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Chief Editor

Dr. R. V. Bhole

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



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Urban Water Management in India: An Analysis

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Abstract: *Today urban area is growing very fast with the challenges of infrastructure facilities, among basic facilities water is a critical natural resource for the growing urban areas. Commercial, residential, and industrial users already place considerable demands on this resource, which often requires treatment, may be located at great distance from the city, and is almost always in demand by multiple sectors. According to the UNDP 2006 report, the industrial and domestic water demand expected to double by 2050, competition among urban, semi-urban, and rural areas will likely worsen. Today the world's population has reached 7 billion, and more people live in cities than in rural areas, yet the benefits of city life are not available to all. Water Management involves the fields of Proper water supply, Maintenance of urban drainage, wastewater treatment and sludge handling. The challenges facing today's major cities are daunting, and water management is one of the most serious concerns. Potable water from pure sources is rare, other sources of water must be treated at high cost, and the volume of wastewater is growing. Urban water management is now on the verge of a revolution in response to rapidly escalating urban demands for water as well as the need to make urban water systems more resilient to climate change. At the same time, because of climate change, more frequent and extreme weather events are expected to alter the quality, quantity, and seasonality of water available to urban centers and their surroundings. Cities are facing a series of challenges: on-going urbanization, resource depletion and emissions, an ageing and deteriorating urban water supply infrastructure and the effects of climate change. To meet these challenges and to be able to drive sustainable economic growth, cities need to become smart and tap their innovation potential through the use of Information and Communication Technologies; this will allow us to create cities with a smaller water footprint overall. Urgent actions are needed to combat water stress, to remedy the vulnerability of infrastructures, and to modify water use patterns in agricultural, industrial and domestic processes.*

Introduction

Urban water management is now on the verge of a revolution in response to rapidly escalating urban demands for water as well as the need to make urban water systems more resilient to climate change. At the same time, because of climate change, more frequent and extreme weather events are expected to alter the quality, quantity, and seasonality of water available to urban centers and their surroundings. Cities are facing a series of challenges: City populations are expected to increase and have a growing share in resource consumption and emissions. According to the United Nations, city dwellers are expected to double by 2050, with most of this urban growth expected to occur in developing countries. The need to increase water efficiency and water savings by investing in resource efficiency has been widely acknowledged as one of the top research and policy priorities for the upcoming decades, in view also of the urgency to adapt to climate change. This will be achieved by optimizing the operation of water utilities, thus saving water and energy, and minimizing network leakages and non-revenue water. At the water

utility level, smart pressure management and optimized operation based on smart algorithms, network intelligence, and the installation of pressure and flow sensors throughout the network can significantly improve operations, save water and energy, and successfully follow the new trends in cities. The use of relevant ICT and social computing can be instrumental in raising awareness of stakeholders on the significance of the water sector in sustainability, and can be used to change behaviors and attitudes among citizens. ICT can help water managers drive aggressive information campaigns and integrate the water sector with other city services, in order to deliver sustainable services and quality in urban life. Cities located near water bodies may be at risk of climate change-related disasters. In response to such threats, water managers are revisiting conventional practices as they search for efficient ways to ensure human well being while safeguarding the integrity of the resource base. There are many challenges to the efficient and effective operation of the water supply network, especially since leakage levels often remain high, leaking not only

water but revenue at the same time, since water distribution is an energy-intensive business, with water being pumped. With an ageing infrastructure, burst rates are rising, while replacing affected network sections requires large capital investments. Given the fact that most networks are still controlled manually, the operational costs of managing these challenges are also rising. Pressure management is really a central issue in tackling the challenges of leakage, bursts and high operational costs. The dilemma faced here is: on the one hand pressure needs to be consistently high enough to satisfy customer needs providing water in adequate pressure, while on the other hand, excessive pressure drives up leakage, burst frequency, energy consumption and operational costs, while decreasing the lifespan of network assets. So, the goal of pressure management is pressure optimization, which usually follows a successful network simulation.

Goal of urban water management

About 30% of people in India live in cities that are expected to double in population by 2050. With a growing economy and changing lifestyles the pressure on already strained water resources is increasing. The government has shown an interest in Integrated Urban Water Management (IUWM) as a new framework and approach for the nation. Some cities already face acute water shortages and deteriorating water quality. The goals of urban water management are to ensure access to water and sanitation

infrastructure and services; manage rainwater, wastewater, storm water drainage, and runoff pollution; control waterborne diseases and epidemics; and reduce the risk of water-related hazards, including floods, droughts, and landslides. All the while, water management practices must prevent resource degradation. Conventional urban water management strategies, however, have strained to meet demand for drinking water, sanitation, wastewater treatment, and other. Most cities in India are water stressed, with no city having 24/7 water supply. According to the Ministry of Urban Development, 182 cities require immediate attention in regards to proper water and wastewater management. According to official statistics, the coverage of sanitation has increased but resource sustainability and slippages are very common in that coverage. Moreover, in cities with more than one million people, the official water supply after 35% loss in leakages is just 125 liters/day per capita which is considerably lower than the demand of 210 liters/day per capita. Infrastructure development and regulations have not kept pace with population growth and urbanization and as a result wastewater management has become a major challenge. Government has made significant efforts to reduce surface water pollution but they remain jeopardized by the lack of wastewater treatment. An estimated 160 million latrines and septic tanks contribute to 80% of the pollution of the national surface waters.



Situation of Girls pumping from water from communal pump



Effective water governance with an IUWM

perspective encompasses many aspects with the main following key elements: adopting a new mind set, a holistic and cross sectoral approach linking urban water management with overall urban planning; adjusting some of the policy and legislation concerning the use of water and reuse of waste water; analyzing aspects of centralized and decentralized management; assessing the economic and financial impact of adopting an IUWM approach; building the capacity of technical and managerial staff; and sharing information with the public and users.

Potential solution for India

So why is IUWM right for India? The IUWM approach is a paradigm shift for urban water management. It is not a prescriptive model but a process that invites existing cities and emerging ones to adjust their current planning and management practices, given their own priorities, in a hydrological, environmental and socio-economic context. It is based on the following key concepts. There is also major groundwater exploitation in urban India as many towns and cities depend on groundwater for their supply. Reform is needed which reduces non-revenue water, groundwater exploitation, considers waste as a resource, and looks at the water cycle in a holistic way. with population growth and urbanization and as a result wastewater management has become a major challenge. Participation of key stakeholders coming from the public, private and social sectors representing different socio-economic activities that have an interest in water in urban areas. There can be many stakeholders involved but an agreement needs to be reached with the representatives of local government who remain the main convener. Not all have the same role and responsibility, but all need to be aware and contribute.

Wastewater Management

Urban wastewater represents a significant pollution load. Where sanitation facilities are inadequate, all available channels become a means for wastewater disposal example, waterborne sanitation systems and pollution mitigation facilities may not be sustainable. World Health Organization guidelines (WHO, 2006a) provide an integrated preventive management framework for safety along the chain from wastewater generation to the consumption of products grown with the wastewater and excreta and recognize that wastewater treatment is one possible component in an integrated risk-management approach. Strict and expensive treatment technologies, however, are not universally feasible or reasonable. Urban water security through a holistic approach implies managing water resources and its waste in a new integrated way, with a focus on: considering the whole urban water cycle as one system within the watershed; aiming for water security through diversity and optimum use of all potential sources of water and matching water quality with purpose of use; aiming for a better utilization of natural systems for water and wastewater treatment; considering storm water/rainwater catchment systems as a potential source; better managing use of water, effluents and water demand and hygiene behavior; strengthening leakage management and maintenance; strengthening resilience of urban water systems that are facing drought or floods. Wastewater is a resource that can be used productively. Grey water can be reused for irrigation, urban agriculture and industrial processes, treated or untreated depending on the purpose of its use and its legislation; nutrients in wastewater can be used for energy production and fertilizer production.

Water quantity

Worldwide, irrigated agriculture may account for 70–80 percent of water withdrawals. Industrial use amounts to an estimated 20 percent of total water use, although this is increasing in urbanizing economies. The proportion of domestic water use is approximately 10 percent of the total. With industrial and domestic water demand expected to double by 2050 (UNDP, 2006), competition over water sources will escalate. Given the pressure on the water resource base, use of existing supplies must become more efficient. Service providers lose large volumes of water to leaks in the distribution system, an estimated 32 billion cubic meters per year worldwide; and illegal connections or shortcomings in water billing account for another 16 billion cubic meters per year (Kingdom et al., 2006). The difference between the amount of water that goes into the distribution system and the amount that eventually reaches – and is billed to – the customer is referred to as nonrevenue water.

Quality of Water

Water scarcity problems, exacerbated by poor water quality, may limit the volume of water available for specific uses. Degradation often results from human activity – intensive agriculture, resource-heavy industries, and rapid urbanization – that distorts natural water cycles and processes across the rural-urban spectrum. In cities, for example, the concentration of built-up impermeable areas means that less water infiltrates to groundwater. The base flows of streams are affected and the volume of surface runoff increases. The resulting storm water flows can convey greater amounts of pollutants, which reduce water quality. Nonpoint source pollution can seep undetected into aquifers, damaging downstream ecosystems and drinking water sources.

Water reclamation and reuse

Reclamation and reuse are essential elements of any sustainable urban development strategy. Used water is harvested and treated to different quality standards for reuse in agriculture, industry, and other sectors. Cities can thereby improve human and environmental health, while supporting economic activities and the recycling creates a multiplier effect, whereby a given volume of water can be made more productive. In some peri-urban areas, treating and reusing reclaimed water for food production is an option for increasing food security. Farmers derive a range of benefits from the use of

wastewater for irrigation, it is a reliable source that is usually free and readily accessible, and available near their urban market. In addition, wastewater tends to contain significant levels of nutrients, thereby reducing the need for chemical fertilizers. The use of wastewater in agriculture supports the livelihoods of farmers, traders, and other actors along the agricultural value chain. It reconciles the public health and environmental resource protection interests of a city with the local farming community's desire to maintain an agricultural way of life.

Rainwater harvesting

Rainwater harvesting can help address water scarcity at the household level and may be easy and cost-effective to implement. Flow- or roof-water harvesting provides a direct water supply and can recharge groundwater, 62 Integrated Urban Water Management GLOBAL WATER PARTNERSHIP while reducing flooding. Such measures may be an immediate solution to accompany long-term infrastructure improvements in water supply and drainage. To date, comprehensive documentation of the design criteria, costs, benefits, impacts, and constraints of large-scale adoption is generally lacking and would be needed to evaluate the viability of scaling up.

The Future of Urban Water Governance

Sound urban water governance is fundamental to ensuring human and environmental health. It requires robust national policies, plans, and programmes, as well as instruments to measure and benchmark progress. Urban areas need to move from a status of water users to that of water suppliers and managers. With today's technologies and management options, water quantities and qualities can be managed more effectively and efficiently for different purposes. Integrated approaches can deliver water to specific users in appropriate quantities, qualities, and at appropriate times, without compromising the availability of the resource for others. Managers can tackle existing, or prevent impending, water scarcity by promoting water use efficiency and alternative sources of water, including wastewater and storm water. New approaches to the collection, transport, treatment and management of sewage can improve resource recovery and mitigate the strain on water resources under challenges such as high population density, urban sprawl, and climate change.

Conclusion

It is need to increase water efficiency and water savings by investing in resource efficiency has been widely acknowledged as one of the top research and policy priorities for the upcoming decades, in view also of the urgency to adapt to climate change. This will be achieved by optimizing the operation of water utilities, thus saving water and energy, and minimizing network leakages and non-revenue water. At the water utility level, smart pressure management and optimized operation based on smart algorithms, network intelligence, and the installation of pressure and flow sensors throughout the network can significantly improve operations, save water and energy, and successfully follow the new trends in cities.

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Malnutrition: What is malnutrition?

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Malnutrition is when a person's diet does not provide enough nutrients or the right balance of nutrients for optimal health.

Causes of malnutrition include:

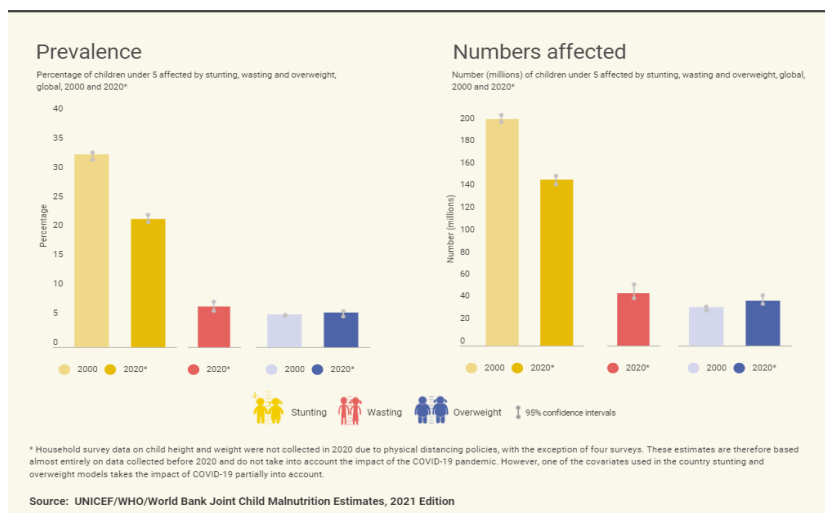
1. unsuitable dietary choices
2. having a low income
3. difficulty obtaining food
4. various physical and mental health conditions

Undernutrition is one type of malnutrition Trusted Source. It occurs when the body does not get enough food and enough necessary nutrients. It can lead to:

1. delayed growth
2. low weight
3. wasting

If a person does not get the right balance of nutrients, they can also have malnutrition. It is possible to have obesity with malnutrition. When a person has too little food, a limited diet, or a condition that stops their body from obtaining the right balance of nutrients, it can severely impact their health. In some cases, this can become life threatening. This article looks at malnutrition in detail, including the causes, symptoms, and treatments.

What is malnutrition?



Malnutrition is an imbalance in dietary intake. It occurs when a person has too much or too little food or essential nutrients. A person with malnutrition may lack vitamins, minerals, and other essential substances that their body needs to function. People may become malnourished if they do not eat enough food overall. However, people who eat plenty but do not have enough variation in their diet can also become malnourished.

Malnutrition can lead to:
short- and long-term health problems
slow recovery from wounds and illnesses
a higher risk of infection

Some deficiencies can trigger specific health problems. For example:

Lack of vitamin A

Around the world, many children develop vision problems Trusted Source due to a lack of vitamin A.

Lack of vitamin C

A lack of vitamin C Trusted Source can result in scurvy. Scurvy is rare in the United States (U.S.), but it can develop if a person does not have a varied diet with plenty of fruits and vegetables. Fresh, frozen, and canned fruits and vegetables all contain vitamin C.

People who are particularly at risk of scurvy include:

older adults
young children
those who consume a lot of alcohol
some people with certain mental health conditions

An overall deficiency

Malnutrition can lead to marasmus, which is a severe form of malnutrition. Marasmus is a deficiency of protein and overall energy intake.

A person with marasmus will have very little muscle or fat on their body.

Over nutrition

Over nutrition is another type of malnutrition. It occurs when a person takes in more nutrients than they need. The result may be an accumulation of body fat from the excess nutrients, resulting in overweight or obesity.

Over nutrition has several health implications Trusted Source. People who have overweight or obesity are at greater risk of:

heart disease
high blood pressure
diabetes
cancer
high cholesterol

The rate of over nutrition is growing worldwide. The World Health Organization (WHO) reports that in 2020, 5.7% of children fewer than 5 were overweight, an increase from 5.4% in 2000.

In addition, the number of adults with obesity almost tripled Trusted Source worldwide from 1975 to 2016.

Symptoms

Some signs and symptoms of malnutrition include:

Weight loss
a lack of appetite or interest in food or drink
tiredness and irritability
an inability to concentrate
always feeling cold
depression
loss of fat, muscle mass, and body tissue
a higher risk of getting sick and taking longer to heal
longer healing time for wounds

Eventually, a person may also experience heart failure Trusted Source.

Symptoms in adults vs. children

Children may present with different malnutrition symptoms than adults.

In children, there may be:

a lack of growth and low body weight
tiredness and a lack of energy
irritability and anxiety

slow behavioral and intellectual development, possibly resulting in learning difficulties

Treatment is possible. In some cases, however, malnutrition can have long-term effects.

Causes

Malnutrition can occur for various reasons. The sections below outline these potential causes in more detail.

Causes of malnutrition

Malnutrition in developed countries is unfortunately still more common in situations of poverty, social isolation and substance misuse. However, most adult malnutrition is associated with disease and may arise due to:

reduced dietary intake
reduced absorption of macro- and/or micronutrients
increased losses or altered requirements

Increased energy expenditure (in specific disease processes).²

Dietary intake

Probably the single most important aetiological factor in disease-related malnutrition is reduced dietary intake. This is thought to occur due to reductions in appetite sensation as a result of changes in cytokines, glucocorticoids, insulin and insulin-like growth factors.⁶ The problem may be compounded in hospital patients by failure to provide regular nutritious meals in an environment where they are protected from routine clinical activities, and where they are offered help and support with feeding when required.⁷

Malabsorption

For patients with intestinal failure and those undergoing abdominal surgical procedures, malabsorption represents an independent risk factor for weight loss and malnutrition.

Increased losses or altered requirements In some circumstances, such as enterocutaneous fistulae or burns, patients may have excessive and/or specific nutrient losses; their nutritional requirements are usually very different from normal metabolism.

Energy expenditure

It was thought for many years that increased energy expenditure was predominantly responsible for disease-related malnutrition. There is now clear evidence that in many disease states total energy expenditure is actually less than in normal health. The basal hyper metabolism of disease is offset by a reduction in physical activity, with studies in intensive care patients demonstrating that energy expenditure is usually below 2,000 kcal/day. The exception is patients with major trauma, head injury or burns

where energy expenditure may be considerably higher, although only for a short period of time.^{8,9}

Low intake of food

Some people develop malnutrition because there is not enough food available, or because they have difficulty eating or absorbing nutrients.

This can happen as a result of:

cancer

liver disease conditions that cause nausea or make it difficult to eat or swallow taking medications that make eating difficult — due to nausea, for example Mouth problems such as poorly fitting dentures may also contribute to malnutrition.

Mental health conditions

Undernutrition or malnutrition can affect people with:

depression

dementia

schizophrenia

anorexia nervosa

Eating disorders can severely affect the quality of life of people living with these conditions and those close to them. Early intervention and treatment greatly improve the likelihood of recovery.

Social and mobility problems

Factors that can affect a person's eating habits and potentially lead to malnutrition include:

being unable to leave the house or go to a store to buy food

finding it physically difficult to prepare meals

living alone, which can affect a person's motivation to cook and eat

having limited cooking skills

not having enough money to spend on food

Digestive disorders and stomach conditions

If the body does not absorb nutrients efficiently, even a healthful diet may not prevent malnutrition.

Examples of digestive and stomach conditions that may cause this include:

Crohn's disease

ulcerative colitis

celiac disease

persistent diarrhea, vomiting, or both

Alcohol use disorder

Consuming a lot of alcohol can lead to gastritis or long-term damage to the pancreas.

These issues can make it hard to:

digest food

absorb vitamins

produce hormones that regulate metabolism

Alcohol also contains calories, so a person may not feel hungry after drinking it. They may,

therefore, not eat enough healthful food to supply the body with essential nutrients.

Risk factors

In some parts of the world, widespread and long-term malnutrition can result from a lack of food.

In wealthier nations, however, those most at risk of malnutrition include:

older adults, especially when they are in the hospital or in long-term institutional care

people who are socially isolated — for example, due to mobility issues, health problems, or other factors

people with a low income

people recovering from or living with a serious illness or condition

those who have difficulty absorbing nutrients

people with chronic eating disorders, such as bulimia nervosa or anorexia nervosa

When to contact a doctor

A few key signs of malnutrition indicate that it is time for a person to seek care from a doctor.

These signs include:

unexplained, unintentional weight loss of more than 5% in the last 3–6 months

presence of other malnutrition symptoms

a worry that someone else may be showing signs of malnourishment

if a person experiences signs of an eating disorder, or sees these in someone else

Likewise, a person should encourage a loved one to see a doctor if they show signs of malnourishment. Some people may not recognize the symptoms in themselves, while loved ones sometimes can.

Diagnosis

If a person shows or notices any symptoms or signs of malnutrition, the first step is to find out why.

If a doctor suspects Crohn's disease, celiac disease, or another condition, they may evaluate the patient's condition by:

asking about medical history

conducting a physical exam

ordering testing

Treating underlying conditions can improve a person's nutritional status.

A healthcare professional may also carry out the following Trusted Source:

blood tests for general screening and monitoring

tests for specific nutrients, such as iron or vitamins

prealbumin tests, as malnutrition commonly affects levels of this protein

albumin tests, which may indicate liver or kidney disease

A tool to identify risk

Some tools can help identify people who have or are at risk of malnutrition.

One way to assess adults is by using the Malnutrition Universal Screening Tool (MUST). 2018 research Trusted Source has shown this to be a reliable tool.

Experts designed this tool to identify adults, especially older adults, with malnourishment or a high risk of malnutrition. It is a five-step plan to help healthcare professionals diagnose and treat these conditions.

The five steps are as follows:

Measure a person's height and weight, calculate their body mass index (BMI), and provide a score.

Note the percentage of unplanned weight loss and provide a score. For example, an unplanned loss of 5–10% would give a score of 1, while a 10% loss would score a 2.

Identify any mental or physical health conditions and provide a score. For example, if a person has been acutely ill and taken no food for over 5 days, this would lead to an additional 2 points.

Add the scores from steps 1, 2, and 3 to obtain an overall risk score.

Use local guidelines to develop a care plan based on the score.

The score will be one of the following:

low risk: 0

medium risk: 1

high risk: 2 or more

Doctors only use MUST to identify overall malnutrition or the risk of malnutrition in adults.

The test will not identify specific nutritional imbalances or deficiencies.

Nutritional deficiency anemia can result if a person's diet cannot provide the nutrients they need. Learn more about it here.

Treatment

If a doctor diagnoses malnutrition, they will make a treatment plan for the person. The person may also need to meet with a dietician and other healthcare professionals.

Treatment will depend on the severity of the malnutrition and the presence of any other underlying conditions or complications.

It may include:

ongoing screening and monitoring
making a dietary plan, which might include taking supplements
treating specific symptoms, such as nausea
treating any infections that may be present
checking for any mouth or swallowing problems
suggesting alternative eating utensils

In severe cases, a doctor may administer nutrients intravenously (through an IV).

The person's healthcare team will continue to monitor them to ensure they get the nutrition they need.

Prevention

To prevent malnutrition, people need to consume a range of nutrients from various food types.

Older adults, young children, people with severe or chronic illness, and others may need additional care to obtain the nutrients they need.

Anyone who starts to show signs of malnutrition or Undernutrition should see a doctor for a diagnosis and treatment.

In the U.S., effective treatment is usually available, although the outlook and time needed for recovery will depend on the cause of the malnutrition.

Summary

Malnutrition is the result of an improper diet. It can result from too few nutrients (Undernutrition) or too many nutrients (over nutrition).

People who experience Undernutrition often have:

low weight
difficulty recovering from injuries
lack of appetite
fatigue
depression
among other symptoms

But malnutrition is not the result of poor diet choices in every case. Sometimes, malnutrition occurs because a person:

does not have easy access to food
cannot leave their home to buy food
cannot cook meals
has a digestive disorder that prevents their body from properly absorbing nutrients
Helping patients treat malnutrition is an important goal for many healthcare professionals. Together, a doctor and patient can review possible causes of malnutrition and help develop more nutrient-dense eating plans.

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Usage of Library Service by the Researcher in COVID-19 at the Punyashlok Ahilyadevi Holkar Solapur University, Solapur

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Abstract: *The current paper pretensions at determining the delectation position of investigator with digital coffers and amenities in the university library during the COVID- 19 period. The check fashion espoused for gathering data from the target population. A well-conditioned design questionnaire participated through the google form with the exploration Researcher at the "Punyashlok Ahilyadevi Holkar Solapur University, Solapur". The outgrowth demonstrations that utmost of the exploration Researcher is satisfied with library installations, ever access of databases during the COVID- 19 Epidemic period in the (Library)K.R.C. (Knowledge Resource Center), subscribes to 90 public and 26 transnational exploration journals and also an-source-journals Business Source Elite. It was observed that further than half of the exploration Researcher use UGC- INFONET Digital Library Consortium in comparison with- Gate Plus for their exploration.*

Key Words: *resources, services, Covid-19, EzProxy, J-Gate, UGC-INFONET*

Introduction: -

All the time, the library is considered as the information centre of any institute. During the COVID- 19 Epidemic libraries are playing a veritably significant part for the experimenter. COVID- 19 was completely changed the operation of library coffers and services in the current script. All Students they don't come to the library, can pierce the library at their remote position. The librarians should observe the current client delectation with the library amenities to make sure that the students are satisfied in time. The academic libraries should arrange colorful digital services and installations the users. Digital information means must be handed grounded on needs in academic libraries. Ever since the original spring of 2020, academics libraries have been passing an exceptional massive "migration" from traditional services to the online services their end users. Due to the Coronavirus complaint (COVID- 19) in India, following the administration's musts of "continuous tutoring and literacy," most Indian academic libraries have started to give online operation of their library coffers and services. Beyond India, with the spread of COVID- 19 across the world, as of March 24, the Government of India under Prime Minister Narendra Modi ordered a civil lockdown for 21 days, limiting movement of the entire 1.3 billion population of India as a preventative measure against the COVID-19 epidemic in India. This paper thus classifies the high- impact reiteration values of

online advanced tutoring and delivers a case study for associates at seminaries to consider a leading online tutoring in analogous conditions. Digital information coffers must be handed grounded on the users' needs in academic libraries. The services and installations have the most influence on the satisfaction of users and can support the users in educational procedures.

Review of Literature: -

Bilawar B.P. (2020), in his work "Lockdown Period and Information Sources," explains the ages of COVID- 19 lockdown and the impact it had on libraries and he raises points about the impact on the declined profitable cycle, employment reduction, and restriction of traveling to important places. The author suggests ways to support online users with the help of social media and government- backed information sources. The author explains that the lockdown period has made it clear about the significance of the operation of digital coffers.

Mestri (2020), in the study "Continuing libraries in COVID- 19 epidemic challenges and recommendations," has suggested that the libraries have to borrow new styles to help the spreading of COVID- 19 until the contagion is part of mortal life. The author suggested different way to breaking the chain from the contagion to spread in library demesne. Formulated four situations of library performing grounded on the number of active cases of COVID in the place; they're more or

less usual, many restrictions, minimal service, and the complete check of the library at places where the number of COVID- 19 cases is above 5000. The author connoted certain approaches while running the library, similar as formulating library policy, handling accoutrements, running of the things, conservation of social distancing, staff safety, limitations on stoner's entry, etc

Singh, Kuldeep (2019) Concluded that, the current literacy amenities on the alertness and its operation of-resources by the patrons subscribed by the Punjabi University, Patiala. The literacy reveals the difficulties while using-resources as well as the delectation position of the pupils. The conclusion of the literacy demonstrations that there should be a particular database of the Library, Internet Connectivity, velocity and Acceptable Arrangement. The literacy also transports out the pets and recrimination of-resources for the patrons.

Aravind, S (2019) Concluded that, to study analyses the mindfulness and compliance to library rules and regulations by the Researcher of Madurai Kamaraj University, Madurai. The thing of the literacy is to catch out the pupil's position of mindfulness about the library rules and regulations and determine their compliance position of Researcher and descry their views on library structures and installations. Survey design examined the study and a systematized form is used to gather data from pupils are aimlessly designated for the reading. A model of 96 was used for the literacy. The conclusion of the modification reveals that the knowledge position is 92 and obedience position is 82.29. The complete delectation position about the library schemes and installations is 89.17.

Pandey, Sunita and Shailendra Kumar (2020) Concluded in the paper is about the accession of information means in Rajasthani trades and culture in the select premises and institutions library of Rajasthan. Gathering expansion in different types of libraries of trades and culture has numerous tasks, and one of them is enterprises about the purchase strategy espoused by the library. It's initiate that there's no published purchase strategy in the library. The paper deliberates the approaches of application of information means.

Objective: -

- ❖ To find out the usage of online records by researcher and the access of researcher to the scientific databases.

Methodology: -

In this study, the check system was named for the data collection through a questionnaire. The addition of the formula for sample size estimation revealed 210 samples in AHSU. The slice fashion which has been applied to this study is the analysis system. The experimenters distributed the structured questionnaires among the sample population who were the exploration Researcher from different departments covering departments of PAHSU. The authors collected information through google form to gain the position of analysis of the exploration regarding library installations and database access in the university during COVID- 19 Epidemic.

This study is limited to collect the data from exploration Researcher in the PAHSU. Social advisability could be a factor in this study as a limitation because the scales are grounded on experimenters' tone- report data.

Table No.1
UGC-INFONET DIGITAL LIBRARY GROUP

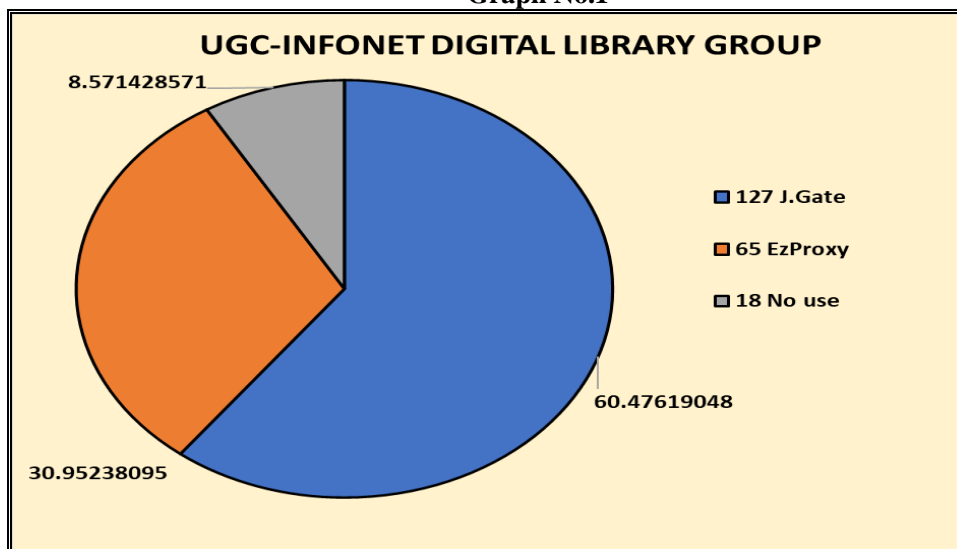
No. of Responses	E-Resources	Percentage
127	J-Gate	60.47619
65	EzProxy	30.95238
18	Don't Use	8.571429
210		100

(Sources: -Primary Data)

In India one of the online databases generally used by the exploration community is UGC- INFONET Digital Library Consortium. In this regard the investigators

asked with experimenters whether they use it or not. Out of 210 of repliers, 60.47Percent use J-Gate, 30.95Percent use Ez-Proxy and 8.57 Percent don't use.

Graph No.1



The issues of the literacy exposed that utmost of the exploration Researcher are fulfilled with access to the databases in the university. The position of satisfaction with the library installations is nearly good. It shows that the "Punyashlok Ahilyadevi Holkar Solapur University, Solapur" is furnishing good services to the exploration Researcher. To pierce the online databases which university library has delivered to the exploration Researcher, nearly half of them have the word to pierce the databases during COVID- 19 epidemic.

As the access to the databases is veritably important to do the exploration, this service can be handed for utmost of the exploration by mindfulness of the off- lot service. This result isn't as what it's anticipated from the exploration Researcher in the PAHSU. According to the exploration outgrowth, further than half of the exploration Researcher use UGC- INFONET Digital Library Group, which is good. thus, it can be prognosticated that they're apprehensive of this.

Conclusion: -

To conclude the status of the library installations and database access at the PAHSU is good, as utmost of the exploration Researcher are satisfied with the databases access, and it can be bettered in the future. Use of UGC- INFONET Digital Library group is further than J-Gate Plus by exploration Researcher. It's suggested to the university library that the operation of the colorful databases is essential for the exploration Researcher and it can ameliorate the quality of the exploration work in the future. For this purpose, the university library should contend the exploration Researcher to apply for an off- lot word and to use the e- coffers to the

maximum extent. This result will be useful for university library to expand their library services effectively, specifically in aiding academic staff in tutoring and exploration.

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Post Modern Youth Sensibility in Chetan Bhagat's One Night @ the Call Center

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Abstract

The novel, One Night @ the Call Center explores the complexities of modern life and post modern youth sensibilities which are crushed under the impacts and exploitations in the age of globalization. The plot of the novel is an admixture of past memories and present realities. The story of the novel encapsulates the span of one night. It is the portrayal of six call center executives who are representatives of thousand of lives professionally confined to the globalized world of call center. Every character from the novel symbolically represents the anxieties and insecurities of the rising Indian middle class, including questions about career, inadequacy, marriage, and family conflicts in postmodern India. All the characters from the novel are in frustration for their unfulfilled aspirations and job insecurity.

Key words – Post Modern, Youth, Sensibility etc.

Introduction

Chetan Bhagat has established himself as one of the best novelists in the world. He has written six novels and two non –fictions which are best-seller like *Five Point Someone* (2004), *One Night @ the Call Centre*(2005), *The Three Mistakes of My Life* (2008), *2 States* (2009), and *Revolution 2020*(2011), *Half Girlfriend* (2014), and non-fiction *What Young India Wants* (2012) *One Indian Girl* (2016). Most of them are adopted in Bollywood movies. Indian youth, their despairs, hopes, aspiration, and their problems remained at the center of his every work. His work is not only a picture of the harsh reality of the youth in India but spiritual guidance, moral support, and technical suggestions also. The youth from different backgrounds with their ethos, aspirations, sentiments, and isolations in their life is the key concern of Chetan Bhagat's Novel. He has used the novel as a perfect tool to entertain, motivate and inspire the youth of 21st century India. His novels are nothing but a great projection of post modern youth sensibility.

The novel, *One Night @ the Call Center* explores the complexities of modern life and post modern youth sensibilities which are crushed under the impacts and exploitations in the age of globalization. The plot of the novel is an admixture of past memories and present realities. The story of the novel encapsulates the span of one night. It is the portrayal of six call center executives who are representatives of thousand of lives professionally confined to the globalized world of call center. All of them are working at Connexions in Gurgaon, Harayana. They have to answer American customers who have complaints against their home applications like refrigerators, ovens, vacuum cleaners, etc. They are facing the threat of job insecurity in the

name of right-sizing, though their working hour's odd and satisfy rude American customers. Thus professional and personal anxieties of the modern youths are key concerns of the novel.

Every character from the novel symbolically represents the anxieties and insecurities of the rising Indian middle class, including questions about career, inadequacy, marriage, and family conflicts in postmodern India. All the characters from the novel are in frustration for their unfulfilled aspirations and job insecurity.

The characters like Shyam Mehra, Priyanka, Varun Malhotra, Esha Singh, Radhika Jha, and Military Uncle are introduced by Chetan Bhagat in a distinguished way. Shyam Mehra, shortly called Sam Marcy, is intellectual and efficient but he lacks self-confidence. He wants to do B.Ed and join a School, but insufficient funds wedged him into his least interesting job at the call center. He pursues the post of team leader not because of his will for the high post but to marry Priyanka, whose mother wants a well-settled groom for her only daughter. Shyam, the protagonist of the novel, is not acknowledged in his family as he works in a call center whereas his cousins are doctors and engineers. On his cousin's marriage, nobody cares for him. Working at a call center is not a prestigious job for them. Shyam describes:

It wasn't surprising; I am only cared for so much.

Every cousin of mine is becoming a doctor or engineer.

You can say I am the black sheep of my family.

Though I do not think that expression is correct.

After all, what's wrong with the black sheep- don't people wear black sweaters?"

(One Night @the Call Center p-15)

So he considers himself as a black sheep of the family as he can't earn properly. Shyam represents 300000 BPO employees in India who are working day and night. They are treated as resources and not by their names or real names. The names that suit American accents are used for everyone. In W.H.Auden's words, they are 'Unknown Citizen' who is identified by their pseudo names or Id numbers.

Priyanka, a heroine of the novel who is an ex-girlfriend of Shyam, is introduced as an ultra-modern woman. She is sandwiched between her own aspirations and her mother's ambitious possessiveness. Chetan Bhagat portrays the female characters as ultra-modern women. They have two edges of choices; they want liberty and freedom at times, and at the same time they have to make their parents happy and compromise with their views. The same happens in the life of Priyanka; the female protagonist of the novel, who is Shyam's ex-girlfriend. After a long premarital affair, Priyanka breaks up with Shyam. But she is at sea, between her own aspirations and her mother's over-ambitious possessiveness. Circumstances force her to follow her mother's will as it is her intention also to keep her mother happy. So, she accepts to marry an NRI, who works 57 in Microsoft, whom she doesn't meet earlier, but she seems happy to get married to the NRI Mr. Microsoft. The happiness is not for her own sake as Ganesh is the right choice for her but it is to keep her mother happy, as Priyanka feels that her mother always thinks about her bright future. She confesses her love with Shyam but agrees to marry Ganesh just because her mother ponders over him as creditable husband material. She shares the good news with her colleagues but when notices the altered photo of the hiding bald of her fiancé, she rejected the marriage, and the love birds are reunited but have to wait for two years to marry as their career is their main priority.

Varun Malhotra is one most important characters in the novel. He is shortly called Vroom or agent Victor Mell. His pseudo name Vroom itself suggests that he is fond of speed and bikes or anything on wheels. Vroom has to earn money for maintaining a high standard with his friend circle. To ride a bike so fast is his own solution to get relaxed from stress. Shyam reveals his mental and physical condition,

"I couldn't sleep at all.

Just lay in bed all day and now I feel sick.

Need to get some energy back."

(ONCC, 21)

Vroom is representative of the modern youth of India who likes wearing branded clothes and shoes, joining clubs and night bars, smoking cigarettes, and using the internet excessively.

The face of urban fashionable girls in the novel is Esha Singh or agent Eliza Singer. She is the nice-looking and the most fashionable girl in the group. The narrator Shyam describes her;

"She is an ambitious girl who wants to become a model.

Her life represents the ambitious middle-class youth

who are running after blind race of materialism"[72].

She represents today's modern young girls who leave their homes for their passionate desires to become a model. Esha has joined a call center job to get a livelihood. She becomes mad about her passionate dream to become a model. Her ambition leads her even to lose her character and obliged to sleep with the forty year man to get the model opportunities. She feels guilty. She reveals to Shyam :

The guy I slept with- forty-year-old designer. —

He told my agent later I was too short to be

a ramp model.....and that son of a bitch sends

some cash as compensations afterward...||

She further says —

I hate myself, Shyam. I hate myself.

And I hate my face and the stupid mirror that shows me this face...

can I get my face altered? (142-143)

Radhika Jha, or agent Regina Jones is an only representative of a middle class married woman that works to support the family. She belongs to a joint family which is too traditional but Radhika accepts it for her love for her husband. She is torn between the modern culture and the traditional culture of her family. She tries to be an ideal wife and sacrifices herself for her husband and his family. But when she comes to know the decisive nature of her husband and takes a harsh decision which she herself has never expected so far that will happen in her life. Radhika decides to take divorce with Anuj and starts living with Esha

Conclusion

Thus, while depicting the life of call center employees, Chetan Bhagat has explored the harsh reality of Indian youth. Everyone has

his aspirations as well as problems also. These characters are the representative of the Indian young generation who wants to make their way in this age of competition. Metropolitan youth culture, cross-cultural issues, broken interpersonal relationships, rising individualism, condition of women, generation conflicts, and influence of foreign culture are the aspects touched by Chetan Bhagat.

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'The Sins of the Father are to be Laid upon the Children' as seen in Amitav Ghosh's The Ibis Trilogy

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Abstract

Amitav Ghosh's *The Ibis Trilogy* is a chronicle spanning continents and countries, history and commerce, success and disappointments, journey and the destination. The sins committed by the parents have greater implications on their progeny and this is proved in the *Ibis Trilogy*. Important characters like Ah Fatt and Raja Neel Rattan Haldar undergo sufferings created by the laxity and foolhardiness of their fathers. Their nexus with the British lead to the sufferings of many people thus increasing their sins, which later on affects their sons. The concept of children suffering for their fathers' crimes can be seen in religious concepts too.

Key Words: father, son, suffering, sin.

"The sins of the father shall be visited upon by the son", so says Launcelot to Jessica in William Shakespeare's *The Merchant of Venice*. The sins that Shylock had committed would be later visited upon on Jessica, his daughter, is the interpretation of these lines. The original phrase 'sins of the father' finds reference in the Holy Bible. Hindu philosophy also believes that the sins of the parents will be borne by the children. In other words, the children to some extent suffer for the misdemeanors committed by their parents. Amitav Ghosh's *The Ibis Trilogy* exemplifies this aspect in some of the important characters. The *Ibis Trilogy* consists of *The Sea of Poppies*, *River of Smoke* and *Flood of Fire*. In the three novels are found myriad characters from different countries and races, leading completely diverse lives and coming together for a grand finale in the end.

Raja Neel Rattan Haldar is the Zamindar of Raskhali dominion. An English educated son of a promiscuous Zamindar, Neel is unlike his father. He just has one mistress, as opposed to his father who had many concubines for the upkeep of which he had spent a lavish amount of money. The old Raja liked to live life King-size, drinking and lording it over his many lands and subjects. He neglects his people and forgets his duty as a ruler and protector. Like his forefathers before him he hooks himself to whichever power is ruling over the country at that particular point of time. The old Raja forms a partnership with Mr Burnham, a trader in opium and bonded human labour. He leaves all the complications and bureaucratic muddle to the Englishman, receiving only his allotted money. The total lack of concern for his subjects deeply mired in penury is of no concern to him. He has no understanding of their plight and how the people

are forced to sell their lands and forced to work in opium fields and factories.

His business dealings with Mr Burnham costs his son dearly, when the English educated Neel finds the ideologies of the English at subpar with his own. The English with swift and planned calculation slowly and surely take over the lands of the people, both wealthy and deprived. Neel's lands are also confiscated after a tiff with Mr Burnham. The nature of the British is such that they even disregard those families which helped them in the past and will spare no expense to torment them if they do not continue to follow their orders. Neel, the Raja of Raskhali is transported out of the country and his property confiscated as he does not comply with the wishes of the British overlords. Neel is thrown in prison on charges of forgery and fraud. All his property and lands are transferred to Mr Burnham. The punishment for the former King comes when the alien powers move him to the jail at Alipore.

In Alipore silence weighs down like the lid of a coffin. It is synonymous with Neel's sentence of transportation to the penal settlement of Mauritius for seven years. When Neel's carriage, accompanied by the guards reaches prison, he is reluctant to get down and face his bleak and terrible future. He is compared to a reluctant dog, tugging at his leash. He suffers the fate worse than that of a dog. The guards unravel his dhoti and call him Draupadi and Shikhandi. Draupadi, wife of the Pandavas in *The Mahabharata* is humiliated by the Kauravas and protected by Lord Krishna. As her sari is unraveled, he keeps providing her with fresh saris and her modesty is thus saved. But no Krishna comes to save Neel as he is subject to the ignominy and mortification of a thorough

body check-up. Shikhandi is another character in *The Mahabharata* who is born as a girl to King Drupada and later changed to a man to avenge the great Bheeshma. Shikhandi is neither man nor woman and is likened to a transgender or eunuch. This exposure of Neel's manhood or lack of it comes up often –previously when his wife's veiled face is exposed. The identity of the Raja is peeled off as he is exposed to the prying eyes of the policemen.

This is the zone of transformation for Neel, the inevitability, the plight and struggles he has to undergo to overcome it. He is plagued by the vision of the shedding off his old skin and acquiring a new skin. It is the experiences in the prison, which modifies his mind and makes him question his priorities.

Neel is not allowed visitors and has to eat what is made by unknown hands. This is unlike when his food would be prepared by specific people according to their varnas. Neel feels a deep disgust at the food served to him at the jail but somehow manages to swallow it. Neel as the Raja and his father before him, have not only failed in their duty to protect the common people but also their means of subsistence from the British invaders. Neel, himself once a King and responsible for opium cultivation, due to the irresponsible and selfish nature of his ancestors, is driven out of his native soil to live in hiding in an alien soil. Neel is to be shipped off to Mauritius. His head is shaved, he is dressed in a convict's clothes and his only property is a bowl, glass and a blanket. The once opulent lifestyle is shredded to a basic garb and he is condemned to live a life of a person in the lowest rungs of humanity. The King who has lost everything clings on to words to create a world for himself.

Bahram Moddie, an opium trader by profession fathers an illegitimate son with a Chinese washerwoman. He veers from his duty towards his wife Shireenbai and their two daughters who he has left behind in India. He is a well-established trader of opium in China, thereby dealing a double blow to his karma. In China he forms a relationship with Chi-mei with whom he bears a son, Ah Fatt. Unknown to Shireenbai, he leads a double life in Canton spending time with Chi-mei and their son. In the end he has to answer for his sins as Ah Fatt gets addicted to opium and becomes a complete mess, being forced to escape the country and ending up in a jail in far off Calcutta. Ah Fatt is fascinated by stories of his father's country- India. He wants to go there and meet Father's Big Wife and her family. Bahram is aghast when he hears of this suggestion. He forbids Ah Fatt to ever

talk of it again. If Ah Fatt goes to India, Bahram would be ruined as his family would find out the truth of his double life. The prospect of facing social death is tortuous to Bahram. Ah Fatt resents his father as he does not allow him to get in touch with his roots and visit the land of his forefathers. He takes to opium and becomes such a slave to it that he turns into the walking dead. It is ironic since Bahram had been instrumental in spoiling the lives of many youth in China. He has to pay the price for that sin, with the abject deterioration in the life of his beloved son and also ultimately his own life. This is exactly what opium does. It takes over the life of a human in such a way that he becomes a habitual addict. When Neel hears of Ah Fatt for the first time from the jail jemadar, he's in a terrible state. Opium has ravaged his body and made him suffer the ultimate despondency.

Ah Fatt's psyche is damaged when Chi-mei tells him she is his aunt and his real mother is dead. Bahram is also introduced as a benevolent guardian. She prevents him from playing in the water with the other boys as she fears he will be eaten by a fish. Ah Fatt is denied of his birthright from both his parents. He is not allowed to be a true son of the river, with his mother denying his desire to play in the river like the other children and his father making sure he gets an English education and upbringing. Later on, when Ah Fatt realizes the truth about his parentage, he feels deceived, more so when his father does not publicly own him.

Bahram's relationship with his illegitimate son with Chi-mei leads to a lot of complications in their lives. Bahram, although he provides money to his second family, cannot provide the one thing Ah Fatt wants-acceptance. This leads to Ah Fatt drowning his sorrows and inadequacies in the comforting arms of opium and steadily moving towards friendship with dangerous drug peddlers like Lenny Chan. Bahram is also responsible for this state of the youth of China which is reflected in the fate of his son. When Bahram robs China in the name of trade, his son, comes to India in search of his roots. Unfortunately, as a punishment to his father he is transported out of India on charges of being a robber and opium addict. The atonement for Bahram's sin is borne by Ah Fatt.

He is charged with illegal possession in Bengal and thrown in prison where his cell mate is the displaced Raja, Neel. He is incidentally called Aafat by the jail people which means calamity. Neel himself is atoning for the sins of his ancestors, who had given the Englishmen charge to carry on the opium trade in India, thus

creating afeem khors or opium addicts. "... Neel had already begun to feel that he was somehow implicated in his cell-mate's plight: it was as if their common destination had made their shame and honour a shared burden" (SP 324-25). They both carry the shame of their fathers' role in the opium trade and atone for it in their own ways. It is ultimately the son who pays the price for his father's sin.

Ah Fatt insists that he should go to his father's land. This is the soul's longing to be rooted in the ancestral soil. Bahram tries to orient Ah Fatt to the western world but the unconscious pulls the boy to his father's land, Hindustan. The soul yearns to go to the native soil and this is a psychological problem for the boy and he feels as if he is a fish out of water. The land of the father or one's ancestors is the place of atonement for any soul in order to have its psychological balance. But this is denied to Ah Fatt as he is an illegitimate child. The land of one's ancestors is very essential as a background for a healthy mind. This psychology is imbibed in Ah Fatt and that's why he goes in quest of India.

Money making by ill means will eventually dissolve the ancient traditions which help keep the families intact. But due to such illegal and immoral means of earning money families collapse, old values are shattered bringing shame to the individual involved as well as their children. Bahram at this stage of his life questions himself and his actions in dealing with opium. On the one hand he is terrified at the idea that he will lose all his money and consequently his family. On the other hand, he is worried at the implications his actions will have on his soul. The sin of taking a million Chinese lives hangs on the shoulders of the traders.

Ah Fatt later sees the vision of his dead parents inside the water. He says, "I can hear them, lah – calling me, the two of them, my mother and father" (FF 454). Bahram and Chi-mei call out to Ah Fatt with the promise of the affirmation and embrace he always craved. Bahram who enjoys all the pleasures of life through his ill-begotten money gives birth to a son who suffers from identity crisis and at the end starts seeing the ghost of his own father like Hamlet. Thus, Ah Fatt is already called out to his final resting place by his parents. And it is his and Chi-mei's spirit which calls out to their son as they know that his time is up, and so that they can be united in death as they could not be in life. Ah Fatt slowly enters the spirit world with the help of opium. He dies at the hands of Lenny Chan's men, who ultimately takes revenge on Ah

Fatt. Thus, passes away Ah Fatt- the troubled son of two soils, at war with each other. The war outside is reflected in his mind too and his two different identities.

Tess in Thomas Hardy's, *Tess of the d'urbervilles* gives birth to an illegitimate child and names him Sorrow. She dotes on him but unfortunately, he passes away and Tess is devastated. "So passed away Sorrow the Undesired□ that intrusive creature, that bastard gift of shameless Nature, who respects not the social law..." (111).

Ah Fatt on the other hand receives acceptance from Shireen, a part of his birth right he had always wished for. Orphaned and adrift he finds a mooring in Shireen's acknowledgement of her husband's illegitimate and distressed son. The first time she meets him, she sees in his eyes a type of wildness, "it was as if the curtains of adulthood had parted to give her a glimpse of a deep well of suffering that went back to his boyhood." (FF 323) Shireen arranges for Ah Fatt to be buried next to her husband, thus giving him the acceptance and acknowledgement, he had craved since his birth. She invokes the wrath of the influential traders of the Parsi community, but threatens to expose their double standards to their families back in India. Most of the men have another family in China which they conveniently hide from their relatives.

The illegitimate children suffer from lack of rootedness to the soil. Born to traders who move from place to place they themselves do not have an identity. Their fathers do not realize the importance of historical sense or have any responsibility. Their lack of belongingness to one particular land destroys their psyche. No ancestral memory or understanding of the past and present of one's country, leads them to broken lives with no redemption.

The sins of the father as borne by the children also lies in the story of King Bhagirath, who had brought the Holy Ganga to Earth. Neel tells the story of the Ganga Sagar Island to the migrants reminding them of the story of the King who atoned for the sins of his ancestors. Neel tells the story of Bhagiratha, the young King who persuades Ganga to come to the earth and fill the seas, thus redeeming the ashes of sixty thousand Ikvakshu princes who were his ancestors and cursed by Sage Kapila for disturbing his austerities. King Bhagiratha brings down the Holy Ganga at whose touch the sins of his ancestors are washed away. Neel and Ah Fatt too thus atone for the sins committed by their fathers and forefathers, of having neglected their

duties and indulging in the opium trade. Neel through his total downfall realizes the mistakes of his forefathers and also his own in neglecting his duties and family. His pride falls and his wife and son take foremost place in his mind, as he works towards the day they can come together as a family.

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Urban Tourism and Challenges: A Study of Varanasi City

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Abstract

Tourism in 19th century itself, was considered as one of the basic human needs, thereby becoming the necessity of society. Cities have always been tourist destinations from a cultural-historical nature to the now more modern form of business and medical tourism. As a result of this transformation, a new concept appeared; Urban Tourism. Now Urban Agglomerations are the leading destinations. Tourism being an important source of income for many developing countries, had been the most affected industry due to the COVID 19 pandemic. It has developed social and medical emergencies along with profound adverse consequences on the global economy. Varanasi being a tourist destination from time immemorial, faces the challenges of Urban Tourism and also the setbacks due to the pandemic. Rampant urbanization and an increase in population has adversely affected the quality of life. Being one of the largest agglomerations of the Uttar Pradesh state, the city needs to re-build tourism after the pandemic to a more sustainable pattern. This paper is a critical analysis of tourism in Varanasi, its problems and looking at most appropriate post – pandemic perspective for Urban Tourism. This is a descriptive study depending on the synthesis of early literature and sources of published news and reports related to tourism management.

KEY-WORDS: Urban Tourism, Urbanization, Sustainable Tourism, COVID 19, Carrying Capacity, Digital Tourism, Pro-poor Tourism.

Introduction

Tourism contains the activities of people, travelling to different places, which is outside their habitual environment for business, medical or simply leisure purposes, with staying there for not more than one continuous year. The definition given by Humzikhor and Krapt about the concept of tourism, which was subsequently adopted by the International Association of Scientific Experts in Tourism (AIEST) involves three distinct elements of Tourism; involvement of travel by Non-residents, stay of temporary nature in the area and stay not connected with any activity involving earnings. According to Zivadin Joviac, 'It is a social movement with a view to rest, diversion and satisfaction of cultural needs.'

Manila Declaration on World Tourism of 1980 talks about its direct effects on the social, cultural, educational and economic sectors of national societies and on their international relations. Tourism rather than being a separate discipline, overlaps with other activities, interests and processes. The study of tourism by just a demographic point of view is now a thing of the past. In the start of the 21st century itself, we witness tourism which is more socially and politically driven phenomenon. The COVID 19 pandemic has been quite obstreperous event, with huge impacts on tourism. Tourism has also been one of the causes of the pandemic and hence so badly affected. International tourists' arrival, saw a decline by 74 percent in 2020 when compared to the last

year. Many developing countries witnessed a 80-90 percent downfall in tourists' arrival. UNCTAD reports, see a pre-covid scenario for tourism sector by 2023 or later.

India holds an enviable position with 5,000 years of history, geographical diversity, heritage and culture. The country has been stereotyped for it, basically being a cultural destination. A new paradigm is indeed in progress where we see more diversified form of tourism. A lot of problems which deaccelerates the country's tourism industry are lack of hygiene and comfortable accommodations, absence of an information system, lack of integrated tourism promotion programmes, challenges in managing urban infrastructure, etc. there are many environmental and socio-economic factors affecting tourism which further reduces the desired quality of tourism.

Urban Tourism

Urban agglomerations provide for and extensive and assorted collection of various historical, cultural, architectural, social, natural and as well as manmade experiences. Thus, a type of tourism activity emerges, Urban Tourism, in an urban space with non-agricultural based economy being the innate characteristic of the region. Urban Agglomerations being the leading destinations for urban tourism are more affected by pandemic because most cases of infections and deaths are accumulated in cities, badly affecting the city's attractiveness. Varanasi, owing to its rich tradition, attracts more than 60 lakh domestic and international

tourists each year. The peak season is regarded as October-March with tourist inflow being 60 percent of the total domestic tourist coming in a year while for the foreign tourist it is 71 percent. The average stay is 2-3 days for both domestic and foreign tourists. All the important (Hindu) festivals like Dev Deepawali, Ganga Mahotsav, Ram Leela are celebrated between October-March. The city Ghats, historical and cultural attractions, religious significance, philanthropic significances, makes it even more attractive to the tourists. Most domestic tourists are from Bihar, West Bengal, Madhya Pradesh and other parts of Uttar Pradesh, while the majority of foreign tourists are from Sri Lanka and Japan (JNNURM).

Tourism is a combination of inter related industries like hotel, restaurant, transport, etc. also there is backward and forward linkages and cross-sectoral synergies with sectors like agriculture, horticulture, poultry, transport, construction, handicrafts, etc which leads to large scale employment generation and poverty alleviation. The lively city of Varanasi, which never stopped, came to a standstill during the pandemic, when the ghats were deserted and its revered temples were closed, times which even the eldest of the generations here have seen for the first time in their lives. The city paid the price of the pandemic not only economically but also physically and emotionally. Apart from the pandemic there are many factors which effect the city's tourism like, historical and cultural factors, weather conditions, accessibility, amenities: both manmade and natural, socio-economic factors, etc. which needs the attention of the policy makers. Being a cultural and historical destination with tourism, the second largest sector of the city, Varanasi's economy, also comprises of the priests, hotels, the florists and tour guides. The flower markets of the city have seen a downfall, during the COVID times with almost all the major temples closed, which badly affected the farmers associated with floral farming. There were times when the flower wholesale markets at Bansphatak and Englishia Line saw a huge gap in their production and sales. Clearly the pandemic affected the economy at large of this sector. With the lockdowns imposed, major rituals performed at the ghats like the Ganga Aarti which attract tourists all over the world, came to a halt; greatly effecting the hotel industry. There has been a major occupational shift among the tourists guides as their scope of earning was limited to the commissions they make at several stages of

booking and travel. The city needs to re-build its tourism along a sustainable form, for the future.

Challenges Of Urban Tourism In Varanasi

In their analysis of tourist satisfaction in Varanasi through important performance analysis, Sujoy Vikram Singh and Naresh Tanwar concluded that for the tourists in Varanasi, clean environment and hygiene were the critical issues. Many schemes like Swachh Bharat Abhiyan, HRIDAY, PRASAD needs to be effectively executed in order to maintain positive reviews, the Destination Management Organizations (DMO's) should invest in improving the core facilities like maintaining pedestrian pathways, enhancing the role of Tourist Information Centres for there are discrepancies in the information present at the destination and at online sources. Placement of direction and signage boards at every tourist place, cleanliness and maintenance of public convenience facilities were other issues.

The COVID 19 pandemic has caused great havoc to the world economy. Hygiene and health conditions have become of utmost importance for tourists travel decisions. The pandemic has certainly provided the policy makers to think about the challenges that lay ahead for Urban Tourism. According to the Tourist Statistics Department, Uttar Pradesh, 2017, Varanasi ranks eighth among top sixteen places in U.P. according to domestic tourist visits and according to foreign visits it ranks third with Sarnath at second place.

Uncontrolled Urbanization –

Varanasi ranks 18th in terms of population in the state. The percentage share of urban population in the district is 43.4 as against 22.3 of the population in urban areas of the state. Varanasi district has population density of 2,395 persons per square kilometre which is more than the state average 829 persons per square kilometre. Total population of the district is 36,76,841 in which urban population is 15,97,051 comprising 43.4 percent of the total population.

There is a huge gap in opportunities and facilities in some of the areas of the city. Varanasi witnesses a recent socio-economic growth and modernization in all fields of activities which has brought radical changes like, spontaneous building constructions (both legal and illegal), consequent landscape alteration and downgrading. The components responsible for urbanization in Varanasi are socio-cultural and religious attractions, being an ancient educational centre, trade and commerce, a tourist centre, rural-urban transformation, medical hub. The main problem of urbanization is that it's

concentrated in some particular areas only. Speedy growth of population over the last two decades has rendered the central part of the city over crowded.

Managing Urban Infrastructure –

The urban infrastructure system is managed using certain social and technical principles, providing basic services for the urban habitat. The services like water, energy, transportation are the foundations of any city and a lack of sustainability in any one sector can lead to a havoc for the whole ecosystem. Hence, governments should aim for sustainable, more resilient and efficient infrastructural development. Of course, the pre-existing unplanned infrastructure, doesn't help with the further advancements and hinders further development but irrational infrastructural development leads to cities historicity damage. Already Varanasi is a congested place with the main city still not developed enough to tackle traffic jams and crowding. Footpath erosion, problem of increased littering, sensitive habitat destroyed and converted into hotels and stay rooms have become quite common in the city. Infrastructure and real estate development are growing very rapidly in cities and in the outskirts, apartment culture is keeping pace with the metro cities. And this advancement of human civilization has put serious questions on the safe use of natural resources. The forest cover is awfully low, accounting for not more than 5 percent of the total area. In addition, there has been an exceptional rise in built-up area, which has grown by 53 percent. This signifies a spree in construction activity, mainly on account of increasing demand for residential accommodation and expansion of commercial activities. Agricultural land has gone down by 5.3 percent. The area under vegetation cover and wasteland, too, has declined by 20 percent and 28 percent respectively.

Carrying Capacity –

UNWTO defines carrying capacity 'the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural, environment and an unacceptable decrease in the quality of visitors satisfaction'. The demand of the present is to probe into possible theoretical solutions for managing not only the resources but also the entire city facilities like, limiting the access, firm restrictions on certain activities, enforcing rules and regulations, providing more information and educating the masses. Tourism sector needs to re-analyse, keeping in view the change in

travellers' behaviour post-pandemic and to redefine future tourism by more sustainable means.

Even a modest but unregulated rush of tourists raises the wages of labour, prices of land and articles of daily use in the tourist region. More demand and less supply of water and power, shared by both the tourists and local residents, creates shortages- the worse sufferers are always the local people. Tourist carrying capacity of the city needs to be matched to the growing tourist traffic and the increase in the number of incoming job seekers to check these problems. There is a need to support facilities and also provide opportunities to support higher income segments. Presently the sewerage system of the city is inadequate with 70 percent area of uncovered sewer system and discharge of untreated sewage in open drains, into Ganga. This already drastic scenario with its inadequate carrying capacity poses a threat to city's environment, with an add on of large tourist influx.

Effects On Environment –

A declining bio-diversity as a result of all sorts of human activity, came to light in the latest United Nations report on assessment of ecosystems. How sensitive is the tourist industry to all the adverse changes in environment if it is not properly conserved is a burning question? Nature's beauty, wild life, cultural attractions and ecology needs to be conserved in order to protect the very resource base of tourism from destruction. The city came into limelight in 2015, when Central Pollution Control Board (CPCB) data highlighted that the city didn't have even a 'single good air quality day' that year. In fact, Varanasi is among the 43 critically polluted zones across the country. Data revealed that pollution levels in Varanasi were 20 times more than WHO's standards. The city's air quality was found to be more toxic than in Delhi.

A good quality and sufficient quantity of water is equally essential for keeping alive the tourist industry. It is required for many direct and indirect uses, which grows on increasing as the number of tourists increases. The shortage and pollution of water adds to the prevailing insanitary conditions and the diseases in densely populated areas of the city. An unregulated inflow of visitors to tourist places in the vicinity are so affected by such conditions that they may decide to keep away from the city, the next time. The city is threatened by groundwater extinction, shrinkage of surface water and its contamination, polluted air and enormous land pressure. Also, the city is producing huge amounts of municipal

solid waste and due to the absence of a proper dumping ground, it is being disposed in low-lying areas in every nook and corner of the city as well as at the banks of the River Ganga, Varuna and Assi or in and around ponds and wells in the city.

The combined effect of low flow and discharge of polluted effluents into the Ganga has caused severe deterioration in the quality of water. A latest report of the Ministry of Environment Forest and Climate Change on the Ganga River shows that the stretch of Allahabad to Varanasi has more than 6 mg/l dissolved oxygen and huge faecal coliform, which implies that it is not suitable for even bathing purposes.

Effect On Local Culture –

Varanasi being basically a cultural tourism destination witnesses an encounter between foreign tourists and the local people. It's a clash between two sets of cultures observed at a number of tourist places here. There is only a commercial relation between the tourists and their hosts just as is between the sellers and buyers of goods and services in the market. Treating local people as objects of curiosity by the tourists cause irritation among the former. Tourists are generally members of a high consumption society of pleasure seekers landing in the midst of society suffering from wants. Youths of the host area suffer from cultural alienation by imitating the behaviour pattern of the tourists and losing the hold of their family traditions. It is the major negative impact of urban tourism, more harmful in the stages of early growth. Increasing number of modern restaurants and clubs alongside the Ghats, are attracting tourists but adversely affecting the culture of this ancient city.

Tourism is generally the spread of local culture amongst the travellers, but this has some adverse effects on the local residents also. High end café, bars and clubs are introduced to please and welcome a certain group of tourists in the city, which is mainly concentrated along the banks of the river Ganga, leading to unnecessary congestion and pollution also. To attract western tourists and create a favourable environment for them the local cuisines and entertainment hubs take a back seat and get further neglected. The local culture is currently thriving to survive against this manicured tourism set up. Many new starts ups and cultural organizations and groups work steadily to keep the originality of tradition and culture of a region alive. Administrative support for these groups can bring a good balance between tourism for commerce and tourism for

cultural experience. Tourism indeed acts as a catalyst for economic growth but there is a need of balance between economic and cultural prosperity.

Health And Hygiene –

Only 32 percent of the households are covered by the sewerage network in the city. The remaining is covered via septic tanks and pits; and rest are not covered at all. 18 percent of the city's population has no access to toilets, either independent or shared. Also, the existing sewerage network is very old and in need of repair. The carrying capacity of the sewerage lines is adversely affected due to garbage dumping and a heavy footfall of tourists lead to pressure on this existing scenario.

Despite much remaining unknown about the future of travel post COVID 19, the world is seeing emerging trends about health and hygiene in travel and tourism concerning traveller booking behaviour and resident sentiment. This means that the city's tourism managers and policy makers need to re-think, re-build and reposition the city's focus on health and hygiene accordingly. In light of growing health and safety concerns, travellers will increasingly turn to authorities they trust for timely and accurate information ahead of and during their travels.

Lack Of Integrated Tourism Development

Programme – The National Heritage City Development and Augmentation Yojana (HRIDAY), a central sector scheme of the Government of India, was launched on 21st January 2015 with the aim of bringing together urban planning, economic growth and heritage conservation in an inclusive manner and with the objective of preserving the heritage character of the city. The mission period of the scheme ended on 31st March, 2019. The scheme has supported development of core heritage linked civic infrastructure projects which includes revitalization of urban infrastructure for areas around heritage, religious, cultural and tourism assets of the cities. These initiatives include development of water supply, sanitation, drainage, waste management, approach roads, footpaths, street lights, tourist conveniences, electricity wiring, landscaping and other citizen services.

Mostly tourism is considered as a way of commercial engagement, leading towards profit for a state in economy. Mostly this is done by establishing commercial zones, instead of promoting and preserving the places of sightseeing or of historical importance. Some other times, a certain zone is overly developed to

either compensate for the lack of commercial prosperity in the other spots. For example, if city has x, y, z places having good amount of footfall, but only x has the capacity to convert the footfall into commerce, that spot would be given more focus and would be developed more than other ones. The Vishwanath Corridor is one such place which has been overly developed for the tourists while many other tourist places are struggling to survive without lack of attention. The Varanasi Smart City Mission aims to provide for the aspirations and requirements of the people, while also developing the institutional, physical, social and economic infrastructure to build a complete urban ecosystem. The objectives of the mission are to provide basic infrastructure, improve and enhance the quality of life, ensure and strive for clean and sustainable environment, apply smart solutions, set examples which can be replicated within as well as outside the smart city, so as to enhance the creation of more smart cities. The Heritage Development Plan for Varanasi, aims to regulate its heritage zones, conserving the built cultural heritage, provide and interface of heritage management with spatial planning to come up with a regulatory framework for development that is heritage sensitive.

Lack of resources, lack of co-operation between various stakeholders like public officers, business community, locals, politicians, industry fragmentation, no volunteer enthusiasm, leadership skills efforts from individuals have led to increased problems of urban tourism in the city. The Varanasi's City Development Plan (CDP) lacks the survey and understanding of the present ground realities faced by the city. The pandemic has indeed made the governments to work in a more collaborated manner at all levels, thus emphasizing on the need of more consolidated tourism policies for faster recovery of the sector; with the objective to have more instinctive and pliable policies which is able to adapt to changes faster, a sturdy safety and health policy issues and crisis management.

Re-Building Tourism

The UN Secretary General, Antonio Guterres says 'As we restart and recover from the pandemic, UNWTO, has a key role in rethinking tourism and its interactions with our societies, economies and natural resources and ecosystems'. The pandemic driven slowdown has given the opportunity to uplift more revolutionary changes in the sector with new models, opening up new destinations and thriving for sustainable tourism patterns. Also, the pandemic has provided for new approaches

to be adopted for maintaining the overall balance of environmental, social and economic results of the tourism. This can be achieved by introducing new technologies, executing more of green recuperating strategies and shifting to more resilient policy and business practices. The future of the tourism industry definitely sees a paradigm shift, due to the pandemic and the G20Tourism ministers in the Diriyah Communique assured the governments to work together for the cause and support of sustainable retrieval of the tourism sector. The disruption brought about by the pandemic has provided the policy makers to grasp the opportunity and reset the economy of this sector, with stronger sustainable base. Since this sector is the most affected by the pandemic, it's the top most priority of the international institutions like, UN, World Bank, WTO to revive the economy of this sector.

Sustainable Tourism –

Varanasi needs a serious re-consideration about its tourism industry according to sustainable pattern. On the one hand flowing of more than 5 million tourists per year, and on the other hand inadequacy and inefficiency of infrastructure for welcoming the tourists, lead to an increased unsustainable condition

The term 'sustainability' emerged in 90's and gradually entered to economic and political context; until 1997, there was not established a relation between tourism and sustainable development. It became introduced for the first time in 'Agenda 21' for the 'travel and tourism industry' which draws its principles from the 1992 UN Conference on Environment and Development. 'Agenda 21' presents tourism as a factor in order to achieve promotion of quality of life and economic flourishing of the local people. Sustainable tourism is taking charge of all the resources in a way that economic and social needs are fulfilled along with maintaining the cultural and biological diversity of the region, intact. The objective of tourism is development of tourism without any ruinous effect on natural, historical, cultural or social resources in order to improve economic growth and to respect to customs of host community.

Indicators of sustainable tourism include controlled growth of tourism industry, capacity of surveying number of tourists according to possibility and infrastructure of place, encouragement of local communities in participating in tourism development in the name of improvement of the economic status of local communities and

preserving natural resources. There are certain barriers on adopting sustainable practices like; lack of financial resources, lack of knowledge/awareness, lack of available staff, etc.

Urban Infrastructure –

The COVID19 pandemic emphasized the need to re-consider the role of free spaces in Metropolitan areas as well as their accessibility. Challenges including crowding and impacts by over tourism on public free spaces will require joint strategies involving all public and private institutions (including local communities) responsible for the maintenance of green and blue free spaces. Strategically planned network of natural and semi-natural areas, which absorb precipitation and reduce water run-off even maintaining their retention function during heavy rainfall events. These measures primarily benefit the local population, but there may also be positive synergies for city tourism.

Preserving or enhancing green spaces and their diverse uses, creating water related structures in public spaces, as well as establishing an offer of water-based sports and recreational activities and wherever possible water-based mobility, can represent valuable elements for the design of summer tourism offers in City tourism. Tourism infrastructure can bring higher living standards to a destination. Benefits can include improved infrastructure, advancements in health and transport sectors, new sports and recreational facilities, restaurants and public free spaces, enhancing the rest and retreat facility with an inundation in better-quality commodities and food.

Policy Implications –

The policy makers need a change of perspectives in their policies: focusing more on inclusive and bottom-up approach in defining the strategies. Necessary changes for a post COVID 19 recovery can be the changes of target markets, new collaborations, focus on quality tourism, technological advancements in the sector. Government should focus on policies that make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity. Policies ensuring viable, long term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable environment, income earning opportunities, social services to host communities and contributing to poverty alleviation. Effective policies can help in bringing tourism back on track and restoring the

confidence of travellers regarding health issues, risk of cancelled travel plans and becoming stranded overseas. It can also help to mitigate the socio-economic impacts on livelihoods.

Pro-Poor Tourism –

tourism is the third largest foreign exchange earner in India, with accounting for 10 percent of the total GDP. The tourism industry has the upper hand of occupying even the unskilled workers. Hence, the sector can help in fighting poverty, but obviously not compromising with the quality of the sector. Pro-poor tourism including the vulnerable section of the society, has also been a priority of Uttar Pradesh government's 2016 tourism policy and also India's fifth five-year plan. There are many ways to help spread benefits of tourism. In general, the poor do better when tourists spend on local products, rather than glamourizing the local market. A minimum wage can be enforced in order to make long lasting benefits with promotion of local products and more of job opportunities.

Digital Tourism –

Social media is critical in promoting cultural tourism destination, being an excellent platform to promote products such as high quality, guided, experiential tourism routes, which should characterise the cultural tourism of the future. The difficulties of movement during the pandemic and the necessary constraints on the number of visitors to cultural tourism destinations mean, and will continue to mean, that not all the potential tourists will immediately be able to travel to their desired destination and may resort to virtual visits online.

Conclusion

Travel and tourism provide a substantial contribution to business operations and ultimately contribute to the worldwide economy. The travel and tourism sector are an economic driver to the destination country's local GDP (Wondirad). The pandemic has reflected social, psychological and socio-economic and cultural influence on various tourism stakeholders, and they will suffer from the adverse effects for a longer time: the pandemic has provided an 'abundant' new framework in which tourism scholars and researchers can conduct studies with applicable research models. Tourism impact surveys need to ignore or drop the previous methods to execute the tourism and travel industry (Michael Hall). Researchers need to implement feasibility studies, tourism demand forecasting, and active and best practices that would be beneficial and appropriate to explore

the COVID 19 consequences on various geographic organizations and stakeholders.

The focus should be on the increase in visitor numbers through a better more comfortable travel personalized service with maintaining affordable prices. During this low flow of tourism, policy makers should consider renovating hotels, improving staff quality and moving to digital technology. Also, attention should be paid to high quality sanitation measures. This study draws an empirical assessment for the travel and tourism industry in Varanasi. Travellers have become more selective and hence focus should be on long time trips rather than fewer trips. This pattern will reduce the negative effects of the travel industry. E-tourism can bring a definite change in the travel and tourism industry's future by providing assessable and multi-functional value structures, structural definitions, theoretical trends and substantial and flexible technical concepts.

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Sericulture Is Boon and Tradition: Growth and Development of Silk Industry in Various Districts of Tamil Nadu 2016 - 2020

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Abstract

Sericulture activities are highly successive and productive in nature. Sericulture is a source of providing employment to the marginal people. It is astonishing to know that sericulture industry is providing gainful employment to 60 lakhs of people every year in India. This sector employs one man throughout the year for producing every 3.07 kg of silk produced and used in handlooms. This potential is very high and no other industry generates this kind of employment, especially in rural areas. Sericulture is highly suitable to small and marginal farmers, because of its capacity to generate a high income with comparatively less investment Economically benefit in different stages of silk industry like mulberry cultivation, silkworm rearing, reeling, twisting, dying and weaving. Every stage is income generating in silk industry like sericulturists to weavers. The study result showed that the area under Mulberry plant and silk worm production has increased in various districts of Tamil Nadu. It also reveals the employment generation and new planting areas also has steep lift in various districts of Tamil Nadu.

Keywords: Sericulture, Silk industry, Cucoon, Mulberry

Introduction-

The Present Study aims the Geospatial analysis of Rearing silk worm and Silk production in various districts of Tamil Nadu, and the objectives are to analyses the spatial distribution and temporal distribution of mulberry growth and new planted area in Tamil Nadu. To delineate, the various types of cocoons and silk worm production and also to evaluate silk reeling and sarees production in various districts of Tamil Nadu 2015-2020.

Data Source and Methods

This paper mainly depends on secondary sources of data, Agriculture department in DMS and in Chepak and also data collected from various published and unpublished sources and websites. Data has been analysed simple statistical methods and Excel diagrams. Main theme has been shown with the help of Arc GIS 10.6 has been used to

create some thematic maps for spatial distribution of mulberry plants and located bar diagrams to show the silk worm area and also the silk production of various distributions of Tamil Nadu. Silkworm has four stages in its life cycle viz., egg, caterpillar, pupa and moth. Man interferes in this life cycle at the cocoon stage to obtain the silk, used in weaving of the dream fabric. The sericulture activities were broadly divided into two divisions' viz., pre-cocoon technology and post cocoon technology. The activities of each division were further divided into sub-sectors. The main product of one subsector becomes a raw material for another sector, thus, interlinking each other and changing the value, form and quantity to enhance the preference by the consumers.

Plant

Layings

Silk moth coming out of cocoon



Mulberry silk is considered to be superior in quality as compared to other varieties. Bombyx mori, the mulberry silkworm feeds on mulberry leaves. About 92 per cent of the total production of the country consists of mulberry silk.

Rationale of the Study

Sericulture production was significant for the development of the human civilization from different aspects. Clothing is a very essential component for human shelter. Tamil Nadu is ranked fourth place among the silk producing state of our country. In 1956, Sericulture was practiced in limited pockets of Coimbatore and Dharmapuri district in our state, accounted 500 hectares only.

Fidings and Result of the Research

Irrigated Area Under Mulberry Plant In Tamil Nadu 2015-2020

SL.NO	District	2015-16	2016 -17	2017-18	2018-19	2019-20
1	Kancheepuram	15.3	3.2	14.37	18.42	16.4
2	Thiruvallur	15.1	15	12.96	3.64	3.24
3	Cuddalore	59.4	111.6	155.57	140.18	179.05
4	Villupuram	191.6	282.9	406.17	350.71	453.64
5	Vellore	745.6	854.5	1185.93	1064.88	1274.49
6	Tiruvannamalai	224.36	298.32	399.98	337.91	447.55
7	Salem	613.94	873.22	1110	1009.09	1233.58
8	Namakkal	674.8	607.5	779.66	721.15	875.24
9	Dharmapuri	850.62	1106.7	1482.13	1284.15	1639.51
10	Krishnagiri	2090.92	2599.3	3207.35	3073.48	3323.36
11	Erode	1436.5	1830.6	1823.2	1813.99	1818.87
12	Coimbatore	753.7	1108.8	1128.64	1067.31	1266.19
13	Tiruppur	1969	2229	2138.52	2135.68	2287.81
14	The Nilgiris	3.2	14	26.32	17	32.39
15	Tiruchirappalli	288.32	329.16	410.24	393.64	435.24
16	Karur	54.8	94.2	147.37	127.33	157.89
17	Perambalur	23.2	25.8	54.05	36.23	65.38
18	Ariyalur	47	45.2	53.85	53.64	60.53
19	Pudukkottai	184.8	185.2	248.18	233.6	259.11
20	Thanjavur	72.2	96.8	136.84	120.24	160.73
21	Nagapattinam	28.2	24.2	34.41	29.55	40.28
22	Thiruvarur	22.2	46	67.61	58.3	89.68
23	Madurai	118	154.2	175.71	164.17	197.98
24	Theni	555.6	672.8	764.17	754.66	806.68
25	Dindigul	1109.8	1282.3	1421.36	1367.25	1439.78
26	Ramanathapuram	57.6	75.4	78.74	87.25	76.72
27	Virudhunagar	145.2	183.2	212.15	210.32	222.27
28	Sivagangai	51.2	95	133.77	112.75	136.72
29	Tirunelveli	436.84	612.84	698.08	656.9	775.2

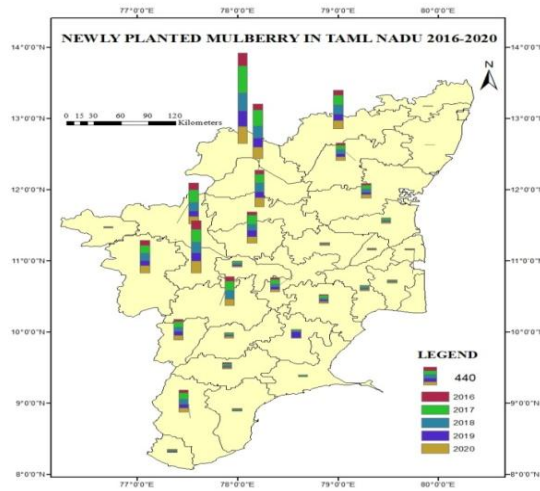
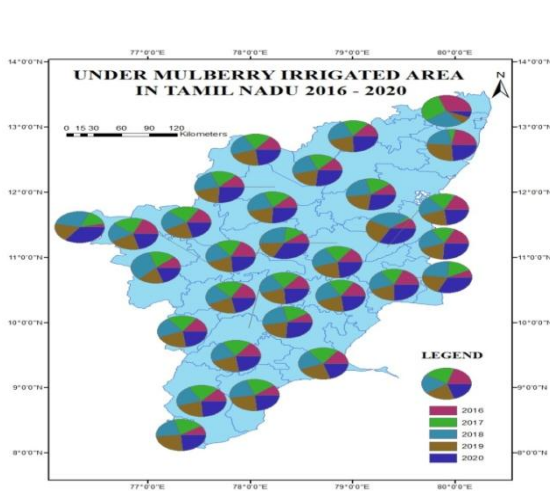
Then with the implementation of many developmental schemes in the state sericulture activity was introduced into the plains of the state. From 1979, Department of Sericulture with headquarters at Salem is functioning as development wing under Department of Industries and Commerce. During the year 2016-2020, 1184.62MT of raw silk, have been produced in the state, of which 609.12MT are cross breed silk and 575.50 MT are bivoltine silk. Tamil Nadu continues to occupy the fore-front position in the country in bivoltine silk production. Tamil Nadu stands first in cocoon productivity

30	Thoothukkudi	43.84	79.44	91.03	96.19	95.08
31	Kanniyakumari	40.18	78.78	91.3	99.57	97.37

Source: Agriculture department, DMS
Irrigated Area under Mulberry Plant in Tamil Nadu 2015-2020

Spatial distribution of mulberry plant found to be very high in area such as Krishnagiri, Erode, Dindigul and Tirupur districts shows consistent growth of mulberry plant under irrigation. It is followed by Dharmapuri, Namakkal, vellore and Salem districts shows steady growth in area under mulberry plant. On the other hand Perambalur the Nilgris, Kancheepuram and Thiruvallur are newly

emerged areas under mulberry plant. Tamil Nadu mainly rely on North East Monsoon. The spell of rainfall is dynamic and to only three months. Rainfall mainly because of Tropical cyclone originated over the Bay of Bengal and Indian Ocean. The area under Mulberry plant mainly depends on the irrigation only minor area which receives enough rainfall. Coimbatore, Erode and Salem shows steep increase.

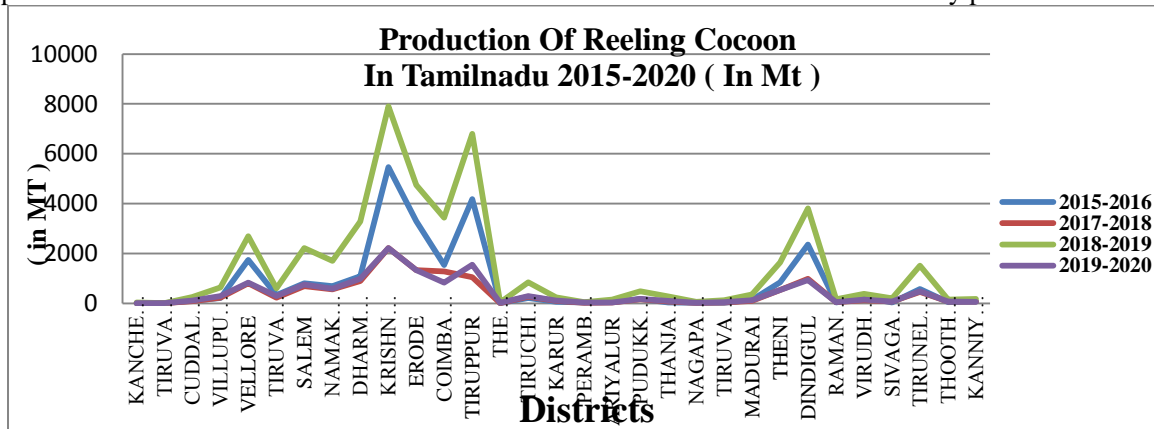


Source: Compiled by Researcher

Newly Planted Areas Of Mulberry Plant 2016-2022

In the year 2016 the Area under mulberry plant about 426 Sqkm in Krishnagiri and 569.8 Sqkm in 2020 whereas in Tirupur 286.7 Sqkm it has increased into 390 Sqkm in 2020 in Tirupur Dharmapuri and Salem districts have new area

under mulberry plant and also shows gradual increase of areas from 2016 -2022. Apart from that Coimbatore, Vellore and Erode also register more area under new mulberry plant. This district also shows an increase of areas within five years. Dindigul, Tirunelveli and Namakkal register moderate area under the mulberry plant.



Source: Agriculture Department , DMS Chennai

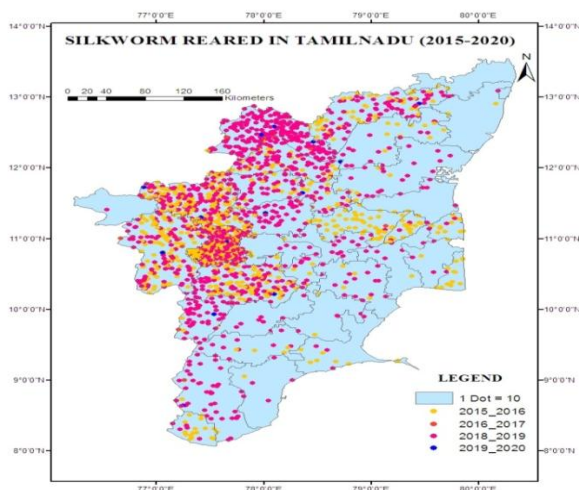
Production of Reeling Cocoon In Tamilnadu 2015-2022

Krishnagiri Place first in production of cocoons in 2015 (5457.35 tonnes) it shows drastic change of production in next three years but sudden fall in the year 2019-20 only 2217.78 tonnes of production, reason behind this the erratic rainfall destroyed the mulberry plant in that year. Next to Krishnagiri Tirupur records high production of cocoon about 4176.67 metric tonnes which has sharp increase in 6792.75 tonnes in 2018-19, the sharp decline in 2019-20 because on tropical cyclone Nivar devastated the mulberry plants. High production is also found in Erode 3294.49 tonnes, Dindugul 2352.82 tonnes, Vellore 2694.39 tonnes in 2018-19 and Dharmapuri records 3280.9 tonnes

in the above mentioned year. Almost all the districts shows fall in production during 2019-2022 because of the monsoon.

Silk Worm Reared In Districts Of Tamil Nadu 2016-2020

Tamil Nadu is the leading State in bivoltine silk Production. The handloom silk sarees including Kancheepuram silk sarees produced in Tamil Nadu are World famous because of their enchanting craftsmanship. Venpattudhoties produced in Salem are very unique and also got authorization to use 'Geo-Index' number. Krishnagiri 1614.6 tonnes, Erode 974.7 tonnes and Tiruppur (1235.7 tonnes) are the leading producer of silk worm in 2016. Raw silk production in Tamil Nadu found.



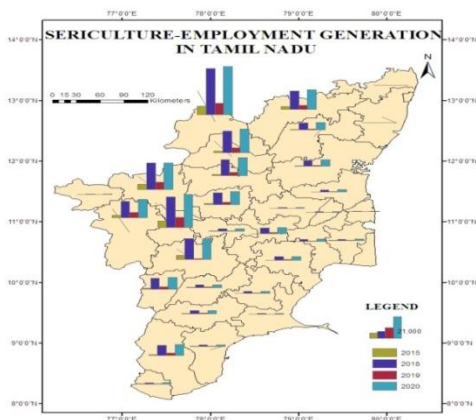
Source: Agriculture department DMS

Sericulture– Employment Generation In Tamil Nadu - 2015-2020

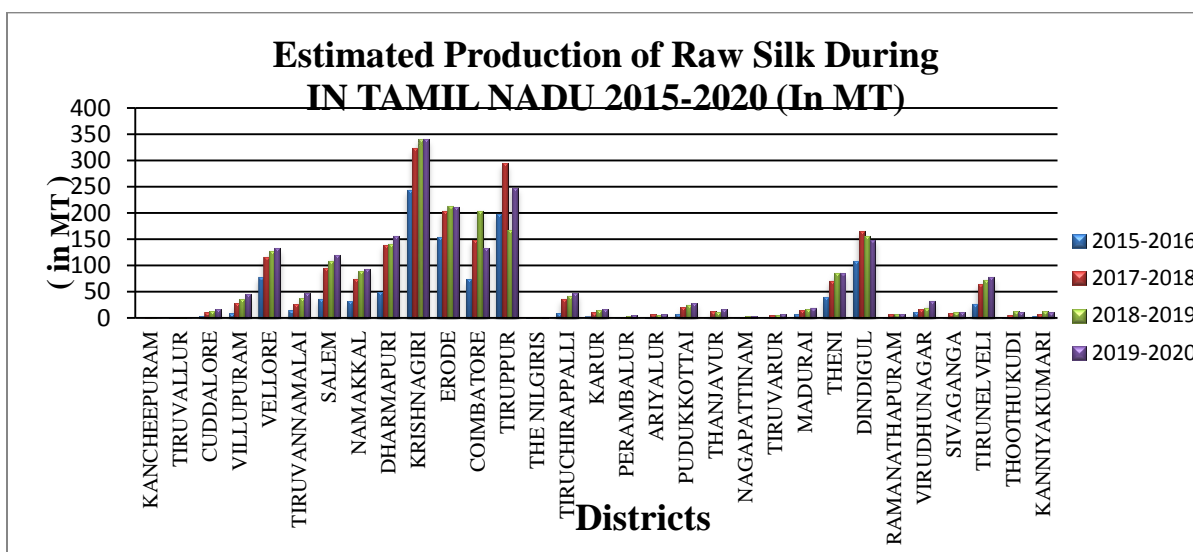
Dharmapuri ranks first in giving employment generation the weavers of silk. Nearly 3.4 billion engaged in sericulture activities during 2016. Area under Mulberry plant also found to be high in this district. Ideal climatic condition and environment enriches the sericulture production in Dharmapuri. Next to Dharmapuri Erode comes second highest employment opportunity, around 2.05 million people are under sericulture in 2016 the employment opportunity has declining due to various factors. Tiruppur gives more employment opportunity for the marginal people to engage in rearing silk worm. Around 1.02 million people are engaged in sericulture

Activities during 2016. Following with the above

Districts, Salem Namakkal and Vellore districts also show high employment than the other districts of Tamil Nadu



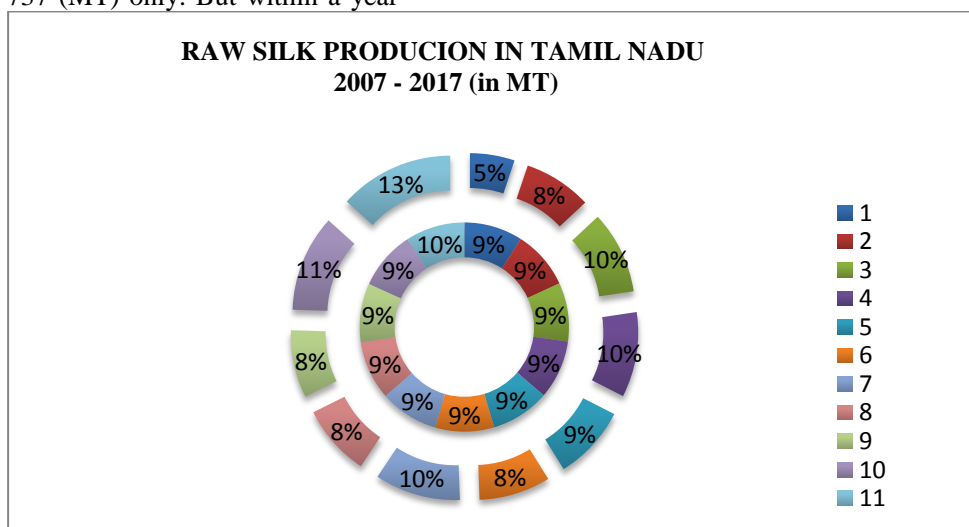
Production Of Raw Silk In Districts Of Tamil Nadu



Raw Silk Production In Tamil Nadu 2007- 2017 (In Mt)

Women in South India in general in fond of silk sarees. In Tamil Nadu for marriages it's a traditional wearing silk sarees and dhotis so, the demand of product increase in day by day. In this above mention table the production of Raw Silk has been increasing constantly. In the year 2007 which is above 737 (MT) only. But within a year

above 8% of increased. In the year 2009-2010 remind stagnant about 10% of increase when compare with 2008. Every year nearly 9-10% of increase has been recorded new Raw Silk Production of Tamil Nadu. In 2017 it has been increase slightly above 13% of Raw Silk Production in Tamil Nadu which is about 1818 (MT).



Common Challenges Faced During Sericulture:
 Inadequate equipment and technology for producing silkworm eggs
 Insufficient technicians in sericulture
 Inadequate tools and QC measures
 Lack of capital for investment

No empowerment thus makes the worker feel demotivated
 Im proper and availability of technologies for silk processing

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Knowledge of Anganwadi workers and their problems in rural Areas

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Abstract:

Anganwadi is a Government sponsored child care and mother care centre in India. It caters to children in the 0-6 age group. These were started by the government in 1975 as part of the integrated child development services programme to combat child hunger and malnutrition. The Anganwadi system is mainly managed by the Anganwadi worker (AWW) and Anganawadi helper (AWH). The Anganawadi Worker is the community based voluntary frontline worker of the Integrated Child Development Service Scheme programme. Selected from the community, she assumes a pivotal role due to her close and continuous contact with the beneficiaries. Children grow and develop amazingly. Mothers and their children age between 0-6 years, not only constitute a large proportion of the community but also vulnerable or special risk group. The first five years of child's life are most crucial for the foundations for physical and mental development. Main objective of the study is to study the profile of Anganawadi workers and to assess knowledge of anganawadi workers and problem faced by them while working

Keywords: Anganwadi worker, Anganawadi helpers, ICDS, Child care,

Introduction:

Launched on 2nd October, 1975, the Integrated Child Development Services (ICDS) Scheme is one of the flagship programmes of the Government of India and represents one of the world's largest and unique programmes for early childhood care and development. It is the foremost symbol of country's commitment to its children and nursing mothers, as a response to the challenge of providing pre-school non-formal education on one hand and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality on the other. The beneficiaries under the Scheme are children in the age group of 0-6 years, pregnant women and lactating mothers. Anganwadis are India's primary tool against the scourge of child malnourishment, infant mortality and curbing preventable diseases such as polio. Their services can also be important tool to fight mental and physical disability in children. India has the world's largest population of malnourished or under-nourished children. Various researches have considerably explored many aspects of this scheme with variable results, but the coverage has been patchy and difficult to compare because of complexity involved in wholesome approach of the service and their constituents.

Children are the most important assets of a country because they will be tomorrow's youth and provide the human potential required for a

country's development. The strength of the nation lies in having healthy, protected, educated and well- developed children who may grow up to be productive citizens of the country. It is estimated that around 40 per cent of children are vulnerable or experiencing difficult circumstances characterized by their specific social, economic and geo-political situations. All these children need special attention. Children in the age group 0-6 years constitute around 158 million of the population of India (2011 census). These Children are the future human resource of the country. Ministry of Women and Child Development is implementing various schemes for welfare, development and protection of children.

Literature Review

Review literature gives an insight into different aspects of the problem under the study. It helps the investigator to design the framework, develop the methodology and tools for data collection and plan the analysis of data.

Das et.al (1990) This study explore that Anganwadi worker is the key person in the progammme, her education level and knowledge of nutrition plays an importance role related to her performance in the Anganwadi centre. It has also been reported that, in addition to education level, training of Anganwadi workers about growth monitoring plays a valuable role in improving their performance.

Sandip B. Patil, Doibale M. K. Study of Profile, Knowledge and problems of Anganwadi workers in ICDS blocks: A cross sectional study.

In his study, Most of the AWWs in ICDS Blocks were from age group 41-50 years, matriculate, experienced, having knowledge of more than 50% in their daily functions at AWCs. The knowledge increases with experience as an AWW, but has no relation with their educational qualification. Problems felt by them were mainly due to inadequate honorarium and excess work load. So, timely increments in honorarium should be considered.

Sulakshana Shridhar Baliga, Padmaja R. Walvekar,(2017),”A study on knowledge of anganwadi workers about integrated child development services at three urban health centers” Study reveals, Anganawadi workers has poor knowledge of health services and The knowledge had no relation with experience and their educational qualification. This difference was not found to be statistically significant. Hence regular training camps should be organized for AWWs to increase their knowledge regarding different aspects especially growth monitoring and supplementary nutrition

Kalpna Joshi (2018) in her study: “Knowledge of anganawadi workers and their problems in Rural ICDS Block” AWCs need to be strengthened in structure and supplies and AWWs need to be given more in-service educational programme and training programme along with salary so that they can be motivated to take interest in all activities of the project

Statement of the Problem

The present intension to find the research gap a succeeded with the help of existing literature and research gap identified

Hence with the evidence of existing literature no extensive research done on “Anganawadi Workers and their problems in rural Area” researcher have interested to undertake a research on “Knowledge of Anganawadi Workers and their problems in rural Area”

Objective:

1. To know about the Anganawadi centre
2. To know about the Service and benefits to the Anganawadi workers
3. To assess the role & responsibilities of anganwadi worker

4. To understand the Problems and challenges faced by the Anganwadi workers

Research Methodology:

The research technique chosen to gain insight into Anganwadi workers and helpers in Anganwadi centre is exploratory in nature. For the purpose of fully understanding the idea, literature from certain research papers, data from trusted sites and newspaper, articles regarding the stated topic are used. According to the objective of the study, the research design used is descriptive in nature.

Anganwadi Centre:

The word Anganwadi is derived from the Hindi word “Angan”, it refers to the courtyard of a house. Angan is a rural Indian term for “a place where people get together to discuss, greet, and socialize their matters”. The Angan is also used occasionally to cook food or for household members to sleep in an open air. This part of the house is seen as the heart of the house and is considered a sacred place. Therefore, the significance of this part of the house comes across in the way a worker works in an Angan and visits other Angans to perform the indispensable duty of helping with health care issues. After all, they are the most important link between the rural poor and good healthcare.

Anganwadi is a government sponsored child-care and mother-care center in India. It caters to children in the 0-6 age group. These were started by the Indian government in 1975 as part of the Integrated Child Development Services program to combat child hunger and malnutrition. The Anganwadi system is mainly managed by the Anganwadi worker. She is a health worker chosen from the community and given 4 months training in health, nutrition and child-care. She is in charge of an Anganwadi which covers a population of 1000. 20 to 25 Anganwadi workers are supervised by a Supervisor. Four supervisors are headed by a Child Development Projects Officer (CDPO). They provide outreach services to poor families in need of immunization, healthy food, clean water, clean toilets and a learning environment for infants, toddlers and pre-schoolers. They also provide similar services for expectant and nursing mothers. According to government figures, Anganwadis reach about 58.1 million

children and 10.23 million pregnant or lactating women. Anganwadis are India's primary tool against the scourges of child malnourishment infant mortality and curbing preventable diseases such as polio. While infant mortality has declined in recent years. Integrated Child Development Services (ICDS) is the only major national program that addresses the needs of children under the age of six years. It seeks to provide young children with an integrated package of services such as supplementary nutrition, health care and pre-school education. Because the health and nutrition needs of a child cannot be addressed in isolation from those of his or her mother. The program also extends to adolescent girls, pregnant women and nursing mothers.

Service and Benefits to the Anganawadi workers and Anganawadi helpers

1. In the event of death of an employee of child (Anganawadi worker/helper) while in service, the legal heir of the deceased in given compassionate appointment under scheme by the government. The order came into force since November 2009.
2. Two days casual leave allowed at time in a month including the unavailed leave of previous months
3. Festive advance ₹ 2000/- is sanctioned once in a year to the staff of anganawadi centres, Medical allowance of ₹ 100/- per month to all the staff of AWCs
4. Additional charge allowance is increased from ₹ 2/- to ₹ 10/- per day to Anganawadi Workers will be taken into account for calculating the pension for those who are appointed as Grade II supervisors / Multipurpose health workers/Teachers before 1-4-2003, and 10 days medical leave will be allowed to those staff who undergo surgery under the new insurance scheme.
5. Further promotional activities to the eligible Anganawadi Workers for appointment as office assistants/clerks in the social welfare and nutritious meal programme department and to the anganawadi workers as Grade II supervisors, travelling allowance is enhanced to ₹ 20/- per month to ₹ 40/- per month to Anganawadi workers
6. Maternity leave allowed for 6 months and two sets of uniforms (sarees) per year have been provided to all the Anganawadi workers/helpers etc.
7. The Honorarium hike is seen as a move to bolster services by giving anganawadi workers honorarium that given them dignity and motivate them to cater to the development needs of children in the 0-6 years age group and lactating mothers. Increase in honorarium of anganawadi workers ₹ 6000/- to 8000/- and Anganawadi helpers ₹ 3000/- to 4000/- respectively.
8. 15 days summer holiday given during the month of May in every year. Death relief fund ₹ 50,000/- is given to both Workers as well as helpers of Anganawadi centres
9. If anganawadi workers/helpers die while in service, or are suffering from severe ailments, their families are given some compensation and financial relief. A sum of Rs.20,000/- is sanctioned to the legal heir of the deceased anganawadi worker and Rs. 10,000/- is sanctioned to the legal heir of the deceased Anganawadi Helper as death relief fund.
10. From September 2014 the death relief amount has been increased to Rs.50000/- for both AWW and AWH. AWWs/Helpers who have completed a minimum of one year of service are eligible for financial assistance under the scheme.
11. New Pension Scheme (NPS) Lite, A contributory pension scheme. In the scheme anganawadi workers and Helpers will contribute Rs.150/- and Rs.84/- as monthly contribution respectively and State government will contribute the same amount.

Role and responsibilities of Anganawadi workers:

There are many responsibilities and duties to be performed by an Anganawadi Worker recommended by the government. Some of them are:

1. Showing community support and active participation in executing this program
2. To conduct regular quick surveys of all families
3. Organize pre-school activities, provide health and nutritional education to families especially to pregnant women as to how to breastfeeding practices etc.
4. Motivating families to adopt family planning, educating parents about child growth and development,
5. Assist in the implementation and execution of Kishori Shakti Yojana (KSY) to educate

- teenage girls and parents by organizing social awareness programs, identify disabilities in children and so on.
6. To weigh each child every month, record the weight graphically on the growth card, use referral card for referring cases of mothers/children to the sub-centres/PHC etc., and maintain child cards for children below 6 years and produce these cards before visiting medical and para-medical personnel
 7. To carry out a quick survey of all the families, especially mothers and children in those families in their respective area of work once in a year.
 8. To organize non-formal pre-school activities in the anganwadi of children in the age group 3-6 years of age and to help in designing and making of toys and play equipment of indigenous origin for use in anganwadi.
 9. AWWs shall share the information relating to births that took place during the month with the Panchayat Secretary/Gram Sabha Sewak/ANM whoever has been notified as Registrar/Sub Registrar of Births & Deaths in her village.
 10. To make home visits for educating parents to enable mothers to plan an effective role in the child's growth and development with special emphasis on new born child

Problems of Anganwadi workers:

In many problems which affect the anganwadi workers in performing their role effectively. The important problems faced by Anganwadi workers were in the following.

1. The problems of Anganwadi workers in the inadequate honorarium. That the Anganwadi workers they are considered with the "honorary workers" and thereby given only "honorarium" and not minimum wages. The work load of the Anganwadi staff was heavy work but the status of the wages in low, the monthly honorarium of Anganwadi teachers was only 5.500 Rs until 2014. The Anganwadi workers themselves belonged to the below. Poverty- line category these inadequate honorarium is main problem for Anganwadi workers.

2. The workload of the Anganwadi staff was heavy if their house visits were also included, a lot of record maintenance or they have to assist for other health programmes apart from their Anganwadi related work like in pulse polio programme, Vitamin A distribution programme in conducted by municipal Corporation it all functions in involve from Anganwadi workers.
3. Inadequate infrastructural facilities are a major constraint in the effective functioning of Anganwadis. In building facilities in terms of space and nature of construction are unsatisfactory.
4. The anganwadi workers are total 12 registers that were maintained by the workers
Ex: survey register, immunization register, ANC register, referral register, dairy cum visit book etc. those anganwadi workers who had maintained that all registers properly.
These records heavy work for anganwadi workers.
5. Inadequate supervision among Anganwadi workers like immunizations, prophylaxis against blindness and anemia, nutrition and health education, Supplementary nutrition, growth monitoring and referred services.
6. There is a lack of help from the community participation or help from the community was always made available as and when required sometimes people help in food distribution if worker was busy with some other activities. The Anganwadi workers are supposed to make periodic visits to beneficiary families. These are problems of anganwadi workers
7. Anganwadi Workers all around the country are being treated as though they are unskilled. Their monthly remuneration, which is quite low in comparison to the Minimum Wage requirement, is insufficient to cover their living expenditures.
8. According to report of Kasturi Rangan's committee, it is nearly impossible to fix the curve of education as an individual advances in age unless the imparting of education is done methodically starting from the toddler level. Anganwadi centres (AWCs) are the ideal location for this, however suffering

from a variety of ailments necessitates immediate attention

Conclusion:

Anganawadi programme is one of the world largest child and women development programme in India. Anganwadi is focal point of ICDS scheme. Each anganwadi has one worker and one helper. A good anganawadi workers has some qualities like leadership, decision making skills, problem solving skills, communication etc. Anganwadi workers play a role of bridge between the community and ICDS, they play a important role in bringing the services to the door step of the beneficiaries. But the department of women and child welfare it has to look into the matter of remuneration and very importantly providing accurate knowledge with regard to the responsibilities of anganawadi workers through the organizing all the anganawadi workers under one roof so that the anganawadi workers will be enhanced with the knowledge and tier adults will be cleared and they can deliver the services in a better manner

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Survey of Medicinal Plants used by Local people of Armori taluka, Gadchiroli District, (M.S.) India

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Abstract :

The current work is based on a thorough field study of medicinal plants conducted in Armori taluka area. Locals in this region rely on the forest flora for their livelihood and on herbal remedies to treat illnesses and disorder. There are 49 reported species of medicinal plants, which belongs to 48 genera and 30 families of the plants used by the local people. Botanical names of all the plants have been arranged alphabetically. Local names, part use and medicinal use have also been provided.

Key words: Documentation, medicinal plants, Armori.

Introduction:

Since the beginning human beings have been coexisted with nature, and plants have been important to their existence as they supply the necessities of life; including food, shelter, medicine, clothing, etc. Our prehistoric forebears were able to use numerous wild plants in diverse parts of the world for their specific use in the process of trial and error. The knowledge on the medicinal plant was transferred from one generation to next generation orally or without any published records. India is rich in ethnobotanical knowledge. The ethnic and rural people of India have preserved a large bulk of traditional knowledge of medicinal use of plants growing around them (Yigra 2010). This knowledge is handed down to generation through word of mouth and extensively used for the treatment of diseases (Mishra *et al.*, 2008). However, there is now a big generational gap between the young and old. As a result, traditional information has not been effectively transferred. Therefore, the present effort was undertaken in order to gather and record the traditional knowledge of the local Medicine Man (*Vaidu*) from Armori taluka (same medicinal

plants used to treat various ailments and disorders).

Materials and Methods:

Field tours were organized frequently to collect the information, many interviews were conducted with old Medicine Man (*Vaidu*) belonging to different categories. As much as 49 different plant species have been surveyed and collected. The collected plant species were identified with the help of floras and processed according to standard method of herbarium preparation. All the specimens are deposited in herbarium of Department of Botany, Mahatma. Gandhi. Arts, Science and Late N. P. Commerce College, Armori.

Results and Discussion:

All 49 species of flowering plants from 48 genera and 30 families were included in the assessment of medicinal plants in the study area. These plants are used to cure a variety of illnesses and diseases, including Cholera, Diabetes, Dysentery, Asthma, Fever, Cough etc. From present study. It is revealed that there is still need to collect information on traditional knowledge which will be helpful for further scientific study on drug formulation and discovery of new drugs.

Table: - List of Ethno-medicinal plant used by local people.

Sr. No.	Botanical Name	Local Name	Part Use	Uses
1.	<i>Abrus precatorius</i>	Gunj	Leaves	Leaves chewed and juice swallowed in stomatitis.
2.	<i>Acacia catechu</i> (L.f.) Willd.	Khair	Bark	Bleeding gum
3.	<i>Achyranthes aspera</i> L.	Aghada, Kutri	Root	Dog bite, Scorpion bite
4.	<i>Adhatoda zeylanica</i> Medic.	Adulsa	Leaves	Cough and asthma.
5.	<i>Aegle marmelos</i> (L.) Corr.	Bel	Fruit	Stomachache, leucorrhoea
6.	<i>Ailanthus excelsa</i> Roxb.	Maharuk	Bark	Stomach pain and cholera.
7.	<i>Alangium salvifolium</i> (L.f.) wang.	PandhariAkwal	Bark	Stomach pain due to worms
8.	<i>Andrographis paniculata</i>	Bhuineem	Leaves	Malarial fever and

	(Burm.f.) wall. ex Nees			worm's infestation.
9.	Aristolochia indica L.	Aristolochia indica L.	Leaves	Snake bite as an antidote
10.	Asparagus racemosus Willd.	Shatavari, Marbat	Tuberous root	Lactation after delivery, acidity, leucorrhoea weakness and weight gain
11.	Azadirachta indica Juss	Kadu-Neem	Leaves and seed	Used in fever, worm fever and internal body heat. Seed oil is used in scabies.
12.	Bacopa monnieri (L.) Penn.	Brahmi	Leaves	Used for cough and hair falls
13.	Balanites aegyptica (L.) Del.	Hinganbet	Fruit	Food poison.
14.	Baliospermum montanum (Willd.) Muell-Arg	Jamal-gota	Root	Root decoction used for stomach pain due to indigestion.
15.	Bauhinia racemosa Lam.	Apta	Bark	Menstrual irregularity.
16.	Boerhavia diffusa L.	Khaperkhuti	Root	Jaundice
17.	Bombax ceiba L.	Kate-sawar	Bark	Menorrhagia, blood purification.
18.	Boswellia serrata Roxb. ex Colebr.	Salai	Bark	Wound healing.
19.	Butea monosperma (Lam.) Taub.	Palas	Flower & Seed	Flowers used against burning sensation and seed used for urinary problem
20.	Caesalpinia bonduce (L.) Roxb.	Sagargoti	Seed	Menorrhagia, also used for abortion.
21.	Calotropis gigantea (Ait.) R. Br.	Rui	Flower	Asthma and bronchitis.
22.	Cassia fistula L.	Bahava	Pod and root	Pod is used to treat stomach pain
23.	Catharanthus roseus (L.) G. Don.	Jagannath	Leaves	Used to treat diabetes.
24.	Celastrus paniculatus Willd.	Malkanguni	Seed	Seed oil is used for paralysis
25.	Celosia argentea L.	Kombda	Root	Kidney stone.
26.	Chlorophytum tuberosum Bakar	Safedmusali	Tuberous root	Root tubers are used as a tonic.
27.	Costus speciosus (Koen.) J. E. Smith	Kewakanda	Tuber	Used for to treat arthritis.
28.	Cullen corylifolia (L.) Medik.	Bawachi	Seed	Seed oil is used for scabies and skin diseases.
29.	Diplocyclos palmatus (L) Jeddrey.	Shivalingi	Seed	Used to enhance ovulation in woman.
30.	Elephantopus scaber L.	Rantambhaku	Root	Used for bleeding piles.
31.	Emblia officinalis Gaertn	Awala	Fruit	Used for constipation, it is the one the ingredient of triphala churn.
32.	Euphorbia hirta L.	Dudhi	Leaves, stem	Shoot with leaves are used to enhance milk secretion in mothers.
33.	Gymnema sylvestre (Retz.) R. Br. ex Schult.	Gudmar	Leaves	Leaf juice is taken internally to control

				diabetes.
34.	<i>Helicteres isora</i> L.	Muradseng, Atai	Fruit	Fruit paste is given to cure stomachic.
35.	<i>Holarrhena pubescens</i> (Buch.-Ham.) Wall. ex G. Don	Kuda	Root and stem bark	Stem bark is used for dysentery and root bark is used as a worm infestation
36.	<i>Martynia annua</i> L.	Waghnaiki	Leaves	Leaf warmed and applied to cure wound.
37.	<i>Maytenus senegalensis</i> (Lam.) Excell.	Bharati	Leaves	Young leaves are chewed and juice spitted out to cures mouth sores.
38.	<i>Nelumbo nucifera</i> Gaertn.	Kamal	Leaf and seed	Seed with spongy testa is used in worm infestation. Leaf is used for skin diseases.
39.	<i>Pergularia daemia</i> (Forssk.) Choiv.	UtaranVel	Flower	Flower juice is used in cough.
40.	<i>Phyllanthus amarus</i> Schum &Thonn.	Bhuiawala	Root	Used to cure jaundice.
41.	<i>Ricinus communis</i> L.	Erandi	Leaf and Seed	Leaf is applied over swelling. Seed oil is used for constipation.
42.	<i>Schleichera oleosa</i> (Lour.) Oken	Kusum	Stem bark	Stem bark powder is used in dysentery.
43.	<i>Semecarpus anacardium</i> L. f.	Biba	Fruit	Oil is used as an antiseptic, cuts and foot cracks.
44.	<i>Sphaeranthus indicus</i> L.	Gorakhmundi	Leaf	Leaf juice is used for toothache, cough and indigestion.
45.	<i>Spilanthus calva</i> DC.	Akkalkara	Flower	Flowers are used to cure cough.
46.	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Behada	Fruit	Fruit powder is used for cough, constipation and indigestion. It is also used in the preparation of triphala powder.
47.	<i>Terminalia chebula</i> Retz.	Hirda	Fruit	Fruit is useful for cough, indigestion, gases, constipation, stomachic. It is also one of the ingredient of triphala powder.
48.	<i>Tinospora cordifolia</i> (Willd.) Miers. ex Hook. &Thoms	Gudvel	Stem	Used in fever, jaundice,
49.	<i>Tridax procumbens</i> L.	Kambarmodi	Leaf	Fresh leaf used in cuts and wounds.

Conclusion:

All the medicinal plants are harvested from the forest to treat illnesses and other usages, but they are not conserved. Therefore, it is important to

raise awareness among traditional practitioners about the need to protect local plant species before their extinction from the area.

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Use of Information Communication Technologies (ICTs): For Accessibility of Grey Literature in Medical College Libraries

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Abstract:

Rapid developments of Information and Communication Technologies (ICTs) have changed the conception of traditional libraries. Modern Medical College libraries are more important, dynamic, and can serve without the restrictions of geographical boundaries. In this global period, libraries are fleetly switching to digital mode and are widely accessible. With the arrival of new communication technologies libraries redesigned their services to a borderless world and come the lifeblood of the community. In today's ICT Environment, the Internet has become a major source for spreading and retrieval of grey literature. Well-designed websites offer users access to a body of digitally produced grey literature that complements the existing body of print materials. ICTs are the main source of information retrieval and dissemination system. The Ease of access and the speed, with which large quantities of information can be available, will have implications for science policy shaping and public attitude. This Research paper focuses on the study of Information Communication Technologies (ICTs) to Accessibility of Grey Literature in Medical College Libraries.

Keyword: ICT application; ICT services; Medical library resources; e-learning; grey literature; librarians' role, library

Introduction

Grey Literature "publication" platforms correspond to the multitudinous types of GL producers as described supra. The development of the Internet handed for yet other ways how to make GL available, e.g. on the company or personal websites, blogs, or in the institutional repositories. Standard general search engines (like Google) do not provide for solution of this problem as the GL is located mainly in the "deep web" that is not indexed wholly by them.¹

"Grey Literature is a term used to describe information products which are created and distributed to circulate knowledge (ideas, facts, opinions) rather than to sell for a profit. In practice, and for that reason, Grey Literature is known as information that isn't retailed and distributed by marketable publishing houses. The term 'grey' stems from the fact that such information isn't published and is not available through the traditional channels of publishers and booksellers. "Grey doesn't indicate any qualification; it is merely a characterization of the distribution mode."² "In fact, a large proportion of Grey Literature is distributed in both modes: 'grey' in the form of pre-prints, 'white' in the form of a published article. The quality is often identical; the main difference being that 'white' literature has a quality stamp provided by the publisher and its embedded peer-review process."³

The **value and importance of grey literature** lie substantially in its complexity, topicality, and financial availability. As noted by Schöpfel, and

Farace the GL "represents a substantial part of the scientific production".⁴ As the GL is not published in the "traditional way" it logically contains information not available/searchable/indexed by the standard librarian tools (e.g. standard library catalogues). Due to this fact, the GL should be always included in literature searches as it limits the potential bias.⁵ A mere reliance on the officially published sources may lead to a "subjective one-sided research path".⁶ The GL also contains more detailed information, an example being a technical report with detailed descriptions, diagrams, and data sets that would be never published in traditional journals.⁷ Compared⁸ to the "white literature" the GL tends to be more up-to-date as it is usually not subject to traditional and time-consuming pre-publishing processes. The quality of GL literature is still debatable⁹ as it is usually not subject quality processes like peer-reviewing in the case of published papers in traditional scientific journals. However, Seymour¹⁰ claims that the grey literature is subject to various levels of internal quality assessment - an example being the review process in the case of master or Ph.D theses. Also, the "publishing's" institution's name and reputation is at stake, therefore a certain quality check is to be expected. Lastly, due to its non-commercial character, the GL is usually available for free as in "free beer"¹¹, i.e. without monetary compensation. As discussed in the next section with the emergence of the Open

Access movement the GL is also opening up in the sense of free as in “free speech”.

ICT Tools:

ICT tools stand for **Information Communication Technology tools**. The ICT tools mean to digital infrastructures like computers, laptops, printers, scanners, software programs, data projectors, and interactive teaching box. Information and Communication Technologies (ICTs) have become central to education and training in Library and Information Science/Service (LIS) because of the great influence of these technologies on the professional world.

The arising new technologies have revolutionized the methods of information storage and retrieval in the Medical library field. In this Internet era more and more libraries in the world make use of these new technologies for storage, retrieval, and dissemination of information in a further effective way. Libraries can store a huge quantum of information using new technologies and transmit this information anywhere anytime without any geographical hedge. Scholars fulfill their thrust of information using new technologies without wasting their precious time. ICTs facilitate for rapid transmission of information globally through their networks. It helps library professionals to manage their housekeeping and documentation activities such as circulation, acquisition, maintenance of catalogue, periodical management, etc. in the libraries by automating them. These innovative technologies made accessible platforms for the scholars to make use of the information as well as to explore them. The other automated services in the libraries are storage, dissemination and advance searched for the scholars such as SDI, compiling bibliographies, indexing/abstracting, etc. The traditional library housekeeping methods are now carried by using newer technologies. Newer technologies have given better solutions to most of the problems encountered in the field of libraries related to the acquisition, organization of information, reference services, circulation, and bibliographical services.

Grey Literature @ Medical College Libraries

Medical college libraries produce vast literature, which is not going to publish in the traditionally documents. This literature can be defined as Grey literature. This can be used for research, teaching, and learning. Some institutions, universities issue pre-prints or e-prints before their formal publications and these can be considered as a part of Grey literature. These unpublished Grey literature have potential value

to the scholarly community globally. Most of the time, this literature is limited to its creator's desktop and does not have a method to access or identify globally. Some institutions, universities provide mechanisms to access this information through their academic libraries. This non-conventional collection comprises doctoral dissertations, Annual reports of medical colleges, Reports of clinical trials, Current Controlled Trials, Clinical Study Results WHO Clinical Trials, In-house case-studies or case papers, Patient records, Medical literature given by Medical Representatives (MRs) conference proceeding and papers, scientific reports, etc. Today most of the non-conventional literature can be found in electronic format. In this ICT era libraries do not necessarily to have all the documents in their libraries. Instead of that library professionals should know from where to get what they need. They can access whatever information they need by doing a systematic searches on the web. They should have a direct relationship with the main producers of grey literature.

Objective:

To examine the potential of Information and Communication Technology as a tool to access the Grey literature.

The Rationale for Research Topic

The Librarians of Medical Colleges can play a vital role in bringing together all the Grey literature related to health care. There is a need to disseminate current information from the Grey literature through ICT.

Methodology

For this research, a descriptive method has been used. For collecting data, an Interview method was used.

Tool used for Data Collection

The investigator has used both primary and secondary data for the research work. An Interview method was administered for collecting the required primary data. Secondary data were collected mainly from the brochures, newsletters, records, and different types of publications available in Medical College Libraries.

Scope and Limitations

The Researcher covered Selected MBBS (Government and private) Medical College Libraries for the Study.

Result and Discussion

These days almost the medical college libraries have computerized their cataloguing system. Classification not only brings related documents together, but it also helps in storing and deciding their location. Consider that a medical college

library starts with a core collection of GL at some point in its life. Then it is necessary to have an adequate, relevant, comprehensive, and up-to-date collection of GL which should be accessed when required.

A. Awareness and Organization of GL

Grey literature is not a very new concept. The concept was there, but, not many of the respondents may know that it is called Grey Literature. Some may not have a clear idea

regarding the broadness of the concept. Even they may not be aware of all types of GL. How familiar are the respondents with the organization of GL in their own libraries? These issues are explored in the sub-sections.

B. Awareness of the Concept of Grey Literature

The users were asked whether they had known the concept of Grey literature or not.

Table No. 01, Awareness of Grey Literature

Know the Concept of GL	Faculty	Student	Grand Total
No	6	9	15 (3.75%)
Yes	194	191	385 (96.25%)
Grand Total	200	200	400

The above table shows that Grey Literature was known to the majority i.e., 385 (96.25%) of users, this means that 96.25% of the respondents

had aware of the concept of GL, and the remaining 15 (3.75%) were not aware of GL.

Table No. 02, The Features of GL, Means, and Ranks

Features	Mean of Means	Rank
Ease of Access	3.10	3
Avoids Duplication: Helps Selection of Topics for Research	2.72	7
Teaching Purpose: Extent of Use	1.41	12
Research Purpose: Extent of Use	2.71	8
Up-to-datedness and Recentness	2.61	9
Adequacy and Comprehensiveness	3.20	2
Old GL: Extent of Use	2.73	6
Relevant and need-based GL	2.91	5
Library permits Borrowing	3.02	4
Digitized catalogue Entries	3.37	1
Text-based Access through CD or Server	1.96	10
Facilitating Online Access	1.58	11

Table No. 03, Rank-wise Features

Rank	Features	Mean of Means
1	Digitized catalogue Entries	3.37
2	Adequacy and Comprehensiveness	3.2
3	Ease of Access	3.1
4	Library Permit to Borrow	3.02
5	Relevant and need-based GL	2.91
6	Old GL: Extent of Use	2.73
7	Avoids Duplication: Helps Selection of Topics for Research	2.72
8	Research Purpose: Extent of Use	2.71
9	Up-to-datedness and Recentness	2.61
1	Text-based Access through CD or Server	1.96
11	Facilitating Online Access	1.58
12	Teaching Purpose: Extent of Use	1.41

The table above is self-explanatory. 'Digitized Catalogue', 'Adequate and Comprehensive Collection' and 'Ease of Access' are the top three ranking features expected of a good GL collection. These are the minimum requirements expected of a GL collection. 'Text-based Access' and 'Online Access' are the needs at high-end. The other needs are in between and much based on the policy and management of the library in question.

In addition to the above, there are some other expectations of users from the libraries housing the Medical GLs.

Online Access for GL Collection

Library facilities are improving fast and the users expect IT-based services and everything on their desktop. Accordingly, the infrastructure facilities were being installed to help the information seekers. In medical colleges, many of the in-house publications were in digital format. They can be accessed through the Local Area Network or Intranet. The year 2001 and onwards, most of the Medical College Libraries have

computerized their cataloguing system. Therefore, a majority of the medical college libraries are having a computerized catalogue or Online Public Access Catalogue (OPAC) to assist the users in finding out the GL and the other documents. Library OPAC is an outcome of the automation process. It is useful to access the documents available in the library through LAN or campus network or intranet or it can be uploaded on the web and made searchable. Such web-based access can be provided in today's era.

Online Access to Institutional Publications

The present time is referred to as the electronic age. Automation of library functions and services has become the order of the day. Academic and research institutions have created their websites to host various information services for remote and wider access, breaking the barriers of time and distance. In this direction, libraries have started maintaining websites or servers for hosting information to their users. GL also can be digitally generated, stored, accessed, and disseminated.

Table No. 04, Online Access to Institutional Publications

Sr. No	Online Access to Institutional Publications	Faculty	Students	Total
1	Yes	138	142	280 (70%)
2	No	56	49	105 (26.25%)
3	No Answer	06	09	15 (3.75%)
	Total	200	200	400 (100%)

Above Table No. 04 shows the online access of Institutional Publications including internally generated GL. As it is seen in the chart, 280 users access Institution or Library Websites to see the information about Institutional Publication such as Annual reports, Developmental reports, Budget reports, and In-

house publications, including Newsletters clinical tests, etc., GL. The balance includes 105 users not accessing Institution or Library Websites for Institutional Publications and 15 respondents have remained silent on this issue. These 280 respondents are further categorized as shown the Table 05

Table No. 05, College Libraries Hosting Information on

Sr. No	Responses	Faculty	Students	Total
1	On the Website	39	33	72 (25.71%)
2	In the Intranet Server	99	109	208 (74.29%)
	Total	138	142	280 (100%)

The above table shows that 72 (25.71%) users indicated that they access institution or library websites to see information about Institutional Publications. However, 208 (74.29%) respondents, access the intranet server to see the information about Institutional Publications.

Access to Institutional Publications also is accessible through the web or intranet. Online Access for GL collection is made possible through ICT.

Findings

Institutional publications and annual reports play a vital role in preparing proposals and reports concerning the institution. Considering all medical colleges in Maharashtra, 280 users (70%) (Please see Table No. 04) expect access to the digital version of institutional publications such as annual reports, developmental reports, budget reports, and in-house publications, including newsletters.

As it is seen, 208 respondents out of 280 (74.29%), (Please see Table No. 05.) access the server for the information regarding Institutional Publications. On the other hand, 72 respondents out of 280 (25.71%) indicated that they access institution or library websites to seek knowledge regarding Institutional Publications. Almost all activities related to scanning websites/databases for relevant GL, identification, selection, ordering, procurement and processing i.e., cataloguing, classification, providing metadata are done through ICT or the internet. Further, the entire text or graphics can be scanned and stored, so that the document can be directly accessed. Besides, these days it is much simpler because all the GL are born digital. Once it is in machine-readable form then it can be subjected to any ICT application. RSS Feed and other 'Alerting Services' are the other major gifts of ICT which help in effortless access to new GL. Today one can search and access directly any GL unless it is an official trade secret or classified Defense related information. ICT helps access full-text of the latest addition of GL. Internet facility and web technology have made it easy to access.

Suggestion

It is with this context that, there is an urgent need to study the existing situation in Medical/Health Colleges/Universities in Maharashtra, especially about the current development of ICTs and the opportunities the national Fiber-optic network is offering to universities in the country. Overall there is a great potential on the ground in terms of ICT possibilities; it is up to Health Universities and the Governments to exploit them to enhance access and use of grey literature.

Conclusion

The holding of GL is an up-to-date collection in the Medical college libraries. However, it is encouraging note that the majority of the users aware of Grey literature and users also use Information Communication Technologies for accessing the GL. Users access the Institution or Library website to see the latest GL e.g. institutional publication, annual reports, clinical tests, etc. through an Internet server. Online access for GL collection is made possible through ICT. Almost all activities related to scanning websites/databases for relevant GL, identification, selection, ordering, procurement and processing i.e., cataloguing, classification, providing metadata are done through ICT or the internet. Thus, ICT helps access the full-text of the latest addition of GL. Internet facility and web technology have made it easy to access.

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Library Automation - An Introduction

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Abstract

This article focused on the overview of library automation and the changing scenario of library management. The impact of ICT has changed the library operation and its functionality in to s fast to faster mode. Clients need not to visit shelf to shelf to find out a find out a document. They just get their documents sitting in front of a desktop automation has reduced the man power. This article will discuss about the concept the concept of automation its requirement and various components helps to automate library. Some software package has given which are available for automation purposes.

Keywords: Automation, Cataloging ,Library software, OPAC

Introduction

The library plays a critical role in our society it is an important component of any educational institution, which is hub of the teaching and learning activities where students, researchers and teachers can explore the vast resources of information. In the age of information communication technology computers are being used for day- to-day housekeeping activity of the library which saves the time of the library service smooth and effective. In the age of ICT library scenario has been drastically changed in terms of collection, organization and services. Simultaneously user's demands and attitudes have changed in its kinds. Also the information seeking behaviour of user has dynamically changed. They want relevant authentic information very quickly within a single place at their hand. This concept has posed challenges for library professionals for library professionals for quick delivery of library services and information. This development in library field has brought the ideas of library automation. Library automation is inevitable in this age of information and information technologies. Library automation is the use of automatic and semi automation data processing machines to perform such traditional activities as acquisition cataloguing and circulation. Library automation may thus be distinguished from related fields such as information retrieval automatic indexing and abstracting and automatic textual analysis.

Definition Of Automation:

According to the encyclopaedic dictionary of library sciences automation is the technology concerned with the design and development of the process and system that minimizes the necessity of human intervention in their operation (Ishvari et.al, 1993).

According to the encyclopedia Americana automation may be defined as any continuous

integrated operation of a producing system that uses electronic computer on related equipment to regulate and coordinate quantity and quality of what is produced. Automation is automatic control of an apparatus process or system by mechanical or electronic devices that take the place of human organs or observation efforts or decision (Webster Dictionary. 1966).

The word automation was first introduced by D.S. Harder in 1963. He defined in 1936. He defined automation as the automatic handling of parts between progressive production processes. Library automation may be defined in simple sense as 'a process of mechanization of library operations which are of routine and repetitive nature. Computerization of library housekeeping operation, predominance of computerization is known as library automation.

Library Automation: A Brief History

Library automation refers to use of computers in library work including services computers were engaged in library service in USA in 1950s in a very modest way. Dr H P Luhn had organized computerized indexes in 1950s computers entered and found some place in American library during this decade. However, their use and application was very limited and restricted due to the high cost of hardware and non-availability of application software packages. During 1960s the cost of hardware came down and appreciable attempts were made towards developing library application packages. This led to increased use of computers in library and printing industries. In April 1960 the American chemical society published its chemical titles through computers.

In this decade, one of the most significant developments in this direction was seen in MARC I. In the year 1963 W K Gilbert prepared a report on computerization of Library of Congress. On the basis of this report the MARC I project was initiated in 1966, and the work of

bringing out the Library of congress catalogue in machine-readable catalogue (MARC) form was started and completed. There was a heartening welcome of the tape containing the catalogue. MEDLARS and INTREX projects are similar examples of producing machine-readable catalogues. Now-a-days computers have become almost essential components of library work in developing countries.

The Indian statistical institute, Calcutta was the first in India to install a computer system in 1955, and to develop an indigenous computer in 1964. In India computers were used in library work for the first time possibly by INSDOC by bringing out the roster of Indian scientific and technical translators with the help of computers. INSDOC brought out the first union scientific and technical translators with the title regional union catalogue of scientific serials, Bombay Poona in 1973. In 1978 INSDOC initiated SDI service as a NISSAT project with chemical Abstracts and INSPEC databases, with the use of CAN/SDI software of IIT, madras, in 1970's many library ventured in preparing computerized databases. Through the initiative and financial support of NISSAT many library networks was initiated and are operative. Notable of these networks are CALIBNET (Calcutta library network) DELNET (Delhi libraries network) INFLIBNET (information and library network) PUNENET (Pune library network) etc. Some other notable networks are NICNET, INDONET, SERNET, ERNET etc. Nowadays, many institutions such as DRTC, INSDOC, DESIDOC, NISSAT etc are engaged in imparting training for computer application in library work through regular sponsored and part time courses. The price of computer hardware and software has come down considerably. Owing to these factors computers have become popular with Indian libraries.

Indian Scenario Of Library Automation:

In view of enormous capacity of data storage, quick processing access retrieval, dissemination of information, library and information centre of our country have started using computers for these activities. In the beginning computers were used by big academic institutions like DTs, IIMs, and other national institutions like CSIR, INSDOC, NASSDOC, DRTC, DRDO, BARC and other institutions of higher learning of national importance. The condition of academic libraries, and information center was very poor. Except a few central University like JNU, Hyderabad University, Pondicherry University IGNOU, and some state universities like Punjab University of

Mumbai, cochin University of science and technology Osmania University few deemed universities like tata institute of social sciences etc. The use of information technology was not evident before the 1990's the new education policy, 1986 recommended the improvement of library and information centres of universities/institutions of higher learning. It categorically emphasized that information technology should be used in the libraries for providing effective library and information services to the academic communities.

Government of India directed the UGC to constitute a committee to give recommendations for modernization of university libraries and information centers. UGC recommended in 1992 accommodation of a special paper in "Application of computer in Library Activities" in Library and information science courses in India. The introduction of computers for library operations has brought revolutionary changes and new dimension in the whole library and information management in India. The government of India has taken prime steps for computerization automation and networking of library and information centres. A number of national regional and city library and information networks such as NICNET, INDONET, ADINET, CALIBNET, DELNET, MALIBNET, ERNET etc. Have emerged and found their way. In order join and effectively participate in these library networks, library and information centres will have to be modernized and automated (Vashishith 1994). After recommendation of a high powered committee, UGC established INFLIBNET centre which is an inter-university centre with its headquarter at Ahmadabad for computerization automation and networking of university libraries, HTs, RECs, libraries of institutions of national importance for resource sharing among the libraries (Sinha and Satpathy, 1998) till date 142 universities been funded by INFLIBNET, to create IT conscious environment in the libraries. Almost all university libraries have taken steps to change over to automation. Some of them have fully automated their activities and some other have started automating their library activities. The prime minister of India has recently announced special grants for the College libraries of North East India and Jammu and Kashmir for purchasing SOUL software for automating their libraries to cope with the changing environment library schools in India have introduced paper on computer application in libraries in their academic programs. Besides this, different organizations are organizing in-service training courses on

computer application to the working library professionals. As manpower development is one of the important factors in this changing over to automated library system, training of personnel is a must.

Need And Objectives Of Library Automation

Information explosion has resulted in the production of a large amount of literatures in every field of knowledge. Accordingly the print documents are coming to the library in huge numbers which is not possible for a library to manage the collection manually.

Now a day's no user has time to search the required and relevant information from dense heap of information collection. They have no time to go shelf by shelf to pick up a book. So it necessitated for library automation. In most of libraries are yet to be automated. The various factors that necessitated changing a manually operated library system an automated library system are as follows.

The need for automation is emphasized because of the following factors:

1. Traditional methods for handling the information are inadequate. Out is bulk and growth rate of information.
2. Difficult to update the information due to voluminous increase and rise in the degree of specialization involved.
3. Techniques are suggested for applying computers with its advantages of speed, vast storage capacity and accuracy to library works.
4. The need for cooperation and resource sharing and hope achieving some saving through automation made to switch over to automation.
5. Operational advantages
6. Offers flexibility
7. Speeds up processing
8. Greater accuracy, efficiency, consistency and improved work control.
9. Reduces repetitive clerical work.
10. Permits easy of bibliographic control checking and updating
11. Permits improved budget control (Jagadesha and Mahesh 1998)

Essentials For Library Automation:

The essential things for the automation of a library are

1. A good collection
2. Finances
3. Suitable computer hardware
4. User friendly computer software
5. Staff training
6. User training

Automated Libraru Services

There are various types of automated services provided by the automated library. The automated services are:

1. Current awareness service (CAS)
2. Online search service
3. Printed Indexes
4. Selective Dissemination of Information (SDI)
5. Inter library loan
6. Stock verification
7. Reference service

Factors Behind Library Automation:

Some factors which prompted automation of library services are given below-

Computer is extremely fast in processing information and magnetic tape as storage making reduce storage space.

Many a time we require searching a database with a number of keywords with different combinations. This requirement makes a manual search very complex and tedious. Such searches can easily be made on computerized system by random accessing of information and rapid retrieval of information by creating proper information database.

Computerized database can be accessed in interactive mode as per user requirements.

Methodology To Be Followed During Automation:

Decide various functions of each activity

Identify the input requirements (data elements) for each of the function.

Identify the input in terms of records, files and the media, also determine the size of the files.

Identify the output required for each of the functions.

Identify the output in terms of records, files and the media, also determine the size of the files.

Development of programs (to get the desired output from the given input using the available hardware) or buying the commercial software to computerize some or all functions of the activities to be computerized.

Implementation and evaluation.

Problems Of Library Automation

1. Lack of motivation towards latest information technology
2. Lack of organization effort towards library.
3. Lack of fund.
4. Lack of trained personnel
5. Lack of proper/standard technology
6. Ignorance of senior library staff about the technology
7. Lack of suitable library management software packages.
8. Selection of appropriate software packages.

Components Of Library Automation:

Careful planning is a critical step in automating library services. Several points are to be taken into consideration before a library gets into automated activities.

(A) **Aim:** first Component of automation is its aim the purpose the reason why the set of library activities are to be computerized. This aim will be the focal point for integrating automation into the activities and for operating and managing the activities after automation.

(B) **Processing:** Second component is processing consisting of step by step operations performed in an orderly and predetermined sequence on information materials or other items to achieve desired result or service.

(C) **Computer System:** The third component is the computer system supporting the activities. The supporting computer man be a mainframe. The size depends upon the nature of functions to be automated , the number of functions to be supported by the computer, the anticipated volume of processing activity, the size of the information files to be written in the machine storage and funds available to the library. The computer must have the following capabilities:
sufficient memory to store

- a) The operating system
- b) Application software
- c) Process the volume of work
- d) Enable sufficient users to be online to it
- e) Capacity in future growth
 - The computer system should have sufficient auxiliary storage for all the files essentials to the activities with capacity for future growth.
 - Sufficient terminals and other devices such as scanners and printers.
 - The location of the computer can be in the library o outside the library.

(D) **Computer Software:**

The fourth components are the software supporting the activities of the library. Computer software is nothing but step by step instructions that command the machine to perform its share in the processing software may be developed by a commercial vendor or another library or it may be developed locally. The software supporting the library activities can be either stand alone or integrated. The stand alone software only one automated activity such as acquisition circulation etc. An integrated system covers all the library activities such as acquisition circulation cataloguing serial control etc. And share common information and files.

(E) **Data Communication:**

The fifth component is data communication through data communication command and information can flow from the computer system supporting

the automated activities to the points in the library where processing is required even though the main server is located in another part of the building or away from the library.

System Documentaion

The sixth component is documentation in the from of memoranda, reports and manuals. These are written descriptions of various aspects of the automated activities to be used by the library staff and others for training references and quality control purposes while operating managing and maintaining the activities

(F) **Human Resources:**

The seventh component is the human resources needed to share processing with computer supporting the activities, provide, management and leadership for the activities and operate, manage and maintain the computer system supporting the activities. Staff is needed to initiate processes provide the computer with information to be processed and make decision during process steps and regarding services to be provided etc. Apart from attending to activities not supported by the computer system. Training is required for the staff who handles the automated system.

(G) **Environment:**

Eights and last component is environment.

Automated activity must have sufficient physical space to be performed efficiently and be provided with proper levels of lighting, temperature, humidity noise control and cleanliness etc. Any delay at this stage will delay the vary installation of the automation itself.

Areas Of Automation:

Ranganathan' s five laws of the library science stipulate that the documents of the library should have maximum number of users. With the application of information Technology in the areas of library and information centres has been a tremendous improvement in the library services offered by the library to the users. Library automation usually covers all library housekeeping functions such as acquisition cataloguing circulation and serial control . in some libraries it has expanded to the library management system to incorporate OP AC's SD-ROM networks, DTP, office automation etc.

1. Acquisition
2. Cataloguing
3. Circulation
4. Serial control
5. Article indexing system
6. Information Retrieval system

7. OPAC system (online public access catalogue)
8. Web OPAC system
9. Information services

Conclusion

Now a day library automation has become the buzz word in library profession and has become a bare necessity for any libraries. An automated library can provide better services to their users and can maintain the library more properly which a manual library can't do. The record keeping activities and various repost generation becomes very easy in an automated library system. But the success of any library automation programme depends upon its proper planning and execution. Hence library professionals need to take right initiatives in right direction.

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A Study of Impact of Bibliotherapeutic Approach on Challenges Faced By Students of Teacher Education Institute

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Abstract

This paper focuses on aspects of bibliotherapy in respect to academic, psychological and social challenges faced by students of Teacher Education Institute. Bibliotherapy is helpful in treating long term mental illness in the form of depression, anxiety, low confidence, phobia, fear, shyness,. Investigator has used qualitative and quantitative methods of study on which this article is based. The result of the experiment is positive and draw inference that bibliotherapy has a positive effect after treatment. Investigator has conducted interview with the TEI students and it is classified that social well being has improved significantly so as self confidence and social interaction has risen up among students. The self help material investigator selected with the help of subject experts in education and Library and Information Science faculty had significant positive result. Investigator adopted methods like discussion, interview, conversation, debate, quiz to open up minds of students. So that they could openly share their challenges, issues, difficulties with the investigator. Bibliotherapy is effective method for psychological well-being. It improves self-confidence and social interaction. From user perspective bibliotherapy is an important tool of improvement.

Introduction

Bibliotherapy is the use of literature to promote psychological well-being , mental health has got significance in recent years. The bibliotherapy concept was known to us since beginning of 21st century. Through bibliotherapeutic activities like reading circle, book club, reading hours, books on wheels projects reading culture get impetus. Bibliotherapy is a quite well researched internationally. For psychological illness it is effective tool. Students suffering from long term anxiety, depression, phobia, shyness take part in bibliotherapeutic activities. These activities were in the form of reading circles, reading clubs have a potential to increase feeling of well-being among student, self-help material are very useful in mental illness problem. Considering the students old reading habits and inclination towards likings of particular genre may help immediately to treat challenges, problem among students. This therapy helps in curing psychological problems but concrete examples of how and how much psychological wellbeing was influenced were not provided(Hodge, Robinson and Davis, 2007) For bibliotherapeutic program students met for three hours twice in a week for 6 months from September till February. Literature was selected by the investigator and with the help of experts from education field. The investigator used conversation, discussion, quiz, reading aloud sessions. All students attended all the sessions enthusiastically. A questionnaire tool was used to get qualitative data from the students. Five point rating scale

was used in this research by investigator. Each questionnaire tool consists of 10 questions. Media influence variable has qualitative data to collect right answers from the students. It was experimental method of study, so pretest and posttest questions were forwarded to students to collect data. All data collected from the samples kept confidential. According to literary choices of students, their liking of reading, their tendency to particular genre were considered while providing literature to them.

Pim Cuijpers conducted considerable research on bibliotherapy, states that bibliotherapy is more successful for participants who are motivated and have significant reading experience.(Cuijpers, 1997). Reading has a curing function. Students were felt that reading was a pathway to their success in life and beating challenges and problems in their life.

Significance of bibliotherapeutic approach

All student participants were enthusiastic while reading sessions. Reading sessions had positive influence on psychological, academic and social well-being of student participant. These particular aspects are important for selection of the literature consciously. Further bibliotherapeutic activity helps in opportunities offered for social interaction

The literature in the bibliotherapeutic treatment.

All student participants expressed their happiness and appreciation of the literature sessions during and in preparation for reading and conversation sessions.

It is observed that on some occasion student were in difficulty to concentrate during sessions. Literary quality plays a vital role during implementing bibliotherapeutic programme. Brewster points out that several of her informants reported that the act of reading itself was more important than the specific works read in helping them deal with their psychological problems (Brewster,2011)

In a bibliotherapeutic sessions the literature discussions were held, significance of the experts while implementing programme was ensured and significance of bibliotherapeutic activities in relation to other activities were noted.

Bibliotherapeutic Discussions

It is worth to note that aspects of literary discussions most appreciated by students participant. The attitude of the student was expressed in all the interviews. Bibliotherapy promotes changes in the students. Students use reading as a leisure activity. The bibliotherapeutic approach was meaningful to the students and has positive effect on their perception of health and psychological well being. Participant felt better than before. Participants are of the opinion that reading activity can help them prevent a worsening of well-being. Students reacted positively. So it is clear that bibliotherapeutic approach brought change in challenges intensity. Student put forward opinion that because of these bibliotherapeutic treatment they have started more reading. Participants gives feedback that their social interaction has risen up because of social interaction. The findings of this study are student participants have improvement in their challenges. Through bibliotherapeutic sessions self-confidence risen up, shyness has reduced, social skills are improved. Emotional challenges of the students can treat through bibliotherapy.

Statement of the problem

A Study Of Impact Of Bibliotherapeutic Approach On A Challenges Faced By Students Of Teacher Education Institutes.

Objectives

1. To identify the challenges faced by TEI students.
2. To identify the sources of challenges faced by TEI students.
3. To develop a bibliotherapeutic programme and study its effectiveness in the context of academic, psychological and social challenges.
4. To study the effect of bibliotherapeutic approach on academic challenges in context of difficulties in understanding B.Ed. curriculum and academic procrastination.

5. To study the effect of bibliotherapeutic approach on psychological challenges in context of academic stress and study anxiety.

6. To study the effect of bibliotherapeutic approach on social challenges in context of media influence and family expectations.

Hypotheses

1. There is no significant difference in the mean scores of academic challenges in context of difficulties in understanding B.Ed. curriculum and academic procrastination at the pre and post test level.

2. There is no significant difference in the mean scores of psychological challenges in context of academic stress and study anxiety at the pre and post test level.

3. There is no significant difference in the mean scores of social challenges in context of media influence and family expectations at the pre and post test level.

Methodology

In the light of objectives and to test the hypotheses of the present study, the researcher adopted experimental method of the study and for data collection questionnaire tool was used.

Statistical Treatment

Arithmetic mean, Standard Deviation, were used.

Results and Interpretation

H1 There is no significant difference in the mean scores of academic challenges in context of difficulties in understanding B.Ed. curriculum and academic procrastination at the pre and post test level.

There exist significant difference in the pre and post test scores of academic challenges. High mean value of the post test in respects of difficulties in understanding B.Ed syllabus and academic procrastination shows that bibliotherapeutic treatment applied was proved successful and outcome was positive.

H2 There is no significant difference in the mean scores of psychological challenges in context of academic stress and study anxiety at the pre and post test level.

There is significant difference in the mean scores of psychological challenges in context of academic stress and study anxiety. There exist significant difference in the pre and post test scores of psychological challenges. High mean value of the post test in respects of academic stress and study anxiety shows that bibliotherapeutic treatment applied was proved successful and outcome was positive.

H3 There is no significant difference in the mean scores of social challenges in context of media influence and family expectations at the pre and post test level.

There is significant difference in the mean scores of social challenges in context of media influence and family expectations. There exist significant difference in the pre and post test scores of psychological challenges. High mean value of the post test in respects of media influence and family expectations shows that bibliotherapeutic treatment applied was proved successful and outcome was positive.

Conclusion

- There is significant Mean difference in academic challenges scores of pre and post level. So bibliotherapeutic programme was proved successful.
- There is significant Mean difference in psychological challenges scores of pre and post level. So bibliotherapeutic programme was proved successful.
- There is significant Mean difference in social challenges scores of pre and post level. So bibliotherapeutic programme was proved successful.

Suggestions for further research

- The study can be extended to state level.
- Further study can be undertaken considering male, female, student categories.
- Small sample may be taken for more reliable results.

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“A Study of Virtual Banking in India”

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Abstract:

The Revolution in transportation technology in transportation technology has revolutionized the world's industrial and agricultural sectors, and in all of this, the rapid revolution in the banking sector has led to virtual banking. Attempts have been made to change the face of the banking sector. The study collected data from primary and secondary sources. Online banking services like ATM, Personal computer Banking. Phone Banking and E-mail Banking will help people to get information and awareness. This paper shows that the introduction of virtual banking in India. The term virtual banking includes e-banking (mobile banking or banking through computers), debit and credit cards, card-swipe or point of sale machines and digital wallet system. It also explains the important theoretical points related to various modes of virtual banking and its trend.

Keywords: Virtual Banking, Electronic channels, Benefits, Trends.

Introduction:

Banking industry in India has also achieved a new height with the changing times. Information technology has given rise to new innovation in the products designing and their delivery in the banking and finance industries. Financial innovation associated with technological change to Tally changed the banking philosophy and that is further tuned by the competition in the banking industry. Virtual Banking also known as internet banking, E-Banking or virtual banking, in an electronic payment system that enables customers of a bank or other financial transaction through the financial institution's website. Internet banking services introduced so far include the ability to monitor account balances, transfer funds between accounts, pay bills, and apply for loans. Only few banks will allow customers to make electronic trades through brokerage accounts. A Virtual bank is a bank that offers banking services through electronic channels. All services of virtual banks can be performed online and there are no bricks-and-mortar branches. Clients can open an account, make deposits, taking out loans and performs other banking transactions via a mobile app or through the website of the virtual bank. Within the near future many banks will offer home banking via an interactive website.

Objectives of the Study:

1. To understand the concept of virtual banking.
2. To study the modes of transactions in virtual banking and its trend in India.

Research Methodology of the Research Paper:

The present study is based on secondary data. This data has used for getting a real result from research paper. Secondary data has been collected from the various RBI Annual Report, Books, Journals and Government Web-Portal.

Modes of transaction in Virtual Banking:

The cashless Economy in India has been amplified with the Indian Government's initiative of Digital India. This is a flagship programme with a vision to transform India into a digitally empowered society and knowledge economy. When the transactions in an economy are not heavily based on the money notes, coins or any other physical form of money but are aided by the use of credit cards, debit cards and prepaid payment instruments, such an economy is called cashless economy. The modes of transactions in virtual banking are as follows.

ATM – Automatic teller Machine:

Automatic Teller machine began to be introduced in the period 1969 -1984 all over the world ATM literally means electronic cash Dispensing, which is open round the clock and 365 day a year. The banks give an ATM cards to the user and allot a separate and identification number

Privet sector banks are going ahead aggressive ATM Plans Particularly off-site for wider reach with lower cost. They are also targeting ATM development in the top corporate offices or staff colonies – not only for the salary accounts but also for a piece of the corporate pie and also to get the following benefits-

- Reduction in transaction cost
- Reduction in paperwork involved in transfer of securities
- Right location of the ATMs
- Optimum population of ATMs at each Center

Table No.1, Branches and ATMs of Scheduled Commercial Banks (At end-March 2021)

Sr. No.	Name of the Banks	Branches					ATMs		
		Rural	Semi urban	Urban	Metropolitan	Total	On-Site	Off-Site	Total
	Public Sector Banks	28,828	24,028	16,654	16,801	86,311	78,007	59,106	1,37,113
1	Bank of Baroda	2,851	2,087	1,482	1,794	8,214	8,663	2,970	11,633
2	Bank of India	1,835	1,455	803	932	5,025	2,388	3,163	5,551
3	Bank of Maharashtra	611	461	372	471	1,915	1,505	445	1,950
4	Canara Bank	3,072	3,141	2,103	2,130	10,446	9,128	4,324	13,452
5	Central Bank of India	1,603	1,333	810	862	4,608	2,746	898	3,644
6	Indian Bank	1,940	1,589	1,259	1,214	6,002	4,239	686	4,925
7	Indian Overseas Bank	902	961	651	687	3,201	2,720	425	3,145
8	Punjab And Sind Bank	570	279	356	326	1,531	1,067	30	1,097
9	Punjab National Bank	3,900	2,680	2,257	1,931	10,768	8,610	5,171	13,781
10	State Bank of India	7,914	6,496	3,981	3,830	22,221	25,706	36,911	62,617
11	Uco Bank	1,074	818	609	555	3,056	2,146	215	2,361
12	Union Bank of India	2,556	2,728	1,971	2,069	9,324	9,089	3,868	12,957
	Total								

Source- RBI Bulletin

The table shows that, How many ATMs in public sector banks used in march 2021. In Rural branches, Semi urban branches, urban and Metropolitan Branches total use of ATMs On-side and Off- side are 1,37,113.

Credit Card:

In the process of evolution of money after paper currency, several forms of bank money of credit money came in to existence. The quality of these forms of money is the Convince in carrying and effecting the transaction. In this process of evolution, which incidentally, is a continuous process one latest from to enter in to the Indian financial system is credit card.

Benefits of credit cards –

1. To the Banker :

For the issuing banker credit card means an opportunity of making good Profit between the date of payment to business establishment and date of realization of the amount from the card holder period of 30 to 45 days is required.

2. To the member Establishment :

- i) Their sales increase and so do their profits.
- ii) They can sell goods on credit but not at their own risk.
- iii) Their payment is guaranteed by the issuing banker.

3. To the card – holder :

- i) Many banks allow withdrawals of cash against credit cards at any of their beaches.
- ii) In case of loss, the holder's liability is limited.

Debit Card:

Debit cards combine the function of ATM cards and Check. Debit cards are issued by banks but are used at stores, not at the banks themselves. When you pay with a debit cards, the money is

automatically deducted from your account. Debit cards, as we all know are very much in use in resent time. They have eliminated the need for carrying physical cash all around. Not only do they make transaction and paying easy in a matter of seconds ,but also, they are widely accepted.

Benefits of Debit Cards-

- Debit cards are extremely simple to use. Since the payment is deducted directly from your bank account a place where the money already exists, it can be done instantly.
- You pay your bill immediately, unlike when you use a credit card and get bill later.

Internet Banking: In Indian slowly but steadily, the Indian customer is moving to words internet banking a number of banks have either adopted internet banking on the threshold of adopting it. The banks started Internet banking initially with simple function such as getting information about interest rates, checking account balance and computing loan eligibility.

It was ICICI bank which initiated the electronic banking revolution in India when they introduced internet banking as early as 1997 under the HDFC in sept.1999. Global trust bank etc. as estimated 4.6 million Indian Internet users are banking through internet. This figure is expected to reach around 16 million by 2007-08.

SWIFT (society for worldwide interbank financial telecommunication :

SWIFT is the global financial community's foremost messaging infrastructure that is lowest risk and highest flexibility. SWIFT'S mission is to become a worldwide community of financial institution whose purpose is to be the leader in communication solution enabling inter-

operability between its members, their market infrastructure and their end-user community. In 2003 SWIFT had revenue of EUR 57 million and had assets worth EUR 413 million and had 1708 employees. It has reached 2 billion message marks. The growth rate in message traffic is 16.69%. It covers over 200 countries and the live users are over 7500.

RTGS – Real time gross settlement:

RTGS system was introduced in India on 26th march, 2004. RTGS system is a comprehensive and secured online payment mechanism.

Under RTGS system is interbank payment instruction are processed throughout the day, on transaction- by transaction basis. RTGS system was set up, operated and managed by Reserve Bank of India (RBI).

Benefits-

- a) For minimizing the cost of transfer of funds
- b) For reducing the risk of transfer of funds
- c) For providing liquidity to the beneficiary.

Digital Payments:

Large value credit transfers through RTGS dominated the overall payments landscape in the year 2019-20, according for 80.8% of the total value of digital transaction. In terms of volume however, credit transfer via multiple channels such as a unified Payments Interface (UPI), National Electronic Funds Transfer (NEFT) and Immediate Payment Service (IMPS) were the leaders. In case of card payments, the value of card transaction registered a growth of 35.6 % against 21.1% for credit cards.

Table No-2, Digital Payments

	Volume(Lakh)			Value(crore)		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
1. Large Value Credit Transfers – RTGS	1244	1,366	1,507	11,67,12,478	13,56,88,187	13,11,56,475
2. Credit Transfers	58,793	1,18,750	2,06,661	1,88,14,287	2,60,97,655	2,85,72,100
2.1 AePS	6	11	10	300	501	469
2.2 APBS	12,980	15,032	16,805	55,949	86,734	99,448
2.3 ECS Cr	61	54	18	11,864	13,235	5,145
2.4 IMPS	10,098	17,529	25,792	8,92,498	15,90,257	23,37,541
2.5 NACH Cr	7,031	9,021	11,406	5,20,992	7,36,349	10,52,187
2.6 NEFT	19,464	23,189	27,445	1,72,22,852	2,27,93,608	2,29,45,580
2.7 UPI	9,152	53,915	1,25,186	1,09,832	8,76,971	21,31,730
3. Debit Transfers and Direct Debits	3,788	6,382	8,957	3,99,300	6,56,232	8,26,036
3.1 BHIM Aadhaar Pay	20	68	91	78	815	1303
3.2 ECS Dr	15	9	1	972	1260	39
3.3 NACH Dr	3,738	6,299	8,768	3,98,211	6,54,138	8,24,491
3.4 NETC	15	6	97	39	20	203
4. Card Payments	47,486	61,769	73,012	9,19,035	11,96,888	15,35,765
4.1 Credit Cards	14,052	17,626	21,773	4,58,965	6,03,413	7,30,895
4.2 Debit Cards	33,434	44,143	51,239	4,60,070	5,93,475	8,04,870
5. Prepaid Payments Instruments	34,591	46,072	53,318	1,41,634	2,13,323	2,15,558
Total Digital Payments(1+2+3+4+5)	1,45,902	2,34,339	3,43,456	13,69,86,734	16,38,52,286	16,23,05,934

Source- RBI Bulletin

The table clear that, India is in progressive step in terms of using Digital Payments . RTGS has made digital payments of Rs. 11,67,12,478 crore in 2017-18, while it has increased to Rs. 13,11,56,475 crore in 2019-20. In the last three years the valume of Total Digital Payments of RTGS , Credit Transfers ,Debit Transfer and Direct Debits, Cards Payments, Prepaid Payments Instruments in 2017-18 it was 1,45,902 , in 2018-19 it was 2,34,339 and 2019-20 it was 3,43,456 lakhs . Similarly in last three years the volume of Digital Payments is 2017-18 it was

13,69,86,734 , 2018-19 it was 16,38,52,286 and 2019-20 it was 16,23,05,934 crore respectively.

Conclusion:

The banking industry is now a very mature one and banks being forced to change rapidly as a result of open market forces such as threat of competition, customer demand, and technological innovation such as growth of internet banking. If banks have to retain their competitiveness, they must focus on customer retention and relationship management upgrade and offer integration and value added services.

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Cultural Gems in the Fictions of Chinua Achebe and Mulk Raj Anand Dr. Dnyaneshwar Kisan Satbhai

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Abstract: The present research paper focuses on the interrelationship and interconnection between Culture and Literature, features, and the influential role of culture in literary creations; literature offers a platform to expose the conscious and subconscious thoughts, feelings and ideas. Cultural sense constantly exists in the mind of every individual, and intentionally or unintentionally the cultural doctrine of the artist peeps through his artistic creations, sometimes to express his inner voice and sometimes to communicate about his community. In the case of Achebe and Anand, literature has become a strong gizmo through which they have promoted their cultures and traditions, and attested the fact that their societies are not uncivilized, but possess an ancient cultural heritage. Their fictions illustrate that Nigeria and India have gracious and superior ethnic values.

Key Words: Multifaceted, Phenomena, Multidimensional, Ethos, Illustrate Essence, Polytheistic, Polygamy, Nurture, Ethically, Assault.

Introduction:

In the history of human civilization, culture and literature have been playing a substantial role. They are interrelated and interconnected; the former is multidimensional and multifaceted social phenomena and the latter incorporates artistic, factual, imaginative creations and recreations. According to E. B. Tylor, "Culture is that complex whole which includes knowledge belief, art, moral, law, custom and of any other capabilities acquired by man as a member of society"¹ He considers that culture is complex concept and the member of the particular culture has to adopt certain codes and norms. Cooley, Argell & Carr in their book, *Introductory Sociology*, discuss about culture in detail. They define culture as:

Culture is the entire accumulation of artificial object, conditions, tools, techniques, ideas, symbols and behaviour patterns peculiar to a group of people possessing a certain consistency of its own and capable of transmission from one generation to another.²

The above definitions point out that culture has some unique features, such as, it is shared by all the members of the society, it is not in born or innate, it is learned and acquired, the elements of culture are interrelated and constitute a complex whole; culture is transmitted from one generation to another generation, it is materialistic as well as non-materialistic; it is something like a chair, a fan or a car and abstract like belief or superstition. Culture is not static; it has the quality of adaptability. The formation and continuity of culture is not depending on any one individually, and it is collected ethos of the society. It is a social system of

common heritage, and it is integral part of the society. The culture of people is revealed in their beliefs, rituals, festivals, customs, traditions, symbols, norms, values dresses, food, works, languages and other actives.

Literature, as an art form includes fiction, non-fiction drama, and poetry, in which language is used as a medium to design an image to depict cultural life, as well as the perspectives of the author; culture is the source for literary creations. Chinua Achebe and Mulk Raj Anand have used literature, especially novels as a device to illustrate cultural dignity of their societies. Achebe, considering himself as the spokesman of Igbo clan, has presented the cultural identity along with the colonial confrontation and Anand has attempted to display the cultural essence and ethical ethos of the Indian life.

Truly outstanding in his literary achievements, Chinua Achebe exhibits a portrait of the past and present of African society. It is his conscious endeavor to present the African sensibility and atmosphere, because he realized that only an African can tell about Africanness, he states, "...the story we had to tell could not be told for us by anyone else no matter how gifted or well-intentioned."³ According to him the western world needs to know real Africa, he thought it is extremely important to set right the deeply embedded misconceptions about the African people. Through his novels he has tried to display "...that there nothing disgraceful about the African weather, that the palm tree is equally fit subject for poetry."⁴ It shows that Achebe has certain aims and aspirations in writing the novels; the culture of the Igbo clan has played a vital role in quenching his thirst of showing the identity of real Africans.

Similarly, Mulk Raj Ananda an Indian novelist, has revealed exceptional insight in interpreting the Indian socio-cultural life, his novels are the authentic documentation of the pains and pleasure of humanity. He too has a purpose, literature for him is also not for entertainment but to manifest the cultural values along with the agonies imposed on the deprived and oppressed class in India. He considered literature as an instrument, and through it, he has presented the galleries of realistic pictures of Indian ethical and cultural life of Indians. He says, "I have always considered literature and art as the instrument of humanism."⁵ He firmly believes:

... that only in fiction, which is the transformation, through the imagination, of concrete life, in words, sounds and vibrations, one may probe into the many layers of human consciousness with various phases... the writer can evolve an organic pattern, showing the efforts of human being to grow...⁶

Both Achebe and Anand have looked at literature as the cosmic canvas on which they have tried to interpret socio-cultural, political, spiritual, and economical aspects of Africa and India. In the present research paper the research scholar has selected Achebe's *Things Fall Apart* and Anand's *Two Leaves and a Bud* to illustrate the role of culture in literature, especially in the novels.

Things Fall Apart (1958), the masterpiece of Achebe illustrates the fact that culture is an inseparable segment of literature; the novel mirrors the cultural identity of the people through the multidimensional panorama of the Igbo society. It shows that Igbo society has great cultural past to boast of, like any other ancient civilization of the world. Umuofia, the village described in the novel represents Nigeria, is held together by network of relationships, with a common recognition, much stronger than any European civilization, the misinterpretation of African society by the western writers is appropriately countered in the novel. Okonkwo, the protagonist of the novel exemplifies that they are not barbarians and inhuman, on the contrary they are tender and compassionate at heart it is revealed in the case of Ikemefuna, a hostage boy. Traditionally, the Igbo community is male dominated, so Okonkwo sticks to its norms, codes and conducts, being famous for wrestling and for masculine qualities and having deeply rooted feeling of fear to show tender and female qualities can't stop himself from showing love for Ikemefuna, as the custom he kills Ikemefuna,

but being a human he is deeply disturbed. Achebe writes,

Okonkwo did not taste food for two days after the death... he did not sleep at night. He tried to think about Ikemefuna, but the more he tried the more he thought about him... But he was so weak that his legs could hardly carry him... a cold shiver descended on his head and spread down his body.⁷

The man of heroic qualities and afraid of nothing falls apart after doing a cruel act, it is the sign of well-developed civilization. The way of treating the guest also shows the reality that the community is cultured and well-mannered. When guest arrive to the Okonkwo's Obi he offers them traditional kola nuts and palm wine. He has great respects for his clan brother, he firmly believes in the principles of ancestors. He says, "As our people say. A man who pays respect to the great paves the way for his own greatness. I have come to you pay my respect."⁸ The respect for elders and ancestors is the notable feature of the Igbo culture and Achebe has demonstrated it throughout the novel.

Achebe shows that the Igbo community assigns key role to the women for instance, women painted the houses of the Egwugwu, the goddess, They are primary educator of children, through strong telling and behaviour, inspiring in them the curiosity about social values, relationships and the human conditions, the stories the women narrate also develop the artistic consciousness of the children in addition to entertain them. Furthermore the first wife of a man in the Igbo society is paid some respect. It is illustrated in the palm wine ceremony at Nwakibie's Obi, Anasi, Nwakibie's first wife had not yet arrived and the other wives did not drink still her arrival.

The position of the woman in the community is exposed at the time of exile of Okonkwo; the motherland is respected more than the fatherland in Igbo society. At the arrival of Okonkwo to his motherland, Okonkwo's uncle Uchendu noting Okonkwo's distress, eloquently explains the supremacy of mother. He says: A man belongs to his fatherland and not to his motherland. And yet we say Nneka- "mother is supreme. Why is that? It is true that a child belongs to its father but when a father beats his child it seeks sympathy in its mother's hut. A man belongs to his fatherland when things are good and life is sweet. But when there is sorrow and bitterness he finds refuge in his motherland. Your mother is there to perfect you and that is why we say that mother is supreme"⁹

The religious practices are the unified component of Igbo culture, Achebe has discussed in detail about the polytheistic religion practiced in Igbo culture, the Igbo people have different deities such as *Chukwu*, the supreme god, *Agbala*, the god of the future, *Ani*, the goddess of the earth and harvest, spirits and the ancestors, and they also have the concept of *Chi* which refers personal gods, the Igbos have polygamy system, it was considered a sign of prosperity of the man, a man with multiple wives is supposed to be successful, Okonkwo has three wives, in marriage is regarded a sacred union of two families, it is done with certain traditions and customs, such as giving the bride price from the side of the girl to the groom's family. They use bundles of broomsticks to negotiate the bride price. Farming is another aspect of in Igbo society, *Yams* is the main crop taken by the Igbos, it is brought in the compound after harvesting, if it excessive, it also sold in the market, they celebrate the "Week of Peace" in respect to the earth goddess, during the week Igbos visits their neighbors, they drink palm wine, sing folk- songs, and dance on the beating of traditional drums.

The place of woman in Igbo culture is not secondary. The saying, 'mother is supreme', by Unchendu to Okonkwo is the evidence that they bestow the great honour on a woman. The eldest wife is the head of women folk and have authority is exhibited in their custom of permitting her to wear the anklets of her husband's titles. Anasi, the eldest wife of Nakibie, is called by her husband and given a horn of palm wine before the others have their turn, in consideration of women's place in Igbo society, Michel Faber states. Women never saw themselves as secondary of inferior in traditional Ibo society. They were different that is all... in fact, when a man died, he was taken to his mother's people to be buried, that showed the importance of mother and woman. Also on the economic level the market has always been there for the women to make money and they had grown in importance. In traditional Ibo society the wife was economically independent.¹⁰

Anand's *Two Leaves and a Bud* is an artistic work, it mainly deals with the widening gap between the haves and have-nots, the rulers and the ruled, the owners and the workers, but along with the clash between the two classes, from the perspectives of British the Indians are not civilized. The novelist states, "as compared with their masters the, Indians were shocking barbarians in point of intellect and civilization."

¹¹Anand has insisted on the need for values, the civilizing values which nurture an enlightened and humane society. The novel presents the cultural supremacy of Indian society. He has shown that morally and ethically the Indians are far better than the British. Gangu a Panjabi farmer, along with his wife Sajani, his daughter and son Laila and Buddhu enlists as a worker in the Assam tea plantations. As the laborer, he is exploited and harassed by the colonizers, but he struggles to keep his family intact, Anand suggest that nothing the so precious than the family and the dignity of family members in the Indian culture,

The marriage is not just a formality; it is the amalgamation of two souls, husband and wife are the two wheels of the chariot of the home, in Indian society marriage is blessed and sacred union, Gangu is not only the husband of Sajani, he is "companion of her life and death."¹² She decides to help her husband in every situation of life; her family is above all, she cares for her daughter and son, when Sajani is on death bed, her mind is haunted by the cares for the daughter's marriage, and even after her death, Leila's mind is haunted by the memories of her mother, Gangu, as a true companion, "wept bitterly...he sat choked and convulsed by the agony, the intense misery, the utter helplessness of his despair."¹³ It shows that the family members are so intimate and connected to each other and they can go to any extent to help each other, it found only in the civilized community. Anand has pointed out that the head of the family can sacrifice everything to save the dignity and the ethics of the woman in India, and Gangu is the best example of it, Ruggie Hunt is fascinated to the beauty of Laila and he is after her like a hunter behind a bird, though Gangu is helpless and poor but he sacrifices himself to prevent the virginity of his daughter. Anand deliberately reveals this virtuous side of Indian society; he indirectly suggests that the British man may consider superior "because of his clothes, respected for his knowledge and admired for his personal qualities"¹⁴ but culturally, virtually and morally Indians are far superior to them.

Anand has demonstrated the cultural greatness of Indian people. The European officers also accepted the fact that Indian people have great sense of manners, but they do not admire it, on the contrary they ridicule it. Indians give great respect to the quests, the quests are considered as the gods. They are respected and the Indians are so hospitable to their quests, but the British officers like De La Harve thinks that

the Indians are stupid, because they are hospitable. He says, "These Indians are bloody fools, they are so hospitable, they let themselves be robbed... Shah Jehan's daughter is ill. An English doctor attends her. The Emperor gives away valuable forts in reward."¹⁵ actually, it is the age old custom of Indian people to treat the guest as if he is a god. Anand has unfolded the glorious sides of Indians in his fictions. His Indian upbringing and familiarity with Indian rich cultural heritage has given him the opportunity to write about his own people so authentically. His knowledge of western philosophy and life style has enabled him to present the variations between Indian culture and British culture, the values and norms of two countries. While presenting Indian culture as suppressed by British people, Anand throws light on Indian family values. He talks about the glorious side of Indian cultural norms. The home in Indian culture is not the building of four walls, it is much more than that, it is a place of love and comfort, and it is a protection place for women. She gives solace and strength to all the family members, all the family members wait for each other to dine together. These qualities are not found in the European homes. Anand gives importance to the family. It is true that women are more liberal in European families, Maya is also aware of this fact, those women choose their men freely in Vilayat, but Lalu thinks that if he would allow her to think and behave like British women the family set up of his life will be no more.

Both Achebe and Anand have considered literary writing as a mission to stimulate the masses to esteem the indigenous cultural gems and present the panorama of their ancient and proud cultural immensity to those who discredited and disgraced it, they successfully and strategically developed the thematic content to convey the message that Africa and India have great historical, spiritual and cultural roots, which are deeply imbedded and still survived even after the several assaults of the outsiders.

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Opportunities after Covid in vegetables marketing

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Abstract- India is an agricultural country. Farmers in India mainly give priority to agriculture. Every farmer supports his family from the income from agriculture. Especially after the corona epidemic, leafy vegetables have become very important. A diet of leafy vegetables is very important for every person to have a good life. Farmers get a good income from the production of leafy vegetables, fruit vegetables and tuber vegetables. After covid, many opportunities are seen for the leafy vegetable business. Every person in the society, from children to the elderly, consumes leafy vegetables in their diet. Our country has a tradition of agriculture. Farmers grow a variety of crops. Farmers mainly focus on the production of leafy vegetables and fruits. This agricultural product provides cash to the farmers. The farmer is the king of all of us in the country. Only if the farmer survives can the country run smoothly. The farmer works hard to produce leafy vegetables and fruits and vegetables. Many factors in society depend on agricultural production. Agriculture generates a lot of employment. All agricultural products come in essential services. This means that you need vegetables every day. That is why the researcher has chosen to research this subject. Farmers can get higher yields in agriculture if they get good online tools.

Introduction -

India is an agricultural country. Farmers in India mainly give priority to agriculture. Every farmer supports his family from the income from agriculture. Especially after the corona epidemic, leafy vegetables have become very important. A diet of leafy vegetables is very important for every person to have a good life. Farmers get a good income from the production of leafy vegetables, fruit vegetables and tuber vegetables. After covid, many opportunities are seen for the leafy vegetable business. Every person in the society, from children to the elderly, consumes leafy vegetables in their diet. India is an agricultural country. Agriculture is the backbone of our country's economy. Good livelihood can be achieved by selling leafy vegetables, fruits and tubers. Mainly farmers are growing different crops. Changes are made in the production of vegetables as per the market demand. Everyone in the society is a consumer of agricultural products. If enough water is available, farmers can produce better. Farmers are determined to overcome any challenge.

Keywords- e-commerce, e-banking etc.

Objectives-

1. To study the concept of vegetables.
2. To study the types of vegetables.
3. To study the Importance of vegetables marketing.
4. To study the opportunities in vegetables marketing.

Research Methodology- The present study is based on secondary source of data. Secondary data is collected through various books, Journals, Websites and Internet. For the

collection of primary data the researcher has paid visit to market committees (Secretary), farmers and agents. It is after having detailed discussion the present data is collected.

Data collection:

1. Primary Data:

For the collection of primary data the researcher has paid visit to market committees (Secretary), farmers and agent's. It is after having detailed discussion the present data is collected.

2. Secondary Data:

The secondary data is derived from the following sources:

1. Books
2. Magazines
3. Journals
4. News paper

Concept- The word vegetable refers the dictionary meaning, a plant or part of plant which is eaten as food.

Types of vegetables -

- a) **Leafy vegetable** - broad beans, spinach, Fenugreek, Dill leaves, Safflower, cluster beans, bell paper etc.
- b) **A root vegetable** - a potato, carrot, Sweet potato, onion, Garlic, ginger etc.
- c) **A fruit vegetable-** Bringel, Green peas, flower, Tomato, Pumpkin, Drum sticks, Ribbed gourd, Capsicum, Green chilies, Cabbage etc.

(Oxford advanced learners dictionary, Jonathan couter oxford university press 1995)

Marketing Concept: Marketing doesn't mean only buying and purchasing the things. The concept has a broad meaning. It deal with the needs of the people, consumer, marketing is to

satisfy human the needs. Whenever a consumer goes to markets, he seeks the advantage behind the product. It can be well explained with the example. When a consumer wants to buy a facial cream, he doesn't need only a cream at all, he wants a fairness that's why he tends to buy a cream. Thus marketing doesn't remain in that limited contextual background. Traditional market was a physical place where buyers and sellers together exchange goods.

Importance of leafy vegetables:

1. **Leafy vegetables provide vitamins-** Consuming leafy vegetables in daily diet helps to get a lot of vitamins. The vitamin reduces the incidence of illness. From very young children to the elderly, everyone consumes leafy vegetables to help them stay healthy.
2. **Eating leafy vegetables improves health-** Consuming green vegetables in daily diet helps in improving health. Leafy vegetables contribute a lot to increase immunity in the body. In the current scenario, there is a huge demand for organic leafy vegetables and fruits.
3. **Suitable for dieting-** Mainly people who want to balance their body weight do diet. Leafy vegetables and fruit vegetables are consumed for diet. Leafy vegetables are important in every person's diet. Eating leafy greens helps boost your immunity. Doctors advise many people to eat leafy vegetables.
4. **Cash and Carry transaction-** Sale of leafy vegetables and fruit vegetables helps the farmers to get cash from daily transactions. The daily income from the sale of leafy vegetables helps a lot to support the family. Selling fruits and vegetables, mainly leafy vegetables, is considered a major source of livelihood.

Opportunities in vegetables marketing:

1. Buying and selling of leafy vegetables, fruits and agricultural products is highly profitable. This method of buying and selling is considered to be very important mainly for subsistence.
2. Leafy vegetables, fruits and all agricultural products come in essential services. There is no other option. Which means it's about to be the most delusional time of the year, as well.
3. Everyone in the community is a consumer of this product. Taking good products using organic fertilizers will create an opportunity to make good profits.

4. Vegetables are considered to be a very important part of the daily diet. There is a lot of demand for these products every day.
5. Good products make you dominant in the market. Quality products create opportunities to export agricultural products.
6. Collective farming by farmers will enable them to supply to the consumers as per their demand. The product can be supplied in less time, at lower cost.
7. There will be a lot of opportunities for agriculture in the future. Good demand for the product and good quality of the product will make it possible to get a definite advantage.
8. It will be possible to easily compete if the products are manufactured according to the changing market conditions.
9. Currently, chemical-free agricultural products are in high demand. It will be possible to get more benefits if all the people cultivate collectively.
10. It is possible to buy vegetable products with very little capital. That is, it is possible to make a profit in the least amount of capital.

Conclusions-

The purchase and sale of leafy vegetables, fruits and agricultural products has the potential for maximum financial gain. There are going to be a lot of opportunities in this farming sector in the future. It is possible to survive in the competition by farming with the help of new modern tools. It is important to make the right decision considering the market opportunities and demand. Agriculture is playing an important role in the development of our country. Agriculture definitely benefits from employment, imports, exports and the right investment. There is a risk in buying and selling leafy vegetables but there is also a definite benefit. The right decision ability is needed.

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A Geographical Study of Occupational Structure in Beed District (M.S)

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Abstract:

Occupational structure is major indicators of socio economic development of the any nation. Its varied in and under developed, developing and developed countries in the world. The study of economic development of the people remains incomplete short of its reference to the occupational structure of a population. The aim of the present study is to study and examined occupational structure in the Beed district. Present work is based on the secondary data. According to 2011 census data the proportion of working population of the Beed district was 48.57 percent, most the people engaged in agriculture sector.

Keywords: Work, Worker, Occupation, Labor.

Introduction:

Occupational structure is also known as relatively continuous pattern of the activities that affords workers a livelihood and define their general social status. (Sills, 1968, P. 245). Proportion of persons involved in different types of occupations is a significant economic aspect of population. Occupations are grouped in to three classes viz. i) primary ii) secondary and iii) Tertiary Work has defined as participation in any economically activity with or without compensation, wages or profit. Such participation may be physical or mental in nature. Work involves not only actual work but also includes effective supervision and direction of work. (General Economic Tables, part III, census of India.). India census has classified occupation by four categorized by based on economic activity these are Cultivators, Agriculture labor, household industrial workers and other workers. India is a rural nation of the

Study Area:

Beed district is located in the middle part of Maharashtra state and extend between 18°27' and 19°27' north latitudes and 74° 49' and 76°44' east longitudes. The east-west distance of Beed district is 268 kms and 127 Km width of the north to south district. Total Geographical area of the district was 10693 sq. kms. and share 3.5 percent area of the Maharashtra state and 19.20 percent area of the Marathwada region. According to the 2011 census figure the total population of Beed district was 2585049 in which total population 1349106 are males and 1235943 are female.

Proportion of Working Population

Occupational structure is major indicators of socio economic development of the any nation. Its varied in and under developed, developing and developed countries in the world. The study of economic development of the people remains incomplete short of its reference to the occupational structure of a population.

world most of the people live in rural area and practiced agriculture; hence agriculture is a major economic activity and more than 70 percent people engaged in agriculture sector.

Objective of the study:

- To study and examined occupation structure in the Beed district.
- To study the working structure based on major economic activity in the Beed district.

Database and Methodology:

The present study is based Secondary data. The secondary data has been collected from numerous sources which includes both published and unpublished books, government and private publications. District census handbook, district statistical department, socio economic review and district statistical abstract of Beed district. Collected data is processed and presented in the form of tabular and graphical method.

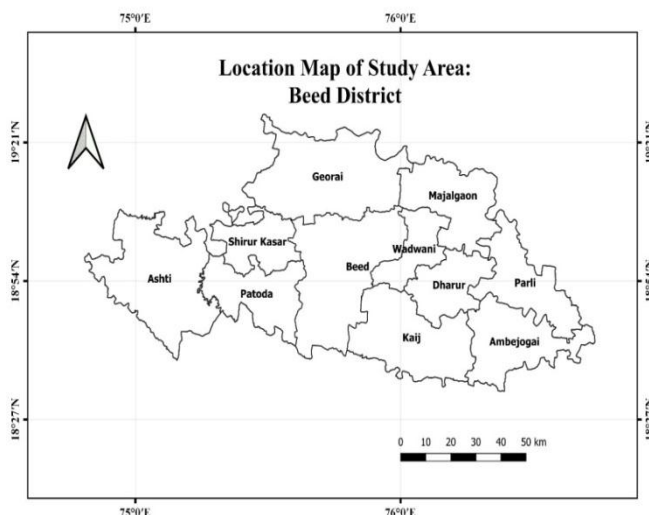


Table No. 1. Shows the occupational structure of the Beed district. According to 2011 census data the proportion of working population of the study region was 48.57 percent it means more than 50 percent peoples are non-workers.

Table No. 1. Occupational Structure of Beed District: 2011

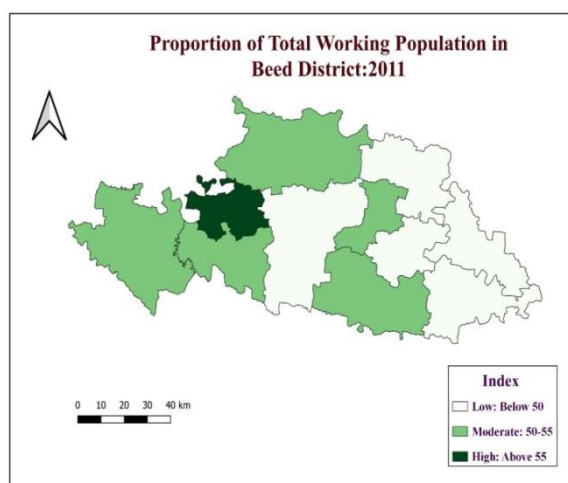
Tahsil	Total Worker	Cultivators	Agricultural Labor	Household Industrial Workers	Other workers
Ashti	54.38	67.04	19.57	1.44	11.95
Patoda	53.89	63.7	24.41	1.26	10.64
Shirur (Kasar)	55.48	65.97	23.52	1.45	9.05
Georai	53.03	55.21	30.73	1.71	12.34
Manjelgaon	48.52	35.99	45.84	1.36	16.81
Wadwani	51.25	48.74	35.88	1.72	13.66
Beed	43.72	41.24	20.5	1.82	36.44
Kaij	50.53	53.76	31.06	1.95	13.23
Dharur	49.03	41.71	42.05	2.04	14.21
Parli	43.28	33.64	32.23	1.99	32.34
Ambejogai	43.37	35.59	33.39	1.56	29.25
Total District	48.57	48.29	29.74	1.68	20.28

Source: *Census Handbook Beed District 2011*

At tahsil level the total working population of the study region was not uniformly distributed. The highest working population was observed in Shirur tahsil with 55.48 percent and lowest working population was observed in Parli tahsil. Ashti, Patoda, Shirur, Georai, Wadvani, Kaij and Dharura tahsil recorded above the district average working population while remaining district was recorded below the district average working population. Where the agriculture is a major activity and most of the people engaged in agricultural activity their working population recorded high.

Occupation Structure Based on Major Economic Activity

Working population of Beed district have been classified in four economic categories these are cultivators, agriculture labor, household industrial workers and other workers. The proportion of cultivators, agricultural labor, household industrial workers and other workers were diversely distributed in the study region. Most of the workers engaged in agriculture sector than the other sectors. In year 2011, the proportion of cultivators in the study region was 48.29 percent, highest cultivators was found in Ashti (67.04) and lowest in Parli tahsil (33.64), for the reason that it is an urban area and maximum people involved in other economic activity. Ashti, Patoda, Shirur, Georai, Kaij, and Wadwani tahsil recorded above the regional average cultivators while other tahsils were recorded below the regional average. Agriculture labors is a second most economic activity of study region. According to 2011 census data, the proportion of agriculture labor was 29.74 percent, Highest agricultural labor was found in Majlagaon tahsil and lowest was found in Parli Tahsil and North Solapur tahsil. Household industry is defined as an industry conducted by one or more members of the household at home



or within the rural areas and only within the precincts of the house where the household lives in urban areas (Census of India). In 2011 about 1.69 percent workers was engaged in household industrial sectors. The high house hold workers found in Dharur tahsil followed by Parli and Beed tahsil while, low household industrial was recorded in Patoda and Ashti tahsil. The proportion of other workers in the Beed district was 20.28 percent in 2011. It is a third largest economic sectors of the district. Highest other workers observed in North Parli tahsil followed by Beed and Ambejogai tahsil 2011 census year, due to most of the other workers are found in urban areas than the rural area and Parli Beed and Ambejogai has more urbanized.

Conclusion:

The proportion of total working population of the study region was 48.57 percent. Agriculture is a major economic activity of the district with more than 80 percent peoples engaged in agriculture sectors. Where the agriculture is dominant economic activity their working

population recorded high. Household industrial workers share less account with 1.68 percent and other sectors was 20.28 percent. Agricultural population was recorded high in Ashti, Patoda and Shirur tahsil while high other sectors workers was found in Parli, Beed and Ambejogai tahsil due to growing market centers and Industrial development in urban city.

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Gender Gap in Literacy- A Case Study of Malda, West Bengal

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Abstract

The gender gap in education has evoked from several social and cultural beliefs pertinent to a region and results in huge differences in economic spin offs of that region. The study area is chosen to be Malda, a very prominent and rich in heritage district of the state of West Bengal. The major objectives of the study are to find out the disparity in literacy rate and availability of education among the males and females of the region. This consisted of the collection of secondary data and information from various sources. The study depicts that literacy rate is overall low in the concerned district with a huge gap in literacy between male and female. The disparity in male-female population of the blocks is calculated by means of Sopher Index and the fifteen CD Blocks of the region are divided into high, low and medium disparity zones. High disparity in literacy among male and female is found in the CD Blocks of Bamangola, Habibpur, Manikchak, Kaliachak III, Gazole, Harishchandrapur I. Several contributing factors have been identified and measures have been suggested likewise. Though several schemes have been initiated by both the Central and State Governments, yet the goodness is far from being reached to every household. Education of women plays a pivotal role in women empowerment and narrowing gender gap. Thus, corrective decisions are to be taken for the overall collective growth of the nation which requires to learn about the participation of males and females in the economy.

Keywords: gender gap, literacy, disparity, corrective measures, awareness.

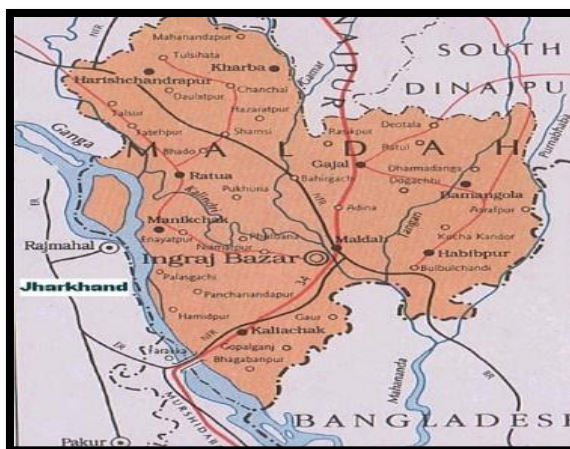
Introduction

The popular definition of literacy in the mainstream dictionaries has been the ability to read and write. However, this traditional concept has changed at contemporary times when the word is used to embrace a wide range of perceptions associated with the thought process manifested by this ability. The conventional concept of literacy is bounded by the skills of reading, writing and learning. But communication in an increasingly digital, text-mediated, information-rich and fast-changing world. Yet, in most parts of the world, the discrepancy remains on the attainment of education between males and females. The gender gap in education has

evoked from several social and cultural beliefs pertinent to a region and results in huge differences in economic spin offs of that region.

Study Area

Malda, being a very prominent district of the state of West Bengal, covers an area of 3733 square kilometres. It is bounded to the north by Uttar Dinajpur, to the south by Murshidabad, Bangladesh to the east and Jharkhand in the west. Malda shares an international border with Bangladesh and is the entry point of Siliguri from south Bengal- thus it has a central position in the state. The district has a rich heritage and history and is a popular tourist destination as well.



Source: Internet

Materials and Methods

This consisted of the collection of secondary data and information from various sources. Secondary data was collected from Census reports, District Handbooks, journal, websites and books. The disparity in education is calculated by Sopher's Index (1974):

$$\text{Sopher's Disparity Index} = D = \log(X_2 / X_1) + \log\{(100 - X_1) / (100 - X_2)\}$$

Objective of the Study

The major objectives of the study are-

- To identify the gender gap in literacy in the CD Blocks of Malda
- To assess the quantitative aspect of it
- To identify the contributing factors
- To suggest measures for improvement of the situation

The Gender Gap in Literacy

Malda district is composed of fifteen CD Blocks which fall under the two sub divisions of the district: Malda Sadar and Chanchal. Nine CD Blocks, namely, Gazole, Bamangola, Habibpur, Old Malda, English Bazar, Manikchak, Kaliachak-I, Kaliachak-II and Kaliachak-III fall under Malda Sadar. Six CD Blocks are under the Chanchal sub division, namely, Harishchandrapur-I, Harishchandrapur-II, Chanchal-I, Chanchal-II, Ratua-I and Ratua-II. Eight of the CD Blocks are having urban population while others only constitute of rural population. According to the Census 2011, the literacy rate in the district is 61.73 with a gender gap of 9.68. male literacy rate is 66.24 and female literacy rate is 56.96 in the district.

Table 1: Literacy Rate and Gender Gap in Male and Female Literates

Sl No	CD Block	Male Literacy Rate (%)	Female Literacy Rate (%)	Literacy Gap
1	Harishchandrapur I	57.37	47.21	10.16
2	Harishchandrapur II	57.21	51.23	5.98
3	Chanchal I	68.39	60.85	7.54
4	Chanchal II	59.97	54.66	5.31
5	Ratua I	64.17	55.81	8.36
6	Ratua II	58.31	53.98	4.33
7	Gazole	69.00	55.03	13.97
8	Bamangola	75.52	60.20	15.32
9	Habibpur	64.05	47.35	16.70
10	Malda Old	63.65	51.83	11.82
11	Englishbazar	67.21	59.10	8.11
12	Manikchak	64.18	50.89	13.29
13	Kaliachak I	66.71	60.20	6.51
14	Kaliachak II	69.86	60.13	9.73
15	Kaliachak III	59.54	47.61	11.93

Source: District Census Handbook, Malda, 2011

The table depicts that literacy rate is overall low in the concerned district with a huge gap in literacy between male and female. Kaliachak II records the highest male literacy of 69.86 and Chanchal I records the highest female literacy of 60.85. The lowest literacy rates of male are observed in Harishchandrapur II (57.21) and that of females are observed in Harishchandrapur I (47.21). the gender gap in

literacy is pronounced in Habibpur (16.70) followed by Bamangola (15.32) and Gazole (13.97).

The Disparity Index

The disparity in male-female population of the blocks is calculated by means of Sopher Index. This shows the regions where disparity is quite prominent in relation to other blocks of the district.

Table 2: Disparity in Literate Population by Sopher Index

Sl No	CD Blocks	Male Literates (%)	Female Literates (%)	A=Log(X ₂ /X ₁)	B=Log(100-X ₁ /100-X ₂)	S.I (A+B)
1	Harishchandrapur I	57.37	47.21	0.085	0.085	0.17
2	Harishchandrapur II	57.21	51.23	0.047	0.047	0.094
3	Chanchal I	68.39	60.85	0.051	0.051	0.102
4	Chanchal II	59.97	54.66	0.040	0.040	0.08
5	Ratua I	64.17	55.81	0.060	0.060	0.12

6	Ratua II	58.31	53.98	0.033	0.033	0.066
7	Gazole	69.00	55.03	0.098	0.098	0.196
8	Bamangola	75.52	60.20	0.098	0.098	0.196
9	Habibpur	64.05	47.35	0.131	0.131	0.262
10	Malda Old	63.65	51.83	0.089	0.089	0.178
11	Englishbazar	67.21	59.10	0.056	0.056	0.112
12	Manikchak	64.18	50.89	0.100	0.100	0.20
13	Kaliachak I	66.71	60.20	0.045	0.045	0.09
14	Kaliachak II	69.86	60.13	0.065	0.065	0.13
15	Kaliachak III	59.54	47.61	0.097	0.097	0.194

Source: Computed by Author

High Disparity Zone: High disparity in literacy among male and female is found in the CD Blocks of Bamangola, Habibpur, Manikchak, Kaliachak III, Gazole, Harishchandrapur I.

Moderate Disparity Zone: Moderate disparity in educational status are mostly found in the blocks of Chanchal I, Ratua I, Old Malda, Kaliachak II, Englishbazar.

Low Disparity Zone: Low disparity of literacy is found in Harishchandrapur II, Ratua II, Kaliachak I, Chanchal II.

Factors Contributing to the Disparity

It has been a trend in most parts of our country that a huge disparity exists between the educational attainment of male and females. Malda is no exception. The causes are deep rooted in the society which is a patriarchal one. Girls are mostly moulded to do the household chores to be better suited for the roles of daughters, wives and mothers. Malda has a very high drop out rate of girls who discontinue education after attaining the primary or the secondary level. Added to this are the class bias, religious barriers in attainment of education and untouchability. In many of the blocks, the primary and secondary schools are nearby, but the college and universities are far away from the villages. The safety of the female students becomes a question which the families are not willing to bargain. Thus, the education attended by them mostly gets restricted to school level. Household income always has a direct correlation with education. Most of the BPL families are unable and unwilling to send their daughters to school. Muslims contribute nearly 51.27% of the population in Malda (2011). The religious beliefs of some households, in many cases, acts as a barrier for women to attain higher education. The highest status accorded to marriage and motherhood in many communities' impacts negatively on female participation in education. The presence of female teachers sometimes affects the attendance rate in schools for the girls. The families with certain cultural beliefs feel comfortable when female teachers are available in schools which the female

students are attending. More or less the students after dropping out from upper primary classes were helping the parents in earning the money, either by getting them involved in the agriculture or other activities to earn money.

Suggested Measures

Education means to spread the light of knowledge to every corner of the society. But Malda presents a gloomy picture of reality. Gender gap in education is a long-talked issue in this region. Though several attempts have been made by the Central and State governments, yet the disparity prevails. Certain measures can be undertaken to include female in the mainstream education system. Apart from the existing system, vocational training courses must be introduced in schools according to the student strengths to prevent the dropout rates. Several programmes have been initiated by the governments but a clear observation of the socio-economic background of the villages must be taken into account for implementation of these plans. For enhancing accessibility to school the content of the school curriculum must be strong. Moreover, communication and transport facilities must be taken care of. Adult education plays a pivotal role here. Educated parents will feel the urge to educate their children irrespective of the gender. Thus, adult education centres and community awareness schemes must be present in the villages. The cumulative effect of all these factors when properly implemented can bring about positive results in the transformation of the society.

Conclusion

Education of women plays a pivotal role in women empowerment and narrowing gender gap. The literacy picture in India and in more or less every state of it shows a scenario where females stagger behind men in education. The social and economic scenario of our patriarchal society does not boost or motivate women in most cases to complete higher education. A huge pool of human resource goes unidentified and unutilised in this way. In Malda, women are found to be economically poor. They are

discriminated and marginalised at every level of society whether it is economic participation, social participation, political participation, access to education and also reproductive healthcare. They need economic power to stand on their own with men. This primarily requires similar education trend with that of men. However, the literacy gap between the genders marks the gap between their empowerment status. Corrective decisions are to be taken for the overall collective growth of the nation which requires to learn about the participation of males and females in the economy. Education thus remains the basic tool for a woman to take life changing decisions for herself and the society.

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Representation of Fantasy in Salman Rushdie's *Luka and the Fire of Life*

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Abstract: Rushdie employs many rare and innovative techniques like fantasy, magical realism, time and space in terms of narrative and language. In general, it is observed that a novelist uses alternative characters to speak or act for themselves and by intrusively telling how they do these things. The novelist believes that the art of fiction does not begin until the novelist thinks of his story as a matter to be shown, to be so exhibited that it will tell itself. In *Luka and the Fire of Life* Rushdie adopts a number of supernatural elements. Magic is no longer quixotic madness. Realism functions as an objective, universal representation of natural and social realities. It functions ideologically, but less hegemonic ally of its program and is not centralizing but eccentric. It creates space for interaction of diversity. Magical realism could be seen as a significant international, contemporary literary mode. It is an important presence in the contemporary literary mode. Unlike mythical realism favoured by the west, it draws upon cultural modes and non-literary forms in their western novel form.

Key words: Arthashastra, Fantasy, Ogre, Magical realism, Supernatural elements

Introduction-

Salman Rushdie is hailed as a captivating novelist with startling imaginative and intellectual resources. There are many more reasons for the grand success of his novels. One of them is the unique style of his narrative technique. Rushdie employs many rare and innovative techniques like fantasy, magical realism, time and space in terms of narrative and language. In general, it is observed that a novelist uses alternative characters to speak or act for themselves and by intrusively telling how they do these things. The novelist believes that the art of fiction does not begin until the novelist thinks of his story as a matter to be shown, to be so exhibited that it will tell itself.

Critic Kathryn Hume's discussion of fantasy as a functional form reveals the power of fantasy in her book *Fantasy and Mimesis: Responses to Reality in Western Literature*:

Successful fantasy persuades us to consider the situation as it was possible. Or it persuades us to wish that the violation of consensus reality could take place. Or it suggests to us that a rich experience awaits us if we recognize the metaphoric ways in which the substitution or contradiction is true on a non literal level. (167)

The scope of Rushdie's allusions, images and vocabulary is overwhelming in its enormity. Jago Morrison, in the article "Imagining Nations: Salman Rushdie's Counter-Histories," is convinced that this allusion like that of the writer like Joyce is deliberate. "Excess and readily overload are attributes of Rushdie's aesthetic" (138). He feels that an informed reader and the ability to trace intertexts is a prerequisite to read

Rushdie. He interlaces with surplus of information. In the novel *Luka and the Fire of Life*, a thousand years ago, there was a curse by the Chinese that all dogs turned into pooches and pye-dogs. The dog kingdom became quick and bogs, they lost their sang power and can only bark. They lost their power and walk on four legs. " A thousand years old, it's true, But we were unmade by a Chinese curse, were turned into pooches and pye-dogs and a curs... (31). The word Arthashastra, is an ancient Indian treatise on statecraft. In the novel, it is mentioned to understand the Indian tradition and also there is a trust that all rules which are instructed in the book is followed by the people. Another character Bulbul Dev, the Ogre, in reality an Ogre is a legendary monster usually depicted as a large, hideous, manlike being that eats ordinary human beings.

Next episode is that the Respectorate of I, a city ruled by rats insisting on cultural relativism, which means the idea that a person's beliefs, values and practices should be understood based on that person's own culture, rather than be judged against the criteria of another. When Dog and Bear disable, Aag appears beside Nuthog, a shape-changer in the form of a dragon. It is a large creature that appears in the folklore of many cultures around the world. There is a strong belief about dragons, which vary according to region.

In the novel, Rushdie points out that, " The ancient gods of the North, the gods of Greece and Rome, the South American gods, and the gods of Sumeria and Egypt long ago" (127). The fact is that, in the magic world, myths are played as computer games. Romans are the lowest and

Egyptians are the highest. Almost the gods of Roman are borrowed from Greek myth. Rushdie has noted Coyote the next god, a figure of Native American legend, who distracts the gods to help Luka to steal the fire. "Luka squinted up into the sky. There she was, the Insultana, the Fairy Queen of the Otters, monarch of the skies, riding on King Solomon's Carpet"(82). The fairy queen or queen of the Fairies is a figure in Irish and British folklore, is believed to rule the fairies. Based on Shakespeare's influence in English speaking cultures, She is often named as Titania or Mab.

The Aztec, the deities from Mexico, is the god of the dead. He has a scary voice and he has received human sacrifices, the throat of the human being has cut and the blood has flown into the god. Luka is begged to stop praying to the Aztec god. Because while flying the god never help to get a life. Next Luka is flying over a phantasmagoric landscape there he hears the voice of Ozymandias, king of kings, in reality the king is arrogant and he has called himself as king. Next the sphinx a man with the hyena's body may destroy the house or temple. While moving they see the lion with a woman's head. Its duty is to stop the stranger and insist them to talk to her.

Rushdie's narrative is a retort to the process of the corridors of power. In order to show the reality, he engages with the knowledge and experience of the worlds. Magical realism is the literary form that encourages readers to suspend conventional definitions of reality and to enter a world where a boundary less imagination weaves its story. As Goonetilleke states, "Rushdie transforms biography into art"(67). Magical realism moves back and forth, between the dissimilar worlds of the real and the imaginary.

In *Luka and the Fire of Life* Rushdie adopts a number of supernatural elements. Magic is no longer quixotic madness. Realism functions as an objective, universal representation of natural and social realities. It functions ideologically, but less hegemonic ally of its program and is not centralizing but eccentric. It creates space for interaction of diversity. Magical realism could be seen as a significant international, contemporary literary mode. It is an important presence in the contemporary world. Unlike mythical realism favoured by the west, it draws upon cultural modes and non-literary forms in their western novel form. The novel is skillfully crafted, the bearer of a powerful and timeless message, and truly accessible to readers of all ages. The novel is an

accomplishment reminiscent of the act of a skilled juggler who keeps all balls suspended in the air as if by magic. So, it is not surprising that Rushdie's latest tale begins with a circus. When Captain Aag's Great Rings of Fire come to the city of Kahani, Rashid Khalifa refuses to take his family, citing the horrible mistreatment of the animals by the Grandmaster. After witnessing with his own eyes "a cage in which a mournful dog and a doleful bear stared wretchedly all about," (3) Rashid's youngest son, Luka, curses the circus master. Shortly thereafter, it is reported on television that the animals have revolted, and later that night, the circus goes up in flames. The next day, a singing dog named Bear and a dancing bear named Dog turn up at Luka's doorstep.

The scene makes the book enchanting and immensely funny while providing a glimpse of the astonishing depth of Rushdie's storytelling. Through the tale of a young boy who has travelled through the World of Magic to steal the Fire of Life that will save his father—a famous storyteller who has fallen into a deep sleep and cannot be awakened, Rushdie delves deep into matters to which every person can relate that is love, life, and death. Rashid Khalifa may not live to see his youngest son grow up and Luka may confront the fact of his father's mortality - as well as his own.

While travelling up the river, the group stops at the Respectorate of I, an oppressive city run by easily insulted rats who demand eternal respect. On getting ready to leave after lunch, Luka unexpectedly insults the Respectorate's national song. But before the rats can do anything the Otters of Ott attack, led by the Insultana of Ott, "a green-eyed girl wearing a green and gold cloak, her fiery red hair streaming in the wind, nor more than sixteen or seventeen years old" (78). Luka correctly guesses her name as Soraya, and helps her defeat the rats with an itching powder.

Later, Soraya joins them on their quest. Her flying carpet helps them pass through the Mists of Time and the Great Stagnation. Soraya sends the carpet extremely high above the Inescapable Whirlpool and El Tiempo for them to escape, "perhaps forty miles below them already" (106). The elephant birds help through the Trillion and One Forging Paths, where the true River of Time splits into thousands upon thousands of fake. Afterwards, they are temporarily detained by the Great Rings of Fire, the treacherous defense of the Fire. However, Dog and Bear reveal them to be both a fake, illusive and the handiwork of Captain Aag.

As soon as Bear and Dog disable the illusion, Aag shows up along with Nuthog, a magical changer in the form of a dragon. While Aag gloats Nobodaddy and tells Luka as, "His original name was Menetius, and he was once the Titan of Rage" (123). Right as Aag orders Nuthog to destroy Luka and company, Soraya arrives, having freed Nuthog's three sisters, who are imprisoned in ice by Aalim. With her sisters now freed, Nuthog betrays Aag and incinerates him. With the changers now with them, the group passes through the land of the ex-gods. After meeting with Coyote, one of the original fire thieves, the fire alarm goes off, alerting the gods that someone is going to try and steal the fire.

Instead of running, Luka and the group head towards the danger. After making it past the guards, by using the one time transformation of Nuthog's sister's one into Slippy, the Horse King, they wait for Coyote to begin the diversion. Coyote begins the diversion while Luka goes behind the Mountain of Knowledge, "with the Lake of Wisdom lapping at its shores, its water clear, pure, and transparent in the pale, silvery light of the Dawn of Days," (160) to find the Abyss of Time. Luka then enters the left-handed version of the Magic World, where he is soon captured. And, when the gods arrive and Luka delivers a speech to them, the world begins to fall apart. The gods, inspired by Luka's speech, allow him to take the fire. Soraya arrives, and the group begins the journey back towards the entrance.

With the world now ending and Nobodaddy nowhere to be found, the group is flying as fast as they can towards the dying Rashid. They are now joined by Prometheus, the original fire thief and the brother of Aag. After bare escape of El Tiempo, "the Carpet being sixty-one miles above the Earth's surface," (193) they enter the Mists of Time when Prometheus dissipates them. They are then captured in the cloud fortress of Baddal-Garh, which is now under the control of the Aalim and Nobodaddy who have betrayed Luka in order to complete his task of killing Rashid Khalifa. Prometheus grows to his full height and hurls Nobodaddy into outer space. Aalim finally shows them, whereas they begin speaking, causing everyone, but Luka, Dog, Bear, and Prometheus to collapse in pain. Luka curses Aalim, and then the god's revolt of destroying the fortress. Luka and the group speed towards the entrance, the gods defending them from the deadly rain cats, Aalim's final card. Luka makes it home

and gives the fire to Rashid and "the color returned to his face; after which a glow of health spread across his cheeks, almost as if he were blushing with embarrassment" (212). A deformed Nobodaddy arrives, whereas Bear sacrifices his immortality to destroy the phantom once and for all. Then, Khalifa who is enjoying a wonderful, happy, dinner, with Soraya now has to "put up with the stories of the Magical World from her husband and both her sons" (217). Soraya then puts the Fire of Life away somewhere, where hopefully it will return to the World of Magic.

In the novel, young Luka, a child, turns back time for his parents by virtue of his survival. The real power of imagination is best explored in the different engaging stories of Luka and Haroun brothers, unique but inseparable tales about father-son love and so on. *Luka and the Fire of Life* is a classic novel without any stodginess, combining the traditional elements of quest such as including fire-breathing dragons-with relatable contemporary references such as the video-game elements of Luka's magical world, where lives can be stored up and one's progress can be saved. Readers will enjoy the vivid imagery, fantastic characters, and clever wordplay, the sweeping action, nail-biting suspense and light hearted humour.

References to countless other tales and myths create a window to a world of literature, while details such as Luka's left-handedness and the diversity of The World of Magic create a platform to discuss timely issues and current events, especially surroundings, the topics of difference, tolerance, and respect. In addition to the central themes of love, life and death, Rushdie touches on a stunning range of secondary themes including the nature of time, ethics, authoritarianism and freedom, truth and illusion, which might be explored profitably by older students. Demolishing any boundaries between children's literature and adult literature, the story is an immensely enjoyable one that is truly growing and evolves along with its reader. *Luka and the fire of Life* is an explosive, magical exploration of filial love, courage, and the power of one's will. The novel says, "Eliminate the impossible, and what remains, however improbable, is the truth" (35). Luka reflects, and it is true that in Luka, the most interesting place that Rushdie writes about is neither reality nor the stunning lands of magic, but the place where the two meet-where imagination and reality collide and thought combines with

something more powerful than one's own nature to become the action is that what shapes the world.

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The Impact of English Language Teaching Methods on Academics through Digital Material

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Abstract- As we are living in the information age the most important aspect of lifelong learning and development is language. People skills like reading, writing, speaking, listening (LSRW skills) enquiring, comprehending and problem-resolving are smartly managed with language skills. Information and communication technology has been claimed as the best tool in the English language teaching and learning process. This research paper highlights how the digital materials effect teaching methodology towards academic success. It aims at how students are benefitted with the replacement of old teaching methodologies with digital materials. English aspirants have a variety of methods to supplement their students for sharpening their interpersonal skills.

Introduction:

Nowadays, classrooms are equipped with interactive whiteboards (IWB), response systems, projectors, and computers. Many reputed universities and organizations are introducing this digital tool to enhance their English language skills. Many topics of the English language can be clearly explained and taught through this channel. Improvement of technology has led to many new inventions that English language teachers began to use in education. Social, psychological and emotional development can be attained through English language learning. Students can interact with people, convey their emotions, thoughts and easily connect with the external world, through the process of language acquisitions. Modern age brings developments which are useful for the students helping them with their jobs and everyday activities. The use of modern language teaching aids like digital materials for the English language learners is one such change in modern age. Whiteboards and markers are replacing the blackboard and chalk system, physical lectures are further enhanced by direct live lectures through the World Wide Web, seminars are transformed into webinars and for any sort of language queries, online English language Instructors are always available.

Review Literature:

P.C.Naga Subramani and V.Iyappan, Tamilnadu Teachers Education University, Karapakkam, Tamilnadu discusses in their journal "Innovative methods of teaching and learning" (2018) that innovative methods and tools of teaching-

learning methodologies are available across the globe. Short lectures, stimulation, portfolio development and problem-based learning are very useful in swift technology used at the education system as well as workplaces in the foreseeable future. Bureu Okmen, Abdurrahman Kilic, Duzce University, Turkey in his journal "The Effect of Language Teaching Methods on Academic Success in Turkey"(2016) opines that English Language affects the characteristics of individuals. He discussed that language skills must not be confined to the classroom education given at the school level. New approaches and methods to improve people's language skills must be implemented by every educational organization.

V. Raymond Lesikar in his book "Business Communication" indicates how the present technologies and trends can be blended together while keeping the fundamentals of the language intact. It helps in reducing communication relating issues, development of audience and gives a lucid picture of visuals and the English language.

Fennel(2001:267) as cited in Kenning(2007) states that the English language is treated as killer language, communication technology will be the major weapon.

Nurul Nadia Haron and Yasmin Hanafi Zaid, University Technology Malaysia discusses the various methods to educate through web-based learning like online journals, educational movies.

Objectives:

The main aim of this study is to understand how digital teaching materials effect the pedagogical

method of education in this progressive era. The study also discusses the role of digital materials towards the personal growth of an individual as well as achieve academic success for any profession.

Discussions And Methodologies Adapted:

Introducing digital learning in the curriculum is benefitting the English aspirants in the real sense. This sophisticated teaching approach spurs the students to achieve their required targets in the fastest and unique manner. In the past centuries, teaching tools were of various kinds and teachers adopted myriad materials to educate the students like Sand, Stones, Leaves, and quills, the bark of a tree, blackboard and chalk. And in the recent past, we can see Printed materials in the form of academic books. But advances in science and technology have revolutionized the present-day world. The technology has made a remarkable place for itself in imparting education to young minds. Technology can be adopted at any level beginning from primary school, middle school, high school or up to the university level. It has transformed the traditional classroom into e-learning or digitalized class rooms such as Google classrooms. Wherein students have ample scope to learn and interact with different people across the globe. Students can learn about different subjects and cultures. They can also learn about the effectiveness and usefulness of learning the English language for the purpose of communication in their native lands or as a foreign language.

Modern Teaching Aids:

Teaching aids are something that makes teachers feel easier to teach their students. Their by training them to learn in a more enjoyable and effective manner. List of modern teaching aids are discussed below:

WEBINARS: [Webinar Centric]

A blend of words like web and seminar together is termed as Webinar. It can also be addressed as a web event, webcast/ web lecture/ virtual event. It is generally performed through the internet by the online audience. It offers various interactive opportunities like asking a question, chat, poll, test, call to action, twitter. The average viewing time for webinars currently stands at 56 minutes. The benefits of webinars offering to us are: can have direct contact and interaction with the target group. It saves time and money. By conducting WEBINARS, students can probe deeper into real problems and try to face the professional challenges. They express their point of view through this platform in the best possible way.

Webinar post-click landing page examples to the model are:

- Kissmetrics.
- IBM Watson.
- Microsoft.
- Microsoft Azure.

Presentation Tools:

Attractive PowerPoint Presentation through different slides is another important component of Modern Teaching Aid [MTA] for English language aspirants. Google Sites, Prezentit, Animoto, Vuvox, Viddix, Vcasmo, Preezo can assist students, Research scholars and English language Teachers to view their ideology in any projects of their research study. Users of PPT can effectively express their thoughts with captivating slides instead of real objects. Fennel (2001:267), as cited in Kenning (2007), claimed that "If English is to be seen as a "Killer" language, communication technology must be interpreted as one of its major weapons." Therefore, it is interpreted from the above a statement that students can learn the English language by using technology by not relying too much on the teacher's ability to engage them in classroom.

Voice Threads:

Currently, many web-sites make provision for uploading PowerPoint slides, videos, photos, etc. and also add voice narration to design multimedia presentations. One such web-service is "Voice Threads." It built and engages students to transform a cluster of media files, such as documents, images, videos and presentations to a convenient place so, that everyone can access easily. Educators make use of Voice Threads for documentary classroom conversations to online tutoring, professional development training. It's one of the great ways to deliver assignments or projects and get feedback. One can attain detailed information about Voice threads through following web links like:

Blogging-[Public Post]:

Students can use this Blogging for practicing their study session. They can post their notes on the class blog, where one can access, evaluate and rewrite a new material. Teachers may have a track of record to modify their actions. Our thinking can be crystallized through Blogging.

Prezi- Presentations:

To make professional like presentations, a versatile app like "Prezi" can be accommodated, as digital material. It's more usable and capable of covering advanced features compared to PowerPoint Software. It's new and can be easily accessible. Fresher can dive and flow easily through the entire app fairly well and produce

nice-looking presentations. This app assists presenters to design embellished presentations with audio and video notes in it.

Social-Bookmarking:

Researchers or educators who have similar interests can have easy access through these useful websites like Bookmarking. There is one more great advantage of this app like it allows the user to save the bookmarks to our favourite folder automatically. And the unique flexibility is, it allows us to access and retrieve the bookmarks saved in any computer device, other than the one which we saved. So storing and searching is made an easier task by this useful resource.

Podcast in classroom learning:

This feature of the digital app is not only resourceful to the common users but also much useful to physically challenged people like hearing impaired students. Podcasts provide serial recordings of oral lectures and news shared regularly online for the listeners. It is flexible and reusable technology available for reversing the oral lecture.

Screencast:

Screencast is an amazing instructional digital tool. It is a highly effective, powerful and affordable teaching-learning aid that can cater to education across any curriculum. Screencast procures a step-by-step methodological approach with data detailing theirs by enriching PowerPoint presentation along with narration and multimedia elements. Trainers of the English language can avail of the free software available on websites to instruct or train their students. Some of the freebies available are Screen jelly, Jing, Screen which facilitates learners to express in the most captivating way without wasting much time.

Moodle:

Moodle is a digital teaching-learning material that facilitates a virtual learning environment both teachers as well as learners to access. Ever note is a useful tool to explore and organize the research content.

Impact of social media into education:

Some well-known social communities in websites are Twitter, Face book, YouTube, blogs and My Space. The challenges by above cited social media are:

- Providing unnecessary information
- Losing control over data
- Commitment towards time is not attained

To keep students engaged, pooling students through social-media can generate resource to make understand and take feedback from the students or users of it.

Smart boards:

Instructional efficiency to smart products is brought by the instructors by making course content virtual and interactive to all.

Research Tools:

The most productive website links for any research scholars for equipping themselves and have a better result in their field of research are yolink, veezzle, specify, nibipedia, findthatfile, dogo etc.

Mobile Assisted Language Learning: [Mall]

Information technology in the form of digital material has provided many online or offline MOBILE APPS for comprehensive learning in the easiest way. LSRW skills can be well practiced and learnt at their own pace with this novel approach. Listening and speaking skills can be improved by the students who can't afford regular lectures. Audio tools like Audacity, Wavosaur, Chiribit, Raper, Vocaroo, Audio Pal, and Sound Cloud can enhance their listening and conversational skills a lot. It saves time and money for the students who live in the remote areas. Students can retain the learnt content for longer time and English language teachers can help students by providing speech training to the pupils through VIDEO RECORDINGS. This sort of teaching aid makes the abstract ideas concrete and thus help in making learning more effective. Business Correspondence is one of the most demanding aspects of the business entrepreneur. Constructing clear statements in English language and responding to the messages can be well trained through many resources. To mention a few, certain writing tools like: NetEditor, Smories, Student Publishing, FlipSnack, Mixboot are the variety of teaching materials available, to train the students how to draft the business communications. From any authoritative websites 'Readymade Templates and Wizards' can be availed by the students for effective correspondence.

Teachers can substitute real objects to training aids like videos, DVDs or videotapes to help students make learning equally meaningful. To create healthy competence among the students, English language trainers can encourage

Quiz and Poll Tools: Students learn to face the typical mindsets and quick approach to recall the relevant stuff at that point of participation. To train such competitive spirit tools like Kubbu, Quibble, What2learn, Quiz Egg, eQuizzer are more useful.

Benefits:

- Technology has brought radical changes in teaching-learning tools by grabbing student's interest in it.
- Digital materials provide PBL-Problem Based Learning which is very useful to the student community.
- Smart gadgets facilitate different tasks such as teaching, framing question papers, assessment of students' performance and feedback.
- Advance pedagogy creates rich experience for students as well as a rewarding experience to the educators.
- Hybrid teaching model combines both e-learning as well as face to face teaching. Such synchrony helps to teach and to learn in their systemic approach of study. In this way, out of class learning can be encouraged.
- Teaching learning with technology stimulates and engages students and trainers to accomplish their objective learning.
- By incorporating digital teaching and learning materials we can save money, labour and time
- Our Curriculum could be extended by adopting technological content knowledge to the teachers and learners to enhance professional and academic skills.
- New age education system is able to imbibe four key skills in the students, which include 4C's: Communication, Collaboration, Competition and Creative and Critical Thinking skills.
- It helps educator or facilitators to view education in a constructive way.
- It helps facilitators in differentiative instructions and value based assessments.
- NES-is trying to inculcate in students, values with a tinge of skill development.
- From Gurukul age to digitalization age, there has been a big leap, where teaching includes not only sending information but also receiving.
- Usage of digital materials or unique technology tools helps to grab and sustain the attention of students while pursuing their higher education.
- Digital tools help the students to perceive, comprehend and retain. Therefore helping them in learn and relearn
- The facilitator can make the content of the curriculum Concise, Crisp and Captivating for the students in their learning process.
- With the digitalization- organizations also reap the benefit of recognition in long list of acclaimed schools, colleges and reputed Universities.
- Digitalization provides the apt platform for Self-Assessed learning, thereby making classrooms making "Student-Centric.
- E-learning bestows equal opportunities to educate and learn, to harness their skills on a regular basis.
- Communication via e-mode gives students significant insight into their given situation.
- Web based learning tools give the flexibility to the student mob to complete the task outside the classrooms, yet connect to the classrooms.
- E-learning tools have eliminated the barriers of time and cost, as the students save the cost of travelling.
- Universities can attract more students register through online-learning
- E-learning, builds the confidence of a student, as they are given the opportunity to broaden their knowledge at their own pace.
- Online learning tools- give ample scope to the learners, to control their own learning process.
- Modern tools make students independent, as he/she has scope to eliminate unnecessary information and concentrate on required data.
- Students might overcome the insecurities that usually they face in classroom learning through this new mode of education.
- Online education material makes the content and format, easily adaptable to changing times.

Barriers:

Apart from the above mentioned multiple benefits in adopting-developing-adapting digital material in enriching the curriculum-based teaching and learning with technology. There are many hindrances to overcome and embellish the English language learning easier. To mention a few:

- Students should have prior knowledge, in the usage of technology otherwise it may effect the success of the e-learning environment.
- For students, who prefer their mother-tongue mode of communication may find it difficult to navigate as it is based generally in the English language.
- E-Learning is difficult to adopt, as it involves human skills, to be specific motor skills.
- The initial stages of an e-learning tool are time- consuming as the students find an alien culture of learning to be adopted

- Web-based learning may be apt only for students with self-discipline, as it depends on independent focus to understand the topic.
- Digital learning tools encourage, students to have prior training, which may be a barrier to gain knowledge through this innovative mode.
- E-learning materials expect students to have a focussed, which is a challenging task for their age.
- The negative impact of e-learning on the facilitators is that their creativity is side-tracked and not recognized.
- Digitalization has spoon-fed the students, which kills their cognitive skills.
- Unlike the traditional classroom learning process which is fun-filled, the e-learning curriculum may become monotonous, confining to individual four walls.
- Generally the human brain has data retention ability which is far more superior to artificial intelligence, but intervention of digital learning mode is degenerates the ability to store and retrieve. Due to excessive dependency on machines rather than using human intelligence.
- It became a bane to the young minds, confining them to four walls. Thereby giving the experience of Social isolation.

Conclusion:

Summing up, Technology based learning and teaching tools may be a boon to curriculum only if it doesn't ruin the chief objective of education process. The researchers or educators should aim at transforming the true essence of knowledge or information to the mediocre. With the adoption of modern tools, the young minds and facilitators can adorn the English language acquisition into limelight. At the same time, teachers as well as students should bypass the old system of learning and

teaching modes and experience the new spur of education.

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Ganigas: Condition of Cold Pressed Oil Industry

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Abstract: India is a vast country and the inhabitants of several of its regions have developed specific preference to certain oils among the oils available in the region. For example, people in the south and west prefer groundnut oil while those in the east and north use rapeseed oil. Likewise several segment in the south have a preference for coconut and sesame oils. The economic prosperity of a country like India depends upon the development of agriculture and cottage industry in a balanced manner and it reveals the importance of agriculture in the process of industrial development. The growth of organized industrial sector in the country was started with the development of agro based industries. Oil pressing, in view of its large potential, is now regarded as the sunrise sector of the Indian economy for growth and also exerts a great socio-economic impact specifically on employment and income generation. If properly developed, Oil pressing sector can make India a major player at the global level for marketing and supply of processed food, and feed a wide range of other plant and animal products. Most of the agro processing industries are traditional, cottage-based and small scale and among them, oil mills occupy a predominant place in India. The review of literature reveals that, the studies associated with the prospects and problems of Ganniga community in Karnataka in general and in particular are very low, and the studies associated with oil milling industry either in Karnataka are nil. It is a traditional oil expeller used by people of Ganiga in districts of Karnataka. It is a simple traditional technology widely distributed in the rural areas. The traditional oil press is used for extraction of oil by a particular community Ganiga who are the oil expeller and oil selling community in Karnataka.

Key words; Ganigas, oil, Industry, condition, socio-economic, Status Etc..

Introduction:

Ganigas basically belongs to Cold pressed oil trade called "Gaana". This is a trade based Community and considered trade as its soul. Once this was fore front industry among all the Cottage Industries. These bull driven oil Extractors, extracted the oil and fulfilled the need of pure oil to the locals and the people around the villages every day. Earlier the Ganigas were in joint family and the few family members were doing Gaana work and others used to travel, distribute and sell the Oil. Ganiga Community found in various states of India like Karnataka, Andrapradesh, Tamilnadu, Maharashtra, Gujarat, Bihar, Orissa, Bengal, Uttarpradesh. They were called by different names in different regions as Gandla in Andrapradesh, Chattiya and Chatte in Kerala, Vaniyan in Tamilnadu, Teli in Maharashtra and Gujarat, Saho in Bihar and Orissa, Guptas in Uttarpradesh and Madyapadesh, Jyothi in Bengal, Ganigas, Jyothi, Teli in Karnataka (Rajashekarappa M:2019:21). In Karnataka we can find Four sub categories in Ganiga Community as Sajjana Ganiga, Jyothi ganiga, Enne ganiga and Kariganiga. This is a widely spread community and it is our dire need to know how this vast community has gone far away from its main trade and also the condition of cold pressed oil industry or Gaana Udyama. There was a time when this Ganiga Community has provided oil to the entire society when there

was no oil industry and converted machines. Now we have to study how this community doing for its living and which alternative trade is following when it is left the Industry. Besides we also have to find whether this 'Gaana' industry is still existed or not. It's our responsibility to understand the Trade based Community.

Ganigas means : trade based Community. The process of oil making by using wooden or stone, oil mills are operated by a pair of bullocks and the people who extracted oil by this way are called as Ganigas.

Industry means: people and activities involved in producing goods. Industry is an organization and the persons who runs it called as an industrialist. The trade which is done for the sake of livelihood is also called as industry or Udyama.

What is Gana Industry? The people who extracts oil is a called Ganigas and that trade is called Gaanada Udyama. The people who extracts oil and sells its to the villages are identified as Ganigas or who provides best quality oil are also called as Ganigas.

Hypothesis

Social and Economically Ganigas well of from Oil industry

In modernity the original profession of Ganigas has disappeared

Purpose Of Study

To understand the Condition of Gaanada Industry

To find the Ganigas who involved in the industry and confront them with the Society

To Confront the Traditional Gaana with Modernization

To find the other Communities who are Practicing and Involved in this Industry except Ganigas.

Review of Literature

Thimmareddy S.Y., Kula kasubugalu mattu Adunikathe, Essay which is Submitted for Ph.D

Gaanagarike, the trade which is extracting oil from the oil seeds was existed before Vijayanagara Empire and it was also an important trade. Ganigas were there in all parts of the empire. And they are called as Hegganigas and Kiruganigas. Ganas were divided as Maragana and Kallugana. The oil was extracted from Hucchellu, Haralu, Kobbari, Hippe and Honge seeds. The cold compressed oil or Gaana Industry was so prominent that the tax was recovered by collecting money or Oil.(72:2010)

Vasudevan C.S.(A) 'Shasonokta ennenadu', Bhatsuri K.G.(e) 2006, Shasana Adyayana Samputa 3, Sanchike 2, Prasara Kanna university, Hampi, P.73-7.

"Few Edicts of Mysore and Chamarajanagara mentions Ennenadu, ennestala, and Ennenadu"(Va:2006:P:73). It is significant that the places in Ennenadu starts with 'HA(ಹ). For Example Haradanahalli, Harulukote, Handrahalli etc. May be these villages come from 'haralu'. Haralenne (Castor oil) is extracted from Haralu (Castor) seeds. Thereby the places of these regions starts with Ha (ಹ), means we can opine that the villages are named after the raw material used to extract the oil.(Vasudevan: 2006:P:75). In this article they have acknowledged the Edicts which belongs to Ennenadu or land of Oil shows how prominent the Gana Industry was.

SCOPE

Scope means the extent of the area or range. We should have a range when we involved in any studies. Here we have opted selected villages in various districts of Karnataka and only the Ganiga trade for our study.

Importance

Once the community which produced oil made it as an industry. We can explore how Industrial revolution made the Ganigas to leave their trade, why they have chosen an alternative trade, their condition. And also through this kind of study we can expect the progress of Ganiga Community.

Modes of Study

We have studied and reviewed articles, books essays to prepare the article about Present condition of Ganada Udyama or Cold Compressed oil Industry. Also chosen situational data and simple random information along with questionnaire method.

Condition

Condition means a state of something, time means duration or process. Duration means the length of time one thing tasks to be completed.

The Process of Condition of Gana Industry

Ganigas lived by selling extracted oil. Their life is solely depended on Gana Industry. Once they are as known as cooking oil. People gives much respect to these ganigas who supplies varied cooking oils. They are called as ganiga shetru, oil extractors, ganada maneyavaru, and the woman from ganiga families are called by names ganagittiyaru, ganadodatiyaru and ganada maneyaki. Ganigas were well known in the localities that people used to come and talk to them wherever they are in those days. When there were no electric Lights, 5 feet Pole was built and ganigas used to provide oil to this pole in the evening. The extracted oil was sent to gram panchyat or village leaders. The entire village was lit by the oil given by them. Brahmims in Agraharas used to uy haralenne and ellene for temples to lit the lamps. There was a huge demand for oil from ganigas, and also we can find the edicts which informs that the kings also given ganas as gift/charity to temples to extract oil for lamps. Ganigas were financially stable during those days when the whole ganiga family is appointed for temple to manage those ganas and the suitable wages also given to their labor. The neem oil was huge in demand because of its medicinal values. The cows were the backbone of this industry and the neem oil plays a vital role in their protection. Kalu bai roga, charma turike diseases are resolved by this neem oil and some of the human diseases and wound were also cured by adding turmeric to neem oil. In those days tractors and advanced technologies were not there, cows are used for sowing it. To protect these cows people were in queue in front of ganigas house to buy the oil and hindi. Hindi is good for cattles and they give quality milk so that people pays the money to reserve the food in advance to protect the farms from the diseases like boodu roga and seede roga they used to mix the Hindi in water and sprinkles in the farm. The farm gives good yielding by this, Not only the oil but also the hindi() was useful.

Gaana may be a trade but we can also find many uses. Ganigas were making their livelihood by extracting oil from Ganas. As Population

increased in India the government made a Pcat and started to import Palm oil or Tale Enne from The Arab Countries in 70's and 80's for over Twenty years. The Compressed Oil industry came to extinct in these days. The imported palm oil was just 20/- per litre whereas Compressed oil is 40/-. People started to buy the oil which is very low in price. No one was asking about oil produced from the Ganas. They started to buy the palm oil which is available at cheap cost. When the things are not going well they left their trade. The ganas which are used for trade purpose now only meant for Pooja Ritual. They could not ar a single penny through this. The community which was paying tax now lost its breadwinning hands. They started new trades like textile showrooms, Provisional stores, general stores.. They invested their left amount and started a new life by selling readymade oil pockets and newly transformed cold pressed oil. The newly transformed oil mills, pocket oils and oil factories shook away the very existance of Gaanigas and Gana Industries. They couldn't compete with the modern oil Producing machines. Once highly demanded Cold pressed oil industry and the Gaaniga community has vanished because of pocket oils. They have

reached the zenith from nadir due to the modernisation of oil industries and machines.

TABLE: The details of traditional Enne ganas in present Day

When we observe the above table, can find the community which is largely involved in Oil production. Here all the communities have given importance to Tradition Enne gana or Cold compressed oil. Mainly the ganiga community is trying to preserve and save the trade. This way ganigas and ganas are again flourishing. The unheard sound of ganas are hearing everywhere now. The increase in the incurable diseases also lead a way to the flourishing of this industry and it has been working as a remedy to those diseases. Many people who are suffering from cough, blood pressure, diabetes, arthritis are using the oil which is produced by cold compressed industry or gaana. Now people have a opinion that the industry is again came into light and the stone and wooden gaanas are in use. It has given financial stability to the ganigas who solely depends on this industry. Besides with ganigas many other communities are practising this.

Sl no	Community	Stone gana	Wooden gana	Transformed gana	Others	Total
1	Ganigararu	7	3	8	4	32
2	Goudalu	2	1	3	Nil	06
3	Rajaparivara	Nil	1	Nil	Nil	01
4	Muslim	Nil	Nil	02	01	03
5	Lingayata	04	02	02	01	09
Total		13	17	15	06	51

Research Outcomes

Once the condition of Compressed Oil Industry was completely devastated but now its gradually raising its head.

Can maintain a family by a Ganada Udyama
 Earlier we can find 2 to 3 ganas now a days we could not find that.

Can find ganigas are reestablishing Gana industries again.

Ganigas' opines that they Can save the traditional age old oil industries

Oil is extracting through Stone, wood, and transformational form.

Others are also involved in the industry along with ganigas.

Most of the ganas are used for pooja ceremony only.

Suggestions: Government should encourage and facilitate the People who are running gana industries.

Government and organization has to come forward to save the Gana industry which is cottage industry.

Should encourage and develop wood and stone ganas

Create awareness among the youth about Enne gana trade

Should incorporate value based texts that includes social sensibility and conservation of basic trade.

Conclusion: On the whole we can say that the Ganada udyama or Industry has extinguished. Many people did not have the aware of Ganas and did not know Gana means Enne gana or oil extracting. They thought that gana means (Bellada) Jaggery gana or Sugar cane gana . Now the scenario is changing and the gana industry is breathing again. It has came into light because of people's much care and concern towards health, and it is a matter of joy that the Ganigas are trying hard to preserve and protect their trade and gana industry . They are creating opportunities and space to lead their life easier with the help and development of Gana industry. They are trying

to confront the old age trade with new modern world and technology.

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The Taliban's Neo-Old Afghanistan: Humanitarian Crisis and Emerging Refugee Problem

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Abstract: After a long period of twenty years, America has decided to stop the operations of USA in Afghanistan. And their army retreated. As soon as the US withdrew, the Taliban seized power in Afghanistan. The Taliban formed their government in Afghanistan through some violence. With the arrival of the Taliban, many Afghans and various minorities began to seek refuge in various countries to defend themselves, and many were internally displaced. Instability in Afghanistan is harmful and dangerous not only for the countries of South Asia but also for the entire world. Afghanistan has been unstable for the past several decades, but the arrival of the Taliban has created a new and frightening problem in the South Asian region. The current situation in Afghanistan is reminiscent of the geopolitical problems of the 1990s. Internal war, violence, disease, resistance to modernism, old religious traditions, economic, political, social, religious minority problems, health problems, education problems, gender discrimination, feeling of insecurity, patriarchal government etc. are causing internal displacement of people in Afghanistan. Or being forced to accept refuge outside the country thus creating a major humanitarian crisis.

Keyword: Taliban-USA, Insecurity, Humanitarian Aid, Refugee, Displaced, UNHCR

Introduction:

In 1994, a group of radicalized students who received religious training in a refugee camp in Pakistan took control of the city of Kandahar and began to seize power. This group was known as the Taliban. By 1998, almost all of Afghanistan was under Taliban control. The Taliban were a group of extremists who strictly enforced Sharia law in Afghanistan, women were deprived of education, girls were not allowed to go to school, women were not allowed to work, overall, the Taliban became a safe haven for international terrorists. Only Pakistan, UAE and Saudi Arabia recognized the Taliban. To put an end to terrorism, the USA and its allies ousted the Taliban regime in 2001.

Taliban's Neo-Old Afghanistan:

For almost twenty years from 2001 to 2021, the common people of Afghanistan could enjoy independence, gender equality, education, health, employment, etc. And an environment conducive to development was being created. once again in 2021, a vacuum was created by the departure of USA in Afghanistan. And the Taliban once again seized power. The current situation has created the same problems that occurred in the 1990s that will recur in Afghanistan.

The old Afghanistan was under the Taliban rule in the 1990s and now the new Afghanistan of 2021 which is again under the Taliban rule. For nearly twenty years, the extremist religious ideology of the terrorist Taliban was successfully suppressed in Afghanistan. During this twenty-year period, Afghanistan underwent drastic changes, including girls' schooling, women working openly, and development without Sharia law. During these twenty years, emphasis was placed on education, health institutions and economic sector was continued, ideological

modernization was created, efforts were made to create harmony between the people and the government, non-violence and peaceful development ideologies were encouraged, international financial funds were used for the development of the weaker sections. So, today's Afghanistan is not what it was twenty years ago. The people of today's Afghanistan seem to be moving towards steady development and modernity along with religion. Economic, social, health, education, poverty, available means of livelihood. Such various problems are faced by common people. But the coming to power of the Afghan Taliban is emphasizing how the Afghanistan of the 1990s can be imposed on the country by religious Sharia law.

Humanitarian Crisis:

International financial aid organizations withdrew from Afghanistan. Also, financial crisis faced the Taliban. It became impossible to pay employees, the public health system was completely destroyed. The recent war has created various humanitarian crises. And the possibility of renewed violence arose. In addition, the people living in the urban areas of Afghanistan became unable to earn their own livelihood, while the situation in the rural areas became extremely fragile and miserable.

After the withdrawal of American troops, the Taliban government came to power in Afghanistan, but various problems arose in front of Afghanistan when they came to power. Issues such as health, hunger, employment, livelihoods and several million people's livelihoods depended on international aid funds, but that too came to a halt with the arrival of the Taliban. Afghanistan's foreign financial assets were also frozen. Ongoing conflict, natural disasters,

poverty, food shortages, pandemics like Covid-19 and sudden power transitions, violence and instability by the Taliban in August 2021 have disrupted the lives of people in Afghanistan and displaced many internally. This also put pressure on countries that aid in humanitarian crises. According to the UN, nearly 3.5 million people were internally displaced by the end of 2021, and at least 2.7 million were forced to take refuge across borders involuntarily. Afghanistan has the third largest number of displaced people in the world after Syria and Venezuela. 1.3 million and 780,000 registered Afghani refugees live in Pakistan and Iran respectively.¹

Millions of people in Afghanistan are in need of humanitarian aid due to the past twenty to forty years of war, frequent natural disasters, political turmoil, extreme poverty, drought and, of course, the Corona pandemic. After the arrival of the Taliban, only poverty and unemployment remain as people have no money to buy food. But the Taliban did not think about how to save the economy from collapse. On the other hand, different conditions under the Sharia Law such as how women should wear clothes, women should not leave the house, women should not work, girls should not take school education, are being announced day by day by the Taliban. A resolution was passed by the UN Security Council that the Taliban will allow people who want to leave the country to do so, and will not obstruct the delivery of humanitarian aid, violate human rights, and not commit coercion or crimes against women and children.²

Before the arrival of the Taliban, Afghanistan was dependent on international financial aid, with nearly 38 million people dependent on foreign aid. But after the hard-line Islamist faction of the Taliban seized power, foreign aid stopped. How will ordinary citizens, Afghan women and girls, journalists, academics, human rights activists, ethnic communities, religious communities and other minority groups be protected under Taliban rule? Now there is a question mark on this. Due to insecurity and violence, the lives of women and girls have become very insecure and dire. People are faced with shelter, food, water, and health needs.

According to a survey conducted by the United Nations World Food Program, almost 98 percent of people in Afghanistan do not have enough food to eat. The political transition has had a major impact on the country's basic services, financial system as well as the market, and the lives of millions of people have rapidly shifted towards poverty, with the number doubling in 2022 from 2021. By 2022, nearly 97 percent of

the population will be below the poverty line. Humanitarian organizations are also facing difficulties in assisting such a large population. As soon as a terrorist organization named Taliban took over the power of Afghanistan, the peace that had developed for a few decades was again disturbed and Afghanistan was broken again and people's lives began to fall. The advent of the Taliban has resulted in a massive increase in violence, war, pauperisation, degradation, fear, unrest, violence against women and girls, resulting in millions of people being internally displaced and many fleeing the country out of fear and taking refuge in various neighbouring nations. Afghanistan began to pose a global refugee problem. It is also beginning to affect neighbouring nations and regional security. The humanitarian crisis caused by the negative impact of the Taliban in Afghanistan. The Taliban had a negative impact on Education, Safety-security, Hunger, Water, Health, Economic, women, Children, Adult, Hazara ethnic and religious population, various tribes.

Taliban's Sharia and Women: The Taliban want strict implementation of Sharia law. Public hanging or mutilation, forcing men to grow beards, forcing women to wear veils, banning music, cinema and television, not allowing a girl above the age of ten to attend school. Women should not go out alone. The fate of women in Afghanistan is desperate, hopeless, unbearable, and disgraced. Women are imprisoned in a cloth prison called Burkha. After taking power, the Taliban continued the system of gender apartheid, stripping them of all their human rights, including the right to work, education, health care, and speech. Women and girls cannot be examined by a male doctor. It is also prohibited to employ women doctors or nurses in hospitals. Women can be brutally beaten and abused, publicly flogged and even sentenced to death if they disobey the Taliban's orders. Instead of the woman, the man of her household can also be punished.

Emerging Refugee Problem:

In the period leading up to the unexpected arrival and seizure of power by the Taliban, instability and violence escalated in Afghanistan, with covid pandemic, extreme poverty, inadequate food, epidemics, natural disasters, economic poverty, lack of health facilities, poor education environment, and starvation. And as a result, nearly several million people were internally displaced or forced to flee the country.

After the Taliban seized power, thousands of refugees fled to the United States for their lives,

Greece built a wall along its border with Turkey to prevent Afghan refugees from entering Greece. Refugees of Afghanistan started turning to different countries for refuge. In that, many people fled in neighbouring Iran, Pakistan and Turkey. After Turkey, Greece and after Greece, the number of refugees also started to increase in the countries of Europe. In order to prevent the increase of refugees and terrorism in Uzbekistan and Turkmenistan in Central Asia, the Central Asian countries have already started making agreements with the Taliban, including Russia. China-Pakistan Economic Corridor and Geopolitical Significance of Afghanistan, Also, The SAARC, TAPI natural gas pipeline and India's interest are important, that is why Afghanistan is considered to be an important territory under the control of the Taliban for various reasons. South Asian nations have not signed the 1951 Convention on Refugees and the 1967 Protocol Relating to the Status of Refugees. The number of Afghan refugees also started increasing in India. India has also made provision for six-month e-visa. It is also feared that the arrival of the Taliban will lead to the emergence of terrorist organizations like Lashkar-e-Taiba and Jaish-e-Mohammed. Regional stability is also threatened by terrorism and immediate security threat. Only a stable government in Afghanistan can provide a stable economy and stop displacement and migration. But the Taliban does not seem to be the right choice for Afghanistan. Therefore, international organizations should focus on solving this problem. It is necessary to provide immediate humanitarian financial assistance to Afghanistan. All nations of the United Nations must decide together how to maintain peace, order and stability in Afghanistan.

Literature Review:

A brief overview of the studies done in the context of topic some of the reviewed studies below:

- 1) **Donini, A. (2009). Afghanistan: Humanitarianism under threat. Feinstein International Center, Tufts University, Medford, MA.**
This briefing paper discusses the humanitarian challenges and opportunities in Afghanistan. Afghanistan is a serious threat to humanitarian conflict. insecurity and terrorism are contributing factors. The authors also suggest how to build and harmonize humanitarian consensus.
- 2) **UNAMA Human rights service. (2022). Human Rights in Afghanistan 15 August 2021 – 15 June 2022.**

The United Nations Assistance Mission in Afghanistan (UNAMA) released a report on the torture and ill-treatment of Afghan citizens, extrajudicial detention, extrajudicial killings, protection of civilians, rights of women and girls, forced displacement, fundamental freedoms, and the treatment of civilians by the Taliban. Concern has been expressed.

- 3) **United Nations Development Programme. (2021, September 9). 97 Percent of Afghans Could Plunge into Poverty by Mid 2022 [Press Release]. <https://www-dev.undp.org/geneva/press-releases/97-percent-afghans-could-plunge-poverty-mid-2022-says-undp>**

According to a UNDP press note published in 2021, nearly 97 percent of Afghanistan's population will fall into poverty by June 2022 due to economic crisis. It was pointed out that vulnerable people and communities in Afghanistan are in urgent need of humanitarian financial assistance. To protect women and girls, to develop local livelihoods, basic income and infrastructure an economic package was proposed but even today there is no solution to Afghanistan's poverty and hunger.

- 4) **United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Afghanistan. (2021). Afghanistan Humanitarian Fund Annual Report 2021**

The arrival of the Taliban in 2021 has increased conflict, violence, war-like conditions, strangulation of human rights. inadequate supply of food led to malnutrition among girls and women. Also, the International Development Fund was affected. The Taliban seize power, leading to economic crisis, instability and widespread hunger in the country. According to the report, nearly 24.4 million people are in need of humanitarian assistance by the end of 2022.

Objective of Study:

- Critically analysing the poor living conditions in contemporary Afghanistan and highlighting the lives of people under the control of the Taliban.
- Understanding the urgent need for humanitarian aid and studying the role of the Taliban in driving the growing refugee crisis.
- Exploring economic, political, religious, causes of unstable Afghanistan. To study the factors driving population migration abroad. seeking refuge in a new country.

Scope of the Study:

The scope of the proposed study will not be limited to only Afghanistan's instability; it will also have a direct impact on Iran, central Asia, and south Asia. It will indirectly have an impact on western nations, including the USA, in

terms of geopolitical strategic interest and human security (refugees and terrorism). The study aims to comprehend the underlying causes of the complex issues faced by refugees, internally displaced people, and asylum seekers from Afghanistan. It covers on a number of the Afghan people's issues, including those that are religious, social, educational, political, economic, physical, psychological, and legal, which drive them to seek refuge.

Research Methodology:

Descriptive, analytical and exploratory research design has been used while studying the subject. We can call it descriptive because it displays a clear and accurate picture of the economic, socio-religious, geographical conditions and past customs of the people of Afghanistan, as well as numerous aspects and difficulties among the people that encourage them to flee and seek refuge. The study is based on secondary data. Collected from various sources like, newspapers, Lok Sabha debates, various libraries, institutes, government offices and reports published by them, journals, manuals, published books, articles, magazines, internet and past research reports, documentation of working NGOs.

Suggestion and Recommendation:

- The Taliban should be pressured to meet international human rights protections in Afghanistan through various regional and international organizations and UN.
- The problem of Afghanistan cannot be solved only with humanitarian financial aid but the economy of Afghanistan needs to be strengthened and for that the international community needs to negotiate with the Taliban.
- The Taliban must respect the rights of women and girls and ensure gender equality in accordance with international humanitarian law.
- Through the United Nations, Afghanistan's frozen money in various countries should be used to address humanitarian issues.

Conclusion of the Study:

Accepting financial aid is not a permanent solution, although it is an immediate need to help refugees. Once the political situation in Afghanistan stabilizes, economic life will get a chance to improve. A lot depends on the way the Taliban are treated by the common man and how the Taliban presents itself in international fora. International recognition is the backbone of Afghanistan's economy. If economic transformation does not occur, and violent instability continues, civil war may break out. Economic weakness and instability may lead to the emergence of new terrorist groups. Afghans will flee from their own country and become a

major problem (refugee crisis) for the international community in the coming years. Therefore, the Taliban must give the common population the right to live in peace and security, without discrimination on the basis of race, religion, and sex, without torture, cruel and degrading treatment, enslavement, as stipulated in international humanitarian law. So that new refugees can be prevented from being created.

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Impact of online Education on the Mental Health and Physical Health of the Students (Raigarh, Chhattisgarh, India) during Covid 19 Pandemic

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Abstract: This research paper investigate how the online education during Covid pandemic effect the physical and psychological health of the students of Raigarh,Chhattisgarh, India. Covid 19 has caused destruction and devastation worldwide in the ways nobody can expect. The life of the people is totally changed and it affects the educational, social, emotional, economical, physical and psychological well being of the individual. During Covid -19 pandemic it is very challenging for the school administration, college administration, University of India and also for the Government of India how the teaching can be continuously going on without any interruption? But the challenge is how the classes will be taken whether from offline mode or online mode? There is also one question arouse in every one mind how the online teaching effective in learning process especially for students? And how its effect the mental health and physiological health of the students? To examine this study has been conducted on 450 students of Raigarh, Chhattisgarh India to know their views on how the online education has affected the psychological and physiological Health of the students. For this Kirodimal Government Arts and Science College, Raigarh Department of Psychology conducted a case study to investigate it. The finding of the study says that in positive and negative both the ways it affects the psychological and physical Health of the students.

Introduction

Covid 19 has caused destruction and devastation worldwide in the ways nobody can expect. The life of the people is totally changed and it affects the educational, social, emotional, economical, physical and psychological well being of the individual. During Covid -19 pandemic it is very challenging for the school administration, college administration, University of India and also for the Government of India how the teaching can be continuously going on without any interruption? But the challenge is how the classes will be taken whether from offline mode or online mode? There is also one question arouse in every one mind how the online teaching effective in learning process especially for students? And how its effect the mental health and physiological health of the students? To examine this study has been conducted on 450 students of

Raigarh, Chhattisgarh India to know their views on how the online education has affected the psychological and physiological Health of the students. For this Kirodimal Government Arts and Science College, Raigarh Department of Psychology conducted a case study to investigate it. The finding of the study says that in positive and negative both the ways it affects the psychological and physical Health of the students.

Online education has drastically changed the way we study but the year and half of attending online classes from home have led to a string of Mental and physical health problems for both students and teachers. In this study students reported that due to online teaching they become 95.11% irritable, 100% stressful, 41.33% feeling depressed, 71.56% lack of interest in the studies, 97.56% feeling isolated, 66.88% socially deprived, 94.67% problem in concentration.

Table:1 Mental and Physical problems faced during covid 19 Pandemic during online teaching

S.No	Mental/ Physical problems faced during online teaching (total Sample size 450)	Total Participants reported	percentage
1.	Mental Fatigue	349	77.56
2	Depressed	186	41.33
3.	Anxiety	436	96.89

4.	Irritability	428	95.11
5.	Stressful	450	100
6.	Lack of Interest in studies	322	71.56
7.	Problem in concentration	426	94.67
8.	Feeling isolated	439	97.56
9.	Socially Deprived	301	66.88
10.	Pain in Back	386	85.78
11.	Eye problems	318	70.67
12.	Overweight	249	55.33
13.	Migraine/Headache	148	32.88
14.	Pain in Muscles	342	76.00
15.	Sleepness/Sleepy	386	85.78

Several research studies reported that overuse of technology can result in mental overload and disconnect people from nature, play and people. A child who spends too much time in virtual worlds is less likely to have effective social skills to interact in the real world simply from lack of practice. J. Kim, R. LaRose, & W. Peng, 2009 posited technology negatively impacted social skills. J. Y. Yen, C. H. Ko, C.F. Yen, H. Y. Wu & M. J. Yang, 2007 reported those engaging in excessive technology use have a decreased sense of time and concentration due to multi-tasking. In addition, they are not future-thinking and are more impulsive. Park & Hyun also found academic performance was affected more than any other factor.

Due to online teaching students may experience stress due to increased pressure to perform independent learning and abandoning their usual routines, which may lead to psychological consequences such as anxiety, depression, difficulty in sleeping and stress eating (Liu N, Zhang F, Wei C, Jia Y, Shang Z, Sun L, et al., 2020). Same thing we have found in the case studies students may experience stress, feel depressed and feel irritability and lack of concentration. Students also reported its affect their learning skill and cognitive abilities also. In this case study they may feel socially isolated and mental fatigue due to spend more time in online learning.

The exposure students receive during school days, interaction with teachers and the activities they organise and interaction with peers all these things play an important role in shaping the personality of student. But with the

major change in the mode of education students have lost this opportunity. Increased screen time have lead to unfavourable effects on the learning and psychological health of students. Fazean Idris, I N Zulkipli et al,2021 Prolonged screen time have worsen the critical thinking ability of the brain. Students are trapped in their comfort zone and are unwilling to move out of it. Many of the students were involved in high risk behaviour like gambling and porn addiction. And also they spend a lot of time in video gaming and other such activities which may lead to mental retardation.

The online mode of teaching not only affect the psychological health of the students its also affect the physical health problems like eyesight problems, sudden weight loss or gain, back pain, migraine, fibromyalgia pain and so on. The students continuously sitting in the front of screen it may leads to strain on the eyes and resulting in major headaches. This was applicable not only to the students but also for the teachers. Its also leads to the lack of classroom ethics The posture, regularity, lack of routine, attentiveness has all resulted in health hazards. Constant sitting has caused weight concern as well. No physical activity has made the students restless and frustrated. This too took a toll on the eating habits, thus resulting in damage to the physical health. Some times studying online has resulted in poor/bad ergonomics, thus resulting in a lot of issues as regards back pain. The results of the case study reported that 99% students reported that they have eyesight problems, 43% students reported severe headache due to continuously focus on

the screen, 84% students reported that continuously sitting in the front of screen leads to back pain as well problem in cervicl region. The case study finding revealed that how the online mode of education affect their physical health as well as mental health.

Finally we concluded that Covid -19 outbreak has disrupted the lives of many people across the world the rapid increas in cases worldwide has created uncertainty and anxiety about what is going to happen. It has also Caused a tremendous level of stress among students. Distance learning is an acceleration of this exsisting challenges. Physical activity seem to be a factor that could prevent mental health disorders such as an anxiety, depression and irritability. These are just some of the challenges students are facing as a results of online education. Humans are resilient species and learn to adopt and evolved when we as a nation have been through a such a tough time and found a way to out of it. We can definitely learn to make online learning more creative and enthusiastic. In the scenario of so many changes it is crucial to

take care of our mental health and wellbeing by doing physical workout, meditation and yoga. Although it is traumatic experience of all but we have to take some preventive measures to test our capabilities to adopt to certain stressful and life threatening events.

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Women Entrepreneurship and Papad Industry

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Abstract: - Indian women are also called 'Annapurna' , sugaran' , 'Ruchira'. This Annapurna really takes care of the whole family . Caring for the preferenies of each person in the family . Makes fresh and various type of food for family members . 'Papad' is one such food found in every Indian households . In today's fast paced world it is not possible for every women to make papad at home . Therefore, such women tend to buy ready-made papad . There is a huge demand for papad form catereres, hoteliers , shop keepers , retailers , women who leave home for work . Some women feels that they are selling papad to help their family , while some women seem to be making papad from other and selling it in the market . From this , it seems that papad industry has been established . This research paper gives a brief overview of some of the women who have been successful in the papad industry in Dhule district . In this research success stories of women entrepreneurs whose making papad have been presented.

Keywords:-*Women , Entrepreneurship ,Papad, Industry.*

Aims :-

- 1] To find out the women entrepreneurs who manufactured of papad.
- 2] To take record the success of women entrepreneurs who produce papad.

Hypothesis :-

The women of Dhule district have achieved success in the papad industry.

Settings:-

Women entrepreneurs who produce papad in Dhule District.

Design:-

Descriptive type of observational study.

Methods and Materials:-

Data were collected by interview of the women entrepreneurs engaged in this industry with a predesigned and pretested schedule.

Conclusion

The women of Dhule district have achieved success in the papad industry.

In modern times, women are involved in every field like knowledge, science , space , research , politics , sociology , industry . Women have also made their debut in the formerly male dominated industry. It seems that, women have worked as entrepreneurs mainly in the fields of laundry, beauty salon , cottage industry , hotels , education and information technology . In the home based industry, it is felt that there are more women entrepreneurs. Also, women seem to have excelled as entrepreneurs of the 'Papad Industry'. In this research, the researcher has taken study of the success of women entrepreneurs in Dhule, who are entrepreneurs of 'Papad Industry'

The researcher feels the need to look at the definition of industry first in research.

- 1] The new encyclopedia Britannica

'An Industry is a group of company to produce an object to sell in market'.

- 2] Pro.EAG. Robinson:-

'An industry is a group of firms producing and distributing similar products and services'.

***Agro-Base Industries :-**

-Dr. V. B. Kondawar

'The agro-based industry is the industry that processes the products that come out of agricultural inputs'.

From the above definition of agro-based industry, it is evident that agriculture produces Rice, wheat, maize, Millet, sugarcane, Sunflower, Groundnut, Sesame, lentil, lentils, Soyabean, Nachani, Mustard etc. There are many industries that use and process these agricultural product. 'Papad Industry' is one of them. Many women in India seem to have helped their families financially through the papad industry .Many women from Dhule district work as entrepreneurs in this papad industry.

Women Entrepreneur:-

"A small scale industrial unit , industry related service or business enterprise ,managed by one or more women entrepreneurs in proprietary concerns , or in which she / they individually or jointly ,have share capital of not less than 51 percent as partners / shareholders / director of privet limited company / members of co-operation society , is defined as a women enterprise".

Women Intrepreneur in Dhule District who produce 'papad'.

1] Renuka Lakhichand Chavan

Renuka lakhichand Chavan lives in 'Patalde' village in Dhule. Renuka and some women from her village make papad and sell it. Before the establishment of this industry, Renuka's financial situation was very poor. She did not have even her own house to live in. There was no money for Children's education. Her husband was not getting any job either. That's how Renuka saw a ray of hope from the 'papad' industry. With the help of MSRLM from Maharashtra, she set up a self help group with the help of women from the village and transformed her skills into papad industry. The business which started with the help of Rs. 8000 has now been transformed into a small scale industry. The annual turnover of Renuka's papad Industry has reached Rs.12 to 13 lakhs. Not only this, Renuka's own big house is also a godown for storing papad. During the seasons, Renuka and the women in her group work together to make up to 50kg of papad a day. Renuka's self-help group has received 'Rajmata Jijau Swavalamban Award' and 'Krishi Angrovan award.'

2] Sunita Prakash Mahajan:-

Sunita Prakash Mahajan from Dhule is in the business of making papad and also sells them 'Hat shevai'. Sunita learned the skill of making papads from her mother-in-law Meera Mahajan. The papad and Hat shevai made by Sunita are also bought by people from Dubai, Singapore and USA. The women members of the Annapurna savings group which she founded have a share of Rs 60,000 in the bank and an average annual turnover of Rs 11 lakhs from the home based industry.

3] Shubhangi Akesh Chhajed:-

Shubhangi Akesh Chhajed is a very famous entrepreneur from Dhule. She started 'Spark Food' papad industry in 2013. Her papad is known as 'Vimal Ashish papad'. The business started by Shubhangi's husband was transformed into a papad industry by Shubhangi. With an investment of Rs 30 lakh, it has an annual turnover of 70 lakh to 80 lakh. Vimal Ashish papad is located in Arvi, Dhadre, Dhule MIDC, Laling, Purmepada, Sadgoan area of Dhule. Vimal Ashish papad has 8 to 10 workers. Shubhangi Chhajed seems to be constantly emphasizing on expanding its entrepreneurial reach.

4] Swapnali Avinash Patil:-

Swapnali Avinash Patil is the resident of Shirpur. Swapnali invested Rs 15 lakhs and established Kamal Gruh Udyog in 2016. Swapnali was inspired by his family to set up a papad industry. Now this home industry has been

transformed into a micro-enterprise. Papad of Kamal Gruh Udyog is sold not only in Dhule but all over Maharashtra. 5 workers work in Swapnali's 'Kamal Gruh Udyog', is known to satisfactorily cater to the demand of its customer base. The business strives to make for a positive experience through its offerings. Customer centricity is at the core of Kamal Mahila Gruh Udyog in Shirpur and it is this belief that has led the business to build long term relationships.

5] Sangita Sanjay Yeole, Nardana

Sangita Sanjay Yeole is a very famous entrepreneur from Dhule. Sangita Sanjay Yeole started his own factory in Nardana MIDC in 2016 to produce 'papad' and other similar food item in M/S Kulsamini Industries. Sangita has invested over Rs 45 lakh in her papad industry. Her papad making factory has all the machines needed to make papad. About 10 workers work in this place to making and packaging of papad. Her papad is also sold outside of Maharashtra. Her aim is to sell papad from her factory in the country and abroad.

6] Vandana Lakshman Chaudhary:-

Vandana Lakshman Chaudhary is resident of Waghadi, Taluka Shindkheda. In the beginning Vandana used to roll the papad alone at home and sell it. When the order to make papad then used to make papad. She had profile by rolling papad alone, but it also took more time. The taste of papad spread everywhere and she started getting orders of 30-40 kg of papad per month, but this was not possible for Vandana alone. Then Vandana gathered 10 more women from the village and formed 'Jai Bhavani Self Help Group' for this she got a loan of Rs 5 lakhs from the bank. With the help of story of making papad. Each woman in the group earns an annual income of Rs 1 to 1.5 lakhs, from this business. This group of papad is in high demand from caterers and hoteliers. The aim of women in this group to transform this home used industry into a small scale industry soon.

7] Shweta Chetan Girase, Shirpur.

Shweta Chetan Girase is a resident of Shirpur. Entrepreneur Chetan Girase from Shirpur and his wife Shweta Chetan Girase founded 'Babaji Agro Industry' at Gartad. In her industry papad, appalam, and some other similar product are made. Shweta Chetan Girase started making papad in Babaji Agro Industry in 2019 with an investment of Rs. 50 lakhs. The factory employs about 25 workers. Shweta reached the pinnacle of success by succeeding in her entrepreneurship in a very short time.

Conclusion

From the information given in the relevant paper and other information, it is evident that in Dhule district also some women entrepreneurs have been success full in industries like papad. The women themselves have made great strides in the papad industry through their knowledge skills. In such a short span of time such entrepreneurial women have successes in creating financial independence place in society. Successful women entrepreneurs in such papad industry need to be published through the media so that the new generation of young women can be inspired by their entrepreneurship work ethic, risk taking ability , etc. Can inspired a new generation of young women and contribute to the economic development of the country by increasing overall entrepreneurship among women.

Suggestions:-

- 1] The women of Dhule District should look at the papad industry not only as a traditional industry but also look modernity to the papad industry.
- 2] To increase the participation of women in papad industry , it is necessary for the government to provide special encouragement to women in the industrial policy as well as in various schemes of the government and to Conway information related to trade and industrial management to women.
- 3] As there is a large amount of agricultural sector in Dhule District , a mechanism should be setup to provide guidance and information to women in agro-based papad industry and business.

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Interpreting Brain activity and Behavioural quantification of Humans towards the challenge and visualization of the dataset

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Abstract: The main principle of brain organization is the functional integration of brain regions into interrelated networks. Analysing brain activity and performance is the key objective of the study. The study focuses on the activity of the brain after one hour of a certain activity, which includes reading, editing, painting and physical activities like jogging etc. The use of these methods, however, is not limited to studying behaviour in the wild or strictly ethological settings. Here the quantification of human behaviour after being assigned a particular work was monitored. The reflection over the period and its impact on life were analysed. The data discloses the different age groups with different tasks for an hour and we discuss open challenges that remain for behavioural quantification and highlight promising future directions. Inferential statistics were carried over to visualize the correlation frequency between one or two or more datasets and the packages like corrplot, psych, and ggplot2 were used for interpretation of the data.

Keywords – Brain activity, inferential statistics, Study focus, behavioural quantification, one hour

Introduction:

Behaviour is a zestful phenomenon that necessitates changes to an animal's pose over time. Unlike the tracking of body parts, quantification of the temporal structure is a radically strenuous problem without a clear ground truth. It is often presumed that behaviour can be described as a sequence of distinct behavioural states, such as 'walking' or 'grooming'. The type of behavioural quantification can ease comparison between instances of individual behaviours (for example, in reaction to specific sensory inputs or across exploratory conditions) and generate hypotheses about the neural circuitry that gives rise to them (for example, by defining event boundaries or timescales of computation). Animal behaviour, as defined by humans, The simplest way to define a behaviour is by designating a fixed set of rules that describe the criteria that must be met to determine its happening at a given instant. These can be as simple as codifying instances when the animal's centre of mass is moving at a speed greater than a minimum threshold as 'locomotion', but can quickly become complex when establishing detailed inclusion and exclusion criteria based on fine specifications of postural features. Although easy to evaluate and interpret, fixed rules may fail to apprehend the full variability of behaviours that can be flexibly manifested, particularly when subject to experimental artifices that may alter the statistics of the features used in the classification criteria [5]. In the present study, the primary data collection was done using experimental activities on the Brain for 30 days to study the behavioural change of a person. Several hypotheses and examinations of populations have been practised

using programming languages. The behavioural change reflected in the person's life and their working environment was monitored for the results.

Objectives:

To study the population referred to the assigned task

To examine the behavioural changes in everyday life in samples subjected to the study

To analyse the dataset statistically

Materials and methodology:

The primary motive of this study was to analyse the patterns of concentration on a given task and also to study the impact of successful completion of the said task, especially how successful completion helps, build up a habit. The study was carried out on different age groups of people who were assigned tasks like reading, sketching, studying and various physical activities [8, 9]. Also, the gradual ageing with occasional memory patterns was also analysed [7]. The sample population volunteered for the thirty days of one-hour challenges on daily basis. The dataset represents the divergence and their activity in daily life was studied. Through this, the behavioural pattern of a person becomes noticeable towards the given object and situation [5, 10].

The present study promotes memory and is an effective way to build a habit. Every day the person's activity with the respective time utilised to complete the task was noted. Reading, writing, and colouring promote brain cell activity, which is the major communication practice area. Most of the population were going through depression and anxiety these days also measured for the performance of the Brain [2, 6]. The five-factor model of personality was noted in this study such

as neuroticism, extraversion and openness to adventure, acceptance and conscientiousness. The behavioural patterns [3] show gradual enhancement throughout the duration of the study. It acts as an interlinked chain connecting the objectives and personality of an individual. Development of a sense of responsibility [4] as well as purpose towards the task, and also the observance capacity of the individual can be figured. Also, studies were performed in combination with nutritional food uptakes to increase the neuronal activity in the Brain [1].

The study also involved inferential statistics for the relationship analysis with one or two variable data. The rational linear or non-linear relationships between the dataset were interpreted using inferential statistics with the help of packages. General data visualization [15] performed using RStudio.

The Corrplot package [14] gave a correlation matrix that helped to detect the hidden patterns among variables. It is very easy to use and gives a rich array of plotting options in visualization

methods. It gives p- values and confidence intervals to provide information about the significance of correlation in a statistical manner. Pearson correlation “psych package” [13] was used for scale construction using factor analysis, principal component analysis, cluster analysis and reliability analysis. Psych correlation is an extension of the pair’s function that allows easy addition of regression lines, confidence intervals and several additional arguments and it creates a graph of a correlation matrix colouring the regions by the level of correlation. The package called “ggplot2 package”(stands for The Grammar of Graphics)[11, 12] used here greatly improves the quality and aesthetics of graphs and gives more focus to almost every section of the data and it also gives efficient commands to create complex plots. Using this package, the scatter plot was observed for the correlation status between the data.

Location of the study - The primary data involved in the study was collected from the place Madurai, Tamil Nadu in India.

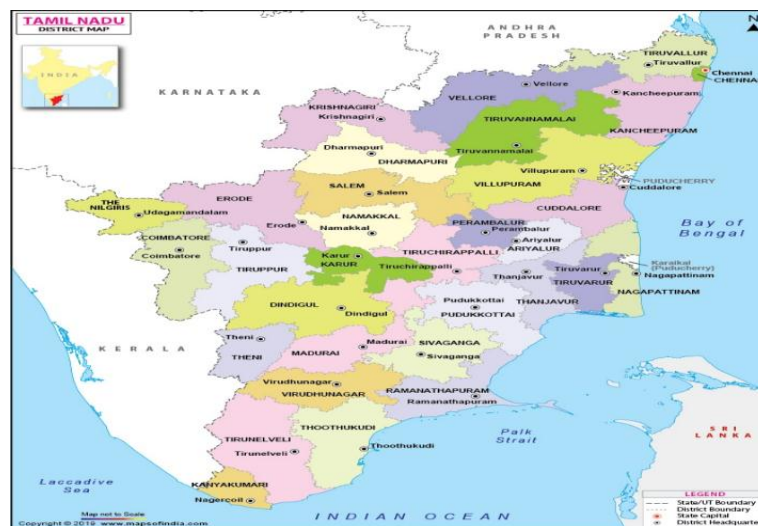


Fig.1: The study Location in India

- Annai Bharath Astrocity (Housing limited are), Madurai, Tamil Nadu, India

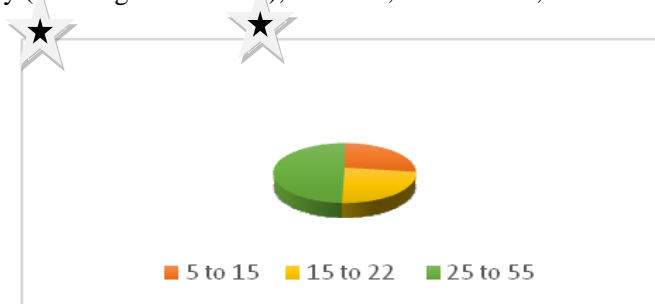


Fig.2: The pie chart represents the population taken for study according to their age.

The data analysis helped to understand the data clearly without missing out on any information. Also using statistical tools makes decision-making precise and frees, from any bias. The

assigned task completed per day was converted to numerical data where the amount of assigned activity completion was reported. General

statistics of mean, median and standard deviation were performed over the dataset.

Inferential statistical analysis was performed using software to interpret and explore the frequency distribution between the day's progresses of an individual. Using tools, the efficiency and overall performance were identified using a graphical representation. Psych package was used to ascertain the correlation and confidence intervals among the variables. Corrplot package gave correlation matrix visualization in a different manner including shape, patterns, and colours. Ggplot2 package gave competent scatter plots of the matrix with the correlation.

Results and Discussion:

The raw data was collected by experiments for a month and the behavioural change towards the objects was screened. Noticeable positive changes in activity were seen, especially participants in the age group 5-15 showed a greater task completion rate. The stress over exams had been reduced and the behaviour pattern in doing chores was typically tolerable by routine rewards. There was a

remarkable evolution pattern seen in academics and sports levels. Problem-solving abilities were improved. In adults, between the age group 15-25, the characteristic process of learning things carved a different approach in tackling everyday challenges. This was applied to health and habits of automatic responses towards the force. Daily monotonous and academic growth was seen clearly. Most of the participants started becoming consistent. Most working young adults finished the task before deadlines. It was clear that self-reformation and increase in productivity caused positive results in the workplace, gradual commitments with the balance between work and family were seen and they were up for open and valuable communication medium. Elder citizens between the age group 25-55 found time for themselves through these experiments. They mostly seemed to be happy and free from trauma and stresses, and it was seen that regular walking improved the physical and mental health of a person. It reflected their positive ageing phase despite the trials in life, clearly mentioned in the below table.

Table.1: Projection of variations in life by the practice of challenge to Brain

Prominent changes in Life	According to Age		
	5-15	15-25	25-55
School/ College/ Work	Interest in asking more questions, determined for excellent academic performance in problem-solving	Open-minded for an efficient conversation, time management and self-moulding	Independent healthy working environment among the co-workers, positive ageing
At Home	Building good manners	Well-planned organization toward the activities	Stress-free smiling faces observed

By using RStudio, the data was interpreted for a better understanding of the study and several packages were used to find the relationship between the variables.

The fig.3 represents the boxplot of each variable minimum, maximum with the median value

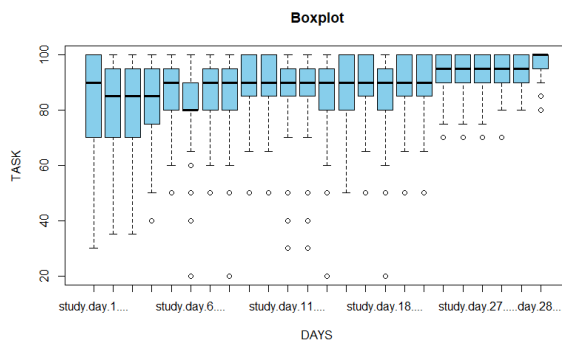


Fig. 3: Boxplot of data from day 1 to day 30
 The corrplot represents the correlation matrix of days 1, 5, 10, 15, 20 and 30 in the manner of a circle

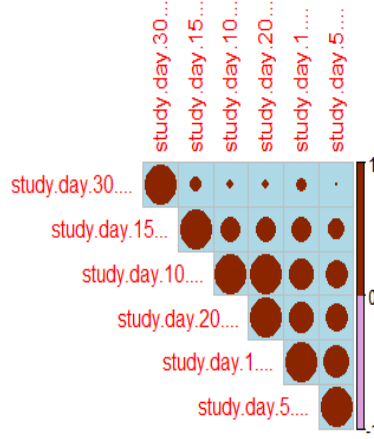


Fig. 4: Corrplot of the dataset
 The below graph annotates the bivariate scatter plots of correlation between the variables, and the observed results of p- values illustrate that the null hypothesis is true.

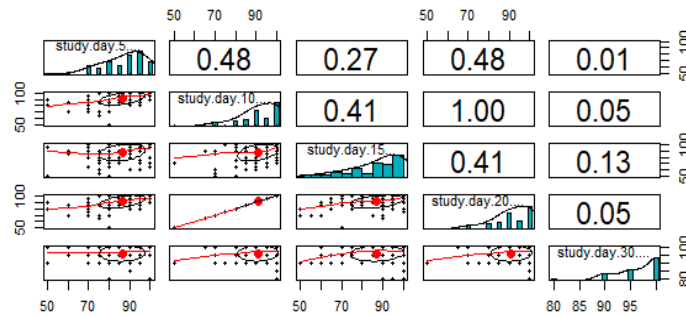


Fig. 5: Plot using “psych” package
 The below scatterplot represents the performance of an individual with their activity scale over the time basis

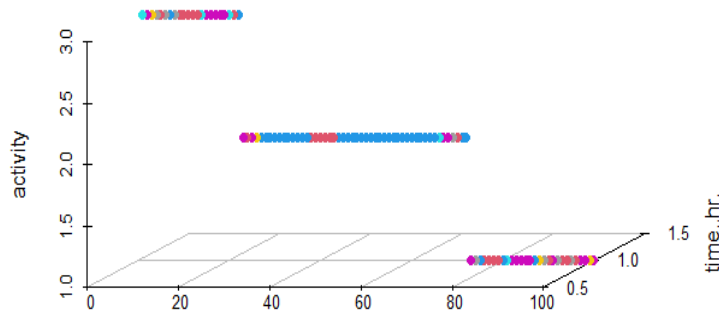


Fig. 6: Plot using the “ggplot2” package
Discussion:

Constant growth levels in studies and activities like reading, and problem-solving were perceived and visible good manners were also observed. This challenge helped them to build a habit and roots in a good work environment. The raw data expresses the persistent growth of healthy and stress-free life. Out of the test sample population, the 5-15 years old population shows 95% overall improvement and 15-22- and 25-55-years old shows 100% improvement. By this study, it is evident that improvement in

confidence levels and healthy good habitual activity were clearly detected. Further, the statistical analysis was performed to interpret the dataset to get the significance level. The p-values of the sample population showed a positive correlation and the values demonstrations null hypothesis is true. Without losing the data, each variable was pictured in various graphs using packages which provide the interpretation of big data.

Summary:

The study mainly focused on the performance activity before and after the experiments and its impact on their behavioural pattern and confidence level was studied with different age intervals. The population of volunteers was constantly supervised to build a habit and their instant satisfaction over the task after completion was collected. The changes from physical to mental state were recorded for quality purposes.

Inference:

The statistical approach of the dataset shows a positive correlation and the significant p-values accept the null hypothesis. Also, graphs obtained using packages like `corrplot`, `psych` and `ggplot2` provide comprehensive information to interpret the data.

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Impact of Motivation on the Performance of Employees of NCR

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Abstract: Since motivation has been a key indicator of how well employees do their jobs for a long time, organisations and human resource managers have been very concerned about it. There are a lot of things that have to do with management, employees, the organization, and the workplace, which makes it hard and complicated to get people to work hard. So, the organization and the person in charge of human resources should use a variety of strategies and methods to get people to work hard. When a person joins a company, they have to meet different needs and meet different expectations. Human resource managers use both monetary and non-monetary factors to reach different goals for employees and the organization as a whole. Employee motivation can be regarded of as a force that drives employees toward the attainment of specific organizational goals and aims. These days, it is one of the most contentious issues in businesses, as every company strives to make the most efficient use possible of both its financial and human resources. The primary objectives of this research are to examine the kinds of factors that have an impact on employee motivation in NCR and to determine the extent to which motivation influences employee performance. A questionnaire that is self-administered is used to collect data from 200 teachers who work in government schools as well as private schools. In order to determine the effect that employee motivation has on employee performance, regression analysis is used. This study takes into account four variables: employee motivation; employee performance; intrinsic rewards; and employee perceived training effectiveness. The findings of this research indicate that there is a considerable and favorable relationship between the motivation of employees and the performance of such employees. Furthermore, this study came to the conclusion that a substantial positive relationship exists between intrinsic rewards and employee performance as well as employee motivation. According to the findings of this study, an employee's perception of the effectiveness of training has a negative correlation with their level of motivation. It is also proven from their comments that although they were provided with the training courses, they did not utilise this training in their routine teaching because they believed it to be unproductive. This can be proven from both of these aspects. The fact that they were dissatisfied with the training that was offered to them had a negative impact on their motivation to teach.

Key words: Employee Motivation, Employee Performance, Intrinsic Rewards, Employee Perceived Effectiveness.

Introduction

Motivation is derived from the word 'motive,' which refers to an individual's needs, desires, wants, or urges. It is the process of motivating individuals to take action in order to attain a goal. Need for Money, Respect, Job Satisfaction, Accomplishment, etc., might be among the psychological variables motivating people's actions in the context of their work goals. Motivation plays a vital role in the management process as a whole. This strategy is effective for encouraging employees to contribute positively to the achievement of company goals. Motivation is required because human nature necessitates some form of inducement, encouragement, or incentive for improved performance.

Employees are motivated by the following factors:

- Ask workers what they want
- Ask workers what they want
- Treating employees with respect
- Treating employees with respect
- Feedback and training from managers and

leaders

- Industry-standard benefits and remuneration
- Carry a notebook for ideas
- Explain the incentive system

Motivate people to enjoy hard work. Today's workers must know why they're toiling. Every employee is driven differently. Employee motivation is a company's workers' degree of energy, devotion, and innovation. Managers get work done through staff. Managers must motivate staff to do this. Not so easy! Motivation is a multidisciplinary subject. Despite vast basic and applied research, motivation is poorly understood and implemented. Motivation requires understanding human nature. Problem! Man is simple yet complex. Understanding and appreciating this is necessary for effective staff motivation, management, and leadership. Every concern demands physical, financial, and mental motivation from employees and human resources to reach goals. Motivation maximises human resources. Building employee work ethic helps. This helps the

company maximise resource use. It increases productivity, reduces costs, and improves efficiency. Motivated co-ordination and cooperation can achieve goals. Stability of staff is vital for a company's reputation and goodwill. Only when employees feel like they're part of the management will they remain loyal. Employees' talents and efficiency benefit both employers and workers. This will lead to a good market image, which will attract skilled employees. In the context of today's globalised environment, businesses are continually looking for ways to improve the skills of their employees and to inspire them through the use of HR software and procedures. According to Güngör (2011), businesses will not succeed until they implement reward management. According to Barber and Bertz (2000), incentive management enables companies to better attract, retain, and motivate high-potential employees, which ultimately leads to improved business results. Money and bonuses are examples of extrinsic benefits, whereas recognition, security, a title, promotion, appreciation, praise, participation in decision-making, flexible working hours, workplace comfort abilities, feedback, work design, social rights, and other intrinsic rewards are examples of intrinsic benefits. Extrinsic benefits include things like money and bonuses (Yang, 2008). According to Grant, levels of motivation have an effect on staff performance and productivity (2008). According to what he discovered, motivated workers are more self-driven and respect autonomy. People that are motivated to work are interested in what they do and are eager to accept responsibility (Kuvaas & Dysvik, 2009).

The formalised process of obtaining new knowledge, skills, and capabilities is referred to as training. The orientation and magnitude of one's efforts, as well as the psychological quality that stirs an organism to motion, are both referred to as motivation. Training tactics have an effect on the motivation of employees as well as the commitment of organisations (Meyer & Allen, 1991). Rowden and Conine (2005) state that training leads to an increase in employee work satisfaction, which in turn leads to an increase in customer performance. Employees that are committed to learning report higher levels of happiness and have greater overall performance (Tsai et al, 2007). Tsai et al. (2007) and Harrison (2000) both agree that training that is prompted by learning

helps increase employee performance and is essential to the accomplishment of organisational goals (Harrison, 2000). According to the findings of the study, the performance of a company is determined by a variety of elements, the most important of which is the level of employee motivation (Saif ullah malik et al., 2012).

Intrinsic rewards are intangible awards of recognition or achieving motivation in any work when one sees in Maslow's hierarchy as conscious fulfilment. In other words, intrinsic rewards are motivation that comes from inside. It's having the satisfaction of knowing you did something positive or brightened someone else's day. Employees are encouraged through the use of incentive management systems, particularly intrinsic rewards, which affect both individual and organisational performance. Both Pool and Pool (2007) and Lok and Crawford (2004) feel that there is a connection between motivation and job satisfaction. According to Tsai et al research,

there is a considerable connection can be found between perceived training effectiveness and job satisfaction (2007).

Models and theories concerning motivation can be found in the field of organisational behaviour. Concentrate on the professional development of your staff. Progress is considered to be the most important factor in employee motivation by Maslow, Alderfer, McClelland, Hackman, and Herzberg. [Citations needed] There is a connection between employee motivation, work satisfaction, and organisational commitment (Basset-Jones and Lloyd, 2005; Chen et al., 2004). The success of any organisation, whether public or private, is directly correlated to the level of employee motivation (Chintallo & Mahadeo, 2013).

According to the findings of a study that was conducted by Sirota et al. (2005) with the participation of 135,000 respondents from a variety of different groups and countries, businesses that implemented motivation programmes that involved camaraderie, equity, and achievement were more successful than businesses that either had no employees or twice as many employees who were enthusiastic (of total 45 percent). According to the findings of a study, the productivity of workers improves when they experience higher levels of motivation (Asim, 2013).

Intrinsic reward

Intrinsic motivation is an interest in the

activity itself rather than external influences and incentives. Organizations need something to keep their staff working, such as salary or bonuses, but motivation is highly vital to keep workers engaged and involved in their work so that their quality and quantity of work and productivity doesn't decline (Williams, 2004). Intrinsic reward is the enjoyment a person gets from working in a good organisation that compensates him for his work. Employees value extrinsic and intrinsic rewards. Intrinsic motivation comes from within (pleasure, satisfaction, pride) while extrinsic incentive comes from outside (salary, money, grades, etc). (Scott and Bruce, 1994),.

Intrinsically driven people work on math problems because they're entertaining or they're tough and provide them pleasure to solve. In both circumstances, extrinsic rewards such as payment or award are unimportant (Roberts, 1991 and Rothwell, 1992). It doesn't imply extrinsic incentive isn't necessary, but it's not enough to motivate someone (Eisenberger and Cameron, 1996; Janssen, 2000; Mumford, 2000).

A study indicated that rewards are key to reducing employee unhappiness. When employees are happy, they work harder and with more interest, leading to good performance (Mehmod, 2013). Intrinsic rewards influence employee performance, according to a study. When individuals receive intrinsic rewards, they realise their performance and work harder to be recognised. (2014)

Importance of Motivation

The concept of motivation holds a great place and function throughout the entirety of the management process. Encouragement of workers to make a constructive contribution to the accomplishment of organisational goals is a beneficial use of this strategy, which can be employed fruitfully. Because of the nature of the human race, individuals typically require some form of induction, encouragement, or incentive in order to achieve higher levels of performance. This points to the significance of providing incentives to workers. Increasing an employee's sense of motivation is one way to boost their performance, even if they are working at a lower level.

Along with their other responsibilities, managers are expected to fulfil the role of employee motivator as part of their job description. It is necessary for a manager to act not only as a friend but also as a motivator to

the people under his supervision. The ability to stay motivated is beneficial in all facets of life, including the interactions we have with our family. The situation is exactly the same in business. This strongly shows that having a motivated attitude is quite crucial. It is an integral component of the management process overall.

When it comes to getting employees excited about their jobs, management can put a powerful tool at their disposal: motivation. When employees are motivated, they are more inclined to put in effort at work, which ultimately leads to an increase in the efficiency of the firm.

Better usage of available resources; decreased incidence of labour issues; substantial gains in production and productivity; enhanced public perception

Objectives of the Study

To study the significant and positive relationship of Employee motivation with employee performance.

To study the significant and positive relationship of intrinsic reward with employee performance.

To study the significant and positive relationship of intrinsic reward with employee motivation.

To study the significant and positive relationship of Employee perceived training effectiveness with employee motivation.

Hypotheses of the Study

There has a significant and positive relationship of Employee motivation with employee performance.

There has a significant and positive relationship of intrinsic reward with employee performance.

There has a significant and positive relationship of intrinsic reward with employee motivation.

There has a significant and positive relationship of Employee perceived training effectiveness with employee motivation.

Research Methodology

This method of research is known as descriptive research, which implies describing and explaining a specific explanation. The focus of the descriptive research is on describing the current condition, rather than making evaluations or offering interpretations of the present situation (Creswell, 1994). Verifying the hypothesis that accurately reflects the current condition is one of the main focuses of the present situation.

Sampling Data

The population of this study consists of the faculty members of Government and private schools of NCR. A sample of 200 respondents were asked to complete a questionnaire. This study used convenience sampling, which is a non-probability sampling technique. Convenience sampling entails the gathering and collection of information and data from the sample of the study or the unit in the study that are easily accessible and convenient.

Instruments of the Present Study

There are two major objectives of the present study regarding survey instruments: The first is the relationship between various variables in the implementation of employee motivation. Second, it can be used to collect information on respondents with diverse characteristics in order to comprehend the variations. The survey of instruments has 2 parts.

Part 1 contains various individual and demographic factors. This part will collect information regarding the respondent's gender, age, income, and level of education.

The importance of Part ii in the current study cannot be emphasized. These variables consist of employee motivation, performance, intrinsic reward, and perceived training efficacy. This component of the study is based on previously utilized questionnaires and previous material. The study's scale was derived from previous research and published literature.

Procedure

The questionnaire was distributed to 200 NCR-based respondents. Before administering the questionnaire, the respondents were briefed on the goal of the study and the questions so that they could easily provide pertinent responses. 200 questionnaires were selected in total. After questionnaires were collected, they were categorized and placed into an SPSS sheet for further analysis.

Results and Interpretation:

After the prerequisites for reliability and validity have been met, this portion of the study tests the model. On dependent variables, the casual associations of the independent variable are measured. Motivation and Performance of Employees With (Beta=0.373) and ($p < 0.01$), the study's regression findings indicate the considerable positive relationship between Employee motivation and Employee performance. According to these findings, employee motivation exceeds employee performance by 45%. The study's results support

hypothesis 1.

Intrinsic reward and Employee Performance
The employee motivation model's regression analysis suggests a significant positive relationship between (Beta=0.185) and ($p < 0.01$). The results indicate that intrinsic reward is approximately 21% greater than Employee performance. The study's results support hypothesis 2.

Intrinsic Motivation and Employee Reward

Employee motivation has a significant positive relationship with the variable intrinsic reward, according to the study's findings. This variable has a statistically significant positive correlation with (Beta=0.310) and ($p < 0.01$). This indicates that intrinsic rewards contribute more than 52% to employee motivation. The results of the present study confirm the hypothesis 3.

Employee perceptions of the effectiveness of training and Employee motivation

The study's regression results (Beta=-0.003 and $p > 0.01$) confirm the negative relationship between employees' perceptions of training effectiveness and employee motivation. According to these findings, training efficacy as viewed by employees contributes more than 5% to employee motivation. This study's result does not validate hypothesis 4.

Discussion

This research explores the relationship between employee motivation, performance, and perceived training efficacy. It encourages employee motivation. Business-to-business (B2B) employees said they were motivated by their autonomy, independence, responsibility, and position and tasks from management. Some respondents said art, design, or architecture could be motivational, but they didn't say for sure. Respondents said these three constructs boost employee engagement by improving the physical work environment. Improving the working environment improves employee well-being, emotions, and encouragement, which increases motivation. Some respondents disagreed since they weren't interested in the physical environment. Employee motivation, performance, intrinsic reward, and perceived training efficacy are relevant variables. Multi-item questionnaires based on empirical research were employed to measure these characteristics. The study used teacher data. According to their comments, they were given training courses but didn't use them in their everyday teaching because they were unsuccessful. Unsatisfactory training reduced their motivation to teach.

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Civic Amenities and Characteristics among Small Urban Towns in India: A Case Study of Kushinagar

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Abstract-

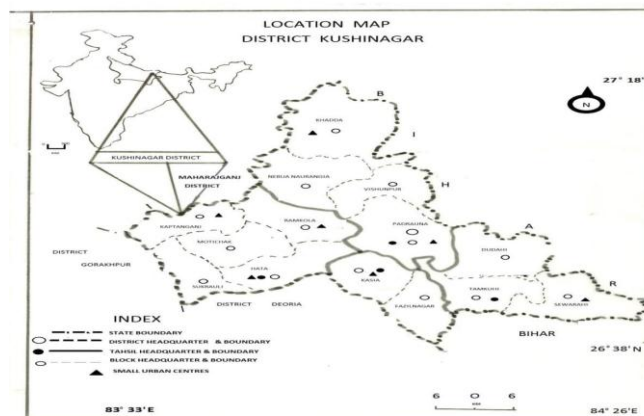
In India, from very beginning the concentration of development is mainly taking place in Metros or class 1 cities as compared to the small and medium size towns. The small urban centers can provide a better ground for the modern urbanization have become the victim of serious problems and therefore unable to play a proper role in the context of socio-economic world. In fact, the challenges of urbanization are badly affected due to this urban poverty which is largely an extension of rural poverty. Thus, in the context of development, if these centers are provided with proper provision of urban facilities along with employment, education, urban amenities and social protection which attract the rural people and fulfill the rural needs. With this view, the present paper try to study the position of infrastructural facilities like water supply, sanitation, electric, telecommunication, education, health, recreation, shops, road and transport in small urban centers of Kushinagar, which is the district of middle Ganga Valley and one of the most populous region of India.

Keywords; small urban centers, urbanization, urban amenities, infrastructure.

Introduction:

Some empirical studies suggest a strong relationship btw infrastructure and economic growth. According to the 'world bank' 1% increase in infrastructure is associated with a 1% increase in GDP across all countries. A study by Deichmann (2002) for Mexico shows that a 10% increase in market access leads to a 6% increase in labor productivity. Broadly speaking, the development of infrastructure has five fold impact on the economy: Creating access to employment and providing future earning opportunities. Creating access to previously inaccessible commodities and services. Increasing production efficiency. Saving time, which can be better utilised in productive activities. Improving the health and physical condition of the population. Study Area With this view, in the present paper, tried to study the condition of urban facilities of Kushinagar district, one of the small urban centres of India. Kushinagar is the district of middle Ganga valley, which is one of the most populous regions of India. It is lying 26°38' - 27°18' N and 83°33'E to 84°36'E on the eastern

margin of Uttar Pradesh, covers an area of 2906 sq. km, which linked by N.H.28 and Gorakhpur-Kaptanganj railway line. Land resource is the base of economy. 76.3% area of district under agriculturally productive land or cultivated. The district consist of four tehsils, 14 development blocks, 141 Nyay Panchayat, 1560 villages, 957 Gram Panchayat and 7 urban centres, namely Padarauna Nagar Palika, Khadda, Ramkola, Severahi, Kasia, Hata, Kaptanganj are six nagar panchayat according to census 2001. Total population of urban centres are 132523 in 2001 and 170385 in 2011 which is 4.58% and 4.78% of district population. In the study area, there is a lack of proper infrastructure of Kushinagar, where majority of rural population i.e. 95.13% of total population. They are neither eager nor conscious towards the development of these activities. In urban centres, the development of amenities is also slow due to lack of proper attention and poor investment by the town development authorities. Table (1) reveals the development of infrastructure in the small urban centres of Kushinagar btw 1991 to 2011 decade.



Water And Sanitation-

In the rural areas of Kushinagar hand pumps are the main source of drinking water. In each village four to five hand pumps have been installed by government. From earlier seven urban centers are also being served by tube wells and water taps. But these sources only function a few hours a day, however, because of poor maintenance. Water supply is found inadequate especially during summers when the suffering is more due to increasing demand of water by the inhabitants. Despite the impressive coverage of provision of safe drinking water, there is a great deal of concern about both quality and sustainability. At several places supply pipes are cracked and are near some dirty areas. At a few places the sewer pipes are close to the drinking water pipes. Most of the hand pumps in such area are not so safe as they mostly have a depth of 80 feet's only, which contains a lot of pollutants that have reached the underground water. In Kushinagar, there are calcium and sulphate are most common constituent causing hardness of natural water. Due to the imbalances of mineral salts, deficiency diseases like thyroidal problems are common and also causing epidemic problems are common in this area. In this regard, India mark hand pipes have been provided by government within the area. Except Padarauna all the centers suffer from these conditions of water supply. In the Padarauna more than 70% households use the water taps, 10% Hand pumps and 15% household have no proper supply; they depend only on nearby India mark hand pumps. In Saverahi and Khadda only 40% houses have water taps, 30% houses have no proper provision of water supply. (Table: 2)

The situation of sanitation is rather dismal. Survey indicated that with less than 50% of households having functional latrines in Khadda and Saverahi. In Kasia and Padarauna 66% households have their own functional latrines. While in Ramkola, Kaptanganj and Hata have 50 to 60% households with latrines.

The government subsidizes the building of latrines by households that are below the poverty line, governments share the subsidy to households for constructing latrines which is about 80% of the unit cost. Despite these incentives people are slow to adopt sanitation practices.

Power, Telecommunication & Recreation:

Although the power supply available but these centers are always suffering from frequently power cuts and electric faults. Till 1971 all the centers linked with electric power but Kasia and Padarauna have proper power

supply. While in Ramkola, Kaptanganj, Saverahi, Hata and Khadda, there are 10 hours in day or night power supply in alternate weeks and also have no regular supply. They are always suffering from frequent power cuts, low voltage supply and electric faults. There is also a big problem of unauthorized use of the electric current. Nearly 40% of households have Katia system. This system is very harmful and sometimes gives a very strong spark. The available total telephone connections in urban areas were 1113 in 1991, which is 4187 in 2001 and 1488 in 2011. The above figures reflect the trend of development in using mobile phones instead of landline telephones because it is easy to handle and portable. Table I shows the highest figure in Padarauna. In Khadda, there is only 231 connections in 2001 and 56 in 2011 less than other centers. 261 public call offices (2011) in urban areas, in which 64 in Padarauna, 25 in Hata, 52 in Saverahi, 26 in Kasia, 30 in Kaptanganj, 24 in Ramkola and 40 in Khadda. This figure is very low in 1991, only 92 public call offices in entire region. In 1981 there is only one Targhar in each urban centers accepting Kasia but in 2001, Targhar of Kasia, Ramkola, Kaptanganj and Khadda were closed only four Targhar are in urban area of Kushinagar. But these are closed now. All centers are provided postal services. In 1981, there were 10 post offices in urban centers, in which 4 in Padarauna, 2 P.O. in Kasia one in each other urban centers but in Kaptanganj, there was no any Post office. Now one P.O. is open in Kaptanganj. In present, there is 4 post offices in Padarauna, 2 in Kasia and 1 in each other urban centers. In 30 years, there is no development shows these figures because the negligence of these small urban centers. Healthy urban recreations like cinema houses are there, like- there are two cinema house in Kasia out of which only one is running properly, same condition is in Padarauna, here are three cinemahouses but only two are running properly; But In Hata & kaptanganj there are one cinema house each but these are closed now a days; these cinema houses are not working properly due to their local disputes, lack of purchasing power of people, lack of facilities etc; but here is no park or any play grounds. In the whole area only 'Buddha Nirvan Sthal' in Kushinagar is develop as a recreation Centre due to its tourism importance. Not only this, the point of worry is rather stagnation of many of the small towns of India. In these centers the surrounding villagers visit for having a change from their routine life and have a pastime.

Health & Educational Services:

The conditions of medical facilities are not so good. There is one district hospital in Kasia, Hata & Padarauna. Except Sevarahi and khadda, there is one Community Health Centre (CHC) in each other five urban centers. From 1981 there exist four primary health centers in urban centers. In present; there is 3 PHC in Padarauna and one PHC in each six urban centers. But sufficient beds, O.T. and specialist doctors are not available as required and those who are available are in poor condition. There are 5 Aurvedic hospitals, in which 2 are in Padarauna, 1 is in Kasia, Hata and Kaptanganj each. 8 homeopathic hospitals or clinic in entire area where no single doctor is available, in the absence of doctors the hospitals are closed for whole day. The family planning and mother child welfare centers are allotted one to each urban centers with the work load of surrounding areas. Private clinics are in much better position but their fee is very high, In order to avail the advance specialized and emergency medical facilities available in these hospitals (TABLE-3).

As for as the educational facilities are concerned the changes have molted to a considerable extent. In 1981 seventeen junior school, thirteen higher secondary, nine senior secondary school three degree collages were present in Kushinagar urban area. In which Padarauna ranked first in no of institutions and Kasia was second. With increasing population and demand some junior, higher and secondary schools are also open but they are not sufficient for extra opportunity and their services are not satisfactory. In present, 28 junior basic school 24 senior basic school 34 higher secondary school and 28 P. G. colleges in 2011. There are more than 100 Montessori nursery schools are open throughout the urban area which influence the modern education (Table: 4). But above all, it is clear fact that the school and colleges spread in a greater number but more of them are away from quality contents and fulfill the need of present day race. Also the condition of higher education is not satisfactory only four P.G. collages (Financed) are in Padarauna, Kasia, Saverahi & Fazilnagar each from 1981, who have the responsibility to shape the youngsters future with their traditional education which is insufficient without any professional assistance. After 2005, there are 26 self-finance collages are also present in these areas but they don't provide quality education; there are a few private technical/vocational training centers as in table (4), but they are not up to the standard to make students future secure; neither these institution

are able to fulfill the needs of local people as for as neighboring rural people. No doubt, these institutions behave as a factory of degrees.

Other Institution:

These types of institutions are too busy to perform as a base for collection and subsequent distribution of agricultural products of the surrounding region. It is actually this rural based function which link small towns with the country side. These are banks, polish station, control rate shop, cold storage, godowns, agricultural and animal service Centre, clothe shop, gold & silver shops, cycle sell & repair shop, hardware shops, book & stationary shops, Aurvadic, medical drugs, Tractor and agricultural implement sell and repair are Centre place function available generally in small towns. Table (5) reveals that the developments of this type of shops are very slow between two decades (1991-2001). There is only one polish station in each urban Centre in 1991 and same in 2011. Control rate shops are 38 in 1991 and 70 in 2011, in which 27 shops in Padarauna, 8 in Kasia & Saverahi each, 8 in Hata & 5 in Khadda, 6 in Ramkola and 5 in Kaptanganj. Being large rural centers six cold storage are provide here two in Padarauna two in Kasia and Ramkola & Sevarahi have one cold storage each, but it's astonishing that out of six, only laree cold storage Kasia is running rest 5 are closed. There were 22 seeds and pesticides centers in 1981 which is now 67. From 1981 to 1991 there were no single agricultural service centers, but in 1995 agricultural service centers were opened and now it is 84 in 2001 and 70 in 2011. These agro based urban centers got only 10 cooperative societies out of which 6 are in Padarauna & Sevarahi, Kasia; Ramkola & Hata has one each. Table (6) shows the banking position of entire region there were 12 branches of nationalized bank in 1981 which were 23 in 2011, in which 5 are in Padarauna, 5 in Kasia, 3 in Ramkola, Kaptanganj, Hata and 2 in rest two urban centers Sevarahi & Khadda. All seven centers have 1 branch of Gramin Bank, 2 branches of corporate bank in Padarauna while other six centers have one branch each. But now 4 branches are closed. There are three branches of Bhumi Vikash bank in urban area in which 1 in Padarauna, Kasia and Hata each. Different type of shops like pan shops, clothe, gold & silver, book & stationary, cycle sell & repair, medicine, bakery, provision stores, country liquor, utensil, fruit and vegetable shops are present in these centers. But only Padarauna, Kasia and Hata have manyshops which fulfill the needs of rural centers also. Ramkola, Kaptanganj, Khadda and

Saverahi have no sufficient shops that fulfill the needs of rural people beside these centers. The people of these centers are come in other urban centers.

Road and Transport:

Small towns and roads are closely associated and contribute to each other development by virtue of their intrinsic qualities of functions. The study area is well served with a good network of transport arteries. National Highway (N.H. 28) travel from Kasia, Hata and Saverahi which is now known as east-west corridor, beside this all other local metaled and non-metaled roads which are provide a great impetus for the development of urban centers connected with district headquarter. All the centers are connected with each other but around 50% villages of countryside are not connected to road network. The total available roads in these urban centers are 180 Km.long in which only 60 Km. length is metaled, according to statistics of Kushinagar 2013. In Padarauna a state roadways depot is under construction. Many state transport bushes and undertaking bushes are running up and private bushes & taxies are also running between these centers and other centers also. Authorized bus services are available from Padarauna & Sevarahi, Kasia is in center because of that these buses passes through it, as well as Hata is on the way to Gorakhpur so that buses are available from there too. But from Ramkola, Khadda & Kaptanganj there is no such authorized bus facility available, people are bound to use private transport like-Taxi, mini bus etc

Conclusion:

Our study of small urban center's infrastructure for housing, electricity, water, sanitation, telecommunication, road and transport reveals many common themes and common problems across the sectors. First is the fundamental importance of access to basic infrastructure for productivity, improving quality of life and stimulating economic development. And second, unfortunately, is the lack of such access in all sectors, because urban services are ignored by town development authority. The scenario of urban facilities is not properly developed for providing good life style and economic development. They are suffering from highly negligence of development. Although this infrastructure includes a number of capital assets for different provisions but these assets have suffered from poor maintenance and little attention, has been paid to the quality of service actually delivered. On the basis of my study, I can say that the existing infrastructure of

services and community facilities of small urban centers have become outmoded, due to over population density. More than half of the people suffer from bad, unsafe and unhygienic environs. Many of the municipal bodies have undeveloped and / or eroded tax systems and suffer from lack of capital funds for development. The services if provided have deteriorated over the years and there seems no sign of reversal. The financial position of urban bodies is very poor, expenditure exceeds the revenue, and it is common for the deficit to be mint by the state government by giving the grant and assistance of occasions of by waivers of loans, octoroi, which was the main source of revenue, has since been abolished and now local bodies have to depend upon transfers that is grant and share from the state government. Only 10% of government expenditure is spent on maintenance of public facilities. Many steps have been taken by both the central and state government like JNNURM, Kansiram Garib Awas Yojana, Water supply, Sewerage and Solid waste disposal and road construction etc. But not surprisingly, there are conflict and controversies and sometime, it is not possible to fix their responsibilities for lapses in providing civic amenities or in solving other urban problems. Therefore, there is lack of infrastructure in small urban centers.

In the context of development, there is a need of decentralization for the healthiest urbanization. Therefore, small urban centers of country can play important role. And if there is a proper provision of urban facilities along with employment, quality education, urban amenities and social protection, which attracts the rural people, and fulfill the rural needs and also deduct the burden of big urban centers.

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A Positive Effect of Nanotechnology on Global Warming & Climate Change

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Introductions to Nano science and Nanotechnology

Nanoscience and nanotechnology have made enormous advances in recent decades, and their impact on every sector has been widely recognized across the globe. As a result, their strategic position has already been established in the twenty first century. The study nanomaterial's and nanostructures is a relatively new discipline with several compliments. Nanomaterial's and nanostructures are crucial in the creation of Nano science and nano technology applications such as information and procedures, energy sources, the environment health, and medicinal treatments. Most countries are investing significantly in the study of nanomaterial's and nanostructures, such as the advancement of Nano science and nanotechnology Nano electronic technologies and devices, nano or micro fabrication techniques, Nano biotechnology, Nano medical Diagnosis techniques and nano environmental monitoring and treatment techniques. The continuance of indepth research on nanomaterial's and nanostructures is vitally crucial. Furthermore, the (indepth) study of nanomaterial and nanostructures is a valuable source for developing new ideas, methodologies, and procedures, possibly leading to breakthroughs in major scientific challenges. At the same time, the nanomaterial market is a native power for nanomaterial development.

Introduction of Nanomaterials

Nanomaterials are essential components of nanoscience and nanotechnology. Nanostructure science and technology is a large and multidisciplinary field of study and development that has grown rapidly in recent years across the globe. It has the potential to change the way materials and products are generated as well as the range and kind of functions that maybe accessible. Current in semiconductors may be carried by the flow of electrons or the movement of positively charged holes in the material's electron structure. Nanomaterials with diameters ranging from 1 to 20 nm have emerged as a prominent multidisciplinary area of research interest in the last decade, with the promise for wide-reaching industrial, biological, and electrical applications. Surfaces and interfaces are critical in nanomaterials, although in bulk materials, only a tiny number of atoms will be at or near a surface or interface. The tiny feature size of nanomaterials assures that many atoms, potential 50% or more in certain situations, will be near the interfaces. Surfaces features such as energy levels, electrical structure, and reactivity, may vary significantly from internal states, resulting in quite distinct material properties. Nanocapsules and nanodevices have the potential to open up new avenues for medication delivery, gene therapy, and medical diagnostics. Carbon nanotubes are utilised as reinforcing particles in nanocomposites, but they also have a wide range of additional uses. They may serve as the foundation for a new age of electrical devices

that are smaller and more powerful than bulk materials. Carbon nanotubes have previously been used to build a nanocomputer. Materials with nanometer-scale dimensions have different characteristics than bulk materials.

When semiconductor materials are shrunk to the nanoscale, their physical and chemical characteristics change dramatically, resulting in unique features owing to their enormous surface area or quantum size effect. The semiconductor's conductivity and optical characteristics (absorption coefficient and refractive index) may be changed. Semiconductor nanomaterials and devices are still in the research stage, but they have the potential to be used in a variety of fields, including solar cells, nanoscale electronic devices, light emitting diodes, laser technology, waveguide, chemical and biosensors, packaging films, super absorbents, amour components, automobile parts, and catalysts. Semiconductor devices include numerous types of transistors, solar cells, various types of diodes such as light emitting diodes, silicon-controlled rectifiers, and digital and analogue integrated circuits. Some semiconductor nanomaterials, such as Si, Ge, GaAs AlGaAs, InP, InGaAs, GaN, AlGaN, SiC, ZnS, ZnSe, AlIn, GaP, CdSe, CdS, and HgCdTe have extensive applications in computers, palm pilots, laptops, cell phones, pagers, CD players, TV remotes mobile terminals, satellite dishes, fibre networks.

History of Nanomaterials

Michael Faraday created colloidal gold particles in 1857, which was one of the earliest scientific

reports. Nanostructured catalysts have also been studied for more than 70 years by the early 1940s precipitated and fumed silica nanoparticles were being made and commercialized in the United States and Germany as ultrafine carbon black alternatives for rubber re-enforcements. Nanosized amorphous silica particles have found widespread use in a wide range of everyday consumer items, including nondairy coffee

Classification of Nanomaterials

Nanomaterials are exceedingly tiny, with at least one dimension of 100 nm or less. Nanomaterials might be one dimension (for example, surface films), two dimensions (for example, strands or fibres), or three dimensions (eg. particles). They may be solitary, fused, aggregated, or agglomerated, and, can have spherical, tubular, or irregular morphologies. Nanotubes, dendrimers, quantum dots, and fullerenes are examples of common

creamer, automotive tyres, optical fibres, and catalytic supports. Metallic nanopowders for magnetic recording cassettes were created in the 1960s and 1970s. Granqvist and Buhrman reported nanocrystals made using the increasingly standard inert gas evaporation process for the first time in 1976. It was recently discovered that Maya blue paint is a nanostructured hybrid material.



Fig. 1: Nanomaterial (Carbon nanotube)

Nano materials. Nanomaterials have uses in the realm of nanotechnology and exhibit physical and chemical properties that vary from ordinary substances (i.e., silver nano, carbon nanotube, fullerene, photo catalyst, carbon nano, silica). Siegel classifies nanostructured materials as zero-dimensional, one-dimensional, two-dimensional, and three-dimensional nanostructures. Nanomaterials are defined as

materials with ultrafine grain sizes (50 nm or dimensionality confined to 50 nm). According to Richard W. Siegel, nanomaterials may be generated with several modulation dimensionalities: zero (atomic clusters, filaments, and cluster assemblies), one (multilayers), two (ultrafine-grained over layers or buried layers), and three (nanophase materials consisting of equiaxed nanometer sized grains) (Fig 2).

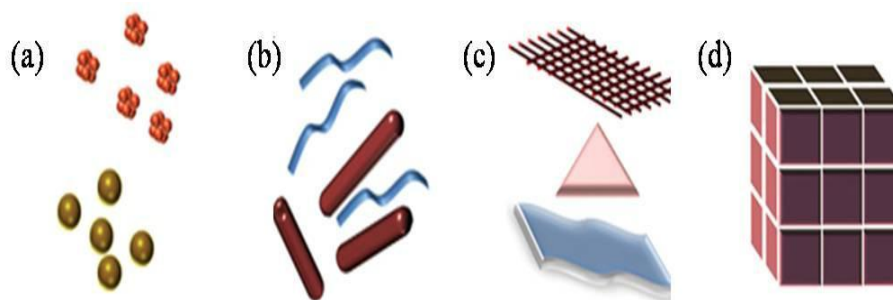


Fig.2: Classification of Nanomaterials (a) 0D spheres and clusters; (b) 1D nanofibers,

Nano-wires, and nanorods; (c) 2D, nanofilms, nanoplates, and networks; (d) 3D nanomaterials

Types of Nanomaterials

Current Nanoparticles (NPs) and Nano Semiconductor Materials (NSM) may be classified under four material groups. There are two types of carbon based nanomaterials based nanomaterials:

(i) carbon-based nanomaterials: These NMs often include carbon and have geometries such

as hollow tubes, ellipsoids, or spheres. Carbon-based NMs include fullerenes (C60), carbon nanotubes (CNTs), carbon nanofibers, and carbon black, grapheme (Gr), and carbon onions. These carbon-based compounds are manufactured via laser ablation, are discharge, and chemical vapour deposition (CVD) (except carbon black).

(ii) Metal and metal oxide NPs and NSMs are examples of inorganic-based nanomaterials.

These NMs may be used to make metals like Au or Ag NPs, metal oxides like TiO₂ and ZnO Nanoparticles, and semiconductors like silicon and ceramics.

(iii) Organic-based nanomaterials: These are NMs derived primarily from organic matter, as opposed to carbon- or inorganic-based NMs. The Use of Non-covalent (weak) interactions for molecular self-assembly and design aids in the transformation of organic NMs into desirable structures such as dendrimers, micelles, liposomes, and polymer NPs.

(iv) Nanomaterials based on composites: Composite NMs are multiphase NPs and NSMs with one phase on the nanoscale dimension that may combine NPs with other NPs or NPs with bigger or bulk- type materials (e.g., hybrid nanofibers) or more intricate structures (e.g., metal organic frame works). The composites may be made up of any combination of carbon-based, metal-based, or organic- based NMs and metal, ceramic, or polymer bulk components.

Positive Effects of Nanotechnology

Nanotechnology improves the strength of numerous materials and devices while also increasing the efficiency of monitoring devices, using less energy, reducing material waste, preventing toxicity, environmental pollution cleanup, and renewable energy generation.

While these are seen to be favourable effects of nanotechnology. The utilization of nanomaterials and nanoparticles may also result in considerable resource savings and increased efficiency in industrial and energy-related applications. Nanotechnology as the potential to provide

Economic, social, and environmental advantages. It has the ability to help lessen the human impact on the environment by addressing issues like as energy usage, pollution, and green gas emissions. Nanotechnology has the possibility of solving the twenty-first century's global concerns, such as supplying alternative energy, defending the human right to clean water, assuring wildlife protection, cleaning up brown fields, and lowering global disease load. It has the potential to provide major environmental advantages, such as:

- cleaner and more efficient industrial processes
- Improved detection and elimination of pollutants through increasing air, water, and soil quality

High precision manufacturing via waste reduction...

Clean ample electricity through highly efficient solar cells

Reduction in the demand for huge industrial units due to the removal of greenhouse gases and other pollutants from the environment

Repairing environmental damage

Nanoscale products that utilize grapheme in commercial or research applications might assist the environment in numerous ways; Graphene-based nanocomposites lower aircraft weight by replacing standard metals and composites, and the weight savings result in a thousand tons of petroleum saved. Metal meshes surrounding the fuselage of an aircraft may be replaced by grapheme thin films or grapheme buck sheets.

To avoid the direct and indirect consequences of lightning strikes The outstanding features of grapheme improve the efficiency of modern renewable energy processes, such as decreasing the weight of wind turbine blades and enhancing energy conversion efficiency.

Energy Consumption: By incorporating grapheme into a coating material, just one layer is required, eliminating the requirement for a multifunctional film coating. A graphene- based coating has two applications: it may be applied to wind turbine blades or the body of an aircraft, It reduces weight while enhancing efficiency.

Material Cost Savings: Novel breakthroughs in nanotechnology will reduce the cost of alternative energy methods such as hybrid autos.

Less Raw Material Waste: Large sample testing will be done on a smaller scale, and raw material consumption will become more efficient. Nanoscale chemical reagents (or catalysts) speed up chemical processes and improve their overall efficiency.

Environmental Protection and Monitoring: A detector was developed using sophisticated nanotechnology to detect a radioactive leak at the Fukushima Daiichi Nuclear Power Plant quicker and more accurately. This is one of Washington's finest radiation detectors and can detect even the smallest amount of radiation.

Clean and inexpensive energy: When it comes to turning sunshine into power, prototype solar panels using nanotechnology outperform regular designs. Nanotechnology is used in batteries, and nanoparticles may enhance hydrogen storage materials and fuel cell catalysts. Nanotechnology may improve energy production conversion and storage by generating larger surface area and lighter storage units for fuel cells, solar cells, thermo-to- electric, biomass energy, hydrogen storage, secondary batteries, super- capacitors, and thermal storage fluids.

Protect in the human right to safe drinking water: Because of its speedy and low-cost contaminant identification nanotechnology enables low-cost water filtration. Magnetic interactions with ultra-small rust may aid in the removal of arsenic from drinking water. Nanotechnology may potentially enhance monitoring of air and water quality by inventing more sensitive detection systems capable of measuring a wide variety of pollutants and harmful chemicals at the same time. Rapid detection enables rapid action, limiting damage and lowering repair costs.

Environmental Progress and Pollution Reduction: Lighter automobiles and machines that use less fuel; alternative fuel and energy sources; and materials that detect and remove environmental toxins all seem to be feasible. The University College Dublin (UCD) Center for Bio-Nano Interactions (CBNI) investigates the impact of nanoparticles dispersed in the environment, where decaying plant and animal matter transforms into natural organic matter, typically composed of polysaccharides, and investigates how this interaction affects organic stability, dispersability, environmental fate, and behaviour.

Global Disease Burden Reduction: Personal well-being will grow globally as health care improves via better diagnosis and treatment. Economic Crisis Mitigation Investment in Nanotechnology will encourage economic growth, which will assist the development of auxiliary sectors such as product marketing, waste recycling and disposal, and intellectual property and liability disputes.

Effect of Nanotechnology on Global Warming **Global Warming Effect**

Global Warming is the world's most recent crisis. All governments and organizations in developed and developing nations are working to minimize it. Global warming refers to the exceptionally fast rise in the Earth's average surface temperature over the last century, which is mostly attributable to green-house gases emitted by humans who use fossil fuels. Over the previous century the global average surface temperature has risen by 0.6 to 1.0 degrees Celsius. This is due to the greenhouse effect. Nearly 30% of incoming sun radiations are reflected back to space from the outer side of the earth's atmosphere, while the 70% enters the earth's atmosphere. A fraction of these radiations (visible light spectrum) is absorbed by the Earth, and the earth re-radiate this absorbed energy in the form of heat i.e., infrared radiations.

Greenhouse gases including carbon dioxide, nitrogen oxide, methane, fluorinated gases, and water vapour collect heat from infrared radiations and block its departure from the atmosphere. As a result, infrared radiations persist in the earth's atmosphere for an extended period of time, causing the earth's surface temperature to rise. Carbon dioxide emissions are a major contributor to global warming. According to several assessments, the average surface temperature of the Earth might increase by 2°C to 5°C by the end of the twenty-first century.

Climate Change Effect

Climate change induced by greenhouse gases, mostly carbon dioxide (CO₂) created from the combustion of fossil fuels, has caused significant changes in ecosystems and resulted in roughly 150,000 more fatalities per year. This increase is mostly due to the unsustainable use of fossil fuels and changes in land use. Our reliance on fossil fuels is a major contributor to global warming; this is one of the most pressing environmental issues in the near future. Automobiles and industry have recently contributed to a significant rise in greenhouse gases, notably carbon dioxide. Carbon dioxide levels in the atmosphere are 387 parts per million (ppm), over 40% higher since the industrial revolution, according to the United States National Oceanic and Atmospheric Administration (NOAA). The burning of fossil fuels such as oil, gas, and coal is the major source of carbon dioxide emissions in the atmosphere. Greenhouse gases have irreversible effects on the ozone layer, the environment, and human health. Global warming has become a global concern that requires prompt response from all governments. To overcome this problem, many techniques might be used:

1. Reduce energy usage while improving the efficiency of current technology.
2. Reduce the use of fossil fuels in autos and industry and replace them with re-neweable energy sources.
3. Participate in carbon management, which entails separating and transforming carbon into valuable goods.

There are several techniques to reduce energy usage and, as a result, greenhouse gas emissions in many important domains. Nanotechnology has had a significant influence on our lives by offering a feasible alternative to fossil fuels and thereby lowering greenhouse gas emissions. Transportation and industry are the two largest sources of greenhouse gases in the environment. The current pace of global warming may harm

our planet in the future. The latter two decades of the twentieth century were the warmest in 400 years. Climate change has occurred on Earth in the past, but present climate change is faster and damaging. Nanotechnology tackles the problem of global warming by reducing the use of fossil fuels, reducing energy consumption, and improving the efficiency of current renewable energy technologies.

Conclusion

Nanotechnology is a multidisciplinary method that necessitates extensive cross-sector cooperation among university researchers, businesses and government. While nanomaterials may assist clean up certain environmental debris, they can also pollute the environment in other ways. Choosing the correct nanoscale materials is one of the most important aspects for the future of nanotechnology. The Nanotechnology will continue to evolve, help society, and enhance the environment in a variety of ways. Nanomaterials will improve product functionality, weight savings, energy usage, and environmental sustainability. Nanotechnology has the ability to drastically reduce greenhouse gas emissions and thereby mitigate global warming. The current pace of global warming may harm our planet in the future. The latter two decades of the twentieth century were the warmest in 400 years. Climate change has occurred on Earth in the past, but present climate change is more fast and damaging. Nanotechnology tackles the problem of global warming by reducing the use of fossil fuels, reducing energy consumption, and improving the efficiency of current renewable energy technologies.

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Social Media Used By the Academic Libraries during Covid-19 Pandemic Lockdown to Provide Information to the Library Users

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Abstract: All the Academic libraries were closed due to covid-19 pandemic lockdown as per the WHO guidelines. The Academic institutions were running online using online platform and using social medias. This new opportunities gives the librarians to use the ICT tools to provide the library services to the library users. Hope initially many problems might be faced by the librarians due to lack of infrastructure to provide the online services. But soon many LIS professional may find the way from this situation and started providing library services to the users and faculty members.

Keywords: Academic Libraries, Covid-19 pandemic, Library Services,

Definitions:

1) Lockdown : a temporary condition imposed by governmental authorities (as during the outbreak of an epidemic disease) in which people are required to stay in their homes and refrain from or limit activities outside the home involving public contact (such as dining out or attending large gatherings) By, Merriam Webster Online Dictionary.

2) Pandemic: a dangerous disease that infects many people at one time. By, Cambridge Online Dictionary.

3) Epidemic: (especially of medicine) of disease or anything resembling a disease; attacking or affecting many individuals in a community or a population simultaneously. By, vocabulary.com

4) Social Distance: Social distancing is a set of measures aimed at stopping the spread of an infectious disease, based on staying away from other people as much as possible. It includes things like working from home, only going out to buy food and other essentials, and avoiding contact with other people. By, Collin English Online Dictionary

5) Social Medias: communications on the Internet, such as on websites for social networking and micro blogging, through which users share information, ideas, personal messages, and other content, such as videos. By, online Britannica

Introduction:-

Whole world was stranded and locked due to covid-19 out spread. The effect was gone to the life of every persons/ human being in the whole world. The education institutions were closed due to the covid-19 pandemic. All the educational institutions were closed for many months as a precautionary measures and guidelines issued by the WHO and by the local

Health Departments and Health ministry of every country. This was an unprecedented situations faced by the people from all corners of the world from new born baby to the very old person. The idea of used of ICT tools and platform were come forward and these platforms were used by the peoples of all over the world for work from home, online learning, organising meetings and for be in touch with the family and friends. The problem of covid-19 gives us an opportunity to take a innovative path so that the life of every human become easier. The use of internet, computers, and mobiles were grown up exponentially in pandemic lockdown period. As we say "every problem is mother of invention and new ideas". This proverb come 100% true in the time of pandemic lockdown and post pandemic lockdown. Every one's life is now blended with conventional and ICT, telecommunications technology.

Drastic transformation is seen in educational domain and in library services may be it college library or university library or public library. Huge online contents are now available on internet in the form of eBooks, eMagazine, eJournals and audio books.

Use of Social Media in the Libraries:-

1) Facebook:-

This media can be used by the Library to create a community of users and can share all the information of library in the form of audio-visual and photos. This is a very popular media among the students and common citizens. Due to its versatile usability it is very useful for the library.

2) YouTube:-

YouTube is a free-hosting video streaming websites that allows all members to watch, store and share. The librarian can organised any program of library in real time by sending the

link to the users. Live streaming is possible in Youtube. The audience may as many as possible without restriction on viewers. Pre recorded videos can be uploaded on the YouTube and the videos can be saved in the playlist for long time till we delete the video from the playlist.

3) Twitter:-

Twitter is a micro blogging and social networking service on which users post and interact with messages known as 'tweets'. We can tweet text, video, audio or links. This messages or tweets can be share very quickly to the masses and the reactions of the users or the feedback of the users can be seen in the form of retweets. This social media can be used to inform the students about any events or for asking any query to the librarian related to reference service or the book available in the collections.

4) Whatsapp:-

This social media is very popular among the netizens or the common citizens and students for sharing the text messages, videos, audio and photos. It allows users to send text messages and voice messages, make voice and video calls, and share images, documents, user locations, and other content. The librarian can share useful links, pdf files, docx files, ebooks, ejournals need by the users as an when requested by them.

5) Telegram:-

Telegram is a globally free accessible, cross-platform, cloud-based instant messaging service. The service also provides end-to-end encrypted video calling, VoIP, file sharing and several other features. Telegram has its own benefits as there is no limit for the joining of members in the group. The messages can be deleted two sided at any time without any time or period restrictions. In the covid-19 lockdown Telegram get more importance for sharing the information to the students, teachers and faculty members of the colleges and educational institutions. As it is nearly resembles to the Whatsapp but the features wise it is one step ahead of it.

6) Google meet app:-

Google Meet is Google's video conferencing app that is available to everyone who has a Google account. An online meeting is easy to set up whether you are an individual getting together with a couple of friends or a small meeting conducting a workshop online. Google meet do not restrict regarding the time. It is freely available for all the Google account holders. As many members can join the meeting by opening the shared link of the meeting. The Library can be used this meeting app for short

discussion on a topic or a short lecture arranged for the students.

7) Zoom meeting app:-

Zoom is a cloud-based video communications app that allows you to set up virtual video and audio conferencing, webinars, live chats, screen-sharing, and other collaborative capabilities. This app has its benefits and shortcomings also. It has many features provided to the organisers for sharing, recording, chatting, messaging. But the free time given to the organiser is very less. If you want more time for the meeting then you have to pay for that to the zoom. Long meeting, conferences, seminars, workshops can be organised by using zoom meeting app by the Library.

8) Instagram:-

Instagram is a free photo and video sharing app. Library professionals can upload photos or videos of their service and share them with their followers or with a select group of Students and faculty members. They can also view, comment and like posts shared by the students, users and faculty members on Instagram.

Conclusion:-

Covid-19 pandemic was an unprecedented situation come across the whole world. After many years such situation stands in front of every citizen of the whole world. The entire world was stand still cut from each other. Social distancing was another factor which keeps away from each other. This situation also affects the educational institutions and teaching faculties all over the world. The use of social medias and online platform took place to reach out the students and teachers. The library was also not untouched to the use of ICT and online opens access platforms. The librarian provides services to the users by using the social medias and other online platforms for organising the library programs and providing information services to the users.

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Yoga and Mental Peace: A Study

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Abstract At present, Yoga has become widely known and has been used for treatment of chronic health conditions. Through Yoga individuals get empowered positively to take charge of one's own psychological wellness. It could save a large expenditure for treatment and prevention of mental health problems. Yoga can take the form of a new therapy for curative, preventive, protective and promotive objectives at schools, hospitals, health care centers and even in family too. It offers immense help in sustaining wellness, addressing concerns related with increasing suicidal tendencies due to examination anxiety, deal with frustration and conflicts in society and to opt career choices with full awareness of one's own abilities and potentials. Yoga plays a vital role in balancing equilibrium between our mind, body and soul. Hence, the purpose of this study is to analyze how the practice of yoga helps in achieving peace of mind, in comparison with people who do not practice yoga.

Introduction

Yoga is one of the most ancient metaphysical sciences among others. It investigates the nature of soul and through its discipline, awakens the super conscious mind of the man which unites the moral being with the immortal supreme spirit.¹ Human beings suffer from more and more physical and psychological stress and strains and it becomes common among youth of present society. Yoga helps to find out the ways to face them and solve it.

It is very important to mention that Yoga creates balance and also provides both a philosophy and a religion. The real joy of life appears when we can unify nature and culture, wealth and poverty, movement and stillness, attachment and detachment. In this respect, the yogic activities provide immense help in assisting an individual to seek his all round growth and development in all the personality dimensions including the union of his self with the Greater soul. Many still believe that yoga is a religion, but it's not, instead, it's a way of living who strives to have a healthy mind in a healthy body. A human is a mental, physical and spiritual being and yoga helps promote a balanced development of all the three. Other forms of physical exercises, such as aerobics, guarantee only physical well being. They have very little to do with the development of the spiritual or planetary body.

Yoga is a form of mind-body fitness that involves a combination of muscular activity and an internally directed mindful focus on awareness of

the self, the breath, and energy. Four basic principles underlie the teachings and practices of yoga's healing system.² The first principle is the human body is a holistic entity comprised of various interrelated dimensions inseparable from one another and the health or illness of any one dimension affects the other dimensions. The second principle is individuals and their needs are unique and therefore must be approached in a way that acknowledges this individuality and their practice must be tailored accordingly. The third principle is yoga is self-empowering; the student is his or her own healer. Yoga engages the student in the healing process; by playing an active role in their journey toward health, the healing comes from within, instead of from an outside source and a greater sense of autonomy is achieved. The fourth principle is that the quality and state of an individual's mind is crucial to healing. When the individual has a positive mind-state healing happens more quickly, whereas if the mind-state is negative, healing may be prolonged.

In recent years there is a growing utilization of Yoga as one of the therapeutic measure in the field of mental health where the benefits of yoga practice and therapy are being widely recognized. Now the health professionals are aware of therapeutic values of yoga and many introduce the approach as a psycho-physiologic and spiritual technique in their treatment.³ Research indicate

¹ Shyam Sundar Sarkar (2018) "Yoga And It's Importance In Our Daily Life", *International Journal of Humanities and Social Science Invention (IJHSSI)*, Volume 7 Issue 08 Ver. II, ISSN- 2319 – 7722, P.48.

² Catherine Woodyard, (2011) "Exploring the therapeutic effects of yoga and its ability to increase quality of life", *international journal of Yoga*, Issue No- 4(2): 49–54, retrieved from <https://www.ncbi.nlm.nih.gov/pmc/article/PMC3193654/>

³ Shankar Das (2018) "Global Mental Health, Peace and Sustainability: Does Yoga Show the Way?",

Asanas increase patient's physical flexibility, strength and coordination while the Pranayama and Meditation practices calm and focus the mind to enhance higher self awareness and lessen anxiety, that result in better quality of patients life. Some other beneficial and therapeutic effects reported by Yang such as reduction in level of distress, blood pressure, and improvement in mood, resilience and metabolic regulation. Studies also indicate yoga is effective in the treatment of anxiety disorders (including in caregivers), pain, Alzheimer's disease, stroke prevention and rehabilitation, epilepsy, peripheral nervous system disorders and multiple sclerosis. Hence, this study is an effort to understand how Yoga could bring mental peace in our life.

Objective

1. To understand how Yoga could bring mental peace in our life.
2. To know the importance of Yoga in balancing equilibrium between our mind, body and soul.

Methodology

This study is primarily descriptive and analytical. In this study only secondary source of data have been used. The secondary source of data includes like books, articles, research papers, report published from various sources, internet sources and so on.

History of Yoga

The history of yoga is indeed very old and nothing can be said firmly about the origin of yoga only it can be alluded that yoga was organized in India. The available evidence shows that history of yoga was related to Indus valley civilization. At that time people used to do yoga. On the basis of various sculptures and sculptures we reach at the conclusion that yoga was a part of the civilization. Yoga has its origins in ancient Indian philosophy and can be traced back to the Rigveda itself, the oldest Hindu text which speaks about yoking our mind and insight to the Light of Truth or Reality. Great teachers of early Yoga include the names of many famous Vedic sages like Vāsiṣṭha, Yajñavalkya, and Jaigīśavya. The greatest of the Yogis is always said to be Yogeśvara Kṛṣṇa himself, the propounder of Bhagavadgītā which is called as Yoga Śāstra an authoritative work on Yoga. Lord Śiva is also the greatest of the Yogis or Ādinātha.

The word "Yoga" originates from Sanskrit and it means "to join, to unite". Yoga exercises have a holistic effect and bring body, mind, consciousness and soul into balance. Yoga assists us in coping with everyday demands, problems and worries.⁴ It also helps to develop a greater understanding of our self, the purpose of life and our relationship to God. On the spiritual path, Yoga leads us to supreme knowledge and eternal bliss in the union of the individual Self with the universal Self. Yoga is that supreme, cosmic principle. It is the light of life, the universal creative consciousness that is always awake and never sleeps; that always was, always is, and always will be.

It needs to mention here that Yoga is a 5000 year old tradition. In India monks went into seclusion for years with the goal of creating a disease free strong body. The original intention was to be able to sit in meditation for hours but with a achy body that is impossible to do.

In India, Yoga has been part of man's activities directed towards higher spiritual achievements. The history of Yoga could be divided into five categories: a. Vedic period b. Pre-classical period c. Classical period d. Yoga in Medieval Times e. Yoga in Modern Times. All these five categories of Yoga could be discussed as follows-

Vedic period: The earliest recorded mention of the word 'yoga' is in the ancient Indian text, the Rig Veda - this body of knowledge dates back to around 1500 BC! In the Atharva Veda, again (dating to 1200-1000 BC), there is a mention of the importance of the control of breath. It is difficult to pinpoint exact dates because in the beginning, the Vedas were, only, orally passed on from one generation to another. Written records came much later.⁵

Pre-classical period: In this period, the Upanishads took birth. They explain the meaning hidden in the Vedas, elaborating on the workings of the mind and spirit through personal teachings. They espouse meditation and mantra recitation towards the ultimate goal of attaining enlightenment. Out of the 108 Upanishads, there are 20 yoga Upanishads.

⁴ Sunil Kumar Yadav, Ashwani Kumar, Vikas Kumar, Anil Kumar (2015) "Importance of yoga in daily life", retrieved from <https://www.researchgate.net/publication/278673574>

⁵ See A brief history of yoga: Through the ages available at <https://www.artofliving.org/in-en/yoga/yoga-for-beginners/brief-history-yoga>.

Classical period: In the classical period, Lord Mahavira and Lord Buddha's teachings formed the early basis for Yoga Sadhana. While Lord Mahavira spoke of attaining salvation and freedom through meditation, Lord Buddha spoke of specific postures and meditation to attain enlightenment. The Bhagavad Gita also came into existence in this period. This text is a dialogue between Lord Krishna (universal consciousness) and Prince Arjuna (human consciousness). Here, the Lord explains the concepts of Dharma, Karma yoga (generous actions), Bhakti yoga (dedicated and caring actions) and Jnana yoga (knowledge).

Yoga in Medieval Times: With regard to Yoga in Medieval times, many sages and philosophers such as Adi Shankaracharya contributed to the development and continuation of Raja Yoga and Jnana yoga, adopting and building upon the teachings and techniques of yoga. With his teachings, and yogic rituals, like the Jnana Yoga, one can achieve Nirvana or liberation. Additionally, meditation was also considered vital to help clear the mind.

Yoga in Modern Times: There are numerous person and instances associated with the development of Yoga in Modern times. Swami Vivekananda was largely responsible for the spread of yoga to western societies. Here, there was much focus on physical well-being. Raja yoga was further developed by Ramana Maharshi, Ramakrishna Paramahansa, BKS Iyengar, K Pattabhi Jois, Paramhansa Yogananda, and Vivekananda. Yoga spread to the West in the mid-nineteenth century. Vedanta, Bhakti and Hatha yoga flourished at this time.

These are the five categories through which one can understand about the historical background of Yoga. However, many more things left out from this discussion.

Yoga and Mental Peace

The practice of yoga has grown as a universal science which has innumerable therapeutic facets that helps to achieve holistic health. Though there are numerous types and schools of yoga, each characterizes their own specific styles of mind and body postures (asanas), breathing techniques (pranayama), meditation and deep relaxation practices that fosters awareness and eventually promote intense states of consciousness. According to yoga the nervous system of an individual affects one's health and yoga purifies and brings relaxation to the mind. It symbolizes

unification of mind, body and soul to enable a person to gain higher consciousness.

In the Indian tradition, Yoga was conceived as a pathway towards attainment of joy in life, freedom from sorrows, mental balance and peace. Since antiquity, the seekers of self-realization (often called as Rishis or Yogis) have been using yogic practices for restoring mind-body balance in order to make them capable for attaining spiritual realization.⁶ The ultimate states of human mental health development have been described using different terms. For example, Buddhists use notion of 'Nirvana', Samkhya system uses 'Moksha', Vedantists use 'Atmasakshaatkar' etc. But all these notions converge in their meanings that it involves liberation from suffering. Sage Patanjali, who collated, coordinated and systematized the system of Yoga, declared the main objective of Yoga as regulation of mind in the first aphorism of famous Yoga Sutra (Yogah Chittvritti Nirodhah). Bhagvad Gita, which elaborates comprehensive typologies of Yoga, also states the need of Yoga for removing sorrow and increasing bliss in life. Hath Yoga, a yogic tradition focusing on physical modus-operandi for realizing deeper states of consciousness, emphasises on postures, breathing patterns, energy locks and contemplation to enhance energy and vitality.

Mental health is very important for quality life of an individual. Promoting mental health is crucial to raise performance and enhancing the quality of life and health. By fostering psychological health, several social problems can be addressed effectively. Yoga, which has immense capacity to promote mental health, has not been used to cater to the needs of mental health promotion.⁷ It can empower people to self-regulate their emotions, behaviors and cognitive processes. Regular practice of Yoga may decreases the time taken to fall asleep, increase in the total number of sleep hours, and feeling of being fresh after sleep in the morning. Although the practice of Yoga only cannot be complete cure for many chronic ailments but it can uplift patient's mood and therefore play an important role in the management of wellness in patients suffering with different critical illnesses. Among cancer patients, for instance, it can

⁶ Arun Pratap Singh (2017) "Yoga for mental health: opportunities and challenges", *MOJ Yoga & Physical Therapy*, Volume 2 Issue 1, p.1.

⁷ Ibid

increase acceptance of life in reality, energy, relaxation, quality of sleep and quality of life.

It is very crucial to mention that creating sustainable global peace on the Earth is an ultimate state of contentment and freedom amongst and within all nations and humanity.⁸ At the same time sporadic and acute societal unrest; including religious fanaticism, terrorism, territorial disputes, political and ethnic tensions posing greater challenge of the era around the globe. The interpersonal conflict may escalate to institutional aggression, hostility and war. For every human being world peace is desirable and peace brings both material and spiritual benefit to all societies. When it's most needed the yogic science has the power to inspire grassroots social change in the world. Yoga is not just for self-transformation, but is an instrument for global peace which provides internal, emotional and spiritual reconciliation and healing. It gives one the self-strength and capability to approach conflicts from a space of mindfulness, compassion and love, in such circumstances peace is inevitable.

Conclusion

Currently, Yoga become popular all over the world and now it is being practiced by citizens of all the continents. Indeed Yoga has become widely known and has been used for treatment of chronic health conditions, and management of the symptoms related to acute physical ailments. Yoga empowers individuals' positively to take charge of their own psychological wellness and save a large expenditure for treatment and prevention of mental health problems. Yoga can take the form of a new therapy for curative, preventive, protective and promotive objectives at schools, hospitals, health care centers and in family. It offers immense help in sustaining wellness, addressing concerns related with increasing suicidal tendencies due to examination anxiety, deal with frustration and conflicts in society and to opt career choices with full awareness of one's own abilities and potentials. After going through this discussion it can be said that Yoga is very important not only to maintain good physical health but also mental health too. However, it needs to mention that the common masses of India are yet to understand about the benefit of Yoga. To make it success,

government should take proper policies and needs to introduce some courses in the School, College and also in University level for popularizing it.

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⁸ Shankar Das (2018) "Global Mental Health, Peace and Sustainability: Does Yoga Show the Way?", *Journal of Depression and Anxiety*, Volume 7, Issue 1, 2167-1044, p.2.

Traditional Uses of Medicinal Plants in Treating Bone fracture, Urine stone, Stomachache and Jaundice in Chandgad Tahsil (District Kolhapur) of Maharashtra, India

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Abstract An ethnomedicinal survey was under taken to collect information from local rural people about the use of medicinal plants in Chandgad Tahsil. The present paper documents the traditional knowledge of medicinal plant species used to cure Bone fracture, Urine stone and Jaundice. Ethnomedicinal information of medicinal plants was taken from different localities of Chandgad Tahsil by interview with local rural practioners (vaidya). The knowledge about the medicinal plant has been transmitted orally from generation to generation. The people in the study area still have a strong belief in the efficacy and success of hearbal medicine. The present investigation revealed that there are about 5 species of plants used to treat Bone fracture, 9 species of plants used to cure Urine stone, 5 species of plants used to cure stomachache and 5 species of plants used to cure Jaundice. The traditional knowledge of medicinal plants has great potential for research and the discovery of new drugs.

Keywords: Traditional, medicinal plant, Bone fracture, Urine stone, Jaundice. Chandgad Tahsil

Introduction

India is considered to be a store house of medicinal plants. It harbors over 2000 medicinal plant species. During last few decades there has been an increase in the study of medicinal plants and their traditional uses in different parts of the world. Herbal remedies are considered the oldest form of health care known to mankind on this earth. Chandgad Tahsil has a valuable heritage of herbal remedies. The climate of the area is healthy and favorable for growth and development of plants. So area shows rich biodiversity. Many villages of Chandgad tahasil of Kolhapur district are located in the forest area and are far away from city. Its rural people living in remote forests are still depending on the local plant resources for medical treatment. The local rural herbalist or medicine man (health practitioner) called Vaidu. Vaidu cure various diseases of rural people using medicinal plants. Traditionally this treasure of knowledge has been transmitted orally from generation to generation without any written document. With an errosion of traditional culture of tribal and rural peoples invaluable knowledge of medicinal plants is threatened. It is an urgent need to collect and conserve all ethnobotanical information from various communities.

Material and Methods

For gathering information regarding plants used medicinally by the rural vaidus several field trips were undertaken in the villages of chandgad tahsil in different seasons. Ethnobotanical data were collected according to the methodology suggested by Jain. The ethnobotanical data (local name, mode of

preparation, medicinal uses) were collected through questionaries, interviews and discussion among the rural practitioners (vaidu) in their local language and recorded in field note book. The collected information was cross checked with the help of available literature. The specimens were collected from the field and identified with the help of local flora. Names of all key informants were noted and are available on request. The study involved an extensive literature search and herbarium examination.

Observations

Folklore medicinal plants are arranged disease wise with their botanical name, family, local name, part used and mode of administration in table 1.

Result and Conclusion

Present investigation revealed that 9 plant species are used for treatment of Urine stone, 6 plant species are used for treatment of Bone fracture, 5 species of plants used to cure stomachache and 5 plant species are used for treatment of Jaundice. This indicates that rural people of this region possess good knowledge of herbal drugs but their continuous and progressive exposure to modernization may result in extinction of the rich heritage of knowledge in course of time. The part of the plant most used for medicinal purposes were leaves followed by stem bark, roots, fruits, and seeds. Ethnomedicinal data may provide a base to start the search for new compounds related to photochemistry, pharmacognosy and pharmacology. This may provide new source of herbal drugs and help to understand the molecular basis of their activities. Moreover it

may further be mentioned that over exploitation of these species in the name of medicine may lead some species ultimately to the

disappearance in future. Therefore attention should also be made on exploitation and proper utilization of these medicinal plants.

Table 1: List of Medicinal Plants with Botanical Name, Family, Local name, Part used and Administration

Sr. No.	Botanical name, Family and Local name	Part used	Administration
Urine Stone			
1	<i>Bridelia squamosa</i> (Lam.) Gehrm. Euphorbiaceae; Ragat Asan	Bark	One cup bark extract given by empty stomach for seven days.
2	<i>Celosia argentea</i> L. Amaranthaceae; Kurdu	Root	One cup root decoction given for seven days.
3	<i>Cipadessa baccifera</i> (Roth) Miq. Meliaceae; Narang	Leaf	One cup leaf extract and half cup of milk added with half spoon poppy seed powder taken internally by empty stomach for seven days.
4	<i>Cynodon dactylon</i> (L.) Poaceae; Harali, Durva	Leaf	Whole plant extract taken orally for ten days.
5	<i>Dendrophthoe falcate</i> (L.F.) Loranthaceae; Bandgul, Bande	Leaf	One cup leaf extract taken orally for five days.
6	<i>Holarrhena pubescens</i> (Buch.-Ham.) Apocynaceae; Pandhara Kuda	Bark	Two spoon bark powder with water given early morning for seven days.
7	<i>Hygrophila schulli</i> (Buch.-Ham.) Acanthaceae; Kolshinda	Leaf	One cup leaf extract given with coconut milk.
8	<i>Kalanchoe pinnata</i> (Lamk.) Crassulaceae; Paanphuti	Leaf and Root	Leaf and root extract taken early morning for five days.
9	<i>Tridax procumbens</i> L. Asteraceae; Dagadipala, Kunticha pala	Leaf	Leaf extract given early morning for five days.
Jaundice			
1	<i>Achyranthus aspera</i> L. Amaranthaceae; Aghada	Leaf	Two tea spoon leaf juice given for seven days.
2	<i>Careya arborea</i> Roxb. Lecythidaceae; Kumbha	Bark	Bark juice applied over all body for five days.
3	<i>Ricinus communis</i> L. Euphorbiaceae; Erand	Leaf	One glass leaf extract given orally by empty stomach for five days.
4	<i>Solanum nigrum</i> L. Solanaceae; Kamuni	Leaf	Leaf juice given for seven days.
5	<i>Tinospora cordifolia</i> (willd.) Menispermaceae; Amrut vel	Leaf	One cup leaf extract with one spoon honey given early morning for one week.
Bone fracture			
1	<i>Allophyllus cobbe</i> (L.) Sapindaceae; Tipani /Hadsandhi	Leaf	Leaf paste plastered over bone fracture.
2	<i>Casearia championii</i> Thw. Flacourtiaceae; Modi, Hadmodi	Leaf	One glass leaf extract taken internally twice a day for one week and leaf paste applied over fractured part.
3	<i>Careya arborea</i> Roxb. Lecythidaceae; Kumbha	Bark	Fractured bones of childrens were tightly bound by elongated bark.
4	<i>Pavetta Crassicailis</i> Bremek Rubiaceae; Papat	Leaf and bark	Leaf paste bind over fractured part for 15 days and one spoon bark powder eaten with coconut kernel for 15 days.
5	<i>Persea macrantha</i> (Nees) Lauraceae; Pulas	Bark	Crushed bark plastered over fractured bone and bark juice given orally.
6	<i>Wendlandia thyrsoides</i> (R. & S.) Rubiaceae; Ranper, Tarangi	Leaf	Leaf paste applied over fractured bones.

Stomachache			
1	<i>Acacia catechu</i> (L.F.) Mimosaceae; Khair	Bark	Bark decoction taken internally twice a day.
2	<i>Alstonia scholaris</i> (L.) Apocynaceae; Satvin, Saptaparni	Bark	Bark extract given for ten days.
3	<i>Amaranthus spinosus</i> L. Amaranthaceae; Kate-Mat	Leaf	Leaf paste along with lemon juice taken orally.
4	<i>Mallotus philippensis</i> (Lam.) Euphorbiaceae; Shendri	Fruit	Fruit cover powder taken internally with water.
5	<i>Toddalia asiatica</i> (L.) Rutaceae; Jangli mirachi	Leaf	One cup leaf decoction taken internally.

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Population Characteristics of Malegaon & Nandgaon Tahsils of Nashik District

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Abstract: In this research paper the researcher has studied the characteristics of population of Malegaon and Nandgaon tahsils of Nashik district. The geographical data analysis technique has been used for calculating the results of this paper. Total population of the district having analyzed compared with reference to the census 2001 & 2011. The tahsil wise decadal growth of the Nashik district in 2001 and 2011 compared and. The R growth rate formula has been used to calculate the population growth rate. The data has been tabulated maps have been incorporated at the place. Rural population growth rate as well as urban population growth rate in the Nashik district has been calculated in the decade 2001 and 2011

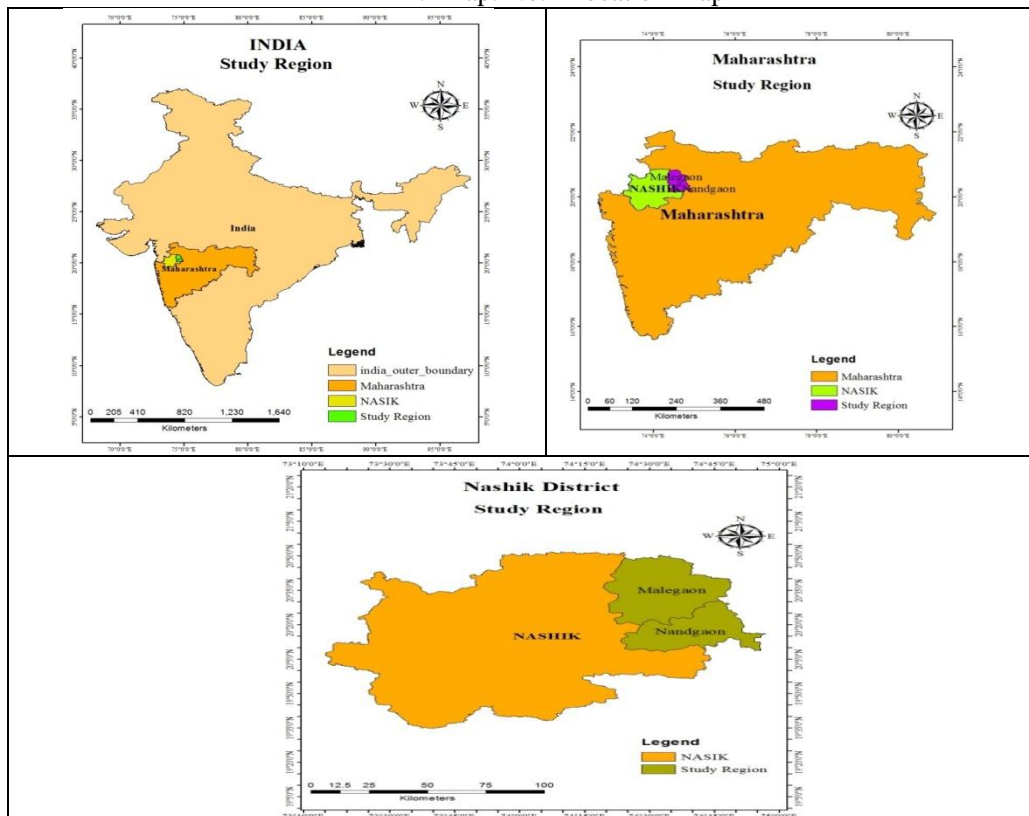
Introduction

India is a second largest populated country of the world; there were 1210726932 as per 2011 census. Maharashtra state is a second largest populated state of the country, Maharashtra state total population was 112374333 as per 2011 census. The Nashik district is fourth largest populated district of the state; there were 6107187 total populations as per the 2011 census. And Malegaon tahsil is second largest tahsil of the district i.e. 955594. And Nandgaon tahsil is fifth largest populated tahsil of the district. The total population of the tahsil was 288848 as per 2011 census.

Study Area

Study area are situated in the east part of the district, lies between $20^{\circ} 00' N$ To $20^{\circ} 53'$ North latitudinal and from $74^{\circ} 21' E$ to $74^{\circ} 56'$ East longitudinal extension, with the total geographical area of 2919.62 sq. km. According to census 2011, 1244442 total population of the study area, to the east of study area is Jalgaon & Dhule district, on the western side are Satana, Deola and Chandwad tahsils (Nashik District) Aurangabad is at the south east, Yeola tahsil is south. Malegaon and Nandgaon both tahsils are situated in the east part of the district

Map. No.1 Location Map



Methodology-

Methodology is one of the significant part of analysis result of analysis highly depend on the

methodology will be used for the data analysis purpose. The present study is based on the secondary source of data.

Objectives

- 1) To study the population characteristics in the study area
- 2) To study the tahsil wise population of the district
- 3) To study the rural urban population of the study area.

Table No. 1: Tahsil wise total population of the district as per census 2001 & 2011

Sr. No.	Tahsils	Total population	
		2001	2011
1	Surgana	145135	175816
2	Kalwan	168403	208362
3	Deola	127194	144522
4	Baglan	311395	374435
5	Malegaon	789230	955594
6	Nandgaon	236319	288848
7	Chandvad	205189	235849
8	Dindori	264727	315709
9	Peth	96774	119838
10	Trimbakeshwar	136417	168423
11	Nashik	1317367	1755491
12	Igatpuri	228208	253513
13	Sinnar	292075	346390
14	Niphad	439842	493251
15	Yeola	235521	271146
	Nashik Total:	4993796	6107187

(Source – Census 2001, 2011)

As per censuses of 2001 the total population of Nashik district was 4993796. Then a decadal later in 2011 it was increased with 1113391 and was 6107187. The rate of growth in this decade was a 22.29%. Out of 2001 the population of Malegaon tahsil was 789230. And

then a decade later in 2011 it was increased with 166364 and was 789230. The rate of growth in this decade was a 21.07%. And the total population of the Nandgaon tahsil was 236319. Then the 2011 it was increase 52529. And was 288848. It means decadal growth of 22.23 %.

Figure No. 1 as per census 2001 & 2011 Tahsil wise Population of the Nashik district.

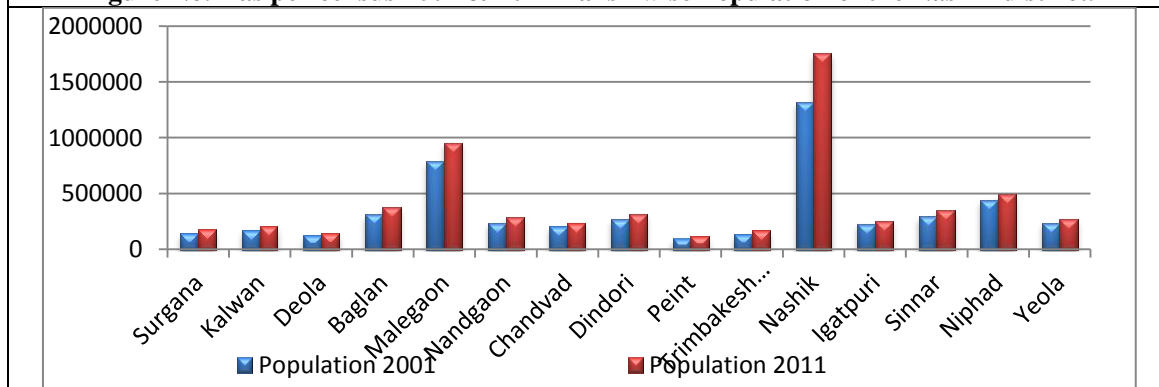
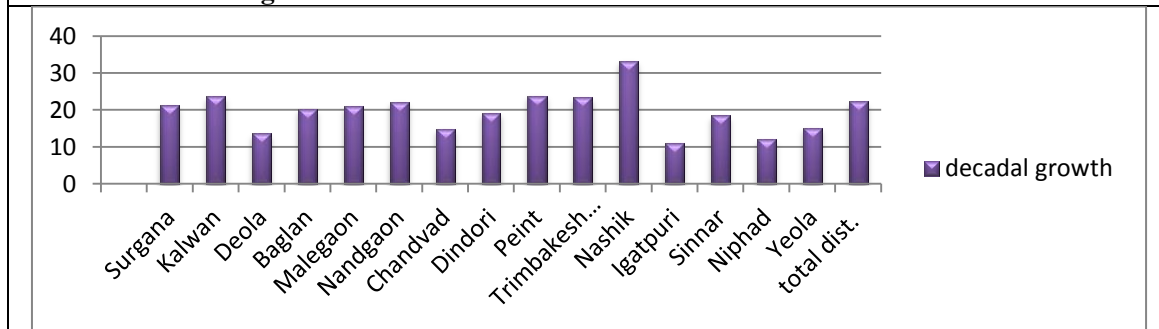
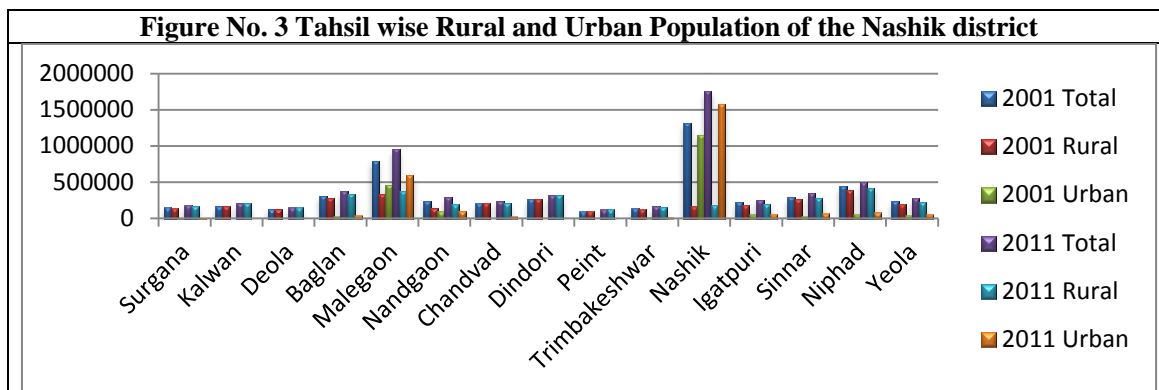


Figure No. 2 Tahsil wise Decadal Growth in Nashik district





Above the figure No. 1 we can see that the different between 2001 to 2011 total population of district with tahsil wise. After the Nashik tahsil, Malegaon tahsil is highly populated tahsil of the district and Nandgaon tahsil is fifth largest populated tahsil of the district.

Tahsil wise decadal growth of the Nashik district

As per census of 2001 the total population of Nashik district was 4993796 and 6107187 as per

the 2011 census. Which means the increase in population in this decade was 22.29 %. And the total population of the Malegaon tahsil was 789230. And then a decade later in 2011 it was increased with 166364 and was 789230.the rate of growth in this decade was a 21.07%. And the total population of the Nandgaon tahsil was 236319. Then the 2011 it was increase 52529. And was 288848. It means decadal growth of 22.23 %.

Table No. 2: Tahsil wise population decadal growth in Nashik district

Sr. No.	Tahsils	Total population		Decadal growth 2001 to 2011
		2001	2011	
1	Surgana	145135	175816	21.13
2	Kalwan	168403	208362	23.72
3	Deola	127194	144522	13.62
4	Baglan	311395	374435	20.24
5	Malegaon	789230	955594	21.07
6	Nandgaon	236319	288848	22.23
7	Chandvad	205189	235849	14.94
8	Dindori	264727	315709	19.25
9	Peint	96774	119838	23.83
10	Trimbakeshwar	136417	168423	23.46
11	Nashik	1317367	1755491	33.25
12	Igatpuri	228208	253513	11.08
13	Sinnar	292075	346390	18.59
14	Niphad	439842	493251	12.14
15	Yeola	235521	271146	15.12
Nashik Total:		4993796	6107187	22.29

(Source – Census 2001, 2011 computed by researcher)

The following formula applied to calculate the growth rate of population

$$R = \frac{P_n - P_0}{P_0} \times 100$$

Where;

R = growth rate of population.

Pn = current years population

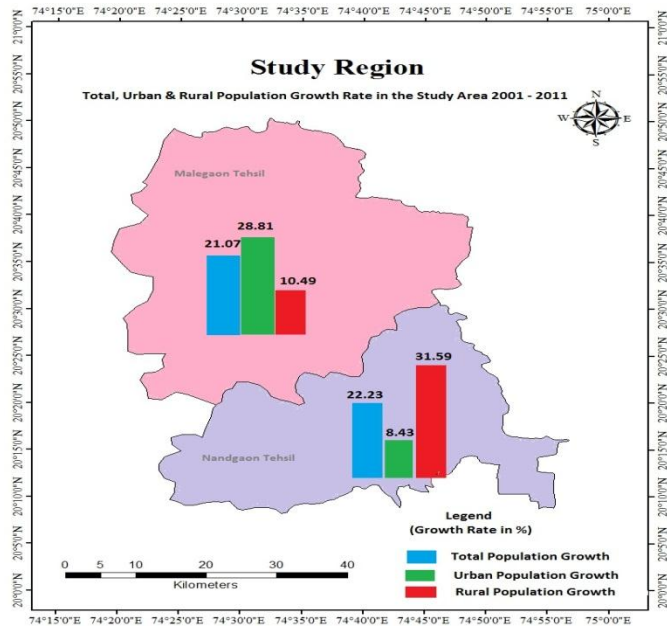
P1 = Base year population

Table presents the tahsil wise population growth in Nashik district from 2001 to 2011. According to decadal growth of more than 20 are Surgana, Kalwan, Baglan, Malegaon, Nandgaon, Peint, Trimbakeshwar, and Nashik tahsil and whole district also. Deola, Chandwad, Dindori,

Igatpuri, sinner, Niphad, and Yeola tahsils population growth is lower than average of Nashik districting. That is less than 20. Specially Malegaon and Nandgaon both tahsil as well as total district average population growth rate is between 21 to 23% , Malegaon tahsil are

populated as compare to Nandgaon tahsil, Malegaon tahsil population 166364 it has increased so much in between 2001 to 2011.

As shown Figure No. 2 in the above table, there is a decade increase from 2001 to 2011, according to the tahsils wise of the district. As shown above, the highest increase in Nashik tahsil is seen, 33.25% increase. After this, there is an increase of 23% in the Kalwan, Peint and Trimbakeshwar tahsils, followed by Surgana, Baglan, Malegaon, Nandgaon those tahsils with 20 to 22% increase. And tahsil of Deola, Chandwad, Dindori Igatpuri, Sinnar, Niphad and Yeola has increased by 10 to 20%. The average increase in the district is 22.29%. From the above mentioned detailed the study area we can say the increase in population was Nashik district increase in population from 2011 to 2011 was 22.29 % , and Malegaon tahsil increasing population from 21.07 % and Nandgaon tahsil increase of 22.23 % ,



Map No. 1 Population Growth rate Map 2001-2011

Table No. 3: Tahsil wise Rural and Urban population in Nashik district 2001 to 2011

Sr. No.	Tahsils	Population					
		2001			2011		
		Total	Rural	Urban	Total	Rural	Urban
1	Surgana	145135	138988	6147	175816	169553	6263
2	Kalwan	168403	168403	0	208362	208362	0
3	Deola	127194	127194	0	144522	144522	0
4	Baglan	311395	278834	32561	374435	336734	37701
5	Malegaon	789230	333176	456054	955594	368137	587457
6	Nandgaon	236319	140723	95596	288848	185186	103662
7	Chandvad	205189	205189	0	235849	210508	25341
8	Dindori	264727	264727	0	315709	315709	0
9	Peint	96774	96774	0	119838	119838	0
10	Trimbakeshwar	136417	126613	9804	168423	156367	12056
11	Nashik	1317367	165041	1152326	1755491	175948	1579543
12	Igatpuri	228208	176463	51745	253513	197686	55827
13	Sinnar	292075	260445	31630	346390	281091	65299
14	Niphad	439842	381356	58486	493251	418853	74398
15	Yeola	235521	192314	43207	271146	221320	49826
	Total dist.	4993796	3056240	1937556	6107187	3509814	2597373

(Source – Population Survey Report in 2001 and 2011)

As per census 2001 and 2011 above the table showing total population of the district with tahsil wise, and describe the rural and urban population of the tahsil wise of the district. Population of district is very highly growth of all tahsils of the district. According to 2011 total population of the district was 6107187. And census 2001 the total population of the district

was 4993796, it means in between those ten years (decadal) 1113391 increase the population of the tahsil. About Malegaon tahsil there was 166364 people's population increases, it means 21.07 % population was growth. And Nandgaon tahsil 52529 numbers of peoples was increase it means 22.23 % growth of the tahsil.

Table No. 4: Tahsil wise rural population growth in Nashik district 2001 to 2011

Sr.No.	Tahsils	Population (Rural)		Growth Rate (%) 2001 to 2011
		2001	2011	
1	Surgana	138988	169553	21.99

2	Kalwan	168403	208362	23.72
3	Deola	127194	144522	13.62
4	Baglan	278834	336734	20.76
5	Malegaon	333176	368137	10.49
6	Nandgaon	140723	185186	31.59
7	Chandvad	205189	210508	2.59
8	Dindori	264727	315709	19.25
9	Peint	96774	119838	23.83
10	Trimbakeshwar	126613	156367	23.49
11	Nashik	165041	175948	6.60
12	Igatpuri	176463	197686	12.02
13	Sinner	260445	281091	7.93
14	Niphad	381356	418853	9.83
15	Yeola	192314	221320	15.08
	Total	3056240	3509814	14.84

(Source – Census 2001, 2011 computed by researcher)

As shown in the above table, rural population growth has been shown in the tahsil wise of Nashik district, 14.84 has been average population growth of Nashik district. In which the highest population growth of Nandgaon tahsil has increased in the whole district, it is 31.59 percent. And lowest in the district is 2.59 percent of Chandwad tahsil has increased, There has been an increase in tahsils of Chandwad,

Nashik, Sinner and Niphad by 5 to 10 percent, after this, between 10 to 15 percent there has been an increase in Deola, Malegaon and Igatpuri tahsils, then, there has an increase of Yeola, Dindori tahsils between 15 to 20 percent, after this, there has been an increase in between 20 to 25 percent in Surgana, Kalwan, Baglan, Peth and Trimbakeshwar tahsils, and more than 25 percent has increase only in Nandgaon tahsil.

Table No. 5: Tahsil wise urban population growth in Nashik district 2001 to 2011

Sr.No.	Tahsils	Population (Urban)		Growth Rate (%) 2001 to 2011
		2001	2011	
1	Surgana	6,147	6,263	1.88
2	Kalwan	0	0	0
3	Deola	0	0	0
4	Baglan	32,561	37,701	15.78
5	Malegaon	456,054	587,457	28.81
6	Nandgaon	95,596	103,662	8.43
7	Chandvad	0	25,341	-
8	Dindori	0	0	0
9	Peint	0	0	0
10	Trimbakeshwar	9,804	12,056	22.97
11	Nashik	1,152,326	1,579,543	37.07
12	Igatpuri	51,745	55,827	7.89
13	Sinner	31,630	65,299	106.44
14	Niphad	58,486	74,398	27.20
15	Yeola	43,207	49,826	15.31
	Total	1,937,556	2,597,373	34.05

(Source – Census 2001, 2011 computed by researcher)

As shown in the table above, tahsil wise urban population growth rate of Nashik district, in between 2001 to 2011 census, in the whole Nashik district 34.05 percent average urban population increased. In the district sinner tahsil is highest urban population growth rate, and lowest in Surgana tahsil observed, i.e. only 1.88

percent. According to census 2001, Chandwad tahsil there was no urban population, but according to 2011 census this tahsil has been given the status of urban city, that's why it is seen as increase the number of population, the urban population is zero in Kalwan, Deola, Dindory and Peth of those four tahsils, there has

been an increase of Surgana tahsil by 1 to 5 percent, after that, there has been an increase of Nandgaon and Igatpuri tahsils 5 to 10 percent, Yeola and Baglan tahsil 15 to 20 percent, Trimbakeshwar 20 to 25 percent, Niphad, Sinner, Nashik, and Malegaon tahsils has been an increase in more than 25 percent.

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Women in the Teaching Profession: Problems and Challenges: A Special Reference To Female Lecturers

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Abstract : A teacher is a student's mentor, advisor, philosopher, and friend. A teacher not only influences the lives of students but also works for the betterment of society. The teacher is a role model. Many people believe that women can be better teachers than males since few attributes are necessary for this career, such as patience, care, and affection, and women have these qualities in greater abundance than men. Higher education has changed dramatically in recent decades, with new policies governing teacher workload. They must also fulfill additional research, extension, and corporate life obligations. Female teachers confront the issue of balancing work and family life in this situation. Thus the present study aims to know about the stress level and challenges faced by the female lectures of higher education. Furthermore, the study aims to clarify the real situation of Indian working women in the teaching profession as well as to identify the major issues confronting female lectures, and give suggestions to improve female lectures performance in their field. The current research uses the descriptive survey method. The convenience sampling method will be used to select 50 female lecturers working in colleges in Bangalore. A self-structured questionnaire will be used to collect data.

Key words: Higher education, working women, female lecturers, challenges, problems

Introduction

Teaching, a noble profession is a daunting and challenging task. It is rather evident that women are significantly over-represented in the profession of educators. As per the data from the education department, more than 80% of all teachers are women. A greater reason for this trend is that school, college timings make it easier for women to manage work and family. So, women who are ambitious and career-oriented as well as want to look after their household responsibilities find teaching to be the most convenient and valuable profession. For many years teaching was seen as a comfortable, stable job with predictable tasks to perform. However, now with pedagogy being as disruptive as it is, teachers who are reluctant to change and relearn are unable to keep up. In the present era, with the advent of new methodologies in teaching and the way digital and smart learning has made inroads into the field of education, the role of teachers has also greatly evolved over a period of time. Today, a teacher is faced with the arduous task of keeping him/herself abreast with the latest inventions and strides in the field of medicine, education, science, art and etc. Upgrading their skills and knowledge from time to time is thus necessary and is an utmost priority today. They are facing multifaceted problems and stresses due to increasing demand and expectations from the society. Social status, salaries and general service condition of women teachers are far from satisfactory. There are various kinds of problems which women teachers are frequently facing.

Classroom challenges are part of the life of a teacher, and a good teacher always overcomes them. Some of the common challenges teacher's faces include lack of teamwork, minimal personal time, working towards long-term goals, arguments and student excuses, work family balance etc. Addressing these challenges can help improve teachers' emotional well-being and enhance students' success rate, thereby improving the ultimate quality of education.

Objectives

1. It focuses status of women in teaching profession in colleges.
2. Analyze the constraints that lecturers face when managing their professional and family responsibilities.
3. To suggest the efforts needed to improve the performance of teaching staff in their profession.

Research methodology

The population of the study consisted of female lecturers in colleges in bangalore during the period of 18th may to 28th may 2022

Sample of the study: a questionnaire was developed on google form to get data

Information about the challenges faced by women lecturers in teaching profession.

Sample size of the study: total forty five female lecturers in colleges in bangalore were covered in the study.

Sample design: convenience sampling

Sources of data

The study involves critical evaluation and analysis of primary data. A questionnaire was designed and formulated to find out the problems

faced women lecturers in teaching profession. Secondary data is also used for the study. Data were extracted from various sources such as research articles, publications and authenticated websites.

Research instrument:

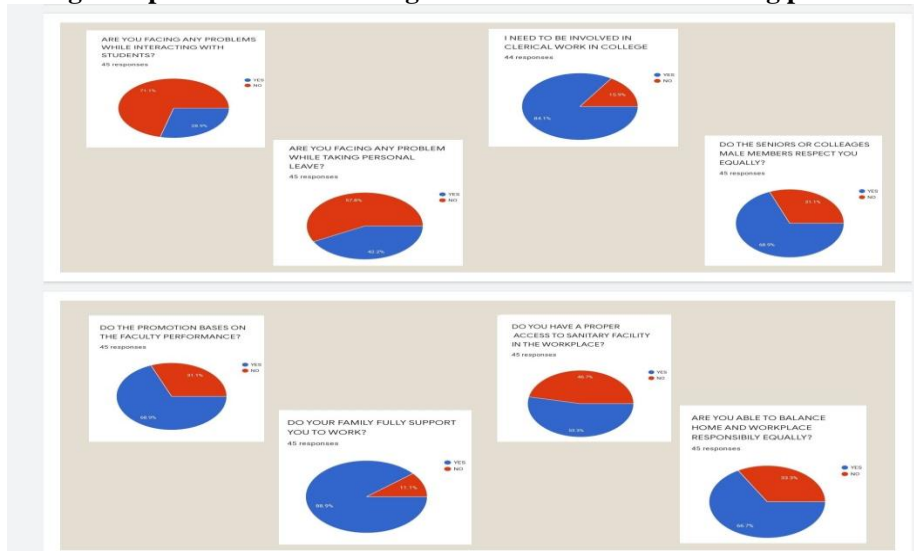
The tool used is questionnaire and personal interview. Following facts were kept in mind while preparing the questionnaire: We tried to construct the questionnaire in such a way that it would work as a logical component of a well-thought-out tabulation plan, as well as to write it in plain english. Multiple-choice questions make up the majority of the questions. We started by making a draught copy of the questionnaire to make sure the questions were in the right sequence We also paid special attention to the fact that the questionnaire should include simple

but clear instructions for the respondents so that they have no trouble answering the questions.

Data analysis

Women instructors play an important part in the entire development of the family; yet, they confront difficulty in balancing family and professional obligations. Working women, in general, serve as both money generators and primary carers for their families' children. Working women may find it difficult to fulfill both familial and professional obligations as a result of their multiple roles. In light of this context, this section looks at the difficulties women lecturers experience in balancing work and home responsibilities. Eight variables were established and evaluated independently in order to analyse the constraints experienced by female teachers. Data was collected from 45 female lecturers via an e-questionnaire.

Diagram: problems and challenges female lecturers in teaching profession



Challenges	Yes	No
Family support	88.9%	11.1%
Balance between home and working place	66.7%	33.3%
Respect from male members	68.9%	31.1%
Personal leave	42.2%	57.8%
Clerical work	84.1%	15.9%
Student interaction	28.9%	71.1%
Sanitary facility	53.3%	46.7%
Promotion in working place	68.9%	31.1%

Table: problems and challenges female lecturers in teaching profession

The results show that there were 28.9 percent of respondents aged 31 to 45, 26.7 percent of those aged 46 to 60, and 44.45 percent of those aged less than 30. Permanent lecturers

account for 35.6 percent, temporary lecturers account for 35.6 percent, and part-time lecturers account for 28.9%. The majority of women's faculties work because they want to and because

they need to. A total of 71 percent of female lecturers have difficulties as a result of working longer hours than required. However, 84 percent of female lecturers must engage in clerical work in the college, which is one of the problems they confront in balancing their family and their job. Furthermore, 52% of female professors felt that managing their family and profession is difficult when they are frequently asked to attend meetings after hours and this has gone on for a long time. The majority of them believe that official authorities do not respond quickly to complaints. 53.3 percent of faculty members do not have access to sanitary facilities in the workplace. Few faculties are experiencing difficulties as a result of a lack of family support, lack of respect from male faculty, difficulties taking personal leave, and difficulty with work promotion and student interaction. However, 88.9% of female lecturers believe that women will be required to work in the teaching profession in the future.

Findings

In our study, we found that temporary and part-time lecturers face difficulties communicating with students, difficulty taking leave, officials who do not act on their complaints and male professors who do not respect them. They can, however, strike a balance between career and family life. Permanent full-time lecturers, on the other hand, have no problems interacting with students or taking personal leave, and the official authority responds quickly to their complaints. Male faculty members respect them, but they need to work more than just teaching; they need to be involved in clerical work, and they face challenges managing their family and their profession. Working women are stressed, according to the survey, due to an imbalance of job, family, and social life. According to the above conversations, most female lecturers have issues connected to their incapacity to spend quality time with their families as a result of severe workloads that cause stress and work-family conflict. Many female lecturers suffer from psychological stress as a result of an unbalanced professional, family, and social lives. However female lecturers believe that women will be required to work in the teaching profession in the future.

Suggestions

There are many problems that female lecturers have to face .it is necessary to concentrate on a few aspects in order to make the employment of female professors more comfortable. The study reveals that a family-friendly policy and practice that encourages the involvement of lecturers as

well as the overall development of the community has implications. Social support issues and work-family balancing issues are not new. Social assistance must also improve in order to improve work-family balance. The findings also point to the importance of a family-friendly policy and its implementation in order to support women lecturers who make major contributions to their families, communities, and country. A working woman's ability to improve her social status is in her own hands. At home and in the office, women need to be more proactive and aware of their rights. Women's empowerment will not be achieved unless women decide to speak out against their exploitation, whether on an economic, social, or sexual basis. The policy's implementation must be closely monitored, and data on women's engagement in the organization must be evaluated on a regular basis. This will ensure that top management is aware of any gender discrepancies within the organization, and that appropriate efforts can be made to close those gaps. The woman who works outside the home needs the support of her husband and other family members. To allow them to employ her abilities outside of the home, they must share domestic tasks. Because india is a traditionally patriarchal and male-dominated nation, a significant elevation of working women's status in society will remain a distant dream without the positive and liberal mindset of the average indian male to encourage them. Seminars and workshops should be organized, and the value of education should be institutionalized through all socialization agents, such as religion, law, media, politics, and family. Aside from socioeconomic improvements, policies must be developed at the political level. Parents and family members should work together to encourage and motivate to progress. According to the poll, the firm exhibits a lack of respect for its employees. Special preparations for the care of female lecturers should be made. The first thing that society should take is to help working women feel more at ease. Inequality in the workplace affects a small number of female academics. Their grievances should be adequately heard. Salary increases should be made from time to time to incentivize and encourage them to continue with the company. . In the survey, it is noticed that temporary and part-time female lecturers are facing more problems as compared to the permanent full-time lecturers. Special provisions should be framed for temporary and part-time female lecturers so that they can adjust properly between personal life as well as

professional life and to motivate to stay in the organization. Efforts should be done to provide a familiar environment in the organization so that the stress level of women can be decreased.

Conclusion

Women's workplaces are being enhanced and promoted these days. Teaching must shed its status as the profession of last resort for females in society. Females should be encouraged to pursue other careers so that they are not obligated to teach if they wish to work. Also, the importance and responsibilities of a teacher's profession should be explained so that it is not misunderstood as an unappealing but available position. The goal of this study was to learn about the obstacles that female lecturers encounter in reconciling their roles as a mother and a professional. The study discovered that employing female lecturers in economic activity has a number of positive effects on the family's financial situation. Despite the importance of female lecturers in the overall development of the family, the majority of female lecturers face substantial challenges in reconciling their roles as mothers and teachers, particularly when they are required to work longer hours than usual. As a result, the majority of female lecturers experience psychological stress when they are unable to accomplish a work within a set time frame. While they spend significant amounts of time away from their young children and family, this might be a contributing factor to family conflict. Women's nature is a promotion to gain high quality in every field, but if the conditions are not ready, then the reduction of promotion and optimization in work will occur, and so on... Trade unions should try to improve the conditions for women's workers in many areas, for example, maternity leave is easily given to women and can help them achieve higher posts. Women's nature is a promotion to gain high quality in every field, but if the conditions are not ready, then the reduction of promotion and optimization in work will because women workers are frequently subjected to sexual harassment, the government should impose strong penalties for such crimes. Additionally, public transportation can be risky for women, and the government should conduct more inspections. Given the value and requirements of female participation in the teaching profession. Therefore a fundamental change is required in the attitudes of employees, family members, and public.

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A Study of Internet Awareness among Higher Secondary School Students

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Abstract: Education is the information that you are taught by others and what you learn on your own. It is a life's long journey for every person. A person experiences most of their education through school from grade school all the way to high school and even college. Teachers in educational institutions direct the education of students and might draw on many subjects, including reading, writing, mathematics, science, and history. The Internet supplements the traditional tools you use to gather information, Data Graphics, News and correspond with other people. Used skilfully, the Internet shrinks the world and brings information, expertise, and knowledge on nearly every subject imaginable straight to your computer.

Introduction

The country, information, including access to the Internet, will be the basis or personal, economic, and political advancement. The popular name for the Internet is the information superhighway. Whether you want to find the latest financial news, browse through library catalogues, exchange information with colleagues, or join in a lively political debate, the Internet is the tool that will take you beyond telephones, faxes, and isolated computers to a burgeoning networked information frontier. The Internet supplements the traditional tools you use to gather information, Data Graphics, News and correspond with other people. Used skilfully, the Internet shrinks the world and brings information, expertise, and knowledge on nearly every subject imaginable straight to the computer.

Need For the Study

Today, with the increasing global competition, changes in production techniques transformation of workplace, our school education needs to enable students with employment-orientated skills. All these developments have made the knowledge of computers necessary to everyone. Hence it has become necessary to introduce computer education at school level. The widespread use of computers has led to another revolution called internet revolution. The internet is often termed as the network of networks; it is the world's largest computer network and is scattered all over the globe. Nowadays it is possible to access any information through the internet. The students used to spend their time in library searching for information in books and journals. Nowadays they use web search engines and figure out the web sites containing the required information. The information sharing has become very easy due to access. Chatting and downloading anything from internet are regarded as higher-level applications of internet. The internet is a powerful means of communications, dissemination and retrieval of

information and it has made tremendous impact on the academic activities of the faculty, researchers, and the students.

Statement of the Problem

A Study of Internet Awareness among Higher Secondary School Students.

Operational Definiition

Internet

Galbreath (1997) has defined the internet simplistically as 'a network of network with universal addressing scheme allowing real time computer to computer, local independent communication and information exchange'.

Awareness

Webster's new dictionary (1990) defines awareness as "Cautions of something" (p-50). It means having knowledge or realization of something that affects the surrounding.

Functional Definition

Awareness

Awareness is the state or ability to perceive, to feel, or to be conscious of events, objects or sensory patterns. In this level of consciousness, sense data can be confirmed by an observer without necessarily implying understanding. More broadly, it is the state or quality of being aware of something.

Objectives of the Study

The main objective of the present study is as follows

1. To find out the significant difference between Boys and Girls higher secondary school students in their awareness of internet.
2. To find out the significant difference between Rural and Urban higher secondary school students in their awareness of internet.
3. To find out the significant difference between Tamil and English medium higher secondary school students in their awareness of internet.
4. To find out significant difference between Arts group and Science group higher

secondary school students in their awareness of internet.

5. To find out whether there is significant difference in Internet awareness of higher secondary school students in respect of their religion, community and type of schools.

Null Hypothesis

1. There is no significant difference between Boys and Girls higher secondary school students in their Internet awareness scores.
2. There is no significant difference between Rural and Urban higher secondary school students in their Internet awareness scores.
3. There is no significant difference between Arts and Science higher secondary school students in their Internet Awareness scores.

Table -1, Awareness of Internet Score: Sex

Gender	Number	Mean	S.D	t-value
Boys	62	150.73	26.55	-3.3464**
Girls	118	135.79	31.78	

From the above table it is inferred that, there is difference in the mean value of awareness of internet scores of boys and girls students. The mean score of boys' students is higher than the girls' students. The calculated t-value (3.35) is greater than the table value (2.60) at 1% level of significance. Therefore, there is significant difference in the awareness of internet of boys and girls' students. Hence the null hypothesis is

Table-2, Awareness of Internet Score: Location of the School

Location	Number	Mean	S.D	t-value
Rural	90	146.3	28.544	2.365
Urban	90	135.57	32.243	

From the above table , it is inferred that, there is difference in the mean value of awareness of internet scores among rural land urban school students. The mean score of rural school students is higher than the urban school students. The calculated t value (2.37) is less than the table value (2.60) at 1% level of significance. Therefore, there is no significance in the awareness of internet of rural and urban school

Table-3, Awareness of Internet Score: Medium of the school

Medium	Number	Mean	S.D	t-value
Tamil	90	138.87	31.439	0.899
English	90	143	30.259	

From the above table it is inferred that, there is difference in the mean value of awareness of internet scores among Tamil and English medium school students. The mean score of English medium school students is higher than the Tamil medium school students. The calculated t value (0.899) is less than the table

4. There is no significant difference in the Internet awareness score among higher secondary school students who are studying in government, government aided and private school.

Scope of the Study

The present investigation is an attempt to study the school students' internet awareness, studying in government, government Aided, and Private schools located in Coimbatore District. The findings of the study help to understand the level of internet awareness of students.

**Analysis and Interpretation of the Data
Gender**

The following table gives the mean and standard deviation of awareness of internet score and t-value with reference to Gender.

**significant at p=0.01 level

'there is significance difference in the awareness of internet of boys and girls students' is not accepted. Thus, Gender of the students contributes for the awareness of internet.

Location of the School

The following table gives the mean and standard deviation of awareness of internet score and t-value reference to location of the school.

students. Hence the null hypothesis 'there is no significant difference in the awareness of internet of rural and urban school students' is accepted. Thus, location of the students does not influence internet awareness.

Medium of the School

The following table gives the mean and standard deviation of awareness of internet score and t-value reference to medium of the school.

value (1.97) at 5% level of significance. Therefore, there is no significance in the awareness of internet of English medium and Tamil medium school students. Hence the null hypothesis 'there is no significant difference in the awareness of internet of Tamil and English medium school students' is accepted.

Thus, Medium of the school students does not influence internet awareness.

Course of the Study

Table-4

Awareness of Internet Score: Course of the Study

Course	Number	Mean	S.D	t-value
Science	110	147.49	28.13	3.59**
Arts	70	130.63	32.26	

The following table gives the mean and standard deviation of awareness of internet score and t-value with reference to course of the study.

**significant at p=0.01 level

From the above table it is inferred that, there is difference in the mean value of awareness of internet scores of Science and Arts students. The mean score of science students is higher than the Arts students. The calculated t-value (3.59) is greater than the table value (2.60) at 1% level of significance. Therefore, there is significant difference in the awareness of internet of Science and Arts students. Hence the null hypothesis is **'there is significance difference in the awareness of internet of Science and Arts students'** is not accepted.

Thus, Course of the Science and Arts students contributes for the awareness of internet.

Findings

The data was analysed by using descriptive statistics, t-test. The findings of this study are as follows

The calculated t-value (3.35) is greater than the table value (2.60) at 1% level of significance. Therefore, there is significant difference in the awareness of internet of boys and girls students. It shows that sex of the students contributes for the internet Awareness.

The calculated t value (2.37) is less than the table value (2.60) at 1% level of significance. Therefore, there is no significance in the awareness of internet of rural and urban school students. This indicates that location of the students does not influence for internet awareness. The calculated t value (0.899) is less than the table value (1.97) at 5% level of significance. Therefore there is no significance in the awareness of internet of English medium and Tamil medium school students. This shows that Tamil and English medium of the school students does not influence internet awareness.

The calculated t-value (3.59) is greater than the table value (2.60) at 1% level of significance. Therefore, there is significant difference in the awareness of internet of Science and Arts students. It indicates that Course of the Science

and Arts students contributes for the internet awareness.

Conclusion

The internet is often termed as the network of network, it is the world's largest computer network and is scattered all over the globe. Internet has evoked the interests of school students. The ambitious projects of providing computer education to some selected government, government aided, and private school can create a positive impact among students. The project is successful in enhancing their internet awareness. The findings of present study indicate internet awareness among higher secondary school students in Coimbatore district is high. The overall results of the study suggest the need effective learning. Students who are highly motivated in using internet will learn more effectively than students who don't have internet awareness.

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Abstract: If we observed, the basic purpose of development is to enlarge people's choices. It concern with the sustainable improvement in the quality of life for all people. The raising per capita income and consumption is part of the purpose of development but reducing poverty, expanding access to health services and increasing educational levels are also important, meeting these goals requires a comprehensive approach of development. So the human development approach is rediscovery in the area of economic development. The present paper is trying to find the concept of human development which has relates with the country's economic development. The concept of economic development has undergone with many conceptual framework, one of the most important and desirable concept of human development which gained currency after the year nineteen ninety. Thus the present paper illustrates the indicator of Human development. The present paper also explains the report of human development composite by the UN. Present paper is trying to explain main factors included in the composition of human development report. Now every nation's economic development has measured by their human development. Now the HDI (Human Development Index) is an alternative measure that takes into account social and cultural growth alone. So the present paper explains the how economic development and human development interrelated with each other.

Keywords: Human development, Economic development, Index, Longevity, Gross enrollment ratio etc.

Introduction:

The study of development is not a new. Aristotle (384- 322 BC) argued that "Wealth is evidently not the good we are seeking, for it is merely useful and for the sake of something else." Another thinker Immanuel Kant (1724 - 1804) also explained, human beings as the real end of all activities, he observed so act as to treat humanity, whether in their own person or in that of any other, in every case as an end with all, never as means only. And Adam Smith (1723-1796), explained that economic development should enable a person to mix freely with other without being "ashamed to appear in public. A similar thought has introduced by the modern economics through, including Robert Mathus, Karl Mark and John Stuart Mill. There has remarkable shift in development economic after the 1960. Development economists try to explain why standards of living grow faster in some places than in others. There has an investigation what promotes economic development and what hindered it. The thinking of economist has started about what does and does not help countries to develop in the past several decades.

A clear trend that has emerged in the past few decades is the movement away from narrow measures of standards of living as indicators of development and towards broader more comprehensive indicators of quality of life. Most of the economists are agree that economic development should mean an improvement in

people's quality of life. Income per person is a good indicator of quality of life. Higher incomes allow people to do more of the activities that matter to them but there have some aspects of quality of life that are not clearly linked to incomes because of the some limitation of income as an indicator of quality of life ,overtime economist have expanded the range of measurements used to access economic development. The most successful attempt at broadening the definition of economic development and recognizing the subjectively of quality of life has come from the idea of "Human development" Mahbub- Ul- Haq a leading Pakistani economist, helped pioneer the concept while working at the United Nation Development Programme (UNDP) and was responsible for starting the human development report, which is now published annually by the U.N.

Objectives of the Study:

- i) To understand the concept of Economic Development.
- ii) To explain the concept of Human Development.
- iii) To illustrate the indicator of Human Development.
- iv) To find out the interrelation between Economic Development and Human Development.

Hypotheses:

- i) The concept of economic development depends on human welfare.

- ii) The human development is the main concept which included to measure economic development.

Research Methodology:

The present paper has developed by using the secondary sources. The published books journals, newspapers, articles, government reports, online databases and views of writers are used for this study.

Subject Analysis:

Economists have debate on the many different approaches to measuring economic development and human development. The well known Indian Nobel Prize winner economist Amartya Sen written that development is the expansion of the capabilities of people to lead the kind of life they have reason to Cherish. It means people wants more fulfilling life .The principal goal of development policy to create sustainable improvements in the quality of life for all people. It means raising per capita incomes and consumption is part of the goal, there has other objectives such as reducing poverty, expand access to health services, and increasing educational level are also important. Meeting these goals requires a comprehensive approach to development. The Idea of development has multiple goals.

The traditional development thinking has fail to meeting the comprehensives and lesions included in the new thinking of development. It emphasizes the need to reach beyond economic s to address societal issues in a holistic manner .The new perspectives come across with new visions such as equality, Education, Health, the environment, culture and social well being. The human development concept analyzes the new approach of economic development which included societal issue.

i) The concept of human development:

The UNDP Human Development Report was established in 1990which has developed by the influential work of Amartya Sen ,Mehboob –Ul_ haq, Richard Jolly, francs Steward and Meghanand Desai at the UNDP (United Nation Development Programme) They provided new frame work known as ‘human Development ‘embraces the enlargement of all human choices, many human choices extend far beyond economic well being ,knowledge ,health a clean physical environment ,political freedom and simple pleasures of life are not exclusively or largely dependent on income ,national wealth can expand peoples choices in

these areas but it might not The use that people make of their wealth, not the wealth itself , is decisive and unless societies recognize that their real wealth is their people ,an excessive obsession with material wealth can obscure the goal of enriching human lives.Thus the conceptually human development is the combination of people’s entitlements and actual attainments in the crucial aspects of their lives such as education, health and livelihood, taken together, these three elements, the sum of outcomes relating to schooling, health services and quality of life chances such as life expectancy and nutrition and importantly income. Human development has been defined as the “Process of enlarging people’s choices.” The Human development explain that one has to lead a long and healthy life and in the process to be educated and to enjoy life and in the process to be educated and to enjoy a decent standard of living. Also there have additional choices include political freedom, guaranteed human rights and self respect. To achieve such type of choices public policy play a vital role. Thus Human development report has a composite of the measurement of indicators which has followed by the government by the public policy .Public policy must be developed by the government agency which has depended on greater link between economic growth and human choice.

The government should design the policy in which the land reform, progressive tax services to reach all of the deprived population the removal of barriers to the entry of people in economic and political spheres and the equalization of their access to opportunities and the establishment of temporary social safety nets for those who may be bypassed by the markets or public policy actions. Such policy packages are fairly fundamental and will vary from one country to another but some features are common to all of them.

i) Development is analyzed and understood in terms of people participate in it or benefit from it the touchstone of the success of development policies becomes the betterment of people’s lives ,not just the expansion of production process.

ii) Human development is assumed to have two sides one is the formation of human capabilities such as improved health, knowledge and skills, the other is the use people make of their acquired capabilities for employment, productive activities, political affairs or leisure’s society needs to built up human capabilities as well as ensure equitable access to human opportunities considerable human

frustration results if the scales of human development do not finally balance the two sides.

iii) There is need to make a careful distinction is maintained between ends and means people are regarded as the ends but means are not forgotten. The expansion of GNP becomes an essential means for expanding many human options but the character and distribution of economic growth are measured against the yardstick of enriching the lives of people production processes are not treated in an abstract vacuum They acquire a human context.

iv) The human development analysis political cultural and social factors given as much attention as the economic factors. The study of the link between the economic and non economic environment is one of the most fascinating and rewarding aspect of this analysis.

v) This human development aspect explains that people are both the means and the ends of developments but people are not regarded as mere instruments for producing commodities through an augmentation of "human capital" The aspect needs to gives attention that it is always remembered that human beings are the ultimate end of development not convenient fodder for the materialistic machine.

Thus the human development has concerned not only with using these human capabilities (through investment in people) but also with using these human capabilities fully (through an enabling framework for growth and employment). Human development has four essential pillars equality, sustainability, productivity and empowerment.

ii) Measuring the human development:-

When one has measure the national development it is easier because it measures by the national income but when we measure the human development, there is a need for different indicator which would cover both social and economical aspects of people. Human development index is based on social and economic aspects. The GDP or income is a most predominant one in obtaining valued outcome in the course of development on the other hand the human development indicators are most appropriate in capturing desirable 'outcomes' for which the means are ultimately engaged in the process of development.

iii) Human Development index:-

Human Development index (HDI) focuses on three measurable dimensions of human development living a long and healthy life being educated and having a decent standard of life.

Thus it combines measures of longevity as measured by life expectancy at birth, education attainment as measured by a combination of adult literacy (2/3 weight age) and combined primary, secondary and Tertiary enrollment ratios (1/3 weight ages) and standard of living as measured by real GDP per capita (PPP\$) it allows a better and broader view of a countries development than does income alone.

For the construction of the index fixed minimum and maximum values have been established for each indicator of human development index.

1. Life expectancy at birth: 25 years and 85 years.
2. Adult literacy: 0% and 100%
3. Combined gross enrolment ratio: 0% and 100%
4. Real GDP per capita (PPP\$): \$100 and \$40000

The performance of each dimension is expressed as a value between 0 and 1 by applying a general formula.

Dimension index: Actual value –Minimum value /Maximum value - minimum value.

The HDI is a simple average of the life expectancy index, educational attainment index and adjusted real GDP per capita (PPP\$) Index and so it is derived by dividing the sum of the three indices by 3.

HDI=1/3 (Life expectancy index) +1/3 (Education index) +1/3 (GDP index)

The countries are ranked according to their HDI value. The performance is expressed between the value of 0 and 1. Thus the countries with 0.800 and above HDI value are considered as high HDI countries. Countries having HDI value between 0.500 – 0.799 are considered as medium HDI countries and countries having below 0.500 HDI value are considered as low HDI countries.

After the Second World War, development economics emerged as a distinct field of study. The HDRs (Human development Reports) have stimulated discussion world –wide leading, what now is called human development. Which include international and national government, policy makers, planners, opinion of leaders, parliamentarians, media, NGOs and various discussions of members of the civil society?

Relationship between economic development and human development:

The concept of development human development is an evolving one to previous development concept which considered that investing in improving human capabilities to contribute to economic development. Human development is the knowledge, skills, capabilities, attributes and

varies characteristics they possess. It is a set of skills, capabilities and experiences that the individual acquires and enables him to participate in economic life and gain income, which can improved through investment in education, health care, training and other forms of human capital.

The relationship between human development and economic development is a two way relationship, as each of them is reflected negatively and positively on the other that economic growth takes through improving human capabilities and achieving desired growth reflected in human development as it expands options in front of human resources in particular for individuals in general.

The human development is a social, economic and political process by its nature and human beings are its object and tools, and at the same time, its objective. The human development is the main objective of every development policy. To obtain economic development the human development is the most and prior condition of all process of development. The human development and economic development is interrelated with each other for country's overall development.

Conclusion:

The process of enlarging people's choices is known as human development. It has explain with people must be at the center of development process. It has argued that the development has to be woven around the people not people around the development. Now development concept has been shifted to quantitative factors to qualitative factors .The economic development is depend on well-being of people which reflects in human development. The ultimate aim of every country's development strategy is to improve the quality of life of country's people. There has clear trend emerged in the past few decades away from narrow measures of standard of living as indicator of development towards broader and more comprehensive indicator of quality of life. Most of the economists and readers are agree that economic development should mean an improvement in people's quality of life. Human development emerges as an important approach to development. Economic development now a day's widely explained that higher GNP growth, the expansion of output and wealth are only a means to development, the end of development is expansion of human capabilities. Human beings are the in the heart of any pace of development of society. The economic development and human

development is strongly interrelating with each other, without human development any country cannot fulfill economic development.

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Insurance Literacy – Tool to Save Our Life

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Abstract: All parents want their children to be taken care of even when they are not around. Life insurance makes sure your loved ones won't suffer financially in your absence. There is no way to replace a loved one, but planning with life insurance does help in taking care of the financial needs of the family's. Life insurance help you achieve those goals by helping you build a financial corpus with the protection of a life cover. Life insurance plans inculcate a habit of disciplined saving. Paying a little amount as an insurance premium each month will help you accumulate funds. An insurance policy is one of the most valuable instruments that allow us to enjoy such benefits. It is crucial to realize the importance of insurance and understand how they can positively impact our lives. The chapter attempts to measure the Insurance literacy leads to development of awareness among scheduled community people in Tuticorin District. Primary data collected through structured interview scheduled has been used for analysis and presented in the study. The result of the study that Insurance literacy is low among the scheduled community people in Tuticorin district.

Introduction

Insurance awareness plays a key role in ensuring policyholders' protection and also in development of insurance sector. Lack of insurance awareness has proved to be one of the hurdles in penetration of insurance across the country. Insurance occupies an important place in the complex modern world since risk, which can be insured, has increased enormously in every walk of life. Insurance being complex and a subject matter of solicitation is relatively not easy for a common person to understand. The Consumer education is an important prerequisite for promotion on insurance inclusion and enhancing public awareness on key local risks and insurance policy available that suits their needs. Managing finances through different stages in life can be challenging in various ways. It is necessary to chart a plan that evaluates how

Statement of the Problem

While the importance of insurance is widely recognised, for individuals as well as for society as a whole, the number of individuals actually buying insurance is dramatically low. After stressing this concept in this paper we focus on the critical comparison between three strands of research: financial literacy, insurance literacy, and behavioural insurance literacy and decision-making. Financial literacy has assumed greater significance in recent years. It is popularly believed that people need to become more self-dependent in the upcoming years. Growing competition has forced financial service providers to offer hybrid products with composite features. Many users have left these ill- equipped products to cope with the

income needs to be distributed to have a beneficial financial portfolio. Through the different short and long-term life goals, the need for financial protection remains constant. Financial literacy advocates making financially responsible decisions to avoid being economically vulnerable or to face any financial adversity. Trusted Since 1906 Page 3 of 6 In India the need for financial literacy is getting greater because of the low level of literacy and large section of population which remains out of the formal financial set up. India still has large sections of people who are resource poor and who operate on the margin. These groups are really vulnerable towards persistent downward financial pressures. Moreover with no Established banking relationships, the poor sections are pushed towards expensive alternatives without adequate financial literacy. complicated choices which they need to make due to insufficient awareness and improper awareness level.

With the changes in working life globally, the income stream of individuals has all become more incoherent. The income level of an individual fluctuates at different timelines such as the periods of high income followed by low level of income or no income at all. This pattern may be reversed. With the increase in mortality age; people need to make greater provisions for their retirement, health care and insurances to cover uncertain eventualities. Social security schemes offered by the government are also shrinking gradually. Thus with the changing socio-economic environment of personal finance one must have necessary financial skills to make

appropriate investment decisions. Finance Education can play a vital role in equipping individuals with the necessary skills for appropriate investment decisions. This will increase one's ability to choose suitable products that will facilitate in achieving their financial goals. Financial literacy mission can prevent Economic Weaker Sections (EWS) of society from being trapped in complex financial markets which are offering complex integrated products.

Objectives of the Study

The study "Financial Literacy among Scheduled Communities in Tuticorin District" aims to assess the financial literacy level among scheduled community people in general and in particular. The following objectives were made:

1. To know the demographic profile of the scheduled community people in the study area.
2. To analyse the literacy level of scheduled community people in insurance in the study area. viz, Tuticorin district.
3. To offer suitable suggestions to improve the financial literacy of scheduled community people that leads to financial inclusion.

Review of Literature

Rusliza Yahaya, Zuraidah Zainol, Juliana Haji Osman @ Zainal Abidin, Rosmini Ismail (2019)¹ in their study on "The Effect of Financial Knowledge and Financial Attitudes on Financial Behavior among University Students" examine financial literacy among university students in Malaysia. Specifically, this study attempts to examine the relationship between financial knowledge and financial attitudes and also the effects of these variables on financial behavior among university students. The findings reveal that the respondents have moderate level of financial knowledge financial knowledge significantly influenced financial attitudes significantly influenced financial behavior. On the other have, financial knowledge does not any significant influence on financial behavior. This study enriched the literature by identifying factors that influenced financial behavior and provided suggestions to be practiced by universities in developing good financial attitude and financial behavior of students.

¹ RuslizaYahaya, Zuraidah Zainol, Juliana Haji Osman @ Zainal Abidin, Rosmini Ismail (2019). The Effect of Financial Knowledge and Financial Attitudes on Financial Behavior among University Students. International Journal of Academic Research in Business, Vol.8, No.8

Poppy Alvianolita Sanistasya, Kusdi Raharjo and Mohammad Iqbal (2019)² in their study on "The Effect of Financial Literacy and Financial Inclusion on Small Enterprises Performance in East Kalimantan" aims to find out the effect of financial literacy on Small Enterprises (SEs) performance and the effect of financial inclusion on small enterprises performance. The result of the study showed that positive and significant effect of financial literacy on enterprises performance and financial inclusion positively affects the performance of small enterprises.

Neha Garg and Shveta Singh (2018)³ in their study on "Financial literacy among youth" the study particularly focus at how socio – economic and demographic factors such as age, gender, marital status and income influence financial literacy level of youth and whether there is and interrelationship between financial knowledge, financial behavior. The study reveals that the financial literacy level among youth is low across the most part of the world that has become a cause of concern. also it has been observed that various socio –economic and demographic factors such as age, gender, income, marital status and educational attainment influence the financial literacy level of youth and there exists an interrelationship between financial knowledge, financial attitude and financial behavior. This paper aims to understand the influence of various factors influencing the financial literacy as understanding the factors that contribute to or detract from the acquisition of financial literacy among youth can help in making policy interventions targeted youth to enhance their financial well – being. Strong endeavour of the world economics to improve the financial well-being of their citizens has contributed to the rising importance of financial literacy as it equips the individuals to take quality financial decisions to enhance their financial well-being

Hypotheses of the Study

To give a specific focus to the objectives, hypotheses have been formulated to test the objectives in clear terms using appropriate statistical tools. For testing purposes, some of the

² Poppy Alvianolita Sanistasya, Kusdi Raharjo, Mohammad Iqbal (2019). The Effect of Financial Literacy and Financial Inclusion on Small Enterprises Performance in East Kalimantan. Journal *Economia*, Vol.15, No.1

³ Neha Garg, Shveta Singh (2018). Financial literacy among youth. International Journal of Social Economics, Vol.45, Issue.1

research questions of the study were converted into hypotheses. The study involved the hypotheses which are listed down, proved and explained in detail in the fourth and fifth chapters. Following null hypotheses were formulated for the study.

H₀₂: There is no significant difference in insurance literacy level among the different demographic variables of scheduled community people in Tuticorin district.

Methodology

Primary and secondary data have been collected from different sources and used for analysis. Secondary data required for the study have been collected from various publications of the Reserve Bank of India and various reports of the government of India. Primary data has been collected through a well-structured interview schedule structured by the researcher in consultation with the experts in the field. A Likert five-point scale ranging from strongly agree to strongly disagree has been used to collect a quick response from the respondents.

Significance of the Study

Scheduled community people are economically belonging to the weaker section. They are more vulnerable naturally. They don't have land on their own. They are less educated and poorer in health. Without financial literacy, we cannot expect to make major headway in either financial inclusion or consumer protection. Financial literacy has been assumed a greater importance in recent years, as financial markets have become increasingly complex and there is information asymmetry between markets and the common person which is leading to the latter i.e. common person finding it increasingly difficult to make informed choices.

Scope of the Study

The present study attempts to examine the demographic variables of scheduled community

people and demographic variables influencing the financial literacy among scheduled community people in Tuticorin district. It examines the financial literacy level among scheduled community people in the study area viz. Tuticorin District based on their selected demographic variables. Further, it examines the literacy level of scheduled community people in the banking, insurance, and postal financial services in the study area. viz, Tuticorin district. It aims to offer suitable suggestions to improve the financial literacy of scheduled community people that leads to financial inclusion. The study was done taking the scheduled community people in Tuticorin district into consideration. The survey was restricted to the scheduled community people only in Tuticorin district.

Analysis of the Study

Insurance Literacy Level among Different Gender Group of Scheduled Community People

This part deals with the gender group of scheduled community people and Insurance literacy level. The relationship between independent variable (Gender group) and dependent variable (Insurance literacy level) is established through 't' test. An attempt has been made to find the significant relationship between the gender group of scheduled community people and insurance literacy level, 't' test is used. The hypothesis is framed as follows,

The null hypothesis (H₀₁) - **“There is no significant difference in insurance literacy level among the different gender group of scheduled community people in Tuticorin district”**.

The result of the 't' test for the insurance literacy level among different gender group of scheduled community people is presented in Table 1.

Table 1, Insurance Literacy Level among Different Gender Group of Scheduled Community People

Insurance Literacy Level	Gender Group (Mean Score)		t Statistics
	Male	Female	
Insurance is the best way to save and secure money	4.0599	4.0375	1.235
Insurance will give protection to life and property	3.9683	3.8344	3.098*
Insurance gives confident about returns	3.6901	3.4713	4.648*
Insurance gives timely help for sudden loss to life property	3.2535	3.2261	0.732
Other than life protection, LIC provides loan to its customers	3.1549	3.1083	1.232
There are varieties of policies in insurance to save the money	3.5106	3.3949	2.584*
Insurance schemes are suitable for all kinds of people	3.2923	3.1242	3.269*
There are many number of policies available which suits to fulfil the needs of the people	4.0986	4.0892	0.329
Scheduled communities are well aware about latest policies introduced in the market	4.1303	4.0287	3.177*
Children's plans always give the returns after a long time	3.8803	3.8471	0.761

Source: Computed Data

*-Significant at five per cent level

As the above Table 1 shows scheduled community people are well aware about latest policies introduced in the market and there are many number of policies available which suits to fulfil the needs of the people are the high insurance literacy among the sample scheduled community people who are male as their mean scores are 4.0986 and 4.1303 respectively. The Table 4.10 shows there are many number of policies available which suits to fulfil the needs of the people and Insurance is the best way to save and secure money are the high insurance literacy among the sample scheduled community people who are female as their mean scores are 4.0892 and 4.0375 respectively. Regarding the insurance literacy among the different gender group of sample scheduled community people, Insurance will give protection to life and property, Insurance gives confident about returns, there are varieties of policies in insurance to save the money, Insurance schemes are suitable for all kinds of people and scheduled community people are well aware about latest policies introduced in the market are statistically significant at 5 per cent level.

From the table 5.10 it is found that Insurance will give protection to life and property (t=3.098), Insurance gives confident about returns (t=4.648), There are varieties of policies in insurance to save the money (t=2.584), Insurance schemes are suitable for all kinds of people (t=3.269), scheduled community people are well aware about latest policies introduced in

the market (t=3.177) differs significantly with respect to gender group of the scheduled community people. This leads to mean wise comparison of each segment of gender group.

It can be concluded that the scheduled community people who are male have high insurance literacy level regarding Insurance will give protection to life and property (Mean=3.9683), Insurance gives confident about returns (Mean=3.6901), There are varieties of policies in insurance to save the money (Mean=3.5106), Insurance schemes are suitable for all kinds of people (Mean=3.2923), scheduled community people are well aware about latest policies introduced in the market (Mean=4.1303).

Insurance Literacy Level among Different Age Group of Scheduled Community People

An attempt has been made to find the significant relationship between the age group of scheduled community people and insurance literacy level, 'ANOVA' test is used. The hypothesis is framed as follows,

The null hypothesis (H_{01}) - **“There is no significant difference in insurance literacy level among the different age group of scheduled community people in Tuticorin district”.**

The result of the 'ANOVA' test for the insurance literacy level among different age groups of scheduled community people is presented in Table 2.

Table 2, Insurance Literacy Level among Different Age Group of Scheduled Community People

Insurance Literacy Level	Age Group (Mean Score)				F Statistics
	Below 20 Years	20 – 40 Years	41 – 60 Years	Above 60 Years	
Insurance is the best way to save and secure money	4.0000	4.0395	4.0417	4.0820	0.435
Insurance will give protection to life and property	3.9333	3.9435	3.8631	3.7213	3.414*
Insurance gives confident about returns	3.5333	3.6130	3.5714	3.3770	2.883*
Insurance gives timely help for sudden loss to life property	3.0000	3.2599	3.2679	3.0984	3.812*
Other than life protection, LIC provides loan to its customers	3.0000	3.1949	3.0714	2.9508	6.859*
There are varieties of policies in insurance to save the money	3.4667	3.5056	3.4107	3.2295	4.875*
Insurance schemes are suitable for all kinds of people	2.9333	3.2429	3.1607	3.1639	1.711
There are many number of policies available which suits to fulfil the needs of the people	4.1333	4.1017	4.0952	4.0328	0.746
Scheduled communities are well aware about latest policies introduced in the market	4.2000	4.0989	4.0536	3.9836	2.210
Children's plans always give the returns after a long time	3.9333	3.8729	3.8690	3.7705	0.750

Source: Computed Data

*-Significant at five per cent level

As the Table 2 shows scheduled community people are well aware about latest policies introduced in the market and there are many number of policies available which suits to fulfil the needs of the people are the high insurance literacy among the sample scheduled community people who are in the age group of below 20 years as their mean scores are 4.2000 and 4.1333 respectively. The table shows that there are many number of policies available which suits to fulfil the needs of the people and scheduled community people are well aware about latest policies introduced in the market are the high insurance literacy among the sample scheduled community people who belong to the age group between 20-40 years as their mean scores are 4.1017 and 4.0989 respectively. The table indicates that there are many number of policies available which suits to fulfil the needs of the people and scheduled community people are well aware about latest policies introduced in the market are the high insurance literacy among the

sample scheduled community people who are in the age group between 41-60 years as their mean scores are 4.0952 and 4.0536 respectively. As shown in the above table that Insurance is the best way to save and secure money and there are many number of policies available which suits to fulfil the needs of the people are the high insurance literacy among the sample scheduled community people who belong to the age group of above 60 years as their mean scores are 4.0820 and 4.0328 respectively. Regarding the insurance literacy among the different age group of sample scheduled community people, Insurance will give protection to life and property, Insurance gives confident about returns, Insurance gives timely help for sudden loss to life property, other than life protection, LIC provides loan to its customers and there are varieties of policies in insurance to save the money are statistically significant at 5 per cent level.

Table - 3
Demographic Variables of Scheduled Community People and Insurance Literacy

Demographic Variable	Insurance Literacy			d.f	F Value	Sig at 5% Level	Ho
	Mean	S.D	No. of Respondents				
Age Group							
Below 20 Years	36.13	1.80	15	3	5.687	0.001	Rejected
20-40 Years	36.87	2.77	354				
41-60 Years	36.40	2.52	170				
Above 60 Years	35.40	2.62	61				
Education							
Illiterate	37.02	2.30	37	6	18.560	0.000	Rejected
Primary school Level	35.55	2.28	190				
High school Level	36.31	2.43	188				
Hr.Sec. Level	37.32	2.86	64				
Graduate Level	37.50	2.58	104				
Post Graduate Level	41.06	3.47	15				
Professional	41.50	4.94	2				
Occupation							
Agriculture	35.90	2.17	20	5	16.872	0.000	Rejected
Coolie	35.88	2.51	238				
Self Employed	38.06	2.99	44				
Government Employee	38.42	3.44	26				
Private Employee	37.87	2.39	113				
Others	36.03	2.40	159				
Number of Members in the Family							
Below 4	36.08	2.57	139	2	3.161	0.043	Rejected
4-8	36.70	2.76	436				
Above 8	37.04	1.94	25				
Monthly Income							
Below Rs.5000	35.26	2.12	26	3	16.357	0.000	Rejected

Rs.5000-10000	36.02	2.54	148				
Rs.10001-15000	36.17	2.28	225				
Above Rs.15000	37.59	3.01	201				
Source of Income							
Income from Spouse/Parents	35.79	2.16	195	4	5.698	0.000	Rejected
Salary Income	37.79	2.76	137				
Agriculture	35.86	2.85	15				
Own Business Income	38.35	2.61	42				
Wages	36.19	2.71	211				

Source: Computed data

It could be understood from Table 3 that the computed 'F' value for insurance literacy among different age group of sample scheduled community people is 5.687 and the 'p' value at 5% level of significance is 0.001. As computed value is greater than table value, the null hypothesis is rejected. It is inferred that there is a significant difference between age group of the sample scheduled community people and insurance literacy. Table 5.29 shows that the computed 'F' value for insurance literacy among different education of sample scheduled community people is 18.560 and the 'p' value at 5% level of significance is 0.000. As computed 'F' value is greater than table value, the null hypothesis is rejected. It is inferred that there is a significant difference between education of the sample scheduled community people and insurance literacy. Table further shows that the computed 'F' value for insurance literacy among different occupation of sample scheduled community people is 16.872 and the 'p' value at 5% level of significance is 0.000. As computed 'F' value is greater than table value, the null hypothesis is rejected. It is inferred that there is a significant difference between occupation of the sample scheduled community people and insurance literacy. Table further elucidates that computed 'F' value for insurance literacy among different number of members in the family of sample scheduled community people is 3.161 and the 'p' value at 5% level of significance is 0.043. As computed 'F' value is greater than table value, the null hypothesis is rejected. It is inferred that there is a significant difference between number of members in the family of sample scheduled community people and insurance literacy. Table further highlights that the computed 'F' value for insurance literacy among different monthly income of sample scheduled community people is 16.357 and the 'p' value at 5% level of significance is 0.000. As the computed 'F' value is higher than table value, the null hypothesis is rejected. It is inferred that there is a significant difference

between monthly income of sample scheduled community people and insurance literacy. Table further highlights that the computed 'F' value for insurance literacy among different source of income of sample scheduled community people is 5.698 and the 'p' value at 5% level of significance is 0.000. As the computed 'F' value is greater than table value, the null hypothesis is rejected. It is inferred that there is a significant difference between sources of income of sample scheduled community people and insurance literacy.

Conclusion

Today's financial world is highly complex when compared with that of a generation ago. Financial education is important to both the security of individuals and the security of nations. To the scheduled community people the financial literacy is very important to make efficient decision on their finance. As compared to urban scheduled community people, the rural Scheduled community people have low level of awareness on finance related matters. Scheduled community people in India have reasonable knowledge on the various savings and investment medium available in the market. But it is very ironical to assess that their knowledge is very much limited to the traditionally know savings and investment avenues like bank saving, holding insurance policy, investment in equities gold or inland/building. To conclude, the government should literate the scheduled community people financially through the camp, seminars, and conference. Then only the scheduled community people can make their investment in an efficient manner.

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Role of Behavioural Finance on Investment Decisions: A Comparative Study

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Abstract: Behavioural finance is an emerging concept that has a greater future scope. Behavioral finance can be defined as "the study of influence of psychology on the behaviour of investors and analysts". The behavioural finance says the impact of emotions, cognitive biases, and various psychological factors that drive the investment decision rather than traditional theories like human beings are rational. So this research intended to study the role of behavioural finance on investment decisions. This is a comparative study based on various demographic features. According to this study, each demographic feature may or may not be significantly different from the factors that influence the respondent's investment decision. We all know females are emotionally weaker than men. The attitude of women towards risk, return and Decision making criteria in investment selection are entirely different from men. The perception, attitude and psychology of women and men are too different. Age, education qualification, income level also have a greater impact on investment decisions. That makes more scope for this study. This study was conducted in Thrissur district. The research gave more focus on the factors which have an impact on investment decisions and also searches for how the investment decisions change due to various demographic features.

Introduction

Behavioural finance can be defined as "the study of influence of psychology on the behaviour of investors and analysts". It means the emotions, cognitive biases and various psychological factors that drive the investment decision rather than rational thinking. This research mainly focused on the impact or role of behavioural finance on investment decisions. The researcher intended to make a comparative study which helps to know how the demographic profile of people affects the investment decision. The behavioural finance theories expanded by numerous researchers, who spoke on gender and investment decisions. The gender predicament in investment decisions intently associated with behavioural finance. Moreover each demographic feature has an impact on investment decisions as well as the selection of investment avenues. The attitude, perception, learning level between gender groups or between age groups or between persons with different qualifications are distinct. So the main point that strikes on the mind of the researcher is that he is not rational about investments but he is judgemental because the emotions are most commonly influenced by his activities. The people may be orthodox or antagonistic, voluntary or involuntary, logical or illogical. Thus the researcher exhilarated to study the impact of various demographic features on investment decisions and to know the awareness level of respondents.

Statement of the Problem

The surging concept "behavioural finance" has a major role in investment decisions taken by each

and every person. This study concerned "The role of behavioural finance on investment decisions". The psychology, emotions, perceptions of different gender groups or in different age levels are distinct. Thus the researcher has made a comparative study. The use of income earned by each person uniquely. The fear about the future leads a person to set aside a certain part of income earned to meet unexpected events. So the researcher tries to study the various notions in behavioural finance and also its effect on investment decisions. The following are the research questions under consideration:

Q1: What are the factors influencing while making investment decisions?

Q2: Whether the respondents are aware about investment avenues?

Q3: How do demographic features impact investment decisions?

Objectives of the Study

The following are the objectives of the study.

To identify the factors which have an impact on investment decisions.

To know the awareness level of respondents regarding various investment avenues.

To discuss the impact of various demographic features on investment decisions.

Significance of the Study

Behavioural finance is an advancing contribution from the field of psychology which says emotions drive the action. This study is confined to consider the emotions, perceptions and attitude of investors from various demographic features and also contemplate the biases that are included in investment decisions. The attitudes

of people are different by their gender, by their age or by education qualification. There is a lot of research conducted by various researchers related to behavioural finance and it sticks to the gender differences in decisions. Thus the study focused on the impact of various demographic features on investment decisions. The role of behavioural finance in investment decisions has more scope in near future because the negative impact of Covid-19 on our economy and monetary transactions may last for a decade or more. Hence it is inevitable to conduct a study on the impact of behavioural finance on investment decisions.

Research Methodology

The research design is descriptive and analytical in nature. The data were collected from primary as well as secondary sources. The primary data were collected by administering questionnaires. Secondary data were collected from websites, Journals and magazines etc. The sample of the study was selected from Thrissur district. The researcher opted for 150 samples via convenience sampling.

Literature Review

Kannadas Sendivelu & Maniya Deepak Shah (2021) tries to find out the impact of behavioural finance on investment decisions of a single

parent and Also assess the biases included in it. The study concluded that every individual subjects to some biases.

Dhruv Sharma, Vandana Misra, J P Pathak (2021) tries to study the emergence of behavioural finance and the biases involved in it. The authors give focus on how behavioural finance supplemented the traditional finance theories by introducing behavioural aspects.

Rekha D M (2020) explored the behavioural determinants influencing investor's decisions and the level of influence of these factors on them. The study revealed that the prospect factors represent the most important factor having the highest significant impact on investment decisions.

Dr. Vinay Kandpal & Rajat Mehrotra(2018) attempts to study the behaviour of investors towards investment avenues and factors influencing while taking financial decisions. The study concludes that the behaviour have an huge impact while making wise decisions

Egidijus Bika, et al. (2013) explained the emergence and development of trends in behavioural finance. This research revealed the aims of recognition and emotional factors focusing on a limited number of rational investors.

Results & Discussion

Table No: 1, Demographic Profile

	Frequency	Percent
Gender		
Male	78	52
Female	72	48
Total	150	100
Age		
20-30	17	11.33
30-40	72	48
40-50	40	26.67
50-60	13	8.67
Above 60	8	5.33
Total	150	100
Monthly Income		
Below 20000	76	50.67
20000-40000	38	25.33

40000-60000	24	16
Above 60000	12	8
Total	150	100
Education		
Below SSLC	18	12
SSLC	30	20
Plus two	34	22.67
Graduate	22	14.67
Post Graduate	18	12
Others	28	18.66
Total	150	100

(Source: Primary Survey)

Interpretation: The demographic table depicts that 52 percent of respondents are male. 48 percent of respondents are coming under the age group of 30-40. Most of the respondents nearly

50.67 percent earned an income up to 20000. Most of the respondents have a minimum plus two qualifications.

Table No: 2, Awareness about behavioural finance

Variable	Frequency	Percent
Aware	134	89.33
Not aware	16	10.67
Total	150	100

(Source: Primary Survey)

Interpretation: From the table it is clear that around 90 percent of respondents have heard about the emerging concept behavioural finance.

Table No: 3, Influence of behavioural finance on investment decision

Variable	Frequency	Percent
Always	49	32.67
Often	32	21.33
Sometimes	26	17.33
Rarely	27	18
Never	16	10.67
Total	150	100

(Source: Primary Survey)

Interpretation: The tables depicts the influence of behavioural finance on investment decisions. 32.67 percent are always influenced by

behavioural factors and 10.67 percent of them are not influenced and not aware about that.

Hypothesis 1

H0: There is no significant difference between male and female regarding the influence of behavioral finance on investment decisions.

H1: There is a significant difference between male and female regarding the influence of behavioral finance on investment decisions.

Table No. : 4, Gender wise - Mann - Whitney - Wilcoxon U - Test

	Gender	N	Test statistic	Table value@ 5%	P value	Accept/ Reject
Influence of behavioural finance	Male	78	10.5	2	-0.31334	Reject
	Female	72				
Test distribution is not normal Mann - Whitney - Wilcoxon U - Test Grouping Variable: Gender						

(Source: Primary Survey)

Interpretation: The table depicts the calculated value greater than table value at 5% level of significance. Thus the null hypothesis is rejected

and it means there is a significant difference between the influences of behavioural finance on gender groups.

Table No: 5, Awareness about investment avenues

Variable	Frequency	Percent
Extremely aware	52	34.67
Moderately aware	56	37.33
Somewhat aware	26	17.33
Slightly aware	16	10.66
Not at all aware	0	0
Total	150	100

(Source: Primary Survey)

Interpretation: From the table it is clear that all the respondents are aware about the investment avenues in distinct ways. 37.33 percent of respondents are moderately aware about all kinds of investment avenues.

H0: There is no significant difference between male and female regarding awareness about investment avenues.

H1: There is a significant difference between male and female regarding awareness about investment avenues.

Hypothesis 2

Table No. : 6, Gender wise T test

	Gender	N	Test statistic	Table value@ 5%	Accept/ Reject
Awareness regarding investment avenues	Male	78	2.63	1.96	Reject
	Female	72			
Test distribution is normal T test Grouping Variable: Gender					

(Source: Primary Survey)

Interpretation: From the table it is clear that the test statistic is greater than the critical value at 5% level of significance. Thus the null hypothesis is rejected that the male and female get awareness in different ways.

Hypothesis 3

H0: There is no significant difference between age and awareness about investment avenues

H1: There is significant difference between age and awareness about investment avenues

Table No.: 7, Age wise – kruskal- wallis H test

	Age	N	Test statistic	Table value@ 5%	Accept/ Reject
Awareness level	20-30	17	6.524	9.488	Accept
	30-40	72			
	40-50	40			
	50-60	13			
	Above 60	8			
	Total	150			

Test distribution is not normal
Kruskal Wallis H Test
Grouping Variable: Age

(Source: Primary Survey)

Interpretation: From the table it is clear that the calculated value is less than table value. Hence we accept the null hypothesis. That means there is no significant difference between age groups and the awareness of investment avenues.

H0: There is no significant difference between male and female regarding awareness level of individual investment avenues.

H1: There is a significant difference between male and female regarding the awareness level of individual investment avenues.

Hypothesis 4

Table No.: 8, Awareness on individual investment avenues

Investment Avenue	Gender	No.	Mean	Standard Deviation	Calculated Value	Table Value	Accept/Reject
Bank Deposit	Male	39	4.025	.973	.671	1.96	Accept
	Female	36	3.88	.9038			
Post Office Savings	Male	39	3.71	.987	-3.58	1.96	Reject
	Female	36	7.416	6.135			
Insurance	Male	39	4.076	1.04	2.51	1.96	Reject
	Female	36	3.416	1.21			
Share	Male	39	2.79	1.38	2.30	1.96	Reject
	Female	36	2.11	1.17			
Bonds/ Debentures	Male	39	2.74	1.34	2.43	1.96	Reject
	Female	36	2.05	1.10			
Chit Fund	Male	39	4.23	.894	2.63	1.96	Reject
	Female	36	3.66	.97			
Real Estate	Male	39	3.66	1.43	4.18	1.96	Reject
	Female	36	2.5	.92			
Provident Fund	Male	39	3.897	1.23	2.6	1.96	Reject
	Female	36	3.11	1.35			

(Source: Primary Survey)

Interpretation: While considering post office savings, insurance, shares, bonds, chit funds, real estate, and provident fund, according to t-test calculated values are more than the table value, so reject the null hypothesis and accept the

alternative hypothesis that is awareness level of respondents towards various investment avenues are significantly differ in between male and female.

Table No: 9
Sources of awareness

Source	Frequency	Percent
News paper	40	26.67
Television	34	22.67
Friends or colleagues	24	16
Brokers or consultants	18	12
Journals or magazines	12	8
E- sources	22	14.66
Total	150	100

(Source: Primary Survey)

Interpretation: The table shows that 26.67 percent of respondents get awareness about investment avenues through newspapers or

dailies. Least of the respondents get the information from journals or magazines.

Table No: 10
Decision taken on investment

Variable	Frequency	Percent
Independently	27	18
Friends	41	27.33
Family members	38	25.33
Neighbors	15	10
Brokers and consultants	17	11.34
Others	12	8
Total	150	100

(Source: Primary Survey)

Interpretation: The above table depicts that most of the respondents are taking decisions

regarding investment by considering the words of friends, family members or by individually.

Table No: 11, Income set aside for investment

Category	Frequency	Percent
0-25%	79	52.67
25-50%	60	40
50-75%	11	7.33
More than 75%	0	0
Total	150	100

(Source: Primary Survey)

Interpretation: From the table it is clear that 53 percent of respondents are keeping less than 25% of income for investment and none of them keep more than 75% of income for investments.

Table No: 12
Variables control the investment decision

Variables	Frequency	Percent
Confidence to invest	28	18.67
Regular review and comparison	7	4.67
Consistent investment strategy	13	8.67
Knowledge about avenues	36	24
Satisfaction with current investment avenues	10	6.66
Risk bearing capacity	32	21.33
Possible returns	24	16
Total	150	100

(Source: Primary Survey)

Interpretation: From the table it is clear that 24 percent of respondents are considering knowledge about avenues as a control variable. Least controlling variable is regular review and comparison about 5 percent.

Table No: 13
Investment avenues preferred

Investment Avenues	Frequency	Percentage
Bank Deposit	42	28
Post Office Savings	30	20
Insurance	20	13.3
Shares	6	4
Bonds/Debentures	10	6.7
Chit Funds	26	17.33
Real Estate	0	0
Provident Fund	16	10.7
Total	150	100

(Source: Primary Survey)

Interpretation: The above table mentions that most of the respondents opt bank deposits, post office savings and chit funds as preferred investment avenues. Because these three avenues have the least level of risk and most of the respondents have risk averse character.

Table No: 14
Factors considering while making investment decisions

Attributes	Frequency	Percentage
Assured return	130	86.7
Tax benefits	142	94.7
Child education	86	57.3
Daughters marriage	52	34.7
Speculation	33	22.0
Capital gain	21	14.0
Retirement benefit	79	52.7
Secured future	111	74.
Safety of investment	148	98.7
Quantum of investment	127	84.7
Potential risk	150	100
Potential gain	56	37.3
Liquidity	67	44.7
Customer service	31	20.7
Past experience	133	88.7
Time horizon	47	31.3

(Source: Primary Survey)

Interpretation: The table shows that the most concerning factors while making investment decisions are potential risk, safety of investment and assured return. The least affected factor is the capital gain earned from the investments.

Hypothesis 5

H0: There is no significant difference between male and female regarding the factors considered for making investment decisions.

H1: There is a significant difference between male and female regarding the factors considered for making investment decisions.

Table No: 15
Genderwise - Mann - Whitney - Wilcoxon U - Test

Factors	Male (N ₁)	Female (N ₂)	Test statistic	Table value@ 5%	Accept/ Reject
Assured return	58	72	96.5	75	Reject
Tax benefits	70	72			
Child education	20	66			

Daughters marriage	8	44			
Speculation	29	4			
Capital gain	18	3			
Retirement benefit	7	72			
Secured future	41	70			
Safety of investment	76	72			
Quantum of investment	57	70			
Potential risk	78	72			
Potential gain	50	6			
Liquidity	13	54			
Customer service	4	27			
Past experience	61	72			
Time horizon	13	34			
Total	603	810			
a) The distribution is not normal b) Mann – Whitney – Wilcoxon U test c) Grouping Variable : Gender					

(Source: Primary Survey)

Interpretation: From the above calculations it is clear that the test statistic is greater than the critical value. Hence we reject the null hypothesis which means there is a significant difference between male and female regarding the factors considering for investment decisions

Findings

The following are the major findings of the study.

52 percent of respondents are male. 48 percent of respondents are coming under the age group of 30-40. Most of the respondents nearly 50.67 percent earned an income up to 20000. Most of the respondents have a minimum plus two qualifications.

90 percent of respondents have heard about the emerging concept of behavioural finance.

32.67 percent are always influenced by behavioural factors and 10.67 percent of them are not influenced and not aware about that.

There is a significant difference between the influences of behavioural finance on gender groups.

All the respondents are aware about the investment avenues in distinct ways. 37.33 percent of respondents are moderately aware.

There is a significant difference between male and female on the awareness regarding investment avenues.

There is no significant difference between age groups and the awareness of investment avenues. While considering post office savings, insurance, shares, bonds, chit funds, real estate, and provident fund, according to t-test calculated values are more than the table value, so reject the null hypothesis and accept the alternative hypothesis that is awareness level of respondents towards various investment avenues are significantly differ in between male and female.

26.67 percent of respondents get awareness about investment avenues through newspapers or dailies.

Most of the respondents are taking decisions regarding investment by considering the words of friends, family members or individually.

53 percent of respondents are keeping less than 25% of income for investment and none of them keep more than 75% of income for investments.

24 percent of respondents are considering knowledge about avenues as a control variable.

Most of the respondents opt bank deposits, post office savings and chit funds as preferred investment avenues. Because these three avenues

have the least level of risk and most of the respondents have risk averse character.

Most concerning factors while making investment decisions are potential risk, safety of investment and assured return.

There is a significant difference between male and female regarding the factors considered for investment decisions.

Suggestions

Following are the suggestions derived from the study.

The female investors should be encouraged to invest since they are very cautious about the avenues, risk and return.

The Government Should take initiatives to give adequate training programs to people with less literacy level.

Government should arrange awareness programs to the entire public to encourage them to create investment behaviour.

Respondents should take due care while making investment decisions.

Most of the respondents are ready to save their income rather than investing in risky avenues. So the concerned authorities should take initiatives to encourage the public for investment.

Conclusion

The researcher tried to compare the role of behavioural finance on investment decisions based on some demographic features like gender and age. From the study it is clear that almost all respondents opted for savings rather than investment. Because they regret taking the risk. The female respondents are not interested in investing in risky avenues and also they do not expect more earnings. The female respondents used the investment or savings for the future rather than male invest for making immediate return. They are not cautious about the future unlike females. All the respondents are aware about the investment avenues but distinctly. Most of the respondents opt bank deposits, post office savings and chit funds as preferred investment avenues. Because these three avenues have the least level of risk and most of the respondents have risk averse character. The study was entirely conducted in the rural area of Thrissur district. So the respondents have not much idea regarding investment in shares, debentures as such investments. Thus the authorities should take initiatives for educating the rural people about investment avenues. There is a significant difference between male and females regarding the factors influenced while making investment decisions. The investment behaviour of

respondents are changed according to the variations in demographic features.

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New Education Policy 2020 and Children with Disability

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Abstract: A large part of the youth population in India is suffering from single or multiple disabilities. It is often difficult for them to take their place in society. Education, health, and employment are a few challenges they face in daily life. The government brings policies, programs, and provisions from time to time for their well-being. Moving forward in this direction, the government announced the new education policy on 29 July 2020, which includes actions for the holistic development of the disabled. New Education Policy 2020 opens a new era in educational reform. This policy includes guidelines for “Equal opportunity” and “Barrier-free Education” for the well-being of the disabled. This article has been presented in the context of NEP 2020 and children with disabilities. Researchers have presented some suggestions in this paper, which can prove beneficial in future for disabled children.

Key Words - New Education Policy, Disability, Children with disability, Importance.

The Indian national education policy was first introduced in 1986, which was later amended in 1992. Since then, there were many changes in society and education, which constantly demanded amendments in the education policy. Therefore, the new education policy 2020 was introduced on 29th July 2020. This policy replaced 34 years old Indian national education policy. The education policy provides measures for foundational pillars of equality, quality, access, affordability, and accountability. The new policy provides instructions for equal opportunity and education to children with disabilities. The barrier-free education and access to education for children with disabilities were important provisions in the new educational policy 2020. According to Merriam-Webster “Disability is a physical, mental, cognitive, or developmental condition that impairs, interferes with, or limits a person’s ability to engage in certain tasks or actions or participate in typical daily activities and interactions.”

Objective of the Study-

- 1- To individual development of disabled child.
- 2- To Providing opportunities for "Barrier Free Education" to all children with disabilities.
- 2- To achievement of national goal.
- 3- To bringing out the hidden talent in the child.
- 4- To achieving the goal of the national Education Policy.
- 5- To Bringing positivity in the relationship between the society, the disabled family and stakeholder.

Key Points of the New Education Policy 2020-

There are the main key points-

- NEP 2020, adopted on 29th July 2020.

- NEP 2020 which will replace the existing 10+2 school system with a new 5+3+3+4 school system.
- Ensuring Universal Access at all levels of school education.
- Early Childhood Care & Education with new Curricular and Pedagogical Structure.
- This policy for “Equal opportunity” and “Barrier-free Education” for the well-being of the disabled.
- Attaining Foundational Literacy and Numeracy.
- Reforms in school curricula and pedagogy.
- Multilingualism and the power of language.
- The aim of the new policy 2020 is the universalize of education from pre-school to secondary level with 100% Gross Enrolment Ratio ((GER) in school education policy 2030.
- Now the age group for the Right to Education (RTE) is now 3 to 8 years (earlier 14 years.)
- This education policy describes the much-awaited new reforms that the country and society have needed for a long time. This adaptation can be visible or beneficial for children with disabilities and other disabled stakeholders. Therefore, disabled children's methods of learning, teaching pedagogy, and teachers' ability are important concerns in this policy.
- PWD act 2016 has been kept in mind to provide barrier-free education to disabled children. Generally, children with

disabilities face barriers to access to education in preschool and primary school. Because studies find that some schools have less than 40% stairs and 17% have almost accessible toilets. Apart from this many other facilities related to disability are also not available in those schools.

Importance of NEP 2020 for Disabled Child-

Here some importance points-

- It speculates an India-centric education system and the provision of quality education and equitable access to all students in a sustainable manner.
- It allows the students to enjoy the education and gain confidence due to individual learning or the personal growth and development of the special children.
- According NEP 2020 will bring 2 crores out of school children back into the mainstream, through the open schooling system.
- The disability cases could include different variety like-emotional, mental, physical developmental.
- Under NEP recognizes the importance of creating enabling mechanisms for providing Children with Special Needs (CWSN) or Disabled.
- This policy promotes inclusive education and provides equal education to both. Normal children and children with disabilities.
- New Education Policy 2020 is an important attempt to provide "barrier-free education" to the disabled and also a concrete step toward bringing them into the "mainstream" education.
- New Education Policy 2020 aims to ensure that no child from birth misses an opportunity to read, write and excel that's why this new policy will lay special emphasis on disabled children.
- Under NEP 2020, it will be possible to provide resources for the inclusion of children with disabilities in the school and school premises, as well as assist in the appointment of trained special teachers to teach such students.
- This policy promotes inclusive education and provides equal education to both normal and children with disabilities.
- It will enable children with disabilities to fully participate in the regular schooling process from basic to the higher levels of education. It also includes providing cross-disability training with appropriate technology-based equipment and support mechanisms. The support of teachers will also be included according to the need of these children.
- The knowledge about teaching children with specific disabilities will be an integral part of all teacher education programs.
- There will be no discrimination in schools.
- Accessible school infrastructure, reasonable accommodation, personal support, and teaching with Braille and Indian sign language.
- School infrastructure can be used as free social consciousness centers.
- Recruitment of special teachers with cross-disability training.
- Disability awareness has been included in teacher education.
- Resources will be provided to school campuses for the integration of children with disabilities, along with the assistive devices, and teaching and learning materials.
- The home-based education will continue to be an option for children who are unable to attend school. They will be treated like other children based on the normal system.
- Special attention will be given to the safety and security of children with disabilities.
- Schools will be provided with assistive devices, suitable technology-based tools, and language-appropriate teaching-learning materials to facilitate the changes among children with disabilities.
- While preparing the National Curriculum Framework (NCF) for children with disabilities, NCERT will ensure that it consults expert and experienced persons with the national institute of DEPWDs.
- In addition, a high-quality module will also be developed for NIOS (National Indian Open School) to teach Indian sign language and other basic subjects using Indian sign language.
- Each state will be encouraged to set up "BAL-BHAWAN" in the district. To build the future of these disabled children, their

career-related, sports-related, and other interest-related activities will be addressed.

- Based on this policy, it has also been taken care of that child with benchmark disabilities have the option of regular or special school education as per RPWD Act 2016, (As per Section 2(r) of the Rights of Persons with Disabilities Act 2016. A person with a benchmark disability means a person having a specified disability of not less than forty percent (40%) as certified by the Certifying Authority). The resource centers with special teachers and trainers will be set up for different types of children with disabilities and will be made available to meet the rehabilitation and educational requirements of these children.
- Attention has also been given to women and transgender disabled students. An additional and necessary fund will be given to the states to build toilets for them, keep them clean, and provide bicycles and cash transfers.
- Evaluation and certification agency will continue to function for transparency. The new National Assessment Center PARAKH will prepare guidelines for assessment from the basic level to the higher education level to ensure equitable access and opportunities for all learning students.
- Barrier-free education will be main objective of the government, provided to all disabled children.

Conclusion-

New Education Policy 2020 developed according to the demands of the 21st century; it is very important step for all round development of Indian country and society. In which special attention has been given to children with disabilities along with normal children. Therefore, to fulfill this need, a comprehensive national education policy has been formulated by the nation. This will lead to the welfare and well being of the country along with the education system. It is step towards bringing them into the "mainstream" education.

In the end, it can be said that these reforms/changes will help in providing quality education and ensures well-being of the children with disabilities. All these features are under the pre-planned program of the government of India. It is a great move and hopes it goes well. The

researcher tried to highlight some important points on India's New Education Policy 2020 and Disabled students in this research paper.

Suggestions/Recommendations-

On the basis of many studies, the researcher has presented some suggestions for making children with disabilities prosperous and well-being, which can definitely prove useful in making their future bright.

1-The policy and provisions for the Welfare of children with disabilities should be properly implemented on the basis of NEP 2020 proposed by the government.

2-To facilitate the education of children with disabilities, schools should be provided with assistive devices, suitable Technology based equipment, and language-appropriate learning materials.

3-With regards to the modules developed to improve language quality, the government should ensure that it reaches every child with disabilities.

4-In relation to many policies and provisions proposed by the government, it is the duty of the central and state government as well as the local government and NGOs to make observations and help from time to time for the Welfare of these children.

5-The teacher must be 100% trained to teach handicapped children or only trained teachers should be hired in special or inclusive schools.

6- Any general School, inclusive school, or special school must admit the child on the basis of his/her uniqueness.

7- According to the policy, there is no separation in the stream of Science, Arts, and Commerce so the child who wants to stream admission in any stream must give admission on the basis of his merit or ability.

8-Schools should have the freedom to modify the structure of the school curriculum based on the interest and needs of the children.

9- It is the duty of the school and the teacher to try that the dropout of the child is minimized.

10- For the development of children, schools should ensure that they have sports material playgrounds and sports teachers.

11- Schools should ensure a healthy and fun-filled environment is available for the all-around development of the children.

12- It is the ultimate duty of every teacher to understand the attitude of the child and motivate him to do any work on the basis of that.

13- It is the duty of the teacher and the school that if the child is interested in any extracurricular activities more than the standard studies then they should be supported.

14- Society should support any handicapped/disabled child and their parents and not look at them with an inferiority complex.

15- Family society and school all together should always motivate the disabled child that he is the best as he is.

16- Based on the demand of the present circumstances, Science and Technology should be developed for handicapped children. So that they can contribute to building themselves and the nation.

17- Through policies and programs for the welfare of children, government and non-government organizations should help.

18- The NEP 2020 is a huge stride in the right direction — it focuses on the holistic development of students by ensuring access, relevance, equity, quality, and strong foundational learning. The new policy has numerous takeaways for education sector stakeholders.

19- The NEP 2020 seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030. This is NEP 2020 goal with India's learning outcomes. It has drawn much attention to the theme of inclusive and equitable education. 20- The government should strictly implement “Barrier Free Education” for the well being and development of children with disabilities.

I hope that the suggestions given by researchers regarding the new education policy and disabled children will definitely be beneficial for the students, teachers and family. Best wishes to all for the future. Thanks....

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Economic Development in Ahmednagar District, Maharashtra State, India

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Abstract: This research paper based on sources of secondary information, mainly using the 2011 census data as well as District Statistical Handbook at 2019. To study of economic inequality in Ahmednagar district, 15 factors have been used, while population factors and agricultural factors have also been considered. Also the Z score method is used to level these entire economic factors.

Key word: Economic Development, Regional Disparities, Agricultural, Ahmednagar District.

Introduction:

There are some factors of economic development which mainly include the total population engaged in primary second tertiary activity. In short, how many people are involved in economic development is important, and on top of that, today's production in that area depends. What are the factors for measuring regional disparity mainly include physical resource cultural factors and institute and technical factors. Regional disparities in the level of development are the product of regional disparities in the distribution of physical resources [3,4,5]. (Chandna R.C 2012)Regional disparities in cultural moorings as well as regional disparities in technology attainments and disparities in the institutional framework.

Study Area:

The present study Ahmednagar district has been selected as a study area. It extends between 18° 20' and 19° 59' north latitudes and 73° 40' to 75° 43' east longitudes (Map.1). The total length of Ahmednagar district is 200 kilometers and Width it is 210 kilometers. This Ahmednagar district naturally physical into three divisions. The first is the Sahyadri mountain range. There are various mountain ranges like Kalsubai, Adula, Baleshwar and Harishchandragad in this range, second Plateau third plains area. The major rivers in the district are Godavari and Bhima and tributaries Pravara, Mula, Sina, Dhora, Kukdi.

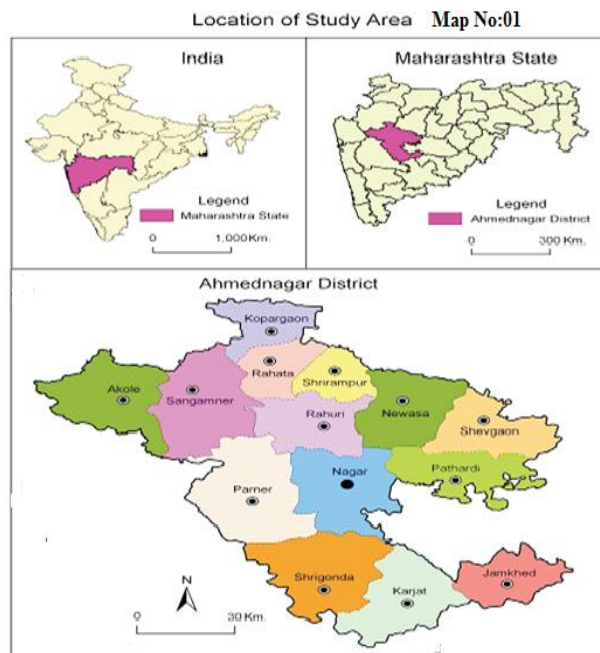
Aims and Objective:

The main objective of this research is to study the economic inequality in Ahmednagar district. There are 15 main factors considered to study economic inequality. It is important to study the effect of these factors on economic inequality. The objectives of this research are also to study economic inequality with the help of Z score.

Research Methodology:

The secondary data source of information has been used for this research. The information has been collected from Ahmednagar District Statistical Handbook for the year 2019 in front of the district. Fifteen

Regional disparities in the level of development are not the product of the regional disparities in the distribution of natural resources alone but are the function of combined effect of regional disparities in the distribution of natural resources, cultural background, technological attainments and intuitional framework associated with the political background. In order to overcome the socio-political and economic disparities of a region, it is necessary to formulate goal strategies based on the geographical background of the region. Accordingly, it is necessary to implement a plan in this area. Human Resources and Natural Resources are the two factors that contribute to reducing the social and economic inequality of any region [10, 15, 16].



factors have been used to study economic inequality and to score the level of economic development from these fifteen factors, the Z score is the statistical method used. The four levels of this economic level are as follows, Level of Development, Very Low Development,

Low Development, Moderate Development, and Development. As well as the Z score index value level is created in that format as shown in Table 1. The Economic Indicators are Percentage of Net sown area (X1), Number of shallow tube-wells (X2), Number of deep tube-wells (X3), Number of commercial banks (X4), Number of gramin banks (X5), Number of

Very Low Development:

The very low development level is based on the level of Z score, it is between levels -1.0 to -0.4, so it includes two talukas. In Ahmednagar district, in very low development, there are two talukas, mainly Jamkhed and Shrirampur talukas. This development depends on these fifteen factors which means that these fifteen factors have not been developed in these talukas or you can see their deficiency.

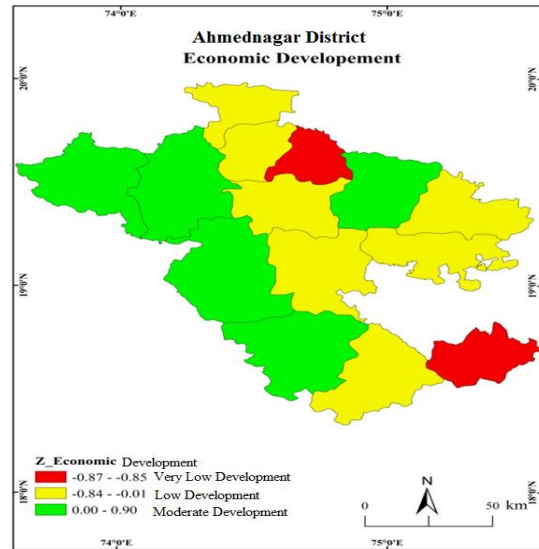
Low Development:

Considering the above fifteen factors, you come across five talukas in low development, mainly Akole Parner, Nevase Sangamner and Shrigonda talukas. This means that the above fifteen factors are underdeveloped, so you see a lot of regional disparities. In short, you don't see economic development in these talukas. Out of these talukas, Parner, Nevasa and Shrigonda talukas are in drought prone areas.

Moderate Development:

Fifteen factors are important factors in the inequality of economic development in Ahmednagar district. Through these factors and the Z score method, seven tehsils come into moderate development. Those tehsils are karjat, Nagar, Pathardi, Rahata, Rahuri, Shovgaon,

cooperative societies (X6), Number of Fertilizer Depot (X7), Percentage of Agricultural labour (X8), Percentage of Cultivators (X9), Road Length (X10) Percentage of HH, (X11) Percentage of Other workers, (X12) Percentage of Marginal workers, (X13), (X14) Irrigated Area, (X15) Literacy rate in Percentage



MAP NO 02: ECONOMIC DEVELOPMENT
 Kopargoan. According to the method of Z score, the value of development is 0 to 1.1. Although literacy rate is low in Shevgaon and Pathardi talukas, the rest of the area is moderately developed as per Z score and agriculture is not developed here as there are irrigation problems or limitations.

Table No 01: Level of Economic Development

Level Z Score	Level of Development	Name of the Tehsils	Number of the Tehsil
-1.0 to -0.4	Very Low Development	Jamkhed, Shrirampur	02
-0.3 to 0.0	Low Development	Akole, Parner, Newasa, Sangamner, Shrigonda,	05
0. to 1.1	Moderate Development	karjat,, Nagar, Pathardi, Rahata, ,Rahuri, ,Shovgaon, Kopargoan.	07
More Than 1.2	Development	-	00

Conclusion:

The help of this Z score, you can find four levels in economic development, very low development, low, moderate and development. It is clear from this that there are two talukas in Very Low, there are five talukas in Low, there are seven talukas in Moderate and there is no taluka in development.

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Research Role of Research Library

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Introduction: The ultimate goal of library is to provide information to the users within the reasonable time & cost team. Hence, we have to understand the information need of the users of the library. The primary factors that should govern collection building is the users need for information. If the libraries have to justify its existence & to serve their purpose, it is essential to study & access the needs for information of users systematically. In the library set up the user should be the central point around which all activities revolve. Users are the important factors without which an information system loses its whole purpose. To use is to put to some purpose thus the user of the system puts the system to its purpose. Particularly in library set – up it is extremely important to understand who the users are, what their needs are & how those needs can be satisfied by the library. To find out the answer of this question the user research is conducted.

Definition of use

‘To put something to its purpose’ Use:-To put something is its purpose User: - Someone who user

Client: -Person using the service of a professional

Patron: -Person giving influential or financial support to a cause Customer: - Buyer

Heidi Julien’s categorization of user as follows –2) “User: -This is the term that is generally

employed to refer to client of information service3) & libraries, to particulars as respondent in research studies.

Client: -This term suggests a particular type of professional relationship

Customer: -This term is associated with a business model of service provision. It evokes notions of financial transactions.

Patron: - This term elicits image of wealthy benefactors & guardians”. Definition of user

A) According to type of work –

- 1) Lay people – basically the ‘ man on the street’
- 2) Government servants
- 3) Educators
- 4) Students
- 5) Researchers
- 6) Policy markers etc.

B) According to systems to which they belongs

- 1) Individuals house wives, farmers, social workers, ex- service man, laborers, student etc.
- 2) Government agencies & department: - administrators, policy makers etc.
- 3) Industrial enterprises : - managers, employees ect
- 4) Research Institutions or scientific organization: - researches, Scientifics etc.

5) Cultural organization Keepers of cultural, musicians dances traditional Chit

Religious Organization – Pastors, priests, nuns, etc”

Other Categories of users

Professional – engineers, Medical practitioners, Managers, Scientists, lawyers etc.

Semi Professionals – Players, Cricketers, Midwives, Pharmacist etc.

Non professionals – laborers’, uneducated farmers, uneducated Housewives etc.

According to type of library :-

In a public Library – The users are mainly children, Student housewives, retired persons etc.

In a academic Library – the users are students, teachers & researches.

In special Libraries – The students are mainly researchers or specialists, who are specializing in a narrow field of subject.

Information use and user needs :-

To create information awareness & to promote the use of information explosion has resulted in an escalating growth rate of micro documents. As a result, the information needs of users has become varied & multidimensional. The information used needs both are directly concerned with users.

The users are the ultimate recipient of information in communication cycle. A user many belongs to user group with identifiable interest & environmental. The Individual as an user many be differ with regards to

- 1) Attitude, believe, values,
- 2) Goals
- 3) Capabilities
- 4) Communication attitude
- 5) Experience & habit
- 6) Cultural Background

The view points of users towards

information various according to the intended use. Although the uses in a particular working environment may have common view point's & often shares the same priorities in the value of information. The dimension of use of information. Another dimension of the information use is the purpose for which it is being used that is research planning etc. The Information priority of user discipline. Depending on the role of a user time & not dependent on the user discipline. Depending on the role of a user the information priorities shift accordingly. For example.

A person may be researcher today, a planner, next, an information expert another day.

The collection and services of library should be tailored to meet the needs of users. This is possible only when we really understand their needs. Every one at various times needs information of one kind or another. The complexity in life is increasing simultaneously the volume of information, variety of media, & the means of access has also increased. On the other side the people tend to make only a minimum effort to obtain information. Hence the information agencies have to increase ease of use. The aim is to see that the users get the information they need.

Information needs of users:-

To understand the concept of 'information need' it is important to know the definition of the term 'need' In general need is Need - What a person ought to have Circumstances under which something is lacking therefore requiring some course of action That which one cannot do without That which is necessary for an organism's health & well being. The meaning of the term 'need' is related to the meaning of the terms requirement, want, demand the dictionary meaning of various related terms are "Need – want of something, which one cannot well do without.

Want: - a fact of being without or having an insufficient quantity, absence or deficiency of necessities.

Requirement: - A need, a thing needed a necessity Condon. Demand: - To require, asking for what is due asking for something" Definition of Information needs According to The librarian's Thesaurus – Information need is defined as " that need which library services or material are interred to satisfy.

Kinds of information needs:-

There are four kinds of information Needs.

- 1) Current information need
- 2) Exhaustive information need
- 3) Every day information need

4) Catching – up information need

1) Current information Need :-

In order to keep the users update with their respective fields of development. It is important to make available the right information in the right format of the seekers at the earliest possible. This need is more essentials in the fields of R & D institutions.

2) Exhaustive Information Need :-

This is required when a particular information user needs particular information exhaustively. Detailed information on a particular field helps the user to draw a suitable conclusion for the purpose.

3) Everyday information Need :-

As day to day activity vary from person to person different Kinds of users need different kinds of information at different points of time. There are some users who need information on a particular activity every day. This goes on changing from one day to another. Therefore everyday information is expected to be fast, reliable & up to date.

4) Catching up Information Need

This type of need is also known, as burnish – up needs. Brief & precise information are the characteristics of this kind of need of the users. The information should be as simple and to the point so that the supers can easily catch it. This is an easy approach or access to information by the users in particular field activity. Which give the complete picture of that area in a precise from?

Kinds of usre studies:-

There are different categories of user studies put forth by different people.

Line M.B. in his hook 'Library survey, defines one type of user study 'The Survey'

'He defined the survey as "A systematic collection of data concerning a library, its activities, operations, staff, use & users at a given time"'.
Wilson - Davis put forth two categories of user studies –

1) Library oriented steadies: - this study involves the investigation of how individual libraries or information centers are used.

2) User oriented studies: - This study explains how a particular user group obtains the information needed for the conduct of its work.

Menzel H categories –

A) User studies :-

Such studies try to find out the relative use of different channels in response to questions like, 'Where would you search for information?' or 'How did you find the reference ?' Such studies have found that the common channels used by

people include personal recommendations, abstraction & indexing services & (finding information) by change, regular perusal of journals etc. Example of such studies is "Scientists approach to information," by Melvin J. voight (1961)

B) Behavior studies

These are carried to find the pattern of the overall reaction of the user community to the communication system without referent to any specific ifromamtona receiving event. They basically study the communication behavior of the user one survey conducted by the "Operations research group of the case Institute of Technology" In 1958 found that scientists (chemists) generally spend almost half the time of their working hours in some form of communication such as consulting literature looking up for references, actually reading, talking or listening to a colleague & so on.

Information flow studies :-

These studies are conducted to find out the pattern of flow of information in the communication system. Example – an article is usually published in a journal 30 – 36 months after it has been written between the time it was written and the time it is published it flows through different stages of report preparation.

First the oral report at a conference. Then the technical report & finally. It is written for the journal.

Other Methods Feed – back service –

A library con acquire feedback information on the variety of services it provides. In the organization at SDI service, every document supplied to user is appended with feedback date card which contains questions as to the relevancy of information, timelines of supply & the descriptors use etc. the analysis of such data cards shows the efficiency of service & also provide considerable clue to build up pertinent user profiles.

Conclusion

Due to the information explosion it is impossible for people to grasp all the information that is being generated form various sources & presented in variety of forms. It is the duty of library and information centers to provide the needs of users & how these needs are satisfied. For this purpose libraries have conduct the studies of users to know their needs, requirement.

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Study of Schiff's bases and its metal complexes for different Applications

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Abstract: The focus on the current study is to investigate that the broad applications of the metal complexes with Schiff's bases. Schiff's bases are an important part of medical science. In many drugs, develops activities like antibacterial, antifungal and anticancer. The potency of these pharmaceutically useful drugs is a treatment for microbial infections and other activities that encourages the development of some more potent and momentous complex compounds. Schiff's bases and their metal complexes are remarkably impressive compounds. On larger-scale biochemical and medicinal studies have confirmed that these complexes are active against various microorganisms. Our study summarized to know about the chemistry of different derivatives of substituted Schiff's bases. Schiff's bases form a different momentous of compounds in pharmaceutical and medicinal chemistry with several biological applications.

Key words: Schiff's bases, Metal complexes, Drugs, Anti-microbial activities.

Introduction

In recent times, A very large number of heterocyclic Schiff's base ligands and their transition metal complexes have been investigated very dynamically, not only for their biological applications such as spectral analysis and thermal analysis, while also for their interesting coordination chemistry. The Schiff's base ligands obtained from the condensation of diamines and there complexes[1,2] as well as salicylaldehydes is a very important part of inorganic chemistry and as such has been extensively studied and coordination compounds are increasingly important as analytical and biochemical and antimicrobial reagents[3,4] while they are used as anti-cancer, hypothermic, antibacterial, antitubercular and antifungal and hypertensive reagents is done as Diaminomaleonitrile (DAMN) is a tetramer of HCN that also has the ability to act as a diamine[5,6]. Alkenyl nitriles are one of the major reagents in organic chemistry that have also been used as a precursor for the producing of nucleotides and also for synthesising of a large variety of heterocyclic compounds[7,8]. The major dominant coordination chemistry of azo Schiff's base derived from DAMN (diaminomaleonitrile) is not well explored. We know of DAMN-based ligands only as a few well characterised complexes. Maclachlan et al[9] reported for the first time Schiff's base crystal structures consisting of DAMN and salicylaldehyde with some metal complexes. A novel bisazomethine Schiff's base formed by condensation of 3-hydroxyquinoxaline-2-carboxaldehyde and 2,3-diaminomaleonitrile has been carried by Arun et al.[10]. Recent studies have shown that the two major compounds are tautomeric forms and Schiff's base shows positive absorption and fluorescent solvatochromism and demonstration duplex

fluorescence with large stoke shifts. Salicylaldehyde 5-methylsalicylaldehyde, Ni(II) and Cu(II) from diamino maleonitrile (DAMN) investigated by Rajasekhar et al.[11] and metal complexes, and azo compounds are very important molecules and have attracted attention in both academic and applied research[12-17]. There is a general formula (R-CH=CH-R) as well as the azomethane group, as here R is an alkyl group that can be substituted in different forms, and these compounds are known as imines, azomethine and anils[18]. Also known as Schiff's base for its widespread use primarily a is also known and is also a useful intermediate in organic synthesis[19]. Which among these compounds have anticancer[20], antitumor[21], antitubercular[22], antibacterial[23], antifungal and antifertility[24], herbicidal[25] and antioxidant[26], antiproliferative[27] with biological activities were tested and also show Schiff's base fluorescences[28], photoluminescence[29] and potentiometric titrations[30] and aggregation[31] and anthelmintic activities [32] etc. and Schiff's base ligands are very easily synthesised and almost all form complexes with metal ions[33]. Although, the inclusion of transition metal ions in these compounds is widely used in the fields of dye industry, food industry, fungicides, analytical chemistry and catalysis, agrochemicals as well as biological activities and the reduction of cytotoxicity of both metal ions and Schiff's base application is[34,35] the chemistry of coordination compounds with heterocyclic Schiff's base ligands containing sulfure, nitrogen and oxygen as donor atoms is [36,37,38] and Schiff's base ligands containing these hetro atoms coordinates with metal atoms in a variety of ways[39] and these chelating properties of Schiff's base ligand are mainly exhibited by

many sectors such as agriculture, pharmaceutical and industrial sectors[40].

Schiff's base plays a key role in designing metal complexes related to complex synthetic and natural oxygen carriers[41] and as stereo specific catalysts for oxidation reduction and hydrolysis biological activities and inorganic chemistry and also effective. The presence of $-N=C-$ in organic compounds forms more stable complexes than other functional groups as well as compounds containing only $-N=C-$ coordinating fractions and so on in natural and synthetic organic chemistry. Pyridine derivatives are of great interest because of their role in synthetic and natural organic chemistry. Many products, including one containing a pyridine sub unit, exhibit biological activity as antimicrobial[42] and antituberculosis activities[43], the tetra dentate Schiff's base complexes has also been shown to form stable complexes. In which coordination occurs through dinitrogen-dioxygen donor atoms[44, 45] and density functional and ligational theory and biological studies on some new Schiff's base metal complexes like as N_2O_2 tetra dentate Schiff's base metal complexes[46,47] and also in recent years Zr(II), Ni(II), La(III) and Th(IV) have been introduced in new form Schiff's base metal complexes which are derived from dithranol and heterocyclic ligand 8-hydroxyquinoline[48].

Our paper exifloral and review many dimensions in a new way.

Complexes : The term is commonly used in chemistry to describe the molecules formed by the combination of a complex substance, especially ligands and metal ions. Mainly a chemical compound refers to the reversible joining of atoms, molecules or ions through weak chemical bonds. Although this applies to coordination chemistry, it has been modified to mean that some metal complexes in particular form virtually irreversibly and are held together by many strong bonds. As more complexes were discovered in the nineteenth century, many theories were proposed for their properties and formation. However, the most successful and widely accepted of these theories was the 1869 series theory of Swedish chemist Christian Wilhelm Blomstrand, developed and modified by the Danish chemist Sophus Mads Jorgensen. As such the extensive preparation of a number of complexes of Jorgensen's provided an experimental basis not only for the Blomstrand-Jorgensen series theory but also for the 1893 coordination theory of Alsatian-born Swiss chemist Alfred Werner's [49].

History of complexes: Alfred Werner developed the basis of modern coordinate science. He

introduced a new theory of variable connectivity. Alfred Werner also worked on complexes with other coordinate numbers. He had previously reported the synthetic chiral compound hexol. Hexol the name of various salts of a coordination complex, Hexol is a cobalt compound first created by Alfred Werner and representing the first non-carbon-containing chiral compound. He also experimented on several forms of cobalt ammonia chloride. Alfred Werner worked mostly on inorganic chemistry, due to which Alfred Werner is called the father of transition metal complexes[50]. Coordination complexes were known as it were not understood in some form or the other since the beginning of chemistry. Examples include Copper and Prasinia Blue. The main breakthrough came when Alfred Werner proposed, that cobalt(III) possesses six ligands in the octahedral geometry. Although this theory allows one to understand the difference between cobalt amine chloride coordinates and ionic chlorides, and to understand a number of previously unreported isomers, he was the first to deduce the coordination complex into optical isomers, while overthrowing the theory that Salicylic was mainly associated with carbon compounds.

Application of Complexes

1. The therapeutic use of metal complexes in cancer and leukemia are reported from the sixteenth century. In 1960 an inorganic complex cisplatin was discovered, today more than 50 years, it is still one of the world's best selling anticancer drug[52].

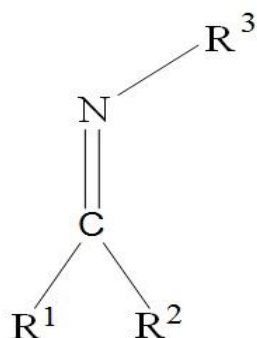
2. Schiff's base which improves developing resistance. Organocobalt complexes with tridentate Schiff base act as initiator of emulsion polymerization and copolymerization of dieny and vinyl monomers.[53,54,55].

3. The catalytic activity of Schiff's base transition metal complexes is high and depends upon coordination sites, metal ions and the nature of ligands. A series of new Co (II) complexes of Schiff's bases bis-5-phenylazosalicylaldehyde-o-phenylenediimine and bis-5-phenylazosalicylaldehyde ethylenediamine were synthesised and characterised by elemental analysis and different spectral techniques. It is catalytic properties of complex of Co (II) were investigated for the oxidation of styrene into methyl phenyl ketone in the presence of oxygen and base pyridine. Bis - 5-phenylazosalicylaldehyde-o-phenylenediimine Co(II) complex was more selective in propan-1-ol, on increasing the catalyst concentration in ethanol and propan-1-ol the reaction becomes more selective and bis-5-phenylazosalicylaldehyde ethylenediamine Co(II)

complex, selectivity in propan-2-ol decreases when concentration of catalyst increases[56].

4. Metal complexes of Cu(II), Ni(II) and Zn(II) are synthesized with Schiff bases derived from 2-aminobenzoic acid and substituted aldehydes viz, o-vanillin, 2-carboxybenzaldehyde, salicylic acid, 1-(3-formyl-4-hydroxyphenylazo)-4-methylbenzene, this tested against fungi candida albicans. Zn(II) complexes exhibit more inhibition than Cu(II), and Ni(II) complexes[57].

5. Salen and salophen type of ligands with Zn(II) complexes synthesised and characterised for elemental analysis and spectral data. Plant growth regulatory activity of Schiff's base **Schiff's bases (As ligand)**



The general structure of the Schiff's base is $R_1R_2C=NR'$, which is a compound known as a subclass of imine, depending on the structure of either the secondary aldehyde or the secondary ketamine. The term is also commonly used as a synonym for azomethine. (which represents the secondary aldamine). Because these compounds are named after Italian chemist Hugo Schiff's in 1864. Although several methods exist for naming these compounds, Schiff's bases are based on aldehyde or ketone compounds. As the carbonyl group is replaced by an amine or azomethine. They are used mostly or exclusively for industrial purposes and exhibit a wide range of biological activities and are the most widely used organic compounds. They are used as intermediates in dyes, catalysts, synthesis and dye polymer stabilizers. Schiff's base is a major organic compound. It is widely used and is synthesized by the condensation process of various amino compounds with aldehydes or ketones, which are called imines because Schiff's base ligand is privileged. Are express to be ligands, and are synthesized only by condensation.

Modern Applications of complex compound

Coordination chemistry is the first to be applied and applications play many roles in our lives, especially in the natural sciences and industrial fields, as in biochemistry, electrical,

ligands and their Zn(II) complexes were tested on seeds of papaya. N,N¹-bis(3-methoxy salicyalidinediamine)-o-phenylene monohydrate complex of zinc has the highest effect on germination and seeding growth of papaya[58]. Coordination compounds have been used since ancient times in the form of dyes and drugs. For example, madder dye, which is a net, was used by the ancient Greeks and other peoples. Because it is a compound of hydroxyanthraquinone. Another modern example is the pigment copper phthalocyanine which is blue.

semiconductor and analytical chemistry. Applications include many forms in analytical science, such as in many medicines, as an indicator, and in metal case for wet metallurgy, catalysis and purification, etc. The human life is complex and very important in terms of activities and is exists in many forms of metal complexes in the living body. The trace elements which have proved to be of vital benefit to the human body. Such as carbon, nitrogen, oxygen, hydrogen, chlorine, sulfur, calcium, potassium, sodium, phosphorus and magnesium etc. Chief among these exists mainly in the form of complexes with a particular physiological function. In the medical field, drugs used in the clinic will exhibit a number of biological effects, especially after the addition of metal ions to the human body. Mainly some drugs are toxic in treatment due to acute burns and make non-absorbable properties and there are some drugs which are not usually applied directly in clinic and such drugs should be changed to synergy and to reduce toxicity and irritation compound for. As such, the ligand can also be used as an antidote. When metals will go into the human body in excess and there will be allergies in the body. Some properties of the ligand may be used to expel metal ions from the human body by replacing metal ions with ligands. The first is the problem of the antidote dimer, which can be used as an antidote for arsenic, mercury and other metals, like poison. These metal ions can dissolve in water after combining, thus causing toxicity and are eliminated and passed out. However, rare earth complex luminescent materials are widely used and can be used as a color blindness study as well as fluorescence analysis of biological macromolecules[59].

1. **Cytotoxic:** In the medical field, organic chemistry has developed as fundamental goals. Drugs derived from these metals are being used very effectively to treat diseases like cancer and these metal ions play an important role in

inhibiting nucleic acids with varying strengths such as stereo specific catalysts[60].

2. **Cosmetics:** Chlorophyll is a porphyrin metal complex dye complexed to a derivative of magnesium. It is the main constituent of green plants and plays a major role in the process of photosynthesis and is well soluble in chlorophyll oils and fats and is mainly used in soaps and oils for dyeing and bleaching. It is also used for waxing, ointment, mineral oil and mainly for coloring oils. Water-soluble chlorophyll finds major applications for coloring confectionery and gelatin producers and beverage and other food industries, and is also added to soaps and creams in the beauty industry.[61].

3. **Anticancer:** The difference between the cis isomer and trans of $[PtCl_2(NH_3)_2]$ is a geometry whereas cis isomer is biological activity and it uses as anticancer drug because the Cl ligand in cis isomer is active and it replaces by water molecule then the new product platinum complex with water reacts with DNA of the cancer cell by replacing water molecule which leads to inhibition growth the cells of cancer[62].

4. **Antiviral:** Although there are many therapeutic options for viral infections, currently available antiviral agents are not yet fully effective, probably due to the high rate of virus mutation. They may also present any of a number of side effects. Salicylaldehyde Schiff's bases of 1-amino-3-hydroxy-guanidine tosylate are a good platform for the design of new antiviral agents[63].

5. **Anti-fungal:** Metal complexes Cu(II), Co(II), Ni(II) and Mn(II) are synthesized with Schiff's bases derived from o-phthalaldehyde and amino acids viz., glycine L-alanine, L-phenylalanine, then tested against three fungi. It is clear that Cu(II) and Ni(II) complexes exhibit inhibition towards all the studied microorganisms. However, Co(II) and Mn(II) complexes exhibit less inhibition and VO(II) complexes have no activity towards the microorganisms[64].

Future of complexes chemistry

What is the possible future of coordination chemistry, having moved the past to the present? It very clearly indicates the current method and essential facts, mainly in biology. This nature constantly presents itself to chemists with great surprise every day and coordination chemistry must continually respond to the enormous challenges of bio-mimicry and developments related to catalysis and materials science. Usually this is a fact that only a few bacteria are identified in soil, whereas metals are not displayed in the normal way in bacteria. This could be of great importance in the agricultural

and industrial sector in the future. The roles of the coordination environment will continue to be greatly clarified and the methods modeled. Which (green chemistry) can make a significant contribution to agriculture. Coordinating Chemistry will continue to strengthen its role in the field of materials science as a central specialization and discipline. Nano science's and technology can change the era of coordination chemistry. And processes related to molecular level events could be of great importance in the near future. The use of metals in catalysis will increase greatly, usually when the control of infinitesimal processes is mastered[65].

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Conclusion

In this review complex metals have been studied, which are being used continuously for the Many years in the society with many deadly diseases like cancer, TB, etc, although a lot of work has been done on it and more There is a need to work on this with the help of a new approach, so that these shortcomings can be overcome and by making many powerful medicines, the path can be successfully paved in the field of treatment and maximum benefit can be reached to the society.

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