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- Chief & Executive Editor

A Study on Customer Satisfaction towards E-Banking with Special Reference to General Banking Customer- Navi Mumbai

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Abstract:

The dynamics of service quality and satisfaction of customer on banks situated in various countries indicates that earlier studies offered no consensus over the subject, to confirm the issues and trends of these factors which regulate service quality and customer satisfaction. The purpose of this study was to examine the relationship between the dimensions of E-Banking service quality and customer satisfaction in Vashi, Navi Mumbai .Data were gathered using a survey instrument, which was distributed among bank clients. The data were statistically analyzed using structural equation modelling with SPSS. The findings show that reliability, efficiency ,and ease of use; responsiveness and communication; and security and privacy all have a significant impact on customer satisfaction, with reliability being the dimension with the strongest impact. E-Banking has become one of the essential banking services that can, if properly implemented, increase customer satisfaction, and give banks a competitive advantage. Knowing the relative importance of service quality dimensions can help the banking industry focus on what satisfies customers the most.

The paper provides empirical evidence to show that the internet banking service quality dimensions area an important factor to satisfy the customers since each of them is positively related to customer satisfaction. The research will help the managers of the banks and the policy makers to focus on these factors that tend to have a dominating impact on satisfying the customers in Vashi, Navi Mumbai area.. This will result in a better internet banking service quality provided by the banks and that in turn will help retain the existing customers and also gaining the new ones.

Keywords: Internet Banking service quality, Customer satisfaction, Reliability.

Introduction:

Banking sectors in most developed countries have pioneered the area of e-services and have been actively involved in its continuous improvement. E-Banking service is said to rely on the exchange of information between customers and providers using technological methods devoid of face-to face interaction .In India E-Banking services for retaining and attracting clients, and are therefore making large investments in implementing the latest E-Banking strategies to maintain and augment their competitive advantage. Most of the previous studies examined Internet banking to the exclusion of all other types of E-Banking services including applications for smart phones and E-Banking robots .Many studies have investigated how E-Banking service quality is measured, but few have studied the relationship between the quality of E-Banking services and customer satisfaction. The implications of this study emphasize the significant influence of E-Banking service quality on customer satisfaction ,and the important impact of E-Banking service reliability on service quality perceptions of banking clients in Vashi, Navi Mumbai.

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Literature Review

Historically, the launching of the first Automated Teller Machine (ATM) in Finland marked the start of a new banking channel, which made Finland the leading country in E-Banking, before it became widely used in any other developed and developing countries (H. Sharma, 2011).

.Neha Dixit & Dr. Saroj K Dutta (2010), Journal of Internet Banking and Commerce, Acceptance of E-banking among Adult Customers: An Empirical Investigation in India, Vol. 15 no. 2. Points out that in a country like India there is a need for providing better and customised services to the customers which can be make possible through e-banking. The people have positive perception about online banking, should be treated with the great value.

Lustsik (2004) defines E-Banking services as a variety of e-channels for doing banking transactions through Internet, telephone, TV, mobile, and computer. Banking customers' desires and expectations with regard to service are expanding, as technology advances and improves. These days, the customer wants to operate and do his or her banking transactions at any location without going to the bank, at any time without being limited to the bank's working hours, and to do all his or her payments (purchasing, bills, stocks) in a fast and cost-effective way. Consequently, financial services quality ought to be characterized by independence, elasticity, freedom, and flexibility, to accommodate these desires.

Customer Satisfaction   :

Customer satisfaction is one of the most important concepts in the field of marketing studies today. Broadly speaking, it links processes culminating in purchasing with post purchase phenomena such as attitude change, repeat purchase ,and brand loyalty. A number of varying definitions have been proposed to clarify customer satisfaction. Satisfaction as an emotional post consumption evaluative judgment concerning a product or service .Satisfaction can also be described as the feedback of a post purchase assessment of certain service/product's quality, and compared with the expectation of the prior-purchasing stage. Customer satisfaction is a customer's feeling of pleasure or displeasure after he or she has distinguished a performance of a product/service with respect to his or her expectancy. Consistent with these definitions, and in so far as this study is concerned, customer satisfaction is the attitude of the customer formulated in response to using any form of E-Banking services. Accordingly, E-Banking attributes may increase, decrease, or keep the same customer satisfaction.

Measurements of E-Banking Service affecting Customer Satisfaction :

With a number of studies converging to show a relationship between E-Banking service and customer satisfaction, question becomes the following: What aspects or dimensions of E-Banking service affect customer satisfaction and in what ways? Our review of the literature reveals that these aspects could be grouped under efficiency, reliability, privacy and security, and responsiveness and communication. With respect to privacy and security, a number of elements were identified and studied by researchers including maintaining the confidentiality of operations, refraining from sharing personal information, and insuring a good level of security for the customer's information. Responsiveness is the readiness to support the bank's customers and deliver them a rapid service. This kind of service can be shaped into four forms. First, the E-Banking system can control and operate the service properly. Second, the E-Banking channels can guide customers toward proceeding properly in case of any failing operations. Third, it can

also cover a rapid solution for any possible error in E-Banking transactions. Finally, it can support the customer's questions with on-the spot response.

Research Methodology:

Efficiency, reliability, security and privacy, and responsiveness and communication are four important dimensions of customer satisfaction with E-Banking service quality. Thus, a survey was developed from prevail dated scales to assess the impact of the aforementioned dimensions on customer satisfaction.

The above mentioned scale items constituted the first part of the survey and sought banking customers' perceptions about the variables under study. Client perceptions were measured using a Likert-type scale with 1 through 5, 1 being strongly disagree and 5 being *strongly agree.* The second part of the survey was designed to collect some pertinent personal data from the respondents, such as age, gender, qualifications, income, and period and frequency of E-Banking usage. These items were used as control variables assessing any potential impact on the dependent variable. The survey instrument was translated to Arabic and then retranslated into English to ensure exact translation and that the intended meanings of the items were conveyed. Corrections were made as necessary.

The convenience sampling technique was used to gather the data, and the surveys were completed by the banking clients who visited the branches and agreed to complete the survey. The survey instrument was also posted online through Google Survey Form. The final number of usable surveys collected and analyzed was a total of 133 samples. The dependent variable was customer satisfaction with the E-Banking service, and it was measured by four items with a high reliability. The independent variables suggested by the literature were efficiency and ease measured by four items, responsiveness and communication measured by three items.

The main hypothesis in this study proposed a positive and significant relationship between Service Quality of E-Banking and customer satisfaction with E-Banking. The convenience sampling technique was used to gather the data, and the surveys were completed by the banking clients who visited the branches and agreed to complete the survey. The survey instrument was also posted online through Google Survey Form. The final number of usable surveys collected and analyzed was a total of 218 samples. The dependent variable was customer satisfaction with the E-Banking service, and it was measured by four items with a high reliability , while the independent variables suggested by the literature were efficiency and ease measured by four items , reliability measured by three items , safety and privacy measured by four items, and responsiveness and communication measured by three items.

Hypothesis 1 (H1**):** The efficiency of E-Banking services positively affects customer satisfaction.

Hypothesis 2 (H2**):** The reliability of E-Banking services positively affects customer satisfaction.

Hypothesis 3 (H3**):** The security and privacy of E-Banking services positively affects customer satisfaction.

Hypothesis 4 (H4**):** The responsiveness and communication in E-Banking service positively affects customer

Findings:

Most of the respondents had college education with 67.1% holding a bachelor's degree and 31% holding a graduate degree or professional certification. Most of the respondents (66%) earned an annual income that ranged between Rs1000,000 and 12,000,000, while 23% earned between 15,000,000 and 17,000,000 indicating that most of the respondents belonged to the middle-to-low income category. Regarding their use of E-Banking services, the majority of respondents (74%) had been using E-Banking services for more than 1 year, and 64.7% used E-Banking services two or more times a month. However, none of the control variables seemed to have any significant relationship with the dependent variable in the model. The SEM results show that reliability of the E-Banking service has the greatest contribution (standardized beta =0.87) to customers' perceptions of service quality, followed by efficiency and ease of use (standardized beta = 0.81), responsiveness and communication (standardized beta = 0.79), and safety and privacy (standardized beta = 0.68), the last being the factor with the smallest contribution to service quality of E-Banking.
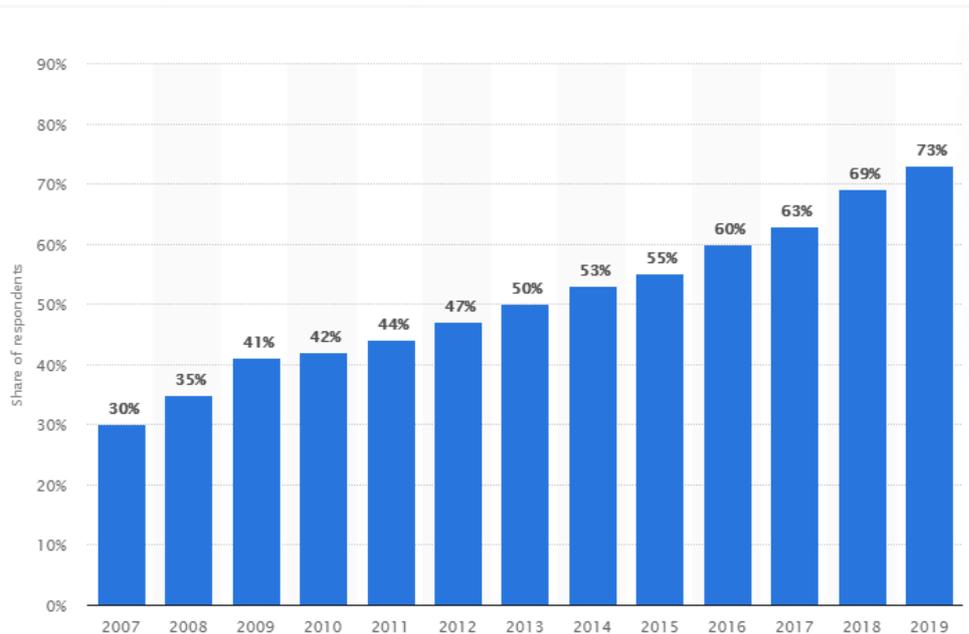
Share Of Respondent Over The Years

Interpretation and Discussion:

The findings of this study showed not only that service quality is a factor that has a significant relationship with customer satisfaction with E-Banking services but also that reliability is the strongest dimension of service quality affecting customer satisfaction .The findings also showed that the four independent variables (efficiency and ease of use, reliability, security and privacy, and responsiveness and communication) as related to the quality of E-Banking services have a significant effect on customer satisfaction. Results shows that there is a direct relationship between the dimensions of Internet banking service quality and customer satisfaction with banks. An important dimension of service quality is efficiency and ease of use of that service. According to survey , using a bank's electronic services offers clients a chance to be cost effective in performing transactions, not only by saving money but also by saving time. Result is consistent with studies done in other markets which suggested that higher levels of efficiency increase customer satisfaction with .E-Banking. Reliability, an important element of

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service quality, was shown in this study to have the greatest influence on customer satisfaction with E-Banking. This confirms results found in previous research on this topic, as people need to be able to depend on a steady delivery of the E-Banking service. On the other side, the dimension of security and privacy had a positive and significant effect on customer satisfaction, thus confirming previous research its impact seems to be lower than the other variables of service quality.

Finally, the variable responsiveness and communication was shown to have a significant and positive influence on customer satisfaction, which is consistent with previous studies. Timely responsiveness and effective communication, which can be essential for customers facing issues with E-Banking services, seem to affect customer satisfaction significantly.

LEVEL OF SATISFACTION	NO. OF RESPONDENTS
Highly Satisfied	38
Satisfied	58
Neutral	32
Dissatisfied	5
TOTAL	133
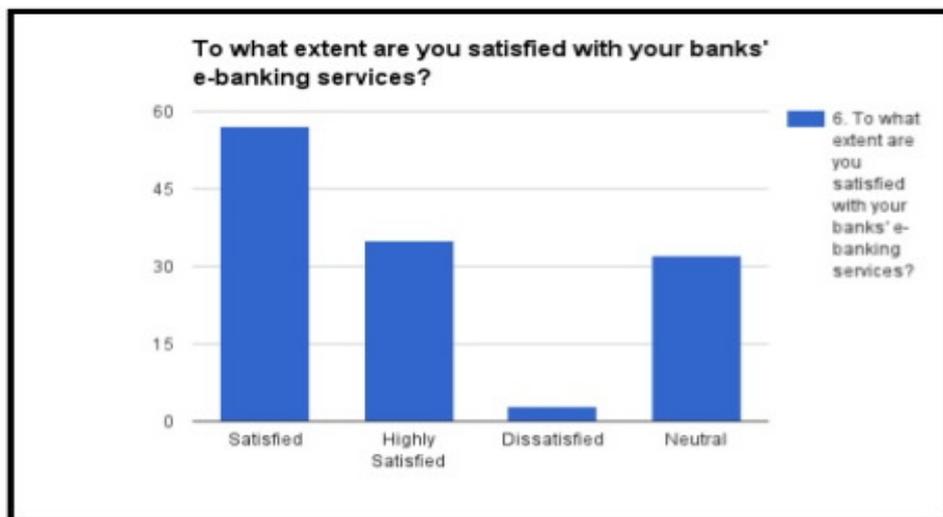
Conclusion:

This study aimed to examine the impact of E-Banking service quality on customer satisfaction in the banking sector. Similar studies had been done for other countries and markets, as was shown in the literature review. The study followed the quantitative approach where a survey was distributed among bank clients in Vashi, Navi Mumbai. Findings suggest that the four hypotheses in this study were supported by the data, and the main contribution of this study was that reliability, as a service quality variable, was the main predictor of customer satisfaction in this particular market.

To further extend this research, it is recommended that ways to increase the reliability of "E-Banking" service be Investigated.

Limitations of The Study and Scope for Future Research:

Despite sincere efforts, the study has certain inherent limitations. The study is descriptive in nature and data was collected from many sources. This paper explained a theoretical backdrop to the concept of quality service in banks and customers' satisfaction.

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The presence and extent of service quality and customer satisfaction examination in different countries has been pursued by the researcher. Previous studies reveal that the service quality and satisfaction of customers are studied jointly and not separately. Service quality and satisfaction of customers towards foreign and nationalised banks can be studied separately in future studies. Again, satisfaction of customers' depends upon quality of service and whether satisfaction of customers' leads to loyalty should be tested in future studies. There is woeful shortage of potential explanation of service quality in foreign banks. Different scholars have tried to explain service quality and customer satisfaction with the help of financial inclusion, customer retention, customer awareness on modern banking services, mobile cash transfer and macro-financial variables. However, there is no unanimity on the possible source of service quality and customer satisfaction. Many researchers examined the time-varying, volatility behaviour of rural and urban banking customers and to the best of my knowledge; it has never been attempted in the Indian banking sector. Hereby, the researchers conclude that there is a dearth of literature in emerging service quality and customer satisfaction in banking sector that can be used as a trigger to examine diversified attributes of service quality and customer satisfaction, especially in the banking sector context.

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Creating Environmental Awareness through the Youth: A Case Study of Don Bosco College, Kohima

Fr. (Dr) Suresh[1]
Dr. Lanukumla Ao[2]

Abstract:

In the present scenario, due to anthropogenic activities, environmental degradation is taking place at an alarming rate resulting in various environment issues. The younger generations including students are the effective media to bring enormous changes in the society. Hence, creating awareness about the environment to the young minds is the vital step in generating environment responsibility in the society at large.

Education has considerable power to help individual reconsider environmentally harmful lifestyles and behaviors. Therefore, environmental education can contribute significantly to the solution of environmental problems. Don Bosco College, Kohima, Nagaland through its various clubs is rendering services in creating environmental awareness and in that way has provided facilities to foster the development of the youth as responsible citizens in relation to the environment.

The paper therefore, will highlight the various steps taken by the college in fostering environmental awareness and responsibility among the students. This paper will examine the issue of changes in behavioral patterns of the students and in generating new research avenues in the field of environmental education.

Keywords: Environmental Awareness, Environmental Education, Environmental Responsibility, Behavioral Pattern.

Introduction:

Today's youth are the agents of change. They represent hope of the present and future as they are tomorrow's leaders. Young people have a greater stake in the future because the future belongs to them, they are more environmentally conscious and have more access to information than the seniors. They are thus well placed to advocate environmental issues and spread its awareness as they have been living in an era where environment protection is in prime focus.

Progress towards sustainable environment is dependent upon a fundamental change in youths' attitude to nature and the environment (Sukhwinder: 2013). The role of education institutions in relation to environmental sustainability is more prevalent as it is essential to impart and reinforce the environment respecting moral values in the young minds (Brynjegard: 2001). Over the past 15 years or so, educational institutions across the world have been encouraged to mobilize students and to take a more active participation in local, national and global processes towards environmental sustainability issues (UNESCO: 2012). Learning more about the environment generally means learning more about what we have done to the environment rather than what we have done to care for it. To become involved in respecting nature and protecting the environment over the long term, people need to have a sense of hope and gratification from environmental instructions (Stewart: 2001). However, instead of focusing on environmental protection, educational institutions across the world were compelled to work

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towards the revision of teaching contents, so as to allow education systems to better respond to socio-economic challenges at the local, regional and global level (Walter: 2015).

Student organizations present a plethora of opportunities for collaborating in spreading environment awareness as they can help build networks as well as provide invaluable experiences and skill sets. They have unique personalized knowledge that makes advocacy for reforms in environment awareness a success. Student leaders can also help in shaping organizational goals (Ramirez, 2017: 52). They are indispensable in promoting environmental advocacy and protection as they come with all the energy and enthusiasm attached.

Harnessing students organizations means having a successful tool in accelerating the path forward towards a more sustainable society. Its creative thinkers and visionaries can play an active role in spearheading environmental education through community programs, seminars, demonstrations, cultural meetings and even religious gatherings to bring about behavioral change at the local level among the masses. Such behavioral change is vital for an equitable, eco friendly and ecologically aware society. Student organizations thus play a prime role in disseminating environmental education and the need to conserve and preserve the diversity of Mother Nature with a hand on and practical assistance approach.

Study Area:

The study is carried in Don Bosco College, Kohima. Geographically is located between 25°68 44 N latitude and 94° 11 59 E longitudes with an elevation of 1500 meters above sea level. The college is implementing the innovative approach through which the students are attached with the real environment and they can practice and relate what they learnt in the class room with the natural world.

The college through the NSS Club, Rovers and Rangers, Peace Channel and Eco Club are actively participating in environment related activities. The NSS Club in particular has adopted two villages – Rüsoma and Chedema to help the villagers through environmental management and protection.

Objective of the Study :

Given the survey of literature and scope, the following objective established for the purpose of the study is:

To review the impact of Environmental Awareness Activities Rendered by Youths in Protecting Environment in a Village of Kohima District

Hypotheses

Given the objectives, survey of literature and scope, the following hypotheses are established for the purpose of the study:

H_1: There is no significant impact of **Environmental Awareness Activities** in creating **Environmental Knowledge** among the Villagers.

H_2: There is no significant impact of **Environmental Awareness Activities** in **Plantation of Trees** in the Village.

Research Methodology

Environmental Awareness Activities was carried out by NSS volunteers of Don Bosco College, Kohima in Rüsoma village for a week. They have conducted various environmental awareness activities such as tree plantation drive, cleaning village ponds, streets, conducting seminars, workshop, distribution of dustbin etc. The total population of the village is estimated

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to be 3000, of which around 1000 villagers have taken part in the environmental awareness activities. In order to study the impact of the conduct of environmental awareness activities a survey was conducted among 100 participations of Rüsoma village as well as 100 NSS volunteers of Don Bosco College, Kohima. The data were collected with two sets questionnaire with the help of 5 Points Likert Scale, for Environmental Awareness Activities, Environmental Knowledge and Plantation of Trees in the Villages. 100 samples of villagers and 100 samples of NSS volunteers were considered (detailed in Table No: 1).

Table No: 1 Sample Selected				
SL. No	Environmental Awareness Activities	Males	Females	Total
Villagers				
1	**Participants**	45	55	100
Students				
2	**Participants**	72	28	100
	Total	117	83	200

Source: Compiled from Survey Data

Latent variable considered for the study

[a] Degree of 'Environmental Awareness Activities'- this variable has been considered to measure the degree of or intensity of environmental awareness activities adopted by the 'NSS volunteers of Don Bosco College, Kohima in Rüsoma village' for creating environmental awareness among the villagers. The data were collected in the perspective of NSS volunteers. (Items considered are in **ANNEXURE-1**).

[b] **Degree of Environmental Knowledge** - this has been used in the sense of measuring the degree of or intensity of Environmental Knowledge created by the NSS volunteers among the villagers through of environmental awareness activities as perceived by villagers. (Items considered are in **ANNEXURE-2**).

[c] **Degree of Plantation of Trees** - this has been used in the sense of measuring the degree of or intensity of plantation drive carried out by the NSS volunteers in the village through of environmental awareness activities as perceived by villagers. (Items considered are in **ANNEXURE-3**).

In order to study the reliability of the variables considered for the study, the following Cronbach's Alpha test was conducted.

Table No-1 Reliability Statistics [Cronbach's Alpha]			
	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Environmental Awareness Activities carried out by NSS volunteers	.895	.894	20
Environmental Knowledge among the Villagers	.772	.753	11
Villagers knowledge in Plantation of Trees	.801	.818	10

Source: Compiled from Survey Data

From the above **Table-1**, it is observed that the scale considered for the study is reliable since the calculated **Cronbach Alpha values are more than 0.70**. It is concluded that data is

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true for the sample as well as in the population. Moreover, to study the normality of the collected data **One-Sample Kolmogorov-Smirnov Test** was conducted and the results are presented in the following table.

Table-2 : One-Sample Kolmogorov-Smirnov Test		Environmental Awareness Activities carried out by NSS volunteers	Environmental Knowledge among the Villagers	Villagers knowledge in Plantation of Trees
N		100	100	100
Normal Parameters[a,b]	Mean	4.4462	4.1209	4.6800
	Std. Deviation	.42565	.29268	.29508
Most Extreme Differences	Absolute	.174	.188	.198
	Positive	.118	.072	.139
	Negative	-.174	-.188	-.198
Kolmogorov-Smirnov Z		1.739	1.880	1.979
Asymp. Sig. (2-tailed)		.055	.012	.041
a. Test distribution is Normal.				
b. Calculated from data.				

Source: Compiled from Survey Data

From the above Tables -2, it is observed that the Asymp. Sig. (2tailed) values computed above are more than 0.05, it is concluded that data follows normal distribution.

Results & Discussion

[a] Impact of Environmental Awareness Activities on creating Environmental Knowledge among the Villagers

Table-3 : Descriptive Statistics of Environmental Awareness & Knowledge	Mean	Std. Deviation	N
Environmental Knowledge among the Villagers	4.6127	.16528	100
Environmental Awareness Activities carried out by NSS volunteers	4.4462	.42565	100

Source: Compiled from Survey Data

From the above Table No-3, it is observed that mean value of Environmental Awareness Activities carried out by NSS volunteers is 4.44 and the mean value of Environmental Knowledge among the Villagers is 4.61 which falls under the category of strongly agree which means the Environmental Awareness Activities carried out by NSS volunteers has an impact on created Environmental Knowledge among the Villagers.

Table-4 : Regression Model [Summary[b]] of Environmental Awareness Activities on creating Environmental Knowledge among the Villagers										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.264[a]	.070	.060	.16023	.070	7.345	1	98	.008	2.223
a. Predictors: (Constant), Environmental Awareness Activities carried out by NSS volunteers										
b. Dependent Variable: Environmental Knowledge among the Villagers										

Source: Compiled from Survey Data

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From the above **Table No-4,** it is discerned that **R** value represents the simple correlation and is **0.264** which indicates the moderate degree of correlation between Environmental Awareness Activities and creating Environmental Knowledge among the Villagers. The R^2 i.e. **0.070** indicate how much of the total variation, in terms of environmental knowledge can be explained by the independent variable, environmental awareness activities. In this case **7.%** can be explained which is very small.

The next table, **Table No-5** indicates that the regression model predicts the dependent variable significantly well. The **'P value'** indicates the statistical significance of the regression model that was run. Here, **P ≤ 0.008,** which is less than **0.05**, indicates that overall regression model statistically significant predicts the outcome variable is a good fit for the data.

Table-5 : ANOVA[a] Regression Model of Environmental Awareness Activities on creating Environmental Knowledge among the Villagers

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.189	1	.189	7.345	.008[b]
	Residual	2.516	98	.026		
	Total	2.704	99			
a. Dependent Variable: Environmental Knowledge among the Villagers						
b. Predictors: (Constant), Environmental Awareness Activities carried out by NSS volunteers						

Source: Compiled from Survey Data

The coefficient table provides the necessary information to predict environmental awareness activities in terms of create environmental knowledge among the villagers, as well as determines whether environmental awareness activities is statically significant to the model by looking at the **'P value'**. Furthermore the value in the **"B"** column under the **"Unstandardized Coefficients"** column as shown below:

Table-6 : Coefficients[a] of Regression Model of Environmental Awareness Activities on creating Environmental Knowledge among the Villagers

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4.157	.169		24.601	.000	3.822	4.492
	Environmental Awareness Activities carried out by NSS volunteers	.103	.038	.264	2.710	.008	.027	.178
a. Dependent Variable: Environmental Knowledge among the Villagers								

Source: Compiled from Survey Data

to present the regressive equation as:

Environmental Knowledge = 4.157+ 0.103 (Environmental Awareness Activities)

Since the P value is less than the table value of **0.05** in the sample data, which provides enough evidence to reject the null hypothesis. Hence, **there is a significant impact of Environmental Awareness Activities on creating Environmental Knowledge among the Villagers.**

[b] Impact of Environmental Awareness Activities in **Plantation of Trees** in the Villages.

Table -7 : Descriptive Statistics of Environmental Awareness Activities and Plantation of Trees			
	Mean	Std. Deviation	N
Villagers knowledge in Plantation of Trees	4.7980	.19694	100
Environmental Awareness Activities carried out by NSS volunteers	4.4462	.42565	100

Source: Compiled from Survey Data

From the above Table No-7, it is observed that mean value of Environmental Awareness Activities carried out by NSS volunteers is 4.44 and the mean value of Villagers knowledge in Plantation of Trees in the Villagers is 4.79 which falls under the category of strongly agree which means the Environmental Awareness Activities carried out by NSS volunteers has an impact on the villagers knowledge in plantation of trees.

Total -8 Regression Model [Summary[b]] of Environmental Awareness Activities in Plantation of Trees in the Villages.										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.261[a]	.068	.059	.19109	.068	7.151	1	98	.009	1.728
a. Predictors: (Constant), Environmental Awareness Activities carried out by NSS volunteers										
b. Dependent Variable: Villagers knowledge in Plantation of Trees										

Source: Compiled from Survey Data

From the above **Table No-8,** it is discerned that **R** value represents the simple correlation and is **0.261** which indicates the moderate degree of correlation between Environmental Awareness Activities and Villagers knowledge in Plantation of Trees. The **R^2** i.e. **0.068** indicate how much of the total variation, in terms of villagers knowledge in plantation of trees can be explained by the independent variable, environmental awareness activities. In this case **6.8%** can be explained which is very small.

The next table, **Table No-9** indicates that the regression model predicts the dependent variable significantly well. The **'P value'** indicates the statistical significance of the regression model that was run. Here, **$P \leq 0.009$,** which is less than **0.05**, indicates that overall regression model statistically significant predicts the outcome variable is a good fit for the data.

Table-9 ANOVA[a] Regression Model of Environmental Awareness Activities in Plantation of Trees in the Village						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.261	1	.261	7.151	.009[b]
	Residual	3.578	98	.037		
	Total	3.840	99			
a. Dependent Variable: Villagers knowledge in Plantation of Trees						
b. Predictors: (Constant), Environmental Awareness Activities carried out by NSS volunteers						

Source: Compiled from Survey Data

The coefficient table provides the necessary information to predict environmental awareness activities in terms of villagers knowledge in plantation of trees, as well as determines

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whether environmental awareness activities is statically significant to the model by looking at the **'P value'**. Furthermore the value in the **"B"** column under the **"Unstandardized Coefficients"** column as shown below:

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4.262	.202		21.147	.000	3.862	4.661
	Environmental Awareness Activities carried out by NSS volunteers	.121	.045	.261	2.674	.009	.031	.210

Table-10 : Coefficients[a] of Regression Model of Environmental Awareness Activities in Plantation of Trees in the Village

a. Dependent Variable: Villagers knowledge in Plantation of Trees

Source: Compiled from Survey Data

to present the regressive equation as:

Plantation of Trees in the Village = 4.262+ 0.121 (Environmental Awareness Activities).

Since the P value is less than the table value of **0.05** in the sample data, which provides enough evidence to reject the null hypothesis. Hence, **there is a significant impact of Environmental Awareness Activities in Plantation of Trees in the village.**

Discussion:

The purpose of the study was to look into the impact of Environmental Awareness Activities rendered by NSS club in Rüsoma village of Kohima District. Therefore, the results show that there is significant outcome rendered by the activities that were initiated by the NSS members.

Ramirez (2017) reported in his study the potentials of student leaders in bringing about a change. Also Ballard *et al*. (2017) said youth do have the power, ability and agency to contribute for conservation. Our study shows that the environmental awareness activities carried out by NSS volunteers has an impact on the villagers.

Manzoor (2017) pointed out in his study, despite 62.8% of the respondents are literate; people don't have much knowledge and awareness about wastage dumping, plantation, environment pollution etc. However, our study shows a moderate impact of Environmental Awareness Activities in Plantation of Trees and other related environment activities in the village.

Soto-Cruz (2014) stated in his study that most of the youths interviewed have sound awareness on the basic concepts of environmental issues. Likewise, our present study also yields the same indication of a high level of environmental awareness among the village youths. The referred article also highlighted on the effectiveness of formal education program in promoting environmental awareness. However, our study reveals that the impact of environmental activities seems to be more effective comparing to formal education. On the other hand the result also indicates that there is a moderate impact of environmental activities on environmental knowledge.

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Conclusions :
Limitation

This research paper did not consider any feedback from the villagers involved in environmental awareness activities. Hence, 360 degree view may be missing.

Conclusion:

Environmental Awareness Activities are new benchmark strategies adopted by the 'NSS volunteers of Don Bosco College, Kohima in Rüsoma village' for creating environmental awareness among the villagers. The study cannot be used as a general conclusion about environmental awareness activities in villagers. Therefore, there is a need for the use of the model in the study of the impact of environmental awareness activities in other villages and to test a hypothesis of the outcome of environmental awareness activities in villages.

S.No.	ANNEXURE-1 : Statement
1.1	Plantation Drive was carried on around the village.
1.2	Nursery Samplings were distributed to the villagers.
1.3	Dustbins were kept in each junctions of village.
1.4	We have Cleaned sanitary latrines in the village.
1.5	We have Cleaned ponds and wells, of the village.
1.6	We have Cleaned village monuments
1.7	We have demonstrated Environmental sanitation and disposal of garbage & benefits of composting.
1.8	We have created awareness on recyclable of plastics and non recyclable of plastics and disposal system.
1.9	We have Demonstrated on reuse of waste bottles
1.10	We conducted Seminar on Cleanliness, importance of Tree plantation and Recycling of waste.
1.11	We conducted Seminar on Effective use of recyclable and Promotion of Greening
1.12	We conducted workshop on rainwater harvesting
1.13	We have demonstrated Widow's farmland development
1.14	Maximum villagers are participated in the cleaning drive.
1.15	Maximum villagers are attended in the Seminar and workshop
1.16	Maximum villagers are participated in the demonstration
1.17	Environmental Awareness Activities were very effective
1.18	Quality Activities were carried
1.19	Environmental Awareness Activities were carried as per the plan
1.20	Performance of the activities were good

Sl.N.	ANNEXURE-2 Statement
1.1	I have learned Environmental sanitation and disposal of garbage & benefits of composting.
1.2	I have learned process of recyclable of plastics and non recyclable of plastics and disposal system.
1.3	I have learned the reuse of waste bottles
1.4	I have learned a lot from Seminar on Cleanliness, importance of Tree plantation and Recycling of waste.
1.5	I have learned a lot from Seminar on Effective use of recyclable energy and Promotion of Greening
1.6	I have participated in all the events.
1.7	We conducted workshop on rainwater harvesting
1.8	We have demonstrated Widow's farmland development
1.9	Environmental Awareness Activities were very effective
1.10	Quality Activities were carried
1.11	Performance of the activities were good

Sl.N.	ANNEXURE-3 Statement
1.1	I am aware that plantation of trees is good for the environment.
1.2	Trees offer many environmental benefits.
1.3	Trees improve our air quality and absorb harmful gases
1.4	Trees save water
1.5	Trees give off oxygen that we need to breathe.
1.6	Trees reduce reduces soil erosion and pollution
1.7	Trees provide food, protection, and homes for many birds and mammals
1.8	Many species of wildlife depend on trees for habitat.
1.9	I have planed tree in my compound
1.10	I keep my surrounding clean here after

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Marketing Strategy Adopted by Cement Industry in India

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Introduction :

Cement is one of the major components of infrastructure development in the world. Today without cement one cannot think of buildings, offices and even roads. Development of cement industry is completely correlated with the development of India. Cement is one of the most important infrastructure industries. India is the 2nd largest cement producer in the world after China, which capacity of production is 520 MT p.a. and per capita utilization is 196 kg. The country has vast potential for development in the construction and infrastructure sector due to support to weaker section of the Indian society, and the cement sector is expected to largely benefit from it. Some of the recent major government initiatives such as development of smart cities, reduction of rapo rate, new financial policy and loans, are expected to offer a major make better to the sector. Expecting such developments in the country and aided by suitable Govt. foreign policies, numbers of foreign investors: such as Heidelberg cement, Lafarge Holcem, & VICAT have invested their funds in the country recently. This is moreover significant that raw material is required for cement production, like stone, Lime and coal is abundantly available in Indian earth.

Marketing is defined as the expectation, management and satisfaction of customers' demand through the exchange process of goods and money. Strategy is comes from a Greek word Strat egos was used by military to define the art of the general. The meaning of it was to plan in such a way with the goal to defeat the army of enemy.

Strategy is a plan of action to attain a predefined long term goal. In the same way marketing strategy is the goal of increasing sales or profit and achieving a sustainable competitive advantage. Marketing strategy always plays an important role in the growth of a company or industry as a whole. Marketing strategy also decides the future position of the company in the market as well as in the industry.

Review of Literature :

Saxena (2010)[1] has discussed with his study that the role and importance of marketing strategy is to create a competitive edge for the company to decide the prospect of the company. The role of marketing strategies is to understand the markets which needed to be covered, finding the niche markets among the various market choices, planning for product and service offered by the companies, pricing, promotion and distribution strategies to place the product well in the market and management of the outcome of the adopted marketing strategies. Marketing strategies must be focused about the customers and countering the strategies of competitors to sustain in the market and strive for making the profits for growth. It further states that a company must create value to become competitive in the market and to differentiate its offerings from the competitors.

Morgan (2012)[2] discussed the three main theories in strategic management with the empirical and theoretical literature on strategic marketing to develop an integrative theory-based conceptual framework linking marketing with firms' business performance. The outcome of the research shows that there is a huge correlation in between marketing strategies on the performance of the firm.

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Burange and Yamini (2008)[3] found in their study that sales and marketing strategy is the foremost important factor in the cement industry for many companies. They found that sales and marketing strategy got more weightage than any other factor for the companies to become more competitive in the industry. There is an extreme need to focus on sales and marketing strategy for cement companies to take competitive advantage to grow in the dynamic business environment ofthe cement industry.

Roshan Shankar, Udit Agarwal Pragya Goel and Wagisha Jha (2011)[4] conducted a study on "Business Strategies for the Indian Cement Industry. This article presents that the Cement is the one of high demanded and single most important and profitable product in the building material sector and with the consumption of cement in India, which had to touch six hundred million tonnes by the year 2020. This study also concluded that considering the increasing of cement demand in India and higher capacity utilization over the years, and key Indian players have already begun to revisit their business strategies.

Kumar & Bansal (2013)[5] also conducted a study and observed that stiff competition is one of the major factors which are affecting the marketing strategies of Indian cement companies. Lack of proper product mix offered to the customers is one of the lacunas in overall marketing strategy. It discussed 'hat differentiation among the products of different brands is not possible due to availability of the same inputs of raw material. It's further revealed the fact that pricing is one of the factors plays a role of differentiator among the brands. Fewer margins are one of the main concerns across the cement industry.

Kumar, John and Senith (2013)[6] observed through his research that the growthof Indian cement industry in recent several years in india. In this study designed to find out about the growth and development of cement industry in India since 1991. The parameters had taken into this study were production capacity, exports, production, and value addition in the cement products. This research was entirely secondary data based and descriptive and applied statistics have been used to evaluate the performance of the Indian cement industry.

Shaik, Balkrishn and Banana (2014)[7] conducted a study on "A Study on Future Marketing Trends Indian Cement Industry" and discussed about the future marketing trends in the cement industry which will focus on the emerging economies markets, improving and enhancing production technology or production portfolio to minimize the cost to achieve cost leadership, branding and innovation to provide better cement products to the targeted customers. The future lies with those companies which provide the best quality cement product at affordable prices and most ofthe companies in the cement industry is focusing on producing the best quality cement by introducing upgraded technology.

Previous studies show that marketing and marketing strategy is one of the most important elements for any firm. Marketing strategy provides a direction to the firm to achieve its goals and objectives within a stipulated time. It has been found that marketing strategy plays a very important role in the growth of the organizations. Both competitors and customers are very important external factors which can't be controlled by the organizations but affect their business in a big way

Importance of the study :

Business has a purpose to serve the customer. Marketing is the strategist of product pricing, product quality, sales promotion and distribution of product which satisfy the customers and marketing intermediaries. So this study have emphasised to the existing system from the

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select cement industries. For them define a suitable Marketing Strategy model to maximise the sales in national and international market.

The cement industry in India is one of the larger markets in the world. It had been one of the fastest growing globally, even it is currently experiencing growth or positive growth rates. Marketing is one of the important policies to be adopted by the marketing department for the same. In marketing, the cement producer or marketing department analyses the nature of the consumer's requirements and then strategy his product to provide satisfaction to the consumers. All the marketing efforts focal point attention around the consumers' wants. The management activity, thus governed with the market and market perception to recognize larger groups of Indian consumers through marketing research and market information. Thus the management always plans to meet the customer's needs and to look market competitions. All activities and programmes entail a number of marketing and business functions, which are to be planned and implemented carefully. This comprises proper market analysis, systematic predictions and forecasting the needs of the society or public. Thus identification of demand and solve through supply involves various activities of marketing to accomplish success in the market and the arrangement of these major marketing functions is called marketing mix.

Objectives of the Study :

Objectives of the study provide the direction to the research and considered to be the one of the most important part of the research. Following objectives are:
1. To explore and measure the marketing environment of cement industry in India
2. To explore the marketing strategies adopted by cement manufacturers in india

Methodology of this study:

This study is completely based on primary data. Both primary as well as secondary data have been collected to undertake the study. Mostly Primary data collected through survey method using questionnaire and also observation method has been adopted. Secondary data has been collected through various journals, books, company reports available at both offline and online & websites of cement companies.

A random sample of 76, of total sample (respondents) 24, 27 and 25 has been chosen from three cement companies mainly Ultratech, ACC and Ambuja. Total 76 sample size has been chosen to undertake this study and to attain all the objectives. A questionnaire has been prepared to distribute among the cement marketing professionals and channel partners to collect the relevant data for the analysis. The collected were analysed using relevant statistical tools like, Correlation, and ANOVA Analysis.

Hypothesis of the study:

Hypotheses 1 : There is no significant difference between the cement industry and product price, technology, promotion & distribution system of the cement industry"

Hypotheses 2 : There is no significant difference between the marketing strategy and cement industry of the selected firms"

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Data analysis :

Table -1 Correlation coefficient analysis between marketing and cement companies

organizational culture	Ultra Tech	ACC	Ambuja cement
Product			
Pearson Correlation:	0.982809	0.966312	0.988644
Sig. (1-tailed):	.000	.000	.000
N:	5	5	5
T-Statistics:	12.98325	9.118848	16.06873
Df:	3	3	3
P Value:	0.000493	0.001394	0.000262
Price			
Pearson Correlation:	0.977616	0.983144	0.978333
Sig. (1-tailed):	.000	.000	.000
N:	5	5	5
T-Statistics:	11.31779	13.11594	11.51187
Df:	3	3	3
P Value:	0.00074	0.000479	0.000704
Technology			
Pearson Correlation:	0.98862	0.974061	0.968868
Sig. (1-tailed):	.000	.000	.000
N:	5	5	5
T-Statistics:	16.05174	10.47543	9.510948
Df:	: 3	3	3
P Value:	0.000263	0.000929	0.001232
Promotion			
Pearson Correlation:	0.987632	0.986204	0.980821
Sig. (1-tailed):	.000	.000	.000
N:	5	5	5
T-Statistics:	15.38152	14.54267	12.267
Df:	: 3	: 3	: 3
P Value:	0.000298	0.000353	0.000583
Distribution			
Pearson Correlation:	0.975304	0.97176	0.989109
Sig. (1-tailed):	.000	.000	.000
N:	5	5	5
T-Statistics:	10.74957	10.01584	16.41612
Df:	: 3	: 3	: 3
P Value:	0.000861	0.001059	0.000246

The correlation coefficient analysis was performed to examine the relationship between product price, technology, promotion & distribution system and cement industries i.e Ultra Tech, ACC and Ambuja Cement. The results indicated that, ACC and Ambuja Cement all are the main variable indicating that there is a positive strong significant relationship between Ultra Tech & product price, technology, promotion & distribution system.

The results indicated that Ultra Tech is the main variable indicating that there is a positive strong significant relationship between marketing strategy, here Product (r = 0.982809, p value is less than 0.05), followed by Price (r = 0.977616, p<0.05) and Technology (r = 0.98862, p<0.05). Similarly promotion and distribution are also positive significant relationship with ultra tech cement i.e (r = 0.987632, p<0.05), and (r = 0.975304, p<0.05) respectively. The

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one sample t-test statistic of Ultra Tech cement are 12.98325 in Product, 11.31779 in price, 16.05174 In technology, 15.38152 in promotion and 10.74957 in Distribution.

The results indicated that the ACC cement is the main variable indicating that there is a positive strong significant relationship between marketing strategy, here Product (r = 0.966312, p value is less than 0.05), followed by Price (r = 0.983144, p<0.05) and Technology (r = 0.974061, p<0.05). Similarly promotion and distribution are also positive significant relationship with ultra tech cement i.e (r = 0.986204, p<0.05), and (r = 0.97176, p<0.05) respectively. The one sample t-test statistic of ACC cement are 9.118848 in Product, 13.11594 in price, 10.47543 In technology, 14.54267 in promotion and 10.01584 in Distribution.

The results indicated that the Ambuja Cement cement is the main variable indicating that there is a positive strong significant relationship between marketing strategy, here Product (r = 0.988644, p value is less than 0.05), followed by Price (r = 0.978333, p<0.05) and Technology (r = 0.968868, p<0.05). Similarly promotion and distribution are also positive significant relationship with ultra tech cement i.e (r = 0.980821, p<0.05), and (r = 0.989109, p<0.05) respectively. And The one sample t-test statistic of Ambuja cement are 16.06873 in Product, 11.51187 in price, 9.510948 In technology, 12.267 in promotion and 16.41612 in Distribution.

From this table it is clearly indicated that (r value is more that p value) Hypotheses 1 "There is no significant difference between the cement industry and product price, technology, promotion & distribution system of the cement industry" is rejected and alternative hypothesis is accepted. So there is a significant difference between the product price, technology, promotion & distribution system and cement inductries (Ultratech, ACC and Ambuja Cement).

Table -2 : Anova analysis between marketing strategy and cement companies
Anova: Two-Factor Without Replication

SUMMARY	Count		Average	Variance
Ultra Tech	5		20.4	0.8
ACC	5		22.2	3.7
Ambuja cement	5		21.4	1.3
Product	3		20.7	0.3
Price	3		20	1
Technology	3		21	1
Promotion	3		23	4
Distribution	3		22	1

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	8.133333	2	4.066667	4.979592	0.039374	4.45897
Columns	16.66667	4	4.166667	5.102041	0.024361	3.837853
Error	6.533333	8	0.816667			
Total	31.33333	14				

The ANOVA test analysis was performed to examine the relationship between marketing strategy and cement industries i.e Ultra Tech, ACC and Ambuja Cement. The results indicated

that product, pricing, technology, promotion and distribution system are the main variable indicating that there is a positive strong significant relationship between cement industry & marketing strategy.

The output of ANOVA test resulted that the P-value is 0.039374 which is less than 0.05. And F value for (2,8) degrees of freedom at 5% level of significance is 4.45897 is more than F crit value 4.979592 for type of cement company This implies that, In respect of Columns (Ultra Tech, ACC and Ambuja cement) there is a significance difference between Ultra Tech, ACC and Ambuja cemen on "regularly adopting marketing strategy."

Similarly,The output of ANOVA test resulted that the P value 0.024361 which is less than 0.05. And F value for (2,8) degrees of freedom at 5% level of significance 5.102041 is greater than F crit value 3.837853 for level of agree on marketing strategy. This implies that, In respect of rows , product, price, technology, promotion and distribution) there is a significance difference between the statement and level of agree.

From this table it is clear that Hypotheses 2 "There is no significant difference between the marketing strategy and cement industry of the selected firms" is rejected and alternative hypothesis is accepted. So there is a significant difference between the marketing of the selected cement companies (Ultratech, ACC and Ambuja Cement).

It was noted that the respondents from the cement industyry of Ultra Tech, ACC and Ambuja cemen have responded to the option Strongly Agreed, and Agree about regularly practices of marketing strategy of this selected companies..

Conclusion :

The cement industry requires to operate in an social and environment needs to handle market of continuous changing customers' product preferences. The production and marketing development becomes a major activity for cement industry of these companies. Basically Cement companies are functioning and operating their business in a high competitive environment due to presence of the cutthroat competition among the national & international and existing cement investors and players in the cement market. This article shows that marketing environment in cement industry is very competitive and dynamic and companies need to adopt new age, digital based and unique marketing strategies to be in competition at Indian cement market not only survival but also for growth and development in cement industry.

Cement companies are well aware of importance of focusing customers. Cement companies are willing to cater new customer segments. It shows the level of competition among the existing cement companies in the market. Any company offers a product or service in the market immediately introduced by its competitors in the market. This concludes that cement industry is highly competitive.

The results show that technology plays an important role in the growth of cement industry Companies have to ready for the change in the technology to utilize the opportunity present in the cement market. The results show that companies contributed in the technology developments in the cement industry. It is required for company to keep the same pace in the change in the technology within the company to contribute to the industry as a whole. Company also needs to check about the benefits it is getting from this contribution and act accordingly. This will help us in further establishing success rules for cement industry in Indian market.

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Digitalization and Consumers' Behavior Attitudes with Special Reference To Online Purchase in Tiruvarur, India

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Abstract:

Consumer behavior is the study of how individual customers, groups or organizations select, buy, use, and dispose of ideas, goods, and services to satisfy their needs and wants for the price they paid. The use of digital technology to research, browse and purchase has gone from segment-specific or sporadic to mainstream. This has resulted in an undeniable and nonreversible shift in the retail landscape. Consumer's attitudes and demographics are changing. Consumers are becoming more variable and expect greater business transparency and corporate responsibility. Increased comfort with technology and high usage of online channels is feeding this shift. Buying pattern of consumer is changing at a quicker rate in the customer oriented market environment. Consumer behavior differs when it comes to the product, price, features, quality, packaging, status, generation, age of the customer etc. The changing preferences of the present day consumer affect the buying pattern because they mostly follow the cadence of fashion and taste according to the changing time. The study reveals that most of the youngsters of the present generation have access to the digital media but they lack the awareness about its optimum utilization. Digital innovations are a major influence on the way customers interact with brands and request services. More customers interact through multiple channels and irrespective of time, place, and device they expect consistency. Digitalization is the integration of digital technologies into everyday life by the digitization of everything that can be digitized.

Introduction:

A consumer need not just be an individual; a consumer can also be an organization. A consumer can be someone who will buy either goods or services or you can also specify the goods and services as economic services or products, or good or commodities. A consumer is the end user or a target to whom the goods and services are sold. .Consumer behavior is the study of how individual customers, groups or organizations select, buy, use, and dispose ideas, goods, and services to satisfy their needs and wants. It refers to the actions of the consumers in the marketplace and the underlying motives for those actions.

The study of consumer behavior assumes that the consumers are actors in the marketplace. The perspective of role theory assumes that consumers play various roles in the marketplace. Starting from the information provider, from the user to the payer and to the disposer, consumers play these roles in the decision process. Some selected definitions of consumer behavior and digitalization are as follows:

According to Engel, Blackwell, and Mansard, 'consumer behavior is the actions and decision processes of people who purchase goods and services for personal consumption'.
According to Louden and Bitta, 'consumer behavior is the decision process and physical activity, which individuals engage in when evaluating, acquiring, using or disposing of goods and services'

"*Digitalization* is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities," according to Gartner's glossary. "It is the process of moving to a digital business."

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Digital marketing is all about promoting business using digital channels like Internet, website, blogs, social media platforms, video marketing, mobile marketing, email marketing and the list is huge…

The channels that make up digital marketing include: Web sites, Social media platforms, Banner placement, email marketing, mobile marketing, SEO, pay per click campaigns, Web TV, SMS, billboards and anything else with a digital foundation.

Benefits of Digitalization:

Digital solutions can simplify a country's security and intelligence systems, and its economy and infrastructure.

For citizens, digitalization promises much needed improvement both in the delivery of public services, such as Government/Bank issued certificates, and other services, financial or other consultancy services.

Decision Making is The Power Given to The Consumer.

Everyone has been a consumer and participated in the consumer market. The consumer market is where the consumer has the right and the power to make a decision of spending their money. Even buying a packet of chips from a store is being a part of the consumer market as you participate in the buying a packet of chips buy paying a sum for the purchase. Here you are also taking a decision. This is a decision of buying goods and spending your money. You are deciding where to spend your money and on what should you spend your money. You are deciding amongst competitors. The more active the consumers of the nation the more active will be the nation's consumer market.

Technology's Influence on Consumer Behavior:

This is certainly true in the area of retail. After all, half a century ago who could have predicted that we would one day do much of our shopping from home through the use of computer networks and virtual stores? Let's take a quick look at the history of retail, and see what led us to this point.

Pre 1800s:

Up until the 1800s, most "retail" was done in small, family owned establishments or in marketplaces. Products seldom traveled very far from supplier to consumer, and most business was local. Bartering was common.

1800s: The Birth of Department Stores:

As transportation methods became more effective and less costly, sellers were able to start carrying more products and supplies from farther away. This allowed for larger shops to open. In 1846, Alexander Stewart built the "Marble Palace," the largest retail store that the world had ever seen. It would later become known as the first department store, and its design would influence later department stores such as Macy's and Gimbel's. The cash register was invented in 1879, and soon included a small paper roll that would record details of transactions, resulting in the first "sales receipts." Within less than a decade, this new technology had become a prerequisite for doing business. Department stores continued to grow and flourish for well over a century.

1800s to 1900s:

As the nation began to expand westward, mail-order business experienced a boom. Catalog shipping prices were reduced to miniscule amounts to help promote expansion (thanks to

the 1862 Homestead Act). In 1872 the first mail-order catalog—a single sheet of paper featuring product names and prices—was sent out by Montgomery Ward. The much more influential Sears and Roebuck catalog was first released in 1894; it featured 322 pages. Mail order catalogs remained the foremost means of purchasing items long-distance until the start of the information age.

1900s:

As technology continued to progress, shopping became easier. Automobiles were becoming commonplace, allowing customers to take enjoyable "shopping trips." The first supermarket opened in Massachusetts in 1915, and the first shopping mall followed suit eight years later in Missouri. The shopping cart was invented in 1936, further facilitating the shopping experience. After the close of the Second World War, a population explosion known as the "baby-boom" increased consumer demand several fold. As a result, new highways and larger shopping centers began to appear. Suburban malls started to spring up as well, and in 1958, Bank of America launched the first credit card program (it would eventually merge with other programs and networks to become Visa in 1976). In 1962, the first discount stores—Kmart, Walmart, Target, and Woolco—opened their doors.The 1960s also saw the invention of the debit card.

Late 1900s:

Department stores began to decline with the emergence of large, inexpensive bulk-items stores. Bigbox store chains began to open, making it easier for shoppers to make all of their purchases at one location. Costco Wholesale opened in 1983 and was an immediate success, and have continued to set the standard for warehouse clubs and high-end retail. In 1990, Walmart became the world's largest retailer, further hastening the decline of department stores. In 1995, Amazon.com went active, taking advantage of the relatively new invention—the internet—to sell and ship books. It took six years before the company began to make a profit.

2000s–now:

As the internet became more ubiquitous and easy to use, many companies took their cues from Amazon and expanded into online retail. Online orders and automated shipping allowed customers to start shopping from the comfort of their own homes, without the need of catalogs, telephones, or postage stamps. In 2003, big box stores sales surpassed department store sales for the first time. In 2006, Facebook debuted, allowing companies to promote themselves on social networks. Social media has revolutionized the way businesses operate and communicate with consumers. This has had a huge impact on retail business. In 2008, Apple and iTunes became the largest music retailers in the world. Amazon.com went on to become the world's largest online retailer. It has become so enormous that it takes big data analytics just to compute the information in the millions of transactions occurring daily. With that amount of people turning to the internet for shopping, many department stores and other "off-line" stores around the country began to close their doors. Malls all around the U.S. have started losing their flagship stores, which has threatened the closure of the entire shopping center.

The Future:

No one can really say what is in store for retail as the years march onward? However, one thing seems certain: whatever happens, the internet and other new technologies will continue to

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pay a big part in the future of retail. so too will we have to adapt whatever new innovation comes our way.

Examples of How Technology is Changing Consumer Behavior.

Marketing paradigm has undergone a sea change over the past decade. The internet has a profound impact on various industries but very few industries have witnessed a metamorphosis like marketing. Gone are the days when knocking on doors or cold calling was considered the easiest and most effective way of reaching out to consumers. Marketing professional back in 90's and 00's would have scoffed at the very idea that a decade or two decades later, companies would be able to run real time marketing campaigns. No one would have harbored such thoughts.

Empowered Consumers :

Today's consumers are more enlightened and empowered. They are constantly being flooded with more digital content than ever before. A vast number of brands are available at consumer's fingertips. Consumers have become more demanding. They know more than ever about what they want, how they want it and from whom they want. Consumers are becoming adapted to immediate accessibility and expect their brand experiences to be personalized and easy to navigate. With so many options just a click away, customers won't wait around if the brand experience is not a satisfying. While selecting product and services, consumers rely more on advocacy of people they know and trust. Recommendations from known people are now five times more trusted than brand marketing according to the Word of Mouth Marketing Association. Consumers nowadays are spending more time surfing social media sites and the decisions about the purchase, often reflect interactions with friends and other influencers. The digital world has made consumers quite impatient, impulsive and they seek immediate gratification. They want immediate services and real-time virtual dialogue with their brands. Next-day delivery is being overtaken by ever-faster delivery possibilities for the shopper.

Evolving consumer behavior in Digital Age :

The biggest change in consumer behavior is that consumers expect a constant and personalized experience. Consumers desire and expect personalized messaging from brands. Marketers should connect with them at the right places at right times, which involves increased real-time localization. Modern consumers are not loyal customers, they are more variety seekers. This has left previously logo-heavy companies scrambling to assimilate their product to suit modern tastes.

These days consumer put more emphasis on post purchase experience. To satisfy and retain customers, products and services are coming with a type of built-in offer of post-purchase assistance. Convenience is moving from fulfilling customer needs to actually predict them – including the post transaction period. Tools like customer analytics, social intelligence, and machine translation are all crucial components which assist brands in the delivery of the experiences that customers want.

The main change in consumer behavior is that consumers increasingly turn away from anything they perceive as marketing. As consumers are becoming tech savvy they are becoming impatient towards intrusive or irrelevant content and messages. More than 30% Smartphone users have installed ad blockers and this number is increasing rapidly. Instead, they look towards small groups of people who have a high level of credibility in their specific industry or category to influence their buying decisions. As consumers spend more time on these social media

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platforms, decisions about what to purchase often reflect interactions with friends and other influencers. In response, leading marketers are adapting their strategies to reach increasingly networked consumers and placing more stress on tactics such as word-of-mouth marketing and storytelling.

Consumers want authenticity in their purchase of products and expect some level of personalization in mass produced as well in upscale items. These demanding customers have become more outspoken about their choices and preferences. If they are not happy about any product and services they are very upfront about their opinions on various social media platforms. Every purchase decision is researched, evaluated, ranked and even crowd-sourced to ensure that it's the best decision.

Consumer behavior in the digital age is an ever-changing and ever-expanding. Staying in tune with consumer behaviors, tastes, and impending trends can help brand stay relevant, visible and engaging for customers.

Factors Influencing Consumer Behavior Towards Online Shopping :

The simple and quickness provided by the online stores for 24x7 has made shopping easy for the consumers. Consumers get affected by various factors such as with online shopping consumer can shop anywhere, anything and anytime with easy and safe payment option. Consumers can do comparison shopping between products as well as online stores by saving time and money. Availability of online information about product services, facility of making comparison with other products while shopping online, delivery time taken by the agency, content and quality of online shopping website and other security measures taken by agency to make customers identity safe and ensure a smooth transaction are other various important factors having impact on consumer attitude towards online shopping .

Consumer behavior is a decision making process as well as mental and physical activity in which an individual engages in evaluating, acquiring, using or disposing of goods and services. Consumer behavior deals with the study of behavior that consumers display in searching for purchasing, using, evaluating and disposing of products and services that they expect will satisfy their requirements.

Consumer plays a very vital role as they are the ones who finally buy goods and services of the firm and the firm always make important efforts to attract them towards its goods and services to earn revenue and enhance profitability. Consumer behavior is interdisciplinary approach based on concepts and theories about people that have been developed by behavioral scientists, philosophers and researchers in diverse disciplines of psychology, sociology, social psychology, cultural anthropology and economics. The study of consumer behavior also helps management to understand consumer needs to recognize the potential of consumer in lieu of new technology and to articulate new things in term of the consumers needs so that products will be universally accepted in the market well.

Consumer buying behavior is influenced by two major factors, individual and environmental. The major categories of individual factors affecting consumer behavior are
Demographics, Consumer knowledge, Perception, Learning, Motivation, Personality, Beliefs, Attitudes and life styles.

The second category of factors is environmental factors.

Environmental factors represent those items outside of the individual that affect individual consumer's decision making process.

These factors include culture, social class, reference group, family, and household. The above mentioned factors are the major determinants behind the decision of consumers to chose a given goods or services.

Consumers of different products coming from different age-groups, different social cultural backgrounds and from different geographical locations behave differently while making selection. Whenever a consumer buys anything from the market, final decision is affected by cultural, social, personal and psychological factors.

Types of Consumer Behavior:

• Programmed or routine behavior

Buying of regular and daily goods that involve very less money and also minimum research work fits under this type of goods buying behavior. For example buying goods from the grocery store that are goods used on daily basis like milk, eggs, bread, etc

• Buying products occasionally or limited decision making

When a consumer tries to gain information about unfamiliar brands of familiar products of not very high value goods this is when a consumer makes a decision however occasionally. The time required to gather such information is quite moderate for example buying of goods like clothes and cosmetics.

• Complex and involvement or extensive decision making

Buying of products such as computers, laptops, property, cars, education, etc which requires a huge amount of research and economic involvement comes under this category or type. This decision take time as it needs too much of research work as the consumer will study almost all the options available in his economic range, the research is prolonged as the customer would want to buy the best option available for the price he is paying.

• The last type is the impulse buying or the conscious planning type

The job of the organizations here is to educate the consumers about their goods and services and motivate them to buy their goods and services. Predicting single or consumer behavior of a group is not just difficult because you never know what factors might influence them and when. Reason being the consumers today have a huge variety of choice and a number of factors influence the behavior of the consumers. Let's take a look at the notes given below to understand what influences consumer behavior.

How To Study Consumer Behavior?
1. First understand the physiology of the consumer of a specific class, standard and of a specific market. You need to understand how does the customer think, reason, feel, and select between the option of products and services offered
2. Then understanding the environment of the customer is important. The environment includes the family of the consumer, their social atmosphere, their culture, etc.
3. The consumer psychology is different when they shop and make decisions of spending their money.
4. How can you motivate the consumer buying behavior, helping him make a decision in selecting between products, the importance of their product and how will their decision affect them?

5. How should the company improve their marketing strategy and marketing campaigns based on their focused consumer behavior?
6. How does a single consumer decision effects a group of consumers that is a group of people, this can include their friends, their family, etc.
7. The consumer's behavior also depends on buying a new products and reusing the old ones. The organizations also need to understand how reusing products influences a consumer.
8. After sales service offered to a consumer also matters in influencing their behavior

Impact on Consumer Buying Decision Process:

Consumer buying decision process can be understood with the help of five stages of decision making process including need recognition, search for information, evaluation of alternatives, selection and purchase and post purchase. The impact of digital marketing communication was assessed on each stage of consumer buying decision process by making respondents rate the statements pertaining to each stage.

Impact on Need Recognition:

This is the first stage of consumer buying decision process whereby a consumer becomes aware of his/her need of buying process. Normally need recognition is „intrinsic" in nature. However, external „stimuli" may make a person aware about his/her need. So, researcher wanted to assess whether, digital marketing communication made a consumer aware of his/her need of buying process.

Impact on **Search for Information**. In this stage, consumer searches for the information that could help him/her in taking a correct decision**. Example** Car being a high involvement product category relies mainly of external sources of information.

Impact on Evaluation of Alternatives Evaluation stage involves bringing together and analyzing the information gathered in the search stage. Online technology helps completing this task as majority of digital channels allow consumers to save and compare the searches made by the consumers. It was intended to know the impact of digital marketing communication on evaluation stage of consumer buying decision process.

Impact on Selection and Purchase Selection and Purchase over digital channels especially in case of product like car can entail various activities like making a selection decision in terms of dealer, brand, timing of purchase, subscribing to a newsletter, joining a club, booking a car online, influence over considered brand for purchase and participation in online discussions. It was aimed to see if digital marketing communication affects the selection and purchase stage of consumer buying decision process.

Impact on Post Purchase Varieties of digital channels motivate customers to post and share their post purchase behavior. So, here in this stage the researcher aimed to see the overall satisfaction or dissatisfaction that an individual might express over digital channels. Researcher also aimed to see whether customers recommend any digital content about car to others. The stage aimed to assess the overall perception of the individuals towards using digital channels throughout the car buying decision making process.

Review of Literature

Cotte et al. - 2006 reveals in his study that the internet is used especially in order to access faster the required information when taking certain decisions and not for the personal

pleasure.

Sathish and A. Rajamohan - 2012. In their study Consumer behavior and buying behavior marketing, a general approach of consumer is taken. A consumer's buying behavior is seen as the sum of his interactions with his environment. Buying behavior studies are a component of the broader behavioral concept called psychographics." Harold W. Berkman and Christopher Gilson define buying behavior as "unified" patterns of behavior that both determine and are determined by consumption. The term "unified patterns of behavior" refers to behavior in its broadest sense. Attitude formation and such internal subjective activities may not be observable, but they are behavior nonetheless. Buying behavior is an integrated system of a person's attitudes, values, Sadia Afzal et al.,(2015) discussed in his paper the impact of online and conventional advertisement on consumer buying behavior of branded garments results revealed that quality, design, content of advertisement, loyalty of consumer towards brand and previous buying experience of consumer are significant factors which influence consumer buying behavior.

Fusun CIZMECI,Tuğçe ERCAN et al., (2015) investigated the impact of digital marketing tools in the creation on brand awareness generation among housing companies. The study focus towards measuring the awareness level of consumers about digital marketing and the impact of the digital channels on their purchase decision. It also examines the preference of digital channels by the consumers based on product types.

Statement of The Problem:

The tastes and preferences of the consumers are also changing at a rapid rate. Development of science and technology today's innovation becomes obsolete tomorrow. The buying behavior of younger generation not only influences their individual buying behavior, but also it influences the buying behavior of the family. As a marketer one needs to understand the changing needs of the customers and produce the goods and services accordingly.

Need of The Study :

Buying behavior of an individual influences many factors which affects the marketer to match the needs of the customers; so it is realized that there is a need to study Digital Marketing and its impact on consumer behavior.

Objectives of The Study:
- ❖ To identify the factors influencing the attitudes to consumers buying behaviors with reference to online purchase.
- ❖ To identify the factors that influence the online purchase behaviors of consumers.
- ❖ To examine the changing consumer behavior and their impact.

Research Design :

The main objective of this study is to investigate the essential factors that affect attitude to consumer buying behavior (online purchase) over the internet. The research is exploratory in nature and the data used for the analysis is primary in nature. The data was collected using a structured questionnaire. The questionnaire was designed following a wide review of the literature on online purchase. It was divided into four parts. The first part was based on personal profile of the respondents. The second part were based on the general awareness about the online purchase. The third part consisted of 16 close ended items based on five point Likert scale (Strongly Agree – 5 to Strongly Disagree – 1).

Sources of Data:

The study uses both primary and secondary data. Primary data is collected through the questionnaire. Such secondary sources are collected from the published articles, research papers, census survey, published general reports, sources through related websites etc.

Sample Design:
Simple random sampling technique is used.

Area of The Study:
The respondents are randomly selected from Tiruvarur Town. Tamil Nadu, India.

Sample Size:
100 respondents were randomly selected.

Limitations of The Study :
This study conducted in Tiruvarur town only. Study conducted for two months only- April- May 2019.

Classification of Respondents :

Category	Gender	No. of Respondents	Total
Gender	Male	53	
	Female	47	**100**
Age	Below 20 years	00	
	20- 30	13	
	30-40	56	
	40-50	22	
	50 and above	09	**100**
Education Level	Up to school	22	
	Graduate	56	
	Post Graduate and above	22	**100**
Employment	Govt Employee	28	
	Private Employee	56	
	Self employment/ business	16	**100**
Monthly Income	Below Rs.20000	38	
	Rs.20000 to 40000	32	
	Rs.40000 to 60000	21	
	Rs.60000 and above	09	**100**

Devices Used for Online Purchase.

Device	No. of Respondents
Desktops - Personal Computers	23
Laptops	10
Tablets	04
Smart phones	63
Total	**100**
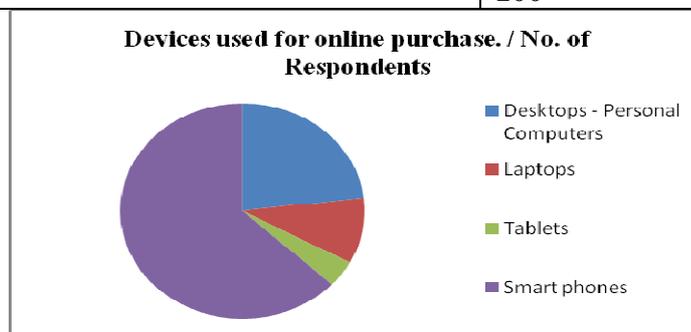
Data Analysis :
Important steps is to analyze the data and discuss the findings. In this part researchers will discuss the empirical findings from this study. The data analysis mainly concerns primary data collected in the form of questionnaires distributed .Below table, shows the results of

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frequency for respondent's agreement with statements. Each statement is considered as one module.

Modules (Online shopping Mode) / scale point	Strongly (5)	Agree (4)	Uncertain (3)	Disagree (2)	Strongly Disagree (1)	Total Weights	Rank
Convenience	**Frequency**						
Get delivery on-time by shopping on-line	20 (100)	15 (60)	20 (60)	30 (60)	15 (15)	295	11
Detailed information is available while shopping online	24 (120)	21 (84)	15 (45)	25 (50)	15 (15)	314	8
Products can be purchased anytime 24 hours a day	40 (200)	25 (100)	20 (60)	10 (20)	05 (5)	385	1
Easy to choose and make comparison with other products..	30 (150)	25 (100)	20 (60)	05 (10)	20 (20)	340	4
Website Design/Features	**Frequency**						
Helps me in searching the products easily	20 (100)	10 (40)	30 (90)	30 (60)	10 (10)	300	10
I prefer to purchase from a websites provides safety and ease of navigation and order	15 (75)	20 (80)	25 (75)	24 (48)	16 (16)	294	12
Helps in selecting the right product	30 (150)	25 (100)	30 (90)	10 (20)	05 (5)	365	3
Familiarity with the website before making actual purchase reduce the risk of shopping	20 (100)	25 (100)	20 (60)	15 (30)	20 (20)	310	9
Prefer to buy from website that provides me with quality of information	27 (135)	22 (88)	18 (54)	18 (36)	15 (15)	328	7
Time Savings	**Frequency**						
Takes less time to purchase	35 (175)	20 (80)	30 (90)	10 (20)	05 (5)	370	2
Does not waste Time	29(145)	20(80)	18(54)	18(36)	15(15)	330	6
Takes less time in evaluating and selecting a Product.	32 (160)	17 (68)	18 (54)	16 (32)	17 (17)	331	5
Security & Safety	**Frequency**						
Feel safe and secure	10 (50)	20 (80)	30 (90)	30 (60)	10 (10)	290	14
Protects my security	05 (25)	10 (40)	42 (126)	38 (76)	05 (5)	272	16
Like to shop online from a trustworthy website	12 (60)	20 (80)	25 (75)	30 (60)	13 (13)	288	15
Return policy	**Frequency**						
Opinion about return of goods, claims while find differences in order, quantity, function -, amount refund etc.,	12 (60)	20(80)	32(96)	21(42)	15(15)	293	13

Calculated Data (Primary Data). Figures shows in brackets are number of respondents * scale point.

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Findings:

From the above study it is found that-

- ❖ More number of consumers of the present time have access to the digital media but lack awareness about its optimum utilization.
- ❖ Majority of the respondents feels that they can purchase products at any time - is possible through online.
- ❖ Respondents feel that they take very less time to purchase.
- ❖ The factors which influence the buying behavior of the consumer includes, lifestyle, attracting the opposite sex, purchasing power, family background, employment status of the consumer, etc.
- ❖ In present scenario use of Tablets and Desktops has decreased in a big ratio. Now Smartphone's are widely in use.
- ❖ Now every category like hospitals, schools, offices prefers to use Smartphone's in place
- ❖ of tablets because they are easily accessible.
- ❖ The use of Smartphone's has been increased because they are easy to carry due to which
- ❖ Shopping behavior has also grown.
- ❖ Most of the respondents simply agree with return policy of the seller, when they returned products to the seller.
- ❖ More number of respondents (32) simply agrees the return policy of the seller.
- ❖ the method- products can be purchased anytime 24 hours a day (24*7) at any where plays a vital role more influence over the buying behavior method.

Conclusion.

Digital technology has changed the retail landscape over the past several years, and there is every indication that it will continue to do so. The evidence of this can be seen in consumer surveys, which display the extent to which digital tools have become integrated into the shopping experience. The Digital marketing which has revolutionized the economy in general and marketing in particulars poses many threat and challenges to the marketer in the competitive market. India needs talented Digital marketers who can use this opportunity which can bring a revolution. To match the requirement of the consumer segment, the present markets is doing lot of research to understand the consumer and their buying behavior pattern. The buying behavior of consumer, their purchasing power, awareness about the products etc. have greater influence on the individual and family buying behavior. It also helps the marketers to understand the consumer in a better way to implement suitable marketing strategies so that the consumers can be retained the present and potential market can be captured.

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Role of Nationalized Banks in the Development of Allied Activities

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Introduction:

The term allied activities denote a set of activities like poultry farming, dairy farming, sheep/goat rearing, forestry etc., under taken by the small and marginal farmers. Landless laborers and rural women folk undertake such activities to maintain the tempo of their economic life. Integrated growth of rural economic life means total transformation in the socio-economic well-being of not only the farmers who possess sizable agriculture land but also the rural masses who do not have land to till.

It is universally accepted that when an excessive pressure of population lead to the subsequent addition to the labour force, the agriculture sector alone is neither in a position to create additional productivity employment opportunities nor it can be provide sufficient income to sustain the lively hood of the rural household's more expressly, even in agriculturally prosperous and high growth region the potential for further development i,e. agricultural by-products like allied activities are essential. Nationalized banks are expected to play an active role in social banking activities is examined by analyzing the composition of the total credit provided by the commercial banks for allied activities with the help of the following parameters.

Objective:

1) analyse the role of nationalize Bank in the Development of Allied Activity, in the area of Bagalkot District
2) Analyse the growth of credit disbursement of Allied Activity.

Research Methodology:

The study depends upon secondary data only. Secondary data regarding the target and achievement of banks under study were obtained from the Annual Credit Plan report of Lead bank from 2013-14 to 2018-19. Additional information was supplemented by publications, reports of offices concerned such as the office of the Assistant Director of Statistics, Joint Directorate of Agriculture, Office of Animal Husbandry, Fisheries Development Department, Aavin Milk Society, District Industrial Centre and NABARD in Bagalkot District.

Credit for allied activities (Rs. In lakhs)

Year	Amount Credit for allied activities	Growth Rate	3-yr Moving Averages/ Trend
2010-11	183.45	--	*---
2011-12	177.6	-3.18	399.86
2012-13	838.53	370.42	355.59
2013-14	50.65	-93.95	350.22
2014-15	161.49	218.83	101.99
2015-16	93.82	-41.9	148.53
2016-17	190.27	102.8	248.16
2017-18	460.4	141.97	309.61
2018-19	278.17	-39.58	*---
G.M	199.951		

Time Series Analysis

3 year moving average method

X - axis : Year

Y - axis : Obs and Trend Values
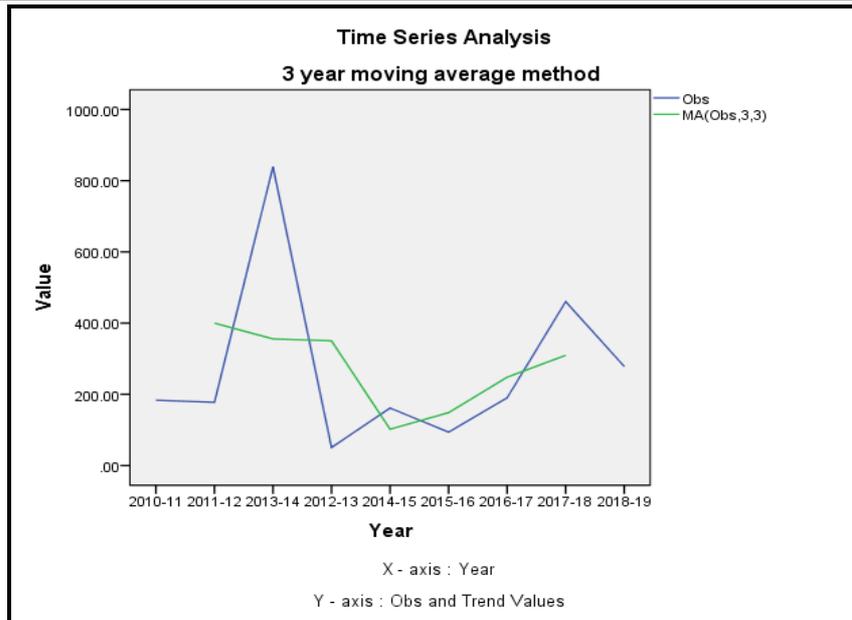
Table No.5.15 shows that the Credit for allied activities in Bagalkot District by a Nationalized banks there have been ups and downs. In the year 2010-11 credit amount Rs183.45 lakhs,that has decreased Rs 177.60 lakhs, growth rate negative -318% again it has increased by Rs 838.53lakh the growth rate 370.42% after that years ups and down over a period of study. The growth of CAGR is only 5.36% the average is 73.53.the State Government introduce Pashu Bhagya scheme, Rural infrastructure Development Fund (RIDF Scheme-24),National Fisheries Development Board (NFDB), Rashtriya Krishi Vikas Yojana (RKVY), Poultry Venture capital funf (PVCF)above these scheme giving training and financial assistance to the beneficiaries. Natinalized Banks give information to the applicants , so they were get more benefits and generate employment.

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The Shravana Tradition in Roppa

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Introduction:

During Shravana festival and family rituals, Myasa Beda tribals pay their first tribute to God's oxen and even have a burial ground for them. When the rains fail, even God's own oxen and their owners have no option but to migrate. The Myasa Beda tribals, indigenous to Challakere and Molakalmuru taluk in Chitradurga, are doing exactly this taking their cattle to greener pastures in Malnad as they fear they will be cursed by their ancestors if they fail to protect the revered oxen. As many as 12 sects of Myasa Bedas rear the oxen and believe that these are the reincarnation of their deceased elders. The oxen are reared in a 'roppa'(A gathering place for cattle) or open field fenced with thorn with a Kilari(Traditional Animal Husbandry)- the holy title given to a Myasa Beda tribal who rears the cattle, keeping a watchful eye. Now, these Kilaris'(Traditional Animal Husbandry) are migrating along with the oxen to Malnad region in search of fodder for the holy cattle. According to tribal norms, these Kilaris must live a rigorous religious life. They wear a small piece of white cloth around their waist and a Kambli or woolen blanket on their shoulders and do not wear footwear. They consume only self prepared food, cooked in a pot. "For the last ten years, we are facing drought. On top of this, our vast grazing land was taken over by the government. We are seeing the death of eight to ten oxen every week because of fodder scarcity.

Ritual in Roppa:

Pastoralism is the part and parcel of Mysabeda tribe. The people of this community treat livestock as their deities. The Kilari (Traditional Animal Husbandry) culture and Roppa culture of this tribe believes that the oxen they rear are the reincarnation of their ancestors. The oxen are reared in a 'roppa' or open field fenced with thorn with a Kilari- the holy title given to a Myasa Beda tribal who rears the cattle, keeping a watchful eye. According to tribal norms, these Kilaris must live a rigorous religious life. They wear a small piece of white cloth around their waist and a Kambli or woolen blanket on their shoulders and do not wear footwear. They consume only self prepared food, cooked in a pot. During every festival and family rituals, Myasa Beda tribals pay their first tribute to God's oxen and even have a burial ground for them. They bury the dead ox after removing horns and leave the removed horn in the burial ground. The hunter and cattle rearing grazing community follows a pastoral culture. The Myasabeda live in villages in the neighborhood of lands affording abundant pasturage and facilities for cultivation Their villages are hedges round with pinkly-pears, or thorns of jali, or with milk-bushes They were probably once nomadic, but are now settled m villages of their own, though they change to new spots once m every four or five years, or whenever their cattle die m large numbers, or some pollution is suspected to have affected Their huts are supported by pillars. Mud walls are sometimes employed to support the thatch, but the use of pillars ensure prosperity They do not use doors for their houses, but close the passage with thorns Myasabeda community leaders believe that living

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in mud-roofed houses is inauspicious The shape of the roof may be gabled, or rounded, but that of the temple-house is always of the latter type The roof may consist of a thatch of clay, or leaves. Each village is generally composed of a number of families of the same exogamous group.

Odapu Haakuvudu(Spraying):

As a rule, Myasabeds live in localities where lands are abundant for pasturage and cultivation. But as local failures of ram frequently occasion a want of forage near the huts, some of them have the flocks to other Myasbedas, giving them dung of their fold for the trouble which they occasion or live m the midst of woods, m places where the small reservoirs, have been formed to supply the cattle with water All the breeding and young cattle, with all the sheep and goats are earned on these expeditions, leaving a few labouring cattle and the buffaloes m charge of the women at home, and men who can be spared from accompanying the flocks. At this tune they never sleep m a hut but are wrapped up in their blankets and accompanied by their dogs they lie down among the cattle within the folds where all night they bum fires to keep away the tigers Sometimes these ferocious animals break through the fence and kill or wound the cattle The cattle are once a day conducted to the water, and the calves after they are a moth old, follow their masters to pasture. Looking more closely at the cattle in the water basin and listening to what the women tell about this image, I learnt there was another meaningful layer in the Odapu Hakuvudu that concerned prosperity and fertility in the family. When pointing at the small cow dung figures in the river/lake, some people said these were the bathing buffalos, others said they were the children in a mother's womb. When asked, they confirmed they could be both. Through this material visualisation of the family in the cow dung figure, we come to see different aspects that are vital to tribal life; tribal families include both humans and animals; tribes consider their cows and buffalos to be their children.

Mukku Teerisuvudu (Dullness of the throat):

Religious beliefs of Myasbeda are characterized by the practice of ancestral worship, worship of deity practice. For Myasabeds, there are many gods and common gods. When they worship the main gods and goddesses, it will be a grand celebration. During the time of the celebration, the whole village put on a fine appearance. Myasbedas also worship their ancestors They believe that soul of their relatives come close to their houses during the time of the festival. During the festivals, they beat drums In fact no function or festival is held without drums. If any important person dies, a special Puja is performed. They recall their ancestors and other relatives died long back, pray them and offer golden cobra and scorpion shaped ornaments and perform Puja. On the whole, Mysabeds are prime devotees of their ancestors and cultural heroes of their community. They have temples for different gods. They decorate their deities with various ornaments. They light lamps just as the country festival is celebrated. They also celebrate many other festivals. During this time, they worship oxen. The oxen are given a good bath that day, decorated with colour on the body and taken m procession in the evening. They light a fire and the oxen are made to move around the fire.

Harake Kattikolluvudu(Spreading):

Cattle occupy a vital position in Roppa culture. The cattle help the humans to sustain the family. Cattle dung has several uses: as an organic and ecologically sound manure for the fields, or processed into cattle dung cakes as fuel, as a disinfectant in homes, and for coating walls and

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floors because of its capacity to absorb malignant energies, to purify the space, and to cool the house in summer times. The intimacy and good feeling people have with cattle dung is also experienced when eating the most favourite local bread which is baked directly in cattle dung cakes and consumed with lentils. Because of all these nourishing and life-giving capacities the cattle is a symbol of prosperity and fertility, which applies, par excellence, to the cattle dung as well. The traditional caste occupations in the villages are largely replaced by agriculture and animal husbandry; by work in dairies oriented at the urban market, and by wage labour in Roppa. When asked about the gendered division of labour, people say both men and women engage in agriculture and cattle breeding. In practice, however, the women do most of the work: they feed, milk and care for the animals, decide about crossing their female cattle and care for the baby animals; clean the stable and collect the dung; carry water; cultivate the fields; and collect fodder and firewood. Men assist in the fields when necessary, help with transportation and marketing in town, and take over women's animal care mainly when running a commercial dairy. Men doing wage labour commute between the village and the city, leaving the bulk of agriculture to their wives but boosting the household economy with cash money, often used for house construction and luxury goods. The women studied state that they love their work and appreciate the husband's financial contribution. Only a few women received no support from their husband; some were widowed, others complained about their husband's drinking habits. These women helped themselves out with sharecropping.

Kasu Meesalu Arpisuvudu(Dedication of cashew reserves):

On Monday morning, soon after the sunrise people offer a puja to cattle and offer money. This money is kept among the Kilaris(Traditional Animal Husbandry). This ritual is called as Kasu Meesalu Aprisuvudu (offering money). After offering money to the cattle, people leave for their villages. Pastoralism is an economic activity involving the care of herds of domesticated live-stock. In its traditional form, it is either practiced as the main mode of subsistence or combined with agriculture. Pastoralism functions as a cultural system with a characteristic ecology.' Pastoral is the kind genre of literature that takes as its subject the society of shepherds, considered as exciting a freedom from the complexity and corruption of more civilized life. Historically, pastoralism is considered an amalgam of mixed agricultural and herding subsistence patterns, in adaptation to grass lands and marginal areas not suitable for growing cereal plants. Pastoralism was probably the consequence of new problems in managing domesticated plant and animal resources.

I study visited many villages in Chitradurga from 15.09.2020 to 34.09.2020. On 17.09.2020, I went to Kampala Devarahatty to take part in the cultural programs organized as part o amavasya. It is quite common to hold ceremony in which the souls of the ancestors are propitiated on the day of Dasara festival but in this village people have the practice of offering puja to the souls of their ancestors on the day of Amavasya.

Infromar:

1. Mallayya, 80, Kilari(Traditional Animal Husbandry)- muttigarahalli.
2. Gonchayya, 68, muttigarahalli.
3. Basanna, 35, The Urummer, tayakana halli.
4. Paapanayaka, 45, hudem.
5. Bommayya, 32, Hotel owner, muttigarahalli.

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Usage of Social Media among Medical Professionals during the COVID-19 Pandemic: A Case Study in Kannur District, Kerala

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Abstract:

The purpose of the present study is to identify the usage of social media in the profession during the COVID-19 pandemic among the medical professionals in Kannur District, Kerala, India. Social media provides health care professionals with tools to share information, to debate health care policy and practice issues, to promote health behaviours, to engage with the public, and to educate and interact with patients, caregivers, students, and colleagues. The study is carried out via online questionnaires due to the current scenario. The study found that for medical professionals, social media is one of the best ways to access current information and thereby update their professional knowledge. Social media like Whatsapp, Facebook etc helps them to share thoughts and enable communication with other colleagues and industry professionals. Social media platforms impact both the personal and professional life of medical professionals. The study found that the crisis of the pandemic has accelerated the transformation of the communication sector, creating new challenges for the communication industry and the medical industry.

Keywords: Social media usage, Medical Professionals, COVID-19, Case Study, Kerala, India

Introduction :

The COVID-19 has been declared as global pandemic. It is an infectious disease which also causes combination of diseases and the consequences will be more. During this pandemic social media become one of the best way to transfer information at a fast pace, unfortunately misinformation too. The spread of this information can be compared to the pandemic itself, but the frictionless communication inherent in social media allows information to spread even faster than the virus[4]. However the people cannot live without social media as they are using social media 24*7. It is the place where people can share their thoughts, finding new ideas and making connection with other people. Social media is a platform where anyone can search, access and share data on anything.

The web has changed the data trade stage where anyone can search, access and share data on anything. During the COVID-19 pandemic the world correspondence through online media is getting inescapable in everyday life and almost in all professions. In any event, for healthcare related data, the web turned into the principal alternative for a layman to look for something to happen steadily. These days' clinical experts are additionally associated with network-related frameworks like social media, diverse clinical databases, online journals and so forth to improve their insight by getting approved and novel advancement arose in the medical science field. In the medical field, the medical professionals likewise proposed keeping up the confidentiality of their patients through open talking or imparting through social media. Many of the doctors delivers classes on the do's and don'ts to prevent COVID-19 through their Face book pages and

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You tube channels. Thus the interactions of healthcare professionals through social media make awareness among the common society as it is a source of trustworthy information.

The phenomenon of COVID-19 as a pandemic has changed the way in which the populace regards information in general and health information in particular. Beginning with the fundamental reason the health crisis has set off the quest for data and generalized massive consumption. Social media gives health care professionals with tools to share data, to discuss medical care strategy and practice issues, to advance wellbeing practices, to draw in with the general population, and to instruct and connect with patients, caregivers, students, and associates. Health care professionals can utilize social media to possibly improve wellbeing results, build up an expert organization, increase individual attention to news and revelations, persuade patients, and give wellbeing health information to the community. Physicians most often join online communities where they can read news articles, listen to specialists, research medical developments, consult colleagues regarding patient issues, and organization. There they can share cases and thoughts, discuss practicing challenges, make references, spread their examination, market their practices, or participate in wellbeing promotion in health advocacy. A developing minority of doctors likewise utilizes online media to discuss straightforwardly with patients to increase clinical consideration.

In contrast to doctors, drug specialists have been generally delayed to adopt social media. A large part of the development in the expert utilization of online media among this gathering seems to include drug specialist explicit interpersonal organizations. In medication, media-sharing sites can be significant assets for education, community building, advertising, and marking. Among the most striking media-sharing sites for medical services experts is The Medical professionals Channel which hosts various programs including clinical news, proceeding with clinical training, and medical care related entertainment.

Review of Literature:

Subedi and others (2020) conducted a cross sectional, mixed method study carried out among medical and dental interns of KIST Medical College and Teaching Hospital. In order to gain in depth formation, qualitative study was done with the help of Focus Group Discussion and the collected data were analyzed using SPSS 26.0. The study identified that many of the intern doctors are obtaining information regarding COVID-19 from unauthentic sites on social media. They suggested that every individual, notably health workers, should be committed to authentic and evidence-based news searching, reading and sharing in social media to upgrade the knowledge related to COVID-19, maximize the precaution and minimize unnecessary panic. **Saud and others (2020)** analyzed the information on seeking support and awareness about COVID-19 through social media platforms among the Indonesian society. They collected data through online surveys via Whatsapp and Facebook and analyzed using MS Excel and SPSS V.25. Whatsapp was the most used social media during the Covid-19 pandemic. Similar studies have been conducted by **Subedi and others (2020)** to explore whether or not intern doctors are using social media rationally in regards to COVID-19. They were carried out among medical and dental interns of KIST Medical College and Teaching Hospital. The study found that 65% intern doctors most often used social media to gain information about COVID-19 of which 87.1 % mostly used Facebook. **Saadeh and others (2020)** conducted a cross-sectional study to understand how social media affects the students' academic performance and career development. The study was conducted among the medical and dental students in the Jordan

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University of Science and Technology. The study found that most of the students did not use social media as a trusted source of information. And also those who completed more years of their medical or dental education were less likely to use social media for medical information and were more likely to follow medical online sites or forums. **Alanzi and Susan (2019)** cross-sectional study was conducted among 235 physicians from different regions of Saudi Arabia. The most common social media used by the respondents was Facebook, and the majority of the participants agreed that social media improved their knowledge and skills. However, most of the participants did not interact with patients using these tools, did not feel comfortable conducting an online consultation, and believed that social media affected the choice of the healthcare provider. **Irfan and others (2018)** carried out a comparative study among family medicine residents and physicians to analyze the utility of social media. The study was based on a self-structured questionnaire and was analyzed using SPSS software. It was found that the use of social media enables them to accomplish job tasks, improve job performance, productivity and more effective patient care when using social media. **Fatimah and Alanzi (2018)** evaluated the perception of health-care professionals in Saudi Arabia toward the usages of social media in health-care delivery. They collected data through a cross sectional online survey and were analyzed using SPSS software version 19.0. The results showed that social media can represent a useful tool by which physicians may advertise their services and disseminate general health information. **Surani and others (2017)** examine the usage of social media among healthcare providers to understand how the social media usage affects the quality of patient care. A sample size of 360 was considered for the study in the coastal bend region of Texas and analyzed using MS Excel. It is found that physicians contribute to medical forums online more than nurses. More than half of physicians and nurses encouraged their patients to learn about their disease processes online. The study suggested that social media is an important tool for healthcare providers to help familiarize patients with their clinical conditions. This is especially beneficial for those who are unable to access healthcare information easily, including ethnic minorities and lower socio-economic groups. **Campbell and others (2016)** made a qualitative study to understand perspectives and experiences of these "early adopter" physician bloggers and social media users. The study used a snowball sampling method and conducted through telephone interviews among 17 physicians. The study mentioned that according to physicians spending more time on social media is not feasible. **Jayaseelan and others (2015)** attempted to investigate to identify which social media is being mostly used by the medical professionals as an informative platform and to enhance their profession in a better way. The research was conducted using 'Expost - Facto' - Research Design, a non-experimental research method. The number of male and female doctors being used on social media was almost equal. Medical professionals use Facebook, twitter and Google plus for sharing information mostly.

The review of related studies indicated that most of the studies are carried out via online questionnaires due to the current scenario. The study consists of a review of research done in the field of social media during the period of 2015-2020. From this related review it was found most of these studies conducted abroad. There is relatively less study on usage of social media among medical professionals in India. Most of the study revealed that the medical professionals include social media in their profession positively.

Objectives of the study:

Objectives of the present study are following:

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- To identify the usage of social media in profession during COVID-19 pandemic among the medical professionals in Kannur District, Kerala.
- To find out the different social media platforms used by the medical professionals.
- To find out the frequency of using social media by medical professionals.
- To investigate the type of information accessed by the medical professionals on social media.
- To point out the view of medical professionals on social media communication in the pandemic situation.
- To understand the benefits of using social media by medical professionals during the Covid-19 pandemic.
- To investigate the opinion about the downsides of social media among medical professionals.

Methodology:

The current investigation was directed through an online study among medical professionals in Kannur District, Kerala. Research instruments containing closed-ended questions were used for data collection. The survey was outlined based on objectives under study and checking on review of literature. The respondents were approached through Whatsapp, Facebook messenger and Gmail. The study was conducted between August and December of 2020. The questionnaire was distributed among 119 doctors who worked in Kannur district on a random basis. Out of these 96 respondents, about 39 female respondents and 57 male respondents were answered to the questionnaire. The data were entered and analyzed in Microsoft Excel.

Scope and limitations of the study:

The present study attempts to evaluate the usage of social media among medical professionals in Kannur district, Kerala, India. Most of the medical professionals are busy with their work so did not get many responses and the response rate is 80.67%. The investigator mainly depended upon the questionnaires for the collection of data. The effort has been taken to make the study as accurate as possible. However, some unavoidable limitations also arise in this study. The major limitation is the study is mainly limited to some medical professionals in Kannur. The findings cannot be generalized.

Results:

Gender wise distribution of respondents:

The gender of the scholars is a significant one. Table 1 gives the gender wise distribution of respondents.

Table 1: Gender wise distribution of respondents

Gender	No.	Percent
Male	57	59.37
Female	39	40.63
Total	**96**	**100**

As shown in Table 1 and Figure 1, out of 96 respondents 57 (59.37 per cent) respondents are male and 39 (40.63 per cent) are female.

Figure 1: Gender wise distributions of respondents
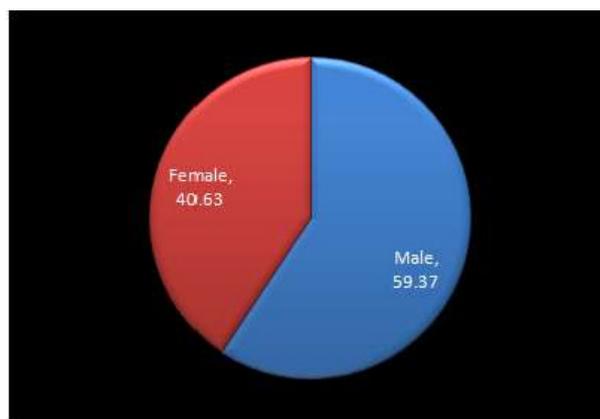
It shows that the number of male respondents is more than the number of female respondents.

Use of social media in profession during COVID-19 pandemic

The investigator collected and analyzed data from the medical professionals to know whether they are using social media in their profession during the Covid-19 pandemic.

Table 2: Use of social media in profession during COVID-19 pandemic

Use of Social Media in profession during COVID-19 pandemic	Male	Female	Total
	Number (%)	Number (%)	Number (%)
Yes	48 (84.22%)	36 (92.31%)	84 (87.5%)
No	9 (15.79%)	3 (7.69%)	12 (12.5%)
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

Table 2 shows those 48 (84.22%) male respondents and 36 (92.31%) female respondents are utilizing social media in their profession. Only 9 (15.79%) male respondents and 3 (7.69%) female respondents are not utilizing social media in profession. Out of the total 96 respondents just 84 (87.5%) respondents are utilizing social media and 12 (12.5%) respondents are not utilizing social media in their calling during Covid-19 pandemic.

Figure 2: Use of social media in profession during COVID-19 pandemic
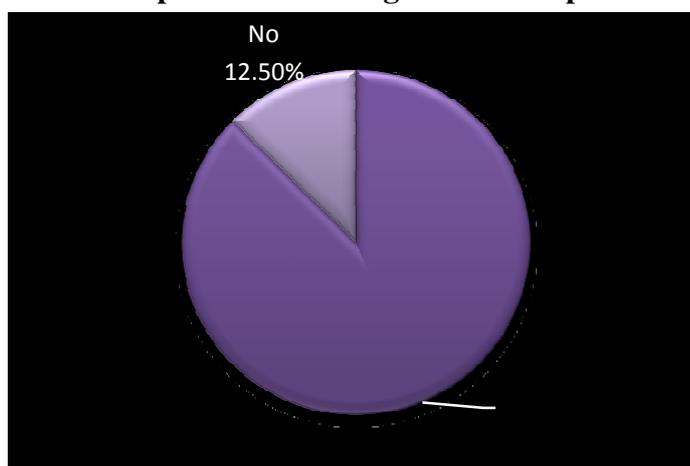
Types of social media used by medical professionals

The different types of social media used by medical professionals are shown in Table 3 and Figure 3.

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Table 3: Types of social media used by medical professionals

Types of social media used by medical professionals	Male	Female	Total
	Number (%)	Number (%)	Number (%)
Blog	18 (31.57%)	6 (15.38%)	24 (25%)
Twitter	8 (14.03%)	4 (10.25%)	12 (12.5%)
Facebook	21 (36.84%)	15 (38.46%)	36 (37.5%)
Whatsapp	57 (100%)	36 (92.30%)	93 (96.87%)
Youtube	21 (36.84%)	27 (69.23%)	48 (50%)
LinkedIn	11 (19.29%)	8 (20.52%)	19 (19.79%)
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

As per Table 3, 57 (100%) male respondents and 36 (92.30%) female respondents are using Whatsapp, 21 (36.84%) male respondents and 27 (69.23%) female respondents are using Youtube, 21 (36.84%) male respondents and 15 (38.46%) female respondents are using Facebook, 18 (31.57%) male respondents and 6 (15.38%) female respondents are using Blog, 11 (19.29%) male respondents and 8 (20.52%) female respondents are using LinkedIn and 8 (14.03%) male respondents and 4 (10.25%) female respondents are using Twitter. Out of the complete respondents 93 (96.87%) respondents are using Whatsapp, 48 (50%) respondents are using Youtube, 36 (37.5%) respondents are using Facebook, 24 (25%) respondents are using Blog, 19 (19.79%) respondents are using LinkedIn and only 12 (12.5%) respondents are using Twitter.

Figure 3: Types of social media used by medical professionals
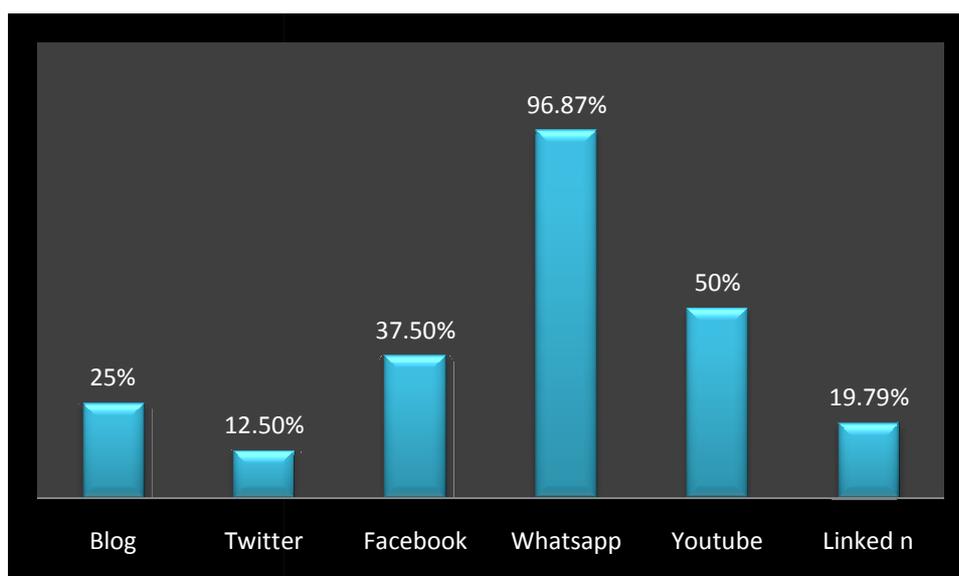
Hours spend on social media

An analysis on hours spent by medical professionals is shown in Table 4.

Table 4: Hours spend on social media

Hours spend on social media	Male	Female	Total

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	Number (%)	Number (%)	Number (%)
0 to 2 hours	23 (40.35%)	19 (48.72%)	42 (43.75%)
2 to 4 hours	34 (59.64%)	20 (51.28%)	54 (56.25%)
4 to 5 hours	0	0	0
more than 5 hours	0	0	0
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

The above table shows that 23 (40.35%) male respondents and 19 (48.72%) female respondents are spending 0 to 2 hours and 34 (59.64%) male respondents and 20 (51.28%) female respondents are spending 2 to 4 hours on social media daily. Among the total respondents, 42 (43.75%) respondents are using social media in 0 to 2 hours and 54 (56.25%) respondents are using social media in 2 to 4 hours. None of the respondents spend more than 4 hours on social media.

Figure 4: Hours spend on social media
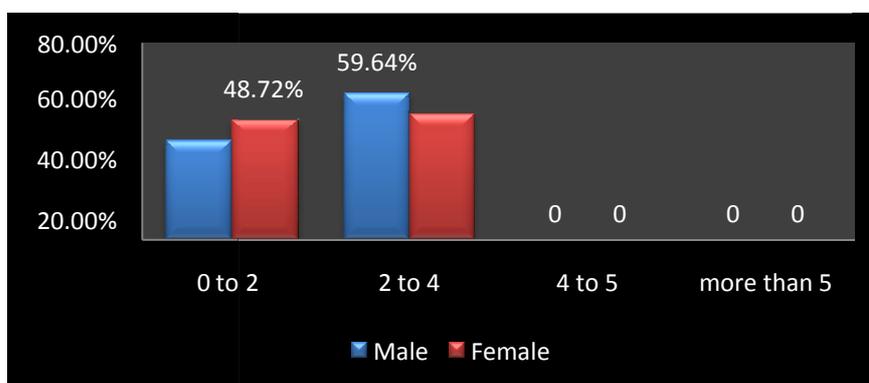
Types of information accessed through social media

Table 5 shows the types of information accessed by medical professionals through social media.

Table 5: Types of information accessed through social media

Types of information accessed through social media	Male	Female	Total
	Number (%)	Number (%)	Number (%)
Disease and related information	15 (26.31%)	9 (23.08%)	24 (25%)
Information on drugs	22(38.59%)	14 (35.90%)	36(37.5%)
General information	40 (70.17%)	38 (97.44%)	78(81.25%)
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

Table 5 present that 40 (70.17%) male respondents and 38 (97.44%) female respondents are accessing General information, 22(38.59%) male respondents and 14 (35.90%) female respondents are accessing Information on drugs, 15 (26.31%) male respondents and 9 (23.08%) female respondents are accessing Disease and related information through social media. Out of the total respondents 78(81.25%) respondents are accessing general information, 36(37.5%)

respondents accessing information on drugs and 24 (25%) respondents are accessing disease and related information through social media.

Figure 5: Types of information accessed through social media
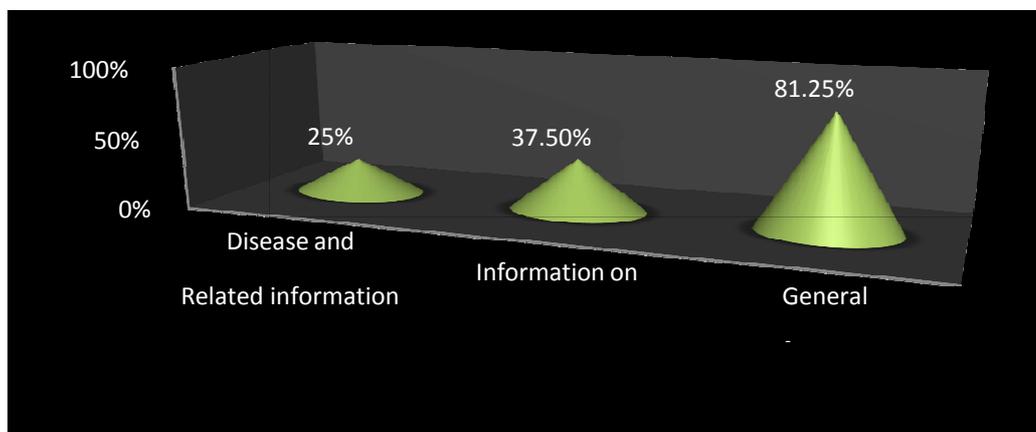
Purpose of using social media

Medical professionals are using social media for different purposes like updating professionals' knowledge, referring to articles or research papers, connecting with colleagues and family members and accessing entertainment contents.

Table 6: Purpose of using social media

Purpose of using social media	Male	Female	Total
	Number (%)	Number (%)	Number (%)
To update professional knowledge	25 (43.86%)	23 (58.97%)	48 (50%)
To refer article/ research information	22 (38.60%)	14 (35.90%)	36 (37.5%)
To connect with colleagues and industry professionals	30 (52.63%)	31 (79.49%)	61 (63.54%)
To stay in touch with family and friends	22 (38.60%)	26 (66.67%)	48 (50%)
To access entertainment content	23 (40.35%)	25 (64.10%)	48 (50%)
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

The data given in Table 6 shows that 30 (52.63%) male respondents and 31 (79.49%) female respondents are using social media to connect with colleagues and industry professionals, 25 (43.86%) male respondents and 23 (58.97%) female respondents are using social media to update professional knowledge, 23 (40.35%) male respondents and 25 (64.10%) female respondents are using social media to access entertainment content, 22 (38.60%) male respondents and 26 (66.67%) female respondents are using social to stay in touch with family and friends, 22 (38.60%) male respondents and 14 (35.90%) female respondents are using social media to refer article/ research information. Out of the total 96 respondents 61 (63.54%) respondents are using social media to connect with colleagues and industry professionals, 48 (50%) respondents are using social media to update professional knowledge, to stay in touch

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with family and friends and to access entertainment content and 36 (37.5%) respondents are using social media to refer article/ research information.

View of medical professionals on social media

Table 7 explains the view of medical professionals on social media like whether that provides relevant information in the current pandemic situation.

Table 7: View on social media

View on social media in the current pandemic situation	Male	Female	Total
	Number (%)	Number (%)	Number (%)
Provide reliable information	31 (54.39%)	29 (74.36%)	60 (62.5%)
Easy to manage information	24 (42.11%)	18 (46.15%)	42 (43.75%)
Quick and better communication	21 (36.84%)	33 (84.62%)	54 (56.25%)
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

The above table presents that 31 (54.39%) male respondents and 29 (74.36%) female respondents are opined that social media provide reliable information, 21 (36.84%) male respondents and 33 (84.62%) female respondents are opined that social media provide quick and better communication and 24 (42.11%) male respondents and 18 (46.15%) female respondents opined that it is easy to manage information on social media. Out of the total respondents 60 (62.5%) respondents opined social media provide reliable information, 54 (56.25%) respondents opined that social media is a quick and better communication and 42 (43.75%) respondents opined through social media it is easy to manage information.

Benefits of social media usage in the current pandemic situation

Social media has a number of benefits in any profession. The benefits of social media in the medical profession during the current pandemic situation are shown in Table 8.

Table 8: Benefits of social media usage

Benefits of social media usage	Male	Female	Total
	Number (%)	Number (%)	Number (%)
At help in health-care delivery	13 (22.81%)	17 (43.59%)	30 (31.25%)
Improve my professional knowledge	34 (59.65%)	32 (82.05%)	66 (68.75%)
Good tool for patient education	16 (28.07%)	11 (28.21%)	27 (28.13%)
Good tool for public health awareness	28 (49.12%)	14 (35.90%)	42 (43.75%)
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

It shows that 34 (59.65%) male respondents and 32 (82.05%) female respondents are opined that social media improves their professional knowledge. 28 (49.12%) male respondents and 14 (35.90%) female respondents opined social media is good tool for public health awareness, 13 (22.81%) male respondents and female respondents are opined social media helps in health care delivery and 16 (28.07%) male respondents and 11 (28.21%) female respondents are opined that social media is a good tool for patient education. Among the total 96 respondents,

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66 (68.75%) respondents opined social media improves professional knowledge, 42 (43.75%) respondents opined social media is a good tool for public health awareness, 30 (31.25%) respondents opined social media is at help in health-care delivery and 27 (28.13%) respondents opined social media is a good tool for patient education.

Downsides of social media:

Authenticity problems, privacy problems, misuse are some of the drawbacks of social media. Table 9 analyses the downsides of social media in the view of medical professions.

Table 9: Downsides of social media:

Downsides of social media	Male	Female	Total
	Number (%)	Number (%)	Number (%)
Authenticity problems	15 (26.32%)	16 (41.03%)	31 (32.29%)
Privacy problem	10 (17.54%)	26 (66.67%)	36 (37.5%)
Misuse	33 (57.89%)	27 (69.23%)	60 (62.5%)
Constant updating	7 (12.28%)	5 (12.82%)	12 (12.5%)
Poor network accessibility	10 (17.54%)	8 (20.51%)	18 (18.75%)
Fake information	5 (8.77%)	1 (2.56%)	6 (6.25%)
Total	**57 (100%)**	**39 (100%)**	**96 (100%)**

Table 9 reveals that 33 (57.89%) male respondents and 27 (69.23%) female respondents are opined misuse, 10 (17.54%) male respondents and 26 (66.67%) female respondents opined that privacy problem, 15 (26.32%) male respondents and 16 (41.03%) female respondents are opined authenticity problem, 10 (17.54%) male respondents and 8 (20.51%) female respondents are opined poor network accessibility, 7 (12.28%) male respondents and 5 (12.82%) female respondents are opined Constant updating and 5 (8.77%) male respondents and 1 (2.56%)female respondents are opined fake information as the problems while using social media. Out of the total respondents, 60 (62.5%) respondents are opined misuse, 36 (37.5%) respondents are opined privacy problem, 31 (32.29%) respondents are opined authenticity problems, 18 (18.75%) respondents are opined poor network accessibility, 12 (12.5%) respondents are opined constant updating and 6 (6.25%) respondents are opined fake information are the problems faced while using social media.

Major Findings:

Coming up next are the findings in regards to the overall data about the utilization of social media among the medical professionals in Kannur area, Kerala.

1. The number of male respondents is more than the number of female respondents.
2. The majority of the medical professionals (87.5%) are using social media in their profession during the Covid-19 pandemic.
3. The majority of the respondents are using Whatsapp (96.87%) following Youtube (50%) and Facebook (37.5%). Twitter is the least used social media among medical professionals in Kannur district.
4. The male respondents are spending more time than the female respondents on social media. Most of the medical professionals under study did not spend much time on social media.

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5. The majority of medical professionals are accessing general information (81.25%) through social media more than information regarding disease (25%) and drugs (37.5%).

6. The purpose of using social media among more than half of the medical professionals is to connect with colleagues and industry professionals (63.54%). Even though fifty percent of medical professionals make use of social media to access entertainment content, to update their professional knowledge and to keep in contact with their family and friends. Comparatively less number of medical professionals using social media to refer to articles or research information (37.5%).

7. More than half of the medical professionals have a view that social media provides reliable information and it is a quick and better communication.

8. In the view of medical professionals, updating professional knowledge (68.75%) is the most benefit of using social media. They also remark social media is at help in health-care delivery (31.25%) and a good tool for public health awareness (43.75%) and patient education (28.13%).

9. Misuse (62.5%), privacy problems (37.5%) and authenticity problems (32.29%) are the major problems faced by the medical professionals while using social media.

Conclusion:

The Covid-19 pandemic has completely changed the lifestyle of humans in every sphere of the world. Due to following the COVID protocols most of the professionals engaged their work at home with the help of network platforms. Hence an increased use of social networks is one of the most far-reaching consequences of the COVID-19 pandemic. Even in the medical profession it is one of the best ways to access current information and thereby update their professional knowledge. Social media like Whatsapp, Facebook etc helps them to share thoughts and enable communication to other colleagues and industry professionals. The study is intended to understand how these communication platforms help the medical profession. It also draws results that reflect the actual use of social media in the medical profession. The social media platforms impact both the personal and professional life of medical professionals. It paves a way to promote communication of healthcare information, patient education, public awareness and professional interactions. The results of the study show a new paradigm of social networks in health communication. The conclusions show that the crisis of the pandemic has accelerated the transformation of the communication sector, creating new challenges for the communication industry and the medical industry.

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Women Empowerment

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Introduction: -

The first thing which we need to understand that women empowerment will just be a concept and dream unless women are educated. Education imparts empowerment. As said by Pt. Jawaharlal Nehru: "You can tell the condition of a nation by looking at the status of its women." One can define women empowerment in terms of promotion and acknowledgement of self-worth, social standing and financial development. Women's empowerment and promoting women's rights have emerged as a part of a major global movement and is continuing to break new ground in recent years. Days like International Women's Empowerment Day are also gaining momentum.[1]

Indian society consists of people belonging to almost all kind of religion beliefs. In every religion woman are given a special place and every religion teaches us to treat women with respect and dignity. But somehow the society has so developed that various type of ill practice, both physical and mental, against women have become a norm since ages. For instance, practice of dowry, female infanticide, domestic violence and other varied kind of discriminatory practices; all such acts consist of physical as well as mental element and therefore, the concept of women empowerment not only focuses on giving women strength and skills to rise above from their miserable situation but at the same time it also stresses on the need to educate men regarding women issues and inculcating a sense of respect and duty towards women as equals. However, discrimination, violence, and harassment at the workplace or in the closed walls of homes continue to exist. But, in rural and poor households, the situation is grim

Meaning: -

Women empowerment in simple words can be understood as giving power to women to decide for their own lives or inculcating such abilities in them so that they could be able to find their rightful place in the society. As an impact of the industrial revolution, the role that women played in society began to change. Along with socialist fervors, women began to realize their self-worth and wanted equal opportunities in all realms of life. The United Nations began celebrating International Women's Day in 1975.In the developed and western world where the feminist movements began, significant improvements have been made. But the gender bias exists still, and not many women are making it to the top rungs of the corporate ladder.

Accordingly, it has mainly five components:

Generating women's sense of self-worth; Women's right to have and to determine their choices; Women's right to have the power to regulate and control their own lives, within and outside the home; and Women's ability to contribute in creating a more just social and economic order.

Benefits of Women Empowerment: –

Development of any kind cannot be achieved when half of the population is neglected. So, all claims of the progress of humanity become void. We may not be harnessing our true

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potential as the super species on the Earth. The first step towards women empowerment is educating a girl child. It is said that when you educate a woman, you educate the whole society. With good education, girls can get high paying jobs and consequently wage gaps could be lowered. Increased health awareness prevents early pregnancy and malnutrition. When women have more freedom, they can involve in unexplored areas like politics[2]. Now we need better childcare policies, health reforms, and a flexible work environment for women. Another major concern is the safety of women. Though the #metoo campaign against sexual assaults has gained momentum, we need more stringent laws against violence and misbehavior of any form. A society where women feel secure and confident is sustainable in the long term. Since ages, it is women who have taken the onus for the wellbeing, peace, and progress of the family and the same can be applied to the entire community with the active participation of women[3].

Constitution of India and women Empowerment: -

Indian's constitution makers and our founding father were very determined to provide equal right to both women and men. It provides provision to secure equality in particular such as the Preamble, The fundamental rights, DPSP and other constitutional provision.

Fundamental Rights:

- Article 14 ensure to women the right to equality ; Article 15(10 specifically prohibits discrimination on the basis of sex ; Article 15(3) empower the state to take affirmative action in favour of women ; Article 16 provides for equality of opportunity for all citizen in matter relating to employment or appointment to any office ; And same is being mention in Article 39 and 42 of DPSP ; Through 73rd and 74th constitutional Amendment of 1933, provided 33.33% reservation in seats at different levels of election in local governance i.e. at Panchayat, block and municipality election etc.

Specific Laws for women Empowerment in India: -

Some of the following laws are provided which not only provide specific legal rights to women but also gives them as a sense of security and empowerment and these are: The Dowry Prohibition Act, 1976, The Maternity Benefit Act, 1961, The protection against Domestic Violence Act, 2005 and Amendment in Indian Succession Act, 1925 etc.

Governmental Schemes for Women: –

History was made when two female scientists from the Indian Space Research Organization led the country's second lunar mission Chandrayaan-2 from its inception to completion in 2019. Female leadership for a huge space mission challenged the meta narrative that rocket science is a profession reserved for men. Another milestone was reached when the Supreme Court upended the government's position on women serving as army commanders in 2020. Women were first inducted into the armed forces in 1992 and have served in a multitude of positions, including fighter pilots, doctors, nurses, engineers, signalers, etc. The Narendra Modi government has launched flagship schemes to promote gender equality, including Beti Bachao Beti Padhao (Save the Daughter, Educate the Daughter), Pradhan Mantri Ujjwala Yojana (a scheme to provide gas connections to women from below the poverty line households) and Mahila-E-Haat. The Bachao Beti Padhao Yojana scheme was launched in January 2015 to address the issue of a gender skewed ratio and generate greater welfare for the girl child. The focus is centred mostly on Northern India, including Haryana, Uttar Pradesh, Delhi, Punjab and

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Uttarakhand where the gender ratio is wider. The Mahila-E-Haat project, an online marketing campaign, was launched in 2016. It uses technology to support female entrepreneurs, self-help groups and non-government organisations (NGOs). Each scheme has its own unique objective, ranging from welfare of the girl child and community engagement to supporting aspiring female entrepreneurs. The government has also created the space for international agencies to work with state governments, local NGOs and private corporations. For instance, the World Bank is working closely with the federal government and the Andhra Pradesh government to improve the quality of public health services in the state, including maternal and child healthcare[4].

Priority Areas: -

Health including food security and nutrition- Focus on recognizing women's reproductive rights, shift of family planning focus also to males, expansion of health insurance schemes and addressing the intergenerational cycle of under-nutrition. Education Improve access to pre-primary education, enrolment and retention of adolescent girls, and address disparities with regard to ICTs ;Economy Raising visibility, engendering macro-economic policies, generate gender-disaggregated land ownership database, skill development and equal employment opportunities with appropriate benefits related to maternity and child care services ; Governance and Decision Making- Increasing women's participation in the political arena, administration, civil services and corporate boardrooms ;Enabling Environment Gender- perspective in housing and infrastructure, gender parity in the mass media & sports, and support services for all women especially the vulnerable, marginalized, migrant and single women ; Environment and Climate Change- Addressing gender concerns during distress migration and displacement in times of natural calamities due to climate change and environmental degradation. Promotion of environmental friendly, renewable, non–conventional energy, green energy sources for women in rural households[5].

Steps to be Taken: -

Maintaining the Education v/s Employment Ratio: It needs to be assured that the women education which is being subsidized very heavily is actually put to use for the country.
The remaining share of the women, which is educated and skilled but not participating in the labor force, should also be able to utilize its talent and contribute to the GDP of the country; Encouraging Women Entrepreneurship: Women shall not only be the seekers but also the creators of job opportunities ;Changing the Mindset: Girls, just like male child, should be asked their dreams, aims, aspirations in family as well as schools ;The idea that 'their dreams and career are as important as that of a male' must be instilled in the minds of girls right from the beginning ; The society also needs to recognise the role and importance of women in the development of the country; Families must have conversations with women about their choice of work; Recognizing Invisible Work: There is a need to invest significantly in the care economy and social protection, and redefine Gross Domestic Product to make work in the home visible and counted.

The concept of Temporary Basic Income introduced by UNDP can prove as a headstart to other similar initiatives. Providing Small Necessities is Empowerment too: Not just education, job and entrepreneurship lead to women empowerment but also providing basic and other small necessities is an empowerment itself. For example; a bank account in their name, a house of their own or even proper hygiene and sanitation facilities at workplaces, educational institutions etc. A

woman who is educated and has worked at places with these basic necessities provided is quite likely to ensure these facilities for the future generations she will be in touch with. [6]

Conclusion: -

If we want to bring about women empowerment in the true sense, there is crying need for the elimination of the male superiority and patriarchal mindset. Also, women need to be given equal opportunities for education and employment without any sense of discrimination. Unless there is attitudinal change in society towards women, merely arming them legal and constitutional rights will simply inadequate. Women empowerment is a starkly long journey but that doesn't imply that it is not worth the efforts. The fruits of women empowerment will require time to ripe and collaborative efforts but all for nothing but a greater good. The ripple effects of empowering women are undeniable as an educated and empowered woman will ensure education and empowerment for future generations.

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Effect of Nutrient Management Levels on Production Efficiency & Economic Efficiency of Soybean Based Crop Sequence

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Abstract:

An experiment entitled "Effect of nutrient management levels on productivity and profitability of soybean-based crop sequence" was conducted during 2017-18 at Agronomy Farm, Panjabrao Deshmukh Krishi Vidyapeeth, Akola (MS). Among the cropping sequences, soybean-onion cropping sequences registered significantly higher production efficiency (44. 35 kg day^{-1} ha^{-1}) than soybean-potato cropping sequence (40.90 kg day^{-1} ha^{-1}). Among the cropping sequences, soybean-onion cropping sequences registered significantly higher economic efficiency (1161 Rs. day^{-1} ha^{-1}) than soybean-potato cropping sequence (1036 Rs. day^{-1} ha^{-1}). Application of 100% RDF + FYM 5 t ha^{-1}+ Biofertilizer (N_3) to soybean recorded significantly higher production efficiency (kg day^{-1} ha^{-1}) and economic efficiency (Rs. day^{-1} ha^{-1}) than application of 50% RDF + FYM 5 t ha^{-1}+ Biofertilizer (N_1) to soybean and at par with 75 % RDF + FYM 5 t ha^{-1}+ Biofertilizer (N_2) to soybean. The rabi crops supplied with 125 % RDF (F_3) level during rabi season registered significantly higher production efficiency (kg day^{-1} ha^{-1}) and economic efficiency (Rs. day^{-1} ha^{-1}) than 100 % RDF (F_2) and 75% RDF (F_1) levels.

Introduction-

Soybean (*Glycine max. L.*) is one of the important oilseed as well as leguminous crop. Soybean as a miracle "Golden bean" of the 21st century mainly due to its high protein (40 %) and oil (20 %) content. In India it is mainly grown as oilseed crop. Soybean (*Glycine max L.*) is known as sojabean, soybean, Chinese pea and Manchurian bean which belongs to family Leguminoceae and has eastern Asian origin. Onion (*Allium cepa L.*) is one of the most important commercial vegetables. It is grown in western, northern as well as in southern India. It is extensively cultivated throughout India for its high nutritional and medicinal properties. It is a maligned vegetable and is widely used as salad, cooked in curries, boiled, fried, baked and pickled.

Potato (*Solanum tuberosum L.*) is one of the most important non-cereal food crops in the world after wheat, rice and maize. It provides a source of low cost energy to the human diet. It is rich in starch, vitamin especially vitamin C, B_1 and minerals. Potato contributes to world food basket just after rice, wheat and maize. It contains 20.6 per cent carbohydrates, 2.1 per cent

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protein, 0.3 per cent fat, 1.1 per cent crude fibre and 0.9 per cent ash. It also contains good amount of essential amino acids like leucine, tryptophane and isolucine.

Constraint analyses have recorded that imbalanced nutrition management is important reasons for restricted growth and declined productivity. (Tiwari *et al.,* 2002). In era of climate change maintaining yield up to required level is a challenge in coming future. Soil although being rich in nutrients but unfortunately only a small portion of it becomes available to plants especially under semi-arid climatic conditions. Nutrients availability is depend up on the physical and chemical structure of soil. Hence, a balanced nutrients application is must to increase the productivity of the crops. Soybean fixes atmospheric nitrogen in soil and partially fulfills the nitrogen requirement of succeeding crops. There is a need for a suitable substitute crop or cropping systems after soybean to improve the soil fertility and productivity to maximize the profitability. Majority of farmers in Vidarbhra grow cotton, tur, soybean, sorghum, rice as a *kharif* crops and wheat, chickpea, linseed, safflower, sorghum, potato, onion, garlic as a *rabi* crop on medium soil. Intensive cropping systems with high yielding improved crop varieties require a higher amount of nutrients as the system removes large amount of nutrients from the soil pool. Chemical fertilizer increases the quantity of food produced but decreases its nutritional quality and also soil fertility over the years if used in imbalanced form (Sinha *et al.,* 2010).

The crops in intensive cropping system are grown in a definite sequence where each crop needs to be fortified to its optimum requirement to realize its production potential. Soybean followed by onion and potato are most commonly adopted cropping sequence in most parts of Maharashtra. The existing system of fertilizer application is based on the nutrient requirement of the individual crop ignoring the carry over effect of the manures or fertilizer application to the succeeding crop to a great extent.

Materials and Methods

The present experiment entitled "Effect of nutrient management on productivity and profitability of soybean based cropping sequence" was conducted during 2017-18 at research farm of Department of Agronomy, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola (MS). The experiment was laid out in split plot design with three replications. Six combinations of two crop sequences (soybean-onion and soybean-potato) and three levels of nutrient management *viz.,* 50 % RDF+ FYM 5 t ha^{-1}+ biofertilizer (N_1), 75 % RDF+ FYM 5 t ha^{-1}+ biofertilizer (N_2), and 100 % RDF+ FYM 5 t ha^{-1}+ biofertilizer (N_3) were the main plot treatments in *kharif* season replicated three times in randomized block design. During *rabi* season each main plot treatment of nutrient management level was split into three sub plot treatments with three levels of recommended dose of fertilizer *viz.,* 75, 100 and 125% to *rabi* season crops resulting in eighteen treatment combinations replicated three times in split plot design. The experimental soil was vertisols with a clay loam in texture, low in available nitrogen (238.34 kg ha^{-1}), medium in available phosphorus (16.79 kg ha^{-1}) and very high in potassium content (383.26 kg ha^{-1}). The soil pH, EC and organic carbon were 8.1, 0.38 dSm^{-1} and 0.50 per cent, respectively.

Production efficiency :

Production efficiency was calculated by the following formula.

$$\text{Production efficiency (kg ha}^{-1}\text{ day}^{-1}) = \frac{\text{Soybean equivalent yield of cropping system (kg ha}^{-1})}{\text{Total duration of cropping sequence (days)}}$$

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Economic efficiency

Economic efficiency was calculated by the following formula.

$$\text{Economic efficiency (Rs. ha}^{-1}\text{ day}^{-1}) = \frac{\text{Net monetary value of sequence crop (Rs.ha}^{-1})}{\text{Total duration of cropping sequence (days)}}$$

Results and Discussion:

Production efficiency (kg day^{-1} ha^{-1}) and economic efficiency (Rs. day^{-1} ha^{-1})

Cropping sequence

The data production efficiency (kg day^{-1} ha^{-1}) and economic efficiency (Rs. day^{-1} ha^{-1}) of the cropping system was presented in Table-1 and graphically depicted in Fig. 1(a) and Fig. 1(b). Among the cropping sequences, soybean-onion cropping sequences registered significantly higher production efficiency (44. 35 kg day^{-1} ha^{-1}) than soybean-potato cropping sequence (40.90 kg day^{-1} ha^{-1}). Among the cropping sequences, soybean-onion cropping sequences registered significantly higher economic efficiency (1161 Rs. day^{-1} ha^{-1}) than soybean-potato cropping sequence (1036 Rs. day^{-1} ha^{-1}) during years 2017-18. Pacharne (2014) reported that groundnut-onion cropping system registered significantly highest production and economic efficiencies due to the yield potential of onion crop.

Nutrient management to soybean (*kharif*)

Application of 100% RDF + FYM 5 t ha^{-1} + Biofertilizer (N_3) to soybean recorded significantly higher production efficiency (kg day^{-1} ha^{-1}) and economic efficiency (Rs. day^{-1} ha^{-1}) than application of 50% RDF + FYM 5 t ha^{-1} + Biofertilizer (N_1) to soybean and at par with 75 % RDF + FYM 5 t ha^{-1} + Biofertilizer (N_2) to soybean.Similarly, application of 75 % RDF + FYM 5 t ha^{-1} + Biofertilizer (N_2) to soybean recorded significantly higher production efficiency (kg day^{-1} ha^{-1}) and economic efficiency (Rs. day^{-1} ha^{-1}) than application of 50% RDF + FYM 5 t ha^{-1} + Biofertilizer (N_1) to soybean. This might be due to application GRDF(General Recommended Dose of Fertilizer) to preceding *kharif* soybean increases the nutrient use efficiency of added nutrients and it increases the yield potential of onion. Similar results findings reported by Thimmegowda (2006).

Table 1. Production efficiency (kg day^{-1}ha^{-1}) and Economic efficiency (Rs. Day ^{1} ha^{-1}) as influenced nutrient management to soybean (*kharif*) and fertilizer levels to onion and potato (*rabi*)

Treatment	Production efficiency (kg day^{-1} ha^{-1})	Economic efficiency (Rs. day^{-1} ha^{-1}
Cropping sequence		
C_1 : soybean- onion	44.35	1161
C_2 : soybean-potato	40.90	1036
SE (m)+	1.05	34
CD at 5 %	NS	NS
Nutrient management to soybean (*kharif*)		
N_1	36.73	931
N_2	43.96	1134
N_3	47.18	1232
SE(m)+	1.00	32

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CD at 5 %	3.25	105
Fertilizer levels to onion and potato (*rabi*)		
F_1	35.96	870
F_2	44.54	1170
F_3	47.37	1257
SE (m)+	0.86	25
CD at 5 %	2.51	74
Interaction		
A x B	NS	NS
B x C (CD at 5 %)	4.34	129
A x C	NS	NS
A x B x C	NS	NS
G. M.	43.40	1122
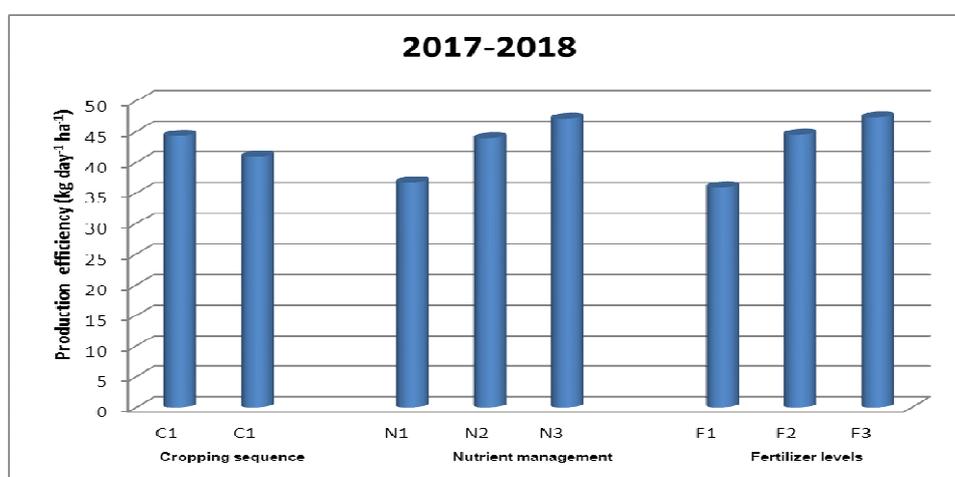
Fig. 8(a) Production efficiency (kg day^{-1} ha^{-1}) as influenced nutrient management to soybean (*kharif*) and fertilizer levels to onion and potato (*rabi*)

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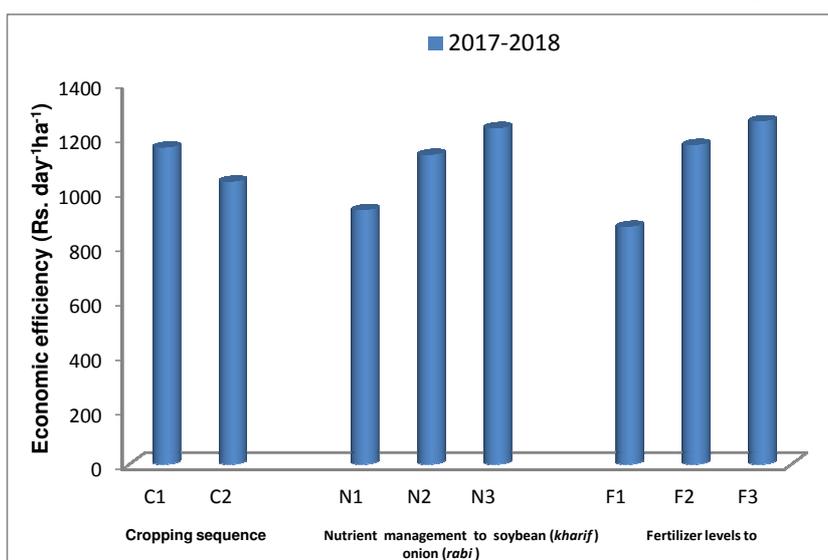
Fig. 8(b) Economic efficiency (Rs. day^{-1}ha^{-1}) as influenced nutrient management to soybean (*kharif*) and fertilizer levels to onion and potato (*rabi*)

Fertilizer levels to onion and potato (*rabi*)

The *rabi* crops supplied with 125 % RDF (F$_3$) level during *rabi* season registered significantly higher production efficiency (kg day^{-1} ha^{-1}) and economic efficiency (Rs. day^{-1} ha^{-1}) than 100 % RDF (F$_2$) and 75% RDF (F$_1$) levels. These results corroborate findings of Gaud (2004), Gudhade (2008), Senthivelu *et al.* (2009), Shanwad *et al.* (2010) , Subehia and Sepehya (2012).

Interaction –

Production efficiency (kg day^{-1}ha^{-1})

Table 2. Production efficiency (kg day^{-1} ha^{-1}) as influenced by interaction between nutrient management to soybean (*kharif*) and fertilizer levels to onion and potato (*rabi*)

Nutrient management to soybean (*kharif*)	Fertilizer levels to onion and potato (*rabi*)		
	F1	F2	F3
N1	27.82	42.21	40.16
N2	33.42	47.11	50.61
N3	46.63	44.30	51.35
B x C			
SE(m)+	1.48		
CD at 5 %	4.34		

Data for interaction presented in Table-2 reveals that the treatment combinations N$_3$F$_3$ recorded significantly higher production efficiency over other treatment combinations and remained at par with N$_2$F$_3$, N$_2$F$_2$.

Economic efficiency (kg day^{-1}ha^{-1})

Table 3. Economic efficiency (Rs. day^{-1} ha^{-1}) as influenced by interaction between nutrient management to soybean (*kharif*) and fertilizer levels to onion and potato (*rabi*)

Nutrient management to soybean (*kharif*)	Fertilizer levels to onion and potato (*rabi*)		
	F1	F2	F3
N1	634	1105	1053
N2	786	1245	1347
N3	1191	1159	1371
B x C			
SE(m)+	44		
CD at 5 %	129		

Interaction - Economic efficiency (Rs. day^{-1} ha^{-1})

Data for interaction presented in Table-51 reveals that the treatment combinations N$_3$F$_3$ recorded significantly higher economic efficiency over other treatment combinations and remained at par with N$_2$F$_3$, N$_2$F$_2$.

Conclusion:

Based on above results, it is concluded that for achieving higher production efficiency as well as economic efficiency, the adoption of soybean-onion cropping sequence with application of 75 % RDF + FYM 5 t ha^{-1} + Biofertilizer to soybean and 100% RDF to *rabi* onion crops appears to be a better nutrient management option .

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A Study of Changing Information Needs & use Pattern of University Post Graduate Students

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Abstract :

The present study aims to determine the Changing information needs and Use pattern of University Post-Graduate students. Data were collected from 185 PG students from the three different schools of S.R.T.M.University, Nanded's Sub-centre, Latur (Maharashtra State), India. Out of 220 PG Students a questionnaire was distributed to 216 PG students and 185 filled in questionnaires were returned, giving an overall response rate of 85.64 percent. It was found that respondents used various sources for acquiring the needed information. Books were ranked as the most important source for teaching and research purposes, followed by periodicals and e-resources. It was found that a majority of the students seek information mainly for doing assignments/seminars and general information with a total of 85.48% (53) and 75.81 % (47) respectively. Thus Social media sites were the most preferred communication channel among students followed by E-mails and mobile phones.

Keywords: Information Needs; Information Seeking Behavior; PG Students; Library Resources; Academic libraries, Communication channels, Internet, Social media sites

1. Introduction:

The information needs of the users are of vital concern to providers of information service. The ultimate aim of any information retrieval system is to supply & deliver the information which can precisely match the information requests or requirements at the right time in right quantity. Academic libraries have to function primarily as service oriented, stimulating institutes supporting academic processes. The users as an essential component of the information system are the most neglected item of attention. The information system has to take into consideration the information requirement of potential users. Information needs and seeking behavior of library users are changing due to several factors such as availability of information in multiple formats, new information discovery and delivery channels particularly mobile devices, changes in scholarly communications, and the entrance of new players in publishing and information provision. The need for change in academic libraries often seems to be pushed more by ICT developments than by user needs in the context of changing academic circumstances. In order to accomplish this task effectively, libraries need to have a thorough understanding of the information needs and information-seeking behavior of their users.

In academic libraries, postgraduate students are among the major users of library resources and they use a variety of information sources to meet their diverse information needs. It is also necessary for them to consult a host of specialized information sources for different purposes such as writing assignments, term papers and project reports, preparing for class discussions, making presentations, and preparing for examinations and other learning activities.

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2. About Srtmun, Sub-Centre, Latur

The Sub-centre of Swami Ramanand Teerth Marathwada University, Nanded at Latur was initiated in the academic year 2007-08 by the Govt. of Maharashtra on the recommendation of the management of the University and of public demand to encourage, to support and to nourish the students of Latur region in specialized courses after Graduation. The Govt. of Maharashtra state has provided the required land, financial support to construct the main building and salary grants to staff for the functioning of the sub-centre at Latur. Apart from conducting specialized courses of higher learning, the Sub-centre has also become the nodal agency for the affiliated colleges/institutions/research centers of Latur district in the context of University's administrative and examination related activities. It is an unique of its kind within the state of Maharashtra for its origin, infrastructure, academic competency and sensitivity towards social responsibility.

The Schools of higher learning at Latur sub-centre are –

- School of Management Sciences
- School of Technology
- School of Social Sciences

3. Library - Sub-Centre, Latur

It has 497.37 sq. mtr area to accommodate stack room(s), reference room, reading hall, counters, Asstt. Librarian's cabin, Internet Lab and WCs. The Library of Sub-Centre has collection of 6102 books, 46 Research journals, 53 subject periodicals, 170 reference books, 386 Project reports, 310 audiovisuals and access to no. of E- resources through Digital Library Consortium initiated by INFLIBNET Centre, Gandhinagar. The various Library activities monitored through SOUL Software as well OPAC facility is also provided search of the book through computer system makes the students library user friendly. Various research journals, magazines, sports issues and competitive examination oriented periodicals provide the students a scope to enhance their horizon of knowledge and to satisfy need of different types of users

4. Statement of The Problem

This study, however, intends to find out the information needs and characteristics of users of Sub-centre, Latur Library. Thus, this study also investigates information needs and characteristics of users, relevance of information resources to their need, communication channels preferred by the users to search the requisite information of their kind, factors affected to increasing use of IT and what constraints are they faced with to meeting these need.

5. Objectives of The Study

- ➢ To identify the information needs of the library users
- ➢ To identify the resources are available in the library for meeting these needs
- ➢ To examine the relevance of these resources
- ➢ To determine most preferred Communication channels for Information search
- ➢ To ascertain factors affected to increase use of IT for information search
- ➢ To identify the Constraints faced by the library users in meeting their information needs

6. Research Methodology

Survey design was adopted in this study because it was considered appropriate. It involves a systematic and comprehensive collection of information about the opinions, attitudes, feelings, beliefs, and behaviours of people. (Aina and Ajiferuke, 2002)

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6.1 Population of the study

The population for the study comprises the registered users i.e. PG Students of Library of SRTMUN, Sub-centre at Latur (Maharashtra) India for the academic year 2014-15 only.

6.2 Sample and sampling procedure

A sample of 185 (85.64%) respondents was drawn and used for the study.

6.3 Data collection

Questionnaire was designed and used for data collection. It was designed based on the objectives of this study. The questionnaire was in two parts, the first part was designed to gather personal and demographic information of the respondents while the second part of the questionnaire was administered to collect information needs and characteristics of the library users, the adequacy of the library resources as well as the challenges faced by the library users in meeting their needs.

6.4 Data presentation and analysis

Out of 216 copies of the questionnaire administered, 185 (85.64%) were completed and returned. Data were presented for analysis using the descriptive statistics which include; frequency count, percentages and tables.

7. Findings and Results

Table 1: Distribution of Respondents by Gender

Gender	Frequency	Percentage
Male	107	57.83
Female	78	42.17
Total	**185**	**100**

Table 1 reveals that 107 respondents were males, representing 57.83% of the sample population, while 78 respondents 42.17% were the female library users. This finding indicates that the females are actually taken less no. of admissions for the higher studies due to various social and family responsibilities, therefore female members not using the library as much as the males. The disparity in information literacy known to exist between male and female population in Latur district is replicating itself again among the youths.

Table 2: Frequency of Library visit by the Respondents

Frequency of Library Visit	Respondents	Percentage
Daily	114	61.62
Once in two days	36	19.45
2-3 times in a week	23	12.42
Occasionally	12	6.68
Total	**185**	**100**

Table 2 shows that for respondents to fulfill their varying information needs, 114 representing 61.62% of the respondents visit the library every day. This could be due to the fact that most of them were students and they needed to use the library to prepare for exams of different types. 36 (19.45%) visit the library once in two days, 23 (12.42%) visit the library about 2-3 times in a week and 12 (6.68%) visit the library occasionally. During such visits, certain sections of the library were of preference as shown in the table 9 below.

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Table 3: Relevance of Library Resources to the Respondents' Information Needs

Library Resources Often Used	Frequency	Percentage
Textbook(s)	158	85.40
Newspapers and Periodicals	67	36.21
Reference books/material	42	22.70
Electronic resources	36	19.45
Project reports	24	12.97
Research Journals	10	5.40
Audiovisuals	8	4.86

Table 3 indicates that the most consulted resources in the library were textbooks, 158(85.40%) agree with the fact that they come over Library to Issue or return of textbooks. This was followed distantly by Reading of newspapers and Periodicals 67(36.21%), reference materials 42(22.70%) and Searching electronic resources 36(19.45%) each. Several other kinds of resources were equally sought to meet respondent's information needs. Project reports submitted to Library were referred by 24(12.97%) respondents. Research journals 10 (5.40%) and Audiovisuals 8(4.86%) were the least consulted materials in the Library.

Table 4: Purpose of seeking the desired information in the Library

Purpose	Frequency	Percentage
Assignments/Seminars	129	69.72
General information	64	34.59
Research purpose	39	21.08
Information concerning academics	22	11.89
Competitive exams	18	9.72
Personal development	13	7.02

Table 4 indicates that a majority of the students seek information mainly for doing assignments /seminars and general information with a total of 69.72% (129) and 34.59 % (64) respectively. Whereas Research and information concerning academics is the less concerned by the respondents with 21.08% (39) and 11.89% (22) respectively. Thus preparing for competitive exams is least concerned 18 (9.72%) followed by personal development 13 (7.02%).

Table 5: Most preferred Communication channels for Information search

Communication channels	Frequency	Percentage
Social media sites	110	59.45
E-mails	89	48.10
Mobile phone	77	41.62
Telephone	36	19.45
Fax	21	11.35
Others (Please specify)	15	8.10

Table 5 shows Social media sites were the most preferred communication channel among the respondents 110 (59.45%) due to an increasing use of IT by youngsters followed by E-mails 89 (48.10%) and mobile phones 77 (41.62%), whereas the low response given to Telephone 36(19.45%) and Fax 21 (11.35%) channels.

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Table 6: Factors affected to increase use of Internet for information search

Factors	Frequency	Percentage
Easy access to IT	108	58.37
Time saving	65	35.13
Able to search	41	22.16
Introducing new IT tools	27	14.59

Table 6 shows 108 (58.37%) of the respondents reported easy access to IT was the most affected factor to increase the use of Internet for searching the required information. Further 65 (35.13%) respondents indicated that e-resources saves time, easy to use, 41 (22.16%) able to decide what information to use for different purposes and 27 (14.59%) respondents mentioned introducing new IT tools lead them to find other relevant and interesting information. In addition, it is found that most of the respondents often uses Internet for entertainment purpose and were very familiar with using them.

Table 7: Constraints to meeting respondents' information needs

Constraints	Frequency	Percentage
Inadequate relevant materials	78	42.16
Lack of information retrieval tools in the library	53	28.64
Inadequate time to seek needed information	42	22.70
Library proximity problem	27	14.59
Ignorance of where and how to obtain needed materials	18	9.72
Uncooperative attitude of the library staff	16	8.64
Others	12	6.48

Table 7 indicates that the major constraints that hindered meeting users' information needs include inadequate relevant materials 78 (42.16%) and lack of information retrieval tools in the library 53(28.64%). Other constraints indicated were: Inadequate time to seek needed information 42 (22.70%), Library proximity problem 27 (14.59%), and Ignorance of where to obtain needed materials 18(9.72%) and Uncooperative attitude of the library staff 16 (8.64%). Under Others, 12 (6.48%) specified constraints were: erratic power supply, lack of good seats and inadequate toilet facilities. In order to ameliorate these constraints, most respondents suggested that the library should acquire more current and relevant materials (64.9%), improve Internet access (47%), conduct user studies (36.6%), provide information on newly acquired materials (24.6%), provide modern facility in reading rooms and improve access to information sources (18.7%).

Conclusion:

Information is considered as an important resource that contributes towards the development of a nation. It provides the central part for the development of knowledge, the basis for innovations, the resources for informed citizenry, and as a result, becomes a key commodity for the progress of a society. The issue of quality in higher education in India has become more paramount now, with the release of the results of the ratings of world universities in 2015, which shows that only a few of universities in India was ranked among the first 100 universities in the world. This issue poses a serious challenge to Indian universities. In tackling the problem of quality therefore, adequate knowledge of the information needs of users is essential for libraries

in re-orienting their collections, services and activities to synchronies them with the information seeking behavior of their patrons. The success of a library in meeting the information needs of its user plays an important role in the number of their future library visits. It is also an imperative that the provision of information technology should be the nucleus of the strategies for improving quality. Students in tertiary institutions need information for their academic activities and this cannot be taken for granted. A well articulated and sustained effort is required to provide ICT facilities in Indian universities and make the same more accessible to the students

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Breast Feeding of The Mothers
(An Observational Study)

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Introduction:

Breast feeding is something that women have done since ages. Breast feeding is universal. It is a process of feeding human breast milk to an infant either directly or with bottle. The World Health Organization defines breast feeding as the act of nursing babies and young children with milk from the mother's breasts. The WHO recommends that breast feeding begins within half an hour of birth and continues until at least for two years.

It is healthy and natural way of providing children with the nutritional components that they require growing optimally for the first few years of life. Integrated Management of Neonatal and Childhood Illnesses (IMNCI) strategy recommended systematic assessment and emphasized counseling of the mother on proper positioning and attachment of infant to the breast.

An author Grkovic IZ, Cttaneo-A (2020) "Are our babies off to a healthy start? The state of implementation of the global strategy for infant and young child feeding in Europe" concluded after the study of 18 countries on the Worlds Breastfeeding Techniques Initiatives with tool and found out that European governments are not doing enough to protect, promote and support sound infant and young feeding practices. Baby's body in relation to his mother's body is depending on the angle of the breast. The aim of the study has been achieved by implementing the Global Strategy with the help of tool.

Breast feeding is more than just feeding the baby, but has even been a way creating that bond between mother and her child which is completely unforgettable. Breast feeding can and should be satisfying experience for mother and the baby.

Importance of Breast Feeding
Benefits For Mothers
1. Promotes faster weight loss after birth
2. Stimulates the uterus to contract and return to normal size
3. Less post partum bleeding
4. Fewer urinary tract infections
5. Less chance of anemia
6. Less risk of postpartum depression and more positive mood
7. Increased confidence and self-esteem
8. Breast milk is always clean and at right temperature
9. Physical and emotional bonding between mother and child is increased
10. Breastfeeding mothers learn to read their infants cues
11. Lowers risk of breast cancer
12. Lowers risk of ovarian cancer
13. Lowers risk of rheumatoid arthritis

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14. Less endometriosis
15. Less osteoporosis with age
16. Less diabetes
17. Less hypertension
18. Less cardiovascular disease

Benefits for Babies

1. Stronger immune system
2. Decreases childhood obesity
3. Less diarrhea, gastroenteritis, gastroesophageal reflux and preterm necrotizing enterocolitis
4. Fewer respiratory illnesses like pneumonia, whooping cough
5. Fewer ear infections like those of damaging ears
6. Fewer case of bacterial meningitis
7. Better vision and less retinopathy of prematurity
8. Lower rates of infant mortality
9. Fewer instances of allergies, eczema and asthma
10. Fewer speech and orthodontic problems
11. Fewer cavities
12. Improved brain maturation
13. Greater immunity to infection
14. Fewer instances of Crohn's disease
15. Lower risk of type I and II diabetes
16. Fewer childhood cancers including leukemia and lymphomas
17. Less likely to develop rheumatoid arthritis and lupus
18. Less likely to develop heart disease in adulthood
19. Lower risk of multiple sclerosis
20. Lower rates of pre and post menopausal breast cancers

Objectives of The Study

(1) To study the attachment of the baby while breast feeding.
(2) To study the position of the mother while breast feeding.
(3) To check out the bonding moment between the mother and her baby while breast feeding.
(4) To study the attentiveness of mother while breast feeding and after care.

Methodology

In this study, research methodology to be used for carrying out the study:

The study was descriptive and exploratory in nature which attempted to discover and analyze the breast feeding techniques followed by the mothers. Self Reporting Technique will be used to declare the findings of the study.

Survey Method: To check the practices related to breast feeding practice a survey method was adopted. Observational chart is used to collect data of Samples.
The Percentage is used for data analysis.

Sample:

Nursing or breast feeding mothers who are admitted for delivery and then after delivery shifted to post natal ward at Daga Memorial Government Women's Hospital, Nagpur. Total 90 mothers were selected through convenient sampling of data collection through 18 students. They

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were provided with observational chart. The observational chart contained 10 points and nursing students were instructed to observe the mothers while breast feeding without even disturbing them or making them aware related to the study. The observations, interpretation and conclusions are as follows:

Observational Points:

Analysis is done on the basis of statistical data of results collected from 90 samples on the basis observation technique through nursing students.

Sr No.	Components	Responses With Percentage (%)		Total
		Yes	No	
1	Mother is sitting straight while breast feeding	53 **59%**	37 **41%**	
2	Baby's body is tilted towards mother and touched her body	67 **75%**	23 **25%**	
3	Baby's trunk, neck and head are in one straight line	53 **59%**	37 **41%**	
4	Mother communicates with baby while breast feeding	40 **45%**	50 **55%**	
5	Baby opened his wide mouth while breast feeding	79 **88%**	11 **12%**	90 **100%**
6	Baby covered lower part of breast's areola while breast feeding	76 **85%**	14 **15%**	
7	Baby's lower lip is folded while breast feeding	75 **84%**	15 **16%**	
8	Baby's chin touched the breast while breast feeding	73 **82%**	17 **18%**	
9	Mother does breast feeding for 15 minutes on one side	59 **66%**	31 **34%**	
10	Mother helps burping after breast feeding her baby	80 **89%**	10 **11%**	

Interpretation:

Point no 1 –

Mother was sitting straight while breast feeding. For this it is observed that out of 90, 53 mothers have been observed sitting straight that is 59% while breast feeding whereas 37 mothers have been observed not sitting straight which was 41% of total samples.

Point no 2 –

Baby's body was tilted towards mother and touched her body as expected, while breast feeding, for this it is observed that out of 90, 67 baby's body was tilted towards mother and touched to her body while breast feeding was 75% while breast feeding whereas 23 (25%) baby's body was not found tilted towards mother and touched to her body while breastfeeding according to the chart.

Point no 3 –

Baby's trunk, neck and head are in one straight line. When observed, 53 (59%) mothers have maintained the proper position of the baby while 37 (41%) mothers have not maintained the position of the baby properly of mothers

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Point no 4 –

Mother communicates with baby while breastfeeding. It is observed that 40 (45%) mothers were found communicating with their babies while 50 (55%) mothers were not found communicating with their babies.

Point no 5 –

Baby opened his full wide while breast feeding. It is found that 79 (88%) out of 90 babies have opened their mouth wide while breastfeeding whereas 11 (12%) babies have not opened their mouth wide while breastfeeding.

Point no 6 –

Baby have covered lower part of breast's areola while breast feeding. It is found that 76 (85%) babies have covered lower part of breast's areola while breast feeding but only 14 (15%) have not covered lower part of breast's areola while breast feeding.

Point no 7 –

Baby's lower lip is folded while breastfeeding. It is observed that 75 (84%) of babies have attached well to the breasts while breastfeeding but 15 (16%) babies were not attached well to the breasts while breastfeeding.

Point no 8 –

Baby's chin touched the breast while breastfeeding. It is observed that 73 (82%) the chin of the babies have touched the breasts while breastfeeding whereas 17 (18%) the chin of the babies have not touched the breasts while breastfeeding.

Point no 9 –

Mother does breastfeeding for 15 minutes on one side. It is observed that 59 (66%) mothers did breastfeeding for 15 minutes on one side and then changed but 31 (34%) mothers didn't do breastfeeding for 15 minutes on one side but changed frequently or discontinued.

Point no 10 –

Mother helps burping after breast feeding her baby. 80 (89%) mothers out of 90 were found attentive about importance of the burping after breastfeeding and 10 (11%) mothers were found unaware about importance of the burping after breastfeeding.

On the basis of observational chart, researcher thinks that there is a wide scope regarding awareness about the importance of breast feeding and improvement related practical procedure of breast feeding.

Conclusions:

The researcher concludes that mothers should be made aware about the importance of breast feeding. The attachment of the baby to the mother's breasts, the position of the mother while breast feeding, the bonding moment between the mother and her baby while breast feeding and the attentiveness of mother while breast feeding and after care are some important areas of the procedure to focus on.

Recommendations:

The International Confederations of Midwives adopted a policy in relation to breast feeding in 1984 that clearly defines the midwives responsibility in this field and describes, "The unique and vital role of the midwife in the promotion of breast feeding." ICM (1985)

The researcher recommends following points through ante natal and post natal counseling and guiding sessions with practical procedures:

- The nursing staff should be provided with in-service training for them regarding the breast feeding technique to disseminate the knowledge and skills so that they will provide to mothers through health education.
- Health care worker should probe into this matter and explain them the significance of communicate with their babies while breast feeding.
- The Nurse stresses the importance the importance of cuddling and eye contact during the feeding and observes for the sign of attachment in feeding behaviors.
- Mothers to be should be taught about the importance of the attachment of the baby to the mother's breasts
- Mothers to be should be taught about the importance the positions of the mother while breast feeding,
- Mothers to be should be taught about the importance related to the bonding moment between the mother and her baby while breast feeding and
- Mothers to be should be taught about the importance regarding the attentiveness of mother while breast feeding and after care

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Covid -19 Pandemic Situation in India

(Covid 19 drastically hits the Indian Economy)

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Abstract :

Globally our country facing lots of challenges and this is arise due to covid 19 this paper focus on the effects of covid -19 which is negatively and some positively affected the life of human and social dilemma as marriage in least 100 people, social distancing , dependency of online education and lots of factor we discuss in this paper .

Keywords – economically loose the industries and lockdown situation, education and Training centers lockdown, loss of health responsible factor to finishes home savings, hospital charges and services too costly and many more reasons.

Introduction –

Industrial slowdown and impact of society

Due to covid 19 many industries facing slow down as cotton, jute, mineral oil and some other industries and this is arise more unemployment. Because lower class people not have efficient knowledge to do online work and their family suppress with too economic burden and social distancing not be able to far this mental burden and this globally destroy world trade because this virus badly infected people have reported cyclical bouts of fatigue ,headache decrease the oxygen level of body month of complete exhaustion so this is big cause people survive very hard life and some time recovery is not possible so this serious condition make a reason of death and a reason of more burden on depends because the time of covid -19 many more children loss their parents and many parents loss their sons and daughters and this is harm socially and other aspects no any type of humanity for patients hospital takes more money not give proper treatments and loss of this humanity. Many People feel nervous and die due to improper treatment and pharmacy companies give costly equipment as oxygen cylinder and other necessary equipment but government not be doing more loss efforts to restrict this issue and this is big causes people los their life and low level income people loss their saving and compiles for debt so lots of bad effects we look in the time of Covid -19 .

Health, psychosocial and economic impacts-

I find this corona virus spread including lockdowns may have serious economic consequences and dangerous effect of exacerbating rather than mitigating health disparities However, to date, few data document the impact of the COVID-19 pandemic on disparities in chronic disease management in India. Given the unprecedented and rapidly evolving COVID-19 situation in India, we aimed to focus the health, psychosocial and economic impacts of COVID-19 pandemic on people with chronic conditions in India.

Increase the ratio of Unemployment-

Ten months since the initial wave of closures due to COVID-19, leisure and hospitality workers continue to face the highest unemployment rate amidst the pandemic; over 16% of the sector's labor force is unemployed while every metropolitan area has hotels, only a few stake

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their economies on them. Being a destination city for travel includes the economic benefit of both personal tourism and corporate conferences; COVID-19 devastated both as people stopped travelling altogether.

Literature review –

many article I am studied then I go to this aspects where people socially Demoralize due to loss of humanity and compiles to broke their money and savings here many articles The Impact of COVID-19 on Italy: A Lesson for the Future written by Luigi Santacroce [1], Lucretius Bottalico [2], Ioannis Alexandros Charitos [3]. Preparedness and Lessons Learned from the Novel Corona virus Disease written by Sai Krishna Gudi [1], Komal Krishna Tiwar Compliance, Barriers, and Facilitators to Social Distancing Measures for Prevention of Corona virus Disease 2019 in Northwest Ethiopia, 2020 written by Workagegnehu Hailu [1], Lemma Derseh [2], Melkamu Tamir Hunegnaw [3], Tsebaot Tesfaye [1], Dessie Abebaw Angaw [2] Our World in Data. Mortality Risk of COVID-19. 2020 [Internet]. Available from: https://ourworldindata.org/mortality-risk-covid. so many more e articles and data I am checked and include in my research paper Corona virus Outbreak. Available at: https://www.worldometers.info/coronavirus/. Accessed 23 Feb 2020.

Objective of the study –

I want to do aware this fact of covid 19 impact globally but lots of mistake which is doing higher level authority and this situation seriously harmed people as poor distribution and wrong beneficiaries take benefit ,pharmacy, hospitals take wrong money with patients and their families and loss of humanity and unethical activities disburse the condition of lay man and economic activity completely finish but government don't provide any potential and resource about as types of people so there we find this condition persist till now but no one authority come for this so this is very big social and mental disadvantage is this impacted more as lack of cooperation trust and believed system if you look news so lots of families complain my patient not get good and proper treatments and we are facing mental and economic burden but no authority take powerful steps .

The responsibility of public health is vast, but we have surprisingly few tools readily available to fight a foe as widespread and relentless as COVID-19. We had no vaccine, we had no treatment, there was no obvious engineering solution, no way to quickly alter the environment

"So our paper examine this fact our country people who have superior position ignore all the aspect of humanity so this is social dilemma which is more impacted"

- Ignore the aspects of humanity.
- Healthcare companies and hospital take high charges.
- Lack of disease prevention tools.
- Unethical distribution of goods and services.
- Loss their family members.
- Resource and medical equipment rates are high .
- Lack of employment resource.
- Students fall in economic debt.
- Societies and peoples not be comfort to meet each other.

Hypothesis of the study –

We find some positive and negative aspects of society as

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- ▪ Due to Covid 19 increase the public debt because lots of industries closed and slow down
- ▪ Due to covid 19 increase the use of technology because lots of industries closed and slow down
- ▪ Due to covid 19, various new companies restrict their new product schemes.

"In various impact of Covid -19and its prove challenge of the society So here people views describe many negative impacts which is significant impact and P value =0.05 so this level of acceptance and this is Cleary mention"

Some bad and good events happen in the time of covid 19

- ➢ Hypothesis strongly accepted Technologies uses increase in covid 19 because public are restrict to go outside or any place and Public facing lots of challenges as industries lockdown increases economic burden, physical weakness due to covid 19.

- ➢ I measure some good events as marriage of least people, social distancing increase love and affection; Students know about technologies and uses and know about benefits as google meet, zoom application

Research methodology –

The search includes methods that have been adapted to the technological possibilities offered by the Internet (methods 'with' the Internet) and methods developed to research online interactions (The first possibility may suit researchers that wish to adapt fieldwork research to conditions where conducting research on the ground is no longer possible go far in the time of Covid -19 so I am choosing descriptive data pattern in limited area prayagraj city which is emphasis about main root of cause which is based on people opinion I am taken 500patients of prayagraj city who provide view no effective tools provided by them and I am also investigate the issues of covid 19 so I find ambiguility in out technical aspects and Conducting ethnography online has been approached from different angles. Here I decide to use online data collection methods that engage with pre-existing material people have uploaded (as this material I have specifically asked and tested reality then to generate following a consent process, which includes many of the methods listed here.

Findings and Results -

1. The trickle-down effect-Between February and April 2020, the share of households that **experienced a fall in income** shot up to nearly 46 percent. A damaging impact on an economy as large as India has caused due a total lockdown was imminent. Unemployment went up to nearly 24 percent in April 20.

2. **COVID-19-Resilient Industries : Information, media and communication earn rapidly – In the time of covid-19 information technology earn rapidly because number of people based on media, technologies and their services as E –newspaper, digital payment, digital marketing and online business etc.** about the impact of the crisis on a range of measures, [executives] say that funding for digital initiatives has increased more than anything else—more than increases in costs, the number of people in technology roles, and the number of customers."

3. Impact on jobs in India 2020- Many people of the age 25 and 29 years old alone accounted for about 46 percent of all job losses .On the other hand we can say Indians, close to nine million gained jobs during the same time. Impact on job loss and gain due to the corona virus (COVID-19) lockdown in India between April and July 2020 increase.

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"Declines in the employment-to-population ratio that exceeded predictions indicate there was additional employment loss in the country due to the pandemic."
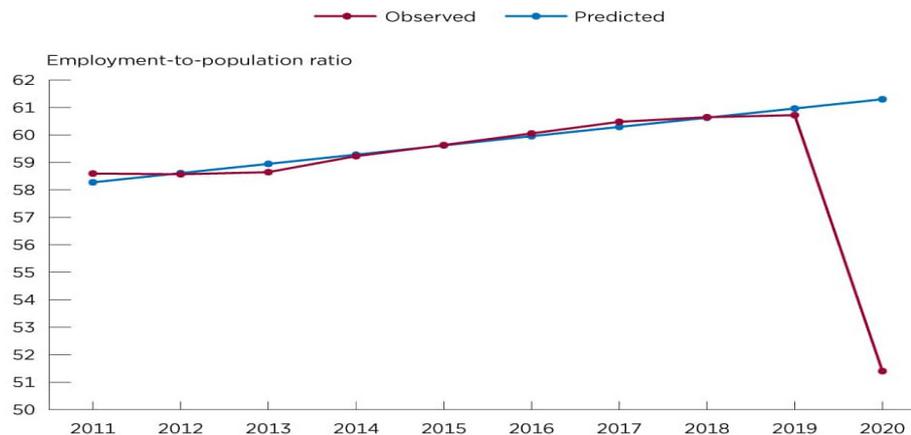
Pre Covid-19 situation of India

• **Year Wise Impact**

This chart sho pre covid -19 situation
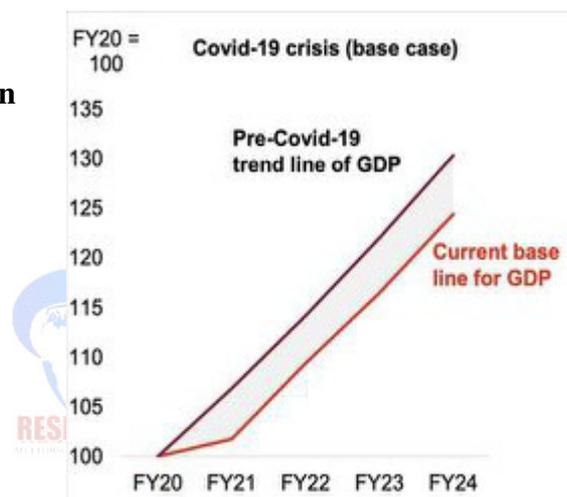
Conclusion and suggestion –

Many things we can make positive as your attitude belief system you can win all the situation firstly this is challenging situation and as like war which is impacted more but if you take adopt prevention tools so this is recover better to this pandemic and higher satisfaction. Social network analysis this measure and represent the connections between social culture and activities explain the characteristics of these interactions.

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Nursing Education

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Meanings:

- **Nursing** - According to dictionary, meaning of Nursing is a profession or practice of providing care for the sick and infirm.
- **Education** - According to oxford dictionary Education means the process of receiving or giving systematic instructions, especially at a school or university.
- **Nursing Education** is the "**production aspect**" of nursing manpower development and is coordinated with planning and management using teaching methodology in nursing education.

History of Nursing Education:

The history of education in India and its aims are very interesting. The aim of education is to understand the ideals of society. The main objective of education in any society requires those prevalent characteristics and ideals, which in turn shape the very process of education. Nursing is a discipline, a career, rich in opportunities and variety. The fast progress of the Medical Science, Technology makes it even more challenging to keep the Students of Nursing updated about the recent happenings in the world and outside. Nursing education is also coordinated with the education of professionals in allied sectors of health and development. Nurse educators function as change agents and leaders to create a preferred future for nursing education and nursing practice.

- In 1860, Florence Nightingale was the first who laid the foundation of nursing profession with the establishment of nursing school at St. Thomas Hospital London (US).
- In India St. Stephens Hospital, Delhi was the first one to begin training the Indian women as nurses in 1867. Orderlies (non – nursing personnel) and Midwives were chosen for 2 to 6 months training, named as "Sick Nursing" and Certificates were given after completion. All nursing programs were apprentice based.
- But in 1871, the first school of nursing was started in government general hospital, Madras with six month diploma midwives program with 4 students.
- In 1908, the TNAI (Trained Nurses Association of India) was formed and it was felt that other graduate nurses were needed to uphold the dignity and honor of the nursing profession.
- TNAI became affiliated with ICN (International Council for Nurses).
- In 1917 it was officially registered under Society Act XXI of 1860.
- The national organization of public health nursing made a "**Survey**" of needs and resources for home care in 16 communities. This was reported in "Public Health Nursing Care Of The Sick" in 1943.
- In India, first 4 years Bachelor degree program were established at Colleges of Delhi and Vellore in 1946.
- By The Indian Nursing Council Act of 1947, INC was formed with 32 members out of them 18 were Nurses. INC is not only registering or examining body but it can enforce its standards by recognizing training schools. It can suggest curricula, inspects schools and

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examinations, has powers to take away recognition of schools that doesn't meet its requirement.

- Since 1953, Post Certificate Course in Community Health Nursing has been given at AIIHPH (All India Institute of Hygiene and Public Health) in Calcutta. But Post Certificate Bachelor degree program in School of Nursing of in the year 1963.
- By The Indian Nursing Council Act of 1947, INC was formed with 32 members out of them 18 were Nurses. INC is not only registering or examining body but it can enforce its standards by recognizing training

  schools. It can suggest curricula, inspects schools and examinations and has powers to take away recognition of schools that doesn't meet its requirement.
- Since 1953, Post Certificate Course in Community Health Nursing has been given at AIIHPH (All India Institute of Hygiene and Public Health) in Calcutta. But Post Certificate Bachelor degree program in School of Nursing of in the year 1963.

Purposes of Nursing Education:

The new emphasis is on Health Nursing – Nursing the mind, the family as a unit of society as a whole and a part of community, with the **Nurse as a Health Educator/ Teacher**.

- **Development of Personality** – includes releasing the sources of creative energy in the students, as nursing is art and science, give a place of honor in the curriculum to the subjects like art, craft, music, dancing and development of hobbies. Cultivating rich interests, which they pursue in their leisure and contribute, in later life, to the development of heritage.
- **Development of Qualities of Leadership** – in those who will be able to assume the responsibility of leadership in social, political, industrial or cultural fields in their small groups of community or locality
- **Development of Democratic Citizenship** – through development of habits, attitudes and qualities, character which will enable the citizens to bear worthily the responsibilities of democratic citizenship
- **Improvement of Vocational Efficiency** – through promotion of technical skills and efficiency at all stages of education so as to provide trained and efficient personnel to work out schemes of schools, colleges, industrial and technological advancement in all the fields.

Importance of Nursing Education

- To understand a client –A person as a whole taking into consideration, the Domains of Health such as Physical, Psychosocial, Emotional, Spiritual, Economical domains etc.
  As, "Every person is Unique"
  Why is it important to study Domains of Health for Nurses?
- To improve the quality of health care
- To manage the environment
- To provide safety to the patient
- To provide evidenced based practice
- To provide person centered care
- To create positive environment for interpersonal behaviors for patient as well as nurses them too.
- To study the Interaction of Epidemiological Triad

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- **Agent** originally referred to an infectious microorganism or pathogen: viruses, bacterium, parasite, fungus or other microbes.
- **Host** refers to the human who can get the disease. A variety of factors intrinsic to the host, sometimes called risk factors, can influence an individual's exposure, susceptibility or response to a causative agent.
- **Environment** refers to the extrinsic factors that affect the agent and the opportunity for exposure. It includes geology and climate, biological factors such as insects and rodents and socioeconomic factors such as crowding, sanitation and availability of health care facilities.

It interrelate in a variety of complex ways to produce disease. Different diseases require different balances and interactions of these three components. Development of appropriate, practical and effective public health measures to control or prevent disease usually requires assessment of all three components and their interactions.

- **To make a Nursing Diagnosis** – Clinical Nurse Specialist makes a nursing diagnosis of clients using critical thinking, goal centered tasks, evidence based practice recommendations and nursing intuitions.

In 1958, Ida Jean Orlando started nursing process which functions as a guide to client-centered care with 5 sequential steps including,

- Nursing Assessment,
- Nursing Diagnosis,
- Nursing Planning,
- Nursing implementation and
- Nursing Evaluation

For quality based care using Maslow's Hierarchy of needs of Client
- Basic physiological needs
- Safety and security needs
- Love and belonging needs
- Self esteem needs
- Self actualization needs

Education For The Nurses Is As Varied As Working Setting Is Available

Certificate courses like Auxiliary Nurse Midwife of two years, and promotional courses like Lady Health Visitor or Supervisor of six months **Diploma courses** like General Nurse Midwife of three years and promotional courses like Public Health Nursing, Pediatric Health Nursing, Psychiatric Nursing and so on of eleven months **Degree courses or baccalaureate courses** like B.Sc Nursing both basic degree of 4 years and post-certificate of 2 years **Masters courses** like Master of Science in nursing (Community Health Nursing, Nursing in Obstetrics and Gynecology, Medical Surgical Nursing, Pediatric Health Nursing, Psychiatric Nursing) of 2 years M.Phil in Nursing of 1 year **Doctoral courses** like Doctor of Philosophy in Nursing.

To Enlist The Roles of Nurses: Beyond The Bedside:

Nurse Academician/ Educator: Teaches the Student nurses in order to transform them into productive workforce.

Nurse Manager: Manages the nursing care of the clients along with their families and community, Delegates nursing activities to ancillary workers and other nurses and supervises and valuates their performance.

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Resource Person: Coordinates patient population ensures quality patient care, overseeing nursing operations, teaching junior staff and implementing the facility's practices and policies.

Nurse Administrator: Functions at various level of health care settings; responsible for management and administration of resources and personnel involved in giving patient care.

Nurse Midwife : Provides pre – natal, intra – natal and post – natal care and delivers babies to woman with pregnancies.

Change Agent: Makes changes in the system such as clinical care, if it is not helping a client return to health.

Nurse Counsellor: helps client to recognize and cope with stressful psycho - social conditions, to develop inter – personal relationships and to promote personal growth. It involves providing emotional, intellectual and psychological support.

Leader: Influences others, motivates the team.

Nurse Anaesthetist: Carries out pre – operative, intra – operative and post – operative status of clients who are undergoing surgeries.

Nurse Practitioner: Skilled at making nursing assessments, performing physical examination, counselling, teaching and treating minor and self – limiting illness.

Nurse Advocate: Nurses after completing the course related to Law, now a day are dealing with nurse's issues related to legal matters.

Quality Manager: Ensures quality in working departments for nurses and Hospital. Identifies the gaps ensures the hospital meets all regulatory compliances.

Community Health Nurse: Nurses work in community
Nurse Entrepreneur: Manages health related business.

Case Manager: Choreographs all the aspects of patient care and coordinates with health practitioners who treat the patients.

Nurse Researcher: Nurses work as a clinical data coordinator, research assistant and clinical research monitor.

Forensic Nurse Consultant: Forensic nursing has vital role in patients violent and a criminal activity.

Academic Nurse Writer: They write textbooks, document writings and so on.

These many roles of nurses need various skills, proper attitude which comes with in-depth knowledge of Nursing Education.

Graduates masters education, particularly in terms of advanced practice nursing, typically considered to include nurse practitioners, clinical nurse specialists, certified nurse midwives, nurse advocates, nurse psychiatrists, nurse educators, nurse counselors, certified registered nurse anesthetists and forensic nurse consultant has been embraced by nurses globally beyond bedside.
The Institute of Medicine, US (1) recommendation that should practice to the level of their education and the recommendation that more nurses need to be prepared at the doctoral level has had a significant impact on how the education of nurses is perceived in US and elsewhere.

The Institute of Medicine, US (2) recommendation relevant to nursing education calls for more nurses prepared at the doctoral level. It addresses two concerns: Having a sufficient faculty to educate the number of nurses needed to meet workforce demands and having enough scientists to contribute to disciplines knowledge base.

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Microwave Assisted Synthesis Characterization and Antibacterial Evolution of Transition Metal Complex with Amide Derivative Ligands

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Abstract:

This study describes the green synthesis, spectral and antibacterial investigations of the complexes of Mn(II) transition metal with pyrimidine derivative ligands. These complexes have been characterized on the basis of elemental analysis, infrared, electronic spectra and magnetic susceptibility studies. Antibacterial activities of these ligands and complexes have also been reported on S. aureus and E.coli bacteria with disc diffusion method. The diffuse reflectance spectrums of the complexes show bands in the region around 17636 cm-1 to 26881cm-1, assignable to 6A1g→4T2g, 6A1g→4Eg, 4A1g (4G) transitions. These are also typical of tetrahedral environment around the Manganese. The magnetic moment (5.79-5.92 BM) of the complex indicates high tetrahedral environment. The microwave assisted method of synthesis of complexes and Ligands have found easily, appropriate and eco-friendly.

Keywords: Microwave, amide, Mn(II), Antibacterial, Tetrahedral

Introduction:

Manganese is essential for iron and steel production by virtue of its sulfur-fixing, deoxidizing alloying properties (1). Manganese has been broadly uses in aluminium alloys and key component of low-cost stainless steel formation. Manganese-di-oxide (MnO_2) is used in dry cells and as a catalyst. Potassium permanganate ($KMnO_4$) is commonly used as a potent oxidizer and as a typical medicine (disinfectant). Manganese oxide is a brown pigment that can be used to make paint and is a component of natural umber. Manganese phosphate is used for rust and corrosion prevention on steel. Manganese will be mostly replaced with lithium battery technology in manufacture of disposable battery, standard and alkaline cells (2-3). Manganese particles usually settle to earth within few days. Humans enhance manganese concentrations in the air by industrial activities and through burning fossil fuels. Manganese that derives from human sources can also enter surface water, ground water and sewage water. Through the application of manganese pesticides, manganese enters in soil (4-5). Manganese plays an important role for growth of plants. Deficiency of manganese ions causes disturbances in plant mechanism. Many herbs also contain manganese, burdock root, fennel dandelion, fenugreek, ginseng, horsetail, lemongrass, seed,parsley, peppermint, chamomile, wild yam and raspberry (6). In mammalian cells, manganese causes DNA damages and chromosome aberrations. Large amount of manganese affect fertility in mammals and are toxic to the embryo and foetus (7-8). Manganese has been shown to cross the blood brain barrier and a limited amount of manganese is also able to cross the placenta during pregnancy, enabling it to reach a developing fetus (9-10). Manganese deficiency in the foetus may also causes malformation of the inner ear, ataxia and bone malformation. Lack of co-ordination head retraction, tremor, loss of righting reflexes, hyper irritability, faulty cartilage and bone matrix formation, heart problems and learning difficulties also occur (11). Metal or metalloid of amide are compounds which contain one or

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more (–CONH2) ligand groups or a simple derivative [such as –CONHR, -CONR2, where R = methyl, phenyl, acetyl etc.) attached to metal. (12-18).

Experimetal:

Apparatus :

i. EC Double Beam UV-VIS Spectrophotometer (UV 5704SS), with quartz cell of 10 mm light path was used for Electronic spectral measurement at GCRC (Green Chemistry Research Center) Govt. Dungar College (NAAC A-Grade) Bikaner, (Raj.).

ii. IR spectra were recorded on Bruker Optic Model Alpha (FT-IR) (Zn-Se Optics, ATR) (4000-500 cm-1) using KBr disc at SIL, P.G. Dept. of chemistry, Govt. Dungar College (NAAC-A-Grade) Bikaner, Rajasthan.

iii. Microwave synthesis was carried out in domestic microwave oven and GMBR (Green Microwave Biochemical Reactor) at GCRC, P.G. Dept. of Chemistry, Govt. Dungar College (NAAC-A- Grade) Bikaner, Rajasthan.

iv. All biological activities have been carried out with horizontal laminar, BIFR, Bikaner.

2 Materials and method

For the synthesis of Mn(II) complexes with amide group containing ligands, a solution of MnCl2 (0.001 mole in 30 mL ethyl alcohol) has been taken in a 250 ml round bottom flask, in this solution respective amide ligand (i.e. N2PB, N2PA, N46DM2PB, N46DM2PA) (0.003 mole) was added slowly with constant stirring. The reaction mixture was placed on a magnetic stirrer with constant stirring for 6-7 hours at room temperature.

In the microwave synthesis, the reaction mixture was irradiated in a microwave reactor at 600 W for 2-5 minutes. The solid precipitate obtained in both the methods was separated and crystallized. Crystals were purified and recrystalized with ethyl alcohol and dried under vacuum.

Results and Discussion:

The complexes of Mn (II) with all the amide group containing ligands are stable at room temperatures over a long period of time. The manganese complexes under investigations were white (brown) coloured powder; these complexes were, partially soluble in DMSO and insoluble in all other solvents. The elemental and metal estimations give satisfactory results. The physical and analytical data of complexes are given in Table 1

(i). Vibrational Spectra:

Vibrational spectra were recorded in KBr pellets and polyethylene film in mid and far IR regions and some diagnostic bands are presented in Table 3.

The IR bands due to amide ν (N-H) mode observed at 3163-3382 cm-1 for the free amide group containing ligands are shifted to higher frequencies indicating non-participation of nitrogen atom of amide group in coordination. Amide 1 bands due to ν (C=O) shift negatively opposite to that of ν (N-H) in the complexes suggesting carbonyl oxygen coordination (19). In complexes it is represented that pyrimidinyl nitrogen participates in bonding, which has been confirmed by the 16-100 cm-1 negative shifting of pyrimidinyl ring peak in complexes to the comparison of ligands. (Figure 5 to 8). These observations have ambiguous and support the final structural conclusions of the complexes and the mode of bonding in them.(Fig. 9-12)

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(ii). Magnetic Susceptibility   Measurements:

Complexes of bivalent manganese are known in both high spin (S=5/2) and low spin (S = 1/2) states. Because of the additional stability of the half filled d-orbitals Mn (II) generally forms high spin complexes which have an orbitally degenerate 6S ground state term and the spin only magnetic moment of 5.9 ± 0.1 BM is expected which will be independent of the temperature and of stereochemistry (20). The magnetic susceptibility measurements have been carried out in the polycrystalline state at room temperature and the results are given in Table 2. All the manganese (II) complexes have magnetic moment values in the range 5.70-5.92 BM indicating the presence of five unpaired electrons and hence these are high spin complexes with tetrahedral coordinate manganese (21).

(iii). Electronic Spectra:

The electronic spectra of the manganese complexes with amide group containing ligands show weak absorption in the visible region. This is presented in Table 2 and in Fig.1 to 4.

The observed spectra of the manganese (II) complexes with the   ligands exhibit bands in the region 17636 cm-1 and 28011 cm-1 assignable to 6A1g □ 4T2g and 6A1g □ 4Eg, 4A1g (4G), transitions.

The electronic spectral transitions of manganese complexes with the ligands are typical of tetrahedral environment around the manganese (22).

Thermal Studies.

The complexes of Mn (II) with the amide group containing ligands show first order kinetics in their thermal decomposition reaction. This is based on a straight line plot of Coats and Redfern (for n = 1). Activation energy (Ea) has been calculated by the linearisation method of Goats and Redfern. The thermal studies give the description about the thermal stability of the complexes. It has been observed that no   decomposition   takes   place   at   room temperature   and complexes are fairly stable well above the room temperature. The initial decomposition started above 500K.

Conclusions:

On the basis of IR spectra, the amide group containing ligands show bidentate behavior in Mn (II) complexes by coordinating through carbonyl oxygen of amide groups and nitrogen of pyrimidine ring. The electronic spectral assignments are characteristic to the geometries adopted by metal ion in ligand environments. Thus, Mn (II) adopts tetrahedral geometry in the complexes of amide ligands. The magnetic moments tally with the electronic spectral data. On the basis of these studies the tentative structures have been proposed for the complexes and which are given in Fig. 9 to 12 for Mn (II) complexes. The complexes synthesized by novel green method are at par with conventional synthesis and in many cases yield was found to be better than conventional synthesis.

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Table- 1

Physico-chemical Data of Cu (II) Metal Complexes

(C.M.= Conventional method, M.M.= Microwave method)

S.N.	Complexes	Colour	m.p. (ºC)	Reaction period		Yield %		Elemental analysis Calculated(Found)%		
				C.M. hrs.	M.M. min.	C.M.	M.M.	C	H	N
1	$[Mn-(N2PB)_2]Cl_2$	Colourless	195	6.5	2.30	46	57	50.38 (50.18)	3.43 (3.33)	16.03 (16.13)
2	$[Mn-(N2PA)_2]Cl_2$	Colourless	210	6.5	2.15	44	55	36.00 (36.00)	3.50 (3.43)	21.00 (21.10)
3	$[Mn-(N46DM2PB)_2]Cl_2$	Orange	152	6.5	2.40	42	58	53.79 (53.75)	4.48 (4.40)	14.48 (14.40)
4	$[Mn-(N46DM2PA)_2]Cl_2$	Yellow	146	6.5	3.00	45	48	42.10 (42.00)	4.82 (4.72)	18.42 (18.35)

Table-2

Magnetic moments and electronic Spectral data of ligand and Cu (II) metal complex

SN	Ligand and Complex	R_f value	μ_{eff} (BM)	Electronic Spectral Bands λ_{max} (cm^{-1})	Tentative assignments	Expected Geometry
1	$[Mn-(N2PB)_2]Cl_2$	(0.875) [a]	5.86	18248, 20120,22805, 28011	$^6A_{1g} \rightarrow ^4T_{2g}$ $^6A_{1g} \rightarrow ^4E_g$, $^4A_{1g}$ (4G)	Tetrahedral
2	$[Mn-(N2PA)_2]Cl_2$	(0.822) [a]	5.79	18281 ,24449,26631	$^6A_{1g} \rightarrow ^4T_{2g}$ $^6A_{1g} \rightarrow ^4E_g$, $^4A_{1g}$ (4G)	Tetrahedral
3	$[Mn-(N46DM2PB)_2]Cl_2$	(0.911) [b]	5.84	18066 ,24691,26881	$^6A_{1g} \rightarrow ^4T_{2g}$ $^6A_{1g} \rightarrow ^4E_g$, $^4A_{1g}$ (4G)	Tetrahedral
4	$[Mn-(N46DM2PA)_2]Cl_2$	(0.640) [b]	5.92	17636, 24570,26595,	$^6A_{1g} \rightarrow ^4T_{2g}$ $^6A_{1g} \rightarrow ^4E_g$, $^4A_{1g}$ (4G)	Tetrahedral

b = ethyl acetate: carbon tetrachloride (4:6), a= acetone: carbon tetrachloride (6:4)

Table- 3

IR Vibrational frequencies of Cu (II) transition metal complexes

S.N.	Complexes	ν_{N-H} (amide)	$(\nu_{C=O})^a$	$(\nu_{C-N+\delta N-H})^b$	$(\nu_{N-H+\delta C-N})^c$	Pyrimidinyl	ν_{M-N}	ν_{M-O}	ν_{M-cl}
1	N2PB	3382	1674	1410	1288	1621			
	$[Mn-(N2PB)_2]Cl_2$	3385	1622	1497	1344	1570	486	503	----
2	N2PA	3339	1735	1408	1288	1618			
	$[Mn-(N2PA)_2]Cl_2$	3447	1645	1497	1327	1577	484	512	----
3	N46DM2PB	3319	1673	1449	1319	1643			
	$[Mn-(N46DM2PB)_2]Cl_2$	3421	1642	1509	1385	1543	481	564	----
4	N46DM2PA	3318	1739	1447	1369	1642			
	$[Mn-(N46DM2PA)_2]Cl_2$	3322	1672	1474	1417	1612	485	514	----

Fig. 1-4

Transition Spectra of Mn(II) Complexes

Fig. 1-4

Transition Spectra of Mn(II) Complexes

1. [Mn-(N2PB)₂]Cl₂

2. [Mn-(N2PA)₂]Cl₂

3. [Mn-(N46DM2PB)₂]Cl₂

4. [Mn-(N46DM2PA)₂]Cl₂
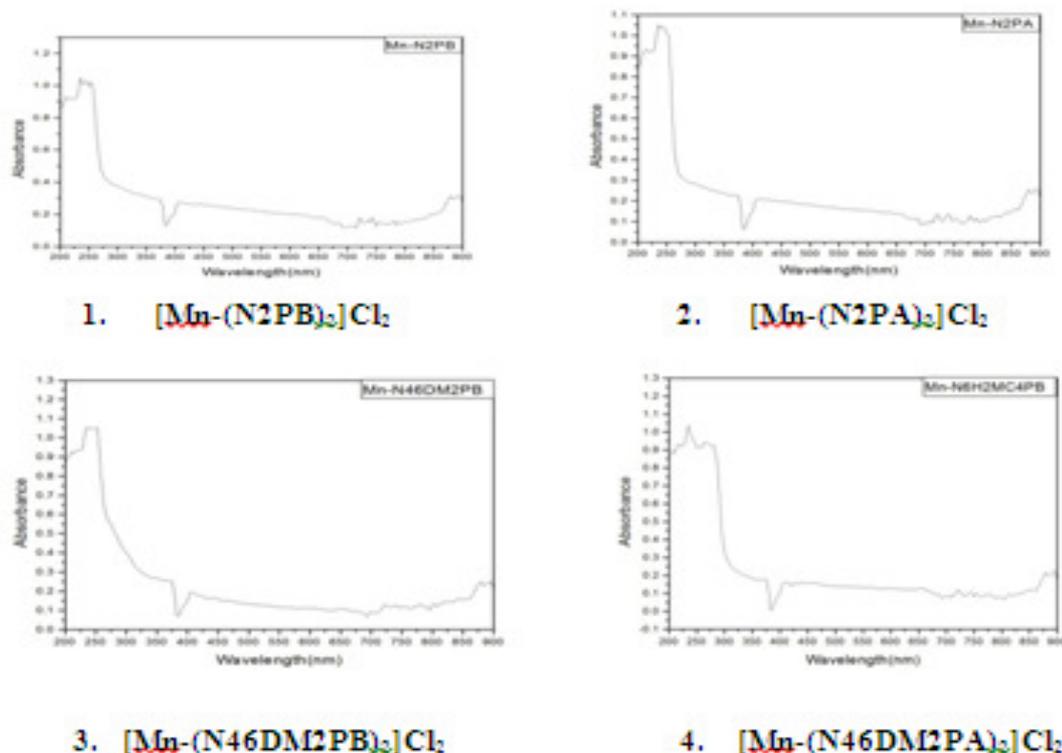
Fig. 5-8

Vibrational Spectra of Mn(II) Complexes

5. [Mn-(N2PB)₂]Cl₂

6. [Mn-(N2PA)₂]Cl₂

7. [Mn-(N46DM2PB)₂]Cl₂

8. [Mn-(N46DM2PA)₂]Cl₂
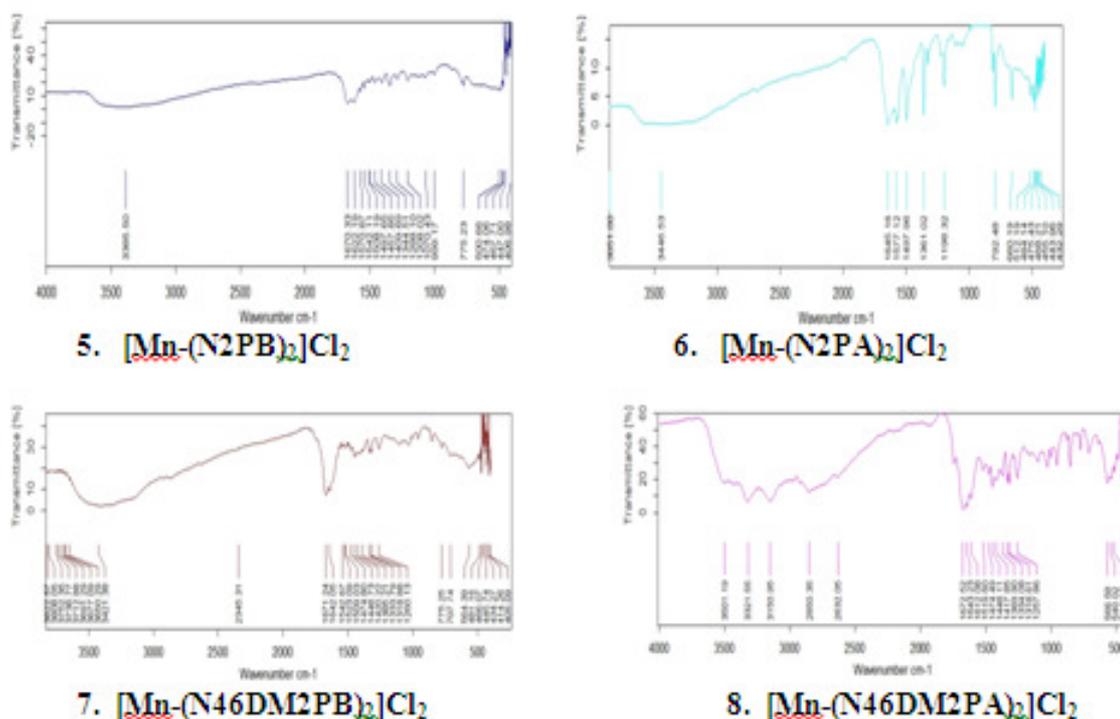
Fig. 9-12

Tentative structure of complexes

Tentative structure of complexes

9. [Mn(N2PB)₂]Cl₂

10. [Mn(N2PA)₂]Cl₂

11. [Mn-(N46DM2PB)₂]Cl₂

12. [Mn-(N46DM2PA)₂]Cl₂
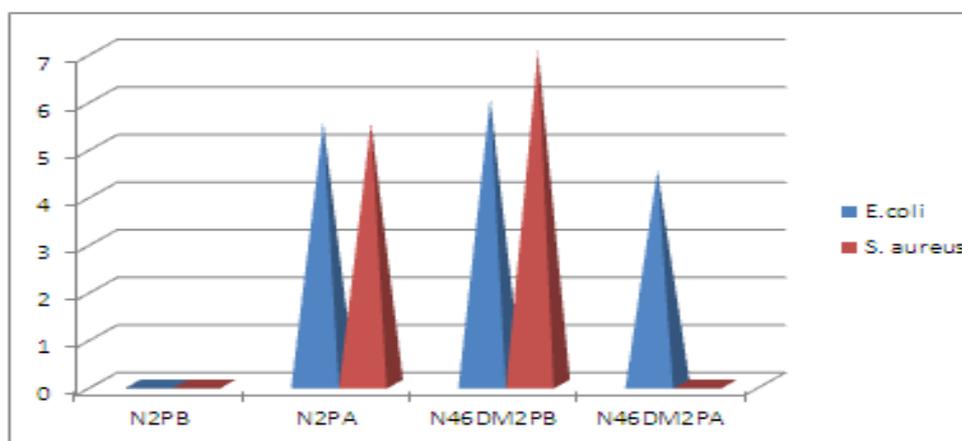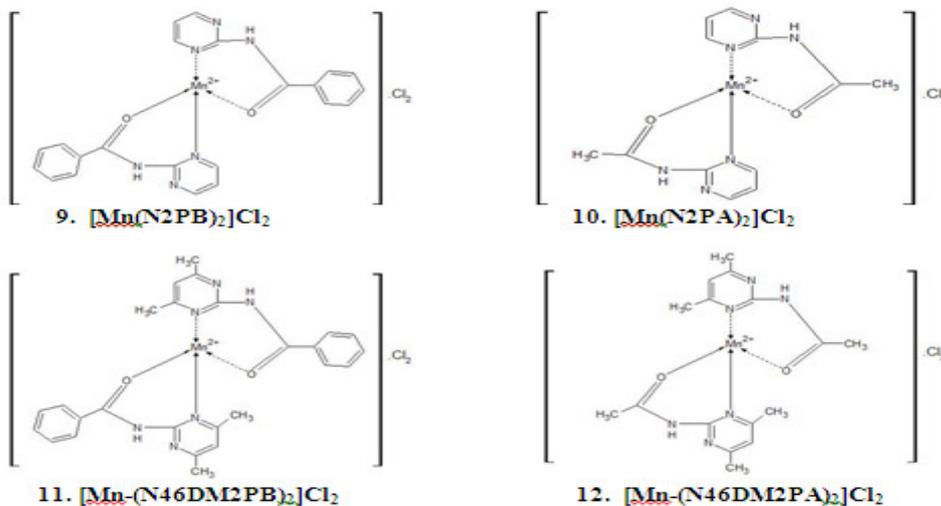
Fig.13. Biological activity of amide Ligands.
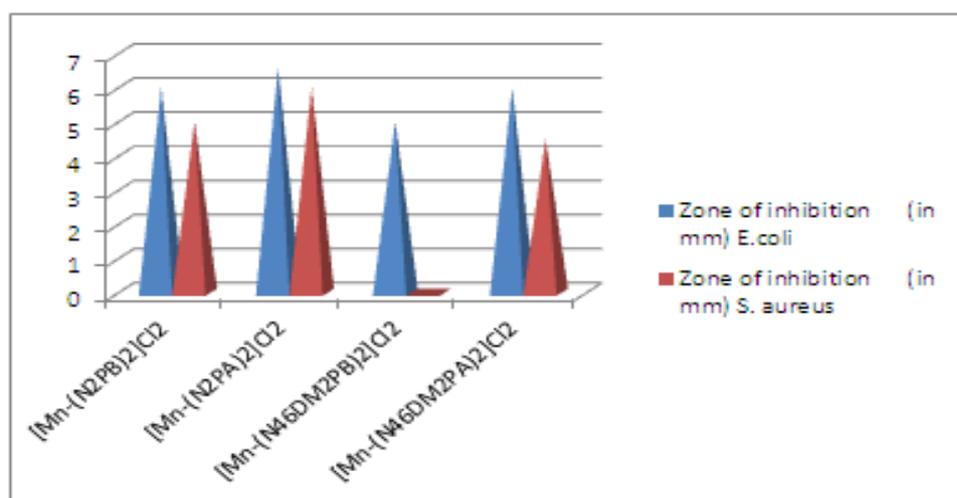
Fig.14. Biological activity of metal complexes containing amide Ligands.

Systematic Literature Review for Formative Research

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Abstract:

The formative research is a very different kind of statistical journey. It is different from reflective research. With this at the background, an attempt has been made to research more on the formative statistics. In the first step, a systematic literature review has been done for the formative research. This helps to know more about the way research has been conducted for it in the academic circles. Apart from this, research questions like "what tools are popularly used for the formative research? What are different domains for it? What are differences between formative and reflective scales and constructs?"

While studying about the systematic literature review about it, various theoretical, thematic, structural, framework, definitional, model and Bibliometric reviews are presented in the study. Apart from these points, the search has been done using the main databases and compared also. The study has been useful to understand the formative research in terms of scale formation, designing of the constructs, understanding the main objectives and hypotheses, and the conclusions derived from the research in itself. The study also discusses various topics that had been covered under the umbrella of formative research. As a result, it helps to know the importance of the formative research as compared to reflective research. Secondly, there is a scope to understand the tools or the softwares that are used for the formative research. Thirdly, one may also know the upcoming an future scope of it.Consequently, one may observe the topics that are available for the research in it. In the conclusion, it is pointed out the software that is popularly used for the formative research and the benefits of it.

Keywords: systematic literature review, formative, scales, constructs, softwares

Introduction:

Formative Research is one of the ways opted for in the formstion of the questionnaire designing, scale formation, item planning and constructs for the analysis. However, in the contemporary times, it has another facet as a competitor viz. the Reflective Research. With this at the background, it was necessary to know more about it. Subequently, the present paper attempts to conduct a systematic literature review for the formative research. This enables one to know more about down the timeline of the research in the academic circles. Moreover, this review will certainly help one to understand the beginning of it in the domains of the research. It will also be helpful to know about the definitions of the formative research in terms of the questionnaire designing, scale adaption or adoption, scale construction for the formative research, formative items, formative scales, formative constructs, etc. (Cools, Finseraas, & Rogeberg, 2021).

Systematic Literature Review:
Main Databases:

The main databases used for the Systematic Literature Review are shown in the Table 1and Table 2. However, the main databases selected for the study after the exclusion criteria are the following ones viz.

    a. Google Scholar
    b. Web of Science
    c. ERIC
    d. Microsoft Research

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These databases were used for the initial search for the various publications and books. These were useful to capture the information about the identified and selected topic of research. Various results were obtained for the formative research also (Cunningham-Erves, Barajas, & Mayo-Gamble, 2021).

\

TABLE 1 : LIST OF THE DATABASES

S.No.	Name of the Database
1	Academic Search
2	African Journals Online
3	Airiti
4	Archive Grid
5	BASE:Bielefeld Academic Search Engine
6	Boo Review Index Online
7	Books In Print
8	CiNii
9	CiteSeerX
10	COnnecting REpositories(CORE)
11	Crossref
12	Current Contents
13	DeepDyve
14	Dimensions
15	Directory of Open Access Journals
16	ERIC
17	Google Scholar
18	HAL
19	IEEE Xplore
20	Information Bridge: Department of Energy Scientific and Technical Information
21	Informit
22	IngentaConnect
23	Indian Citation Index
24	IARP

TABLE 2: LIST OF THE DATABASES

S.No.	Name of the Database
26	J-Gate
27	JournalSeek
28	JSTOR:Journal Storage
29	Jurn
30	The Lens
31	Mendeley
32	Microsoft Academic
33	MyScienceWork
34	national Diet Library Collection
35	OpenGray
36	OALster
37	OpenEdition.org
38	ORCID
39	Paperity
40	Publons
41	ResearchGate
42	Russian Science Citation Index
43	SafetyLit
44	SciELO
45	Science.gov
46	Science Citation Index
47	ScienceOpen
48	Scientific Information Database(SID)
49	SCIndeks - Serbian Citation Index
50	Scopus
51	SearchTeam
52	Semantic Scholar
53	SNAC(Social Networks and Archival Contexts)
54	Socolar
55	Sparrho
56	SpringerLink
57	Unpaywall
58	Ulrich's periodicals Directoy
59	Web of science
60	WorldCat
61	WorldwideScience
62	CogPrints:Cognitive Sciences Eprint Archives

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The review steps included the following (Yik, Dood, & de Arellano, 2021):

i.   Selecting the publications without attending to the exclusive and inclusive criteria
ii. Selecting the publications with the exclusive criteria
iii. Selecting the publications with the inclusive critria
iv. Classification of the articles in terms of the Formative Research, Formative Scales, Formative Items, Formative Constructs and Formative Research using different softwares and tools

While focusing on the above steps, it was found that there was another classification emerging from different branches of knowledge.This may be observed in the Table 3.It will be observed that the most popular databases used for the research were Google, Scholar, WoS, Microsoft and IEEE. Various branches of knowledge covered are Management, Commerce and Finacia Studies, Economics, Arts and Humanities, Medical Schools and Engineering and Technological Schools of Computer Sciences (Ramos, Romero, Perrotta, & Sguassero, 2021).

TABLE 3: BRANCH AND DATABASES

S.No.	Branch	Database
1	Management	Google Scholar, WoS, Microsoft
2	Commerce and Financial Studies	Google Scholar, WoS, Microsoft
3	Economics	Google Scholar, WoS, Microsoft
4	Arts and Humanities	Google Scholar, WoS, Microsoft
5	Medical Schools	Google Scholar, WoS, Microsoft, Publons
6	Computer Sciences	Google Scholar, WoS, Microsoft, IEEE
7	Different Branches of Engineering	Google Scholar, WoS, Microsoft,IEEE

It is in Web of Sciences that helped in proper analysis and to capture the citation results.This is observed through Figure 1 and Figure 2. Apart from these observations, Figure 1 shows the number of the publications in different Schools of Knowledge.Figure 3 shows the number of publications for the formative items. Through Figure 4, one may see the the details of the number of publications as per the specific domain of the knowledge.In the Figure 5, one may see the trend in the number of the increasing publications for the formative research (Morse, Luwe, Lungu, & Chiwaula, 2021).

Research Questions:

The main research questions are the following:

• What tools are popularly used for the formative research?
• What are different domains for it?
• What are differences between formative and reflective scales and constructs?
• What is the status for the theoretical, thematic, structural, framework, definitional, model and bibliometric reviews

Thus, these questions help in knowing more about the formative research. It is also worthy to note that there are different ways in the formative research was conducted as per the prior studies of the research (Pleasant, O'Leary, & Carmona, 2020). These will be discussed in the following paragraphs.

Typology of the Reviews:

From Table 4, it may be observed that there are different kinds of reviews published from the side of the academic circles. The number of publications under different typologies reveal the importance of the formartive research. The number of bibliometric reviews are less as compared

to the others. The highest nmber of publications were seen under the reviews of the framework and model ones. After these, the studies are popular for the theoretical and structural reviews. Apart from these, one may also see that reviews were present in thematic, definitional and conceptual reviews also(See Table 4 for more details) (Kim, Belland, & Walker, 2018).

TABLE 4 : TYPOLOGY OF REVIEWS:

S.No.	Typology of Reviews	Publications
1	Theoretical Reviews	2,87,00,000
2	Thematic Reviews	73,10,000
3	Structural Reviews	2,63,00,000
4	Framework Reviews	3,24,00,000
5	Definitional Reviews	1,91,000
6	Model Reviews	3,58,00,000
7	Conceptual Reviews	1,45,00,000
8	Bibliometric reviews	1,39,000

The research showcased that the formative research may be studied under the categories of scale formation, designing of the constructs, understanding the main objectives and hypotheses, and the conclusions derived from the research analysis.

The Importance Of The Formative Research:

The importance of the formative research is not just confined to the study only. The present paper also focuses on the areas it was used in the research. It was basically usd for the simple research in the qualitative research(See Table 6 for more details). Soon it was introduced into the quantitative research also. However, it must be observed that the formative research comprised of formative questionnaires, formative scales, formative itmes, formatives constructs, formative variables, formative regression and formative SEM models also(See Table 5 for the details of the publications in the each of these areas) (Thomas, Zohura, & Hasan, 2020).

TABLE 5: DETAILS ABOUT THE PUBLICATIONS ON FORMATIVE RESEARCH

S.No.	Research	Publications
1	Formative Research	90,40,000
2	Formative Questionnaires	64,20,000
3	Formative Scales	81,70,000
4	Formative Items	22,00,000
5	Formative Constructs	68,40,000
6	Formative Variables	71,50,000
7	Formative Regression	63,10,000
8	Formative SEM	3,86,000

The Tools Or The Softwares:

Tools and softwares play an important role in the research. Subsequently, it is necessary to know major techniques and tools used for the formative research. It is seen in the Table 6 that qualitative research has its own contribution for the formative research. However, the tools played major role for the quantitative formative research. In the contemporary times, it is SMART PLS that plays the main role for the formative research as compared to IBM SPSS AMOS (Sands & Aunger, 2020).

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TABLE 6: FORMATIVE RESEARCH

S.No.	Research	
	Qualitative Research	**Quantitative**
1		
2	Observations	SAS
3	Textual Analysis	SPSS
4	Visual Analysis	R
5	Interviews	Python
6	Focus Groups	SMART PLS
7	Shadowing	Excel
8	Desk Research	Stata
9	Discussions	JMP
10	Affinity Drawing	Mendeley
11	Visualized Mapping	MATLAB
12	Personas	LISREL
13	Conceptual Mapping	EQS
14	Journey Mapping	
15	Content Analysis	

Future Scope

The Table 7 shows the kind of reviews written and published for the formative research. However, it is not a good sign to see the less number of publications in the scoping, meta-narratives and bayesian meta-analysis (Kim, Belland, & Walker, 2018). Thus, one may see the importance of the research for these reviews and proceed further for the publication opportunities also. As a result, one must focus more attention for such research in future times (Stadler, Sailer, & Fischer, 2021).

TABLE 7:DETAILS OF THE REVIEWS

S.No.	Kind of Review	Publications
1	Narrative Reviews	3,00,000
2	Systematic Reviews	5,08,000
3	Historical Reviews	5,79,000
4	Argumentative Reviews	36,500
5	Integrated Reviews	6,15,000
6	Scoping Reviews	19,600
7	Meta-Narratives	4,960
8	Bayesian Meta-Analysis	4,510

Conclusion:

In the end, it may be concluded that formative research has its own stand and is always recommended for more research in the future times in the academic circles. With Post-COVID times, there are many changes in majority of the topics and research. Thus, there are opportunities to poner upon and publish the research. Some of the areas where there are chances for more research in terms of the formative are:

1. Pursuit of Happiness
2. Well-Being of a human beings
3. Environment and Nature

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4. Attitudes towards non-human animals
5. Impotance of Spirituality in the different areas
6. Advances in Technology

Apart from these points, it is also important to share that the the formative research is gaining its momentum in terms of the research. As a result, there are possibilities to conduct research in the areas of the formative research also.

Figure 1*:* Map for Formative Research

(WEB OF SCIENCE, 2021)

FIGURE 2: NUMBER OF PUBLICATIONS FOR FORMATIVE RESEARCH
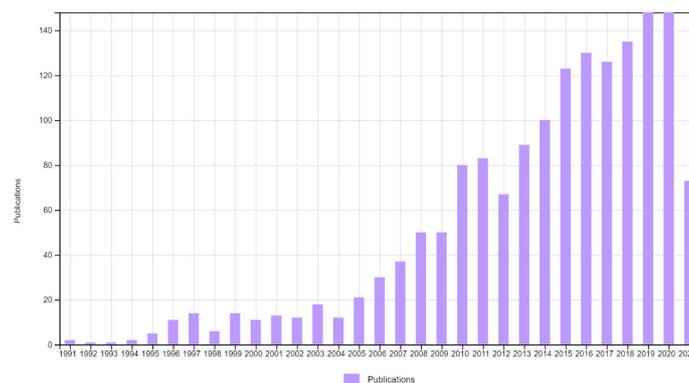
(Web of Science, 2021)

FIGURE 3:FORMATIVE ITEMS
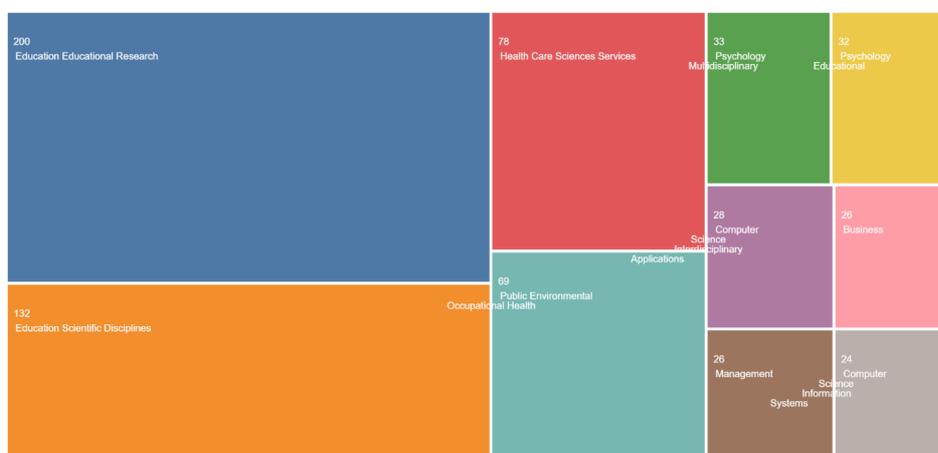
(Web of Science, 2021)

FIGURE 4: FORMATIVE CONSTRUCTS
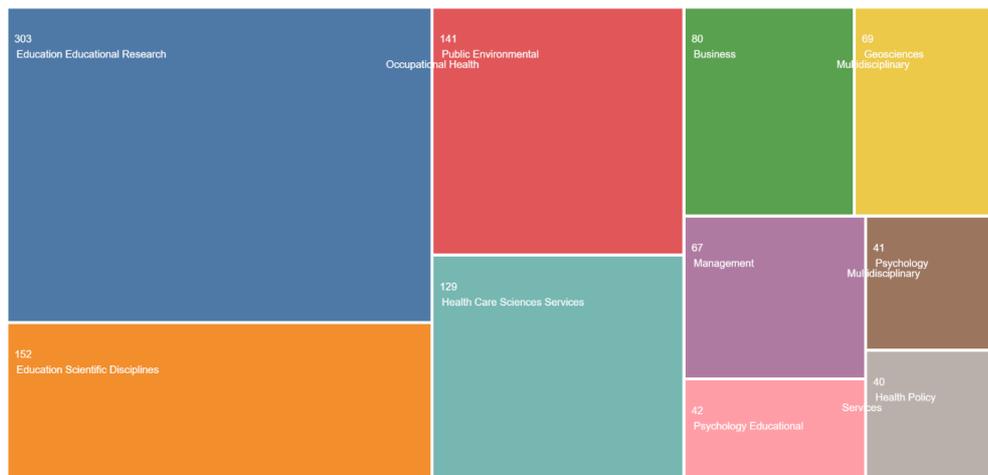
(Web of Science, 2021)

FIGURE 5: PUBLICATIONS OF THE FORMATIVE RESEARCH ACROSS THE GLOBE
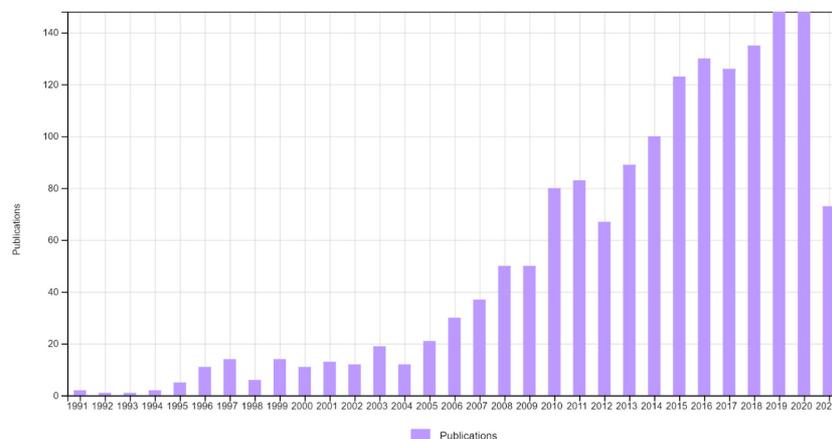
(Web of Science, 2021)

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Digital Transformation in Education

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Abstract :

Digital transformation in the education sector has implied the involvement of sustainable management, in order to adapt to the changes imposed by new technologies. A dedicated unit for the purpose of orchestrating the building of digital infrastructure, digital content and capacity building will be created in the Ministry to look after the e-education needs of both school and higher education. Since technology is rapidly evolving, and needs specialists to deliver high quality e-learning, a vibrant ecosystem has to be encouraged to create solutions that not only solve India's challenges of scale, diversity, equity, but also evolve in keeping with the rapid changes in technology, whose half-life reduces with each passing year. This centre will, therefore, consist of experts drawn from the field of administration, education, educational technology, digital pedagogy and assessment, e-governance, etc.

Empirically explored digital transformation of the basic education of the young generation initiated by the COVID -19 pandemic. Reveals a variety of digital divides emerging and being reinforced as well as barriers to digital transformation encountered. Makes visible children's basic education as a significant area of concern for information management research. Argues we can offer a valuable contribution to children's basic education and teacher education our expertise on digital transformation.

Key words: digital transformation, digital divides, e-learning, educational technology, digital infrastructure

Introduction:

In the 21st century known as the digital age, with globalization, structures in almost every area is influenced rapidly by developing and changing information and communication technologies. It is impossible for education to remain insensitive to these developments and changes. Digital learning is replacing traditional educational methods more and more every day. With how rapidly classrooms are changing, it is best to forget methods you may remember from when you were in school and start thinking about newer teaching and learning techniques based on digital learning tools and technologies. The inclusion of digital learning in the classrooms can vary from simply using tablets instead of paper to using elaborate software programs and equipment as opposed to the simple pen.

The pandemic forced us to take an extraordinary digital leap in our everyday life and practices, including our children and their education. In a flash, their education was transformed from a traditional classroom practice to a remote, digitalized one. Suddenly, an entire generation of children had to start managing and mastering with digital tools to participate in their compulsory basic education. This required significant adjustments not only from children and their teachers, but also from their families, school administration and the entire society. Teachers and schools had to take the lead in this sudden, unexpected digital transformation of children's

basic education, without being well prepared for it. Even if digitalization in education has been a hot topic already for ages within different disciplines and digital tools are extensively already utilized in schools, teachers, schools and educational administration have been poorly prepared for acting as leaders and change agents in digital transformation.

The teachers have showed great resilience, creativity and perseverance in responding to the challenging situation of the COVID-19. Some have identified valuable digital practices that they wish to utilize also in the future. Schools and educational administration of the city may have provided valuable support. However, the teachers expressed worries regarding their pupils, having lack of access to some of them and having a fear of the problems caused by the lock-down for their future education.

This could entail using sites, services, programs, teaching tools, and technologies like study aids built for at-home use. Even social networks and communication platforms can be used to create and manage digital assignments and agendas. Irrespective of how much technology is integrated into the classroom, digital learning has come to play a crucial role in education. It empowers students by getting them to be more interested in learning and expanding their horizons. Here is how digital learning is a setup from traditional education methods.

Digital transformation of our education system will require commitment from all stakeholders. There is a growing need to integrate the smart use of digital technologies to enhance the teaching-learning experience. New technologies in education such as cloud computing, MOOCs, smart boards etc. are already impacting the teaching-learning process in a big way. Leadership support will play a crucial role to make digital transformation in education is effective in schools and colleges.

Academic leaders need to adopt new working ways and approaches that involve the use of innovative technology. Adoption of new educational technologies will enable teachers to make drastic improvements in academic delivery and students' assessment process. It can enable a better learning experience for students and improve job prospects .One of the major reasons for the inclusion of digital technologies in education transformation is the development of more personalized content with greater access to courses for skill development. However, digitalization will only be effective if the technology is used as a tool to drive systemic and institutional changes to impart knowledge and develop job skills and not merely to automate and fast track the process of learning.

Digital transformation is slow process in education which became an urgent topic in the spring of 2020 due to COVID-19. In mid March, the Government closed the schools and universities and the classes were held in online form. This faced both students and teachers with unexpected challenges.

Advantages Of Digital Transformation :

Online education can enhance instructional learning, especially in higher education by creating a blended learning experience that combines both traditional classroom-based methods and modern technology. Another important advantage of the digital transformation in education is in the management of education itself.

Challenges In Digital Transformation :

Meanwhile, millions from Government schools and colleges, especially in rural areas, will not even have access to education due to Covid -19 the lockdown. According to the Key Indicators of Household Social Consumption on Education in India report, based on the 2017-18 National Sample Survey, less than 15% of rural Indian households have Internet (as opposed to

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42% urban Indian households). A mere 13% of people surveyed (aged above five) in rural areas just 8.5% of females could use the Internet.

The poorest households cannot afford a smart phone or a computer. Several parents are not happy with this new set-up. "They complain of increased screen time for children. There are a few parents who aren't comfortable with technology themselves they crib about it. So, their children, too, might look at it negatively. At times, classes get disturbed due to Internet issues. In nuclear families, especially, parents might have to miss work to take care of their children. Some of them could be healthcare professionals, who are desperately needed to mitigate the pandemic.

A Culture of Transformation:

A Culture of Transformation Digital Transformation is not about technology, it's about culture. Through a digitalization of the learning experience, both teachers and students are able to improve their skills, with a common goal: to create a more engaging and effective education process. Here are some ways that digital tools are shifting education

Philosophy of Teaching:

Every teacher has a unique teaching style. Over a period, they would have built a rapport with the children. This is done through observing their body language in class, their interaction with classmates how it is different in small groups and large groups. Now, they just see them on computer screens and there could be a lot of disturbances.

Digital infrastructure:

There is a need to invest in creation of open, interoperable, evolvable, public digital infrastructure in the education sector that can be used by multiple platforms and point solutions, to solve for India's scale, diversity, complexity and device penetration. This will ensure that the technology-based solutions do not become outdated with the rapid advances in technology.

Online teaching platform and tools:

Appropriate existing e-learning platforms such as SWAYAM, DIKSHA, will be extended to provide teachers with a structured, user-friendly, rich set of assistive tools for monitoring progress of learners. Tools, such as, two-way video and two way-audio interfaces for holding online classes are a real necessity as the present pandemic has shown.

Addressing the digital divide:

Given the fact that there still persists a substantial section of the population whose digital access is highly limited, the existing mass media, such as television, radio, and community radio will be extensively used for telecast and broadcasts. Such educational programmes will be made available 24/7 in different languages to cater to the varying needs of the student population. A special focus on content in all Indian languages will be emphasized and required; digital content will need to reach the teachers and students in their medium of instruction as far as possible.

Online assessment and examinations:

Appropriate bodies, such as the proposed National Assessment Centre or PARAKH, School Boards, NTA, and other identified bodies will design and implement assessment frameworks encompassing design of competencies, portfolio, rubrics, standardized assessments, and assessment analytics. Studies will be undertaken to pilot new ways of assessment using education technologies focusing on 21st century skills

Why Digital Transformation For Education?

Gone are the days when students sit in the classroom and learn solely by listening to lectures. Today, education must be collaborative and interactive. Teachers are making drastic changes to the way they approach instruction, with technology in the classroom playing a major role. Digital transformation positively impacts student learning by opening a world of endless possibilities and collaboration.

What is digital transformation?

It is NOT a basic hardware or software upgrade (although that can play a part). Digital transformation is a physical and philosophical change designed to meet the ever growing demands of your students, faculty and campus to create a learning environment where everything connects. This is an ecosystem that combines technology, services and security to bridge the digital gap to create collaborative, interactive and personalized learning experiences.

What issues are driving digital transformation?
- ✓ Campus security
- ✓ Information security
- ✓ Student success
- ✓ IT strategy
- ✓ Data enablement
- ✓ Student centric services
- ✓ Affordability
- ✓ Digital integration
- ✓ Artificial intelligence

How do you create a digitally transformed campus?
- ➢ Build a strong IT foundation
- ➢ Foster successful students
- ➢ Create a safe campus
- ➢ Deliver state-of-the-art cyber security
- ➢ Deploy operational efficiencies

What do I need to do in order to digitally transform?

Digital transformation starts with a strategy. A clearly defined strategy that leverages opportunities presented by the new technology while meeting the objectives.

The following four steps will help you develop a digital transformation strategy for education:
- Connect everything to support tomorrow's digital world Set up strong strategic partnerships and build an ecosystem connecting your people, processes and things to build a communications network that is high capacity, secure and smart.
- Deploy analytics to automate, understand and save money Use real life, real-time data to drive strategic initiatives that improve performance, roll out upgrades and make infrastructure decisions.
- Roll out new business models "Freemium" software and on-demand services are cheaper, more flexible and simpler to manage than traditional systems, and may be just the ticket for your campus.
- Move towards a single, simple platform whether it is on-premises or in the cloud, the ultimate goal of digital transformation is to provide a single platform as the foundation of your network and communications infrastructure.

Digital transformation in education: The challenges

To understand how a full and sustainable digital transformation can take place, it's important to examine the potential challenges or roadblocks an institution might face. By understanding such issues it will be possible to overcome them.

1. A reluctance to adapt
2. A reluctance to adapt
3. Data silos
4. A lack of direction or strategy
5. System-based compatibility

Digital transformation in education: The solutions

1) Develop a strategy
2) Train and invest in skills
3) Integrate and leverage digital data
4) Automate
5) Embrace the power of mobile
6) Experiment with emerging technologies
7) Focus on digital citizenship

The digital transformation due to the COVID-19 was not smooth and without challenges but half of the students liked it and they would prefer it in the future. Our analysis allows drawing a few remarks and conclusions. Firstly, half of the students preferred online education and they are willing to continue it. Secondly, the students who had no technical issues would prefer to use their own devices during the tutorials. Finally, the students who will not prefer online education are divided by technical issues and other concerns.

Online education was considered successful because about half of the students would prefer it in the future. Almost all of these responses agreed upon that weekly class are necessary. Hence, they would like to learn from home with the well established schedule of semesters. Acceptance of rescheduled training like intensive courses would require further investigation because there were no specific questions about it. Current results show that the students think that weekly classes are indispensable. These students did not mention technical issues and had the necessary infrastructure.

Conclusion:

Digital transformation is creating a world of difference by rethinking the digital tools that are used in the classroom. Digital tools are driving new levels of collaboration and innovation to create a campus of endless learning possibilities.

At present, education institutions worldwide are faced with multifaceted challenges, including the growing impact of digitalization and changing expectations from students, staff, and faculty. Thanks to the brutality of the corona virus pandemic, digital transformation in education have shifted from important to essential within a few months. It has highlighted the gap that is prevalent in this community between the necessities and 'not' in this period. Further, as this sector becomes competitive, digital transformation is now becoming a must for survival as this new digital world requires educators to adapt and adopt digital technologies, methodologies, and mindsets.

Students enjoyed the digital education and half of them are willing to continue it in the future. Students would prefer to use their own devices during on tutorials which allow some changes in the labour environments. Unfortunately, some students had technical issues which may be caused by the heterogeneous software environment and can be solved with support material. Therefore, the successful utilization of the digital education can be achieved in the near future.

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A Study to Assess Effectiveness of Self Instructional Module on Level of Knowledge Regarding Care of Patient with Aggressive Behavior among Staff Nurses Working in Government Hospital, Tumkur, District.

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Abstract:

Aggressive behavior is one of the most common problems in hospital as well as public health sectors. It is the emotionally agitated behavior of a person to the point of loss of self-control and becoming prone to commit acts of violence. The massive imbalance in health research funding and output in terms of populations addressed has been referred to as 10/90 gap. Mental and Neurological Disorders are responsible for 13% of behavior related disorder for another third of the global burden of disease. Despite the evidence, mental health is a more neglected area within public health [2].In Switzerland showed that 72% of nurses working in psychiatric setting feel seriously threatened and 70% have reported being attacked at least once during their nursing care.Aggressive behavior can commonly seen in several disorders:

Organic psychiatric disorders like delirium, dementia, and Wernicke-Korsakoff's psychosis[3].Other psychiatric disorders like schizophrenia, mania (delirious mania), depression, withdrawal from alcohol and drugs, epilepsy and personality disorders.

Key Words: Aggressive behavior, Staff Nurse and Patient

Introduction:

According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment and the person's individual characteristics and behaviors. Generally the context in which an individual lives is of great importance on his life quality and health status. Health research plays a major role in advancing science, in providing solution for health problems and can contribute to growth, development equity, global security and fight against poverty. The massive imbalance in health research funding and output in terms of populations addressed has been referred to as 10/90 gap. Mental and Neurological Disorders are responsible for 13% of behavior related disorder for another third of the global burden of disease. Despite the evidence, mental health is a more neglected area within public health.[2] In humans, aggressive behavior takes the form of violent actions against others, where people tend to avoid such situation or fight against it. It is an implication inferred from events preceding or following the act of aggression.

Objectives:-

1) To assess the pretest knowledge of the staff nurse regarding care of the aggressive or violent patient.

2) To assess the post test knowledge of the staff nurse with regarding care of the aggressive or violent patient after administration of Self instructional module.

3) To evaluate the effectiveness of a Self instructional module on care of the aggressive or violent patient among staff nurses

4) To associate the post interventional knowledge among staff nurse regarding care of the aggressive or violent patient with selected demographic variable.

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Materials and Methods:

Research approach and Research Design: The research design adopted for the present study was "One group pre-test and post-test design"

Setting:- study was conducted at government hospital Tumkur District

Population:-Staff Nurses

Sample and sample technique: The present study the samples were 60 staff nurses on probability purposive sampling technique.

Inclusion Creteria:- 1)Staff nurses who are willing to participate in the study.**2**)Staff nurses who are qualified in Diploma nursing,B.Sc nursing,PB B.sc and M.sc nursing.

Exclusion criteria: 1)Staff nurses who have undergone specialized training on care of
 management of Aggressive or violence behavior.

Description of Tool:-Self administered knowledge questionnaire scheduled to assess the knowledge of staff nurses regarding care of aggressive behavior it consist of two parts.

Part I: Socio demographic data with 8 items for obtaining information about the selected background factors such as age, religion, academic qualification, professional qualification, source of health information and year of experience.

Part II: Self administered knowledge questionnaire prepared in the form of multiple choice questions for assessing the knowledge of staff nurse regarding care of aggressive behavior. Total item was 30 with total score of 30.

For right answer score -1 and for wrong answer score-0

The knowledge level has been arbitrarily divided into three categories based on self administered knowledge questionnaire and accordingly scores were allotted. 1) Adequate knowledge :>75% 2) Moderately adequate knowledge:50%-75% 3)In adequate knowledge :<50% Data collection after informed consent was obtained from participants after explaining the purpose of study and assuring confidentiality.Data were collected through interview with participants from15/10/2011 to 15/11/2011

Data Analysis:

Data collected from the subject were transformed into excel master sheet and analyzed using statistical package for social sciences(SPSS)Descriptive(frequency and percentage) and inferential statistics (Chi-square test) were used in study.All statistical analysis was carried out at a5%level of significance.

Results:-

Section-I: Frequency and percentage distribution of staff nurses according to socio demographic variables.

Table 1: Frequency and percentage Distribution of Staff nurses according to age

Age in year	Frequency(f)	Percentage (%)
21-30	12	20(%)
31-40	20	33(%)
41-50	22	37(%)
51-60	06	10(%)
Total	**60**	**60(%)**

The above table reveals that 12(20%) of the respondents were between the age group 21-30 years, 20(33%) of them were between the age group 31-40 years, 22(37%) of them were between the age group 41-50 and only 06(10%) of them were between the age group 51-58years.

Table 2: Frequency and percentage distribution of Staff nurse according to gender.

2. Gender	Frequency(f)	Percentage (%)
a. Male	10	17(%)
b. Female	50	83(%)
Total	**60**	**60(%)**

The above table revels that 50(83%) of the respondents were females and remaining10 (17%) of the respondents were males.

Table3: Frequency and percentage distribution of Staff nurse according to Marital status

Marital status	Frequency(f)	Percentage (%)
Single	12	20(%)
Married	20	33(%)
Divorced	22	37(%)
Widow	06	10(%)
Total	**60**	**60(%)**

The above table reveals that 12(20%) of the respondents were single, 20(33%) of them were married 22(37%) of them were divorced, and only 06(10%) of them were widow

Table4: Frequency and percentage distribution of Staff nurse according to Education

2. Education	Frequency(f)	Percentage (%)
a.GNM	22	37(%)
b.Bsc.Nursing	14	23(%)
c.P.B.Bsc,Nursing	20	33(%)
d.Msc.Nursing	04	07(%)
Total	**60**	**60(%)**

The above table reveals that Out of 60 respondents 22(37%) of them are GNM, 14 (23%)were BSc Nursing, 20(33%) them were P.B.BSc Nursing and only 4(07%) of them were M.Sc .

Table5: Frequency and percentage distribution of Staff nurse according to Area of living.

Area	Frequency(f)	Percentage (%)
Rural	17	28.3(%)
Urban	43	71.7(%)
Total	**60**	**60(%)**

The above table reveals that 17(28.3%) of the respondents were from rural and remaining 43(71.7%) of them were from Urban.

Section II:- Analysis of pre-test and post test knowledge on aggressive behavior among staff nurses.

Table 6: Pre-test and Post test knowledge score of respondents.

	Scores	Level of knowledge			
		Pre-tests(f)	Percentage (%)	Post tests(f)	Percentage (%)
Inadequate	0-10	10(f)	16.66(%)	02(f)	3.333(%)
Modernly adequate	11-20	46(f)	76.66(%)	50(f)	83.33(%)
Adequate	21-30	04(f)	6.666(%)	08(f)	13.33(%)
	Total	60	100	60	100

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The presented in table depicts that in the Pre-tests scores majority 46 (76.66%) had moderately adequate knowledge. about 10 (16.66%) of the respondent had inadequate knowledge and remaining 04(6.66%) of them had adequate knowledge. Similarly post test scores depicted that majority 50(83.33%) had moderately and adequate knowledge 02 (3.33%) had inadequate knowledge and remaining 08 (13.33%) had adequate knowledge.

Table 7: Mean, standard deviation, standard error of pre tests and post tests knowledge scores

		Mean	N	Std deviation	Std error of mean	p-values
Pair	Pre tests	15.4667	60	8.1208	1.0484	0.0001
	Post tests	18.0500	60	7.7861	1.0052	

The data presented in table 7 reveals that the respondents knowledge scores was high in the post tests than that in the pre tests mean pre tests score was 15.4667 and mean post tests score was 18.0500 which is significant as p-value was 0.0001.so there is enough evidence that self instruction module is effective in enhancing the knowledge of respondents

Table8: correlation of pre tests and post tests knowledge scores

		N	Correlation	p-value
Pair	Pretests and Post tests	60	0.983	0.00012

The data presented in table 8 also gives an evident about correlation between pre tests and post tests score which 0.983, so the pre tests and post tests scores are highly positively correlated.

Table 9: Area –wise Mean, Standard deviation of pre test and post test knowledge score.
N=60, p<0.00012

		Pre test		Post test	
		Mean	S.D	Mean	S.D
I	Introduction ,incidence, risk factors of aggressive behavior	16.00	2.5495	19.60	1.9736
II	Meaning and definition of aggressive behavior	15.00	1.0000	18.50	2.5450
III	Clinical features and diagnosis	14.50	1.2909	16.25	1.6320
IV	Protective and Prevention of aggressive behavior	16.10	2.1213	17.55	3.3121
V	Management of aggressive behavior	15.73	1.9436	18.88	4.0000

Section:-III Effectiveness of self instructional module on care of aggressive behavior among staff nurses:-To evaluate the effectiveness of SIM on knowledge regarding care of aggressive behavior patient among staff nurses and to find the significance of mean difference between pretest and post test knowledge score of respondents the following hypothesis was stated.**H1:**

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There is significant difference between pretest and post test knowledge regarding care of aggressive behavior patient among staff nurses. This hypothesis was tested using paired t test

Table 10: Significance of Mean, standard deviation, standard error of pre tests and post tests knowledge scores.

		Mean	N	SD	Standard error of mean	p-values
Pair	Pre tests	15.4667	60	8.1208	1.0484	0.0001
	Post tests	18.0500	60	7.7861	1.0052	

Maximum score=30,

The data presented in table 10 reveals that the respondents knowledge scores was high in the post tests than that in the pre tests mean pre tests score was 15.4667 and mean post tests score was 18.0500 which is highly significant as p-value was 0.0001.Hence the hypothesis was rejected at level 0.00012 level of Significant . So there is enough evidence that self instructional module is effective in enhancing the knowledge of respondents.

Section IV:-Associated between Pretest knowledge score of staff nurses with selected socio demographic variables:-This section deals with findings of the association between pretest knowledge score and selected socio-demographic variables .The mean of the pretest knowledge score was calculated and found to be 15.4. The number of respondents who were above and below the mean were identified and grouped according to socio demographic characteristics like age, gender, and marital status, area of living, source of information and family income and care of aggressive behavior at district hospital Tumkur.To test the association between the knowledge score and socio demographic variables, the following hypothesis was formulated.

H2: There is significant difference between pretest and post test knowledge regarding care of aggressive behavior patient among staff nurses. This hypothesis was tested using paired t test

Table 11: Associated between Pretest knowledge score of staff nurses with selected socio demographic variables   **n=60**

S.I No	Level of scores In terms of Mean		D.F	Chi-square	p-value	Result
	Pre tests	Post tests				
Age (years)						
21-30	0	0				
31-40	15	15				
41-50	10	10				
51-60	05	05	3	0.0	0.98	NS
Gender						
Male	15	18	1	2.158	0.116	NS
Female	12	15				
Marital Status			3	0.052	0.997	NS
Single	7	8				
Married	8	10				
Divorced	6	8				
Widow	6	7				

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	Level of scores		D.F	Chi-square	p-value	Result
	Pre tests	Post tests				
Education						
GNM	04	15				
B.Sc Nur	05	12	3	8.620	0.035	S
P.B.Bsc	17	11				
M.sc	08	10				
Area						
Rural	20	23	1	0.001	0.99	NS
Urban	14	16				
Work Exp						
1-5	06	16				
5-10	07	14	3	8.459	0.037	S
10-15	13	22				
15-25	10	12				
Source of Information						
Mass media	06	17				
Health personnel	08	15	3	6.93	0.074	NS
Seniors	20	14				
Others	10	11				

	Level of scores		D.F	Chi-square	p-value	Result
	Pre tests	Post tests				
Family income						
Less than Rs.5000	07	08				
Rs.5001-10000	08	10				
Rs. 10001-15000	11	15				
Rs.15001-20000	13	14	3	0.199	0.978	NS

NS = not significant   S=significant

Table reveals that there is association between pre tests and post tests knowledge scores with selected demographic variables such as age($\chi 2 = 0.0$) , gender($\chi 2 = 2.158$), and marital status($\chi 2 = 0.052$), education($\chi 2 = 8.620$), area of living($\chi 2 = 0.001$), work experience($\chi 2 = 8.459$), source of information ($\chi 2 = 6.93$), and family income ($\chi 2 = 0.199$). But there was significant association between levels of knowledge at 5% level of significance. And also there was association between level of knowledge and Work Experience.

Conclusion:-

Finding of the study showed that the mean knowledge (15.46)of the respondents was not satisfactory before administration of self instructional module .The self instructional module helped the respondents to learn more about various aspects on aggressive behavior .The post test knowledge score showed significant increase in knowledge of respondents .Hence self instructional module is an effective strategies for providing information and improving the

knowledge of respondents .Educating the respondents would help them to handle aggressive behavior patient in hospital.

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Online Education System in India - The Challenges

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Abstract :

In India, individuals are depending intensely on solid web associations, PCs, or cell phones to return to business during the new ordinary. The emergency has prodded understudies to get e-learning openings, as there is seemingly no end in sight. As the nation takes to online schooling, the current pandemic is affecting country understudies more than the individuals who live in urban areas. Be that as it may, e-learning is changing the area even in far off provincial regions. Level 3 and level 4 towns are raising the stakes by putting resources into the upgrade of advanced training measures. While many are benefiting as much as possible from what web based realizing offers, neighborhood specialists are thinking that its intense to incorporate high velocity web offices. In addition, individuals in provincial regions need to likewise manage discontinuous force supply and more seasoned electronic gadgets, which are regularly a prevention to consistent access The online instruction space in India has been making up for lost time for years and years at this point. In any case, it has been to a great extent utilized for skilling and is floated without anyone else learning. Schools and universities have seldom needed to show exclusively online not at all like post-March 2020 when Covid changed the training worldview and everybody, independent of their openness to learning on the web, have needed to adjust and learn. The current emergency has turned the emphasis on the blemishes in the framework - absence of admittance to quality training for all, absence of comprehensive schooling, shortage of qualified instructors and low spotlight on fundamental abilities. For 12-year-old Rahul Oak, concentrating in an administration helped school that obliges oppressed and the transient local area kids in Mumbai, educational time presently implies he needs to run out of his home to the furthest limit of the path a couple of moments before class begins so he can take advantage of the sign that will fire up his parent's cell phone and he can see his educator on the web. "There is no sign at home," says Shingare. "I would prefer not to miss my day by day meetings thus now it's anything but a training to be prepared and rushed to the furthest limit of the path and sit outside and pay attention to the instructor

Key words: Online Education, Issues, Challenges, Student

Introduction :

Online training sets aside cash and time As online schooling is through web, so it very well may be effectively gotten to anyplace, whenever. You can get to the substance early morning, late evening, at home, in cafeteria, or on the train. As the substance is by and large preloaded, so you can download the talks/recordings and watch them whenever it might suit you consistently. Additionally cost of online instruction is extremely low in contrast with vis-à-vis schooling. Likewise there is an incredible reserve funds on inn and transportation charges. Since all the substance is accessible on the web, so you need not accepting books too. Restricted Social cooperation Since online instruction can be gotten to at home or some other helpful spot, there is exceptionally restricted direct communication with the educator and others doing the course. As per Dhirendra Kumar (2010), particularly those courses which are independent, there is

extremely less conversation among the companions. The vast majority of the conversation happens through email, visit room or conversation gatherings. There isn't any grounds environment to work on friendly collaboration. So you can't foster any friendly connections which do help in the profession development.

There are sets of guardians who like online classes, while others have denounced it's anything but, a public overview led by LocalCircles, a web-based media and local area stage, which got 8,287 reactions from 204 regions of the country. Residents were asked what ought to be the way forward as certain states in the nation have restricted online classes. Accordingly, 31% guardians said that the prohibition on online classes should proceed, while 49% said online classes ought to be begun however restricted to two hours out of every day. Around 15% said online classes ought to be begun and run for the term of normal school hours which could be 4-6 hours while around 3% were uncertain.

Issues facing online education:

Advanced gap: Students who, in principle, approach e-showing should rely upon badly designed techniques, for example, cell phones The Covid-19 pandemic has upset the training area around the world. Classes have been suspended to implement social removing and instructive establishments, from schools to colleges, have moved to online strategies for educating and assessment. As the quantity of cases keeps on ascending, there is no conviction about when regularity will be reestablished. This has energized a type of a lasting slant, if not a total shift, to online training. The new National Education Policy (NEP) endorsed last month additionally discusses being prepared for computerized and online schooling, in spite of the fact that it adds a rider that the advanced separation should be wiped out to completely profit with such techniques Three-fourths of understudies in India didn't approach the web at home, as per a 2017-18 all-India NSO overview. The portion of the individuals who didn't Ahave PCs, including gadgets, for example, palm-tops and tablets, was a lot more noteworthy - 89%. Admittance to these offices was higher among understudies at more elevated levels of schooling. In any case, even at the most significant levels, an enormous portion of understudies didn't approach these offices. True to form, admittance to the web and PCs is straightforwardly identified with family livelihoods.

Absence of admittance to the web and gadgets has additionally made a hole in computerized education. As numerous as 76% of understudies in India in the 5-35 age bunch didn't have a clue how to utilize a PC. The portion of the individuals who didn't have the foggiest idea how to utilize the web was 74.5%. Indeed, this hole ascends with a fall in pay levels. 55% of understudies among the top 20% of families by month to month per capita consumption (MPCE) realized how to utilize a PC and web while these extents were just 9% and 10% among the base 20%.

Challenges to system:

Advanced gap: Students who, in principle, approach e-showing should rely upon badly designed techniques, for example, cell phones The Covid-19 pandemic has upset the training area around the world. Classes have been suspended to implement social removing and instructive establishments, from schools to colleges, have moved to online strategies for educating and assessment. As the quantity of cases keeps on ascending, there is no conviction about when regularity will be reestablished. This has energized a type of a lasting slant, if not a total shift, to online training. The new National Education Policy (NEP) endorsed last month

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Future of online education:

Could online training supplant schools? It can't be the lone choice as socialization and fundamental abilities can't be supplanted by internet realizing which is imperative for training. In any case, a few specialists proposed it can work pair with disconnected classes post-pandemic. That way, it can assist with connecting geological limits, The current commotion to the customary instructive framework in India will function admirably for associations that empower advanced education among their workers. "This will mean a lot more appeal for an assortment of chief schooling just as online-based specific bosses programs," said Vishwanathan Iyer ACA, PhD, Professor – Accounting, Economics and Finance Area, Dean TA PAI Management Institute.He expects the interest for projects of Work-Integrated-Learning assortment to go up because of online training. In the push for online schooling post-pandemic, what should be figured in is that the least fortunate of helpless understudies are not forgotten about as they don't have the assets to get to it. One method of doing that recommended Mahmaya Navlakha of Arthan is for government to step in to make this new arrangement of learning workable for all. "All things considered, community society has its restriction. The public authority can devise a program which guarantees normalization and quality by working with specialists in the field and make a system that makes incorporation," Navlakha said.

Key Challenges for Online Education in India:

There are some normal difficulties that were thought of while setting up the new instruction strategy. Some of them are given underneath. Over 30% of the country's populace isn't PC proficient. Some of them even don't have the foggiest idea how to begin a PC. Not every person can manage the cost of a PC or a PC. A few segments of the general public like ranchers, servants, housecleaners, sweepers and servers may confront troubles buying a PC. A few educators are curious about the new arrangement of schooling. They are not very much prepared for online schooling classes. Other than this, it's anything but essential that a decent study hall

instructor will be a decent educator in the online homeroom. There are a predetermined number of assets accessible to lead an online assessment in India. Other than this, there is a limit for the quantity of inquiries that can be posed in the test. Specific sort of subjects and courses, for example, science and performing expressions can not be instructed in the advanced schooling space. The online instruction framework is all the more a sort of screen-based learning framework which limits the understudies to perform practicals. The web network isn't acceptable all over the place. There are a few urban communities of India where individuals are as yet utilizing 2G or 3G web association.

Online Teaching Tools and Methods:

The current e-learning stages, for example, DIKSHA and SWAYAM will be stretched out to furnish instructors with an easy to use and very much organized climate. These stages will be refreshed with some arrangement of apparatuses like two-way sound interface and two-way video that can assist the educators with leading web based classing and screen the advancement of understudies. All subjects can't be instructed on the web: Construction in math, for example, is hard to show on the web, said a mathematical instructor, Vidya Ganeshan who has been showing the subject for longer than 10 years. "It is hard to show a couple of new ideas in an online homeroom however we utilize an intuitive application as understudies center at home is an issue other than the intricacy of the theme. Prior, the quiet catch was at the educator's end and we could quiet understudies who intruded on class however with the new Microsoft Teams for training application, a few kids play no-show and will not address when an inquiry is posed as the quiet catch is in their grasp currently!" Parents, youngsters need time to get medium: Parents and understudies have not been presented to this new arrangement of learning and will take to adjust to the new type of instruction., which is available in 14 urban communities across India, as of late led a review among the guardians across India in regards to online schooling and discovered one moment level of respondents had reservations concerning web network equipment issues term of the classes capacity to help their kids and programming contrariness and an excessive amount of in general screen time including instruction The difficulties are genuinely low and with time will wilt away, said Peshwa Acharya, head promoting official.

Online education:

Challenges faced by rural communities

As the nation takes to online training, the current pandemic is affecting provincial understudies more than the individuals who live in urban communities. The entire world is changing in accordance with the truth of the Covid-19 pandemic by discovering options in contrast to the disturbances caused hitherto. Enterprises are permitting their labor forces to telecommute, while schools and universities are moving classes on the web. In India, individuals are depending intensely on solid web associations, PCs, or cell phones to return to business during the new typical. The emergency has poked understudies to get e-learning openings, as there is seemingly no end in sight. As the nation takes to online training, the current pandemic is affecting country understudies more than the individuals who live in urban areas. Nonetheless, e-learning is changing the area even in far off rustic regions. Level 3 and level 4 towns are raising the stakes by putting resources into the upgrade of advanced instruction measures. While many are capitalizing on what web based realizing offers, neighborhood specialists are thinking that its intense to coordinate rapid web offices. In addition, individuals in rustic regions need to likewise manage discontinuous force supply and more seasoned electronic gadgets, which are frequently a

block to consistent access. Sadly, understudies in rustic India are denied the freshest gadgets and levels of availability to online substance that metropolitan Indians appreciate every day. In contrast to their partners in urban areas, a lower level of understudies in towns have work area or PCs. They rely upon their relatives' cell phones for learning and going to classes, making it a laborious exercise. Observing little screens to devour however much data as could reasonably be expected for extended periods of time could be impeding to understudies' wellbeing.

Moreover, buying information plans for learning could likewise bring about a ton of costs for families who face monetary imperatives. It could additionally influence the cooperation levels of the two educators and understudies concerning live classes. Computerized education and the advanced gap have been not kidding worries for our country for longer than 10 years. Numerous educators and understudies in provincial regions can't coordinate to the specialized abilities of educationalists and understudies in urban areas. They face road obstructions while moving from disconnected to online instruction, which could be a justification uneasiness among country networks. Aggregate endeavors of common society associations, policymakers and the public authority are needed to make an easy to use advanced interface so educators and understudies think that its helpful for continuous learning. On the splendid side, every one of the partners have made critical interests in further developing admittance to computerized administrations and e-getting the hang of; expanding on prior framework could facilitate the cycle of advanced consideration. Instructors would have the option to change easily in the event that they get the imperative help. Neighborhood and public governments should cooperate with the IT and edtech areas to accelerate the way toward bringing imaginative and practical online instruction apparatuses to country India.

Online Assessments and Examination

Some administration bodies like School Boards, NTA, proposed National Assessment Center or PARAKH will deal with planning another appraisal structure. The new structure will be intended to inspect the exhibition of the understudies according to the refreshed guidelines of online instruction. Other than this, the system will be founded on 21st-century innovation. Besides, buying information plans for learning could likewise cause a great deal of costs for families who face monetary limitations. It could additionally influence the cooperation levels of the two instructors and understudies concerning live classes. Computerized proficiency and the advanced gap have been not kidding worries for our country for longer than 10 years. Numerous instructors and understudies in rustic regions can't coordinate to the specialized abilities of educationalists and understudies in urban communities.

Challenges in Online Learning:

Contrasting face-with face learning with internet learning delivers huge inadequacies in the online mode, for example, absence of human interface, nonattendance of chances of cooperative learning, educator oversight and the most glaring being absence of chances for involved learning in complex subjects like science and arithmetic. Moreover, in the midst of the surge of facilitating on the web classes the best showing practices such a tending to students Multiples Intelligences Learning Styles and giving a separated learning experience have been consigned to the sideline. So how does the top of a school address the difficulties of value learning in online mode and is it conceivable to outfit innovation to give a rich, vivid and comprehensive learning experience to the understudies?

Conclusion:

In any case, it has been to a great extent utilized for skilling and is floated without anyone else learning. Schools and universities have seldom needed to show exclusively online not at all like post-March 2020 when Covid changed the training worldview and everybody, independent of their openness to learning on the web, have needed to adjust and learn. This has energized a type of a lasting slant, if not a total shift, to online training. The new National Education Policy endorsed last month additionally discusses being prepared for computerized and online schooling, in spite of the fact that it adds a rider that the advanced separation should be wiped out to completely profit with such techniques Three-fourths of understudies in India didn't approach the web at home, as per a all-India NSO overview. " Contrasting face-with face learning with internet learning delivers huge inadequacies in the online mode, for example, absence of human interface, nonattendance of chances of cooperative learning, educator oversight and the most glaring being absence of chances for involved learning in complex subjects like science and arithmetic.

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Chronic Occupational Disease: A study of IT sector professionals in India

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Abstract:

Every organization in the world achieves their goals by using human resources. Most of the employees are facing chronic health problems in IT sector. Representatives working in IT industry are inclined to build up a great deal of medical issues because of constant physical and mental worry of their work. For the purpose of this research a number of 5 viable IT firms were selected and 200 IT professionals were selected as a sample. Research has found that there is a very strong positive relationship between health facilities and employees' satisfaction.

Keywords: IT professional's health, Employee satisfaction and IT firms

1. Introduction:

As India is a developing country the growth of the country depends upon the industrial profile of the nation. Data Technology (IT) industry in India has an enormous lift because of globalization of Indian economy and good government approaches. IT and IT related experts are at a steady strain to convey benefits proficiently and must be practical

Representatives working in IT industry are inclined to build up a great deal of medical issues because of constant physical and mental worry of their work. Sicknesses are either initiated, continued or exacerbated by pressure. The basic medical issue because of stress is corrosive peptic infection, liquor abuse, asthma, diabetes, weakness, pressure cerebral pain, hypertension, sleep deprivation, touchy inside condition, psychoneurosis, and skin maladies, for example, psoriasis, lichen planus, urticaria, pruritus, neurodermatitis and so forth. In this research, the purpose is to analyze employee's health and safety and the impact on their job satisfaction. For this purpose, the IT sector professionals has been selected as a population because they are facing more health issues in the workplace due to long working hours. Globalization and privatization have brought new work connections, work weakness, instability with respect to future working conditions and quick out of date quality of abilities are reasons for pressure. The IT industry has become one of the quickest developing enterprises in India. The purpose behind picking especially IT is that the degree of stress these workers face is similarly higher than workers from other sectors. Any sort of work has targets, and a worker becomes focused when the person is allocated with unachievable targets and can't deal with a given circumstance which will lead to chronic occupational diseases

2. Meaning of Chronic Occupational Disease

According to the International labor organization "Occupational disease refers to any disease contracted as a result of exposure to factors arising from work activity".
Two main mandatory elements which are understood from the definition.
1. The causal relationship between exposure in a specific working environment or work activity and a specific disease and

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2. The fact that the disease occurs among the group of exposed persons with a higher frequency rate than in the rest of the population, or in other worker populations.

2.1 Type Of Disease

After some time, expanded periods at the PC can negatively affect our wellbeing. The following are the major constant illnesses endured by the IT experts.

●Lower Back Pain:

This is the most common problem faced by the IT experts. Around 80% of individuals have to sit over 8 hours before a PC which can prompt over weight on bone joints and ligaments of back prompting back pain. Employees are not taking successive breaks in the middle of the work. Since a long time ago run tireless pressure and strain on the bone and tendons prompts basic changes in the spine in this manner prompting an incessant back torment.

●Carpal Tunnel Syndrome (CTS):

Carpal passage disorder is where a nerve known as the middle nerve that goes through the wrist gets packed because of steady yet limited development of the wrist joint. The ligament aggravation coming about because of dreary work, for example, continuous composing, can cause carpal passage side effects. Carpal passage disorder from dull moves like continuous composing has been alluded to as one of the dreary pressure wounds.

●Pressure and Nervousness:

Targets and cutoff times, hearing these two words is sufficient to instigate pressure and nervousness in the vast majority of IT experts.

●Heart Diseases:

Research has found that sitting for a long duration of time without giving importance to various health concerns, including obesity and metabolic disorder. Number of health issues arises that includes high blood sugar, high blood pressure, excess stomach fat and high cholesterol levels. An excess of sitting also seems to expand the danger of life from cardiovascular disease.

●Sleeping Disorder:

A sleeping disorder or trouble in sleeping is one of the regular problems seen in software professionals. This is more recognized in IT sector professionals working in late night shifts, as their ordinary sleep time is disturbed and their day time rest is poor & inadequate due to some or other reasons.

●Deep vein thrombosis:

Deep vein thrombosis is a condition where blood clusters form in the deeper veins in the legs. It is one of the typical health problems in software experts. Generally, the impure blood in the legs is pumped back to heart and afterwards lungs for purification; this is a regular continuous process; sitting for extended hours without any movement can make blood deteriorate in the blood veins of our legs which lead to clot development. This can prompt advancement of a condition known as Deep vein thrombosis.

●Cancer

In addition to heart disease and thrombosis, a recent medical examination has found that there is a link between physical inactivity and certain cancers, particularly colon and breast cancer.

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3. Need of The Study

Research has found that employee's health directly affects work performance of the employee and the profitability of the company. For the success of any business, it is important to have those who work for the organization fit, healthy and happy.

It is very important to know what type of diseases are associated with the work of the employees. Nowadays the Information Technology sector plays an important role in the development of an economy. So, it has become so important to take care of the main warriors who can directly or indirectly be associated with increasing the GDP of the country. The present research will be conducted to find the answers of the following questions

I. Why there is an alarming increase in chronic diseases even after the adoption of so many wellbeing programs by the organizations?

II. What is the status of the employees about the awareness of the chronic diseases symptoms at the initial stages?

The Present study will be a significant endeavor in articulating how the awareness about the early detection of disease helps in curing the chronic diseases.

4. Objectives of The Study:

1. To identify the impact of chronic health issues suffered by employee on employee's productivity and organization's profitability.
2. To examine the level of awareness among the Information Technology sector employees for the health benefits.

5. Research Methodology:

Research methodology can be defined as a particular procedure or technique used to identify, select, process and analyses information about a topic. Research methodology helps to evaluate the validity and reliability of the study

A. Research Problems:

The foremost step in research is formulation of the research problem. A research problem can be defined as a specific issue, contradiction that will be addressed in the research. It will provide a clear purpose and justification to the research. Under this research the main problem is associated with the work-related diseases that turn out chronic with the passage of time.

1. To what extent employee health facilities by the employer and Government are provided in the IT Sector
2. Are the employee health & safety facilities having an impact on employee's job satisfaction?
3. What factors causes employee health & safety problems?

B. Target Population:

Target population refers to the entire group of individuals who are helpful in achieving the effective results for this study. Employees with the experience of minimum 2 years and age between 27 to 45 years are considered, both male and female are included and 200 employees were selected based on the provided selected criterion.

C. Research Design:

The research under study is a combination of both exploratory and descriptive research design. The exploratory will include techniques like reviewing available literature and data sources.

Description design will be used to study the symptoms, experience and type of the job associated with the respondent and draw inference and gain new insights in research work.

D. Data Collection Techniques:

In this research, the data is mainly collected through primary sources. Employees of the IT sector are the major sources of primary data collection. This data has been collected by sending online self-structured questionnaires to employees of five viable IT firms in India. Each sample was selected on the basis of a simple random sampling method.

6. Conclusions:

Most of the employees who are working in the IT sector, face health problems due to above mentioned reasons. Though, organizations has taken necessary actions from time to time to reduce or eliminate the problems associated directly with the work of the employees. According to findings, there is a negative relationship between work stress and employees' satisfaction. Further, there is a positive relationship between health facilities and employee's satisfaction. If employees' health facilities provided by the organization increase, employee's satisfaction also will be increased. So, organizations need to consider employees' health and safety facilities to achieve their objective effectively and efficiently.

7. Future Scope:

This study is constructed for identifying the relationship between employees' health, safety facilities and employees' satisfaction. Even though other factors, such as employer and employee relationship, salary, incentives, leaves emoluments, perks etc. that can affect the employees' satisfaction are considered. So, on the basis of the research conducted it can't be concluded that only health and safety are related to the satisfaction of employees. So, further researchers have to consider other factors than considered factors.

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Usage of E-Journals Among Engineering Students: A Case Study

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Abstract :

E-services now play a vital part in the lives of individuals, organisations, and institutions, and information awareness is the key to the optimum use of information. The present study analyzed the "Usage of e-Services among Engineering Students". A well structured 150 questionnaires were distributed among the engineering students. Therefore, a total of 138 questionnaires were returned and used for this study. The present study demonstrates and elaborates the various aspects of the purpose of using e-services.

Keywords: e-services, Engineering and Technology.

Introduction :

E-services can be seen as the most recent development in information technology and it is one of the most powerful tools ever invented in human history. In the modern era it has created the way the people communicate with each other and the way information is accessed. It has rapidly become an established medium of communication and connects people across the globe, removing geographic boundaries and simplifying access to information. The electronic information resources are becoming more and more important for the academic community in accessing information at the right time and in the right form. The use of information resources in an electronic environment becomes more pronounced when information becomes more readily available in electronic formats (ir.inflibnet.ac.in).

Objective of the Study :

The major objectives of the study are to find out the purposes, types and of use e-services by the students.

Research Methodology :

A well structured 150 questionnaires were disseminated to the Engineering Students selected suitably. Therefore, a total of 138 (13.35%) questionnaires were returned and used for this study. The data analysis and interpretation is based on the response of 138 students belonging to the various branches of engineering. The results of the findings were accessible in tables using percentage.

Data Analysis and Discussions

Size of the sample

Total questionnaires distributed	Total questionnaires received	Percentage (%)
150	138	13.35%

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Table-1: Purpose of usage e-services

Purpose of use e-services	Percentage (%)	Preference
Study/Research work	89.85	I
Update knowledge	78.81	II
Finding relevant information quickly	53.62	III
Paper writing for publication	36.23	IV

Table-1 revealed that the purpose of using e-services for study/research work (89.85%) has been identified to be the maximum by the students. For update knowledge the respondent placed the second order of rank i.e. (78.81%), followed by finding relevant information quickly (53.62%), and for paper writing for publication (36.23%) secured the rank of 3 to 4 respectively in order of ranking.

Table-2: Use types of e-services

e-resources/services	Percentage (%)	Preference
e-mail	100	I
e-journals	92.75	II
Subject gateways	49.27	III
e-databases	21.73	IV
e-thesis/dissertations	20.29	V
e-books	15.82	VI
Web resources (e.g.; images, etc.)	11.59	VII

Table-2 revealed that e-mail has been identified to be the maximum used types of e-services by the students, and it occupies the first rank (100%). e-journals are next in the order of rank i.e. (92.75%), followed by factual subject gateway (49.27%), e-databases (21.29%), e-thesis/dissertations (20.29%), e-books (15.82%), and web resources (11.59%) respectively in therefore placed second to seven position in the ranked order.

Table-3: Frequency of use e-services

Time	Percentage (%)
Daily	46.38
2-3 times a week	43.48
Once in a week	7.24
Not specified	2.90
Total	100

Table-3 reflects that just 46.38% students use e-services daily. Just 43.48% students use e-services two to three times in a week, 7.24% students use e-services once in a week, and 2.9% students not specified for the frequency use of e-services.

Table-4: Estimated time spent in a week for using e-services facilities

e-services facilities	Up to 1 hours	1-2 hours	2-4 hours	> 4 hours
e-mail	5.80%	14.49%	76.81%	2.90%
e-journals	3.12%	37.5%	60.93%	6.25%
e-databases	13.33%	80%	6.67%	-
e-thesis/dissertations	3.12%	28.57%	64.29%	-
e-book	9.09%	72.73%	18.18%	-
Web resources (e.g.; images, etc.)	62.5%	37.5%	-	-

Table-4 indicated how respondents time spent in a week for using e-services facilities.

Table-5- Preferred methods of reading e-services

Preferred methods	No. of respondents	Percentage (%)	Preference
Print out on the paper	106	76.81	I
Display on the PC monitor	18	13.04	II
Downloading in the pen drive etc.	14	10.15	III
Total	138	100	

Table-5 revealed that the most preferred methods of reading e-resources/information services is print out on the paper (76.81%) has been identified to be the maximum by the students. Display on the PC monitor is the second order of rank i.e. (13.04%), followed by downloading in the pen drive, etc. (10.15%) secured the rank of 3 respectively in order of ranking.

Table-6: Satisfaction with e-services in teaching & research works

Satisfaction	Percentage (%)
Partially satisfied	53.62
Fully satisfied	18.84
Least satisfied	20.29
No response	7.25
Total	100

Table-6 reflects that only 18.84% students are fully satisfied with the e- services, 53.62% are partially satisfied, 20.29% are least satisfied, and 7.25% students are not responded with e-services in teaching & research works.

Conclusion and Discussions :

In concluding remark we can say that the present work is based on the response received from the respondents, which have been taken in the beginning of the course. The present study has clearly indicated that, the e-services are highly useful for the research and academic community in the present environment. In which the e-services has to play a significant role to assist the academic community in the provision of this unique service. The findings will be more interesting and impressive. We may say that it is information technology, which makes our life faster and comfortable, if it is used properly for the benefit of the self in particular and for the society in general. To assist the academic community the authorities of the library must conduct the user awareness programs to train the academic community in the maximum utilization of these electronic resources more effectively and efficiently.

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Motives and Interest of Instagram Usage

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Abstract :

The aim of this study is to identify the motives behind Instagram use and topics of interest among students of professional courses and traditional courses. For this project, the Instagram usage and motives scale was used. A sample 180 students from above mentioned courses selected as a sample, purposive sampling method was employed. It is found that the level of Social Interaction, Documentation and Self promotion was highest among engineering students; level of Diversion was highest and similar in Engineering and regular Arts students, and level of Creativity was highest among Students of fine Arts

Keywords : Instagram usage and motives, Traditional Courses, Professional Courses, Professional Course Students, Traditional Courses students

Introduction :

Instagram is a social media app that uses images as the means of communication. Two years after its launch, the number of Instagram users reached three hundred million. Instagram has become an important social networking platform for teenagers Visualized communication has become the most favored way of communication for modern youths.Without a doubt, Instagram has become the most favored social media app of young individuals today. This study investigated whether gender and University Major influences the motives for Instagram use and topics of interest for university students in Sawantwadi to provide future reference for personalized advertising on Instagram.

Objectives :

To study the effect of academic majors on Instagram use and topic of interest.

Hypothesis of Study

There is no effect of academic majors on Instagram use and topic of interest.

Methods :
Design :

Cross-sectional Design was used to test the hypothesis. Group one consists of students studying Bachelor of Fine Arts. Group two consists of students studying Ayurvedic Medicine and Group three consists of students studying Engineering. Group four consists of students studying in Bachelor of Arts, Group five consists of students studying in Bachelor of Commerce, and Group six consists of Bachelor of Science.

Sample :

A purposive sample of 180 students were selected (30 students each from professional courses: Bachelor of Fine Arts, Bachelor of Ayurvedic Medicine and Bachelor of Engineering; and Traditional courses; Bachelor of Arts, Commerce, Science) from Sawantwadi Taluka, within the age range of 18 - 22 and were a mix of male and female students.

Tool :

Instagram Usage and Motives Scale-For the questionnaire design, we referred to the five categories of motives for social media use employed by[53]: social interaction, documentation, diversion, self - promotion, and creativity

Procedure :

The study was conducted on a sample of 180 participants with age range of 18-22 years Each participant was contacted individually and confidentially of their responses was assured Test was uniformly administered to all the participants. Also online survey was conducted using Google forms. All the participants were informed about the purpose of the study and only those who consented were included for testing

Result and Discussion :

The objective of the study was to compare the motives behind Instagram use and topics of interest among students of professional courses and traditional courses. The obtained data was analysed by using descriptive statistics

Table 1. Means of five different motives of students studying BE.

Name Of Stream	Group	Mean
Bachelor Of Engineering	Social Interaction	5.36
	Documentation	4.3
	Diversion	2.7
	Self-Promotion	2.5
	Creativity	4.6

Table 2. Means of five different motives of students studying BFA

Name of Stream	Group	Mean
Bachelor Of Fine Arts	Social Interaction	4.26
	Documentation	2.56
	Diversion	1.93
	Self-Promotion	1.66
	Creativity	4.8

Table 3. Means of five different motives of students studying BAMS

Name Of Stream	Group	Mean
B.A.M.S.	Social Interaction	4.2
	Documentation	2.7
	Diversion	2.1
	Self-Promotion	0.9
	Creativity	3.4

Table 4. Means of five different motives of students studying B.A.

Name Of Stream	Group	Mean
Bachelor Of Arts	Social Interaction	4.23
	Documentation	2.83
	Diversion	2.7
	Self-Promotion	1.93
	Creativity	3.86

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Table 4. Means of five different motives of students studying B.Sc.

Name Of Stream	Group	Mean
Bachelor Of Science	Social Interaction	4.66
	Documentation	2.5
	Diversion	2.36
	Self-Promotion	1.46
	Creativity	3.9

Table 5. Means of five different motives of students studying B.Com.

Name Of Stream	Group	Mean
Bachelor Of Commerce	Social Interaction	5.2
	Documentation	3.1
	Diversion	2.4
	Self-Promotion	1.5
	Creativity	4.5

From the above tables we can find that the level of Social Interaction (5.36), Documentation (4.3) and Self- promotion (2.5) was highest among engineering students; level of Diversion (2.7) was highest and similar in Engineering and regular Arts students, and level of Creativity (4.8) was highest among Students of Fine Arts.

Conclusions :

It is found that students from both the study groups use Instagram mostly to look at posts, particularly for the sake of social interactions and diversion and creativity. Instagram is less used by both the groups for self-promotion.

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The Professionalization of Librarianship : The Present Perspective

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Abstract :

Library science is a well-defined professional discipline that can been clearly differentiated from any of the vocational disciplines. The natural origination of professionalization of library science equally imply the same dynamics from the persons engaged in this profession as the impacts are of universal nature. The profession of librarianship envisages the further changes in the near future that demands the development of competency of the professionals in the global perspective, as the dynamics of evolution in work culture cannot be confined to a single discipline. The impacts are correlative to the other disciplines concerned. This also expects the education system to review the subject in the light of modernization

Keywords – professionals, education, professionalism, library science, development.

I. Introduction :

Librarianship is a distinct and distinguished profession in modern society. It is engaged in public service and plays an important role in national development. Librarianship today is termed as "Library and Information Profession" since the concept of librarianship has changed in view of the changing information needs of the society. For a long time there was dilemma whether librarianship is a profession or not. One of the views is that it is not a profession, it is believed to exist between a profession and a vocation. The medical and legal professions are ancient and hence accepted as professions from time unknown but it is not so in librarianship. Different opinions have been expressed by social scientists about librarianship being a profession.

II. Transformation Of Library Science As A Profession :

There is a profound change in theory and practice of library profession over the passage of time. The custodian librarian had to grow in to become a knowledge organiser and information transmitter. It is axiomatic that libraries and civilization go hand in hand. The concept of librarianship has been changing according to the demands of the society and the bewildering growth of the communication media. The whole history of librarianship indicates some broad landmarks, with different phases. The first phase of librarianship comprised of the "custodianship of the resources of knowledge". From that stage it traversed to the contemporary roles of "knowledge manager" and "digital librarian". Social institutions are affected by movements and changes in the society around them and the library is no exception. The media revolution, the computer and communication technology, the changing behaviour of user community and the increasing social responsibility of libraries have had a great impact on the LIS profession. The present librarian is vested with new responsibilities like managing information networks, and conducting online searches, managing digital preservation and development of digital libraries. The profession is more active and meaningful in the present day information world. Librarian acts as an advisor, interpreter and mediator for user's information needs. Thus the work performed by today's information professional, seems quite different and challenging in both forms and formats than in the past. Thus, this profession is gaining a new

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identity. And professionals are now identified as webmasters, network administrators/managers, information literacy providers, information facilitators etc. This clearly demand the expertise of the librarians in the fields concerned

III. Librarianship As A Profession :

With the industrial revolution and universalization of education, knowledge production had increased. The mechanism of communication, through print, non-print and electronic media and informal communication through invisible colleges has been duly institutionalised through the library. The academic institutions considered libraries as centres of knowledge activity. Further the establishment of British Museum (London), Bibliotheca Nationale (Paris) and the Library of Congress (Washington D.C) inspired for the development of public libraries and other types of libraries. The library legislation in UK that enacted Public Library Act also boosted the situation. Consequent to the increase in number of libraries and the librarians, associations were developed in USA (American Library Association) and UK (Library Association). The twentieth century witnessed the emergence of various professions and librarianship is one among them. Library science courses were offered by universities as graduate or post graduate programmes. Library science got its own knowledge base when codes like Cutter's 'Rules for a Dictionary Catalogue' and 'Dewey Decimal Classification' were developed to achieve standardization in the technical aspects of librarianship. Thus librarianship emerged as a profession from vocation. Many scholars and particularly S.R.Ranganathan contributed to the development of library profession in India by developing standard terminology, theoretical principles, library science education – from certificate to research level, and introducing specialisation and standardized practices. Library profession in India owes a lot to his contributions. As per Ranganathan, Librarianship is a noble profession. A librarian derives his joy by seeing the dawn of joy in the face of the readers who were helped in their search for the right information at the right time. In simple terms, library is a channel of communication and librarian is the mediator of communication. Librarianship is developed both as a science (body of knowledge) and an art (the skills). The motto of the library science profession is to meet the needs and demands of users. However the variety of sources is changing from print to digital; the services changing from traditional reference service to internet based services for online access. Librarianship today has an even more critical role to play in building up awareness among the members of the society and help them to adjust to changes in the information environment.

IV. The Effects On Professionalisation :

The impacts of professionalisation in the field of library science can be viewed in two different ways. In the first place there is the changing role of librarian that has been evolved from just a custodian to digital librarian attending the intermediate stages of librarian, document officer, information officer and even scientist. The intraprofessional differentiation of librarian can be put in the second place accordingly. A. The Changing Role of Librarian 1) Librarian The traditional librarianship started shifting from material handling to information handling. In this process of transmission of knowledge, librarian stood as mediator between the originator (author) and the end user. With the bombarding generation of information termed "information explosion" and the need for the same growing in a big way, importance of librarianship has been realised among people in the society. It was during the postwar period that the responsibilities of the librarian changed drastically, because of rapid growth in book collection and new emphasis on the 'use' of library resources. The amount of literature published in every subject grew

exponentially. In addition the growth and production of secondary sources also increased significantly. Hence it became very difficult to find out specific information from this huge mass of information. Since the needs of the information seekers are varied, information is processed, preserved and disseminated according to the users' specific demands. In the process specialised services like documentation, current awareness, selective dissemination of information and translation etc. are provided. A person in charge of a library is called a librarian. Sometimes, he/she is also termed as library manager. 2) Documentation Officer With changing times, users expecte specific information to be culled out from sources to be provided to them. This germinated the concept of documentation activities in libraries. Documentation centres have been set up to meet the requirements of specialised users in research organisations. As a documentation officer, the job of the documentalist is to collect, organise and disseminate the information from books, monographs, serial publications and non-print sources and provide information pin pointedly and precisely according to the users' requirements. Bibliographical, information consolidation and digest type of services are provided in documentation centres to serve specific needs of users. Documentation officer needs to be aware of the subject/area of interest of her/ his users. S/he should constantly update herself/himself in the ongoing developments in the field. S/he should have a good command over the language and skills of summarising, etc. Technology has enabled to provide these services more effectively and efficiently. 3) Information Officer and Scientist It is the responsibility of the library to build up collection of information in anticipation of future use. The increasing information and its increasing importance have led to the evolution of libraries into library and information centres. Identification of distinct user groups and developing suitable information services like providing access to the virtual collection through a website at anytime and anywhere is the responsibility of information scientist. As the use of information increases in the society, the importance of library and information centres also increases. This demands for special skills in information professionals to create, collect, communicate and consolidate the information on behalf of the clients. The speedy and radical explosion of information has greatly transformed the role of libraries and information centres. Thus, the change in the mission of librarianship has significant implication for the library profile in the twenty-first century. In this new environment library networks play major role in the process of global networking of information. Hence the scope of library becomes universal and the information specialist works as a disseminator of digital information, rather than the custodian of information. Moreover the emergence of information society transforming into knowledge society has increased the complexities of information accessibility, reliability and dependability. With the advent of internet, books and journals arranged on library shelves in traditional libraries are also getting into virtual shelves in electronic libraries, thereby enabling digital seamless remote access to information for all users. This has paved way for the emergence of concepts 'digital library' and 'digital librarian'. 4) Digital Librarian Digital libraries are e electronic libraries wherein all the collections in full text are in digital form and access to the collection is through networks. The very mission of digital libraries is to create new approaches to acquisition of resources, new storage and preservation, classification and cataloguing, intensive use of electronic systems and networks. Thus the present role of digital librarian extends his services far beyond physical boundaries. They provide innovative resources and services, and play an important role as digital librarian in connecting old graphic records, to machine readable forms, and create new records of text, graphics, and

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sounds and multimedia. They integrate all the memory institutions like libraries, archives, museums. Thus they have stemmed out of the traditional brand of gatekeepers of information, to information gateways and information skill developers. In this scenario of transformation, change from the information custodian to information salesman passing through the information transmitter indicates the growth of information industry on the one hand and the proliferation of professional arenas on the other, as Swarupanandan comments. B. Intra-professional Differentiation Library professionals include among others library administrators, classifiers, indexers, cataloguers, reference librarians, and classificationists, teachers of library and information science, and thesaurus constructors. Others like librametrician, bibliometrician and bibliographer can also be included in this category. The library professionals can also be categorised according to the institution they serve, exempli gratia school librarian, college librarian, and university librarian. Categorisation is also possible according to the subject, i.e. medical librarian, law librarian, and so on. 1) Administrator of Library The head of a library is usually designated as chief librarian and his/her subordinates as deputy librarian, assistant librarian, etc. Sometimes, he/she is simply called a librarian, a library manager or a director. A library administrator is responsible for the administration of a library. S/he has to possess expertise in planning, organisation and management of various activities and services of a library and is considered to be a good source of information in these areas. 2) Classifier of Book A classifier generally classifies books following certain scheme of classification, say Dewey Decimal Classification. While classifying, first of all the classifier has to ascertain the subject the book is dealing with. For this purpose, he/she has to go through the title, contents, and sometimes even through the text and index of the book. This apart, many a time he/she is to consult reference books like dictionaries, encyclopaedias, gazetteers and who's who. This process helps him/her to learn the topography and ramifications of a number of subjects bit by bit. A classifier of a general library gradually becomes knowledgeable practically in all subjects. While classifying, sometimes he/she encounters books on subjects that do not figure in the classification schedule giving an indication that the subject may be new. Thus, the classifier becomes aware of a new subject much before its entry in a classification scheme, dictionary or an encyclopaedia. He/ She also comes to know about the word denoting the new subject. Thus, a classifier knows better than others about the books on new subjects that have entered a library because he/she has to spend more time on the book while deciding its class number. Needless to say, this process helps him/her to remember the book for a long time and turns him/her into a good source of information about books available in the library, the subjects in which the library is strong and weak. 3) Cataloguer of the Documents A cataloguer is one who catalogues documents following a catalogue code or a set of cataloguing rules. While cataloguing, a cataloguer gathers information about the title, author, collaborator, edition, imprint, collation, ISBN, price, etc. of the book. S/he also gathers information usually from the class number about the subject of the book. In the course of his/her work, a cataloguer gradually comes to know about the authors writing books, the subjects in which the library is becoming strong or weak, the publishers renowned for publishing books in particular subjects, etc. In these areas, the cataloguer becomes good source of information. 4) Classificationist A classificationist designs and builds up a scheme of classification on sound principles. There are two types of classificationists. a) General Classificationist builds a scheme of classification covering all subjects. b) Specialist Classificationist builds up a scheme on a particular subject, say education.

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A classificationist is an expert not only in the principles of classification but also in epistemology. S/he studies the origin, nature, growth, proliferation and limits of human knowledge; does research as to how a new subject comes into being, how it proliferates into branches and sub branches, and how a particular subject decays. They also study the relationship of various subjects. The structuring of knowledge and fitting every component of knowledge in that structure also figure within the purview of their expertise. Expertise in all these areas makes them to be useful sources of information on different aspects of classification and knowledge. 5) Indexer of Sources The various types of indexes are being provided in documents to locate information using author's name, title of the document, key term, geographical name, chemical formula, etc. With the advent of computers, computer-aided subject indexes like KWIC, KWAC, and KWOC have also come into being requiring least human involvement. An indexer compiles indexes based on some principles, guidelines and tools. To aid indexers standard lists of subject headings, thesauri, etc. are being developed and updated from time to time. Indexing systems like PRECIS, POPSI and Chain Indexing have also emerged. Indexing does not always prove to be a simple job. In compiling some indexes like formula index in chemistry subject knowledge becomes an essential prerequisite. An indexer who has been continuously indexing for years knows how a subject is developing, proliferating into its various branches, and building up linkages with other subjects. S/he also becomes an expert in compiling and consulting indexes and using indexing tools like Library of Congress List of Subject Headings. Thesaurus of Engineering and Scientific Terms, etc. Such people prove to be highly useful in providing expert advice on indexing and solving various indexing problems. 6) Reference Librarian In response to the demand of users, a reference librarian has to consult more books and documents compared to other staff of the library. In this process s/he becomes more knowledgeable about the contents of books held in a library and provide answers to queries from unimaginable sources. Who's-who need not to provide the answer to search every time. The real time queries show that a reference librarian should be well read and well informed, person having a fair knowledge of information sources. 7) Library and Information Science Teacher They lecture classes in various courses of library and information science and many of them guide research students. They also write textbooks, course materials, etc. In developing countries like India, a library and information science teacher generally teaches more than one subject. However, specialisation is gradually setting in. In fact all library and information science teachers cannot teach bibliometrics or computer applications. Only specialist teachers have expertise to deal with the computational subjects. A teacher is not only an expert in the subject s/he teaches, but also knowledgeable in various methods of teaching, and courses and curricula of various universities and institutions teaching the subject. Many of the teachers suggest the research topics to the students. In some foreign universities, a teacher announces in advance the research topics in which s/he can guide the students for doing their project works. A student gets a very good opportunity to select the topic of own choice, as appositive side of the scene. 8) Thesaurus Designer A person who designs a thesaurus is called a thesaurus designer. This is a new group of professionals that emerged several decades ago especially with the advent of computers in the field of library and information science. Thesauri being developed for information retrieval purposes are different from Roget's Thesaurus. Designing and construction of these thesauri require specialised knowledge of thesaurus construction as well as the knowledge of the subject for which the thesaurus is designed. For deciding descriptors for the thought content of a particular document,

and for its subsequent retrieval from a computerized database, a thesaurus provides immense help. A thesaurus constructor knows all the essential principles and methodologies of thesaurus construction and thereby can guide or impart advice to others for the construction of a thesaurus. 9) Bibliographer Compilation of bibliographies is one of the important library activities. Many libraries of the world, especially special libraries provide bibliographical services to its users. While preparing a project report or pursuing research work, a student is also to compile bibliographies or look for already existing bibliography on that subject. Compilation of a bibliography is an interesting job and helps the compiler to go through numerous sources, some of which might be rare, uncommon, or totally new. Thus, the process of compiling a bibliography makes the compiler an expert about the various types of sources of information available on a particular topic and also about the methodology of compilation. 10) Librametrician An expert on librametrics is termed as a librametrician. The word 'librametrics' was coined by S R Ranganathan in late forties of twentieth century, elaborated in scope in later decades. Librametrics is a discipline that measures library activities, library collection, personnel, building, furniture, etc. Librametric studies quite often entail mathematical and statistical applications. Librametricians are the sources of information relating to quantitative studies of various library objects and activities. 11) Bibliometrician to Queries Like librametrics, it also deals with measurement or quantification and involves mathematical and statistical techniques. In this case, the objects of measurement are the documents and their contents. Bibliometricians study among others the growth of literature in a subject, scattering of literature of a subject in various types of documents, ranking of journals from various angles, ranking of authors of a subject depending on their output, active life of literature, obsolescence, and so on. They can easily find out the extent of use of various types of documents in a library, weak and strong areas in terms of collection of a library, rate of growth of a library, and so on. Bibliometric study has picked up quite well in our country. Bibliometricians has to provide answers to many queries relating to the ranking of periodicals in the world, important contributions being produced from a country, rate of growth of literature of a country, use of journals and other documents in a library, various indicators of periodicals like impact factor, immediacy index, and the list is not exhaustive. 12) Content Developer With the advent of Internet, engendered the idea of content development. It involves designing, creation, and deployment of the content in cyber space. Usually it includes text, sound, images, animation and provision for interaction. If one wants to develop a website for an institution, first of all one will have to think about the content of the website, that is, the information one does intend to place in the website for the institution. Normally, the content writer would like to include among others the following information about the institution, such as name, postal address, telephone no., telegraphic code, e-mail address, fax no., year of foundation, name of the head of the institution, names of various divisions and their respective heads, history, objectives, functions, achievements, special facilities available, library and the services being rendered by it, and publications. The textual matter relating to all these will have to be written by somebody and authenticated by the head or someone nominated by him/her. One may like to make the website colourful. Hence, one will also have to decide the colour of the various parts of the text. Also one has to decide the format, types of fonts, and the font size for various headings and other parts of writing. One can include pictures of your institution, various divisions and important personnel and so on. Taking care of all these, you will make the text ready. If one does want to include

some speeches along with the sound, can be done. Some portion of the website can be animated. The provision for interaction can also be there. The person who has visited the website can be requested to sign and give his/her opinion about the website. Many might give their opinion and some good suggestions whereby one can improve upon the website. Normally, a content developer is a computer professional and he/she possesses sound knowledge about the software packages available for content development. In many of the library science courses 'Content Development' has been included as one of the courses. A content developer also acts as an information source in as much as he/she can give advice about various facets of content development to the clientele.

V. Conclusion :

The call for modernization is prevalent in every domain of life. And the field of library science is not an exception. The profession of librarianship is changing fast with the advent of new technologies like internet that led to the conception of innovative ways of learning and research. On the other hand, the new generation clientele are expecting better and more from the librarian. This put the profession of a librarian to the new tests of professionalisation that compelled her/him to get updated to be more professional. The role of a librarian is not confined to just a custodian of the books but s/he has to play a multidisciplinary role to cope up with demand of profession espoused. With the passage of time the demand of the profession is likely to be more challenging and more differential as compared to the present phase which is definitely more complex as compared to the past. It is expected from those who are in this profession to be competitive rather than critical of the domain undergoing changes that are inevitable. A well-equipped librarian can surely face the challenge imposed by the transition of professionalisation of library science from a vocational field. It will be truer to say that the assumption of being segregated to a particular field of expertise is not of use in the current ever transitory space but a professional ought to be as much dynamic as this field does demand to handle the effects of professionalisation competently.

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Reengineering of College Libraries: Challenges and Scope

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Abstract:

Emerging technological revolution is a wheel of library's transformation from traditional to virtual libraries. Tremendous changes have taken place in the libraries due to the advancement of Information Communication Technologies. In this transformational phase, the concept of reengineering has applied to the academic libraries to change its face drastically to cope up with the modern expectations of the library users. Hence the concept and its detailed applications have been discussed in the present article. In the article, author have revealed the various challenges and the scope for reengineering in academic libraries in detail.

Keywords: Reengineering Libraries, Libraries Transformation, ICT tools, Library services, etc.

Introduction:

Everyone is witnessed to the development in all the sectors and the way of doing things. Just two decades ago, teachers were using usual tools and methods to teach but now a days the tools for the same are advanced and more convenient than earlier. We are using online resources for research where earlier it was depending upon printed resources available in nearby libraries. Library and information professionals have to keep futuristic approach to avoid such problems due to the lack of knowledge and adoption of recent technologies. Higher Education System more focussed on adoption of new technology in teaching learning and related processes. Library is an integrated part of the Higher Education System. Hence, it is compulsory to adopt new technology to change the old way to increase the quality of library and information service. In such a fast changing environment, drastic changes are required.

Chris D. Ferguson, (1997) calls for reengineering libraries "in ways that bring librarians and technologists together within a common service environment" to meet users' needs in a more effective manner. Reengineering is the term which used for such drastic change and dramatic improvement in cost, quality, service and speed. Reengineering has its own theory and practice. Undeveloped academic libraries have needed such techniques like reengineering to be a good library and resource centre. Now the current era is depended upon the web therefore they expect and prefer most of the services on web. Hence this is the prominent time to use web platform for library and information services. Shastri (2013) have stated about the web platform as "Bridge the digital divide and access to digital resources will definitely help to provide effective and valuable information services to library patrons in order to satisfy their information needs and for that librarians should perform the role of webmaster".

Hence, considering the significance of reengineering of academic libraries, it needs to rethink on present problems perspective which may unable to fulfil multidimensional needs of the user.

A. Challenges in reengineering of academic libraries:

Reengineering of library is not an easy job for librarians. It requires systematic planned efforts to apply new tools and techniques to the library. In challenges perspective, LIS professionals may face following major challenges while going for reengineering process:

1. Prove the need and approval from higher authorities :

While librarian think on the reengineering their library, they need to prepare its need and benefits to present in front of higher authorities. If they approve and support for the further process, librarians may do better.

2. IT infrastructure:

Basically Reengineering of library is a transformation of library services, its collection, and other housekeeping tasks. If, traditional ways of doing things are not beneficial for today, it needs to replace with new ways and means which definitely application of newer technological tools. Hence it is necessity of libraries that develop IT infrastructure for delivering library and information services with preferable and efficient way.

3. Digital information management:

In the changing scenario, digital information management became important role of librarian. He / she have to handle Issues of information ownership, rights management, data curation, preservation, communication, dissemination of digital information, etc.

4. Budget:

Most of the libraries are always facing financial crunch if they try to acquire all the information in all the forms and formats. Hence, budget is the crucial aspect for any library. Though, the library has financial issue, its need to go through open education resources to cater users need such as DOAJ , DOAB, Nation Digital Library (NDL), Shodhganga, Vidyanidhi, E-Prints, NPTEL, e-PG Pathshala and so many. Likewise there are many good open source software also available for the low budget libraries to automate and digitise the library.

5. Training to library staff:

Frances C. Wilkinson and Linda K. Lewis (2006) have discussed in their article about the importance of training to the library staff. According to them 'Education is a core mission of all libraries. Libraries should make the same commitment to educating their personnel that they have made to educating their users. Training is pivotal in the development of library employees. It enables them to provide better service, to become more skilled employees, and to enhance their personal development' If staff is trained, they would serve better. In large libraries, without skilled professionals the libraries will remain warehouses.

6. Detailed plan of action:

While implementing reengineering techniques to library, it needs to follow steps of reengineering. Librarians have to think from the basic to advance in order to transform the library into new process which are helpful to save the cost, and increase the quality and speed in the library and information services. Hence, the flow chart should be made for changes step by step.

7. Support system:

To reengineering the library, LIS professionals required support in terms of finance, trained manpower, instrument, forming new policies, etc. without support it is difficult to maintain all the tasks in the reengineering process. This support required from the higher authorities and also the team of library staff.

8. Policy and procedure for new form of library:

New policy and procedure is required for the new form of library housekeeping tasks and information services. For smooth functioning of new system, need to describe its policies, rules,

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regulations for the staff and users also. These are the scholarly tasks which need to perform to LIS professionals.

B. Scope for reengineering of academic libraries:

Mornati, (2000) Says that 'Seeking quality in every aspect of library organisation has to become a permanent goal in order to keep a main role as information providers for our users. One the other hand, pressure for new services is forcing us to keep the rapid pace of change in the information world. Libraries have to join resources and to cooperate to be able to face the challenge of digital information and globalisation'. The main approach is to find the scope where libraries have opportunities to change or adopt innovative services and facilities in the libraries.

1. Library web page:

Web page is a new way of providing library and information services. Most of the library and information services may be provided through library web page such as new book display, web OPAC facility, Online book reservation, checking borrowing books online, recommendations, list of e-journal with archives, list of subscribed databases / e- journals / e-books with link, link to institutional repository, Ask librarian, etc. beside this, a library website hosts various types of useful information to the user such as library timing, various policies, rules and regulations, library resources details and many more regarding library.

2. Database searching tools

Today, database subscription is not enough for library; it should have web scale discovery services, federated search tools for quick retrieving required information. Search and retrieval mechanism is more important than subscription of information resources.

3. Self-service system:

A self-service system is required for big libraries where user can self-check in and check out items, renewals and payment of over dues. RFID technology is able to provide such platform for the user. This system needs one time investment but after all, it is beneficial for the library as well as user.

4. User instructions / notifications:

Most of the Integrated Library Management Software (ILMS) provides notifications to the user through email / message. Such ILMS can be used to provide alert service, check-in , check-out notification, overdue instructions to the user time to time.

5. Reference service:

Reference service is the personal assistance to the library user for finding their required information. The reference librarian also called the navigator of information superhighway. Earlier, the reference librarian was offering reference service at the desk of library. ICT has had a big effect on reference service. Recently the service has been reengineered and offering online platform, quick service, online search service, FAQs, and many more. Likewise, the nature of reference service has been totally changed in comparison to traditional reference service. Few examples of reference services in today's era are Librarians' Internet Index, Digital Librarian, Infomine, CyberStacks, Refdesk.com, Virtual Refence Desk, etc. these are providing modern reference services to the user on through online platform.

6. Collection development:

As we know about 5th law of library science that 'library is growing organism'. If the balance would be maintained in the collection development i.e. print and non-print resources, the

space will be managed and the remote access also possible. Hence, such policies need to develop in order to maintain quality collection in the both forms which needed.

7. IT infrastructure:

To provide information services in e-form, library needs to have proper IT infrastructure. Unless and until required ICT infrastructure establish, library can't offer information services and facilities such as Web OPAC, CAS, SDI, Photocopy, Indexing, Internet, CD/DVDs access, access to e-resources, federated search, self-issue, return, renewal service, etc. These are the expected services and facilities of today's user.

8. Collaboration:

The libraries also have an opportunity to collaborate with other institutions, university libraries, publishing industry, etc. the collaboration will help librarians to share their expertise and resources to achieve good results.

9. Consultancy for IPR:

In this regard, Handa and Bhatt (2015) have written that "The librarians in the digital environment have the same responsibility to collect information and help the readers by giving it even electronic format. The role of librarian is to be protected and enhanced. The copyright protection should be encouraging the use of information for creativity and not for creating hurdles in the use of information. The Librarians should continue to work as catalyst for the free flow of information between the owners of copyright and the users of the information". Now days, users are using and sharing information without any knowledge of IPR, sometimes in those situation librarians have to guide them when user asks. Hence, consultancy is one of the roles of librarian under the fare use term.

Conclusion:

The transformation of libraries is the need of today's digital era. In this technological advanced society, libraries have to keep such reliable, authentic, qualitative and expected information and the recent tools of ICT. Hence, reengineering of libraries is a right approach towards the development of libraries. LIS professionals need to consider the scope which discussed above for the development of libraries. Obviously there are many challenges in the path of reengineering but librarians have to keep such positive approach in this area. May be there is more scope for reengineering of libraries, it depends on available finance, support from higher authority, their users needs, etc. The essence of reengineering of library is to provide better access of information resources to the user by applying five laws of library science given by Dr. S. R. Ranganathan. Academic libraries will always precious for the teachers, researchers and students if libraries accept the dynamic progress.

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Trends in Digitization and Archiving, Digital Preservation : Issues and Challenges

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Abstract :

This paper studies the issues of digitization saving, problems and challenges. It also discusses the recurring challenges during digitization and its impact on planning and policy. Digitization is the process of converting documents and converting art images into digital images. The concept of saving problems and challenges, including the meaning of digitization, is also explained here. Digitization is a process in which material is converted from hard copy to electronic copies. Key Objectives of Digitization: Increase access to library materials and improve their protection. The process of digitizing library materials has posed many challenges. These challenges include human and technical difficulties, which have consequences for planning and policy. It was concluded that the need to meet the current challenges in modern day libraries and go digital is to provide online services.

Key Words : Digitization, Preservation, Archiving, Issue, Challenges, Important.

Introduction :

Since the dawn of civilisation human beings have communicated through gestures, symbols, sounds, words and written media like clay tablets, papyrus, parchment, and palm leaf. The beginning of the 15th century heralded the use of printed books and journals and of late through electronic media. During the past two thousand years of human history, civilisation and culture it is evident that the intellectual products of human thought and endeavour were being procured, processed and the thought content embodied in these documents disseminated to the user community. These documents thus are required to be preserved and conserved for posterity (Raju, 2008).[4]

Preservation of written records is apparently just as old as written records themselves. The problem of preservation of rare documents, manuscripts and old records has continued since human being acquired the knowledge of writing. Books and manuscripts have always preserved the documentary and cultural heritage of our ancestors and these special documents are the prized possessions of every nation.[6]

There is an alarming increase in deterioration of archival records. Preventive steps and treatment required for effective preservation of these pieces of information should be undertaken. The successful preservation of history is the bedrock of current human information, knowledge and civilization. Without this attention and effort, natural and manmade disasters will singly or jointly wipe out irreplaceable foundations of the past (http://www.panjabdigilib.org).[5]

National Archives of India (NAI) and National Mission for Manuscripts (NMM) are the two national agencies entrusted with the responsibility of treasuring and preserving the invaluable archival records. NAI serves as the custodian of these records and is sincerely dedicated to the welfare and development of archives and archival profession. NMM locates and catalogues the rare documents available in the remotest nook and corners of the country. The very aim of the

present study is to investigate and study the role of these agencies in the preservation and conservation of the rich national heritage records so that the content enshrined in them continues to inform and educate users forever.[7]

Definition :
Digitization

According to Harrod's Librarians Glossary (Peytherch, 2000) "Digitization is the process of transferring information content from a traditional format into a digitally readable version. Typically a scanner would be used for this purpose when digitizing a printed book; digital imaging of manuscripts, paintings, prints etc, is also covered by this term. Digitization is now quite favored as part of the drive to improve preservation techniques, as fragile originals need not be handled afterwards except in specialized circumstances. Access is greatly improved, as digitized texts can be readily searched, and digital images of faded or difficult originals can be computer enhanced. Several national libraries have started digitization programs for Brittle books, delicate or rare materials ".[2]

Digital Preservation :

According to Russell (2009) "Digital preservation is a process by which digital data is preserved in digital form in order to ensure the usability, durability and intellectual integrity of the information contained therein. A more precise definition is: the storage, maintenance and accessibility of a digital object over the long term, usually as a consequence of applying one or more digital preservation strategies. These strategies may include technology preservation, technology emulation or data migration".[3]

National Archives of India (Nai) :

The National Archives of India (NAI) is the premier national agency containing prized and precious archival records. As per the mandate of Public Record Act of 1993 and Public Record Rules of 1997, NAI is the custodian of all non-current records of the Union Government of India and its predecessor bodies as also the former British Residencies in the erstwhile Indian princely states. It holds the records for the use of administrators and scholars. It shoulders dual responsibility of storage, dissemination, preservation and conservation of our national heritage records embodying rare and invaluable content. It may be said that it is a place where researchers and administrators have a peep into the past of India with the help of social, cultural, political, economical, historical documentary heritage.[8]

The NAI owes its genesis to the Imperial Records Department which came into existence in March 1891 at Calcutta (Kolkata). After the transfer of capital from Calcutta to New Delhi in 1911, it shifted to its present site in 1926. The Imperial Records Department was re-christened as National Archives of India on 30th August, 1947. Today it is referred to as the Delhi"s most intellectual destination and is an attached office of the Ministry of Culture, Government of India. It has a regional office at Bhopal and three Record Centres at Pondicherry, Bhubaneswar and Jaipur (http://nationalarchives.nic.in).[10]

Digital Archiving :

Digital Archives are the repositories where the digital information related to social, economic, cultural, and intellectual heritage is preserved for long-term accessibility. Digital archiving identifies and moves inactive data out of the current production system and databases into long-term storage systems. The archives preserve digitized or born-digital material to

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preserve them for the long term because it may have evidential, legal contextual, cultural, and historical or informational value. The archived data is kept and maintained for future reference and use. The digital archiving facilitates storage, preservation, easy access, and use by posterity, promotes paperless organizations, and maintains confidentiality of data. The Memory institutions like museums, library and information centers archive resources of learning and cultural heritage to make them accessible for use in the future. UNESCO has urged its member states to document and archive the implications and consequences of COVID-19 (UNESCO).[11]

The National Archives of Australia, New Zealand, UK, Spain, Switzerland, Germany, USA, India, and Canada maintain records of government departments, military units, customs, patents, history, and culture. The community-based archives document, record, and preserve their histories, heritage, and experiences for future use and reference (Rodrigues, 2016).[12] Personal Digital Archiving (PDA) is a new concept that has emerged lately. It means when individuals want to capture and archive their digital records; or when libraries or museums want to preserve individuals' digital records. Nevertheless, the individuals and institutions may adopt different practices in managing and preserving digital archives, based on the knowledge and skillsets possessed by them. PDA involves practices of traditional archiving and personal information management (Condron, 2019).[13]

Important of Preservation and Conservation :

Preservation and conservation activities protect the archival materials from the multitude of human and environmental threats. They are an indispensable means of assuring the availability and access to human knowledge for present and future times. Archives contain materials having intrinsic value, which are important for healthy growth of the society. Archives have social obligations to care and preserve the records of history, art, culture, heritage, traditions, scientific discoveries etc. for the future generations. As the years pass by, the value of rare books, manuscripts, paintings show upward appreciation and it becomes almost impossible to replace them in their original form. So the preservation and conservation of archival records is absolutely necessary.[9]

Issues of Digitization :

Many of decision maker's archive and library managers, curatorial and technical staff members and also particular users that responsible in handling the digitization work always faced many issue and they must be concern on what they doing in digitization process. The issue can be a positive issue and also a negative issue. But, the management of assets for digital process presents new challenges to the archive and library community in terms of using and managing complex hardware and software, but mass digitization has not changed the fundamentals of services in archive and library. There are many issues and concern that they must face which are: 1) Legal Aspects, 2) Untrained Staff and Human Error, 3) Changing Format and Obsolescence of Technology, 4) Funding, 5) Refreshing and standardization, 6) Constantly Changing Software and Hardware, and 7) Emulation.[15]

Challenges for Digitization Preservation :

Despite evidence of increasing concern about digital preservation, there are numerous technical, organizational, legal and economic challenges to a comprehensive infrastructure for protecting and preserving digital assets.

1. Technology problems: The success of digital preservation depends on the use of appropriate medium of technology. But the technology relating to hardware and software are changing rapidly making the existing technology fragile and backward. The

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concerned institution must have to upgrade required hardware and software otherwise the system may not be provided expected output.

2. Nature of Content: Digital information exists in several forms and types. Most of the objects that are true replica of their print document like books, reports, correspondence etc. can be converted into digital documents and preserve but materials that cannot be replicated in traditional hard-copy, for example interactive web pages, geographic information systems and so on may create problem.

3. Machine dependency: As digital contents are machine-dependent, access to digital contents may require specific hardware and software that were used for creating them. But since computer as well as storage technologies are in a continuous flux of change, preservation components should be changed and upgrade accordingly. Otherwise, it may create greatest technological threat to ensure continued access to digital contents.

4. Sustainability of digital object: Digital materials are especially vulnerable to loss and destruction because they are stored in fragile magnetic and optical media that deteriorate rapidly. Besides, it can fail suddenly from exposure to heat, humidity, airborne contaminants, or faulty reading and writing device. In some case digital object have a very short span of life coverage comparing to hard backed traditional copy. This may be a problem for digital preservation.

5. Inappropriate budget: Digital preservation requires new and sophisticated technology and trained manpower which requires additional expenditure for the concerned institution. In this case if adequate budget is not provided, digital preservation project may be greatly hampered.

6. Intellectual Property Rights: Digital technology gives libraries an excellent opportunity to improve their services. It also provides new ways and means of preservation and dissemination of library collections. But, as digitization practice involves in migration of original products, Intellectual Property Rights may hinder transforming the originality and also disseminate the same.

7. Shortage of skilful manpower: Digital preservation requires trained and technologically skilled manpower for proper management of resources. But getting such manpower some times become very difficult.

8. Lack of national level collaboration: There is no legal framework in Bangladesh for maintenance and preservation of resources that bears national importance. Besides, in most case digital preservation is poorly understood and poorly funded which is a barrier to success.

9. Nature of storage medium: Digital storage media, whether magnetic or optical, are subject to relatively rapid decay: especially when compared with print. The hardware and software - digital information is machine-dependent, and to be read" accurately it needs specific computer hardware and software. Unfortunately, hardware and software quickly become obsolescent or otherwise unusable.

10. Media failure: The most familiar problems in digital preservation are media failure or deterioration and rapid changes in computer hardware and software that make older systems obsolete on a regular basis.[16]

Conclusion :

The changes in the information are rapid and it is important for information profession to change with it too. Information was created to share and disseminate the information and the professional needs to ensure that the information can be more easily to share when they decide to digitize the records. They need to be more extra careful on intellectual property but at the same time they have to meet the requirement of their patron. The digitization is very important in this 21st century as the user now prefer to search for information online as it is easier rather than searching for the paper-based records. They need to provide the information as powerful and easy as Google or anothersearch engine. The numbers of patron that use our service shows either the service provided are good enough or not. But the process of digitization might require time and budget but it will give a good image in future.

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Indian Accountancy System
with Special Reference to Career Opportunities and Challenges Ahead

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Abstract:

Accounting is the backbone of businesses, and it will not be wrong to say that accountants are responsible for running the show for entrepreneurs across the globe. Accounting refers to the systematic and detailed recording of financial transactions of a business. There are many types, from accounting for small businesses, government, forensic, and management accounting, to accounting for corporations. This study is based on the secondary data by studying various curriculum of accounting education, research papers and websites has been explored to gather information about emerging the present courses/degrees/diplomas of accounting education after graduation in India, to study the accounting traditional and emerging career opportunities and the challenges ahead for accounting Professionals. the courses such as CA, CS, and CMA in India are at par with the Western counterparts. The courses are updated quite often and all the international standards are followed. India accounting services market is expected to grow at an impressive rate during the forecast period. the introduction of GST is further expected to create lucrative opportunities for the market growth. A lot of opportunities are created for Accountants by Start-ups.

Keywords: Accounting Education, Career Opportunities, Challenges in Accounting Jobs

Introduction:

Accounting practices in India could be traced back to a period when Kautilya, a minister in Chandraguptas kingdom wrote a book named Arthashasthra, similar to financial management contains few detailed aspects of maintaining books of accounts for a sovereign state[1].

Accounting refers to the systematic and detailed recording of financial transactions of a business. There are many types, from accounting for small businesses, government, forensic, and management accounting, to accounting for corporations. Accounting plays a vital role in running a business because it helps you track income and expenditures, ensure statutory compliance, and provide investors, management, and government with quantitative financial information which can be used in making business decisions[2].

Accounting is the backbone of businesses, and it will not be wrong to say that accountants are responsible for running the show for entrepreneurs across the globe. The good news is that companies have realized the importance of accountants and offer high-paying jobs and competitive salaries to those meeting their requirements[3].

According to an employment report by job search platform Naukri.com, the IT and software sector was the top job creator in 2019 as they grew by 29%. It is followed by accounting and taxation where jobs grew at 28%. The first half of the year witnessed the highest growth[4].

Review of literature:

Sonali B. Jadhav (2014)[5], Over a period of time need arises to develop International Accounting Standards as accounting standards vary from country to country. As a result of this International Accounting Standards (IAS) and International Financial Reporting Standards

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(IFRS) are developed which can be accepted by more than single country. This paper focuses on procedure of issuance of International &Indian Accounting Standard, need of harmonization of global accounting standard & key difference in presentation of financial statement under International & Indian Accounting Standard. Key benefit in harmonizing accounting standard is common accounting system that is perceived as stable, transparent& fair To investors across the world.

Kirtan Raval (2017)[6] , Since last few decades, demand of uniformity of accounting is becoming strong,. Various multi nations are also expanding their business of multi products. On the other hand, due to differences in financial reporting and accounting standards; the hurdles are creating in financial comparisons at the international level also. So, to solve this problem, IASB (International Accounting Standard Board) came up with the concept of unified accounting standards i.e. IFRS (International Financial Reporting Standard). There are few countries in the world who have already adopted this revolution and making efforts for convergence of IFRS. This paper is a brief talk about Indian Accounting Standards converged with IFRS (IND AS).

Sudhir Chandra Das; Raj Kumar Singh (2018)[7],The emerging scenario of accounting education should not be restricted to the traditional accounting rather it should incorporate E-Commerce and software based accounting curriculum. This advance and technical accounting knowledge and skills can make the students to be more professional in their career. This paper presents an analysis of accounting education in India and America, it highlight the major differences in the two countries. The analysis reveals that accounting education in India emphasizes on financial accounting and cost accounting while the emphasis is on cost and management accounting in America. It shows that being firm specific through comprehensive in-house training the Japanese system is in a better position to produce accountants capable of adapting accounting systems to the different work situation which result from technological changes and automation.

Research Methodology:

This study is based on the secondary data derived from various research papers, journals, books, published material and UGC rule and guidelines. Various curriculum of accounting education and research has been explored from published manuals of universities and professional institutions. Fo This study is based on the secondary data derived from various research papers, journals, books, published material. Various curriculum of accounting education, research papers and websites has been explored to gather information about emerging career opportunities and challenges for professionals in coming years.

Objectives:

1. To explain the present position of accounting education in India and USA;

2. To compare the accounting education between India and USA; and

3. To discuss the importance of policy implementation in accounting education in India

4. To explain the present courses/degrees/diplomas of accounting education after graduation in India.

5. To study the accounting traditional and emerging career opportunities in India.

6. To discuss the challenges in coming years for accounting Professionals.

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Accounting Education (courses/degrees/diplomas) in India[8]:

Traditional Courses	Latest courses	Online courses/certification
- Chartered Accountancy. Chartered Accountancy - Cost and Management Accountant (CMA) - MBA in Finance and Accounting	- Chartered Financial Analyst (CFA) - Business Accounting and Taxation (BAT) - Certified Management Accountant (CMA) - US Certified Public Accounting (CPA) - Financial Risk Manager (FRM) - Association of Chartered Certified Accountants (ACCA) - Certified Financial Planner - Certificate in Investment Banking (CIB)	Developing Finance and Accounting Skills by joining courses offered by LinkedIn Learning, Udemy, Coursera and other private institutes related to GST, Tally, TDS etc.

To explain the present position of accounting education in India and USA;
  II. To compare the accounting education between India and USA; and
  III. To discuss the importance of policy implementation in accounting education in India.

Traditional Accounting Work/fields In India[9] :
There are major fields of accounting-

1. Government Accountants/Auditors **-** Accountants are employed by federal, state and local governments for a variety of reasons. They do the books for government agencies as well as audit businesses and individuals who are required to conform to government regulations or pay tax.
2. Public Accountants - This is one of the broadest accounting fields, as public accountants provide accounting, tax, auditing and consulting services for governments, corporations, non-profits and individuals. Many public accountants are Certified Public Accountants (CPAs).
3. Internal Auditors - Internal auditors act as detectives. They work to examine the internal controls of an organization and attempt to sniff out and prevent inaccuracy, mismanagement and fraud.

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New Avenues in Accounting Career - Opportunities &Challenges[10]:

➢ **Business Set up Consultants:**

A Chartered Accountant can help new entrepreneurs setup their business and at the same time he can help existing entrepreneurs in business expansion. Working knowledge of industry, related regulatory framework, land and building requirements, market research, product knowledge, technological advancements in the industry, funding arrangements, manpower resource arrangements etc. are tackled under this.

➢ **Payroll accounting & Related compliances:**

This opens up the new practicing avenue for Chartered Accountants. You need accounting Knowledge as well as knowledge of laws such as TDS, PF, ESI, PT and other retirement related laws. You can also buy payroll software to manage the accounting and related compliances efficiently.

➢ **Valuation:**

Even though it require certain post qualification experience to get a degree of certified Valuer, still it is one of most lucrative area of Practice due to very less competition in it.

➢ **Forensic audit and fraud Detection/prevention:**

Fraud detection and prevention consultancy is also one of the most sought after consultancy that an Experienced Chartered Accountant can provide to Businesses so that they can be saved from loss of money and assets due to fraud.

Loan Syndication:

All businesses need fund For this the different loan products they have to offer, get yourself familiar loan documentation process. You can provide tailor made loan consultancy that suits the business needs of the client.

➢ **Subsidy facilitation:**

Government of India as well as state governments are providing various subsidy to businesses to help them set up the business as well as for business expansion. Most businesses are unaware of these subsidies. So Professional can help them availing this.

➢ **CFO (Retainership Services):**

Many small and mid-sized businesses can't afford whole time CFO to manage their businesses, hence a new concept of Virtual CFO has emerged. You can act as virtual CFO in few entities and manage their business.

➢ **RERA Consultant:**

This is a new area to practice, Only need is the knowledge of RERA act of your state and related procedures.

➢ **Consolidation of Accounts:**

With IFRS and IND AS, complexities in finalizing financial statements has been increased manifolds and requires intervention of an expert.

➢ **Others:**

There are many other avenues such as Trade mark consultancy, Liquidation of businesses, International Taxation, Transfer pricing etc for new chartered accountants to practice.

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Challenges in Accounting Services[11]:

In accounting business industry there are Few new challenges for the accounting professionals, such as –

1. The Need for Online Accounting Services :

Existing norms of social distancing and lockdown have thrown the challenge of providing virtual accounting services ahead of the accounting business. Today, accounting businesses have to consult with their clients virtually and allocate their work to team working from the home.

2. The Intervention of Automation and AI :

Accounting operations are already automated to some extent, but with the wave of AI and virtual reality technologies, prominent accounting functions such as collecting transactions and compelling bills into financial statements have been performed by a machine. By implementing a robotic process in accounting, operations can many hours of work and even improve efficiency. For companies, this might be good news, but it has also put accounting professionals jobs in danger.

3. Tackle with Cybersecurity :

With advanced online accounting services, the challenge of protecting the accounting information online has become a significant problem. The accounting information like credit card credentials, bank account details, and other e-wallets passwords is the favourite target of hackers nowadays. Thus, when your accounting data is full of your clients' confidential accounting information, it becomes a real issue for accounting businesses to safeguard their data banks.

4. Diversified Accounting Skills :

With the virtual accounting services setup, the traditional rule-based accounting skills are not anymore sufficient. Today, it is becoming a challenge for accounting firms to find competent employees with technical and accounting knowledge.

5. Advanced Marketing Strategies :

With the increasing accounting industry competition, it is a challenge to market and sells services. When every day, a new accounting firm with innovative ideas and approach is entering into the market, it is difficult to gain new clients with your traditional marketing strategies..

6. Alignment with Globalisation :

With online accounting tools, accounting businesses have been fully globalized. It is predicted by the Association of Chartered Certified Accountants (ACCA) that globalization is a double-edged sword for accountants. Now accountants are expected to accommodate different accounting norms and rules prevailing around the globe. When Indian accountants are working remotely for US firms, they have to understand both regions' accounting methodologies.

In addition to it, another challenges are **Financial Reporting**(changes around disclosure requirements for Environmental, Social and Governance (ESG) are likely ahead, and accounting teams need to be mindful of a shifting regulatory landscape.), **Hiring and Retaining Talent**(Hiring is continuing for accounting and finance roles in technology, health care, property management, financial services, as well as for positions that keep cash accounts strong. These roles include billing, accounts receivable and collections. Retaining top employees as

competition intensifies is a key challenge. Two key areas of concern are low morale and high rates of burnout because of heavy workloads ,**Upskilling**(Focus on upskilling and learning more about cloud-based payroll and human resource information systems, enterprise resource planning (ERP) systems, data analytics and financial modeling and forecasting. In addition to technical skills, other beneficial so-called soft skills in demand will be the ability to work independently and in virtual teams, attention to detail, being comfortable with change, creativity, a desire for continual learning and written and verbal communication skills.),Tax Law Changes, Regulatory Changes & New Accounting Standards, Payroll Management and Tackling of Remote Work[12].

Conclusion and suggestions:

A lot of opportunities are created for Accountants by Start-ups. It is important to note that not only qualified Chartered Accountants are in demand but also fresher and experienced Accountancy & Commerce graduate are in demand[13].

India accounting services market is expected to grow at an impressive rate during the forecast period. The India accounting services market is driven by the government initiatives creating employment opportunities in the country. This has drastically increased the working population in the country. Additionally, the introduction of GST is further expected to create lucrative opportunities for the market growth. The arrival of GST has made businesses remodel their supply chains in order to take complete advantage of the new tax structure. Furthermore, the government of India is likely to allow multinational firms to register as auditors thereby fueling the market growth. Besides, the Digital India and Make in India initiatives are further expected to positively influence the market growth over the next few years[14].

There are different reasons for the growth of accounting professionals in India. First, the courses such as CA, CS, and CMA in India are at par with the Western counterparts. The courses are updated quite often and all the international standards are followed. Hence, offshore companies do not have to worry about the standards and quality of the financial statements and other services outsourced from India. Besides this, India has one of the largest English-speaking workforce in the world which ensures coordination between professionals and foreign-based organisations. The large accounting and finance companies including hedge funds companies and Big Four audit firms have branch offices in the country. Companies such as Credit Suisse, Merrill Lynch, Fidelity, Morgan Stanley, Deloitte, KPMG, PwC, and E&Y have several offices in India. However, the opportunities in the future would be based on the small and medium-sized firms who would be willing to outsource the accounting services to Indian professionals[15].No doubt Accounting system is complex and need continuously updating of knowledge but still it is giving livelihood to many people and attracting people towards this profession. People from abroad are also outsourcing Indian professionals due to work excellence and economical operations.

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Impact of Dopants on characteristics of Polymers synthesised using APS as Oxidants

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Abstract:

Polypyrrole (Ppy) was synthesized using ammonium per sulfate APS. The ratio of monomer to oxidants was 1: 2.4 and polymerization was carried out at room temperature. The attempt was made to increase the electrical conductivity by using p-TS and (NSA) as dopants by adding 10% in weight of dopants to the weight of Ppy. Two probe method technique was used to measure the electrical conductivity and was found to be in the range of 10^{-3} to 10^{-2} S/cm.

Keywords: Polypyrrole, structure, doping, p-TS, (NSA),

Introduction:

The conducting polymers have seen rapid growth from 1977 onwards. But substantial development was observed in this field since the year 2000 when Nobel Prize was awarded for this subject. More than 25 different applications of various conducting polymers such as Polyacetelene, Polypyrrole, Polyaniline, etc. have been demonstrated. These polymers can be synthesized by various methods like chemical, electrochemical, and radiations. They can be suitably doped to convert them into semiconductors.

When monomers join together to make a long chain, the material becomes polymer. An example of a naturally occurring macromolecule is insulin, a protein hormone that occurs in the pancreas. Starch, cellulose, and natural rubber are some examples of polymers available in nature, which are form by the formation of chains of a simple unit repeated several times.

The polymer has the most complex structure and it is necessary to prove it at four different levels. That is (i) Monomer level (ii) Molecular-level (iii) Supramolecular level and (iv) Bulk in order to determine the same, the widely used methods are described below:

(i) Optical Microscopy:

The "sizes" of crystals of polymers have been estimated to be of the order of a few hundred-angstrom units. In terms of the defect or para crystalline model, this distance might alternately be interpreted as an average dimension over which crystalline order persists.

(ii) Electron Microscopy:

The application of electron microscopy plays an important role in our understanding of polymer morphology, microstructure, and surface characteristics. Many physical properties of the polymer depend greatly on a structural arrangement, inter chain biding pattern in polymers. The physical properties of crystalline polymeric solids [1] are probably more sensitive to structure modification than other classes of the many semi-equilibrium states which are possible. The polymer has a whole range of orders from completely crystalline regions to completely amorphous regions.

(iii) IR Spectroscopy (Structural determination):

In the infrared study of polymers, it is desirable to determine the vibrational origins of absorption bands in the spectra. To do this it is necessary to study the characteristic group

frequencies of related small molecules as well as polymers, to study vibrational selection rules using the symmetry of the polymer molecule or crystal, and to calculate the force constants and vibrational patterns by normal coordinate analysis. For polymers containing hydrogen atoms, it is very helpful to study the spectra of related polymers with the hydrogen atoms partially or completely replaced by deuterium atoms. This will lead to definite assignments of some hydrogen frequencies as well as some other frequencies. Polymer samples can generally be oriented in various ways and their spectra can be obtained with polarized infrared radiation.

(iv). X-ray Diffraction:

X-ray diffraction has played a very important role in the recognition and characterization of stereo regular polymers. An X-ray picture is said to have provided the clue which led to Natta's discovery of stereo regular polyolefins. The detailed information furnished by structural studies concerning the molecular conformation in the crystalline state permits one to classify a particular stereo regular polymer as iso tactic or syndiotactic [2-4]. Furthermore, the density of the perfectly crystalline phase, as obtained from unit cell dimensions, is a valuable piece of information for those engaged in dilatometric studies.

Conducting polymers are interesting materials for their unique optical, electrical, and mechanical properties. Different from the traditional polymers which are used in our daily life as passive materials, conducting polymers have active properties which can be applied in many areas like sensors, transistors, and optical materials. Those active properties, due to the rich chemistry of conducting polymers, have attracted the attention of many scientists and researchers in the last three decades, leading to the publication of thousands of papers.

Most polymeric materials are bad conductors of electricity and are excellent insulating behavior. But a significant number of polymeric materials do conduct electricity. In practice, the term "conducting polymer" includes a range of materials that display a wide variety of properties and consequently fit many diverse areas of established or potential application. The range of conductivities of interest is enclosed at one end of the scale by clues associated with a typical good insulator, such as polyethylene, $(c.10^{-14}$ s/cm$)$ and at the other end by those associated with a typical metallic conductor, such as copper $(c.10^{6}$ s/cm$)$. Conductivity may be an intrinsic property of the material, for example, poly (Sulphur nitride) $(SN)x$, the first "non-metallic metal", has a room temperature conductivity of $c.10^{3}$ s/cm; alternatively, it may result from adding a conductive filler to an insulating polymeric matrix.
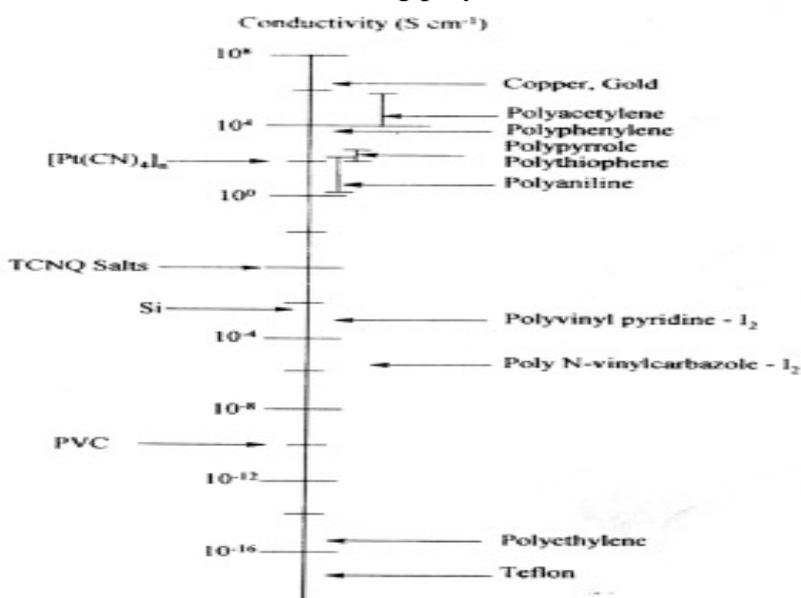
Conductivity ladder of some metals and conducting polymers

Dopants are either strong oxidizing or reducing agents. On doping, either positive or negativecharge carriers are created in polymers.

Polymer + Dopant → [Polymer+ - Dopant-]

(Acceptor) charge transfer complex

Polymer + Dopant→ [Polymer- - Dopant+]

(Donor) charge transfer complex

Redox doping is the best doping method available for polymers. This is also known as oxidative doping and is accomplished by removing π electrons from the conjugated π electrons. All conducting polymers e.g., Ppy, PT, PANietc undergo p- and/ or n- redox doping by chemical and/ or electrochemical processes during which the number of electrons associated with the polymer backbone changes.

During the process of doping, dopants are converted into negative or positive ions with or without chemical modifications. The doping process involves the transfer of the charge to or from the bonding system of the conjugated polymer, leaving the system essentially intact and hence the structural density of an individual chain preserved. However, properties like vibrational energy, electronic configuration of the polymer are changed upon doping as well as its supramolecular structure. The result of the doping is the increase of the polymer conductivity over several orders of magnitude.

In some cases, conjugated polymers show metallic behavior having a negative temperature coefficient. Partial oxidation-reduction is achieved by doping the molecules. As a result charged quasi-particles are created called polarons, initially. As doping progresses, reactions between polarons take place, leading to energetically quasi-particles, i.e. a pair of charged solitons (bipolarons) in materials with a degenerate ground state. At low dopant concentration, the dopant molecules occupy random positions between the chains and affect the electronic properties by their coulomb potential and by hybridization with the polymer p-orbitals.

Polymerization using APS as oxidant:

Pyrrole was distilled before use .0. 1 M Pyrrole solution was prepared by dissolving it in 100 ccs of distilled water and stirred for 15 minutes for proper mixing. The Ammonium Peroxy Disulfate [$(NH_4)_2S_2O_8$] (APS), obtained from SDL, was of reagent grade and was used as received. The solution APS was used in the standard ratio of monomer: oxidant, mixed in 100 ccs of distilled water. The Pyrrole solution was mixed with the aqueous APS solution slowly under constant stirring for 30 minutes. Then the polymerization reaction takes nearly four hours to complete. This preparation was kept unagitated for one day settled down. The Polypyrrole powder was filtered by Whatman`s filter paper no.42 in a vacuum and washed with distilled water several times to remove any impurities present.

Characterization:

1 a FTIR spectroscopy:

The FTIR spectrum shows strong absorption bands at around 3435 cm^{-1} corresponding to N-H stretching. Other medium intensity peaks are observed at around 2926 cm^{-1} - 2854 cm^{-1} which can be attributed to aromatic C-H stretching vibrations. The absorption band at 1534 cm^{-1} is related to C=C / C-C stretching vibrations of the Pyrrole ring. The band at 1471 cm^{-1} is an indication of C-N vibrations arises due to stretching of the ring. The region at 1261 cm^{-1} - 1194 cm^{-1} corresponds to vibrations of the Pyrrole ring. The peak at 1294 cm^{-1} is a result of C-N deformation vibration. The bond of C-H in plane deformation vibration is situated at 1046 cm^{-1}

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and of the C-C out of plane ring deformation vibrations or C-H rocking is at 681 cm^{-1}. The peak at 924 cm^{-1} is due to C-H out of plane deformation vibration band of the ring.
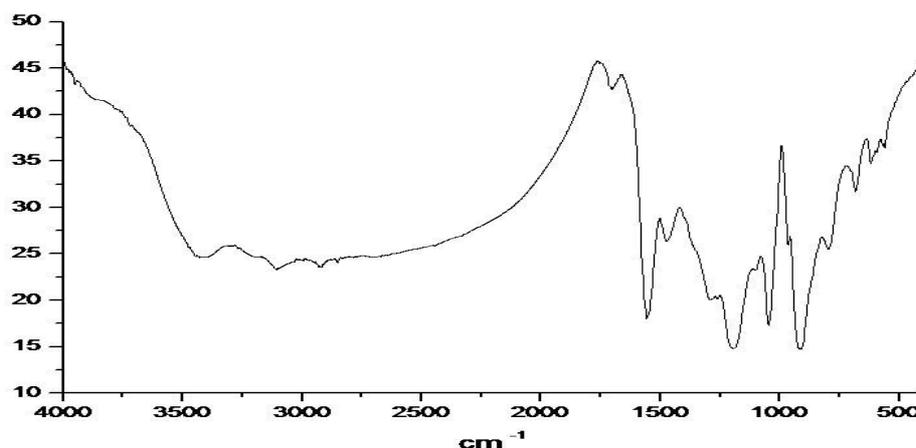

Fig.1 FTIR pattern for polypyrrole prepared using APS as oxidant

1. b. X -ray diffraction analysis:

A typical X-ray diffraction pattern for polypyrrole prepared using APS as oxidant is shown in Fig. The XRD pattern shows broad peaks in the region $15^0 < 2\theta < 30^0$ revealing that the resulting polypyrrole powders are amorphous. This agrees well with the structure reported in the literature. Such a broad peak usually indicates a short-range arrangement of chains. Gaussian distribution for the low angle part of the diffraction curve.
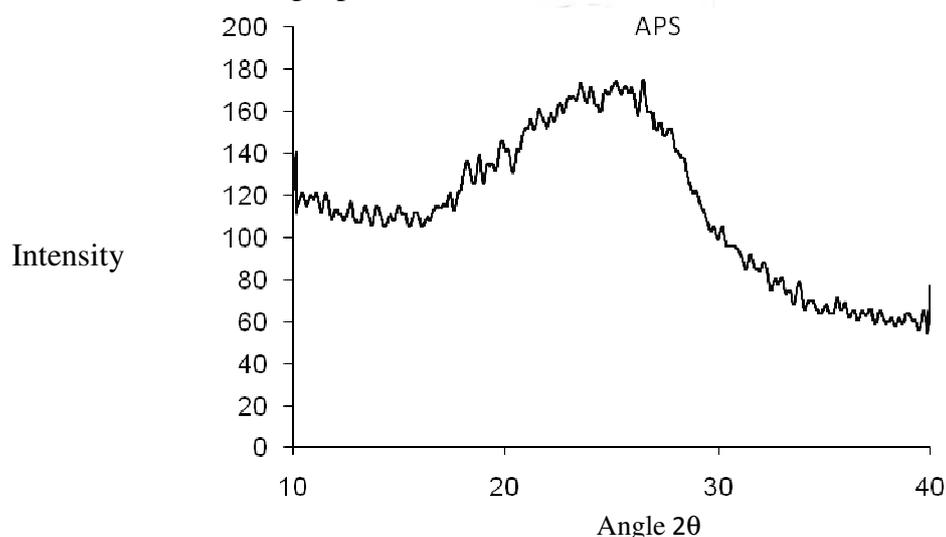
Fig.2 XRD pattern for polypyrrole prepared using APS as oxidant

1. c. Morphology:

The morphological features of polypyrrole synthesized chemically have revealed that mostly the growth is in the globular form. A typical SEM image is shown in Fig. The micrograph shows a globular structure. It can be seen from Fig. that when polymerization was done with APS the average size of globules was found to be 0.59 µm. The individual globules observed were nearly spherical and have a close packing. It seems that such spherulites are growing one over the other and forming a continuous structure. The sizes of these spherulites are varying from 0.2 µm to 0.7 µm. Such morphological features are considered to be good for gas sensing applications.

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Fig.3 SEM of Ppy prepared by our method using APS as an oxidant

1. d. I-V characteristics:

Typical plots of I vs. V for polypyrrole prepared using APS as oxidant is given in Fig.4. Nearly linear relationships of the graph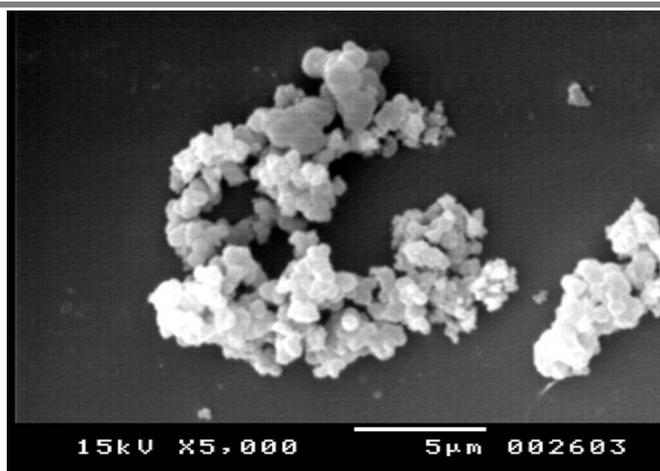 of the I vs V curve were noted up to 8 volts. After this peak when voltage was increased further, a decrease in current was observed. The reason for such decrease is either that the current is now opposed by the flow of opposite charges in the opposite direction of degradation of the sample. This behavior was also seen when I vs V was studied for higher temperatures. The peak current-voltage (Vp) decreases with temperature. It shows that the charges of the opposite kind are generated more in numbers as temperature increases. Additional evidence for the contribution to the current by ions is being explored. The conductivities were found in the range of 1.0 to 4.6 x 10^{-3} S /cm.

The temperature dependence of the electrical conductivity of the polypyrrole, prepared with APS was studied at various temperatures from 30^{0}C up to 70^{0}C. It was observed that the electrical conductivity decreased gradually for all the samples.
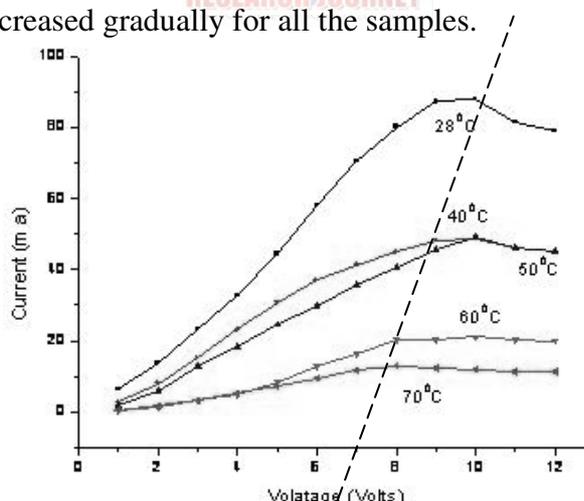
Fig. 4 I vs V graph of Ppy with APS as oxidant at various temperature

2 Effects of dopants:

1 M Pyrrole solution was prepared in 100 ml distilled water and then mixed with dopants such as p-TS and NSA (10% w/w) and stirred for 30 minutes for proper mixing. The solutions were slowly mixed with an oxidizing agent, APS, in the ratio mentioned above, under constant stirring for 30 minutes. Then the polymerization was conducted for 4 hours under constant stirring. These preparations were kept unagitated for 24 hours so that Ppy powder settled down.

The doped Polypyrrole powders were filtered out under vacuum and washed with distilled water several times to remove any impurities present. These Polypyrrole powders were dried for 2 days at room temperature.

Following is the comparative chart of X-ray peak position, Half-width, Globular size, and conductivity of Ppy prepared using APS and various dopants.

Table- 1 X ray peak position, half width, Globular size and conductivity of Ppy prepared using APS and various dopants.

Sample	X ray Peak position	X ray half width	SEM size of globule	Conductivity at R.T. over a linear portion of curve
Pure Polypyrrole	25.4^0	8^0	$0.59\,\mu m$	1.70×10^{-3}
Polypyrrole with NSA	25.3^0	6.6^0	$0.63\,\mu m$	2.92×10^{-3}
Polypyrrole with p- TS	24.6^0	6.8^0	$0.27\,\mu m$	4.60×10^{-3}

Conclusions:

Polypyrrole prepared with various oxidants like APS along with various dopants p-TS and NSA by chemical oxidative method shows excellent electrical conductivity. Even though they cannot be obtained in the film form as they are obtained in amorphous nonsoluble powders, the slurry of it shows good ohmic contact when pasted on PCB. The most important part of it is that it works at room temperature.

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Indian Banking Scenario - Dynamism and Optimism

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Abstract:

If there is one sector which has made a significant impact in our personal lives in the last decade or so, undoubtedly it should be the Banking Sector. Right from opening an account, deposits, withdrawals, funds transfer, payments, till closing of an account, today, all can be done digitally and most importantly, at our own comfortable time & location. Most significant advantage is 24/7 access. ATM's has done a phenomenal change in our relationship with Banks. Further, we can now access money from any Bank ATM's. Technology has facilitated this with strong connectively of respective servers. Strictly speaking there is no additional charge, if you can plan and withdraw money within the stipulated amount as well as within the number of times allowed. Also, gone are the days where we were at the mercy of Bank Branch Officials even to collect a deposit/withdrawal slip, print a pass book etc. Today's CDM (cash deposit machine) allows us to Deposit cash and add instant credit to our account without paperwork or queues. Similarly, most of the bank branches have got machines to print pass book. Most of the Indians, particularly Senior Citizens/Pensioners, still have a thrill in pass book updation, particularly when all the entries are printed legibly, and the pass book balance exactly matches with our records/ expectations. Of course, exception is the millennials group who strongly believe in the concept, "Please Consider your Environmental Responsibility before printing- Save Paper". They are really environment conscious as they are the ones who are going to live in this planet in the future. Fundamentally they believe digital storage is enough for future reference and retrievals.

Nationalism, Rupay Cards:

After demonetization, pace of change in the usage of ATM's is very rapid and expected to reach greater heights. A recent report says that, Mastercard has lodged a protest with US Government over Rupay Payments Network. Infact, it further says that our PM was using nationalism to promote the use of domestic payments network as he has mentioned in various occasions that usage of Rupay Cards serves as a "kind of national service". US payment giants, Mastercard and Visa, both feel that Indian's protectionist policies will hurt foreign payment companies. Rupay payment system is now used for more than half of Indian's 1 billion debit and credit cards. One of the world's biggest payments growth is expected to happen in India. Hence global payments giants want to ensure that there is a level playing ground so that they can also participate in this growth. While they welcome our Government's move towards digital payments, they don't want it to be done through protectionist measures which are detrimental to them.

Demonetization, less-cash :

One of the objectives in the demonization exercise was to move to a "less-cash" society. The currency in circulations was Rs.17.9 lac crore in November 2016 and in October 2018 it rose to Rs.19.6 lac crore. It appears that Indians will continue to show preference for cash and the reasons may be many. Another report says that Rs.50,000 crore cash got drained from banks as

Indian account holders withdrew huge amounts of cash ahead of festivals (Durga Pooja, Diwali etc.). It appears that as per RBI, currency in circulation shot up to Rs.20.2 lacs crore (9th November 2018) and recorded the highest ever growth post-demonetization. While Bankers are confidence that money will come back to the system after festivals (Individual spend money, Businesses deposit the cash back in banks), they need to find out how they can divert the above cash transactions into digital mode. There is a tremendous potential for further digitization. Appropriate incentives can be brought in so that both business & individual will prefer the transactions in a digital way. State elections are scheduled, followed by 2019 parliamentary elections. Former RBI governor once made a comment, "Around election time, cash with public does normally increase…. You can guess as to reasons why, we can also guess". This is still relevant despite very bold initiatives taken by our Election Commission. This is another opportunity for our Indian Banks to innovate & deploy digital solutions so that there will be more transparency, traceability.

Asset acquisition through financing:

Indians have also made a major shift to acquire assets through financing. Sometimes back, it was a taboo to buy anything on credit. Widespread usage of housing loan EMI's has given many Indians the required confidence to go for various types of loans. As the economy grows and millennials joining the workforce, this momentum is expected to sustain at least for the next decade. A significant point to note is that Non-Banking Financing Companies are making a major contribution in this. Major part for this shift is because of digitization and simple process. It appears that better availability of credit information, easy/ attractive/ flexible finance schemes are enticing the customers into buying aspirational premium products. Further, NBFC's penetration from metros to tier 1 & 2 cities will aid in this shift. Banks must compete in this segment as there is general perception that the traditional loan schemes of banks are quite tedious and tardy on delivery of finance. Another key point is the availability of NBFC representatives at the Dealer Place. This helps in quick conclusion of sale along with required documentation (physical or digital). Private sector banks have taken the clues and there is lot of visibility of their representatives. Further, special camps are also conducted to facilitate sales. Public Sector banks are not completely laggards, but motivation level is significantly low. Timely rewards & recognitions will address this issue in the Public Sector Banks and make them to aggressively compete as they also have made significant investments in the relevant technology particularly in core banking solutions. Public Sector Banks have a major advantage in cities beyond tier 2 and in rural areas. Higher financial inclusion, another pet theme of current government, has given a significant opening. But, people in those areas still distrust the digital means due to cyber frauds and enormous time in its resolution. Digital red-tape encourages cash transaction of course, for merchants it is the burdensome transaction charge. If these issues are addressed there is a very high chance of Win-Win across all the stakeholders in the value chain.

Processing time reduction, Digital initiative:

Recently, our Prime Minister made another big push in digital finance. "Rs1 Crore Loan in 59 minutes" Government's website for MSME borrowers offers automated processing of loan that provides in-principle approval in less than an hour. Currently, the website allows automated, contact-less business loan approvals (Rs.10lac to Rs.1 crore). Now, the turnaround time is expected to come down to 59 minutes from 20-25 days. It is expected, that after approval, the loan amount will be disbursed in about a week's time.

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Cyber Security

Data theft is one of the major nightmares for all of us more so in banking sector, since any financial loss affects our mental health. The process of finding a solution has now been simplified and it is the duty of the individual to report immediately to avoid or minimize the loss. This will become more important as more% more Indians are switching over to Digital mode by using Point of Sale machines. POS usage in commercial establishments like restaurants, bars, petrol, pumps etc. where bills are settled with credit or debit cards daily are most vulnerable. Individuals must take all the necessary precautions advised by the banks periodically and it also advisable to check the month end balances. Data theft is now becoming more organized where the modus operandi is now primarily in creating trusts by people posing as bank executives. The most vulnerable segment is "senior citizens/ pensioners". Many stories are reported, and common theme is establishment of trust before committing crime. Similar to Physical crimes, Financial Crime can also create a major turbulence in their lives and also significantly affect their health. Indian Banking sector should create a separate risk protection measures for this group and they need to be periodically educated, assured about their bank balances. There are also gangs that send out thousands of phishing emails, supposedly from banks or government bodies asking people to update their details. The unsuspecting targets fill in the details and because they suffer no monetary loss, they do not realize that an offence has been committed. Trust gets created. Next time, emails contain links loaded with malware. Once the target clicks on the link, their device becomes compromised and all sensitive data is stolen. Malwares are specially programmed to look for data like password, PIN's on the target device. Ultimately, caution is after all an individual choice, it can only be suggested, not enforced.

Is Digitization cure for all ills?

Well, there are no straight forward answer. Most of us are part of social media (Facebook, Twitter, WhatsApp etc.). Their influence in elections is very well known and still debate continues whether Russia influenced US Presidential Elections. This is primarily due to select data leakages. Even Facebook founder, Mark Zuckerberg, has acknowledged there was a data breach. He further apologized and assured all the necessary steps are being taken not to repeat the same in the future.

Similarly, ecommerce has revolutionized the business transactions and all of us spend enormous amount of time in the digital market place as compared to physical market place. E-Commerce giants like Amazon, Walmart etc., have entered India and have very high business targets. Abuse of dominance by tech giants is definitely a major threat and we must tread the path carefully. It is only hoped that Competition Commission of India has necessary authority to order an investigation, if necessary or required. Because it appears that the competition law, as it is, presently talks of assets and turnovers. In the entire digital economy and e-commerce ecosystem, in terms of assets there may be nothing. But the turnovers are pretty high. Most of the giants are not listed in India, Hence SEBI authority and jurisdiction is also not clear. Similarly, financials are not available in public domain and it is difficult to assess their financial strengths. This will gain importance as they are also coming into payments system, Amazon Pay, Google Pay etc., while there have been news reports that they should have servers in India and store the date locally. It is not clear whether they will own or take the servers on rental basis. This has got its own ownership, taxation issues.

Customer Centricity in a digital age:

"Get closer than ever to your customers. So close, in fact. That you tell them what they need well before they realize it themselves"

– Steve Jobs

There is always a debate, "Customer focused V/s Competition obsessed" and this is expected to continue in the near future. In the past, agencies and marketers decided how customers – centric a company is. But, now the customer decides. The need to be customer centric is highly relevant for the banking sector. A decade back, mobile banking, e-wallets, chatbot etc., were in the customer's wish list. Today it's a reality and many customers have experienced it. It allows the banks to come up with more innovative & relevant products for different banking customers. Broadly in the banking sector, customers are classified into Personal and Corporate. One size fits is not possible because again within the above there are various sub-classifications. In the age of internet banking and robo-investing, besides relationship manager, a conversational assistant powered with artificial intelligence can be a great support. Al based conversational chatbot is already visible. CBA (conversational banking assistant) can help customers in funds transfer, order a cheque book, clearing emi dues, clearing bills, recharging mobile phones, temporary enhancement in credit card limits, switching off debit/credit cards temporarily and list goes on. It has to be remembered that customers are in a time-starved world and they expect the banking sector to know what they like & want. As per the recent report (Innovation in Retail Banking), it appears that after existing digital channels (online, mobile) it will be digital assistant, social media and third-party channels are expected to be the primary channels for banking by 2022. Further, Al is expected to have as significant impact in transforming customer service / support by 2022.

In the above context, millennials are going to constitute a significant customer base in the future. Obviously, their banking needs are mostly in digital mode. Banks can participate in a potential long-term growth opportunity with millennials through timely support in everyday financial needs as well as important life events. There financial needs are beyond the traditional banking products & services. Millennials customers are thinking about their needs. Therefore, Banks should keep it simple and don't overstep. Ex make payments as smooth as possible by allowing customers to use a multitude of payment options to help fit their need of the moment. Card, Mobile, third party apps etc. Try to understand their life journey and address a pain point ex. Buying a first home. Banks should help them to navigate through guides, walkthroughs and advice. Journey is important and it should cover all the key milestones. Bank must design the best journey possible and also allow customers to design their new journeys. This flexibility will become critical and will have a major say in the customer- banker relationship. Banks should move from 360-degree view (complete customer view from a banking perspective) to 720-degree view (a holistic understanding of customer from social spheres in tandem with 360-degree view). Based on the bank credits in a saving account per month, if spending habits are analyzed and reported, then they will start relying on banks information. They may avoid the need to transfer the date into third party apps and get the same analysis. Ability to predict next life events, to guide personalized banking product recommendations, to develop a deep understanding of customer lifestyle, to design meaningful touch points will all play a key role in establishing and sustaining a strong customer base.

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Social Media + Banking:

I keep wondering at night, 'Will I have a bank the next morning or will some technology company be doing banking without needing a bank?

-Uday Kotak, Kotak Mahindra Bank

People except personalization and convenience. Social Media – Facebook, WhatsApp, Google etc., provides plenty of opportunity. People also except similar experience in Banking. Despite data privacy issues, Millennials would prefer to do the payment transaction through Apple, Google Samsung etc., peer to peer transaction is one of the potential area for this. Many experts believe that this will be route into banking for the tech giants. They already have the customer base and customer shopping details. This can be effectively used to offer personalized banking products. As customer owns their data, they can also share it with firms who may help them to manage their personal finances. If tech giants decide to enter this segment then there will be a potential threat to banking sector. It is still debatable whether customers will be willing to trust big tech firms with their private banking transaction in view of recent data concerns. But, will customers be willing to go extra mile for the sake of convenience and share the data. May be if the trust level goes up with the tech giants they may do. Based on how much data younger consumer are willing to share with major players, so that they can access their latest services & offer, it appears that convenience may win over security concerns. Business ethics, if carefully preached and practiced by tech giants, will give them a better chance in this. Otherwise millennials may put off banking with them. Many experts across the global expect that Facebook, Google, Amazon, Apple to take the role of banks in the next five years. If relevant regulations are brought in to ensure global financial stability, then they will be a major threat to traditional banks. Of course, in this game, Indian Banks also will get affected.

Technology Impact :

Current government thrust on financial inclusion has resulted in 330 million new bank accounts through Jan DhanYojana. This is a great opportunity for investment in Indian Banking. Our PM also stressed this fact in the recent Fintech Festival in Singapore. He also emphasized that we are living an age of historic transaction through technology, as we have moved from desktop to cloud from internet to social media from IT services to internet of things etc. All these has been done in a very short time and this has been possible through careful deployment of technologies. Long time back, Traditional banking has taken a back seat and paved the way for ATM's & internet banking. Today, it has moved further to mobile banking. Aided by Smart Phones, there is significant shift towards mobile banking.

Many banks have introduced 3in1- convenience of opening an online trading, demand & bank account instantly. One of the major beneficiaries is the stock market. Retail investors were largely depended on dealers and relationship managers to trade in the stock market. Now they are switching over to mobile phones to trade. Primary this is due to increased focus on technology by brokerages, deep penetration level of smart phones and affordable data plans. A point to note is that trading applications of leading brokerages features among the popular finance apps in both, Android & IOS platforms.

In the India Mobile Congress, Mr. Mukesh Ambani, Reliance Industries Ltd. mentioned that by 2020, India should be fully 4G and will be ready for 5G technology. He also claimed that transaction from 2G/3G to 4G in India is the fastest transition anywhere in the world. He was confident that network quality in India will match with Global Standard. This will have its own

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implications for banking sector. Speed and convenience in the payments funds transfer, traders etc. due to 5G technology will provide further impetus towards digitization. India is a massive country with 1.3 billion people and the growth opportunities are very huge. Therefore, huge investment will continue in our banking sector both by Indian & Global Investors.

Technology breakthrough can also happen whereby a single card can be used for credit as well as debit cards. IndusInd Bank has already launched one. Card will carry two EMV chips as well as two magnetic stripes. One can either swipe or insert the card to complete the POS transaction. Card holder is expected to be aware about the implications since interest charges are very high in credit card transaction, if the payment is not made within the due date. Wrong usage like withdrawal of cash through Credit Card in an ATM will result in huge interest.

Senior Citizens, Pensioners :

"Some is sitting in the shade today because someone planted a tree a long time ago".
-Warren Buffett This is one of the vulnerable groups and an easy target foe cycle criminals. Special efforts has to be made by Indian Banks for their contribution made to our country during their working age. We are enjoying today because of their efforts made in the past. Any changes including software migrations should be properly communicated. Digital Assistant may not help them at all times. If necessary, physical assistance will be required so that they continue to live with dignity. Mistakes are bound to happen. Clarifications may have to be repeated. Solutions may have to be provided differently. Most importantly, time bound & peaceful resolution of dispute is the need of the hour. Repeated visit to banks is not possible in our country due to hot weather and poor public infrastructure. In most of the cities, bank even to not have proper parking facilities, ramp facilities etc. Bank Balance assurance in a periodical manner, Tax related support, Pension related support etc., have to be treated as Basic Banking Services and should be provided universally (urban, rural areas).

"Our view is that younger customer loves our digital offering our mobile banking applications and so on. Older customers expect relationship managers and want much more personal attention in terms of their needs."

-Uday Kotak, Kotak Mahindra Bank:

Similar to universal basic income (UBI) concept, there should be certain minimum banking services to all the customers irrespective of bank balance, age and location. Bankers should try to show their human face and hone their HR skills accordingly. It is certainly tough for the banking professionals to do, as they have to simultaneously deal with millennials. Therefore, it is advisable that a separate team within the bank is created and trained to handle this group- Senior citizens / Pensioners.
"Your most unhappy customers are your greatest source of learning".

Dynamism, Optimism

Based on the above Indian Banking was and will continue to be dynamic in line with changing personal / corporate needs and also shift towards ecommerce. Optimism in any sector is possible only when it is relevant and assures / mitigates risk to the customer in a time bound manner (in banking sector, Financial burden should be either zero or kept at the barest minimum). Accordingly, risk mitigation measures have to be developed and deployed so that banking customers can have wonderful and peaceful experience.

When you get an email from your bank which says, "Safeguard your account against Phishing and SIM Swap, here's how you can stay secured.

Be Dynamic – To check the mail contents and act appropriately like password updations etc.

Be Optimistic – Bank Balance (as displayed in the screen gets reconciled with your records).

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Constitutional Perspective of Gender Sensitization and Women Empowerment in India.

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Abstract:

In the globalisation era, the world is passing through a difficult phase. Our society facing plenty challenges ranging from terrorism to poverty. It is essential to ensure the proper and balanced implementation of policies so as to make Gender Sensitization as an effective vehicle of social progress. The role of the constitution in making certain gender justice is being recognized in the present time. It's most acceptable that the supreme law of the land ought to meaningfully address the woman question and answer the challenges by stimulating the full system towards a larger concern for, and protection of ladies. However, law cannot amend a society overnight, it will definitely make sure that the deprived aren't given a raw deal. Hence, the present paper gives a clear picture about the constitutional provisions for gender equality of men and Women and fundamental rights given by the Constitution of India.

The objective of the study is to examine and analyse gender equality and women empowerment from the perspective of the Constitution of India.

Keywords: Gender Sensitization, gender equality, Constitution of India, fundamental rights, women empowerment

Introduction:

According to the provisions of the Constitution of India, it's a legal point to grant equality to women within the society altogether spheres a bit like male. The Department of girls and Child Development functions well during this field for the right development of the ladies and child in India. Women are given a top place in India from the traditional time however they weren't given empowerment to participate altogether areas. they have to be strong, aware and alert every moment for his or her growth and development. Empowering women is the main motto of every department because an empowered mother big makes the brilliant way forward for any nation.

India may be a very famous country known for its cultural heritage, traditions, civilisation, religion and geographical features from the traditional time. On the other hand, it's also popular as a male chauvinistic nation. Women are given first priority in India however on the opposite hand they were badly treated within the family and society. They were limited just for the household chores or understanding the responsibility of home and relations. They were kept totally unaware of their rights and own development. People of India want to say this country as "Bharat-Mata" however they never realised the true meaning of it. Bharat-Mata means a mother of each Indian whom we've to save lots of and care for always.

The most famous saying said by Pandit Nehru is "To awaken the people, it's the ladies who must be awakened. Once she is on the move, the family moves, the village moves, the state moves". In India, to empower the ladies, first it must kill all the demons killing women's rights and values within the society like dowry system, illiteracy, harassment, inequality, female infanticide and violence against women, rape, prostitution, illegal trafficking and other issues. Gender discrimination within the nation

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brings cultural, social, economic and academic differences which push country back. The foremost effective remedy to kill such devils is making women empowered by ensuring the proper to Equality mentioned within the Constitution of India. In spite of girls contribution to all spheres of life and that they enjoy a singular position in every society and country of the planet, they suffer in silence and belong to a category which is during a disadvantaged position on account of several barriers and impediments. India, being a rustic of paradoxes, is not any exception. Here too, women, a personification of Shakti, once given a dignified status, are in need of empowerment. Women's empowerment in legal, social, political and economic conditions needs to be enhanced. However, empowerment and equality are supported the gender sensitivity of society towards their problems. The intensification of women's issues and rights movements everywhere the planet is reflected within the sort of various Conventions gone by the United Nations. The India polity more or less features a always tried to deal with the contemporary need – based development of laws for the required purposes. it's going to be within the field of Human Rights, Politics, Civil Rights, Constitutional Rights or Social Transfer. The Constitution isn't to be construed as a mere law, but because the machinery by which laws are made. The Constitution may be a living and organic thing which, of all instruments, has the best claim to be constructed broadly and liberally. Women empowerment is empowering the ladies to require their own decisions for his or her personal dependence. Empowering women is to form them independent altogether aspects from mind, thought, rights, decisions, etc. by leaving all the social and family limitations. it's to bring equality within the society for both male and feminine altogether areas. Women empowerment is extremely necessary to form the brilliant way forward for the family, society and country.

Indian constitution constitutes equal rights for women in all ways such as fundamental rights, directive principles. The constitutions of India not only granted equal rights but it will also talk about empower the state to adopt measures of positive discrimination in the favour of women.

Constitutional provisions:

Fundamental rights granted a free environment among others to ensure gender equality before the law and protection of women. Discrimination against any citizen of India on the grounds of religion, race, caste, sex or place of birth and equal opportunity to all.
Article 14, 15, 15(3), 16, 39(a), 39(b), 42 etc. Of Indian constitution is of specific importance on the regard to women empowerment.

- Equality before law for women (14)
- The state should not discriminate to any citizen on the basis of their religion, race, caste, sex and place of birth. Article 15 (1)
- Some special provisions for women and children. Article 15 (3)
- Equal opportunity for all citizens. Article 16
- To promote justice, on the basis of equal opportunity and Legal aid. Article 39 (a)
- To save the dignity of women. (Article 51 (a) e)
- One third seats reserved for women in panchayats. Article 243 (3)

Legal Provisions:

Women may be victims of any of the crimes like murder, robbery, cheating,etc. The crimes directed againstwomen are characterized as ' Crime against women's.
These crimes are two types.

The crime under Indian Penal Code

- Rape (sec 376IPC)
- Kidnapping and abduction for different purpose (sec 363-373)
- Homicide for Dowry, Dowry deaths or their attempts (sec 302/304b IPC)
- Molestation (sec 354 IPC)
- Torture (mental and physical) (sec 498-A IPC)
- Sexual harassment (sec 509 IPC)
- Importation of Girls (up to 21 years)

The crime under special law

- The employees State insurance act, 1948
- The family courts act, 1954
- The special marriage act
- The Hindu marriage act , 1955
- The Hindu succession act, 1956 with amendment in 2005.
- The maternity benefit act, 1961
- Dowry prohibition act, 1961
- The medical termination of pregnancy act, 1971
- The prohibition of child marriage act, 2006
- Indecent representation of women (prohibition) act, 1986
- Commission of Sati prevention act, 1987
- The protection of women from domestic violence act, 2005

Special initiatives for women

- National commission for women - Jan1992
- Reservation for women in local self-government, 1992
- The national plan of action for the girl child (1991-2000)
- National policy for the empowerment of women 2001

The provisions initiated by the government of India are working in the rural areas but what are the facts among all these policies and amendments. If we are going in such areas there are a number of dowrycases happening but authorities cannot do anything because most women are not questioning their parents on this subject. Why should they dowry to the boy's side? Some of the murder, girls burning etc. happened but there are no any cases of this because of their social status in the society.

Need for Gender Sensitization with regards to Family, schooling and work places for a significant life

One of the major lacunae in our social organization is the prevalence of gender-based discrimination in different works of life in social economic or political. Gender discrimination refers to biased treatment of women, girls, and Men, Boys which in turn is a

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consequence of deep-rooted normative beliefs about usual traits, behaviours and roles of women and men Such belief are learned since childhood and passed down through generations such that people come to recognise this as given and obvious facets of gender identities for instance, Women have typically performed the task of rearing children. This is the mentality of our society. Hence, the appropriate role for them is care work.

In similar manner people tend to develop an inflexive idea about what is feminine? eventually such stereotype sketches implicated in all forms of social institution and organization, family, community, State.

Ladies are playing multi jobs in the public arena yet they separate not just the womb of their mom and youth yet in addition each phase of their life. They assumed a great part in the improvement of society just as for their country. Regardless of this load of quantities of issues looked by them in their everyday life. In a race of numerous difficulties, they can possibly self-improve and carry on with a superior life for endurance in the public arena.

In Indian setting, ladies confronted numerous difficulties like abusive behaviour at home, education rate and so on. The Indian culture is man centric culture and females have confronting hard principles to make due in the general public. They have constrained marriage in early ages, endowment rehearsing is one of the most noticeably terrible practices coming from antiquated introduction. Which have a major reason for female self-destruction, consumed by their relatives and so forth. Every one of the difficulties looked by them identified with sexual orientation assessment and fairness are the aftereffect of 'sex philosophy'.

Solution/ Recommendation.

Today, we are passing through a crisis—a crisis of identification of values. The world is entrapped in gross materialism. Man has become as selfish as to have utter disregard for others—whether individuals or societies or nations. It is high time to create a balance between Man and Women. In the chaotic circumstances prevailing all over the world today, we are looking for peace as elusive as the mirage in a desert.

1. Sex balance starts at home

Parents must treat young ladies and young men similarly (food, sports, training, equivalent festival upon entering the world, and so on) Guardians are the main good examples kids have, so in the event that they grow up seeing sexual orientation disparity being practiced or endured in this relationship, they are bound to be presented to negative sex job generalizing. Parents should share family errands just as outside tasks, take an interest similarly in monetary issues, show joint dynamic, and approach each other with deference.

Talk about sexual orientation issues with age suitable focal point Regularly, guardians attempt to protect kids from occurrences identified with sex-based savagery, however youngsters actually become acquainted with of these issues through companions or media openness. Parents should converse with kids about sex related issues during a time fitting way so they grow up to be more sex mindful, sexual orientation responsive, and aware.

2. The right sexual orientation informing—

Gender isn't inseparable from ladies and young ladies Sex is frequently distorted as relating just to ladies and young ladies. Make mindfulness that society makes sex standards

and generalizations, including ladies, men, and third sexual orientation. Sex generalizations sway we all, yet influence ladies and young ladies and the third sexual orientation all the more lopsidedly.

3. Tap into the young lady and lady power

Through information, abilities, and authority improvement of young ladies and ladies, we can assemble a strong, enabled, and roused age. Such an age will have high yearnings for self and a promise to sexual orientation balance and value.

4. Draw in with men and young men

All should share duty and responsibility for sex balance, not just ladies and young ladies. It likewise ought not zero in just on ladies and young ladies. Drawing in with men and young men is similarly significant and helps in establishing an empowering climate for an impartial society.

5. Media as a distinct advantage

All types of media should advance positive sexual orientation good examples and even-handed sex standards through motion pictures, shows, narratives, and articles. They can convey to masses, and have an effect because of the profundity of informing and the compass.

6. Celebrate and advance "positive degenerates in the general public"

Breaking obstructions requires strong strides by the two ladies and men, clearing way for an empowering climate. Perceiving the "positive degenerates" in our general public (for instance, Mary Kom, the Phogat Sisters and their dad, and so forth) is significant. We should elevate their change stories to propel others and change mentalities for reformist change.

7. Sexual orientation job socialization

Youngsters gain so much from their nearby environmental factors—families, companions, school, neighbourhood, media, and books. Sexual orientation job socialization and disguise begins at an early age. Youngsters, who experience childhood in sex even-handed conditions, will in general have lesser sexual orientation generalizations than their companions who experience childhood in a sex biased climate.

Conclusion.

It is presumed that the constitution dispatched numerous guidelines, laws for the strengthening of ladies to work on their fortune and magnificence by formative plans, however the issue looked by ladies in India is still needed. The main concerns of the government are to further develop the female education rate, making abilities and capacity to stand their own feet. The grass root issue of Indian culture is to offer the equivalent chance in an instructive area.

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पोषण युक्त आहार आणि कोविड-१९

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प्रस्तावना –

मानवाच्या मुलभुत तीन गरजापैकी अन्न ही प्रथम गरज आहे. अन्नाशिवाय मनुष्य जीवन जगू शकत नाही. अन्न हे पूर्ण ब्रम्ह आहे, असे म्हणतात. अन्नामध्ये विविध अन्न घटकांचा समावेश असतो. स्वास्थ संरक्षणासाठी अन्नाची म्हणजेच आहाराची गरज असते. म्हणून आहारासबंधी जाणीव जागरूकता असणे आवश्यक ठरते.

आजच्या या परिस्थीतीमध्ये कोविड -१९ मुळे सर्वत्र हाहाकार आहे. कोविड १९ चा प्रादुर्भाव सर्वत्र पसरलेला आपल्याला आढळून येत आहे. त्यावर नियंत्रण मिळविण्यासाठी अनेक शास्त्रज्ञांचा औषध निर्मिती साठी प्रयत्न करित आहेत. काही प्रमाणात यशही आलेले आहे. परंतु अजुनही पाहिजे तेवढे समाधान झालेले नाही. हा आजार फक्त औषध घेऊन बरा होईल असे वाटत नाही तर औषधाबरोबरच योग्य पोषणयुक्त आहाराची गरज आहे. जर आपल्याला या आजारावर विजय मिळवायचा असेल तर आपली प्रतिकार शक्ती चांगली ठेवणे गरजेचे आहे. प्रतिकार शक्ती वाढविण्यासाठी पोषण आहाराची गरज आहे. आहारामधून कोणते पोषक घटक मिळतात. आपल्याला त्याची दैनिक आवश्यकता किती. किती कॅलरिज लागतात या सर्वांची माहिती करून घेणे आवश्यक आहे.

कोविड – १९ ची लक्षणे –

१ सर्दी	२ ताप	३ खोकला	४ घसा खवखवणे	५ कफ
६ थकवा येणे	७ श्वास घेण्यास त्रास	८ थंडी लागणे	९ वास आणि चव न समजणे	

परंतु काही पेशंटमध्ये वरिल पैकी काहीही लक्षणे आढळत नाहीत. परंतु तरीही त्यांची तपासणी केल्यास पॉझीटीव्ह येतात. त्यामुळे जास्त काळजी घेणे गरजेचे आहे.

कोवीड – १९ हा आजार झाल्यास किंवा होऊ नये म्हणुन आहाराच्या माध्यमातुन कोणती काळजी घ्यावी कोणते अन्नपदार्थ घ्यावे जणेकरून त्यामधुन योग्य अन्न घटक मिळु शकतील ते बघणे गरजेचे आहे. ते पुढील प्रमाणे –

१. कर्बोदके –

कर्बोदके हे आपणास सर्व प्रकारची तृणधाणे - उद: -गहु, तांदुळ, ज्वारी, बाजरी, मका, रागी, डाळी, साखर, गुळ, शेंगदाने, खवा, पनीर इत्यादीपासुन मिळतात.

कर्बोदकाची आवश्यकता –

१ कॅलरीज मिळण्यासाठी आवश्यक
२ स्नीगधांचे ज्वलनासाठी आवश्यक
३ पेशी निर्मितीच्या कार्यात मदत होते.

२. प्रथीने –

प्रथीने म्हणजे प्रथम स्थान घेणारा आपल्या शरीरात याचे स्थान प्रथम असते. मुल्कर माडच शास्त्रज्ञाने हे शोधुन काढले. प्रथीने ही, डाळी, कडधान्य, शेंगदाने, मास , मासे, दुध , अंडी, या पासून भरपुर प्रमाणात मिळते.

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प्रथिनांची आवश्यकता –

१ पेशींची झीज भरून काढणे

२ नवीन पेशींची निर्मिती करणे

३ शरीराची वाढ व विकास करणे

४ शरीराची रोगप्रतीकारक शक्ती वाढविणे.

३. स्निग्धे -

स्निग्ध पदार्थ नैसर्गिक रित्या वनस्पतीज पदार्थ व प्रणीज पदार्थांपासुन मिळते. उदा. शेंगदाने , तीळ, सुर्यफुल, नारळ, सोयाबीन, मोहरी, अंडी, मास, मासे, इत्यादी पासुन मिळते.

आवश्यकता - आहारात रूची वैचित्र्य निर्माण होते.

१ शरीराला उर्जा मिळते.

२ हाडांचे घर्षण होत नाही .

३ त्वचा मुलायम राहते.

४. जीवनसत्वे –

आपल्या अरोग्यामध्ये जीवनसत्वे अतीशय महत्वाची भुमिका बजावतात. जीवनसत्वे अ,ड,ई,के, हे यकृतात तर ब, बा, ब2, ब3, ब6, व ब12 व क ही जीवनसत्वे यकृतात साठिवली जातात.

५. खनिज व क्षार –

शरीराचे संरक्षण व नियंत्रण करणारा जीवनसत्वा बरोबरच आवश्यक घटक म्हणजे खनीजे व क्षार होय. कॅल्शीयम, फॉस्फरस, लोह, सल्फर, पोटॅशीयम, सोडीयम , क्लोरीन, मॅग्नेशियम, झींक , तांबे, आयोडीन, ई. अनेक घटकांचा समावेश खनिजामध्ये होतो. खनीजांचे महत्वाचे कार्य म्हणजे शरीराचे संरक्षण करणे व शारीरीक क्रियांवर नियंत्रण ठेवणे हे आहे.

आरोग्य म्हणजे केवळ रोगांचा अभाव नव्हे तर शारीरीक, मानसिक व सामाजिक स्वास्थ्य म्हणजे आरोग्य होय. असे (WHO) ने म्हटले आहे. आणी योग्य आहारामुळेच अत्तम आरोग्य मिळु शकते आणी म्हणुनच आहाराविषयक ज्ञान आजच्या काळात प्रत्येक व्यक्तीला असणे गरजेचे आहे.

निरोगी जीवन जगण्याची गुरूकिल्ली म्हणजे पोषण युक्त आहार होय. कारण स्वस्थ व निरोगी जर राहायचे असेल तर आहाराचा अभ्यास हा असायलाच हवा. कुटुंबातील प्रत्येक व्यक्तीचे शारीरीक स्वास्थ उत्तम राहण्यासाठी आहारातुन योग्य त्या प्रमाणात पोषक घटकांचा पुरवठा होणे आवश्यक आहे. आहारात शारीरीक आवश्यकतेनुसार प्रथीने. कर्बोदके स्निग्धे, जीवनसत्वे,क्षार, आणी पाणी यांचा समावेश असावा. तसेच व्यक्तीचे वय, ऋतुमान, सवय यावरही पोषक घटकांची आवश्यकता असते. आहार खुप जास्त किंवा कमी प्रमाणात घेतला तर त्याचा आरोग्यावर परिणाम होतो. आहारावरच पोषण अवलंबुन असते. आहार आणी आरोग्य ह्या एकाच नाण्याच्या दोन बाजु आहेत. कारण आहार भुक शमवू शकतो त्याच बरोबर त्यातील पोषक घटकांमुळे शरीराची वाढ होते झीज भरून काढली जाते. बैधीक क्षमता विकसीत होते. शरीर क्रियाशील होते. योग्य पोषणावरच मानवाची कार्यक्षमता, उत्साह, रोगप्रतीकारक क्षमता अवलंबुन असते.

आहारविषयक झालेल्या विविध संशोधनातुन असे लक्षात येते की आर्थिक निम्न स्तरावरील लोकांचा आहार हा पोषण युक्त नसले. त्यामुळे कुपोषणानुसार समस्या निर्माण होतात.

ज्या प्रकारचा आहार असेल त्यावरच अरोग्य, पुर्ननिर्मिती , कार्यशक्ती अवलंबुन असते. आयुर्वेदामध्ये सुध्दा आहार आणी अरोग्य यांचा सहसबंध जोडलेला आहे. सत्व, रज, तम हे मानवी स्वभावानुसार आहारावरच निर्भर आहे. मानवाची सर्वांगीन प्रगती हि सुध्दा अरोग्याची पावती आहे.

समारोप : -

      अशा प्रकारे जर आहाराची माहीती जर प्रत्येक व्यक्तीला असेल व त्यांनी त्या पध्दतीने आहार घेतला तर आजच्या या कोवीड – १९ च्या परिस्थीमध्ये औषधाबरोबरच आहोराची जोड दिली तर निश्चीतच आपण य कोवीड – १९ ला हरवू शकतो. आहाराच्या माध्यमातून आपण आपली रोग प्रतीकारक क्षमता वाढऊ शकतो. व सर्वच आजारावर मात करू शकतो. आणी सुदृढ, निरामय, आयुष्य जगु शकतो. त्याच बरोबर सरकारच्या सुचनांचे पालन करून आपण कोवीड – १९ या आजाराला दुर ठेऊ शकतो.

संदर्भ ग्रंथ सूची –

१. फरकाडे त्रिवेळी, गोंगे सुलभा - पोषण आणि आहार शास्त्र

२. डॉ. कांडलकर लीना - पोषण आणि आहारशास्त्र

३. डॉ. जवंजाळ संगीता, डॉ. बेलुरकर - मानवी पोषण आणि आहारशास्त्र

कृषी विकासापुढील आव्हाने

विकास नामदेव लोडे
संशोधक विद्यार्थी
रा. नवरगाव पो. सुकणेगाव ता. वणी
जि. यवतमाळ- 445304, मो. नंबर : 7350583021

प्रस्तावना :

जगाचा विचार केला तर जगण्यासाठी जगातील प्रत्येक देश हा शेतीवर अवलंबून आहे. हा विचारही मनात घेऊन शकत नाही. प्राचीन काळापासूनच मनुष्य शेती करून आपली उपजीविका करीत आहेत. जस-जसे मनुष्याने आपल्या बुद्धीचा विकास केला तसेच शेतीमध्ये सुद्धा सुधारणा, विकास झालेला दिसतो. पण त्या मानाने आजही कृषी क्षेत्र हे मागासच आहे म्हणजे पाहिजे तेवढा बदल किंवा विकास झाला असे म्हणता येत नाही.

भारतामध्ये 65 टक्के लोक आजच्या घडीला शेती हा व्यवसाय करतात आणि स्वतःचे कुटुंब व अख्ख्या देशाला, जगाला जिवंत ठेवण्याचे काम हे शेतकऱ्यांवर व कृषी क्षेत्रावर अवलंबून आहे. पण आजच्या घडीला सर्वात जास्त मागास क्षेत्र म्हणजे कृषी क्षेत्र होय. कृषी क्षेत्राची दयनीय अवस्था मागच्या 20 ते 30 वर्षात खूप झाली आहे कारण या क्षेत्राकडे आजही कोणतेच शासन लक्ष द्यायला तयार नाही.

दिवसेंदिवस कृषी क्षेत्रावर भार मोठ्या प्रमाणात वाढला आहेत. पण त्यामानाने क्षेत्र फार मोठ्या प्रमाणात पिघाडीवर पडलेले आहेत आणि औद्योगिक क्षेत्र पुढे आले आहे याला जबाबदार कोण? असा प्रश्न निर्माण होतो. तर याला जबाबदार स्वतः शेतकरी आहे. कारण शेतीवर्गामध्ये एकीकरणाची भावना, अशिक्षितपणा, अन्याय सहन करणे, इत्यादी गोष्टीमुळे हा शेतकरी वर्ग आजही मागास आहेत व कृषी क्षेत्र सुद्धा मागे पडले आहे.

कृषी क्षेत्र मागास असण्याची दुसरी बाजू भारत देशाचा विकास करतांना शासनाचा हलगर्जीपणा व अनास्था कृषी क्षेत्राला न्याय मिळवून देण्यासाठी व कृषीला पुढे नेण्यासाठी असा कोणताही नेता धजत नाही. आणि समोर आलाही तरी त्याला साथ देण्यासाठी एकही हात समोर येत नाही. कारण त्याचे हात मागे खेचतात ते केंद्र सरकार किंवा राज्यसरकार या दोन्ही ही शासनाला फक्त जास्तीचा कर कोणत्या उद्योगापासून मिळतो याकडे लक्ष असते. त्यामुळेच औद्योगिक क्षेत्राच्या प्रगतीकडे आजच्या शासनाचा कल आहे. व कृषी क्षेत्रातून मर्यादित कर शासनाला जमा होतो त्यामुळे हे शासन कृषी क्षेत्राच्या बाबतीत उदासीन असल्याचे दिसते.

1) शेतकऱ्यांचे मनोधैर्य उंचावणे :-

व्यक्ती श्रीमंत असो वा गरीब प्रत्येकाचे जीवन हे समस्याग्रस्त असते. जीवन हे सुख दुःखाच्या धाग्यांनी विणलेले आहे. त्यामुळे शेतकऱ्यांनी अविवेकी व आत्मघाती विचार न करता कणखर होऊन धैर्याने प्रत्येक समस्येला सामोरे गेले पाहिजे. कोणतीही समस्या कायम स्वरूपाची नसते. तिचा सामना करता आला पाहिजे. समस्यांशी दोन हात करता आले पाहिजे. शेतकऱ्यांनी मनामध्ये विचार करायला हवा की, काळाच्या ओघात ह्या समस्या विरतात चांगले दिवस येतात. नवीन समस्याही उद्भवतात याचा अर्थ असा नव्हे आपण आपले अमूल्य जीवनच संपवावे! समस्या सोसण्याचे सामर्थ्य अंगी असायला हवे. ते निर्माण करण्यासाठी कला व मानसिक बळ आत्मसात केले पाहिजे.

जगातील कोणतीही व्यक्ती असो संघर्ष हा अटळ आहे. हा संघर्ष ही समस्या फक्त आपल्याच नशिबी आली असं समजण्याचे कारण नाही. फक्त त्या समस्येचे त्या प्रश्नांचे स्वरूप वेगळे असेल संघर्ष करण्याची आणि झगडण्याची सवय आपण केली पाहिजे. मग हा संघर्ष स्वतःशी, समाजाशी, व्यवस्थेशी, शासनाशी, करून

अन्यायाविरुद्ध लढण्याची ताकद वाढवून इतरांनाही बळ देण्याचा प्रयत्न केला पाहिजे. त्यातच खरा पुरुषार्थ आहे. मनाचा तोल ढळू न देता ही भावना जर आपण संपादन केली तर एका वेगळ्या विश्वात जगण्याचा आनंद आपणास मिळेल त्यातून इतरांनाही जगण्याची उमेद मिळेल आपण जर अकाली आपले जीवन संपविले तर यातून आपल्या मागे असणाऱ्या तरुणांसाठी आपण काय संदेश देणार आहोत.

2) कृषि माल आयात-निर्यात धोरणात बदल:-

शेतकऱ्याला योग्य भाव मिळवून देण्यासाठी आणि या भावामध्ये वाजवीपेक्षा जास्त चढ-उतार होणार नाही याची दक्षता घेण्यासाठी आयात-निर्यात धोरण केंद्र सरकारने आपले शेतकऱ्यांना जेथे त्यांच्या मालाला योग्य किंवा वाढीव भाव मिळतील तेथे त्यांनी आपला माल विकण्यासाठी ही परवानगी देण्यात यायला हवी पण अशा प्रकारे काही प्रश्न मनात येतात.

१) किती शेतकरी असा माल निर्यात करतील ?

२) दर्जेदार व निर्यात योग्य माल आपल्याकडे असेल का?

३) आजही 50 टक्के माल स्थानिक पातळीवरच विकला जातो.

४) आजही अनेक शेतकरी कापूस भेसळ करून संकलन केंद्रावर आणतातच.

अशा अनेक प्रश्नांचा काही संदर्भ देता येतो. शेतकऱ्यांचे हित जोपासण्याकरिता आयात निर्यात धोरण शेतकऱ्यांना अवगत करून देणे. माल निर्यात करण्यामागाची तांत्रिक प्रक्रिया व त्यांचे फायदे शेतकऱ्यांच्या कार्यशाळा घेऊन समजावून सांगने, शेतमालाचा दर्जा राखण्यासाठी त्यांची मानसिकता तयार करणे, इत्यादी आपल्या मालाला बाजार भाव मिळतात म्हणून शेतकरी असा आपला माल पाठवू शकणार नाही. एक तर असे बाजार भाव कोणत्या बाजारपेठेत आहेत हे त्याला माहीत होणार नाही. आणि झाले तरी त्याला पाठविता येणार नाही. शेतकऱ्यांचा माल खरेदी करून व्यापारी हे काय हातात घेत असतील तर शेतकऱ्यांना याचा फारच कमी फायदा मिळेल. त्यासाठी त्या परिसरात या कामासाठी सहकारी संस्था स्थापन करून हे काम करून घेता येईल तरच शेतकऱ्यांना याचा फायदा मिळेल.

3) प्रगत कृषी तंत्रज्ञानासाठी किसान जागृती :-

भारतापुरते बोलायचे झाल्यास भारतीय कृषीला व्यवसायिक अधिष्ठानाचा दर्जा मिळाला असला; तरी एकविसाव्या शतकातील जागतिकीकरणाच्या खुल्या अर्थव्यवस्थेचे आव्हान स्वीकारताना, भारतीय कृषि समोरील आव्हानाची जाणीव शेतकरी तथा कृषी संकलन क्षेत्रातील उद्यमी यांना करून देणे गरजेचे आहे. सबब कधी नव्हे, ते आता प्रगत कृषी तंत्रज्ञान त्यांच्या तांत्विक व व्यवहारिक हेतूबोधासह ग्रामीण भागात पोचविण्याची नितांत गरज निर्माण झाली आहे. प्रागतीक कृषी तंत्रज्ञानाच्या प्रचारासाठी जागृतीला अन्यसाधारण महत्व आहे. ही जागृती व्यक्तीसापेक्ष व समुदायसापेक्ष या चढत्या मोजणीने क्रमशः करावी लागते जसे एखाद्या कुटुंबातील एक स्त्री शिकली, तर सबंध कुटुंब शिकले व कुटुंबानंतर स्वाभाविकच समुदाय व पुढे समाजात शिक्षणाचे अभियान सुरू होतो.

कृषी जनजागृती अभियानातील प्रामाणिक उद्देश असा की, भारतीय शेतीच्या मागासलेपनाला शेतीवरील वाढत्या लोकसंख्येच्या व्याप आणि अपेक्षित व पारंपारिक पद्धतीच्या अवलंबनापासून सहजासहजी विभक्त होऊ नशकणारा कृषी समाज ही कारणे दिसतात याचे यथास्थिती निखंदन झाले पाहिजे. आज भारतातील संख्यात्मक व गुणात्मक कृषी उपजेसाठी शाश्वत शेतीला अग्रक्रम देणे गरजेचे आहे. या अग्रक्रमाचे समर्थन करून या शाश्वत शेतीच्या नियामक तंत्रज्ञानात सर्व शेती निविष्टांचा अतिरंजीत नव्हे, तर संतुलित वापर अभिप्रेत आहे. हे शाश्वत शेतीतंत्रज्ञान कृषी जनजागृती अभियानानेच शक्य आहे.

4) कृषी चे प्रागतिक नियोजन :-

भारताला स्वातंत्र्य मिळाल्यानंतर 1951 पासून निर्धारित पाच वर्षाचा काळात विविध विकासात्मक कामाचे नियोजन करून त्या प्रभावी अंमलबजावणी करण्याची प्रक्रिया सुरू करण्याचा मानस आहे अपेक्षित व

गरीब जनतेचे उन्नयन हा विकासाचा केंद्रबिंदू असायला हवा समाजवादी समाजरचनेचा विचार हा या विकासाचा आधार गृहीत धरण्यात यावा कारण राज्याच्या नागरिक शास्त्र परिभाषेत स्थल बदूल प्रभुत्व पूर्ण सुसंघटीत समाज म्हणजे राज्य अशी राज्याची वैचारिक संकल्पना मांडण्यात आली आहे. ग्रामीण भारताचा विकास म्हणजे भारतातील 65 टक्के जनसंख्येच्या विकास होय.

पंचवार्षिक योजनेद्वारा करावयाचा विकास हा विचार अग्रणी मानण्यात यावा ज्याअर्थी ग्रामीण भारतातील 65 टक्के जनता म्हणजे कृषी संकलन क्षेत्रात उपजीविकेसाठी व्यस्त असतानाही जनता असेच हे सरळ साधे समीकरण तयार झाले. भारतीय कृषी चे तकदीर किती फळफळले व परिणामी भारतीय कृषीची तस्वीर कशी तयार झाली? तसेच येत्या काळात या तसबिरीला कोणत्या दर्जेदार रंगांनी रंगविले जाण्याची शक्यता आहे. कृषी क्षेत्रात विकासोन्मुख असे परिणाम कारक बदल घडून यावेत यासाठी कृषीचे प्रागतिक नियोजन ही आजच्या काळाची गरज झाली आहे. कारण सर्वसामान्य जनतेच्या राहणीमानात अपेक्षित बदल घडून आला पाहिजे व शेतकऱ्यांचे जीवनमान उंचावले पाहिजे.

5) कृषीचे वेगळेपण केंद्रीय अर्थसंकल्पात न दिसणे:-

20 ते 30 वर्षांच्या काळामध्ये केंद्रीय कृषी अर्थसंकल्पाने बळीराजाला समाधानी केलं असे कधी झाले नाही. प्रत्येक कृषी अर्थसंकल्पात शेतकऱ्यांच्या पदरी निराशाच आली. कृषी व संकलन क्षेत्रातील गरजाधीष्टित आव्हाने कोणती? याचा विचार महत्त्वाचा ठरतो. भारतीय कृषी व 'सलग्न क्षेत्रातील विसाव्या शतकातील आव्हाने, हि एकविसाव्या शतकातील आव्हानांपेक्षा भिन्न होती. या पार्श्वभूमीवर, एकविसाव्या शतकातील आव्हानांची खातर जमा करणे गरजेचे आहे. विसाव्या शतकात कृषी क्षेत्रापुढील देशातील जनतेला भूकमुक्त करण्याचे प्रचंड आव्हान होते. हे आव्हान समर्थपणे पेलण्यासाठी हरितक्रांतीचे माध्यम वापरण्यात आले. स्वाभाविकच देशापुढे अन्नधान्य उत्पादनात परिणामकारक वृद्धी व त्यांचे संपूर्ण देशातील संतुलित वितरण या बाबतीत हरितक्रांतीच्या योजना प्रारूपात अग्रक्रमाने अंतर्भूत होत्या.

केंद्रीय अर्थसंकल्पात, कोणत्याही समस्येचे उच्चारण करण्यासाठी नियोजनबद्ध व समयाधिष्टीत आर्थिक तरतूद हवी स्वाभाविकच, शेतजमिनीच्या सुपीकतेत वाढ करण्यासाठी, आवश्यक त्या पायाभूत सुविधा उपलब्ध होणे, अनिवार्य आहे. अल्प व दीर्घ मुदती सिंचन प्रकल्प आत्ता कृषिक्षेत्राला संजीवनी देण्याचा सर्वोत्तम उपाय होय. या करिता योजना व योजनेत वित्तीय राशीचे स्वातंत्र प्रावधान ' कृषीसिंचन वित्तीय राशी ' या शीर्षकाखाली अर्थसंकल्प होणे अभिप्रेत आहे.

6) कृषीवरील वाढते जैविक ओझे :-

जमिनीवरील वनस्पती, जलचर प्राणी, व पक्षीविश्व उदरनिर्वाहासाठी भलेही शेतजमिनीवर फुलणाऱ्या व आसमंतातील नैसर्गिक खाद्यवस्तू वर निर्भर असले. तरी सामान्यपणे सृष्टीला व विशेष करून सृष्टी व आसमंतातील पर्यावरणाचे संतुलन राखून, त्यांच्यातील सामान्याचे एकमेवाद्वितीय कार्य जैविक विश्व करत आहे. त्यामुळे या वैविध्यपूर्ण व आकर्षक जैविक विश्वाचे शेतजमिनीला कधीच ओझे वाटले नाही. शेत जमिनीला आज रोजी जड झाले; ते मानव शेतजमिनीचा उपभोग चिजवस्तूच्या निर्मितीचे माध्यम म्हणूनच केवळ वापर करीत नाही, तर त्याने स्वतःच्या विलासी व इशारा मी जीवनासाठी निर्दयपणे शेत जमिनीवरील विलोभनीय, मनोहरी व टिकाऊ साधनांची दयनीय अवस्था केली आहे.

अलीकडच्या काळात अनिर्बंध लोभापायी या सृष्टीचे विलोभनीय व लोभस स्वरूप, रासायनिक मूलद्रव्यांचा अतिरंजित वापर व त्यामुळे प्रदूषित झालेले झालेली हवा, पाणी व प्रत्येक उपजाऊ शेतजमीन आज असाध्य रोगसापेक्ष वेदनांनी कव्हल आहे. अशा सृष्टीतील शेतजमिनीला आवश्यक ऊर्जेचे अन्नतीने पुरवावे म्हणून, मानव जातीला जणू छळतो आहे. अशा परिस्थितीत ही शेत माऊली आता 'जड झाले या निर्दयी माणसाचे ओझे' असे मुक स्वर आळवित आहे. तेव्हा तिची दया कुणाला व केव्हा येणार? शेतजमीन प्रदूषित

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पर्यावरनाने अधिक बाधित होणार नाही, याची जर विनाविलंब दक्षता घेतली नाही तर ही उपजाऊ शेतजमीन वेदनेने 'जिवलगा जड झाले ओझे' हे संगीत गाणार हे निश्चित.

7) काळाची गरज म्हणून सेंद्रिय शेती:-

शेती उत्पादन वाढीचे लक्ष गाठण्यासाठी पर्यावरण संतुलनाकडे व नैसर्गिक संसाधनाच्या संतुलित वापराकडे दुर्लक्ष झाले. शेतीची सुपीकता व त्यावर निर्भर असणारी उत्पादन क्षमता टिकवण्यासाठी, किंवा तिच्या वर्धमानतेसाठी नत्र, स्फुरद, पालाश, ही मुख्य अन्न द्रवे काही प्रमाणात, ती ज्या रासायनिक खतांच्या स्त्रोताद्वारे दिली जाऊ शकतात, ती पूर्णपणे प्रतिबंधित केल्या जाऊ शकत नाही. तसेच काही पिकावरील धोकादायक किटकांचा व रोगांचा प्रतिबंध करण्यासाठी काही रासायनिक औषधांचाही वापर करावा लागतो हे खरे आहे. पण ज्याच्या अनिर्बंध वापरावर आता निर्बंध घालण्याची वेळ आली आहे. पिकांची सशक्त वाढ आणि त्यापासून निर्माण होणाऱ्या मानवाच्या उपभोग योग्य वस्तूंची निर्मिती ही आरोग्यवर्धन स्वरूपात निर्माण करण्यासाठी आता, जोरखते, जैविकखते, एकात्मिक कीड व पीक रोगसंहारक व्यवस्थापन आवश्यक झाले आहे.

कृषिप्रधान अर्थव्यवस्थेच्या संदर्भात तर भारतामध्ये उत्पादन वाढीचे आधिक्य व सातत्य कायम ठेवण्याकरिता अनेक प्रकारचे भौतिक संसाधनांचा, मग ते नैसर्गिक असो वा कृत्रिम, त्यांचा वापर व त्या वापराचे योग्य योग्य तंत्र वापरून कृषी उत्पादन वाढीचा दर कायम ठेवण्याचे आटोकाट प्रयत्न आजही सुरू आहेत परंतु, उत्पादन वाढ ही विकासाचा द्योतक गृहित धरताना नैसर्गिक संसाधनाच्या ऱ्हासाकडे व निसर्गात निर्माण होणाऱ्या पर्यावरण प्रदूषनाकडे उपयुक्ततेच्या पार्श्वभूमीवर लक्ष केंद्रित न झाल्याने संपूर्ण मानव जातीच्या आरोग्याला धोका निर्माण झाला आहे. म्हणूनच आज सेंद्रिय शेती करणे काळाची गरज आहे.

8) कृषी सिंचनासाठी लोकसहभागातून वीज पुरवठा:-

सध्या आपल्या देशातील प्रत्येक प्रांतात ऊर्जेचे गंभीर संकट निर्माण झाले आहेत. प्रांतनिहाय हे संकट कमी-अधिक प्रमाणात असेल. पण हे वास्तव नाकारता येणार नाही की, प्रत्येक प्रांतात निर्माण झालेल्या विजेच्या दुर्लक्षितपणामुळे जनता केवळ 'हैराणच नाही, तर जनतेच्या सराव भाषेत ती खरोखरच 'परेशान' झाली आहे.' शहरी भागात विजेच्या नियंत्रित नावाखाली अगतीकतेमुळे केल्या जाणाऱ्या विजेच्या अनियंत्रित भारनियमनामुळे शहरी नागरिकांना घरगुती वापरासाठी आवश्यक वीज पुरवठा होत नसल्याने, प्रत्यक्षात त्यांच्या मानसिकच नव्हे तर शारीरिक छळ सुरू असल्याची त्यांची सतत ओरड ऐकू येते कारण विजेचा पुरवठ्यातील सततच्या प्रतिबंधात्मक विजेच्या आचरणामुळे या नागरिकांचा तशी धारणा होणे स्वाभाविक आहे.

तेव्हा प्राधान्याने, ऊर्जा संकटावर तात्काळ उपाययोजना करून; या संकटाचे निखंदन होईल, अशी स्थिती अपवादात्मक भारतीय प्रदेशभूभाग सोडलेत तर कोणत्याही भुप्रदेशात नाही; मग भलेही संबंधित राज्यात वेगवेगळ्या राजकीय पक्षाची सरकारे असतील कारण, विजेची सततची वाढती मागणी व या मागणीची स्थिती यथोचित पूर्तता करू शकतील; असे ऊर्जानिर्मितीचे प्रकल्प, जे सध्या प्रस्थापित आहे. ते अल्पावधीत पूर्ण होण्याची तुर्तास शक्यता संभवत नाही. याचे कारण असे की, धरणाचे पाणी उपलब्ध करणे असो वा वीज निर्मिती करणे असो, अशा उत्पादक प्रकल्पाची वाटचाल आर्थिक तरतुदीतील अनंत अडचणी येतात.

9) आहारातील मंदगती विषप्रवेश रोखण्याची गरज:-

रासायनिक शेती पद्धतीला ही हौशी प्रयोग असे हरितक्रांतीचे कल्पीत प्रारूप आहे. परंतु अधिकतम कृषी उत्पादनाला चालना देणारी शेती पद्धत सिद्ध होत असल्याने प्रत्ययास येताच, अधाधुंद रासायनिक

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खतांचा वापर, रोगप्रतिबंधक औषधी व कीटकनाशकांचा गैरलागू अवलंब करण्यात आला. परिणामी भूकमुक्तीसाठी अवलंबिण्यात आलेली ही हरितक्रांती भूकमुक्तीच्या उपचाराचे उद्दिष्ट पूर्ण करू शकली व त्या दृष्टीने ती ऐतिहासिक यशस्वी झाली असली, तरी भारतीय शेतीचे स्वास्थ बीघडविण्यात ती कारण ठरली, असे स्वार्थी लाभार्थी कृषी उपजकारच आता ओरडतात.

निसर्गशास्त्री असे म्हणतात की, मानवाने कृषी उत्पादनाची वर्धिष्णू तत्त्वप्रणाली विकसित करताना, निसर्गाच्या अंगी शेतजमिनीला स्वबळावर सुजलाम सुफलाम बनविण्याच्या तिच्या क्षमतेलाच दुर्लक्षित केले आणि अनैसर्गिक कृती कार्यातून मानवाला सहारक ठरणारी नैसर्गिक संकटे त्यांने हकनाक ओढवून घेतलीत. दूषित जमिनीतून घातक रसायनांच्या वापरामुळे नीट निर्मित कृषि उपज निर्भेळ, निकोप, पाचक व पोषक अशी संतुलित असू शकत नाही हे उघड आहे. आपल्या दैनंदिन आहारात अन्नधान्य, भाजीपाला, फळफळावळे, दूध, इत्यादी शाकाहारी वर्गासाठी तर अंडी, मास हे मासाहारीसाठी आवश्यक आहे. हा सर्व आहार स्वाभाविकच कृषि उपज व वनस्पतीशिच निगडीत आहे. पण दुर्दैवाने ही सर्व खाद्याने विषाक्त होत आहे.

10) शेतीमालाला योग्य किंमत:-

शेतीतील कच्या मालाची किंमत कारखानदारीच्या एकूण खर्चाच्या किती टक्के असते? १५ रुपये किमतीच्या कापसाचे कापड १५० रुपयाचे होते ५ रुपये किमतीच्या तंबाखूपासून११० रुपयाच्या बिड्या बनतात कच्या मालाच्या किमतीतील वाढ ही कारखानदारीच्या एकूण पसाऱ्यात आणि फायद्याच्या मोठ्या आवाक्यात सहज सामावून जाण्यासारखी आहे. अन्नधान्यांच्या, भाजीपाल्यांच्या किमती वाढल्या म्हणजे ग्राहकांना द्याव्या लागणाऱ्या किमती आपोआप वाढतील ही कल्पना मुळात चूक आहे. शेती मालाच्या भावाच्या वाढीमुळे कारखानदारी मालाचे भाव वाढणे अपरिहार्य नाही.

शेतीमालाचे भाव न वाढता ही कारखानदारी मालाचे भाव सतत वाढत असतात असे दिसून येते कापूस एकाधिकार खरेदी चालू झाल्यापासून सात वर्ष कपाशी ची किंमत स्थिर राहिली एवढेच नव्हे तर दोन वर्ष ती प्रत्यक्षात कसली तरीसुद्धा कापसाचे भाव याच काळात किती वाढले शेती व्यक्ती रिक्त इतर क्षेत्रात मालाच्या भावात वाढ होते. ती देशातील आर्थिक व्यवस्थेमुळे, चलनवाढीमुळे, कराबद्दलच्या धोरणामुळे, ही वाढ सतत चालू आहे. शेतीमालाचे भाव जवळजवळ स्थिर असूनही ही भाव वाढ झालेली आहे. चलनवाढीचे चक्रही चालूच राहिले आहे या चक्राचे तडाके फक्त शेतकरी सहन करत राहिला आहे. त्या चक्राचे जे फायदे आहेत त्यापासून मात्र तो अनेक वर्ष वंचितच राहिला आहे. म्हणूनच कारखानदारी माल व शेतीचा कच्चा माल यामध्ये किमती मध्ये तफावत असता कामा नये.

सारांश:-

कृषीच्या समस्या तशा फार आहेत. काही प्रश्नांची, समस्यांची चर्चा या शोधामध्ये केली आहे. त्या संदर्भात काही उपाय ही सांगितले आहेत अर्थात या समस्या किंवा प्रश्न जादूच्या प्रयोगाचे एका रात्रीतून सुटणाऱ्या नाहीत. हे जरी खरे असले तरी सरकारी मदतीशिवाय हे प्रश्न सुटणे शक्य नाही सिंचनाचा प्रश्न शेतमालाच्या बाजार भावाच्या प्रश्न प्रक्रिया उद्योग, कमी व्याजदराचे कर्ज, कारखाने व गिरण्यांना पुनर्जीवन, शेतीसाठी कमी दराचा वीज पुरवठा या समस्यांचे निवारण शासनच करू शकते. हे करताना सरकारला फक्त आकड्याचा खेळ करून चालणार नाही त्यासाठी सर्व अधिकारी सर्व विभाग यांच्यात समन्वय, एकसुत्रीपणा आणि संवाद असायला हवा.

सरकार आर्थिक व इतर मदत करते आहे. सरकारचे जे कर्तव्य आहे याचा अर्थ शेतकऱ्यांना सरकारी मदतीवर विसंबून राहता येणार नाही. आपल्या हक्कासाठी मागण्यासाठी शेतकऱ्यांनी जरूर भांडावे, न्याय पदरात पाडून घ्यावा यासाठी शेतकऱ्यांचे संघटन करावे. संघर्ष करावा त्या सोबतच गावाच्या एकत्रीकरणातून काही चांगले प्रयोग करता येईल का? हेही बघायला हवे अनेक गावात ग्रामविकासाची शेतीच्या विकासाची

जल संवर्धनाची, वृक्षसंवर्धनाची, आर्थिक विकासाची कामे, होताना दिसतात. यातून सामाजिक एकोपा निर्माण होऊन अनेक सार्वजनिक कामे करता येईल तरुणांनी यासाठी पुढाकार घ्यावा व जी कृषी पुढील आव्हाने आहेत त्यावर मात कशी करता येईल याचा यथायोग्य प्रयत्न केला पाहिजे.

संदर्भ :-

1) शरद जोशी :- "विचार आणि कार्यपद्धती",जनशक्ती वाचक चळवळ औरंगाबाद.

2) शरद जोशी :- "बळीचे राज्य येणार आहे", जनशक्ती वाचक चळवळ औरंगाबाद.

3) शरद जोशी:-"पोशिंद्याची लोकशाही",जनशक्ती वाचक चळवळ   औरंगाबाद.

4) शरद जोशी :- "खुल्या व्यवस्थेकडे खुल्या मनाने",जनशक्ती वाचक चळवळ औरंगाबाद.

5) शरद जोशी :- 'भारतासाठी', जनशक्ती वाचक चळवळ औरंगाबाद.

6) डॉ. मार्तंड खुपसे:- "शेतकऱ्यांच्या आत्महत्या: चिंता आणि चिंतन", समीर   प्रकाशन, कळंब.

7) प्राचार्य सुधाकर देशपांडे :- "कृषी भारत निर्माण भाग १", पायगुण प्रकाशन अमरावती.

डेटाबेसची संकल्पना आणि प्रकार

श्री.विनायक दशरथ नाकतोडे

प्रभारी ग्रंथपाल,

आदर्श कला व वाणिज्य महाविद्यालय,

देसाईगंज (वडसा), जि. गडचिरोली (म.रा.), 441207

डेटाबेस हा संगणकामध्ये साठविण्यात आलेला डेटा संच असतो आणि तो यांत्रिकपणे शोधता येतो. यात आवश्यक असलेला कच्चा स्वरुपातील डेटा साठविण्यात आलेला असतो. उदा. भौतिक, रासायनिक गुणधर्म, अंकरुपी डेटा, अग्रंथसूचीय माहिती. डेटाबेस हा संरचित माहितीचा किंवा डेटाचा संग्रह असतो. तो संगणक प्रणालीमध्ये विशेष सॉफ्टवेअर संचाच्या मदतीने संरचित केलेला असतो.

व्याख्या :-

1) जॉन कॉनवे :- "डेटाबेस हा यंत्रवाचक स्वरुपात नोंदीचा संग्रह असतो जो दूरच्या (remote) कॉम्प्युटर टर्मिनलमधून शोधण्यासाठी उपलब्ध करुन दिला जातो."

2) Micmillan Dictionary :- "Database is a collection of integrated data stored, so that it may be accessed by authorized user with simpler user friendly dialogues?"

डेटाबेसची वैशिष्टये :-

1) माहिती अद्यावत ठेवता येते.
2) संग्रहित केलेली माहिती केव्हाही पुर्नप्राप्ती करता येते.
3) संग्रहित केलेल्या माहितीला कोणत्याही क्रमानुसार बघता येते आणि त्या माहितीला क्रम देता येते.
4) संघटीत केलेल्या माहितीचे क्षेत्र विस्तारित करता येते.
5) माहितीची गरजेनुसार पुर्नमांडणी, प्रत, छपाई आणि अहवाल तयार करता येते.
6) तयार केलेल्या फाईलची कॉपी करुन दुसऱ्या ठिकाणी सेव करुन ठेवता येते.

डेटाबेस निर्मितीच्या मुख्य पायऱ्या :-

1) डेटाबेसची आवश्यकता निश्चित करणे.
2) डेटाबेसची उपयुक्तता व कार्यक्षमता निश्चित करणे.
3) माहिती घटक निश्चित करणे.
4) फाईल्स व डेटा एलिमेंट्स विभागणे.
5) डेटा एलिमेंट्सचा कोश बनविणे.
6) डेटा एलिमेंट्स फाईलमध्ये एकत्रित करणे.
7) प्रत्येक फाईलची शोधप्रक्रिया निश्चित करणे.
8) फाईल्स मधील परस्पर संबंध ठरविणे.
9) डेटाबेस संघटित करणे.

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डेटाबेसचे प्रकार:

1) ग्रंथसूचीय डेटाबेस :- यामध्ये विस्तृत ग्रंथसूचीय माहितीचा समावेश असतो. उदा. प्रलेखाचा क्रमांक, ग्रंथनाम, लेखक, आंतरराष्ट्रीय प्रमाण ग्रंथ क्रमांक, प्रकाशक, वर्ष, प्रकाशन वृत्त, साधन संदर्भ, सार, उल्लेख, वर्गांक, ग्रंथाक, संग्रहांक.

2) तालिका डेटाबेस :- यामध्ये नियतकालिका, मोनोग्राफ्सची यादी दिलेली असते.

3) रेफरल डेटाबेस :- या प्रकारचे डेटाबेस माहितीचा संदर्भ देतात. उदा. संघटनांची नावे, पत्ते, लेखक, प्रकाशक, संस्था, मालिका.

4) अंकरुपी डेटाबेस :- यामध्ये आकडे, संख्याशास्त्रीय / सर्वेक्षण प्रकारची माहिती असते. उदा. मंगळाचा व्यास, जगातील देशांची एकूण संख्या.

5) पूर्ण टेक्स्ट डेटाबेस :- यामध्ये पूर्ण टेक्स्ट डेटाबेसेसचा समावेश असतो. उदा. The Newyork Times Via NEXIS, पुस्तके, प्रबंध, नियतकालिके, मासिके, वर्तमानपत्र.

6) टेक्स्ट अंकस्वरुप डेटाबेस :यामध्ये टेक्स्ट आणि अंकाच्या डेटाचा समावेश असतो. उदा. वार्षिक अहवाल, हस्तपुस्तिका डेटा, टेलिफोन डिरेक्टरी, रेल्वे टाईम टेबल.

7) मल्टिमीडिया डेटाबेस : यामध्ये अनेक प्रकारच्या माध्यमातून वेगवेगळया प्रकारच्या डेटाबेस मधून साठविलेल्या माहितीचे मिश्रण असते. उदा. ध्वनी, व्हीडिओ, चित्रे, हायपर टेक्स्ट, निमेशन.

संदर्भ :-

1) लेले, वसंत विश्वनाथ, समग्र ग्रंथालय आणि माहितीशास्त्र (प्रश्नोत्तर), पुणे: युनिव्हर्सल प्रकाशन, प्रथमावृत्ती, 2015.

2) पाटील, प्रदीप तुळशीराम आणि सोनवणे-पाटील, कल्पना शामराव, माहिती साधने : भाग 3, जळगाव : प्रशांत पब्लिकेशन्स, प्रथम आवृत्ती, 2019.

3) इंटरनेट.

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शोध छात्रा

पुस्तकालय एवं सूचना विज्ञान विभाग

काशी हिन्दू विश्वविद्यालय, वाराणसी

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एक सूचना वितरण के रूप में पुस्तकालय को सामाजिक संस्था के रूप में समाज में होने वाले परिवर्तनों का सामना करना पड़ता है। पुस्तकालय की गुणवत्ता सेवाएं हमेशा पुस्तकालय पेशेवर और प्रबंधकीय पुस्तकालय में कार्यरत कर्मी के दक्षताओं पर निर्भर होती है। बढ़ती हुई और डिजिटल क्रान्ति के परिवेश में अब पुस्तकालय पेशेवरों के लिए ये अनिवार्य हो गया है कि वे नए कौशल एवं दक्षताओं को अपने विषयक्षेत्र में अपना कर कर्तव्यों का सुचारू रूप से निर्वहन करे।

d th'KCn& पुस्तकालय, पुस्तकालय पेशेवर, कौशल एवं दक्षता, डिजिटल परिवेश।

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पिछले कुछ दशकों के दौरान पुस्तकालय का नया रूप सामने आया है। पुस्तकालय अब सूचना केन्द्र हो गये हैं। दुनिया भर की विषयों की जानकारियों का हब पुस्तकालय को कहा जाए तो अतिशयोक्ति नहीं होगी। अब उपयोग कर्ता सूचना को दूरस्थ स्थान पर बॅटे। 24X7 प्राप्त कर सकते हैं। सूचना प्रौद्योगिकीकरण में पुस्तकालय का स्वरूप बदल दिया है। वर्तमान इलेक्ट्रानिक युग है। सूचना का दिन प्रतिदिन विस्फोट हो रहा है। पुस्तकालयाध्यक्षों की जिम्मेदारियाँ भी बढ़ती जा रही हैं। पुस्तकालय को नई चुनौतियों और प्रतिस्पर्धाओं का सामना करना पड़ रहा है। सीमाहीन डिजिटल पुस्तकालय वातावरण में पुस्तकालय संचालन करने के लिए पुस्तकालय पेशेवरों को सूचना प्रौद्योगिकी और इसके प्रयोग का ज्ञान होना चाहिए। पुस्तकालय की बदलती भूमिका और जिम्मेदारियों ने पुस्तकालय अध्यक्षों की व्यावसायिक पहचान भी बदल दिया। अब ये सूचना अधिकारी, सूचना ब्रोकर, नालेज क्रियेटर, नेटवर्क क्रियेटर, वेब डिजाइनर, साइबेरियन इत्यादि नामों से जान जाते हैं आज की तकनीकि परिवेश में रहने के लिए पुस्तकालय पेशेवरों को अपनी कौशल एवं दक्षताओं को बढ़ाने के लिए ट्रेनिंग एवं शिक्षा की आवश्यकता है। नया सूचना जगत पुस्तकालय पेशेवरों में नई योग्यता एवं दक्षता की मांग कर रहा है।

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कौशल परिचालन कार्यो को करने के लिए दक्षताओं और क्षमताओं को शामिल करता है दूसरे 'शब्दों में किसी कार्य को प्रभावी रूप से और आसानी से किसी ज्ञान का उपयोग करने की क्षमता से है।

n{krk $

दक्षता कौशल का एक सेट है जो किसी कार्य की कार्यक्षमता को बेहतर बनाता है।

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कुछ मामले में कौशल और दक्षता समान हैं। बुनियादी स्तर पर ये दोनों एक शैली क्षमता की पहचान करते हैं। जिसे किसी व्यक्ति में प्रशिक्षण और अनुभव के माध्यम से हासिल किया है। कई अध्ययनों में उल्लेख किया गया है कि सूचना प्राद्योगिकी के युग में पुस्तकालय पेशेवरों की भूमिका कौशल और ज्ञान बहुत महत्वपूर्ण है।

%&#'e ())*+ वर्तमान डिजिटल सूचना परिवेश में यह अनिवार्य हो गया है कि पुस्तकालय अध्यक्ष को डिजिटल दक्षता हासिल करने की जरूरत है।

%jk t (),-+ पुस्तकालयाध्यक्षों की पास डिजिटलीकरण मेटाडेटा निर्माण और प्रबंधन, डिजिटल जानकारी का संरक्षण, और कम्प्यूटर कौशल का ज्ञान होना चाहिए जो इलेक्ट्रानिक सूचना परिवेश में काम करने के लिए उपयोगी है।

%eMe ())(+ ने पुस्तकालय अध्यक्षों को उभरती डिजिटल संस्कृति में अपनी गतिशील भूमिका निभानी चाहिए।

%\.\V ,///+ ने अनुशासन विशिष्ट ज्ञान की एक सूची प्रस्तुति की जो एक डिजिटल है। टेनेंट ने महत्वपूर्ण कौशल को वर्गीकृत किया और डिजिटल पुस्तकालय संग्रह, सेवाएँ, इमेजिन तकनीक, आप्टीकल अक्षर पहचानना, मार्कअप भाषाओं जिनमें एचटीएमएल, एसजीएमएल, और एक्सएमएल शामिल हैं।

उपर्युक्त अध्ययन बताती है कि डिजिटल परिवेश में कौशल वाले पुस्तकालय पेशवरों के साथ काम करना पुस्तकालय की सफलता की सूचक है।

पुस्तकालय के संदर्भ में तीन प्रकार की कौशल की चर्चा की गई है–

iLrdky; i'kojk dh dk'ky:

,0 व्यक्तिगत कौशल

2. व्यावसायिक कौशल

3. प्रबंधकीय कौशल

1;f2r&r dk'ky $

ये योग्यताएं मूल्यों के एक समूह का प्रतिनिधित्व करती हैं। जो पुस्तकालय अध्यक्षों को कुशलपूर्वक और प्रभावी ढंग से काम करने और पूरे कैरियर के दौरान उनके योगदान को मूल्यों की वधित प्रकृति को प्रदर्शित करती है। इसके अन्तर्गत संचार कौशल, रचनात्मक कार्य, आत्मविश्वास, समस्या हल करना, निर्णय लेना, सेवाभाव, ग्राहक संबंध, सिखने की प्रवृत्ति, तनाव प्रबंधन, समय प्रबंधन, स्वप्रेरणा, समूह दक्षता इत्यादि सम्मिलित है।

1;kolkf;d dk'ky $

ये वो कौशल है जो पुस्तकालय अध्यक्षों के ज्ञान का विकास करती है। पुस्तकालय और सूचना सेवाएं प्रदान करने के लिए ये कौशल बहुत आवश्यक है। इसमें सम्मिलित है सूचना प्राद्योगिकी कौशल, सूचना साक्षरता, ज्ञान प्रबंधन, तकनीकी पेशेवर इत्यादि।

iBk4kdh; dk'ky $

ये वो कौशल है जो पुस्तकालय अध्यक्ष को अपने उद्देश्यों की प्राप्ति के लिए मार्गदर्शक का कार्य करती है। प्रबंधकीय कौशल के अन्तर्गत स्थानीय और वैश्वीक सोच, योजना,

संगठनात्मक कौशल, वित्त प्रबंधन कौशल, टीम बिल्डिंग, निर्णय लेना, नेतृत्व कौशल, बातचीत कौशल, उपभोक्ता प्रबंधन कौशल, परियोजना प्रबंधन, संसाधन प्रबंधन कौशल इत्यादि।

iLrdky; "kj fMftVy ifjo'k $

मुद्रित युग डिजिटल युग में बदल रहा है। इस सूचना विस्फोट युग में सूचना तक पहुँचना, संग्रह करना तथा पाठकों तक पहुंचाना पुस्तकालय के लिए चुनौती बन गया है। पुस्तकालय शैक्षिण, मनोरंजक और सूचनात्मक बुनियादी ढांचे का एक हिस्सा है। मेमोरी ट्रेसिंग उच्च गति वाले कम्प्यूटर, मल्टीमिडिया और नेटवर्किंग के साथ मोबाइल उपकरणों ने सूचना विज्ञान और सूचना सेवाओं को गहराई से प्रभावित और विकसित किया है। आज के डिजिटल परिवेश में बढ़ती हुई सूचना, पुस्तकें, डेटाबेस, कैटलाग, ओपन एक्सेस, जनरल सभी इन्टरनेट पर उपलब्ध हैं जिसे आसानी से एक्सेस किया जा सकता है।

fMftVy ifjo'k e dk'ky! n{krk dh "ko';drk $

संचार और सूचना प्रौद्योगिकी ने आज पुस्कालय के स्वरूप को भी बदल दिया है। इसने पुस्तकालय के वितरण की प्रकृति को महत्वपूर्ण रूप से प्रभावित किया है। इसलिए डिजिटल परिवेश में पुस्तकालय पेशेवर कड़ी चुनौतियों का सामना कर रहे हैं। पुस्तकालय पेशेवरों के लिए आवश्यक हो गया है कि नये तकनीक का उपयोग सीखें। डिजिटल जानकारी या ई–सूचना मुद्रिकृत सूचना की तुलना में अधिक गतिशील है। आज के युग में इन्टरनेट, ईमेल, वर्डवाइब्रेव सूचना की गतिशीलता के साधन बन गये हैं। पुस्तकालय पेशेवर को एक शिक्षार्थी बन नये नये तकनीकों को सीखना होगा। आज की तकनीकी क्रान्ति ने कुछ नवाचार और कुछ नवीन विचारों को बनाया है जैसे कृत्रिम बुद्धि, बारकोड तकनीक, भाषण, नेटवर्क प्रणाली इत्यादि। दक्ष पेशेवर ही इन तकनीकों का प्रयोग कर पायेंगे और अपने आपको विकसित कर पायेंगे। नव विकसित हार्डवेयर और साफ्टवेयर ज्ञान, ई–लाइब्रेरी या डिजिटल लाइब्रेरी के लिए आवश्यक है।

Hkkjr ljdkj 5kjk "k;kftr dk'ky fodkl dk;dh $

विभिन्न विश्वविद्यालयों के पुस्तकालय एवं सूचना विज्ञान विभाग के अलावा भी कुछ संस्थान पुस्तकालय पेशेवरों के कौशल विकास के लिए कार्य कर रही हैं। INFLIBNET समय–समय पर SOUL प्रशिक्षण करता है ताकि पुस्तकालय पेशेवर साफ्टवेयर का उचित तरीके से उपयोग कर सके। साथ ही साथ कई तकनीकि प्रशिक्षण भी आयोजित करता है। इंडियन एसोशियशन फॉर स्पेशल लाइब्रेरी एण्ड इनफारमेंशन सेंटर (IASLIL) भी तकनीकी कौशल विकास के लिए कार्य कर रही है। NASS DOC और DESIDOC दोनों राष्ट्रीय डाक्यूमेंटेशन सेन्टर ट्रेनिंग कार्यक्रम आयोजित करती है। उपर्युक्त संस्थाएं आनलाइन शिक्षण या ई–प्रशिक्षण करवाती है जो पुस्तकालय कर्मचारियों के कौशल के विकास का उपयोगी तरीका है। पुस्तकालय पेशेवर कार्यस्थल पर रहकर ही प्रशिक्षण का लाभ उठा सकते हैं। आज के परिवेश में आनलाइन कान्फ्रेस, सेमीनार, वर्कशाप, टेनिंग कार्यक्रम, लघु पाठ्यक्रम और स्वयं अध्ययन आयोजित हो रहे जिसमें कार्यस्थल पर रहकर ही इन कार्यक्रमों का लाभ उठाया जा सकता है।

f. 6cl6k $

आधुनिक युग का पुस्तकालय डिजिटल सूचनाओं का संरक्षक है इसलिए पुस्तकालय पेशेवरों को कौशल वृद्धि कार्यक्रमों की जरूरत है। पुस्तकालय पेशेवर को भी अपने लक्ष्य की प्राप्ति के लिए और पुस्तकालय हित के लिए सकारात्मक सोच रखना चाहिए। आज के परिवेश में पुस्तकालय में यह तकनीकी प्रयोग पूरी तरह तभी सफल होगा। तकनीकी और मानव संसाधन के बीच घनिष्ठ समन्वय होगा। यह तभी संभव होगा जब पुस्तकालय पेशेवरों के पास आवश्यक कौशल और दक्षता होगी। इसलिए पुस्तकालय पेशेवरों की कौशल वृद्धि कार्यक्रमों की आवश्यकता है।

I nHk $

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महाराष्ट्र राज्यातील कृषी गणनेमधे झालेला बदल

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संशोधनाचा गोषवारा :-

    महाराष्ट्र राज्य हे भारत देशाच्या पश्चिम व मध्य भागात वसलेले आहे.जनगणना २०११ नुसार राज्याची लोकसंख्या ११.२४ कोटी असून भारतात लोकसंख्येच्या आधारावर दुसऱ्या क्रमांकाचे राज्य आहे. महाराष्ट्र राज्याने, राज्याच्या तात्पर्याने देशाच्या विकासाच्या दृष्टीने कृषी या क्षेत्राला प्राधान्यक्रम देण्याचे धोरण ठरविले आहे.

    १९७०-७१ च्या तुलनेत महाराष्ट्रातील कृषी गणनेमधे कशाप्रकारे बदल होत आहे जात आहे, याबाबत आढावा घेण्याचा प्रयत्न करण्यात आला . त्यानुसार वहीती खातेदारांची संख्या क्रमशः वाढत जात आहे आणि वहीती क्षेत्राच्या प्रमाणात घट होत जात आहे.म्हणूनच वहीती सरासरी क्षेत्राच्या प्रमाणात घट होत आहे,असे दिसून येते. याचे **प्रथम कारण** म्हणजे **अ.** भौगोलिक क्षेत्रफळाची नैसर्गिक मर्यादा आणि **ब** . लागवडयोग्य जमिनीची नैसर्गिक मर्यादा होय.नैसर्गिक मर्यादेमुळे वहीती क्षेत्राच्या प्रमाणात वाढ होऊ शकत नाही,हे तर आहेच परंतु याशिवाय **अधिक महत्वाचे द्वितीय कारण** असे की लोकसंख्या वाढ हे होय.लोकसंख्या वाढीमुळे कृषीवरील भार सतत वाढत जात आहे.

    वहीती खातेदारांची संख्या क्रमशः वाढत जात आहे म्हणजेच कृषीवरील भार वाढत जात आहे. कृषीवरील भार वाढण्याची अनेक कारणे आहेत. १. लोकसंख्या वाढ, २. बेरोजगारी 3. जमिनीचे अपखंडन ४ भांडवलाची कमतरता ५. उद्योजकतेकडे दुर्लक्ष इत्यादी. सद्यस्थितीतील सांख्यिकी आणि त्याबाबतीतील विश्लेषण सुद्धा अशाच प्रकारचे दिसून येईल. यावर उपाय म्हणजे औद्योगोकरणात वाढ करणे, कृषीवर आधारित उद्योगांचा विकास करणे, लोकसंख्या नियंत्रण, सहकारी शेतीचा अवलंब करणे इत्यादी .

    कृषीच्या बाबतीत अनेक योजना ,धोरणे राबविण्यात येतात, तरीसुद्धा त्या पूर्ण होण्यासाठी सरकार व जनता सर्वांच्या सहकार्याने यातून मार्ग निघणे शक्य होऊ शकते. लॉकडाऊन कालावधीतीत शेतकऱ्यांसाठी अनेक योजना तयार करण्यात आल्या.

महत्वाचे शब्द :- दुय्यम संशोधन पद्धती, सद्यस्थिती, आढावा, चिकित्सक, जमिनीचे अपखंडन, वहीती खातेदार, वहीती क्षेत्र, कृषी निविष्टा

शब्दांचे अर्थ :- सद्यस्थिती= आजची परीस्थिती, आढावा घेणे=व्यवस्थित तपासणी करणे, जमिनीचे अपखंडन = जमिनीचे तुकडे, भाग, वहीती खातेदार=शेतकरी,ज्याच्या नावाने शेती आहे ,वहीती क्षेत्र= लागवड क्षेत्र, शेती क्षेत्र , कृषी निविष्टा = शेतीसाठी लागणारा कच्चा माल, (जसे -खते, बी बियाणे, किटकनाशके वगैरे)

संशोधनाचा उद्देश :-

1. संशोधन विषयाबाबत चिकित्सक अध्ययन करणे .
2. कृषी आणि कृषी गणनेविषयक सांख्यिकी व माहितीचे संकलन करून त्याचे विश्लेषण करणे .
3. विश्लेषणाच्या आधारे सद्यस्थितीचा आढावा घेणे.
4. घटनेची वास्तविकता जाणून घेणे .

संशोधन कार्यप्रणाली:- ,विविध प्रकारचे अहवाल, लेख, आर्थिक सर्वेक्षण, मासिक, वार्षिकांक इत्यादी दुय्यम संशोधन पद्धतीच्या सांख्यिकीचा वापर करणे.

संशोधन पद्धती :- सांख्यिकी व माहितीचे संकलन करून त्यावर प्रक्रिया आणि   विश्लेषण करणे. त्या विश्लेषणाच्या आधारे सद्द्स्थितीचा आढावा घेणे.

प्रस्तावना :-

महाराष्ट्र राज्य हे भारत देशाच्या पश्चिम व मध्य भागात वसलेले आहे.जनगणना २०११ नुसार राज्याची लोकसंख्या ११.२४ कोटी असुन भारतात लोकसंख्येच्या आधारावर   दुसऱ्या क्रमांकाचे राज्य आहे. महाराष्ट्र राज्याने, राज्याच्या तात्पर्याने   देशाच्या विकासाच्या दृष्टीने कृषी या क्षेत्राला प्राधान्यक्रम देण्याचे धोरण ठरविले आहे.

तक्ता क्रमांक १.१ मधे   १९७०-७१ च्या तुलनेत महाराष्ट्रातील कृषी गणनेमधे कशाप्रकारे बदल होत आहे ,ते दर्शविण्यात आले आहे . त्या नुसार वर्ष १९७०-७१ च्या तुलनेत महाराष्ट्रातील कृषी गणनेमधे झालेला बदल हा वहीती खातेदारांची संख्या (हजार) आणि वहीती क्षेत्र (हजार हेक्टर)याद्वारे दर्शविण्यात आला आहे.तसेच १९७०-७१ च्या आधारे शतक प्रमाण आणि शतक प्रमाणातील बदल दर्शविण्यात आला आहे. वहीती खातेदारांच्या शतक प्रमाणातील दशवार्षिक बदल हा वर्ष १९७०-७१ पासुन ते वर्ष २०१०-११ पर्यंत दर दहा वर्षात आणि २०१०-११ पासुन ते वर्ष २०१५-१६ या पाच वर्षात ३८.६२, ९१.२७, १४५.१६, १७६.७० , २०८.७३ प्रतिशत इतका क्रमशः वाढत जात आहे,असे दिसून येते ....**विधान क्रमांक १**

वहीती क्षेत्राच्या शतक प्रमाणातील दशवार्षिक बदल हा वर्ष १९७०-७१ पासुन ते वर्ष २०१०-११ पर्यंत दर दहा वर्षात आणि २०१०-११ पासुन ते वर्ष २०१५-१६ या पाच वर्षात ०.८६, १.२०, ५.०८ , ६.६७ , 3.१८ प्रतिशत इतक्या प्रमाणात   घटत जात आहे,असे दिसून येते. ....**विधान क्रमांक २**

वहीती सरासरी क्षेत्राच्या शतक प्रमाणातील दशवार्षिक बदल हा वर्ष १९७०-७१ पासुन ते वर्ष २०१०-११ पर्यंत दर दहा वर्षात आणि २०१०-११ पासुन ते वर्ष २०१५-१६ या पाच वर्षात २७.३४, ४८.३६ , ६१.२१ , ६६.३६ , ६८.६९ प्रतिशत इतक्या अधिक प्रमाणात आणि सतत घटत जात आहे,असे दिसून येते. ....**विधान क्रमांक ३**

वहीती खातेदारांची संख्या क्रमशः वाढत जात आहे आणि वहीती क्षेत्राच्या प्रमाणात   घट होत जात आहे.म्हणूनच वहीती सरासरी क्षेत्राच्या प्रमाणात   घट होत आहे,असे दिसून येते.म्हणजेच **विधान क्रमांक १ व विधान क्रमांक २ मुळे विधान क्रमांक ३ प्रतिपादित होत आहे. विधान क्रमांक ३ प्रतिपादित होण्याची प्रमुख दोन कारणे आहेत.** याचे **प्रथम कारण** म्हणजे **अ.** भौगोलिक क्षेत्रफळाची नैसर्गिक मर्यादा आणि **ब** . लागवडयोग्य जमिनीची नैसर्गिक मर्यादा होय.नैसर्गिक मर्यादेमुळे वहीती क्षेत्राच्या प्रमाणात वाढ होऊ शकत नाही,हे तर आहेच परंतु याशिवाय **अधिक महत्वाचे द्वितीय कारण** असे की लोकसंख्या वाढ हे होय.लोकसंख्या वाढीमुळे कृषीवरील भार सतत वाढत जात आहे.

वहीती खातेदारांची संख्या क्रमशः वाढत जात आहे म्हणजेच कृषीवरील भार वाढत जात आहे. कृषीवरील भार वाढण्याची अनेक कारणे आहेत. १. लोकसंख्या वाढ, २. बेरोजगारी 3. जमिनीचे अपखंडन ४ भांडवलाची कमतरता ५. उद्योजकतेकडे दुर्लक्ष इत्यादी.

सद्द्स्थितीतील सांख्यिकी आणि त्याबाबतीतील विश्लेषण सुद्धा अशाच प्रकारचे दिसून येईल. यावर उपाय म्हणजे औद्योगोकरणात वाढ करणे ,कृषीवर आधारित उद्योगांचा विकास करणे ,लोकसंख्या नियंत्रण, सहकारी शेतीचा अवलंब करणे इत्यादी होय .

कृषीच्या बाबतीत अनेक योजना, धोरणे राबविण्यात येतात, तरीसुद्धा त्या पूर्ण होण्यासाठी सरकार व जनता सर्वांच्या सहकार्याने यातून मार्ग निघणे शक्य होऊ शकते .

लॉकडाऊन कालावधीतीत शेतकऱ्यांसाठी अनेक योजना तयार करण्यात आल्या.थेट व घरपोच मदत करण्यात आली.

जसे :- " महात्मा ज्योतीराव फुले शेतकरी कर्ज मुक्ती योजना २०१९ च्या सुरुवातीपासून जानेवारी २०२१ अखेर ३१.०४ लाख लाभार्थी शेतकऱ्यांना १९८४७ कोटी रुपये रकमेचा लाभ देण्यात आला."

यासोबतच

लॉकडाऊन कालावधीतील उपाय योजना :-

- कृषी निविष्ठा आणि कृषी उत्पादकांच्या वाहतूक व विक्रीसाठी संबंधित विभागाकडून परवाने उपलब्ध
- कृषी निविष्ठांचे ९.४२ लाख शेतकऱ्यांना घरपोच वाटप
- शेतकऱ्यांच्या 3.७९० गटांच्या माध्यमातून सुमारे १.३७ लाख मे. टनफळे व भाजीपाल्यांची नागरी ग्राहकांना थेट विक्री इत्यादी.

निष्कर्ष :-

वहीती खातेदारांची संख्या क्रमशः वाढत जात आहे आणि वहीती क्षेत्राच्या प्रमाणात घट होत जात आहे.म्हणूनच वहीती सरासरी क्षेत्राच्या प्रमाणात घट होत आहे,असे दिसून येते. याचे **प्रथम कारण** म्हणजे **अ.** भौगोलिक क्षेत्रफळाची नैसर्गिक मर्यादा आणि **ब** . लागवडयोग्य जमिनीची नैसर्गिक मर्यादा होय.नैसर्गिक मर्यादेमुळे वहीती क्षेत्राच्या प्रमाणात वाढ होऊ शकत नाही,हे तर आहेच परंतु याशिवाय **अधिक महत्वाचे द्वितीय कारण** असे की लोकसंख्या वाढ हे होय.लोकसंख्या वाढीमुळे कृषीवरील भार सतत वाढत जात आहे.

मार्गदर्शन :-

वहीती खातेदारांची संख्या क्रमशः वाढत जात आहे म्हणजेच कृषीवरील भार वाढत जात आहे. सद्स्थितीतील सांख्यिकी आणि त्याबाबतीतील विश्लेषण सुद्धा अशाच प्रकारचे दिसून येईल. यावर उपाय म्हणजे औद्योगीकरणात वाढ करणे कृषीवर आधारित उद्योगांचा विकास करणे ,लोकसंख्या नियंत्रण ,सहकारी शेतीचा अवलंब करणे, रोजगार निर्मिती,स्वयं रोजगार निर्मिती इत्यादी होय. कृषीच्या बाबतीत अनेक योजना, धोरणे राबविण्यात येतात तरीसुद्धा त्या पूर्ण होण्यासाठी सरकार व जनता सर्वांच्या सहकार्याने यातून मार्ग निघणे शक्य होऊ शकते.

तक्ता क्रमांक १ .१ : महाराष्ट्रातील कृषी गणनेमधे झालेला बदल (वर्ष १९७०-७१ च्या तुलनेत)

शतक प्रमाण (१९७०-७१ च्या आधारे) शतक प्रमाणातील बदल (१९७०-७ १ च्या आधारे)

कृषी गणना	१९७०-७१	१९८० -८१	१९९०-९१	२०००-२००१	२०१०-११	२०१५-१६
वहीती खातेदारांची संख्या (हजार)	४९५१	६८६3	९४७०	१२१३८	१३६९९	१५२८५
	१००	१३८.६२	१९१.२७	२४५.१६	२७६.७०	३०८.७3
	००	३८.६२	९१.२७	१४५.१६	१७६.७०	२०८.७3
वहीती क्षेत्र (हजार हेक्टर)	२११७९	२१३६२	२०९२५	२०१०3	१९७६७	२०५०६
	१००	१००.८६	९८.८०	९४.२०	९3.33	९६.८२
	००	०.८६	-१.२०	-५.०८	-६.६७	-3.१८
वाहितीचे सरासरी क्षेत्र (हेक्टर)	४ .२८	3.११	२. २१	१ .६६	१ .४४	१ .3४
	१००	७२.६६	५१.६४	3८.७९	33.६४	3१.3१
	००	-२७.3४	-४८.3६	-६१.२१	-६६.3६	-६८.६९

(संदर्भ : महाराष्ट्राची आर्थिक पाहणी २०२०-२१) पेज नंबर- 3

संदर्भ –

1. महाराष्ट्राची आर्थिक पाहणी, महाराष्ट्र शासन , भारत २०२०-२१ ,पेज नंबर-१
2. महाराष्ट्राची आर्थिक पाहणी, महाराष्ट्र शासन , भारत २०२०-२१ ,पेज नंबर- 3
3. महाराष्ट्राची आर्थिक पाहणी, महाराष्ट्र शासन , भारत २०२०-२१ ,पेज नंबर-१३
4. महाराष्ट्राची आर्थिक पाहणी, महाराष्ट्र शासन , भारत २०२०-२१ ,पेज नंबर-१४

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