (2.53)	20231.5 (100.00)
1989-90	15462.5 (55.91)	1840.8 (6.66)	5331.6 (19.28)	4317.4 (15.61)	706.1 (2.55)	27658.4 (100.00)
1990-91	18389.1 (56.48)	1830.9 (5.62)	5819.2 (17.87)	5560 (17.08)	958.2 (2.94)	32557.6 (100.00)
Mean	7926.13 (53.7)	1069.61 (7.16)	2828.43 (18.94)	2311.49 (15.48)	801.24 (5.37)	14934.10 (100.00)
SD	5209.54	397.42	1450.31	1474.80	535.18	8466.97
CV	65.73	37.16	51.28	63.80	66.79	56.70
CAGR	20.23	7.82	12.88	16.47	14.10	16.16

Source: Calculated on the basis of data given in various issues of Economic survey Report, GOI, 1981-1982 to 1986-1987 and Handbook of Statistics on the Indian Economy, RBI, 2000-2001 to 2005-06.

Note: Figure given in Bracket () indicates percentage share of commodity.

Table represents the data about direction of total export to the main countries in pre reforms period. It is seen in figure 6.1 that export during this period was mainly contributed by the OECD countries, which are followed by Eastern Europe and Developing countries. The share of export to the OECD countries is 53.07 percent and that of Eastern Europe, Developing countries, OPEC countries and other/unspecified countries are 18.94, 15.48, 7.16 and 5.37 percent respectively. There is continuous growth is seen in the export towards OECD countries. The growth is increasing with 20.23 percent compound growth rate during pre reform era The growth in export to OECD countries has changed remarkably showing wide variations as coefficient of variation is 65.73 percent. The continuous growth is seen in the export to the OPEC countries with certain declines as shown in figure 6.2. The growth of export to OPEC countries is increasing with 7.82 percent compound annual growth rate. The growth in export to OECD countries has changed consistently as coefficient of variation is 37.16 percent. The growth of export to the Eastern Europe countries is increased with 12.88 percent compound growth rate. The growth in export to Eastern Europe countries has changed consistently; the coefficient of variation is 51.28 percent. Total export shows increasing trend, except fewer declines. In pre reform period mean earnings from export towards Eastern European countries is Rs. 2828.43 crore. Continuous growth is seen in the export towards developing countries. The growth is increasing with 16.47 percent compound annual growth rate. The growth in export to developing countries has changed remarkably showing wide variations as

coefficient of variation is 63.80 percent. India has developed its trading relationships with other countries besides these 4 country groups.

India exported average values of Rs. 801.24 crore to the other countries.

The export to these countries is growing with compound annual growth rate of 14.10 percent. The significant shifts can be seen in the export to other countries as coefficient of variation is 66.79 percent. In pre reform period India has exported mean amount of Rs. 14934.10 crore. The growth in export is increased with compound annual growth rate of 16.16 percent and coefficient of variation is 56.70 percent.

Table No.1.2
Direction of Total Export in Post Reform Period

(Values in crore)

Year	I) OECD Countries	II) OPEC of which	III) Eastern Europe	IV) Developing Countries	V) Others/ Unspecified	Total Direction of Export
1991-92	25482.2 (57.86)	3850.2 (8.74)	4813.7 (10.93)	8842.8 (20.08)	1052.2 (2.39)	44041.8 (100.00)
1992-93	32466.4 (60.47)	5179.7 (9.65)	2359.3 (4.39)	12268.8 (22.85)	1414.1 (2.63)	53688.3 (100.00)
1993-94	39672.1 (56.88)	7471.8 (10.71)	3140.9 (4.50)	18184.5 (26.07)	766.5 (1.10)	69751.4 (100.00)
1994-95	48491.3 (58.65)	7625.6 (9.22)	3319.1 (4.01)	21883.4 (26.47)	1207.4 (1.46)	82674.1 (100.00)
1995-96	59223.3 (55.69)	10299 (9.68)	4482.2 (4.21)	30768.4 (28.93)	1264.1 (1.19)	106353.3 (100.00)
1996-97	66034.7 (55.58)	11462.2 (9.65)	3899.7 (3.28)	35630.2 (29.99)	1709.1 (1.44)	118817.1 (100.00)
1997-98	72415.2 (55.66)	13109.6 (10.08)	4769.5 (3.67)	38324.8 (29.46)	2608.5 (2.00)	130100.6 (100.00)
1998-99	81044.9 (57.99)	14938 (10.69)	4429.7 (3.17)	38794.5 (27.76)	2586.7 (1.85)	139753.1 (100.00)
1999-2000	91460.5 (57.32)	16910 (10.60)	5602.5 (3.51)	45325.9 (28.41)	290.8 (0.18)	159561.4 (100.00)
2000-01	107237.8 (52.68)	22156.9 (10.88)	6020.4 (2.96)	59447.1 (29.20)	8708.7 (4.28)	203571 (100.00)
2001-02	103119.7 (49.34)	24916.5 (11.92)	5984.2 (2.86)	64553.2 (30.88)	10444.4 (5.00)	209018 (100.00)
2002-03	127679.2 (50.04)	33318.2 (13.06)	6040.1 (2.37)	86445.2 (33.88)	1654.6 (0.65)	255137.3 (100.00)
2003-04	136151.1 (46.41)	43858 (14.95)	7147.3 (2.44)	104697.3 (35.69)	1513 (0.52)	293366.8 (100.00)
2004-05	163976.6 (43.69)	59342.7 (15.81)	7998.8 (2.13)	141970.5 (37.82)	2050.9 (0.55)	375339.5 (100.00)
2005-06	202935.8 (44.46)	67482.7 (14.79)	8767.9 (1.92)	175927 (38.55)	1304.5 (0.29)	456417.9 (100.00)
2006-07	235333.2 (41.16)	93668.3 (16.38)	11354.2 (1.99)	229704.6 (40.17)	1719 (0.30)	571779.3 (100.00)
2007-08	258764 (39.45)	108662 (16.57)	13622.5 (2.08)	278487 (42.46)	2556 (0.39)	655864 (100.00)
2008-09	314835 (37.45)	178789 (21.27)	9256 (1.10)	315265 (37.50)	22610 (2.69)	840755 (100.00)

Year	I) OECD Countries	II) OPEC of which	III) Eastern Europe	IV) Developing Countries	V) Others/ Unspecified	Total Direction of Export
2009-10	304309 (35.99)	178618 (21.12)	8508 (1.01)	332577 (39.33)	21522 (2.55)	845534 (100.00)
2010-11	379767 (33.23)	243769 (21.33)	12819 (1.12)	437582 (38.29)	68984 (6.04)	1142922 (100.00)
2011-12	495969 (33.83)	278291 (18.98)	15547 (1.06)	597623 (40.77)	78528 (5.36)	1465959 (100.00)
2012-13	558961 (34.20)	341908 (20.92)	21417 (1.31)	680755 (41.65)	31137 (1.91)	1634319 (100.00)
2013-14	658313 (34.75)	366594 (19.35)	22412 (1.18)	784361 (41.41)	62502 (3.30)	1894182 (100.00)
2014-15	668600 (35.24)	369160 (19.46)	21001 (1.11)	809570 (42.68)	28695 (1.51)	1897026 (100.00)
Mean	218010.08 (38.34)	104224.18 (18.33)	8946.33 (1.57)	222874.51 (39.20)	14867.85 (2.61)	568580.50 (100)
SD	199472.00	125366.00	5966.88	256767.00	23333.68	605136.00
CV	91.50	120.28	66.70	115.21	156.94	106.43
CAGR	14.62	23.12	8.85	21.37	19.59	18.00

Source: Calculated on the basis of data given in various issues of Handbook of Statistics on the Indian Economy, RBI, 2000-2001 to 2014-15.

Note: Figure given in Bracket () indicates percentage share of commodity.

Table 1.2 gives the data about direction of total export to the main countries in post reform period. It is seen that export during this period was mainly contributed by the Developing countries, followed by OECD countries. The share of export to the developing countries is 39.20 percent, and that of OECD countries, Eastern Europe and other/unspecified countries are 38.34, 18.33, 1.57 and 2.61 percent respectively. There is continuous growth is seen in the export towards OECD countries. The growth is increasing with 14.62 percent compound growth rate. Mean export to the OECD countries is Rs. 218010.08 crore. The growth in export to OECD countries has changed remarkably showing inconsistent growth as coefficient of variation is 91.50 percent. The continuous growth is seen in the export to the OPEC countries with certain declines as shown. The growth of export to OPEC countries is increasing with 23.12 percent compound annual growth rate, but the growth in export to OPEC countries has changed inconsistently as coefficient of variation is 120.28 percent. The growth of export to the Eastern Europe is increased with 8.85 percent compound growth rate, but this countries show consistent growth in export other than other countries. The growth in export to Eastern Europe countries has changed consistently; the coefficient of variation is 66.70 percent as well as continuous growth is seen in the export towards developing countries. The growth is increasing with 21.37 percent compound annual growth rate. India has developed its trading relationships with other countries besides these 4 country groups. India exported average values of Rs. 14867.85 crore to other countries. The export to these countries is growing with compound annual growth rate of 19.59 percent. The significant shifts can be seen in the export to other countries as coefficient of variation is 156.94 percent. In post reform period India has exported with mean value of Rs. 568580.50 crore. The growth in export is increased with compound annual growth rate of 18 percent and coefficients of variability of 106.43 percent due to changing the countries policies and demand of export countries.

Conclusion:

As seen in the comparison the Share of OECD and Eastern Europe countries in total export of India goes on increasing in pre reforms period i.e. 53 and 19 percent respectively while decreasing towards post reform period i.e. 38 and 2 percent respectively, due to the changing policies of trading activity in these countries after reform process, but in case of developing countries in the post reforms period India reaching to double (39) percent export towards this country as compared to the pre reform era (16) percent. In post reforms period increasing the total direction of export as a pre reforms period the mean value was

Rs. 568580.50 crore and Rs. 14934.10 crore respectively with inconsistent growth. The compound annual growth rate is little more in post reforms period i.e. 18.00 percent than pre reform era i.e. 16.16 percent it is seen in table 5.2 and 5.3.

The comparative analysis of changes in the export direction of India with its trading partners reveals that, in the pre reforms period OECD countries were dominant relatively as well as growth terms, which was followed by Eastern Europe and Developing Countries. But in the post reforms period, the domination of OECD countries has reduced significantly and it is increasing of the developing countries. Besides this, export to OPEC countries is increasing in the post reform period, with more diversification in relative as well as growth terms.

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Effect of Agronomic Design on Productivity of Fodder Crops

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Abstract: The popular fodder crops were cultivated either in sole cropping or in intercropping system for measurement of fodder yield. Fodder production has significant application in agriculture. The selected fodder crops were cultivated by adapting replacement series technique. Competitive relationship between fodder crops under intercropping cultivation, gives an indication of yield advantages on the basis of land equivalent ratio (LER). Intercropping of fodder crops has been recommended for higher productivity.

Key Words: Intercropping, competitive crop, fodder, LER

Introduction: Cultivation of fodder crops has a special significance in agriculture as it supports growth, maintenance and production of farm animals. The animal provides supplementary income to farmers. Several fodder crops have been recommended for cultivation and subsequent feeding to cattle. While cultivating the fodder crops proper agronomic practices have to be followed for maximum fodder production per unit area. Intercropping, mixed cropping or cultivating two or more crops simultaneously on same piece of land is a common practice in Indian agriculture. (Andrew And Kassam, 1975, De et al. 1975; Rao And Willey, 1978; Willey 1979). It has been realized that intercropping gives higher yields than cultivating single crop alone i.e. sole cropping. Major cause of yield advantage is better use of growth resources, greater nutrient uptake and competition among the component crops (Dalal, 1965; Patel et al., 1968).

Studies on fodder production initiated in this department during 1968-1969. Till 1980 potential of fodder crops were studied by adopting sole cropping system. Kasture (1982) initiated the experiments on intercropping and showed that this practice of cultivating legume and non-legume crop simultaneously is beneficial. Kasture and Mungikar (1981) pointed out that sorghum and cowpea mixture yields more than their mono culture. It has been shown by Mungikar (1988) that an intercropping system use light energy more efficiently, resulting in higher total productivity.

Experimental: The field trials were under taken with bajra (*Pennisetum typhoides* Rich.), Cowpea (*Vigna unguiculata* (L.) Walp. Pusa Barsati) and *Dolichos* (*Lablabniger* medicus Cyn. *Dolichos lablab* L.). All field trials were conducted in Botanical Garden of Dr. Babasaheb Ambedkar Marathwada University. The soil was slightly alkaline with a pH value of 8.2; containing 0.45% organic carbon. The available N, P, K were 101, 10.1 and 22.3 kg/ha. respectively a piece of land was prepared by ploughing and cross ploughings. The land was then divided into plots, each bearing 16.48 m² area. The sowing was done by hand in rows 30.5 cm apart. Since the crops were to be harvested for vegetative phase i. e. green foliage; slightly higher seed rate were used than recommended for production of grains. Fertilizers were applied through urea and single super phosphate for nitrogen and P₂O₅ respectively. Before sowing farm yard manure (FYM) at the rate of 1500 kg /ha and 20 kg P₂O₅/ ha were applied as basal dose. When ever necessary weeding was done by hand. The crops were grown under irrigation. All trials were conducted in randomized block design (RBD) with three replicates.

The crops were harvested for green fodder with steel cutter early in the morning. The harvesting was done generally at pre flowering stage. Fresh green fodder obtained per plot was measured and recorded as yield of green fodder per plot. A sample of green fodder from each plot was brought to the laboratory immediately after harvesting.

Result and discussion: table -1 gives the yields from Bajra, cowpea and *Dolichos*. The green foliage of bajra was with 26.4% DM when cultivated as a sole crop, decreases within the limits of 22.3 to 22.4% when cultivated with either cowpea or *Dolichos*. There was no any change in N content due to cropping pattern and the foliage of bajra contained 2.53 to 2.57% of N on DM basis. The N content in the leaves of cowpea and *Dolichos* were higher than those in bajra. On an average N content in these two crops ranges from 3.53 to 3.82% with little variation due to cropping pattern.

Land productivity is a basic consideration in evaluating yield advantages due to various intercropping pattern. For this purpose land equivalent ratio (LER) for different intercropping system was calculated and presented in the table. The land equivalent ratio is the total land required by sole crop to achieve as much yield as recorded from intercropping system. A LER more than equity indicates yield advantage. The three inter cropping system showed yield advantages for green fodder. Bajra + *Dolichos*

intercropping system however, did not showed yield advantage. The over all results indicate that bajra+ cowpea intercropping system had yield benefits.

Conclusion: The overall results obtained from present investigations trial with sole and intercropping system indicate that production of fodder crop couldbe increased by adapting intercropping system of cultivation.

Table -1 The yields of green foliages (GF),dry matter(DM)and crude protein (CP)from Bajra , Cowpea and Dolichos cultivated in either sole or inter cropping systems.

crops	Foliages		Yields kg/ha		
	% dry Matter (DM)	N % of DM	Green Foliages(GF)	Dry Matter (DM)	Crude Protein(CP)
Sole cropping					
Bajra (B)	26.40	2.57	14935	3945	636
Cowpea(C)	21.00	3.81	2225	467	111
Dolichos(D)	22.16	3.66	5609	1245	286
Inter cropping					
Bajra+ B	22.40	2.53	10852 (0.72)	2434 (0.61)	384 (0.60)
Cowpea C	20.40	3.70	1269 (0.57)	259 (0.55)	60 (0.54)
Total			12121 (1.29)	2693 (1.16)	444 (1.14)
Bajra+ B	22.30	2.53	10336 (0.70)	2306 (0.58)	364 (0.57)
Dolichos D	20.90	3.70	2225 (0.40)	464 (0.37)	107 (0.37)
Total			12561 (1.10)	2770 (0.95)	471 (0.94)
Cowpea C+	20.10	3.82	1876 (0.84)	377 (0.81)	90 (0.81)
DolichosD	21.30	3.53	5591 (0.99)	1191 (0.96)	263 (0.92)
Total			7467 (1.77)	1568 (1.77)	353 (1.73)
C.D. P=0.05			1314	369	66

The values in parenthesis indicate land equivalent ratio (LER)

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Theme of Suffering In Saul Bellow's Novel "Mr. Sammler's Planet"

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Abstract

The present research paper intends to explore the theme of suffering in Saul Bellow's novel "Mr. Sammler's Planet". Literature involving suffering often restores our faith in justice and aids us in grappling with the question of why we suffer in our life. Author use the characters to reveal the truths about the human condition. In literature novelists identify ways in which suffering can function as a motivator for his/her own progress. The present research has considered this situation. The present research aims to analyze the theme of suffering in Saul Bellow's novel "Mr. Sammler's Planet".

Key Words: suffering, plight, empathy, struggle, failure, alienation, liberal humanism

Research Methodology: Interpretative, analytical and evaluative.

Introduction

Suffering is a universal phenomenon which is hard to define. It is often connected to pain. Suffering includes ways of dealing with adversity, loss and pain which always appear in literature. The most notable characteristic of Saul Bellow's protagonist is suffering. The present research paper intends to explore the theme of suffering in Saul Bellow's novel "Mr. Sammler's Planet".

Mr. Sammler's Planet is the most anxious and apocalyptic novel. It was published in 1970 which was the winner of National Book Award. Saul Bellow often described as America's best contemporary novelist who earned enormous praise and wide relationship as well. He was awarded the Nobel Prize for literature in 1976. *Mr. Sammler's Planet* is a novel of horror and a novel of suffering. In this novel there are terrible experiences during World War II where the Nazis shoot his wife. Then he is thrown into a ditch with other people who have been shot. These things reflect the suffering of the major and minor characters of the novel *Mr. Sammler's Planet*.

Objectives:

1. To analyze the humanities in characters.
2. To explore the major and minor characters in the light of the suffering.
3. To analyze the theme of suffering in Saul Bellow's novel "Mr. Sammler's Planet".
4. To analyze the life of Jewish people.
5. To explore the ways of life of the people.
6. To understand the cause of people's suffering.

Theme of suffering in Mr. Sammler's Planet

The present research aims to analyze the theme of suffering in Saul Bellow's novel "Mr. Sammler's Planet" which reflects the major and minor characters of this novel. As this is the most anxious and apocalyptic novel; the theme of suffering is reflected very significantly in this novel. Further Sammler the protagonist is a seventy year old Polish Jewish survivor of the Holocaust. The title of the novel also suggests the life on earth that is the plight and the struggle of human being. This novel include countless variations on several fundamental polarities such as objectivity and subjectivity, love and hate wisdom and foolishness, society and self, beginning and end, death and life. Further Sammler was the only survivor of the massacre and he managed to survive the debasement which rapes humanity. Sammler was repatriated, along with his daughter Shula. He wants to forget the misery of life, but the memory of the past breaks in as burden of sorrow. He is caught up in this world of ideas. With this novel Saul Bellow located his main theme which he was to continue exploring for the rest of his life as a creative writer. That theme was the role of the immigrant Jew people in twentieth century America which was the main cause of suffering in this novel. The person has been driven by poverty and war to find refuge in a land. Further Sammler is a representative of twentieth century history who has dug his own grave and survived a Nazi execution Squad. *Mr. Sammler's Planet* is a response to the social and sexual revolutions of the 1960s in America and Europe, coupled with his long standing concern for the fate of immigrant Jews in post-Holocaust America. The protagonist has a lot of trouble with the social movements of the 60s that is why he suffers a lot while living a life. We are on the planet where we live. We learn from our experiences and their interpretations by ourselves. No other world or planet is available. No other world will make any serious difference. We ourselves have to solve our difficulties. Sammler's life is presenting him with many problems. He is upset because of imminent death of Elya Gruner who saved Sammler and his daughter from Holocaust Poland

and supported them in America. He also disturbed by his daughter who steals the only copy of manuscript of GovindLal. During the lecture on H.G. Wells a Marxist student violently attacks Sammler's speech as "effete" nonsense. Along with that he is physically disabled, having lost one eye in Nazi regime. In short he suffers a lot in his life. When Shula went to Israel and married Eisen who began beating her a lot; Sammler Rescued her and they returned to New York. During the war Sammler lost faith in god and suffered from failure and alienation. Sammler finds himself wandering in an America. Sammler also feels empathy for pickpocket while he is beating by Eisen. Sammler's nephew flooding the house and crashing an aeroplane while taking photographs shows the suffering in novel. As Sammler says,

"It was the turn again and again of certain minor things which people insisted on, enlarging, magnifying, and moving into the centre". (Page No. 250) In this novel a registrar of madness records the degradation of the city life by beholding very deep into the pathetic condition of the human mind and soul. Most of the characters in the novel reveal the failure, confusion and suffering. Saul Bellow sees it, as that once on American shores, the immigrants are pulled between preserving their own culture, and then becoming assimilated as an American. This is normally characterised as a choice between two ways of life in which first is a traditional respect for liberal humanism, human decency, and a love of arts, intellectualism, and also a deep sense of cultural and political history. It is also likely to involve close bonds with family their members and the second is a no-holds-barred pursuit of individualism and personal liberty, embracing free-market capitalism, dog-eat-dog competition, get-rich-quick schemes. And devil take the most greed and corruption at all levels in which common people suffered a lot. In Sammler's Planet it is quite obvious that which of these two options Bellow supports. Sammler is a Holocaust survivor and he cherishes his relatives and friends. He is also a man of culture and sophistication, even though he is living on hand-outs from his nephew. Mr. Sammler is a living representative of twentieth century history. He is a man who has dug his own grave. And also he is miraculously survived a Nazi execution squad. Saul Bellow does not offer a simplistic example of victimhood of the sufferer. Once Sammler himself reflects on the case of Chaim Rumkowski who is a Jewish leader in occupied Poland nation who assisted the Nazis, arranged the deportation of children to the death camps. And even there abused young girls by him before he was beaten to death by fellow inmates on arrival at Auschwitz. Saul Bellow's message is quite clear here in which the full horror must be confronted, and should not be forgotten. Here the hero of the novel is surrounded by every excess that modern America can throw at him: the black pickpocket who does intimidate him with an aggressive sexual gesture; his ex-fellow Feffer whose instinct is to exploit everything that comes his way; Wallace Gruner who is the son of his nephew who is described by his own father as a 'high-IQ idiot' that is full of mad entrepreneurial schemes to make money.

Saul Bellow's Sammler Planet novel is basically his response to the social and sexual revolutions of the 1960s in America and Europe which was coupled with his concern for the fate of immigrant Jew people in post-Holocaust America. Sammler is oppressed and appalled by the excessiveness of a sexual madness which was overwhelming the Western world. Sammler's young niece named Angela is the living embodiment of the sexual revolution summons large. These things show that there is also a sexual suffering in this novel. In the novel the earth provide macrocosmic along to mankind's experience of conflict in life. Shula steals the manuscript of Dr. GovindLal so that her father can read it to complete a memoir of H. G. Wells and Lal's attempt to recover it drive much of the novel's plot. Margotte Arkin was a niece of Sammler's dead wife, Antonina. She was the wife of Usher Arkin, recently killed in a plane crash. Dr. Elya Gruner, a gynecologist, widower is dying of an aneurism. His slow dying offers Sammler many occasions for considering the meaning of life and death. All these reflect the theme of suffering in the novel *Mr. Sammler's Planet*. The present research paper intends to explore the theme of suffering in Saul Bellow's novel "*Mr. Sammler's Planet*". As Sammler explains to Dr. Lal

"Once you begin talking, once the mind takes to this way of turning, it keeps turning and it dips to all events, and perhaps it makes matters slightly more tolerable, to let it turn."

(Page No. 215)

Conclusion

Despite of the flaws of Saul Bellow's characters, Bellow sympathizes with them for their sufferings and readers feel empathy for those suffered in the novel "*Mr. Sammler's Planet*". At the end of the novel Mr. Sammler found compassionate consciousness necessary to bridge the gap between himself and his fellow beings. Suffering is the part of our nature to seek pleasure and avoid pain. Novel plays a central role in how to deal with suffering. We learn from the experience of suffering and it makes us stronger and resilient. Suffering includes ways of dealing with adversity, loss and pain which always appear in literature. The most notable characteristic of Saul Bellow's protagonist and other characters is suffering. His some major and minor characters suffer a lot in their life in the novel *Sammler's Planet*".

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Butterfly Diversity of Udadavane Forest Area Akole, Ahmednagar, M. S. (India)

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Abstract

Butterflies are insects in order Lepidoptera under phylum Arthropoda. They are one of the most important assemblages of insects that act as biodiversity indicators as well as nature's gardeners. Forest area of Udadavane village possesses a diverse floral composition thereby supporting a large number of butterflies. This paper present preliminary study of presence and distribution of butterfly from Udadavane village region of Akole tehsil of Ahmednagar distract in Maharashtra having species belonging 21genera, 29 species&6families. The family Nymphalidae was the most dominant with the highest number of species (18 Species, 62%), Papilionidae (3 Species, 10%), Pieridae (3 Species, 10%), Lycaenidae (3 Species, 10%), Hesperidae (1 Species, 4%) and Riordinidae (1 species, 4%).

Keywords: Diversity, Butterfly, Lepidoptera, Distribution, Udadavane

Introduction:

Butterflies are often polymorphic, and many species make use of camouflage, mimicry to evade their predator. Butterfly adults are characterized by their four scale- covered wings. They strictly habitat and seasonal specific and hence also act as good indicator of habitat quality and also they are the sensitive indicators of climate change [1]. They have been studied systematically since the early 18th century and about 19,238 species are documented by Heppner [2]. Kunte et al. 2012 indicated that India harbored total 1504 of butterfly species which around 8.74% of the world's butterfly [3]. Declining butterfly populations have been noticed in many areas of the world, and this phenomenon is consistent with rapidly decreasing insect populations around the world.

Material And Method:

Study Area:

Udadavane is village in Akole tehsil of Ahmednagar District (M. S.). It is 190 km. away from Ahmednagar located between 19.568245⁰ N 73.697527⁰ E occupy an area about 1722.37 hector. The area is surrounded with a very large variety of trees, mini forest, vast grassland and hills. Udadavane village is a good habitat for biodiversity of butterflies. The present study has been carried out from September 2021 to December 2021. butterfly watching and recording has been done during Sunday and holidays in such way that there should be least one visit in each line transect during a week. The observation made with the aid of binocular and digital camera. The recorded species are studied and identified with the help of photographs by using field guide, reference books and publications available without killing them.



Image 1: Map of Udadavane Village Area

Result:

A checklist of butterflies of Udadavane village has been prepared based on the present study. Total 29 species of butterflies were recorded belonging to 21 genera and 6 families. The checklist of all the species observed with their distribution is given in Table 1.

Sr. No.	Family Name	Common Name	Generic Name	Distribution at study area		
				forest	Maruti temple	village
1.	Nymphalidae	Angled castor	Ariadne ariadne	+	+	-
2.		Blue pansy	Junonia orithya	+	-	-
3.		Chocolate pansy	Junonia ipthia	-	+	-
4.		Common crow	Euploea core	+	+	+
5.		Common baron	Euthalia aconthia	+	+	-
6.		Common evening brown	Melanitis leda	+	+	+
7.		Common fivering	Ypthima baldus	+	+	-
8.		Common fourring	Ypthima nubneri	+	-	+
9.		Banded tree brown	Lethe confusa	+	-	+
10.		Glassy tiger	Parantica aglea	+	+	+
11.		Great eggfly	Hypolimnas bolina	+	+	+
12.		Lemon pansy	Junonia lemonias	+	+	+
13..		Peacock pansy	Junonia almana	+	+	-
14.		Plain tiger	Danaus chrysippus	+	+	+
15.		Striped tiger	Danaus genutia	+	+	-
16.		Dark evening brown	Melanitis phedima	+	-	+
17.		The dryad	Minois dryas	-	+	+
18.		Gemmed satyr	Cyllopsis gemma	-	-	+
19.	Papilionidae	Blue mormon	Papilio polymnestor	-	+	-
20.		Common jay	Graphium doson	+	-	+
21.		Common mormon	Papilio polytis	+	-	+
22.	Pieridae	Common emigrant	Catopsilia pomona	+	+	+
23.		Common grass yellow	Eurema hecabe	+	+	+
24.		Small grass yellow	Eurema brigitta	+	+	-
25.	Lycaenidae	Common line blue	Prosotas nora	+	-	+
26.		Angled pierrot	Celeta decidia	+	+	-
27.		Red pierrot	Talicauda nyseus	+	-	-
28.	Hesperiidae	Chestnut bob	Iambrix salsala	+	-	-
29.	Riodinidae	Plum judy	Abisara echerius	+	+	-

Table 1: Checklist of Butterflies in Udadavane village area, Akole, Ahmednagar (M. S.)

Sr. No.	Family	No. of genus with %	No. of species with %
1.	Nymphalidae	12 (57%)	18 (62%)
2.	Papilionidae	2 (9%)	3 (10%)
3.	Pieridae	2 (9%)	3 (10%)
4.	Lycaenidae	3 (15%)	3 (10%)
5.	Hesperiidae	1 (5%)	1 (4%)
6.	Riodinidae	1 (5%)	1 (4%)
Total		21	29

Table 2: Family- wise compositions of Butterflies in study area

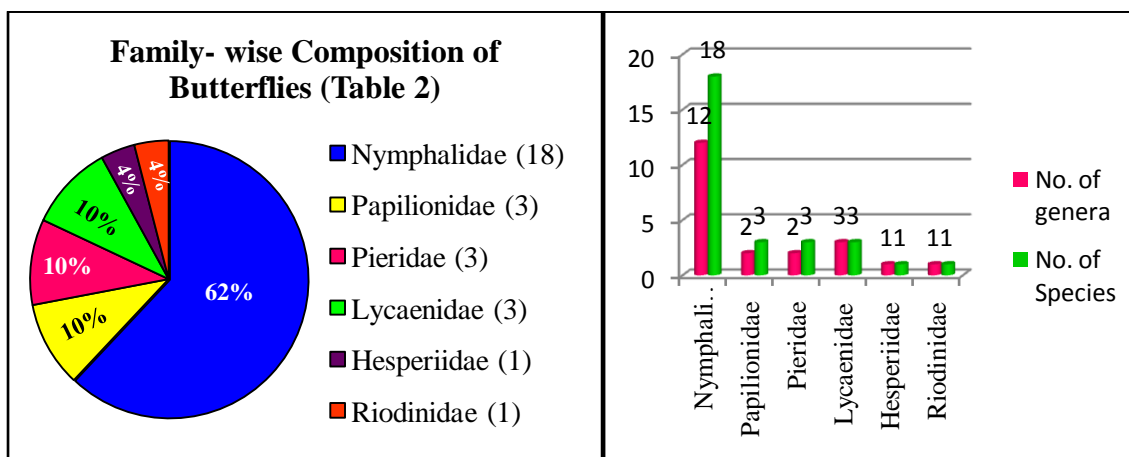


Chart 1: Family- wise compositions

Chart 2: distribution of genera and species

A checklist of Butterflies of Udadavane village and forest area has been based on present study. (Table 1 & 2). A total 29 species of butterflies were recorded belonging to 6 families (Table 1 & 2). The family Nymphalidae was found dominated with 12 genus and 18 species (62%), followed by Lycaenidae 3 genera and 3 species (10%), Pieridae 2 genera and 3 species (10%), Papilionidae 2 genera and 3 species (10%), Hesperiidae 1 genera and 1 species (4%) and Riodinidae 1 genera and 1 species (4%) were recorded (table 2). In our observation more number of species of butterflies preferred open forest area (25) followed by Maruti temple area (19) and Udadavane village area (16).



Fig. 1: A checklist of Butterflies in study area.iscussion:

Natural forest area constitute the major store house of biodiversity, because the always represent more than one floral species of different age, class of vegetation. In the present study, total 29 species of butterflies were recorded belonging to 21 genera and 6 families. Family- Nymphalidae was the largest family comprised of maximum number of genera (12) and species (18).

Guptha et al. 2012 recorded a total of 50 species of butterflies belonging to 5 families in Seshachalam Biosphere reserve, Eastern Ghats, Andhra Pradesh, India. The family Nymphalidae(20 species) was found dominant followed by Lycaenidae (12 species), Pieridae (11 species), Papilionidae (5 species) and Hesperiiidae (2 species)[1].

High incidence of butterfly population with wide distribution was observed during the month of September- December. Lepidopterans are prominently phytophagus and pollinators. Lepidoptera is found dominant group of insect in terms of generic name and species name. This definitely reflects the availability of suitable habitat and ecological favorable condition.

Conclusion:

The present research has concluded by systematically studied butterfly biodiversity and prepared checklists and catalogs in the study area. Family- Nymphalidae was the largest family comprised of maximum number of genera (12) and species (18) than other families. Udadavane village is a good habitat for biodiversity of butterflies.

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Improving Mental Health Through Psychological Immunity: Promoting Sustainable Development For Youth

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Abstract

The Sustainable Development Goals (SDGs) 2030 have laid down the action plan for the people of this planet. These goals integrate the pressing needs of humanity and environment together thereby supporting universal calmness and good fortune through collaborative partnership between all nations acting as stakeholders. One of the goals (goal 3.4) aims at ensuring healthy lives and promotion of wellbeing for humans at all ages and stages of their life. Today, children and youth run high risk of facing mental health crisis. There is a great need to discuss mental health challenges faced by them and it is imperative to support mental well-being through mindfulness activities, development of positive attachment and promotion of Psychological immunity (PI). Individuals facing mental health issues are at great risk of depression, psychological trauma, and can adversely impact their personal and national development. This can have negative impact on the functioning of individuals, societies and nations. This paper explores various mindfulness activities and attachment development for improving mental health of the youth such as mindfulness in eating, walking, driving, gardening, and engaging in single tasks. Mindfulness is viewed as performing any given task with peace and calm, being in the present and engaging with life in a positive way. The findings suggest that mindfulness helps to ease the stress and anxiety in a simple way. Such activities when performed with a little fore-thought supports slowing mental wellbeing of youth by creating awareness for the present and surroundings. Attachment refers to deep, emotional bonding with other persons. Such bonds are generally formed with the caregiver at an early age and support formation of healthy relationships in later life. Findings reveal that positive, secure attachment are essential towards formation of well-being. The SDGs therefore create a discussion on maintenance of well being among youth through PI and mindfulness activities.

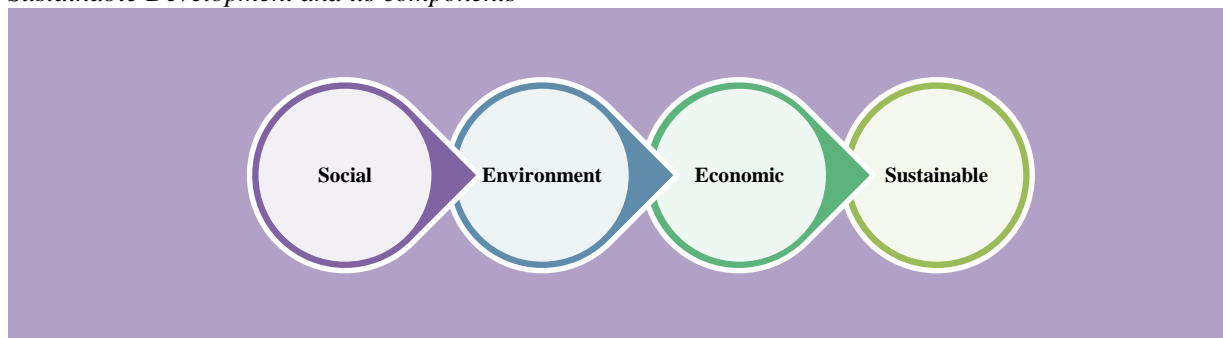
Keywords: Attachment, Mental Health, Mindfulness, Psychological Immunity, Wellbeing, Youth.

Introduction

Sustainable Development refers to the universal goals which aim at supporting prosperity, peace and sustainable living for entire mankind. The term 'sustainable' refers to sustenance, capacity to sustain and retain. The word originated from the Latin term *sustinere* which means to hold, sustain, uphold, or endure ("Sustainability", 2022). The term sustainable targets three major aspects namely social, environmental and economic aspects as shown in the image below:

Figure 1

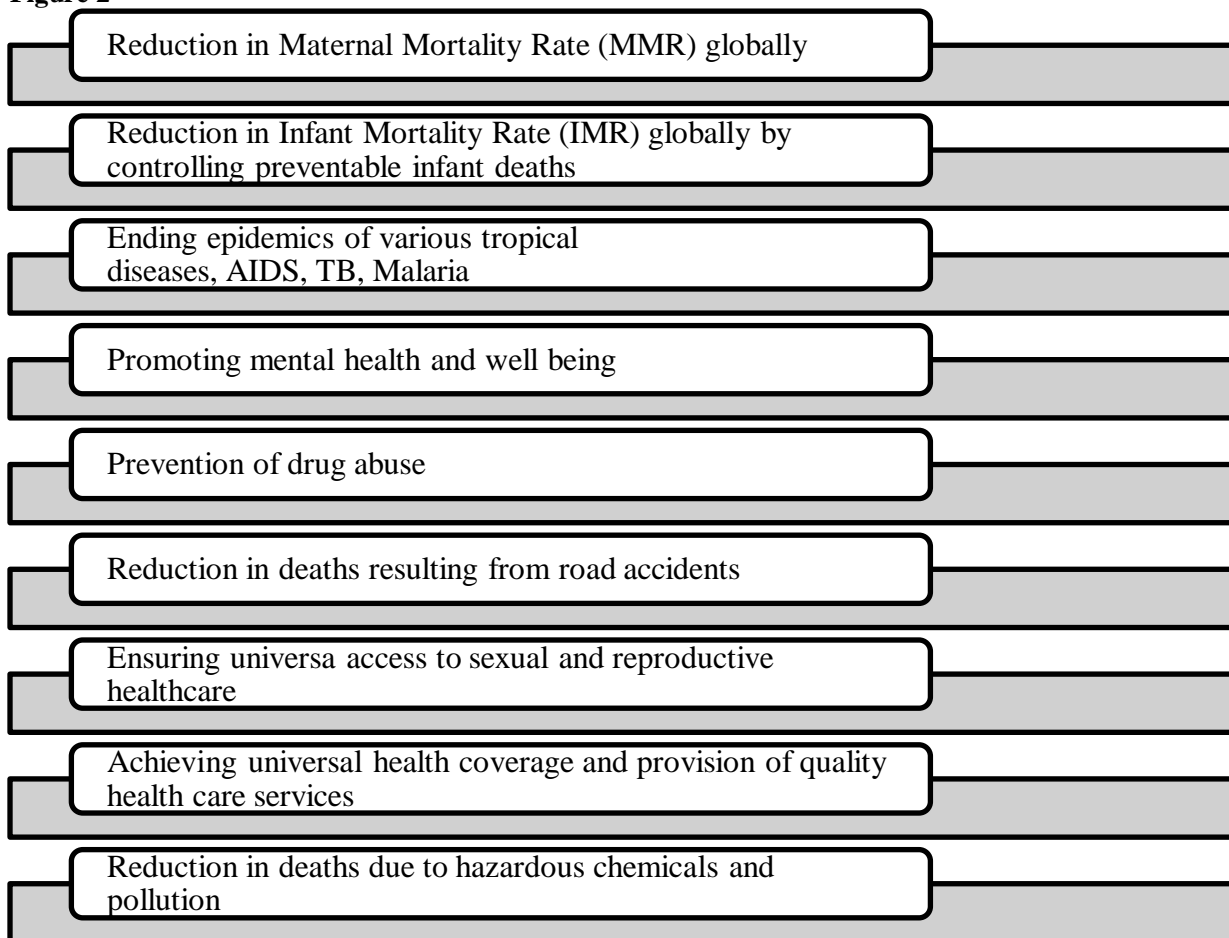
Sustainable Development and its components



Sustainable Development Goals (SDGs) have 17 goals and 169 targets which are associated with it. Goal 3 talks about supporting and ensuring healthy lives. It further talks about promoting wellbeing for all ages, at all stages through prevention, preparation and timely treatment. It includes the following targets ("Transforming our world: the 2030 Agenda for Sustainable Development. United Nations: Department of Economic and Social Affairs",

2022):

Figure 2



Targets of Goal 3.4

Youth today are exposed to various stressors such as family problems, academic stressors, and peer pressure among other challenges ("Stress Management and Teens", 2022):

1. Demands of the school and daily frustrations
2. Negative self-thoughts and low self-esteem based on negative perceptions about self
3. Body changes especially linked with adolescence
4. Insecure attachments
5. Unsafe environment and neighbourhoods
6. Separation among parents, divorce
7. Illness, chronic disease
8. Death or loss of a loved one
9. Changing schools due to transfer or shift to new locales
10. Setting high expectations for self, over expectations by teachers, parents, society
11. Financial issues faced by the family
12. Family relationship problems

Objectives:

The study aims at exploring various measures to build and develop Psychological Immunity (PI) among children and youth in order to promote sustainable development and positive well-being.

The major objective is divided into several sub-objectives such as:

1. To explore various mindfulness strategies to support Psychological Immunity(PI) among youth.
2. To explore various techniques to develop resilience and coping strategies in daily living to support Psychological Immunity (PI) among youth.
3. To explore tips for teachers and parents to develop Psychological Immunity (PI) among youth.

Research Questions:

1. What are various mindfulness strategies to support Psychological Immunity (PI) among youth?

2. What are the various techniques to develop resilience and coping strategies in daily living to support Psychological Immunity (PI) among youth?
3. What tips can be given to teachers and parents to develop Psychological Immunity (PI) among youth?

Research methodology: Review of relevant journal articles and web resources was done to gather secondary data for supporting and developing PI among youth. Interconnections between mindfulness and resilience were also explored.

Findings

Findings for Objective-1:

Review of related literature supports the practice of mindfulness activities such as those listed below:

Use of Mindfulness: Mindfulness promotes the use of conscious engagement with the present and surroundings. It is considered as the easiest and the simplest method to reduce stress and strain. Some mindful activities which can be practiced are as follows ("30 Mindfulness Activities to Help You Find Calm at Any Age", 2022):

Mindful eating: it refers to the conscious act of eating while savoring the taste, texture and silently. Eating this way helps us to focus on the taste, aroma, flavor and texture of food. One should avoid multitasking by switching of the mobile phones and television, while eating.

Mindful walking: practicing meditation while walking is the best form of mindfulness. As we draw our concentration inwards, while walking in a straight line or circle. Such mindfulness practices can be followed at the neighborhood park and traffic free areas.

Mindful driving: while driving also, one can engage in the practice of mindfulness. One can pay attention to the weight of the vehicle drive consciously, taking in the scenery, pedestrians, trees and surrounding environment. One should listen to the horn of the vehicle, feel the crunch on the gravel lined roads.

Mindful gardening: It involves forming mindful connection with nature. One can consciously engage with the planting of seeds, watering flowers and plantations. One should also be conscious of the surroundings such as chirping birds, trotting squirrels etc.

We can also engage our senses in a 'scavenger hunt' such as listening carefully and name one thing or sound which we hear; paying attention to our surroundings and naming a thing or object that arrests our attention; smelling with our nose and noticing perfumes, odors, fragrances with a conscious thought; we can try touching things of varied textures around us and name an object that we like to touch.

Some other measures to control and reduce stress and strain, thereby supporting development of PI can be understood as practicing of regular exercise and meditation, getting enough sleep and following a daily routine. One can also engage oneself in practice of relaxation techniques, development of assertiveness skills, rehearsing and practicing situations which reduce stress and developing coping strategies. Reduction of negative self-talk which influences one's self-image and self-belief. This develops coping skills which will help to support us in a positive manner in dealing with stressors. Taking regular breaks while performing stressful tasks helps us to maintain good mental well-being. One can also form strong positive networks with those around us which will help us to tide over difficult times with ease.

Findings for Objective-2:

Techniques for building emotional immunity among youth: Building emotional immunity among children and youth can support development of stronger coping skills and resilience. This can be seen as follows ("Easy Tips And Tricks To Build Stronger Emotional Immunity In Children", 2020):

Encouraging communication: free, open and shared communication acts as a catharsis of emotions. Listening patiently to others helps in flow of bottled-up emotions and acts as a release of pent-up emotions.

Understanding others: understating the perspective of others, seeing things from their angle and showing empathy helps to build coping strategies and reduces stress. This helps to build emotional regulation., allowing us to explore their emotions.

Findings for Objective-3:

The review of relevant research reveals the following tips for parents and teachers:

Tips for parents and teachers:

1. It's important for parents and teachers to understand their child, their needs and feelings.
2. Provide opportunities for open communication and sharing their fears, feelings, apprehensions and emotions.
3. Providing opportunities to explore their surroundings in a safe and secure manner.
4. Inspiring responsibility in order to build emotional immunity and resilience.

Discussion And Conclusion

It can be seen that the practice of mindfulness techniques are the simplest and easiest ways to build coping strategies among youth, which helps to deal with daily stressors. It is essential to generate PI

among the youth through various practices and techniques as discussed in the findings of this research study, such as providing opportunities to engage in mindfulness-based practices, engaging in open and shared communication and risk taking in safe environments will help to develop coping and resilience among the youth. Parents and educators need to be aware of such strategies to support the sustainable development of youth specially during adolescence and growing up years. This study clearly indicates the need for supporting mental well being of youth through use of appropriate mechanisms and strategies. Gombor 2009 (cited in Essa, 2020) explains the components of PI to direct one's attention towards surroundings, social and physical environment. Practicing of mindful activities support an individual's capacities to adapt to the internal and external environment thereby developing sustainable practices of mental and physical well-being.

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Impact of Covid-19 on Employment In Unorganized Sector In India

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Abstract:

A Non-living organism corona virus has attacked the entire global economy which is one economic unit like a living organism prior to the Covid era. The present study paper will mainly explore how Covid-19 affected the employment in unorganized sector in India. This crisis which the mankind has ever faced caused to stop many economic activities throughout the world including India. According to the ILO, nearly 25 million jobs could be lost worldwide due to the pandemic which would led to income losses for workers US dollar 860 billion and 3.4 trillion.

In India large share of the population mainly depends upon the informal sectors. As per Periodic Labor Force Survey (PLFS) over 90% of workers in India are engaged in unorganized sectors. They are primarily involved in agricultural, manufacturing, trade, hotel, construction, transport, finance, business and real estate and self employed. Thus these informal workers who have been working in the above said sectors strongly hit by the Covid-19 both in rural and urban areas. Due to job losses and wage reductions of workers in unorganized sectors dropped below poverty line. Many of the workers who lost their jobs during the pandemic still remained as unemployed and pushed them deeper into crisis. In order to tackle the problem the Government of India has initiated various measures for generating employment in the country through several projects and programmes such as MGNREGP, Atmanirbhar Bharat Rojgar Yojana and Prime Minister Employment Generation Programme.

Key words: Employment, Unorganized sector, Economic Activities, Poverty line

Introduction:

The Covid-19 pandemic caused for the closure of many economic activities across the globe putting at the risk the health, jobs and livelihoods of millions of people around the world. The International Labor Organization in its report ILO monitor 2nd edition Covid -19 and the world of work describes Covid-19 as worst global crisis since world war-II. As per the report of ILO nearly 25 million jobs could lost world wide due to pandemic which would mean income losses from workers between US dollar 860 billion and 3.4 trillion. Most vulnerable people live and work in the informal economy in developing countries like India. Since 2020 the pandemic has devastated the Indian Labor market denting the employment scenario and threatening the survival of millions of workers and the families working in unorganized sector. As per periodic labor force survey (PLFS) over 90% of workers in India are informal workers which in absolute numbers translates into 419 million out of 465 million workers.

Statement of the Problem:

It is estimated that a large number of workers are engaged agricultural activities, manufacturing, trade, hotel and restaurant, construction, transport, storage, communication, business and real estate. The Covid-19 pandemic hit the most those workers working in the above informal sectors. These informal workers lost their jobs and livelihood due to corona pandemic and pushed below poverty line. As the growth rate of economy is slowdown many of them are still remained as unemployed. The real per capita incomes of were on an average 12% below their pre-pandemic level and dragged vulnerable people deeper into crisis. So this study paper will explore how the pandemic affected the employment level in unorganized sector in India.

Objectives of the Study:

1. To assess the impact of Covid-19 on employment situation in informal sector in India.
2. To know the measures taken by the Government to bring the employment level pre-pandemic level.

Study Methodology: This study paper is purely descriptive which depends upon the documentary sources from which the data is collected such as research papers, articles, essays, books, journals news papers and official websites.

Impact of Covid-19 on Employment Situation in Informal Sector:

The informal workers both in rural and urban areas have been hit by the Covid-19 pandemic comprising the migrants, agriculture workers, casual/contractual labors, building and construction workers, factory labours,domestic workers, platform workers, self-employed workers such as plumbers, carpenters, painters, street fruit vendors and vegetable vendors etc. It was reported that because of the character of seasonality of employment and lack of formal employee-employer relationship in the unorganized sectors

belonging to the above sectors have been the worst sufferers during the Covid-19 induced lockdowns and closure of economic activities. Particularly the poor and vulnerable workers in the unorganized sectors have been in distress for their informality due to low levels of income and savings, lack of employment security and access to government social protection. The consequential effects on loss of jobs, rising unemployment, indebtedness, nutrition, health and education of unorganized workers and their family members have the potential to cast a long shadow and irreparable damage. As per the survey which is done by Center for Monitoring Indian Economy (CMIE) the overall rate of unemployment has increased from 8.4% to 23.8% as of March, 2020.

Unemployment Rate (in %) in Current Weekly Status in Urban Areas for Persons aged 15 Years and above.

Survey Period	Male	Female	Persons
Oct – Dec 2019	7.3	9.8	7.8
Jan-Mar 2020	8.6	10.6	9.1
April-June 2020	20.7	21.1	20.8

Source: PLFS, Quarterly Bulletin, MoSPI

It can be seen from the above table that the unemployment rate in unorganized sector was increased from 8.6 to 20.7 and 10.6 to 20.8 male and female respectively. The overall persons of unemployment shot up to 20.8 from 9.1 during the period of January 2020 and June 2020. It can be understood by the above stated figures how the Covid-19 affected the employment situation adversely in the informal sector.

Measures Taken by the Governments: In order to tackle the problem of unemployment arisen due to Covid-19 the following measures are taken by the government.

- A) **Setting up control rooms:** The union government has set up 20 control rooms under the chief labor commissioner for addressing the issues and grievances of the workers mainly wage related and migrant labor issues arisen due to nationwide lock down imposed to fight against the Covid-19. In this regard an amount of Rs.295 crores was got disbursed to 1, 86,365 workers in the central sphere. These control rooms are rejuvenated on 21st April, 2021 after the second wave of Covid-19.
- B) **Setting up of Advisory:** The government of India has instructed to all the state and union territories governments to advise all the employers of public and private establishments to extend their coordination by not terminating their employees, particularly casual and contractual workers from job or reduce their wages.
- C) **Launching new schemes:** Aatmanirbhar Bharat Rozgar Yojana (ABRY) has been initiated with effect from 1st October, 2020 to incentivize employers for creation of new employment for fiscal stimulus with an amount of Rs.27 lakh crore during Covid-19 pandemic for making the country self-reliant and to create employment opportunities for organized and unorganized sectors. Under the another scheme Pradhan Mantri Garib Kalyan Yojana Rs.2567.20 crore was credited to provide employee share in EPF accounts of 38.85 lakhs eligible employees through 2,63,272 establishments. The central government provided relief from liquidity crunch during pandemic by announcing reduction in statutory rate of EPF contributions from 12% to 10% for all classes of establishments and employees. In addition to the above new schemes the government has earmarked an additional Rs.40,000 crore under MGNREGA to generate employment of nearly 300 crore person days towards addressing need for more work including return migrants.
- D) **National Database for the Unorganized Workers (NDUW):** The government has introduced a centralized data base of all unorganized workers including construction workers, migrants, platform workers, street vendors, domestic workers and agricultural workers seeded with Aadhar seeded under the technical supervision of NIC to address various challenges and issues relating to the delivery of benefits of the welfare schemes meant for them and allocated Rs.401 crore.

Suggestions:

1. It is observed that the Covid-19 crisis in India has come in the backdrop of pre-existing high and rising unemployment. Therefore a comprehensive plan and roadmap is required to address the deteriorating condition of employment much aggravated by the Covid-19 in the informal sector.
2. It is imperative to expand the social assistance and public welfare programs both in the rural and urban areas to provide relief and protection to the poor and disadvantaged people of the society by offering another round of income support to compensate for loss of jobs caused by the lock downs.
3. There is a need for social security measures to mitigate the impact of Covid-19 pandemic on unemployment and joblessness.
4. The Government should think over it to put money in the bank accounts of the informal workers during pandemics like Covid-19 when all the economic activities are suspended.

5. The Government should introduce and encourage entrepreneurial opportunities both at central and state levels which would help in reducing unemployment.
6. Measures should be taken to enhance the skills of the vulnerable and marginalized populations in the economy by creating a large number of skill development programs.

Conclusion:

The Covid -19 pandemic in India has exacerbated vulnerabilities for the women, young and self – employed workers besides the migrants who have semi-skills and unskills. The Government should strive to support a recovery that is robust, broad based and women, youth centric. It is also important to know that short-term measures alone would not be adequate to counter the adverse economic effects of Covid-19, the Government have to embark upon long term radical reorientation of the growth strategies to make the growth process more employment intensive and inclusive by focusing on industries and activities that are critical for employment generation and job creation in informal sector.

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E-Commerce: Opportunities And Challenges

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Abstract

21st Century is the century of technology. The entire world has turned into a global village with the emergence of technology. Technology has changed the trade and commerce across borders. Electronic Commerce has changed the way of traditional business in the world. E-commerce has emerged with multiple solutions for trade and commerce within and across the nations. There are many opportunities for new entrepreneurs in the global market. With the introduction of Industry 5.0 and 5G in information and technology, the speed of e-commerce will definitely take a boom. The online portals like Amazon, Flipkart, Alibaba, Ola, Uber, Zomato etc. have changed the pattern of customers purchasing. E-commerce is playing a very vital role in developing the economy with fast and transparent trade and commerce. But off course, there are few challenges in front of E-commerce such as online frauds, insecure transactions and cyber attacks etc. the present article discusses the different opportunities and challenges in front of E-commerce in the emerging era of technology.

Key Words: E-Commerce, technology, trade and commerce

Introduction:

The concept of commerce is comprehensive and complex which comprises all the functions involved in buying and selling by all persons and organization. E-commerce is selling, while transfer process requires several institutes.

Information is electronically transferred from computer to computer in an automated way. It helps to conduct traditional commerce using modern method of transferring and processing information, where the information is heart of every commercial activity. It refers to the paperless exchange of business information using electronic devices like data interchange, electronic mail, electronic fund transfer and other network based technologies. E-commerce has recently got a fillip, because of US government decision to use federal purchasing paperless. Internet has given another boost to e-commerce as it is low cost alternative to the proprietary network. The well-known electronic data interchange (EDI) is an integral part of e-commerce. E-commerce is synonymous with e-business and e-trading and it consists both the online e-business and offline e-business. E-commerce is a unique and the potential opportunity for any size of business using internet. Present age is digital however, most of business transaction happened in the traditional way in India. So India has great scope to develop e-commerce i.e. selling and buying on the internet and make payment electronically. According to WTO, e-commerce is an commercial process which include production, distribution of goods and services electronically. Since, long India has recognized the need to adopt electronic data interchange (EDI) especially in the era of international trade. Govt. of India advocated and adopted LPG in 1991 to open up and integrate the economy with global economy. Establishment of EDI council in India in 1994 has great significance in this regard.

Emerging E-age :

1. E-banking, E-cheque
2. E-book, E-journal, E-learning
3. E-marketing
4. E-files / office / E-mail
5. E-booking
6. E-searching services
7. E-governance
8. E-commerce

Commerce Generations :

Barter system – Money economy – Face to face – Mail order business – Super market – Telephone ordering – Television – Internet commerce.

Branches of E-commerce :

1. B2B : Business to business
2. B2C : Business to consumers
3. C2C : Consumer to consumer
4. B2G : Business to government
5. G2G : Government to government

6. G2C : Government to consumers

Why E-commerce ?

World Wide Access :

Web is easily accessible and low cost medium. It brings together customers and marketers, which spread in an outside the country.

Global Market Entry :

Even a small enterprise located anywhere in the world can enter in the global market to sell their product online.

Solution to Distinct Problem :

Problem like limited space, resources and staff availability get eliminated.

Wide Range :

Very large number of products and services can be offered by marketers by using single web-side.

Customer Satisfaction :

It renders customer satisfaction and value addition.

Speedy Operation :

Higher operational speed fulfils transaction within no time.

Healthy Relationship :

It boosts the customer relationship for success.

Sales Improvement :

It lifts inventory turnover and sales volume speedy.

Convenience with Options :

It offers convenience of shopping adequate products and services allowing wider options.

Paperless Society :

It ensures paperless society by reducing mental burden.

E-Banking :

In digital world, internet banking has great relevance, realizing that the default access of your banking information in the near future would be only through the internet. Such service requires top level security and complete privacy protection, where 128 bit SSL (secure sockets layer) guarantees world class security for internet and e-commerce.

Internet banking user ID (which is the same as your customer ID) and internet banking password is required for internet banking services. We can have account information, account balance, account enquiry and status, transaction tracking and history, instalments and funds flow details, statements, cheque status and demat account information. Similarly, online request and the instructions in case of cheque book, stop payment, FD renewal, online payment facility and other customer services also available on net banking. Currently, all services under internet banking are free of cost, however Rs. 15 per transaction charged in case of fund transfer to another bank and visa card to card transfer. Similarly Rs. 10 per ticket charged for online railway ticket booking. Payol on eBay co. has a unique payment model where money can sent to any one who has email address. It is introduced in 1998, which enables any individual or business using an email address to send or receive payment online. The facility is the available in 45 countries, which is availed by 56 million people in the world. It helps to move money electronically from bank account to other PayPal Account holders enriching e-commerce business. However, precaution be taken to avoid misuse of internet banking facilities.

E-marketing : NDTV launched its own e-commerce venture called ndtvshopping.com where you can chose over 200 million product, books to movies, music, CDs, mobile handsets, etc. using bargaining too. Still online shopping in India is neglected. Buyer prefer to touch and observe the product before playing for it even then the internet connections are increasing and people use it for search or shopping.

Govt. predicts e-commerce business would increase from Rs. 570 crores in 2004-05 to nearly 2300 crores in 2006-07. Rapid growth in internet, personal computers and broad band, make wide range for e-market to achieve business goals. E-business attracts and retains right customer and business partner using digital technology. Every computer mobile phone and other networked device like laptop can easily send or receive data in the form of e-mail or files over internet. The data moves over phones, cables and satellites from one sender to another. As a result word is becoming a family.

E-commerce on Mobile :

Few companies created mobile optimized websites, some of them now allow people to complete e-commerce transaction on mobile instead of just searching information. People can purchase any product on amazon.com catalogue through Amazon mobile site. Travellers can instantly book a room in any Travelodge UK hotel through Travelodge mobile site and rail tickets at the train line mobile site. Similarly,

music fans can purchase tickets for their favourite concerts at the see tickets mobile site. It has been witnessing a revolution in communication technology. It covers both rural and urban area, which introduced in 1995. The country has set target 200lakhs mobile connections in 2007. The tel density increased from 5.11% in 2003 to 10.38% in 2005. The private parties and operators boost the growth and development of telecommunication system from 21% in 2003 to 36% in 2004 and 50% in 2006 in the rural and urban area. It gives support for e-commerce turnover.

Growth and Development : In 1960s and 1970s many efforts have been taken so that computers in different locations can be linked using new technology and computer linked in terms of LAN and WAN. Today entire world is tied up together in World Wide Web (www). Till 1990 internet was confined to a particular group, but people use it in substantial after 1994. According to NASSCOM the number of internet connections in India stood at 280000 in 1999 having access to 800000 people. In India E-commerce introduced in 1995 by VSNL. Broad band connections in India reached to 49.82 lakh in Oct 2008 of which highest 18.76% are in the Maharashtra alone. Recently America announced entire federal purchasing paperless. US recorded about 50% share trading through net 40% US population apply internet by end of 2003. World wide web users were 687.6 million of which highest number 190 million were from Europe and 159 million from USA while India constitute just 19 million users .Global e-business recorded \$ 10 billion in 1997, \$ 220 billion in 2001 and \$ 1 trillion in 2004 India registered in 1998 \$ 1400 billion in 2004 and projected \$ 5700 billion in 2008. Similarly e-mail business in India recorded Rs. 250 million in 1995. Rs. 600 million 1996 and about Rs. 6100 billion in 2000.

Opportunities :

1. Global avenues and LPG
2. Economic boom
3. Population
4. Fashion
5. Time / speed
6. Extension of marketing
7. To be supper power
8. Career advancement / knowledge upgradation
9. World class services
10. Employment opportunities
11. World is becoming family
12. 24 hrs world and electronically money transfer
13. Age of MNC's and corporate sector
14. Paperless society
15. Availability of internet technology

Challenges :

1. Overcome computer illiteracy
2. Investment in internet technology
3. Improve the strength of net users
4. Ensure cost effectiveness
5. Enhance the skills to develop websites and use it prevent misuse and provide safety transaction.
6. Face economic crisis
7. Change people attitude towards market
8. Secure one parent share in Global trade
9. Extend scope and make it applicable to all goods and services

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Study of Beach Tourism Potential in Raigad District of Maharashtra

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Abstract :- Tourism is a service industry with a lot of promise for growing the economy, creating jobs, improving infrastructure, and eradicate the regional disparity. Tourism may be contribute in sustainable development, economic growth and social benefits. Tourism development of any region mostly depends on natural and man-made factors like climatic conditions, geographical features, development of transport and communication network, available accommodation facilities, behavior of local people, entertainment facilities, flora and fauna of the region and peace, safety and security etc. The sea beaches are the major attraction of tourism all over the world. The beaches in the Raigad district cannot be exception. In this Paper, emphasis is given on the study of distribution of existing and potential Beach tourists' destinations in the Raigad district.

Key Words :- Beach Tourism, Potentiality, Regional disparity, Employability.

Introduction :-

Nowadays tourism becomes major economic activity. It deals with tourists' destinations, their location, basic infrastructural facilities available, potential tourist places. Tourism encourages the person for movement from one place to other. Tourists, service providers and the Places or region of tourism i.e. tourist places are the three significant factors of tourism development (Vengesayi, Mavondo, Reisinger, 2009). Maharashtra is one of India's most developed states in terms of industrialization, agriculture, and tourism growth. It has a lot of tourist hotspots and a lot of tourist attraction potential. There are many hill stations and water reservoirs with semi-evergreen and deciduous forests. In aspect of beach tourism, the state got coastline of 720 km of Arabian Sea in the West. The narrow strip between the Arabian Sea and Western Ghats is known as Konkan(Aahirrao,1999). It includes Thane, Raigad, Mumbai Sub urban, Ratnagiri and Sindhudurg. The tourist destinations like beaches, forts, temples, and waterfalls are the main attractions for tourists. There is huge potential for beach tourism development in Maharashtra. There are several small, sandy pocket beaches are found in the Konkan coast. The tidal range of the beaches various from less than 2 meters to greater than 3.5 meters (Karlekar, 2002). Most of these beaches are not yet fully explored by tourists. The famous beaches are Alibag, Kihim, Kashid, Akshi, Nagaon, Revdanda, Shrivardhan, Diveagar, Harihareshwer, Ganpatipule, Velneeshwer, Hedvi, Aare, Bhatye, Guhagar, Anjarle, Harnai, Dapoli, Karde, Dabhol, Malvan, Tarkarli, Kunkeshwer, Devbagh, Mithbav and Vengurla etc.

Study Region :-The geographical location of the Raigad districts is significant as it occupies the western coast of Arabian Sea. Latitudinal extent of the study region is between 17⁰51" North to 19⁰ 18" North latitude and Longitudinal extent is between 72⁰51" East to 73⁰40" East longitude. The district has 240 kms coastline. The Raigad is outlined by sahayadri ranges it has western Ghat in the eastern direction and the coastline of Arabian Sea is in the west direction. The district is neighbored by five different districts namely Mumbai suburban (Northwest), Thane (North), Pune (East), Ratanagari (South) and Satara (Southeast).

Objective:

1. To study the present status and potential of Beach tourism sites in the study area.
2. Making recommendations for future tourism development in the study area.

Data Collection and Methodology :-

To fulfil the objectives of the present study relevant Primary and Secondary data is essential. In the present work for the collection of primary data survey, interview and observation method has been used. First hand, data were composed through people participatory rural appraisal method, investigation. Data about Beach as a tourist placeless was accomplished on the spot observations. The Secondary data were collected through various reference books, research papers, and newspaper article. Tourism atlas, maps, reports on district tourism plan for Raigad district were used as a secondary source of information. The composed information is studied with the help of suitable statistical techniques. The data is summarized, processed and represented with the graphical form for getting proper inference.

Discussion

Status of Beach Tourism and its Potentiality :-

The sea beaches are the major attraction of tourism all over the world. The beaches in the Raigad district cannot be exception. Beach is the depositional landform formed by sea waves along the seashore. Beaches are usually formed when seacoast is clam and speed of winds is low. (Savindra Singh, 2016).

About 24 sandy beaches are in the district and hence district has huge opportunity for beach tourism development. All the beaches were not used for tourism purpose by tourists. It may be due to lack of accessibility, availability of tourists amenities, etc. even though natural and cultural features are attraction. The development of beach tourism at any beach depends upon availability of existing tourism infrastructural facilities like accommodation facilities, food, entertainment facilities, other socio-cultural attractions and amount of tourists visited to the tourists destination. Beaches in the Raigad district have been grouped into two classes like 'developed' and 'developing' beaches for tourism. Developed beaches are known as existing beach tourism centers and developing beaches are called as potential centers of beach tourism. Out of total 24 beaches, 11 are identified as existing beach tourism centers and remaining 13 beaches are known as potential centers of beach tourism. Mnadwa, Kihim, Awas, Alibag, Akshi, Nagaon, Kashid, Murud, Shrivardhan, Diveagar, and Harihareshwer are famous beaches for tourism at present. Table no 01 shows the tehsil wise distribution of beaches in the study region.

Table No: 01 -Tehsil wise distribution of Beaches in Raigad District

Sr. No.	Tehsil	Developed beaches for tourism	Developing beaches for tourism	Total
1	Uran	Nil	Pirwadi Beach , Kegaon Beach,	2
2	Alibag	Alibag Beach, Kihim Beach, Awas Beach , Mandwa Beach, Nagaon Beach, Akshi Beach	Chaul-Revdanda Beach, Saswane Beach, Thal Beach, Varsoli Beach	10
3	Murud	Murud beach, Kashid Beach,	Nandgaon Beach, Rajapuri Beach,	4
4	Shrivardhan	Shrivardhan Beach, Diveagar Beach , ,Harihareshwar Beach	Aravi Beach, ,Shekhadi Beach, Kondiavli Beach, Valvati Beach , Adgaon .	8
	Total	11	13	24

Source: Compiled by researcher

Existing beach tourism centers

Alibag Beach :-

The beach is placed in Alibag town. Alibag is a coastal city and a municipal council in Raigad district. It was developed in 17th century by SarkhelKanhojiAangre the chief of Navy of ChhatrapatiShivajiMahahraj. Geographical location of Alibag is 18⁰ 38'29" North to 72⁰ 52' 20" East at the elevation of 0 meters from mean sea level. The length of beach is 4 to 5 kilometers and it is 150 to 160 meters wide, intertidal zone of the beach is 35 meters with flat slope (Raigad district Tourism Development plan, 2013). Colour of the beach sand is brown having sparse vegetation covers. The major attraction of this beach is Kolaba fort. The facilities like food stalls, Hotels, resorts, restaurants and entertainment facilities like horse riding, boating and water sports activities are available as well as seating cabins and public wash room for both gents and ladies are available at the Alibag beach. Alibag is connected with state highway. It is easily accessible to Mumbai, Pune and other cities of Maharashtra. It is also connected with railway and waterway nearest railway, station is Pen, which is around 30 kilometers from town. Alibag is connected with waterway the adjacent jetty is Mandwa from where catamaran/ ferry services are available to Mumbai. Another port in the city Rewas from where ferry facility is available.

Nagaon Beach:

-Nagaon beach is named by Nagaon village in Alibag Tahsil latitudinal location of Nagaon is 18⁰26'30" North and longitudinal location is 72⁰54'20" East. The Geographical extent of village is 280.65 hectares. Inter tidal zone of beach is about 175 meters with flat slope. Dense Vegetation cover around the beach having coconut, betel, and casuarina trees. According to 2011 census total Population Nagaon is 3837 and out of this 2013 are male and 1824 are female. Nagaon is situated on state highway No – 4. It is about 11 kilometers from Alibag towards the south and 114 km. from Mumbai. Buses ply daily from Alibag and Murud to Nagaon. Tourists are interested in visiting Nagaon beach due to the clean water, cottages, water sports, horse riding, boating and delicious seafood, provided at affordable prices around the attractive beach (Pimple, 2014). Nagaon beach acts as the nodal place for surrounding other beaches like Murud, Kashid, Akshi, Alibag, Kihim and Mandwa.

Akshi Beach:-

Akshi beach located at Akshi village in Alibag Tehsil. The Topographical area of village is 290 hectares. Length of the Akshi beach is 5000 meters and its width is 143 meters, Inter tidal zone of beach is about 175 meters with flat slope. Dense Vegetation has covered the beach and it has coconut, betel, and casuarina trees. According to 2011 census total Population of Akshi is 2974 people out of this 51.68 percent are male and 48.32 percent are female. Akshi is well-connected place by S.T. buses to Alibag are also accessible from Mumbai central and Panval state transport depots. Nearest Railway station is Pen, which is linked to Panvel at the distance of 45 km. from Gateway of India, Mumbai direct catamaran ferry services are also available to Akshi and the nearest jetty to Akshi is Mandwa. Ferry service from Rewas to Akshi is also available. Tourists are interested to visit Akshi beach because it is a famous place for the setting in TV serials and films. It is also a famous spot for the bird watchers in Alibag from the dawn to the dusk one can see and enjoy the beautiful scenery of birds. There are several types of migratory birds which are observed on this beach every winter. The sunset looks very attractive from this beach.

Kihim Beach :-

Kihim beach is near Kihim village in Alibag tehsil. Kihim village covers 365 hecters area with population of 2582 persons and out of which 1285 males and 1297 are females as per the 2011 census. Absolut location of the beach is on 18^o 49' North latitude and 72^o 57' East longitudes. It is narrow sandy pocket type beach (Karlekar/ Joshi, 1993). The length of Kihim beach is 1800 meters and width is 80 meters and Inter tidal zone of beach is 90 meters with flat intertidal slope with white sand and dense vegetation cover surrounds the beach. Kihimis 12 km far from Alibag by road in the northern direction. MSRTC buses run regularly on this route. Kihim is connected to Mumbai by NH-17 and the state highway. Pen is the nearest railway station and it is 30 km far from Kihim. Passenger boat services are also available from Gateway of India to Mandwa Jetty and from BhauchaDhakka in Mumbai to Rewas. The main attraction in Kihim is beautiful sandy beach, which is known for shootings of many Hindi films. Horse riding and other tourist sport activities are also available at the beach. Tourist facilities are found in average conditions.

Kashid Beach:-

Kashid beach is situated on 1.5 km near to the Kashid village in Murud tehsil. Total area of Kashid village is 653 hectares with 1138 population, out of which 595 are male and 543 are female. Geographical location of village is on 18^o26'30" North latitude and longitudinal location is 72^o 54'20" East. The length of the beach is 3000 meters and width is 460 meters. Inter tidal zone of beach is 65 meters with flat intertidal slope with light brown sand and beach is enclosed by dense vegetation cover (Raigad district Tourism Development plan, 2013). One of the important features of Kashid Beach is that it's Northern and Southern ends are rocky. This is dangerous for swimmers and water sport activities. This beach located on state highway No- 4 and major district road. Beach is 18 km from towards North from Murud town and 32 kilometers away in south from Alibag. Kashid beach is 130 km from Mumbai and 170 km from Pune. State transport buses provide regular service from Alibag, Murud and Mumbai. Kashid beach is connected with nearest Railway stations such as Kolad (57 Km) Pen (60 Km) and Nagothane (63 Km) and Nearest Airport is Mumbai (130 Km) and Pune (170 Km). Another convenient way to Kashid is to travel by catamaran services from Gateway of India to Mandwa (Alibag) or by ferry from BhauchaDhakka to Revas (Alibag) and from Mandwa or Revas by road. The facilities like food stalls, coconut stalls, Hotels, and restaurants as well as accommodation facilities like luxury class resorts private bungalows, home stay facilities are available. Entertainment facilities like horse riding, boating (Banana Boat ride, water Scooter) other water sports activities as well as changing rooms and public wash room for both gents and ladies are available at the Alibag beach.

Murud Beach:-

Murud beach is located in Murud Town, which are tehsil place and a municipal council in Raigad district. The beach is 2000 meters long. Inter tidal zone of beach is 80 meters with flat intertidal slope with light brown sand and beach is bordered by mountain on three sides and dense vegetation cover found there (Raigad district Tourism Development plan, 2013). This beach is located parallel to Alibag – Murud district road No-92. Murud beach is located at a distance of 42 km from Alibag and easily accessible from Pune and Mumbai. Nearest Railway, station for this beach is Roha. Which is around 38 km from Murud. Another convenient way to Murud is to travel by catamaran services from Gateway of India to Mandwa or ferry wharf (BhauchaDhakka) to Revas and from Rewas to Murud by bus. This beach is safe for swimming. Murud has historical background. The Nawabs' palace is in Murud. For entertainment propose number of water sports activities are found here it includes Paragliding, banana boating, water Scooter ride, horse riding, etc. The sea fort Murud janjira is situated in Arabian sea near the Murud beach

and it is an attraction of tourists. The sunset of this beach is very pleasant. Accommodation and food facilities are easily accessible at Murud. A number of beach resorts, restaurant, lodging and boarding, private bungalows, and home stay facilities are available. Every year during the last week of December, the Murud Municipal Corporation celebrates 'Murud- JanjiraParyatanMahotsav' on beach on this occasion food festival, cultural programmes, half marathon, bullock carts races, and local people for the promotion tourism organize other programmes.

Shrivardhan Beach:-

Shrivardhan is one of the immaculate beaches in the Konkan. It is placed in Shrivardhan tehsil. Shrivardhan covers 4.64 sq. km. area Geographical location of beach is on 18° 2'34.09" N latitude and 73° 0'37.52" E longitude. Total population of this village is 6952 and out of which 3293 are males and 3659 are females. The beach is 3000 meters long and it is 70-80 meters wide with soft and silver sand (Raigad district Tourism Development plan, 2013). Arecaue nut and palm trees surround this beach. Shrivardhan has historical background as it is birth place of first peshwaShrimantBalajiVishwnath. Water sport activities are developed on this beach including Paragliding, water surfing as well as Horse ride, Scooter ride. Basic tourists facilities like food and accommodation are developed here with permission of MTDC. The road connectivity to Shrivardhan is very good as it is situated near the National Highway No- 17 (Mumbai- Goa National Highway). It is also connected with state highway via Mangaon to Shrivardhan. M.S.R.T.C. buses ply from Mumbai, Mangaon, Alibag, Pune, and Kolhapur to Shrivardhan regularly. The adjacent railway station is Mangaon, which is 45 km from Shrivardhan.

Diveagar Beach :-

Diveagar beach is located in northern side of the Shrivardhan Tehsil. It covers 516.77 hectares area with population 3839 and out of which 1856 are males and 1983 are the females. The beach is about 5500 meters long and width of the intertidal zone is 60 meters with flat slope. Colour of sand is white. The beach is covered by dense vegetation trees are like palm, bête nuts, coconut and casurina. Suvarna Ganesh is one of the foremost attractions of Diveagar beach (Pimple, 2014). Tourist activities like Paragliding, banana boating, water Scooter ride is available on the beach. Accommodation and food facilities are available in hotels, resorts, lodging, private bungalows, home stay facility, breakfast, lunch and dinner facilities are available here. Diveagar is located about 40 kms off the NH- 17 from Mangaon which is also the adjoining Railway Station Tourist Mangaon is located on Panvel- Goa highway No-17. Ferry services are available from Rajapuri (Murud Janjira) to Dighi (Shrivardhan) and Dighi to Diveagar is about 20 kms by roads.

Hari hareshwar Beach:-

Harihareshwar is the ancient Pilgrimage center of Hindu devotees. Harihareshwar is located on southern tip of Raigad district near the mouth of Savitri River. Geographical location of the beach is 18° 0'12.20" N latitude and 73° 1'01.53" E longitude. There are two beaches at Harihareshwar one is positioned in the northern side of temple and second is situated in southern side of Harihareshwar temple. This beach attracts number of students and researcher of geography because it is unique beach where one can find Sea cliff, Wave cut Platform, Sea Cave, Geo, etc. it is recognized that the natural beauty of the beach decreases rapidly due the facilities developed for tourists (Karlekar, 2016) which leads to increased amount of pollution by excessive use of plastic.

Conclusion :-

The tourism potential are mainly based on physical factors and geographical location with reference to catchment areas of tourists. There are probable tourists who can afford to travel from region of their origin to tourists destinations. If a location is within the reach of tourists from their region and if it is attractive in terms of physiographic factors may be called potential tourists destination. According to this all the beaches in the district can be considered as potential tourists destinations as their location is quite convenient for urban population in two metropolitan cities like Pune and Mumbai. The scenic beauty of any one of these beaches has been proved beyond doubt. However, all of them are not developed destinations.

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Studies on Floral Nectar Dynamics and Flower Visitors in *Spathodea camp an ulata* Beauv.(Bignoniaceae)

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Abstract

The present paper deals with the study of flowering phenology, flower dynamics, nectar production, sugar composition and flower visitors of *Spathodeacampanulata* Beauv. (Bignoniaceae). *Spathodeacampanulata* is an ornamental plant belonging to family Bignoniaceae. The plant blooms during January to March and the peak flowering period was observed during second week of January to first week of February. Flowers are produced in compact terminal racemes. The flowers are orange-scarlet, bisexual, campanulate shaped and last for 3 days. Flower bud contains water. Anthesis occurred early during the morning. Anther dehiscence in the mature bud. Flower produces nectar from the nectary disc located at the base of ovary. The amount of nectar and nectar concentration from flowers was recorded after every two-hour interval from 08.30hrs-16.30hrs. The average volume of nectar was found to be 10µl. The average nectar concentration was found to be 25.8%. Sugars from floral nectars were detected by one directional thin layer chromatography. Nectar showed the presence of two sugars fructose and glucose. Flower visitors were observed for their visits and behaviour during the flowering period. Birds were the main flower visitors. Bees were seen visiting occasionally.

Key words: *Spathodeacampanulata*, Nectar, sugars, visitors

Introduction

The genus *Spathodea* is a temperate representative of the Bignoniaceae, a family of primarily tropical distribution. The flowers of the Bignoniaceae usually have a well developed nectariferous disc around the ovary; the nectar is released by stomatal sap holes (Galletto, 1995; Rivera, 2000). Nectar characteristic patterns of nectar secretion and availability, flower production spatial arrangement and morphological aspects of flowers and flower-visiting birds are important in order to understand the foraging behaviour of birds on flowers (Waser, 1982; Kearns and Inouye, 1993). *Spathodeacampanulata* Beauv (Bignoniaceae) is an ornamental tree throughout the tropics and is commonly known as the African Tuliptree. The campanulate orange-scarlet flowers formed in compact terminal racemes of 30-50 flowers at the end of every branch which produce copious nectar and are adapted for pollination by birds. *Spathodeacampanulata* flowers are arranged in panicle, compact and upright inflorescences at the end of every branch, that produces up to 30 flowers each month (Rangaiah et al., 2004)

Thus, the aim of the present work was to study flowering phenology, the nectar volume (µL), nectar concentration, chemical composition of sugars and flower visitors in *Spathodeacampanulata*.

Material and Methods

Study Area

The present study was carried out in the campus of Shri Shivaji Arts, Commerce and Science College, Akot during January to April 2021.

Flowering phenology

A cultivated population of *Spathodeacampanulata* in college campus was chosen for observations. Flowering phenology, time of anthesis and time of anther dehiscence was recorded during the peak flowering period.

Nectar Analysis

The time of nectar secretion was noted during the peak flowering period. The amount of nectar from flowers was recorded at 2hrs intervals during the flowering period. Nectar was extracted with micro-capillary tubes. Nectar concentration was determined using a hand-held sugar refractometer (Erma Japan) from 8.30hrs to 16.30hrs for 5 days during the peak bloom. For the analysis of sugar, nectar samples preserved in isopropanol as well as fresh nectar samples were used. The sugars present in nectar were studied by using thin layer chromatography. Nectar sample was loaded on the plate along with standard sucrose, fructose and glucose keeping a comfortable distance between the loaded nectar sample and standard sugars. Later the plates were run in a solvent prepared by mixing butanol-4 parts + acetic acid 1 parts + distilled water 5 parts (4:1:5). After solvent run, the silica gel plate was allowed to dry, sprayed with 1% aniline, 1% diphenylamine and 85% Ortho-phosphoric acid prepared in 100 ml acetone.

Flower Visitors

Observations were made on the type of flower visitors during the peak flowering period. The duration of visits, number of flowers was recorded at 2hrs interval.

Result and Discussion

In *Spathodeacampanulata* flowering begins from January and the peak flowering period was observed during last week of February to second week of March. But, some individuals delay flowering process by about one month. Such individuals stay in flowering until late May. Flowers open daily 06.00hrs-0800hrs. Anther dehiscence takes place between 12.00hrs-13.00hrs in the mature bud. In one inflorescence contains 35-50 flowers. Anther dehiscence in between 12.30hrs-14.00hrs *S. campanulata* flowers during the dry season in some region, for 5-6 month a year though, or in other it will flower all round. It may begin flowering when 3-4 years old in favourable site. It obligate out-croser (Bittencourt *et al.*, 2003).

Floral nectar is secreted by plants to attract and reward of pollinators, and it plays a key role in the functional ecology of plants (Baker and Baker, 1983; Gonzalez-Teuber and Heil, 2009). In *spathodeacampanulata* nectar secretion begins in the flower during morning 6.00hrs-8.00hrs. The quantity of nectar was measure on the day of flower opening at two hours intervals between 8.30hrs-16.30hrs. Nectar is thin and abundant. On an average the total amount of nectar measure during this period in each flower was 10µl (Table 1 & Graph 1). Maximum nectar production occurred during 13.00hrs-15.00hrs. The average nectar concentration was found 25.8% during the peak flowering period (Table 1 & Graph 2).

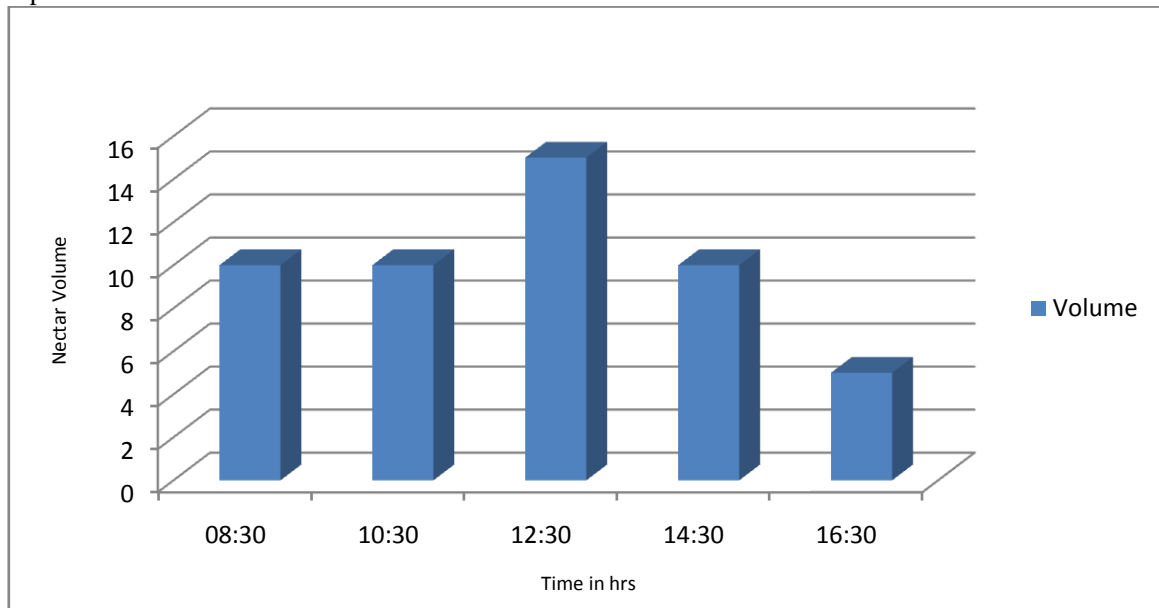
In *Spathodeacampanulata*, nectary disc is located at the base of ovary. The observations found that nectar secretion begins in the flower during morning 06.00hrs -08.00hrs. The two nectar sugars fructose and glucose were identified. Bahadur *et al.* (1986) observed the nectar of *Spathodeacampanulata* consist of sucrose, glucose and fructose but sucrose occurs in traces.

Spathodeacampanulata exhibits ornithophilous pollination syndrome Faegri and Van der Pijl (1979). The flowers are large, nectar-rich, orange -scarlet and showy serve as strong visual cues to attract the birds. The present observations showed that in *Spathodea*, Red vented bulbul, Indian Myena and small birds were the main pollinators. Among the peak flowering period observed in the study, in morning between 07.00hrs - 11.00hrs had greater number of pollinator visits per bout. Indian Myena and Red vented bulbul mostly visited at the morning time but small birds visited the flower throughout the day. Red vented bulbul stay 30-40 sec, and foraged on nectar and in one trip it forages 1-2 flowers (Table 2). In India, Salimali (1932) observed that *S. campanulata* receives visits from Myenas, Crows, bulbuls, Sunbirds, and drongos.

Table I. Nectar Volume And Nectar Concentration in *S. campanulata*

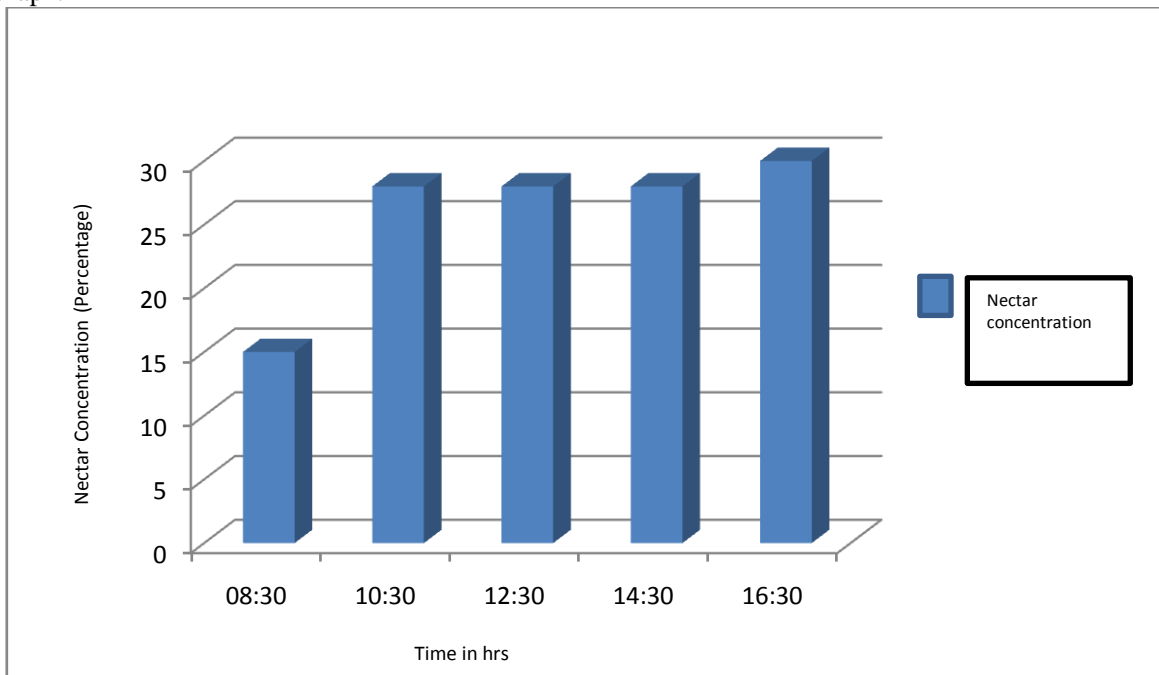
Time	Nectar Volume	Nectar Concentration
8.30	10µl	15%
10.30	10µl	28%
12.30	15µl	28%
14.30	10µl	28%
16.30	5µl	30%

Graph: 1



Nectar Volume in *Spathodeacampanulata*

Graph: 2



Nectar Concentration (%) in *Spathodeacampanulata*

Table 2 : Flower visitor's census in *Spathodeacampanulata*

Flower visitors	Forage type	Time of visit	Flower visited
Red vented bulbul	Nectar and calyx water	07.00-09.00hrs	2-3
myena	Nectar	07.00-09.00hrs	1-2
Small birds(unidentified)	Nectar	8.00- 16.00hrs	1-2
Bees	Nectar	13.00- 14.00hrs	4-5



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Performance study of Studentised Residual based Shewhart Control chart

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Abstract:

The control chart based on regression plays an important role for monitoring statistical process control when the variables are correlated to each other. Thus the main aim is to use this tool to observe the behaviour of quality characteristics. But in some statistical process control charts it is assumed that the quality characteristics of interest follow univariate or multivariate normal distribution. However, in several applications this assumption may not hold and could lead to misleading results. In this paper, we study the effect of non-normality when the quality characteristics of a process or product are characterized by a simple linear profile. Various types of distributions like heavy tailed and skewed non-normal are used to evaluate the non-normality effect. Simulation studies indicate that the non-normality can have significant influence on the in-control performance of considered techniques.

Keywords: Simple Linear Profiles, Non-Normality, Average Run Length, Residual Control Chart

Introduction:

Control charts are one of the most powerful tools widely used in every industry for monitoring the production processes and quality improvement (see Montgomery, 2004). We know that control chart is graphical tool contains three lines. the middle line is called as central line (CL) and the line lies above the central line is called upper control line (UCL) and the line lies below the central line is called lower control line (LCL). But generally the construction of a control chart is carried out in two phases. In the Phase-I the available historical data are used for analysis to determine whether the data indicates a in-control process and to estimate the process parameters and thereby the construction of control limits. The Phase-II data analysis consists of monitoring future observations based on control limits constructed in the Phase-I estimates to determine whether the process continues to be in control or not. But sometimes outliers or other unusual data points occurs in the Phase-I data and they can show an adverse effect on the estimation of parameters and the resulting control limits. That is, any deviation from the main assumption in our case, identically and independently distributed from normal distribution may lead to an out of control situation. Therefore, it becomes very important to identify and eliminate these data points prior to calculating the control limits. Most statistical process control methods assume that consecutive observations from a process are independent and identically distributed (i.i.d) over time. If the quality characteristic of a product or process can be represented by a functional form between the quality characteristic and the input variable, then effective monitoring can be established. This scenario is the so-called "profile monitoring. A good introduction to the concept of profile monitoring, and examples of its application can be found in Woodall et al. (2004). The majority of work in profile monitoring has focused on situations where the profiles are linear. For example, see the work of Kang and Albin (2000), Kim, Mahmoud, and Woodall (2003), Mahmoud and Woodall (2004), Wang and Tsung (2005), and Jensen, Birch, and Woodall (2006b). These methods often fit separate linear regression models and monitor the coefficients of the fitted regression model to determine outlying profiles. The origin of the model based control chart techniques provided by Diapola (1945) by combining regression analysis methods with conventional control chart. This chart is known as correlation control chart. It is used for analyse quality problems in airplane assembly. He used the regression equation for predict rivet use as a function of the number of minor repairs. Mandel (1965) extended the idea of correlation control chart in monitoring the productivity of postal workers. Jackson (1956) and Weiss (1957) also discussed the issues of control when the process variables are related. Hang (1984), Hawkins (1991,1993) suggested the model based monitoring procedures are also called regression adjustment procedures. Neter et al (1990) propose three examples in which a process can be expressed in terms profiles. Wade and Woodall (1993) taking the review and analysis of cause-selecting control charts. In this article we studied the performance of studentised residual based Shewhart control chart when the error comes from heavy tailed distribution like Cauchy, student t with five degrees of freedom, Slash, lognormal, chisquare with seven degrees of freedom, exponential, Weibull and its comparison is made up with normal error with sample sizes 5 and 10.

The Residual Control Chart

Define X and Y to be the external covariate and the output characteristic of interest, respectively. The model relating X to Y can take many forms. For simplicity, the simple linear regression model

$$Y_i = \beta_0 + \beta_1 X + \varepsilon_i, \quad i = 1, 2, \dots, n$$

is used here for discussion. It is assumed that ε_i are independent and identically distributed (i.i.d.) normal variables with mean zero and variance σ^2 . In practice, the values of σ , β_0 , and β_1 are unknown and must be estimated using historical data collected from the process. We assume that a sample of n paired observations (X_i, Y_i) , are available in a set of historical data. In classical linear regression, the regressor variable, X , is assumed to be fixed. When the regressor variable is random, then the regression can be regarded as conditional on the value of the regressor *see* Least-Squares Estimation; Seber. (1977). Denote \bar{X} and \bar{Y} as the sample averages of the X and Y variables, respectively. Also, define

$$S_{XX} = \sum_{i=1}^n (X_i - \bar{X})^2 \quad \text{and} \\ S_{XY} = \sum_{i=1}^n (Y_i - \bar{Y})(X_i - \bar{X}) = \sum_{i=1}^n Y_i(X_i - \bar{X})$$

Then, the estimates of the Y-intercept, β_0 , and the slope, β_1 , can be obtained using the least-squares method (see, Montgomery, D. & Peck, E. (1982). Introduction to Linear Regression Analysis), given by

$$\hat{\beta}_0 = \bar{Y} - \hat{\beta}_1 \bar{X} \quad \text{and} \quad \hat{\beta}_1 = \frac{S_{xy}}{S_{xx}} \quad \dots \dots \dots (2)$$

We denoted the predicted value of Y as $\hat{Y} = \hat{\beta}_0 + \hat{\beta}_1 X$

The residual is given as the difference between the observed and predicted values; that is,

$$e_i = Y_i - \hat{Y}_i \quad \dots \dots \dots (3)$$

The estimate of error variance σ^2 is

$$\hat{\sigma}^2 = MSE = \frac{\sum_{i=1}^n (e_i - \bar{e})^2}{n-2} \quad \dots \dots \dots (4)$$

Where in the least-squares estimate, it follows that

$$\bar{e} = \frac{\sum_{i=1}^n e_i}{n} = 0 \quad \dots \dots \dots (5)$$

The estimates $\hat{\beta}_0$, $\hat{\beta}_1$ and $\hat{\sigma}^2$ are unbiased.

The residual control chart is a Shewhart or other type of control chart applied to the regression residuals. The Shewhart residual control chart with 3σ control limits may be established as follows:

$$UCL = \bar{e} + 3\sqrt{MSE} \\ CL = \bar{e} \quad \dots \dots \dots (6) \\ LCL = \bar{e} - 3\sqrt{MSE}$$

However, note that there is less accuracy in predicting a future Y value when the corresponding X value is further away from the sample mean \bar{X} see Montgomery, D. & Peck, E. (1982). Introduction to Linear Regression Analysis. By taking in to account for this, it has been suggested that the parallel limits in equation (6) be revised to the prediction limits in equation (8)

$$LCL = \bar{e} - K\hat{\sigma}_e \\ CL = \bar{e} \\ UCL = \bar{e} + K\hat{\sigma}_e \quad \dots \dots \dots (7)$$

The variable

$$\hat{\sigma}_e = \sqrt{MSE \left(1 + \frac{1}{n} + \frac{(X_0 - \bar{X})^2}{S_{XX}} \right)} \quad \dots \dots \dots (8)$$

is the standard error of the prediction for a given future observation of $X = X_0$. The constant multiplier \mathbf{K} can be chosen as $\mathbf{K} = t(\alpha/2; n - 2)$, where $t(\alpha/2; v)$ is the upper $\alpha/2$ percentile of the Student's t distribution with v degrees of freedom.

Table No:1 n=5								
Shift	slash	lognormal	t5	Cauchy	Chisq.7	normal	exponential	Weibull
0	371	371	370	369	370	370	370	371
0.01	191	189	202	189	196	172	187	190
0.02	116	110	123	115	120	90	112	115
0.03	77	72	80	75	78	50	74	74
0.04	54	50	55	53	52	30	50	51
0.05	39	36	38	39	36	19	37	36
0.06	29	27	27	29	26	13	27	26
0.07	22	20	20	23	20	9	20	20
0.08	17	16	15	18	15	7	15	15
0.09	14	12	12	14	11	5	12	12
0.1	11	10	9	11	9	4	10	10

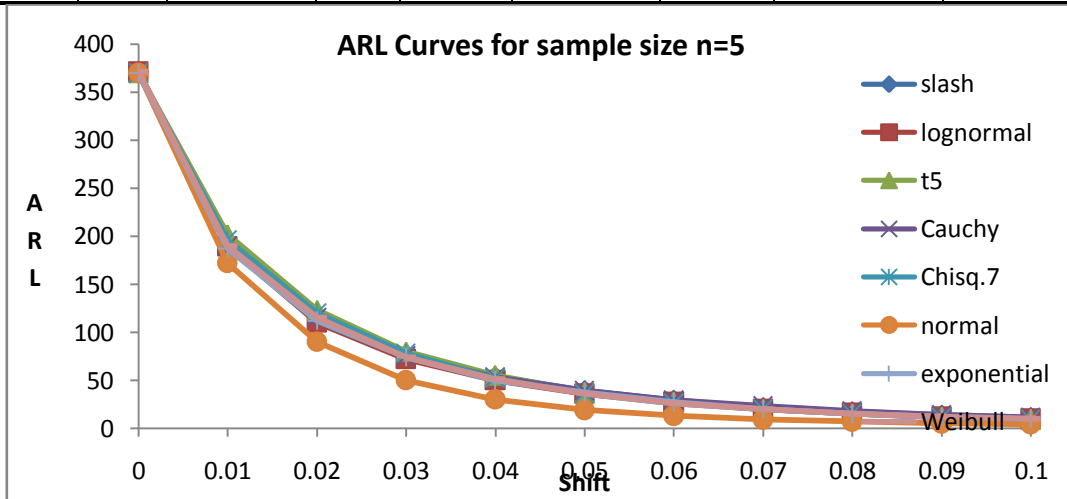
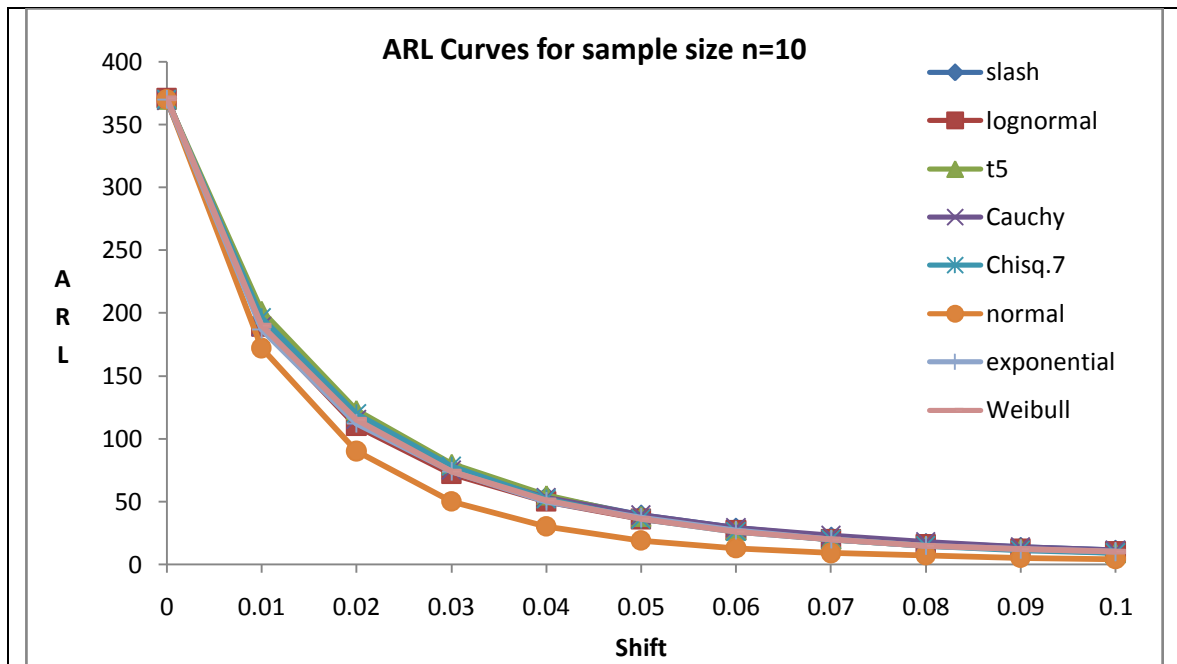


Table No:2 n=10								
Shift	slash	lognormal	t5	cauchy	chisq.7	normal	exponential	Weibull
0	370.39	370.82	370.98	370.64	370.21	370.38	370.72	370.37
0.01	285.07	190.88	180.45	283.03	267.65	172.48	180.59	181.72
0.02	212.74	103.89	96.08	209.86	191.54	89.75	95.48	95.30
0.03	152.24	62.65	55.30	146.54	132.05	49.83	54.55	55.26
0.04	105.22	39.24	33.96	103.24	87.98	30.03	33.46	34.48
0.05	68.10	26.66	21.83	65.57	56.42	19.07	22.10	21.95
0.06	38.48	18.29	14.73	36.46	33.61	13.03	15.19	15.39
0.07	16.66	13.27	10.70	15.76	18.06	9.20	10.93	10.78
0.08	8.43	9.82	7.97	8.30	8.32	6.84	8.14	8.16
0.09	6.62	7.49	6.12	6.46	2.74	5.26	6.39	6.30
0.1	5.52	6.06	4.83	5.42	1.48	4.13	4.96	5.00



Performance Study :

The **performance** of a control chart are usually evaluated by the average run length (ARL) of the chart. The run-length is defined as the number of samples required before the chart signals and the average run length is the expected value of run length. If the process is under or in control, the average run length should be large so that the false alarm rate is low. but if the process mean shifts then the average run length should be small so that the shift can be detected quickly. Since the average run length has been used widely for evaluating the properties of control charts, several methods had been proposed in order to calculate the average run length of different kinds of control charts. The run length distribution for the shewhart \bar{X} control chart is geometric. The average run length of \bar{X} control chart is the mean of geometric distribution. In this section we compare the ARL performance of shewhart control chart based on residual for subgroup sample size n is equal to 5,10,20. We consider three models $Y = 2 + 3X + \epsilon$

Where X follows normal with mean 5 and variance $\frac{5}{3}$ and the random noise is taken from standard normal distribution, standard Cauchy, Weibull, standard Slash, Log-normal with parameters (0,1), Uniform, Chisquare with seven degrees of freedom, standard exponential and Student-t distribution with five degrees of freedom. and Control limit is chosen to get specified in control average run length (ARL_0) value of 370. We use 10000 simulation runs to calculate the out of control (ARL_1) of Studentised based shewhart control chart by introducing shift in the location parameter using R software. The output is given in the following table no 1 and table no 2. control chart based on normal distribution shows excellent performance in detecting small, moderate and large shift for both sample sizes. Lognormal, exponential, weibull shows nice performance for detecting small, moderate and large shift for both sample sizes as compared to chi-square, Cauchy, student t and slash distribution. The control chart based on student t-distribution shows equally excellent performance with lognormal, exponential, weibull for large for large sample but it perform worst for small sample in detecting small, moderate and large shift.

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A study of language variation with reference to Indian Culture and Diction in English

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Abstract

Language is a tool of communication. In fact language is such a live thing on the earth which never dies. Human beings cannot live in society without language. As far as the communication of all the regional languages are concerned each sentence complete with at least one word of English. As we all know English has been playing a very important role in all the aspects of Indian lives. The study of language variation is an important concept of sociolinguistics for understanding language in detail. Language variation is a natural phenomenon. Language variation is a core part of sociolinguistics and today it is an important research paradigm. The present research study discusses language variation as per the levels of linguistics i.e. phonological morphological syntactical moreover the present research studies discusses culture and diction for investigation language variation. In sociolinguistics language variation is one of the significant parts of language study how varieties of language that are produced and formed in various geographical regions with different pronunciation and diction such differences may be present within the same geographical region due to social and cultural impact.

Key words: Language variation, Culture, Diction, Sociolinguistics, Indian English

Introduction

It is a fact that language is not a homogeneous entity. It has different forms in different place and situation. Language is not just about communication but it's an identity of social background and culture. If we study in sociolinguistic approach language is a behavior. We generally assume that people living in a particular geographical region speak the language associated with it e.g. English in England, French in France, and German in Germany however it is not always the case that people living in geographically defined area all speak the same language. e.g. Taking the example of English we find that it is not a single language however it exists in the form of several varieties. One kind of varieties is called R.P.(Received pronunciation) this variety of English is used in the southwest of England and particularly in the universities of oxford and Cambridge and the BBC. It is recognized as an educated and formal kind of English but there are other varieties of English such as the English that is spoken in the north of England in Yorkshire and Lancashire. In Scotland (Scottish English), Wales (Wales English) etc. moreover cockney English also exists in England. It is spoken by working class people and it is considered as a less educated variety of English.

India is a multilingual country where each state carries its own mother tongue. It is studied that there are variations in Indian English language. English language in India has an eventful history. Britisher's came in India in the 16th century and established colonies in India for the sake of employment. They recruit Indians in East India Company henceforth English began to spread in India. So far English language in India is developed with cultural aspects. Somehow English language in India has its own features. Today when we say Indian English it denotes linguistics and sociolinguistics features. Therefore researcher is more interested to study the notion of language variation in Indian English language. The present research study focuses on language variation with social context namely culture and diction. Language variation has an eventful history from long time. English used by Chaucer differs radically from the variety used by Shakespeare and both these differ from the writing of Jane Austin. The writing of these three writers are quite different likewise in india Indian English writing has an eventful history its emerged with social and cultural revolution. India is a multicultural country. A typical Indianness has found in Indian English writings. e.g. Mulkraj Anand's Untouchable (1935) and Coolie (1936) which reflects social and culture differences such aspects affects on language. The working class has been shown in the selected novels. The language of expression of the characters like Bakha in Untouchable and Munoo in Coolie seems to be revolutionary one or unique by socially, culturally and linguistically. Moreover the novels of Shobha de's Socialite Evenings (1985) and her second novel starry nights (1991) her novels are mostly based on women equality. Her characters like Karuna in Socialite Evenings and Aasha Rani in starry nights have broken the stereotype conventions and customs and her characters mostly belong to elite culture. Therefore their language represents the particular class which somehow goes throw variations in language. Language variation is a natural phenomenon. Diversity, cultural leads to change or variate the language. The term language variation refers to Regional, Social, Cultural, differences in the ways that a

particular language is used. Linguistically aspects such as Phonological, Morphological, and Syntactical are subject to variation. Variation in language simply means changes in language. Language change with respect with pronunciation (accent) diction (choice of words) sometimes changes in grammatical pattern. Variation is a main concern in sociolinguistic. While studying variation in Indian English language in detail it is important to go through the study Indian English language as a variety.

India is a country of cultural diversity there are 28 states in India. Its state carries its own mother tongue and each state has a unique democracy, history and culture, dress, festival languages etc. English began to spread in India in pre independence era and gradually it's related at everyone's house in post independence. Indian English language has its own traits. Indian English language has been indianized in many aspects. Mother tongue of the respective states influenced the English language in India. Indian English language is a distinct variety of English with demographically the highest number of people are using English in India. A speech and writing in Indian English language shows that the influence of the languages and culture of India. English is most commonly spoken language in India after Hindi language. Indian English speaker often mingle Hindi or other languages with English. e.g. Indians are often ask what's your good name? Which is as it is translation of Hindi Apka Shubh Naam Kya Hai? Shubh means auspicious or good. Mulkraj anand has made linguistic experiments successfully however such experimentation causes difficulties to the foreign readers who are not culturally and linguistically familiar. Mulkraj Anand's writing shows typical Indianness in respect with diction. There are some Hindi adjectives and verbs has been used by so interestingly e.g. Kala (p.10), Dharmic (p.129), Swadeshi (p.131) some verbs also experimented such as don't buck buck (p.28), maharani (p.98) etc. moreover in coolie some dictions are used e.g. Chaprasi, Sahib, Izzat, Salam, Accha, Huzoor ,Tangas ,Bazaar.

Likewise Shobha de also called the pioneer of the bilingual style in Indian English language. Her usages of English words are quite catchy which shows socio-cultural impacts in socialite evenings (1985) words like Jadu Tona, Gharwali, Unpadh slangs like chalu cheez, khunnas. The novel Starry nights (1991) is a novel based on the lives of bollywood in it English word are used such as hero-shiro, baby-jaan, chikna-face such type of dictions have been used by the writers to show typical Indianness in English language. To sum up, today we need to study or know the language variation for understanding the language in detail. A study of sociolinguistics in recent time will be helpful to live with new trends in language. The Indian English writers are using words in English which are socially and culturally originated. E.g. Salam, Bazaar Tangas. etc., Moreover Today we can easily find There is a new trend in language that language is getting short which means peoples are using short forms (contraction) in their communications for the sake of using style in language e.g. ASAP (as soon as possible) Doc (doctor), gonna (going to) etc. this is also new trend of using language which is important for the research study.

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Review: Solid Waste Management At Kolhar

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Abstract: Solid waste is the useless, unwanted and discarded material resulting from day to day activities in the community. Solid waste management may be defined as the discipline associated with the control of generation, storage, collection, transfer, processing and disposal of solid waste. The study of solid waste management at Kolhar is Small town .The collect information about collection and of transportation of largely Recovery ,Recycling and Disposal. The Present Review based on the stud Carried out on Solid waste management Practice by kolhar City.

Keywords: solid waste, management, composition.

Introduction

The Review included solid waste consist of kitchen waste, school's -Colleges waste, Municipal waste, Agriculture, hotels and Hospital waste. The amount of this solid waste is increasing day to day with increasing Urbanization and it creates various Environmental Problems. The government has launched a very effective scheme name Sant-Gadge Baba Nagari Swachhata Abhiyan and Swachha Bharat Abhiyan, Review consist of How to waste management at Kolhar and advantages of Environment. Kolhar bk. is large village located in rahata taluka of ahmednagar district , Maharashtra with total 2721 families residing. The kolhar bk village has population of 14057 of which 7174 are male while 6883 are females as per population census 2011, Kolhar bk.

Sources of Solid waste:

- Municipal solid waste
- Hospital solid waste
- Institutional Solid waste
- Agriculture solid waste

1) Municipal solid waste:

The Municipal Waste is collected from Complexes, Colonies, Various Shops and Road. There is Solid waste like dust, leafy Matters, Waste Papers, empty bottles ,Plastic (Bottles ,Polythene) food waste other material. The dead Animal are those that die naturally or accidentally killed on road .These Animals are handle with the help of special type of Equipment and dispose them. The Waste from Datt Nagar, Lakshmibai kunkulol Sankul Kolhar Bhagavatipur , Bhagavati Mata Temple Area ,Market Yard collected by Ghanta Gadi .

2) Hospital solid waste:

Hospital Waste Management means the management of waste produced by hospitals using such techniques that will help to check the spread of diseases through. We visit several hospital Shree Sai Children Hospital, Nav-Jivan Hospital, Mahamine hospital, Gurukrupa hospital and discuses with them various Solid Waste Management practices .There is various type of waste like Infections ,Noninfectious, Hazardous, Radioactive, Raw syringe ,Injection, Biodegradable Material Needle .These waste differentiate in various bag Green ,Yellow, red Bags. yellow bag Used for non-biodegradable material. Red bag used for the Hazardous material. Green bag used for biodegradable Material.

3) Institutional Solid waste-

At the Kolhar there are some Institution Arts ,science and commerce college , New English school kolhar , Pravara high school ,Bhagavati mata vidya mandir .Institutional). solid waste. consist of Paper, Plastic's, glasse wood, Food matin. matral etc The generated from educational administrative Public building 3 such as school colleges, offices. Prison odd. Market Hotels, all Pump Petrol Pump clothes shops.

4)Agriculture solid waste:

There is large agricultural land area at kolhar .Most of people doing Farming .Agriculture waste like Spoiled Food Grain ,Green Waste cow dung, Vegetable waste, Sugar cane leaves trash (pacharat) etc are recycle. Using Bio- degradable waste ,cow dung ,vegetable waste Farmer prepared Biogas and Organic Fertilizer agriculture.

The activities associated with the management of municipal solid waste from the point of generation to final disposal can be grouped into the six functional elements.

- Waste generation
- Storage
- Collection
- Transportation
- Segregation & Processing
- Disposal

Municipal solid waste (MSW) also called Urban Solid Waste, and is a waste type that includes predominantly household waste (domestic waste) with sometimes the addition of commercial wastes, construction and demolition debris, sanitation residue, and waste from streets collected by a municipality within a given area. They are in either solid or semisolid form 2 and generally exclude industrial hazardous wastes. MSW can be broadly categorized into five broad categories as-

Biodegradable waste: food and kitchen waste, green waste (vegetables, flowers, leaves, fruits), paper (can also be recycled).

Recyclable material: paper, glass, bottles, cans, metals, certain plastics, etc

Inert waste: construction and demolition waste, dirt, rocks, debris.

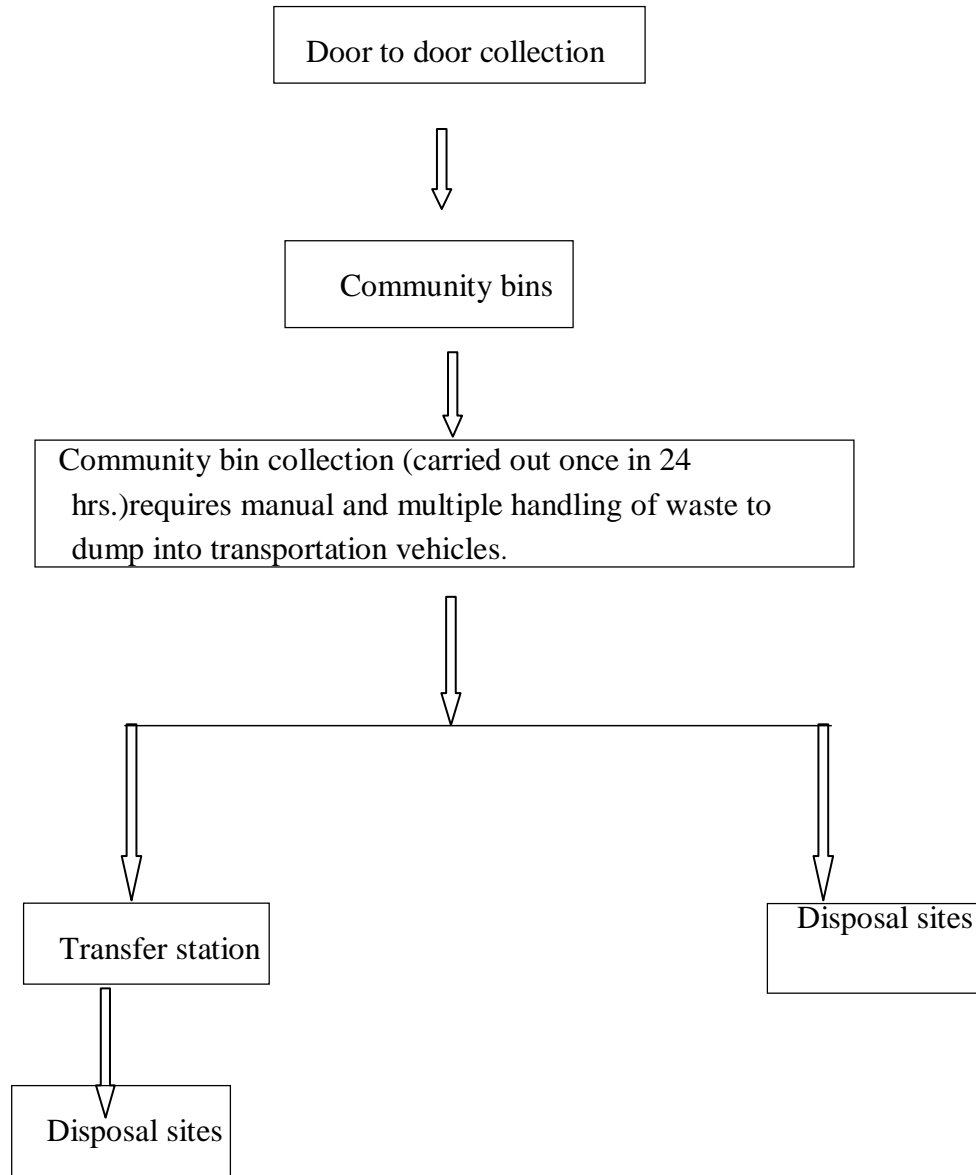
Composite wastes: waste clothing, Tetra Packs, waste plastics such as toys.

Domestic hazardous waste (also called "household hazardous waste") & toxic waste: medication, e-waste, paints, chemicals, light bulbs, fluorescent tubes, spray cans, fertilizer and pesticide containers, batteries, shoe polish.

Source	Typical waste generators	Solid waste contents
Residential	Single and multifamily dwellings	Food wastes, paper, cardboard, plastics, textiles, leather, yard wastes, wood, glass, metals, ashes, special wastes (e.g., bulky items, consumer electronics, batteries, oil, tires), and household hazardous wastes.
Municipal services	Street cleaning, landscaping, parks, beaches, other recreational areas, water and wastewater treatment plants.	Street sweepings; landscape and tree trimmings; general wastes from parks, beaches, and other recreational areas; sludge.
Institutional	Schools, hospitals, prisons, government centers.	Paper, cardboard, plastics, wood, food wastes, glass, metals, special wastes, hazardous wastes.
Commercial	Stores, hotels, restaurants, markets, office buildings, etc.	Paper, cardboard, plastics, wood, food wastes, glass, metals, special wastes, hazardous wastes.
Agriculture	Crops, orchards, vineyards, dairies,	Spoiled food wastes,

	feedlots, farms.	agricultural wastes, hazardous wastes (e.g., pesticides)
--	------------------	--

2. Collection Of Solid Waste



Flow chart showing collection of solid waste in fig.1

As a part of decentralization entire city is divided into five zones for the collection of solid waste as follows.

- Weakly Market
- Sanjay Gandhi school, Banger Nagar
- Girls hostel, Near postal ground
- Bus stop
- Bhagwati square

There are many varieties of municipal solid waste such as food waste, rubbish,

commercial waste, institutional waste, street sweeping waste, industrial waste, construction waste and sanitation waste. It contains recyclable (paper, plastic, glass and metal etc.), toxic substances (paints, pesticides, used batteries, medicines etc.) Compostable organic matter (fruit and vegetable peels, food waste), soiled waste (sanitary napkins, etc.)

Transportation of Municipal Solid Wastes –

Vehicles used for transportation of wastes shall be covered. Waste should not be visible to public, nor exposed to open environment preventing their scattering. The following criteria shall be met, namely:-

- (i) The storage facilities set up by municipal authorities shall be daily attended for clearing of wastes. The bins or containers wherever placed shall be cleaned before they start overflowing;
- (ii) (ii) Transportation vehicles shall be so designed that multiple handling of wastes, prior to final disposal, is avoided.

Segregation of Municipal Solid Wastes-

In order to encourage the citizens, municipal authority shall organize awareness programme for segregation of wastes and shall promote recycling or reuse of segregated materials. The municipal authority shall undertake phased programme to ensure community participation in waste segregation. For this purpose, regular meetings at quarterly intervals shall be arranged by the municipal authorities with representatives of local resident welfare associations and non-governmental organizations.

Classification of waste

Biodegradable Waste	Non- Biodegradable Wastes	
Organic Waste	Recyclable Waste	Others (Inorganic /Hazardous Waste)
• Used Tea Leaves/ powder	Rubber	• Some medicines
• Egg Shells	• Shampoo bottles	• Paints
• Kitchen waste	• Glass	• Fluorescent tubes
• Fruit peels	• Wires	• Spray cans
• Meat	• Metal/ Metal objects	• Fertilizers and pesticide containers
• Bones	• Plastic •	• Batteries
• Flowers	• Rags	• Shoe polish
• House dust after cleaning • Leather	• Leather	
• Fruit peels	• Rexine	
• Garden Waste		
Paper Recyclable		

Storage of Municipal Solid Wastes-

1 Municipal authorities shall establish and maintain storage facilities in such a manner as they do not create unhygienic and unsanitary conditions around it. Following criteria shall be taken into account while establishing and maintaining storage facilities, namely:-

2. Storage facilities shall be created and established by taking into account quantities of waste generation in a given area and the population densities. A storage facility shall be so placed that it is accessible to users.

3. Storage facilities to be set up by municipal authorities or any other agency shall be so designated that wastes stored are not exposed to open atmosphere and shall be aesthetically acceptable and user-friendly;

4. Storage facilities or 'bins' shall have 'easy to operate' design for handling, transfer and transportation of waste. Bins for storage of bio-degradable wastes shall be painted green, those for storage of recyclable wastes shall be painted white and those for storage of other wastes shall be painted black;

5. Manual handling of waste shall be prohibited. If unavoidable due to constraints, manual handling shall be carried out under proper precaution with due care for safety of workers.

Material and method

To obtain the basic data on solid waste, information regarding waste generation and its quantity and disposal management is essential. Hence, in the present work, manual survey was carried out as waste generation depends upon topography, seasons, status and habits of population of the area, viz., residential, commercial, market, etc. After completion of the survey, monthly grab samples of 2-kg size were collected during 2005 and 2006 from nine selected sites in different wards/zones of the city (Fig. 1). Similarly, a composite sample was also collected from the waste disposal site of the town.

The collected samples from different sites were mixed together in the laboratory and were segregated manually (Sivapalan et al. 2002) for organic (paper, leaves, market waste, wooden matter, kitchen waste, slaughter house waste, cloths, gunny bags, etc.) and inorganic (rocks, sand and bricks, plastic, metal, bones, rubber and leather, glass, etc.) content and weighted separately which is presented in Table 1. The organic content was dried, grinded and sieved through a 0.45-mm sieve for analysis of pH, electrical conductivity (EC), moisture content (MC), organic carbon (OC), nitrogen (N), phosphorus (P) and potassium (K) with the help of standard methods given by Tondon (2005) and Trivedi and Goel (1984). The results obtained after analysis are presented in Table 2.

Result and discussion

It is observed from Table 1 that the organic content is the main component of the MSW quantity which accounts for 61% of the total waste generated in the city. However, inorganic waste accounts for only 39% of total waste.

Table 2 Characteristics of organic solid waste from MSW of Kolhar City

Sr. no.	Parameter	Value
1	pH	7.1
2	EC (mhos)	3.8
3	Moisture content (%)	38.5
4	Organic carbon (%)	40.2
5	Nitrogen (%)	0.73
6	Phosphorus (%)	0.93
7	Potassium (%)	0.35

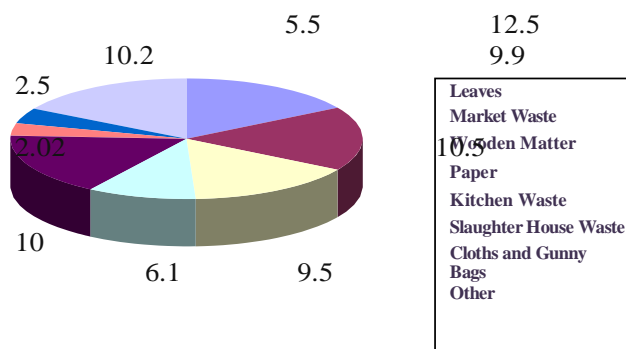


Fig. 2 Composition of organic content in MSW of Kolhar

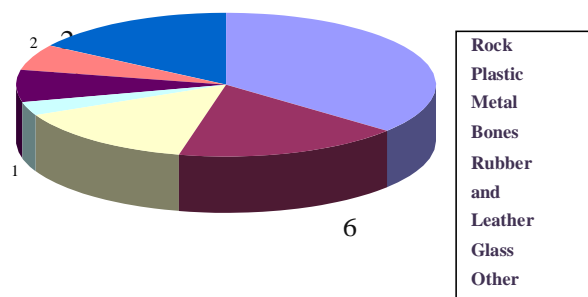


Fig. 3 Composition of inorganic content in MSW

Kolhar city in percent

The organic and inorganic contents from Table 1 were plotted in a pie diagram and shown in Figs. 2 and 3, respectively.

It can be observed from Fig. 2 that a major part of the organic waste is occupied by market waste which accounts for 10.5%, followed by kitchen waste 10%, leaves 9.9%, wooden matter 9.4%, paper 6.1%, cloths and gunny bags 2.5%, slaughter house waste 2.02% and other inseparable material accounting for 10% of total waste. These products are the result of daily and weekly market held in the city, different activities from a large domestic sector from the different wards of the city, activities at hotels and restaurants spread throughout the city, sweeping of roads, cutting of trees, papers used for different purposes like packing of food materials and gift materials, etc.

Figure 3 reveals the composition of inorganic waste from MSW. Inorganic waste is contributed by rocks, stones, bricks and sand which accounts for about 12.5% followed by plastic 6%, metal 5%, rubber and leather 2.5%, glass 2%, bones 1% and inseparable material 5.50%. These products are added in MSW by different activities like con- of moisture in the refuse is mainly contributed by cooked waste material from hotels, restaurants (Sharma and Gupta 2006) and household kitchen waste. The moisture is also contributed by slaughter house waste. The results are some what similar to that reported by Sivapalan et al. (2002), from the study of Kuala Lumpur city waste. The organic carbon of the dry solid waste is 40.2% which might be contributed by ash and other carbon-containing materials. Nitrogen content of the organic matter is 0.73% which shows that the vegetable matter which is the main source of nitrogen in the city waste is contributed by kitchen waste and market waste. The phosphate content is 0.93%, and potassium content is 0.35%. These values indicate that the organic matter from city waste may stand as a great potential source of nutrients for crops if used as a fertiliser through compostin(Sharholetal. 2007).

3. Disposal Of Solid Waste

There is a site for the municipal solid waste management at village Kolhar situated at 18 km from the Rahata city. Disposal of solid waste is done by the following two methods.

Composting: - It is done by vermin composting of any type of biodegradable wastes such as hotel refuge, biodegradable portion from residence and commercial market, vegetable waste, leaf litter, etc. Size of each vermin composting rack is 6.12 m X 1.52 m X 0.6 m made up of steel. It requires two month.

Land filling:-Waste is stored on the top of the hill in 5 acres area. All inorganic material is used for the land filling and dumping.

Disposal methods -Improper and unscientific techniques adopted for MSW disposal are economically non - viable and socially unacceptable, due to this selection of proper disposal method is necessary. Quantity and characteristics of the MSW are two major factors, which are to be considered as the basis for the design of efficient, cost effective and environmentally compatible disposal method. One can choose the appropriate disposal method which is generally categorized as follows: For large Scale disposal:

Open dumps-

The cheapest and the oldest easy method of MSW disposal is 'open dumping' where the waste is dumped in low - lying areas on the city outskirts and leveled by bull - dozers from time to time. Open dumping is not a scientific way of waste disposal. Open dumps refer an uncovered site used for disposal of waste without environmental controls. The waste is untreated, uncovered, and not segregated. In spite of its simplicity in execution, the financial involvement for this traditional method of waste management has been quite high particularly for the big metropolis. Uncontrolled, open dumps are not a sound practice. Open dumps are exposed to flies and rodents. It also generates foul smell and unsightly appearance. Loose waste is dispersed by the action of wind. Drainage from dumps contributes to pollution of surface and ground water and also the rainwater run-off from these dumps contaminates nearby land and water thereby spreading disease. A WHO Expert Committee (1967) condemned dumping as “a most unsanitary method that creates public health hazards, a nuisance, and severe pollution of the environment. Dumping should be outlawed and replaced by sound procedures”.

Landfill Disposing- of waste in a landfill involves burying the waste, and this remains a common practice in most countries. Landfills are generally located in urban areas where a large amount of waste is generated and has to be dumped in a common place. The equipment required to operate is relatively inexpensive and can be used for other municipal operations as well. Serious threat to community health represented by open dumping or burning is avoided in this method. Landfills are often established in abandoned or unused quarries, mining voids or borrow pits. Unlike an open dump, it is a pit that is dug in the ground. The waste is dumped and the pit is covered at the dumping ground with debris/ soil and spread evenly in layers.

Conclusion

- The collected data shows that the maximum proportion of refuse caused by food and garden wastes, proportion of the reuse caused by food and garden wastes, second highest was paper and the third highest was inert material. Percentage of Plastic carry bags was higher, where glass, ceramic and metals were nearly equal with each other.
- Provision of litter bins at public places shall be made and there will compulsory segregation at all the sources.
- As the disposal site is at 18 km away and smaller vehicle are used for the transportation of solid waste, it would be desirable to set up transfer station to economize the expenditure on the transportation.

As manual separation plate form of solid waste is there at the disposal site in village Kolhar, it is the most positive way to achieve the recovery and reuse of material such as metal, plastic, glass and rubber etc.It should be done throughout the year. System should

be based on Environmental protection rules (reduce, recycle, reuse and recover)
Public awareness, political will and public participation as essential for the successful
implementation of the legal provisions and to have an integrated approach towards
sustainable management of municipal solid wastes.

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Advances of Green Chemistry for Sustainable Development

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Abstract:

All areas of Chemistry like Organic, Inorganic, Biochemistry, Environmental, Physical, Polymer, Drug etc are covered by Green Chemistry. Catalysis, bio-catalysis, and use of alternative renewable feedstock, reaction Medias, reaction conditions and some synthetic pathways can be achieved in Green programs. Green technology is now accepted by government, industry and the public as a necessary goal for achieving societal, economic and environmental objectives. Green chemistry is very important to improve our life, chemical industries and environment.

Green technology is an umbrella term that describes the use of technology and science to create products and services that are environmentally friendly. The goal of green tech is to protect the environment, repair damage done to the environment in the past, and conserve the Earth's natural resources.

Keywords: Green Chemistry, Sustainability, catalysis, bio-catalysis.

Introduction:

Green tech refers to a type of technology that is considered environmentally friendly based on its production process. Green chemistry is defined as the chemistry that designs chemical products and processes that are harmless to the environment, so preventing pollution, some chemical products are remain in the environment after use and they are broken down into harmless component. It can be achieved by reducing the required energy, replacing the organic solvents with water So that we can save money as well as lives^[1]. Green chemistry is interdisciplinary approach based on chemical ecological and societal responsibility which enables creativity and advancement of innovative research^[2]. Green chemistry is based on twelve principles by Anastas and Warner^[3].

Important 12 principles of Green Chemistry:

1. **Prevention.** It is better to prevent waste formation than to treat it after it is formed.
2. **Atom economy.** Design synthetic methods to maximize incorporation of all material used into final product.
3. **Less hazard.** Synthetic methods should, where practicable, use or generate materials of low human toxicity and environmental impact.
4. **Safer chemicals.** Chemical product design should preserve efficacy whilst reducing toxicity.
5. **Safer solvents.** Avoid auxiliary materials - solvents, extractants - if possible, or otherwise make them innocuous.
6. **Energy efficiency.** Energy requirements should be minimized: conduct synthesis at ambient temperature and pressure.
7. **Renewable feedstocks.** Raw materials should, where practicable, be renewable.
8. **Reduce derivatives.** Unnecessary derivatization should be avoided where possible.
9. **Smart catalysis.** Selectively catalyzed processes are superior to stoichiometric processes.
10. **Degradable design.** Chemical products should be designed to be degradable to innocuous products when disposed of and not be environmentally persistent.
11. **Real-time analysis for pollution prevention.** Monitor processes in real time to avoid excursions leading to the formation of hazardous materials.
12. **Hazard and accident prevention.** Materials used in a chemical process should be chosen to minimize hazard and risk for chemical accidents, such as releases, explosions, and fires.

Recently some advanced trends are used to reduce or eliminate production of substances that are hazardous to human health and environment ^[4]

- a) Some alternative reaction conditions like microwave, ultrasound and light reacting reactions are used.
- b) Less toxic ecofriendly chemicals can be designed.
- c) Reaction media like water, ionic liquids, and supercritical fluids are used as an alternative to organic chemicals.
- d) Highly pure and selective compounds are obtained in the field of catalytic and bio-catalytic reactions ^[4].
- e) Many green technologies aim to reduce emissions of carbon dioxide and other greenhouse gases in order to prevent climate change.
- f) Green technologies have the shared goal of preserving biodiversity and conserving the earth's resources, there are few ways to do so without affecting the environment in other ways.

Another Principles of Green Chemistry for Sustainable Development:

- 1 Prevention is always better than to treat waste after it has been created.
- 2 Atom economy is related to waste prevention. When yield of product obtained is high, maximum material is converted to product then ultimately reduce the amount of waste. During synthesis of ibuprofen involves only three steps and 99% pure product is obtained.^[5,6,7]
- 3 Recently many synthetic methods can be designed which uses less hazardous chemical substances.
- 4 Replacing harmful chemicals with safer chemicals makes many processes cleaner and cheaper. ^[8]
- 5 Safer solvents and Auxiliaries are used during synthesis. The choice of suitable solvents are based on process safety, environment safety and worker safety. The solvent should be chemically and physically stable. Tomatoes growth can be achieved by extrusion from greenhouse gas, carbon dioxide is used as a tomato seed growth bi-activator.^[9]
- 6 Synthetic methods should be designed in such a way that requirement of energy should be minimized.^[10]
- 7 Use of renewable feedstock is the next principle of green chemistry. Use of biodegradable plastic is the new trend for food industry.^[11]
- 8 Some unnecessary derivatives like blocking groups, protection / deprotection, temporary modification of physical and chemical processes must be minimized if possible because such derivatization require additional reagents and can generate waste.
- 9 Biodegradable catalyst lowers the activation energy and thus accelerates the rate of reaction.
- 10 The degradation of product is also crucial so that chemical products are so designed that after the end of their function they break down into innocuous degradation products. [12]
- 11 Conservation of ecosystem.
- 12 Development of sustainable society.
- 13 People are entitled to a healthy and productive life in harmony with nature.
- 14 Development today must not undermine the development and environment needs of present and future generations.
- 15 Synthetic methods should be designed in such a way that requirement of energy should be minimized. ^[10]

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- 19 The degradation of product is also crucial so that chemical products are so designed that after the end of their function they break down into innocuous degradation products.



Green Chemistry in Every Day Life:

Chemistry is a big part of our everyday life. One can easily observe this branch of science in different spheres of human life such as in the food we eat, the air we breathe, the various cleansing agents we use, so much so that even human emotions are sometimes a result of chemical reactions within our body! Perchloroethylene is commonly being used as a solvent for green dry cleaning of clothes. PERC contaminates ground water and is a suspected carcinogen. A Micell technology developed by Joseph De Simons, Timothy Romark, and James McClain made use of liquid CO₂ and a surfactant for dry cleaning clothes, thereby replacing PERC. Using this technique Dry cleaning machines have now been developed.^[13] Micell Technology evolves a metal cleaning system that uses CO₂ and a surfactant thus eliminating the need of halogenated solvents[14] The paper is manufactured from wood (which contains about 70% polysaccharides and about 30% lignin), for good quality paper, the lignin must be completely removed. Initially, lignin is removed by placing small chipped pieces wood into a bath of sodium hydroxide (NaOH) and sodium sulphide (Na₂S). By this process about 80-90% of lignin is decomposed. The remaining lignin was removed through reaction with chlorine gas (Cl₂). The use of chlorine removes all the lignin (to give good quality white paper) but causes environmental problems. Chlorine reacts with aromatic rings of the lignin produce dioxins, such as 2,3,4-tetrachlorodioxin and chlorinated furans. These compounds are potential carcinogens and cause other health problems. These halogenated products find their way into the food chain and finally into products, pork, beef and fish. So use of chlorine has been discouraged. Subsequently, chlorine dioxide was used. Other bleaching agents like hydrogen per oxide (H₂O₂), ozone (O₃) or oxygen (O₂) also did not give this the desired results. A versatile agent has been developed by Terrence Collins of Camegie Mellon University. It involves the use of H₂O₂ as a bleaching agent in the presence of some activators known as TAML activators that as catalysts which promote the conversion of H₂O₂ into hydroxyl radicals that are involved in oxidation (bleaching). The catalytic of TAML

activators allow H₂O₂ to break down more lignin in a shorter time and at much lower temperature. These bleaching agents find use in laundry and results in lesser use of water.^[15]

Chemicals play an important part in our life and we come across many of them in our day to day activities. We are quiet unaware of chemical uses and in this bolg you will see examples of chemicals that keep our life going smooth. These chemicals are used either in combined form or as some reagents.

Sr.No	Common name of the Chemical	Molecular formula & IUPAC name	Uses
1	Baking Powder	NaHCO ₃ ;Sodium bicarbonate	Used for baking for cooking ,release CO ₂ in reaction with the ingredients
2	Soap	Esters	Used for bathing & washing cloths
3	Detergrnt	Sodium sulphate,sodium hydroxide & phosphate compounds	Used for washing cloths
4	Toothpaste	Calcium carbonate,Sodium Flouride	Used for cleaning teeth while brushing
5	Salt	NaCl; Sodium Chloride	Used for seasoning for cooking, also used as preservative
6	Vinegar	C ₂ H ₄ O ₂ acetic acid,ethanoic acid	Used as preservative and for seasoning foods. Utilized for various household cleaning uses.
7	Graphite	Carbon	Used in Pencil
8	Alcohol	C ₂ H ₆ O Ethanol	Used in alcoholic drink
9	Bleaching Powder	NaOCl	Commonly used domestic bleach, used for cleaning purpose
10	Sugar	C ₁₂ H ₂₂ O ₁₁ ;Sucrose	Used as cooking sweetner
11	Mouthwash	H ₂ O ₂ ; hydrogen peroxide,	Used for personal hygiene.

Conclusion:

The Aim of green chemistry is to design a chemical processes and products that are harmless to human health and the environment. Green chemistry is based on twelve principles. It is impossible to meet the requirement of all twelve principles but it attempts to apply as many principles as possible. Recently we mainly focused on design an ideas, processes that starts from nonpolluting material. Green chemistry approach will be successful only when proper training and education will be given to new generation.

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Effect of Covid 19 On Indian Economy

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Abstract

As we can understand from our history that pandemic is not a new thing which mankind has experienced but the most common big thing is their adverse effect on economy. The main motive behind this research paper is to make aware about the effect of the COVID pandemic on the Indian economy. Some facts and figures are mentioned in the research paper in a lucid way. It also focusses on how steep fall in the prices of crude oil, rise in exports in IT sector and pharma industries which has been silver lining to Indian economy.

Keywords: Agriculture, Export, Import, Pandemic, Economy

Introduction

The effect of coronavirus pandemic has not only adversely affected to India, but the world has been largely disruptive. Not only in terms of economic activities but also the loss of human life. Almost all the sectors have been adversely affected as the domestic demand and the exports had sharply declined with some notable exceptions in the field of Pharmacy and IT. So we will look into some of the sectors widely affected with pandemic.

Impact on food and Agriculture

The lockdown had caused in shutting the operations of retail sellers (shutdown of mandis and market) and had restricted the movement of commodities leading to Inflation and Deflation at the same time. As I had interviewed the farmers and understood that wastage of fresh vegetables, fruits, and milk due to inability of farmers to transport them from point of production to the markets. Considerable concern about food production, processing, distribution, and demand were the problem faced by food and agriculture sector. If this sudden negative shocks had lasted for sometime would have lead to serious food security problems and might have caused the permanent change in the food system.

Oil and Gas

The biggest traded commodity in the world and the base of any economy is energy sector. It mainly comprises of Oil and Gas industry which is quite significant as India is the 3rd biggest energy consumer only behind US and China. In April, 2020 the price of West Texas Intermediate crude reached the negative for the first time in history, falling negative 37.63 US dollars per barrel. This affected the most to the oil surplus countries and this helped the countries like India which are oil deficit to get the maximum possible advantage through spot trading and by filling the reserves of crude in the country at most to lower the burden of expenses on crude import and use that capital in support of other streams. [India saved almost 8.3 lakh crores in 2019-20 and 30 thousand crores in 2020-21 on crude imports]

Export

The domestic production networks were experiencing the shortage of raw materials, components and force to bear the higher cost. The fall in construction sector affected the core sectors like Steel power and coal. Therefore, the backward linked sector like mining and quarrying has been affected in the pandemic which also eventually led to loss in exports or decrease in the exports. With the lockdown uncertainty had increased within the buyers from all over the world to postpone the big-ticket purchases thereby dissuading the demand further.

However there has been phenomenal average growth of Indian brands those appeared in the Brand Finance IT Services ranking since 2020 is an impressive 51 percent. Also As per the department of commerce, drugs and pharmaceutical exports for FY21 (April 2020-March 2021) have touched \$24.44 billion with a record growth of 18.07 %, and 7% growth in FY 2021

As almost 67% of the electronic components are imported from China which resulted in the chip shortage of the semiconductors for the car production in India which has continue to affect the production and still unpredictable how long it will continue.

India's export contracted by 4.8% to \$314.3 billion dollar and imports contracted by 9.1 % to 467.2 billion, leaving trade deficit of \$152.9 billion during FY 20

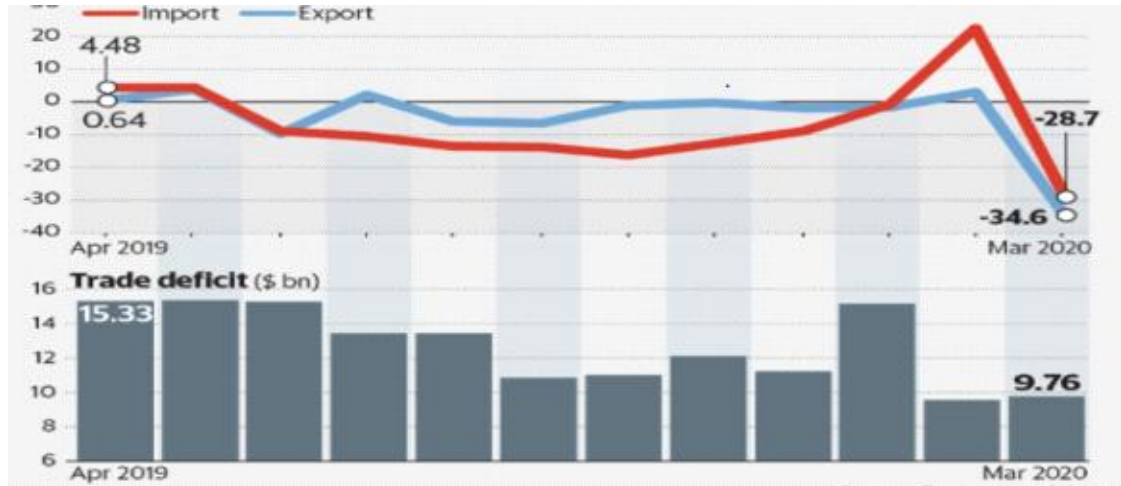


Fig- Drop in Import & Export

Effect on MSME-

As MSME sector in India is the second largest employment generator after agriculture and acts as breeding ground for entrepreneurs and innovators to strengthen the economy. Studies show that according to DGCA data, the value of MSME related to products in India had contributed 48.5 % of the total export during 2017-18. And it was noticed that in the year 2019 the sector contributed only 29% of the overall GDP the difference shows that how badly the sector was affected and caused heavily to contribute to economic depression.

During the lock down the sector faced challenges related to Debt repayments, wages/ salaries, statutory dues, etc.

And one of the biggest reasons which shows that micro and small Enterprises faced the maximum heat was due to the liquidity crunch. Many MSME had to do lay off the workers because of inability to pay them to incur the expenses as there was sharp decline in demand

Also amid rise in the tensions on the border ,India ahead launched aatmanirbhar Bharat mission in which 15 relief measures were declared as a package out of which 6 were entirely focusing on to empower the MSME's.

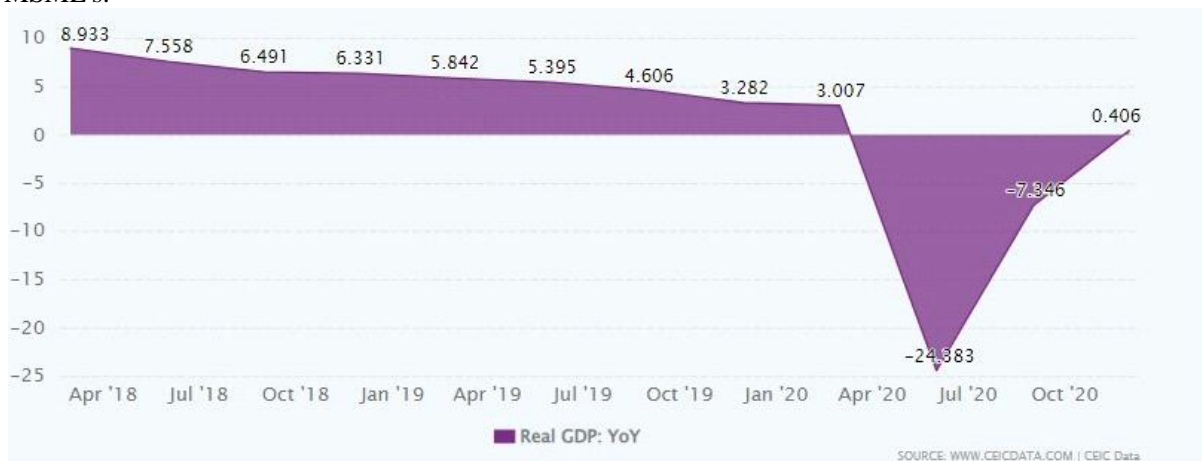


Fig- Fall in GDP on YOY basis

Conclusion-

After studying the different economic scenarios it has been found that the most affected sector was the mining sector which is followed by manufacturing, construction, trade, hotel and transport services and financial services. To overcome the adverse effects of the lockdown and the pandemic, government had tried to give the relief on timely basis by announcing the series of economic packages to give stimulus to the economy .The first economic package was rupees 1.7 lakh crore (Almost 1 % of GDP) which was announced immediately after lockdown to tackle the immediate basic needs of the majority then RBI had announced series of measures to announce the liquidator in the market by giving 6.5 lakh crores(Almost 3% GDP) and finally the economic package was around 12 lakh crore(6% GDP) which was announced by the government. These packages have helped in avoiding the fall of economy from going bad to worse.

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Covid-19 Pandemic: Impact on Socio Economic Conditions of Women in India

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Abstract: Economic challenges which arise due to covid 19 pandemic outbreak pose a serious threat to women's work and business activity. It exposes them to increased risk of exploitation or abuse. Severe economic shocks faced by Girls and young women are more likely to take on high-risk work for their economic survival. Lockdown due to covid 19 pandemic are putting girls and women at heightened risk of violence and cutting them off from essential protection services and social networks. Lockdowns also lock the autonomy of girl. It reinforces the attitudes and practices which regard girls as second priority and hold the back.

Keywords: *Pandemic, Economic, Employment, Women work force*

Introduction

A challenge of covid 19 pandemic faced by the living generations across the world. Its worst impact Very few nations, may have been spared from the worst impact economically. Despite the billion plus population, India has managed the spread of the pandemic with timely measures. It adversely impacted on the education system. According to UNESCO, due to covid 19, over 89% students were out of school. This represents 1.54 billion children and youth enrolled in school or university, out of that girl students were nearly 743 million from 185 countries. Covid 19 pandemic causes rise in dropout rates which disproportionately affect adolescent girls. Over 111 million of these girls are living in the least developed countries for them taking education is already a struggle. This disease outbreaks increase in the home responsibilities of girls' and women.

Objectives of the Study

- To study the impact of covid 19 on the citizens of India.
- To understand the impact of covid 19 on social conditions of girls and women.
- To understand the impact of covid 19 on employability of women.
- To suggest the remedies to overcome a challenge of covid 19,

Limitations of the Study

The present study is related to the impact of covid 19 on the socio-economic state of women in India. The other effects of covid 19 are not considered for the research study.

Research Methodology

The present study for the research is dependent on secondary data. The secondary data were collected from the Govt. Portal of India, Magazines, Newspapers & Internet.

Highlights of the study

Covid 19 infect people of all gender and all ages, but some girls and women may be at a higher risk because of worst financial condition and lack of resources and information. They are at the front line as caregivers and as a staff related with health and service sectors. Women, in India make a significant proportion as a healthcare worker as 80 percent are nurses and midwives. But in management their involvement is very less. Only 13 percent of the working resource of the nation in covid 19 task forces are women. This pandemic adversely impacted women's employment in India. In India domestic violence, child marriage, cyber violence, trafficking of girls and women increased during the pandemic.

India recorded 2.5 times increase in domestic violence from February to May 2020 according to the National Commission of Women data. Organization's which are working for women reported that in the first four phases of lockdown, the number of cases they received are more than they had in the last ten years for a similar period. The government of India has given domestic violence shelter and support services which is an important step in this pandemic. During two waves of covid 19, 700 One-Stop-Crisis centers remained open in India which supports over 3,00,000 women who suffered. Every crisis impacts girls and women differently than men due to gender inequalities. To bring them on common platform, now there is a serious need to frame policies in that way.

To minimize the impact of this pandemic, Plan India has launched the Help India Heal Initiatives. The objective of this is to directly support nearly 200,000 COVID affected families and one more target is to indirectly support 1 million poor and vulnerable families, especially girls and young women for covid prevention, vaccination, and food security interventions.

Periodic Labour Force Survey (PLFS) 2019-20 that is the survey period from July 2019 to June 2020 employment rate continued to expand. About 4.75 crore additional persons joined the workforce between 2018-19 and 2019-20, which is about three times more than the employment created between 2017-18 and 2018-19. Relative to the urban sector, the rural sector contributed much more to this expansion. The number is 3.45 crore in rural sector and 1.30 crore in urban sector. Amongst the additional workers, females were 2.99 crore that is 63 percent. In 2019-20 about 65 percent of the additional workers joined were self-employed and 75 percent of the female workers joined as self-employed were unpaid family labourer. In the additional workers casual labourers were 18 percent and regular wage/salaried employee 17 percent.

The situation takes a sudden change in employment sector due to covid 19 pandemic lockdown. Consumer's expectations and priorities for the goods and services changed which adversely hamper the business world. It causes the increasing rate of unemployment.

Following table indicates the comparison of unemployment rate in India from 2017 to 2020.

Unemployment rate in India

Year	Unemployment Rate (%)	Increase/Decrease(%)
2017	5.41	- 0.1
2018	5.33	-0.08
2019	5.27	-0.06
2020	7.11	+1.84

Source: Ministry of Labour and Employment

Above table shows the increase in unemployment rate in India. The World Bank estimated that participation rate of the female labour in India fall 20.3% in 2019 from more than 26% in 2005, compared with 30.5% in neighboring Bangladesh and 33.7% in Sri Lanka. According to Ministry of Statistics states that the female labour participation also fell to 15.5% during the April-June 2020 quarter and 16.1% during the July-September 2020 quarter. According to the government report it is the lowest among the major economies the reason is pandemic. India has one of the lowest female labour force participation rates in the world, the estimate done by the World Bank. In India most of the employed women are in low skilled work such as farm, factory, and domestic help sectors.

According to the United Nations, Policy Brief: The impact of Covid 19 on Women, highlighted that it is important for national response plans to prioritize support for women for that it is required to implement measures that have proven to be effective. It includes

- Integrating prevention efforts and services to respond to violence against women into COVID-19 response plans
- Designating domestic violence shelters as essential services and increasing resources to them, and to civil society groups on the front line of response
- Expanding the capacity of shelters for victims of violence by re-purposing other spaces, such as empty hotels, or education institutions, to accommodate quarantine needs, and integrating considerations of accessibility for all
- Designating safe spaces for women where they can report abuse without alerting perpetrators.
- Moving services online
- Stepping up advocacy and awareness campaigns, including targeting men at home.

All existing inequalities between men and women amplifies and heightens due to pandemic. The COVID-19 pandemic and its impact on social and economic conditions have created a global crisis which is unparalleled in the history of the world. Whether at the national or international level, it will significantly weakened various sectors because inequalities have made all of us more vulnerable to the impacts of the crisis. If we decide to simply repeat past policies and fail to use this moment to rebuild more equal, inclusive, and resilient societies, then it will seriously hamper the economy of the nation.

Conclusion and Suggestions

It is essential that every COVID-19 response plan, and every recovery package and budgeting of resources, needs to address the gender impacts of this pandemic. This means that including women and women's organizations at the heart of the COVID-19 response, transforming the inequities of unpaid care work into a new economy that works for everyone and designing socio-economic plans. The socio-economic plans should be with an intentional focus on the lives and bright productive futures of girls and women. Putting women and girls at the center of economies will fundamentally drive better and more sustainable development outcomes for all. The studious plan will support a more rapid recovery and initiate to achieve the Sustainable Development Goals.

It is necessary to launch mass awareness campaign to support adolescent girls and young women for the prevention of the spread of COVID including tackling myths surrounding vaccinations. The challenge has not been finished; we not only need to take caution but also need to reframe our policies to convert unpredictable situations into an opportunity for the citizens of the nation. The government is taking efforts to protect and safeguard the girls and women from gender-based violence. The draft of anti-trafficking bill 2021 is another step taken by the government which is set to increase the penalties for perpetrators and making reporting of such crimes mandatory.

Reducing gender-based education gaps and ensuring women remain in and widen their participation in the formal labour market. It will play a significant role in providing many economies to 'rebound' with stronger, more equitable and sustainable development. It will be important to implement an intentional gender lens for the designing of fiscal stimulus packages and social assistance programmes. These programmes will help to take a step ahead to achieve greater equality, opportunities, and social protection.

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Towards a moderate philosophy of Human Rights in India

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Abstract

Extreme philosophy of both the rightist and leftist fail to deliver true concept of human rights in India. There should be an impartial, scientific, realistic and humanitarian human rights philosophy in India. The moderate philosophy of human rights provides justice to all. The moderate philosophy of human rights should be the combination of all interests including national interest, collective interest of the society, interest of the deprived classes, individual interest and all citizens of India.

Human rights in India are interpreted and analyzed from two extreme philosophical groups. These philosophies are extreme leftist and extreme rightists. Extreme leftists are front runners in Indian human rights movement. The extreme leftists focus on human rights violation of lower class people like scheduled classes, scheduled tribe, women and minorities. In national and international seminars they advocate human rights of the lower class people. They target armed forces, police, civilian administration, upper classes, religious institutions and beliefs and even judiciary for violation of human rights of lower classes. They always question the history of the nation and national identity.

The extreme rightist on the other hand counter the idea of human rights philosophy of extreme leftist. They are not comfortable with the interpretation of human rights by extreme leftists. The extreme rightists interpret human rights in light of conservative values like traditions, values, morality and nationalism. Extreme rightists oppose naxal movement, reservation policy, terrorism, secular policy and independent life style of women. They support caste system, dissimilarity and inequality and irrational religious practices as optional religious practices.

In most of the international and national seminar the academic discussion on human rights are dominated by the extreme leftists. They focus on state violation of human rights and violation by upper class. They take up these selective examples of human rights violations by security forces in Kashmir, North-East states and generalize the incidents as the whole system is violating the human rights. The most of these extreme leftist advocate that "India is a nation of nations and one day it will collapse like Yugoslavia." They counter nationalism as "The Indian nation was never existed and it was created in 1947. The history of the nation was created by rightist historians." They oppose death penalty for terrorists and criminals and argue that they are innocents and police framed the false cases. They support naxal violence as a fight for human rights. However violence and rights can't go together. Only democratic practices give a way for human rights.

The extreme leftist criticizes Indian state power over its territory. But it is true that all modern states formed on the basis of unification of territories. These states maintain unity and integrity by using military power. Border provinces of a state are multi cultural and cause boundary disputes and identity crisis. If the extreme leftist's arguments get materialized, there will be anarchy all over the world. Without the state power there will be no human rights. They forget that Marxist idea of stateless and classless society never materialized.

The extreme leftists target only Hindu religion in India. They argue that "Hinduism is not a religion. It is an upper class mythology. The castes within this religion are always infighting and there is never a harmony. Women were deprived of their rights and suppressed. Dalits are suppressed and have no rights." It is surprising that they have never talk about the violation of rights of women in Afghanistan, Siriya and other religion based countries. They argue that Indian nation never existed before 1947 and it was coined by rightist historians. They criticize every value in India as '*Brahminical*'

The extreme leftist philosophy of negativism and human rights is not acceptable. They question the existence of a nation state of India and reject the idea of 'unity in diversity'. In the name of human rights violation they stand with the terrorists, naxals, and criminals. They never condemn

the violations by terrorists and naxals. Most of the extreme leftists have 'selective approach' and they talk only on other side of the human rights violation cases. They never talk on human rights violations of women in all sections of society and all countries.

Most of the academic discussions on human rights are a stage for a clash between two extreme philosophies of human rights. The extreme leftists are on the side of aggressive and negativism while extreme rightists are on the side of defensive and positivism. Both the arguments above are far from reality. We can't accept extreme rightist interpretation of human rights values based on traditions. Discrimination on the ground of religion, race, caste, sex, language and place of birth is against humanity and a clear case of human rights violation. A civilized society can never accept practices like castism, racism and suppression of women on any ground. It is shameful that practices like 'madesnana', 'honor killing', and other practices are defended on the ground of optional traditional values. These practices are clear cases of human rights violations. The extreme rightist oppose naxal movement as human rights violation. But they are not in position to oppose this movement theoretically.

In modern age, every state has its own philosophy. The inevitable fact is that these philosophies are the philosophies of the majority. But the rights of the minorities should be protected. The majority philosophy shall not suppress the philosophy of the minority. In the same way minorities have no right to challenge the rights of the majority. The Indian national philosophy is secular and multi cultural. The human rights activists shall not have double standards and selective. But the mindset of the both the leftist and rightist is of double standard and selective.

Extreme philosophy of both the rightist and leftist fail to deliver true concept of human rights in India. There should be an impartial, scientific, realistic and humanitarian human rights philosophy in India. The moderate philosophy of human rights provides justice to all. The moderate philosophy of human rights should be the combination of all interests including national interest, collective interest of the society, interest of the deprived classes, individual interest and all citizens of India. The rights of dalits, tribals, women, minorities, children, working class, middle class, upper class and every citizen of India should be combined on the basis of give and take policy. The principle of 'unity in diversity' and '*vishwamanava*' i.e. the moderate philosophy should be the basis of human rights in India.

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