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Contents

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(formerly UP Technical University, Lucknow)

1 No. Page

Founder
Late Shri Raj Kumar Goel Ji

Commandment
From The Founder

We are building our Institute as an ideal family, the **RKGIT PARIWAR** where members strive for the development, well being and promotion of each other.

अज्ञानेनावृतं ज्ञानं ।
श्रीमद् भगवत गीता अध्याय 5, श्लोक 15

Aims & Scope

SAARANSH is an international bi-annual refereed research journal published by RKGIT (MBA), Ghaziabad. The objective of the journal is to provide a forum for discussion of advancement in the area of management. The journal published research papers, articles, book reviews & case studies. The journal invites manuscripts on all aspects of management and business environment.

FROM THE DESK OF THE EDITOR ✍

The present issue carries seven articles. The first study compares the TQM practices of selected hospitals in Hyderabad. The study employed MBNQA model to identify TQM practices and studied their outcome on organisational performance.

The second article seeks to comprehend the various demographics of investors needing wealth management services and their preferred advisors.

The third article will inspect the effect of exchange rate volatility on India's exports and imports using the Johansen co-integration method. It is observed that there exist a long-run relationship between the exchange rate and India's foreign trade.

The fourth paper attempts to achieve the objective of "Atma Nirbhar Bharat" and focuses on vocal for locals. For this, the government must restructure regional imbalance through different Government policies like vocal for the local and rational stimulus package. This study gave insight into views of future and sustainability of MSMEs product.

The fifth article focused the regulation policy for cleaner technology in India's sugar distillery and cement industry. It highlighted the possible foreign strategies in the Indian context with a new platform for economic and environmental advantage by using cleaner technology towards sustainable development.

The sixth article brought insight into how the disease COVID19 has provoked de-globalisation, revived the nationalisation issue worldwide, and reframed the effect of COVID19 on geopolitical relations, human resources, global demand and supply chain.

The seventh article attempted to trace the gospels and principles of the current Human Value Education from the Epics of India from the Gita, the Mahabharata, the Ramayana, the Vedas and the Upanishads.

We hope that this issue will give readers a platform to have a better knowledge of contemporary India's vibrant economic outlook. Furthermore, I express my heartfelt gratitude to all of the authors for sharing their intellectual effort and valued support with the hope of future patronage.

–Dr. Vibhuti

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EXPERT'S-COMMENTS
for
"SAARANSH" RKG Journal of Management

Prof. Jagdish Prakash, Ex Vice Chancellor, University of Allahabad

✍ ***SAARANSH** is a very standard journal in the area of management which includes empirical articles bynational and international authors'*

Prof. R. C. Saraswat, Vice Chancellor, Dr. Ram ManoharLohiyaAvadh University, Faizabad

✍ *'I am pretty sure that the professionals and faculty of various colleges will contribute in the forthcoming issue of the journal.'*

Prof. Vinay Kumar Pathak, Vice Chancellor, Dr APJ Abdul Kalam University, Lucknow

✍ *"The efforts of the editorial the board are appreciable keeping in view the keen interest being taken in the journal both by academician and executives throughout the country."*

Prof. R. L. Tamboli, Professor & Head, Deptt of ABST,ML Sukhadia University, Udaipur

✍ *'The journal will be getting commanding heights in India, and thereafter abroad, positively.'*

Dr. A. K. Bajpai, Professor, Mechanical Engineering Dept, M.M.M. Engineering College, Gorakhpur

✍ *The outcome of this Journal from your Institution helps in development better academic environment in your College. The Engineering & Management community; Business and Industry and Society all are going to be benefited by your efforts.'*

Prof. Prithul Chakraborti, Head, CMS, JIS College of Engineering, Kalyan, Nadia

✍ *'I appreciate the quality of the contents of the journal.'*

Prof. V. Vijay Durga Prasad, Professor and Head, MBA, PS College of Engineering & Technology, Vijayawada

✍ *'The significant point which I liked is the feedback form about the articles published in the issue.'*

Prof. (Dr). G. K. Upadhyay, Director, Sri Sri Institute of Technology & Management, Kasganj

✍ *'It proves to be a result of great hard work & creativity'*

Dr R. K. Singh, Faculty, MONIRBA, University of Allahabad, Allahabad

✍ *'The journal is overall an excellent attempt'*

CONTENTS

A Comparative Analysis of TQM Dimensions in Improving Performance—Insights From an Investigation of Hospitals

Dr. Syeda Amtul Mahaboob*

ABSTRACT

Delivering quality has been the priority of any business today. Entrepreneurs long back realised that a customer focused organisation could go a long way. But a new mantra in today's world is being customer-oriented and being profitable to society. CSR practices are being adopted in most businesses and are being considered a part of organisational performance. In order to improve the excellence of its operations and performance at the same time, many corporate hospitals are opting for Total Quality Management Practices. Adopting TQM is thought to enhance not just quality but also performance. The present study is conducted to compare the TQM practices of selected hospitals in Hyderabad. The study employed MBNQA model to identify TQM practices and studied their outcome on organisational performance. Performance is also measured based on the indicators given in the model. These practices were then compared to identify differences in these practices across different hospitals.

Keywords: Quality, Performance, Hospitals, Total Quality Management, Comparison

1. INTRODUCTION

Healthcare systems encircle over their recipients-the patients. The vendors are the hospitals as they supply treatment or cure at fixed rates when it comes to hospitals. The shopper is the patient who shops for these treatments at fixed rates. The purchaser demands standard services that should be according to defined rules. This human-centred purpose defines the fundamental nature of quality in healthcare systems. These days are a patient concentrated health care era, that's why it is highly recognised that excellence will finally confirm the benefits of healthcare services. With increasing knowledge in patients regarding health, the patient hopes and asks for standard health care as a recipient of health utilities. According to Lakhe 2006, quality is explained as efficiently providing or surpassing a patient's requirements. The method depends on the condition of the hospital to meet patient needs and finally exceed these needs. Any information missing about those areas imply that the hospital is not proper in excellence of standards in various zones significant to the patient. It is an opinion of most of the quality scientists that maintaining quality services leads to better business performance. The TQM is the answer to surpass the limits that quality is delivered in hospitals, which is most commonly being adopted in healthcare institutions today. Total quality management (TQM) is a never compromising and vigorous attempt by each company to perceive, achieve and go beyond the expectations of those who receive the end product. By nature each organisation is required to develop its method to TQM to fit its unique environment and management style, few features apply to most TQM organisations which are as described below (Evans and Lindsay 1999):

- Paying attention on customer appeasement
- Thriving for consistent performance
- Including every personnel

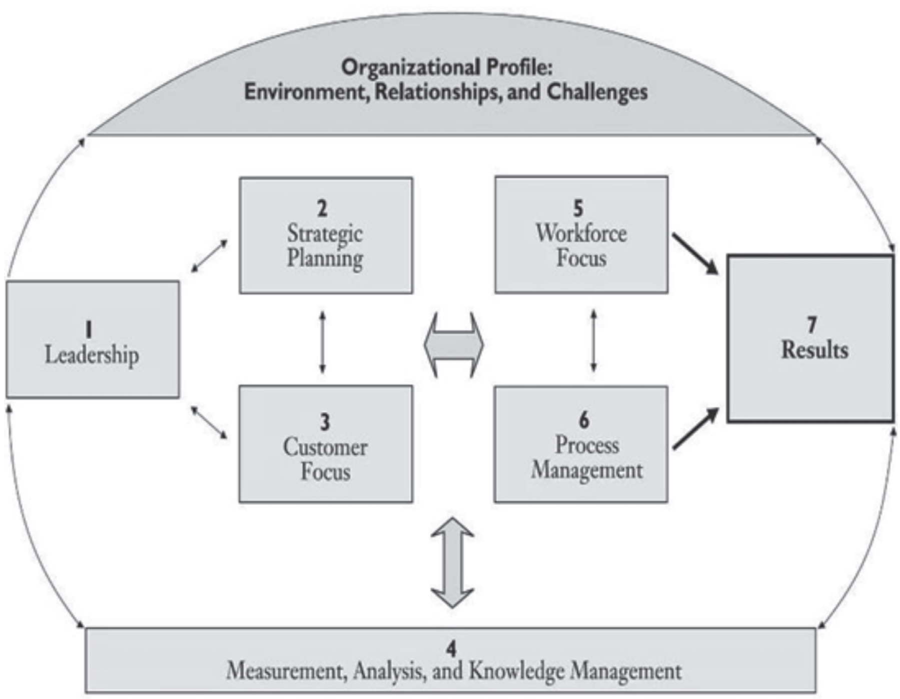
* Maualna Azad National Urdu University, Gachibowli, Hyderabad. Contact No: 8885963199 Email id: dramtulqadri@gmail.com

- Taking support from top level executives
- Clear vision
- Measuring results from time to time
- Regular training programs on TQM

The pillars of quality checking procedures in healthcare can be dated from the period of Nightingale's work during the war of late Nineteenth century when the introduction of infection control practices started at warfront which delivered to a lesser number of the mortality rate of around fifty percent. According to Lakhe 2006, healthcare organisations worldwide have been consistently deploying Total Quality Management to minimise costs, upgrade efficacy, and impart higher quality. TQM practices could be a basic part of a hospital's market surviving philosophy. Healthcare institutions these days are more likely to try to differentiate themselves from their rivals for delivering uniqueness in service quality. Hence, TQM pays due importance to better customer gratification, provides the prospects of more significant market dividends and more profits. Thus TQM could be a significant area of hospital's market surviving philosophy and through which performance can also be improved.

We find people coming to India from developed countries for their treatment because our medical services are world-class and affordable to the ordinary people. Hyderabad being a metropolitan city is the hub of many corporate hospitals. Many studies were conducted on TQM in Indian healthcare but the city of Hyderabad has not been touched. The present study uses the MBNQA (Malcolm Baldrige National Quality Award) model given by NIST (National Institute of Standards and Technology) to identify the TQM Dimensions for healthcare. There are many pieces of evidence in healthcare business research that MBNQA model is the most widely accepted model by the healthcare industry to assess their performance. Numerous frameworks have been established to classify the crucial success zones of TQM deployment. But almost all researchers had claimed that Malcolm Baldrige National Quality Award (MBQNA) structure is the most fitting

Figure: 1.1 MBNQA (Malcolm Baldrige National Quality Award Model)



framework for TQM deployment in hospitals. More and more healthcare facilities are drawn to the MBNQA because their management feels that the award provides a world-class organisation (D.H. Stamatis 2010).

As per the American organisation that maintains quality (NIST, 2016), which deals with the MBNQA, over forty USA provinces and forty-five countries worldwide have tied their excellence programs to the Malcolm framework. The MBNQA model criteria view an organisation as a system that helps in getting efficacious performance and reduces the problems of the hospital's excellence maintenance.

The excellence quantifiers brought into picture from Balridge Hospital framework are given as: 1. Leadership 2. Strategic Planning 3. Customer Focus 4. Measurement, Analysis and Knowledge Management. 5. Workforce Focus 6. Process Management (Operations) and 7. Organisational Performance results. The Profile of Organization provides data related to the firm's inside and outside surroundings. The present study used the MBNQA criteria to highlight the TQM Dimensions in hospitals. The Malcolm Criteria addresses four performance types (Heidari Gorji and Farooquie 2011).

1. Hospital actions and outputs
2. Focusing on recipients
3. Returns and share in the markets
4. Executional.

The Hospital actions and outputs refer to performance implied to the steps and pointers of health care conveyance significant to purchasers and collaborators. Recipients of the performance include customers and society.

2. OBJECTIVES OF THE STUDY

(i) To analyse the association of TQM practices with a performance of hospitals

(ii) To compare the TQM practices of different hospitals

3. REVIEW OF LITERATURE

The usage of TQM in the firm of Hospitals had not been researched until the 1990s (Goldstein & Schweikhart 2002). The Malcolm Baldrige National Quality Award is the most studied model for TQM around the globe. According to a survey conducted by Futures can in 2013, sixty-five percent of the hospitals may use Baldrige Criteria for performance evaluation or as an internal assessment tool by the year 2018 (NIST 2018). Many types of research were being conducted in the western world on Total Quality Management regarding the healthcare industry. But as the present study is concerned with the Indian Hospital industry, given below are some of the studies on Total Quality Management in Indian Healthcare.

Rohini (2006) utilised the SERVQUAL structure and MBQNA model to study the services quality and involvement of the TQM facets with the medical institution's performance. She collected the responses from executives, administration staff, physicians and surgeons from fourteen hospitals in Karnataka and one hospital in Anantpur district of Andhra Pradesh regarding the extent of total quality management facets implementation and its result on the firm's performance. The patients' responses were also taken to study the quality of services provided in the hospitals.

Usha (2007) researched a multispecialty healthcare facility in a South Indian city and a qualitative study of thirteen hospitals all over the country. The scrutinising used Malcolm structure to explore the Total Quality Management enactment and examine the medical institution's effectuation. Feedback was gathered from senior and middle-level executives.

Duggirala et al., (2008) developed a scale to study the impact of TQM practices on hospital performance. They conducted their research in hospitals of major cities of Tamil Nadu and Gujarat. A positive relationship was found between the TQM dimensions and hospital performance.

Ali Morad Heidari Gorgji (2010) compared the Indian and Iranian Total Quality Management Dimensions with the TQM practices of the United States. He collected data from hospitals in Delhi and Aligarh in India. From Iran, hospitals in Tehran and in the state Mazandaran were selected as a sample. The data obtained from India and Iran was compared with the hospitals of the US that received the Baldrige NQA recognition around the duration 2000-2010.

Sunil C. D' Souza and A.H. Sequeira (2011) collected data from 76 educational institutions of medicine in Karnataka, Kerala, Andhra Pradesh and Tamil Nadu to scrutinise the association of service utility maintenance indicators (excellence maintenance and consumer appeasement standard) highlighted by MBNQA and its influence on the medical institution's effectuation. The study results indicated that the healthcare organisations had a silver line performance with the quality dimensions of MBNQA criteria.

M. Balasubramanian (2013) performed a qualitative study in dual speciality healthcare facilities in Mumbai, namely Breach Candy hospital, then Bhatia Hospital, to study the impression of the deployment of TQM on attainment and revenue of the hospitals.

Dr. M. Ujjwal Rao (2015) performed a case study in Jehangir hospital, Pune, to study the impact of TQM, Accreditation and electronic medical records on the outcomes of a healthcare organisation. The results indicated that the NABH (National Accreditation Board for Hospitals) validated each of the TQM practices in the hospital and rated the hospital significantly higher in TQM and clinical outcomes than non-accredited hospitals.

It can be observed from the above studies that the previous researchers on TQM have not researched the healthcare sector of Telangana.

4. HYPOTHESIS OF THE RESEARCH

The subsequent are the two hypotheses of the research:

H_{01}: There is no association of the TQM Dimensions with the hospitals' performance.

H_{02}: There is no difference in the TQM Dimensions of the hospitals.

5. RESEARCH METHODOLOGY

To study the involvement of TQM facets in the performance of the hospitals and to compare the TQM aspects of different hospitals, six TQM Dimensions were identified from MBNQA model. Two dimensions were added (service culture and servicescapes) to include the organisational profile shown in the model. The sample consists of staff from five corporate hospitals of Hyderabad, including doctors, nurses, support staff, and administrative staff. The sample is collected through the method of stratified random sampling. A tested structured questionnaire has been adopted for the study. Private hospitals of Hyderabad city, namely Premier hospital, Olive hospital, Virinchi hospital, Care hospital and Apollo hospital were selected. The sample was collected through the Krejcie and Morgan table (1970) procedure. The overall number of workers in these five hospitals equals 3445, and the sample size shown by Krejcie and Morgan table (1970) for this population is 346. From each category of the employees, a ten percent sample was taken.

6. DATA SCRUTINISATION AND EXPLANATION

To examine the association of the TQM facets with performance, the tool of multiple Regression was used. To compare the TQM Dimensions of different hospitals, ANOVAand Posthoc tests were used.

5.1 Multiple Regression to check the involvement of the TQM facets in the hospital's performance

The eight TQM facets were taken as independent variables and the Organizational Performance of the Hospitals was considered as a dependent variable.

Table 5.1.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.713	0.508	0.496	2.87572

The above table 5.1.1 shows the R square value as 0.508, which means that fifty percent of the variation in Organizational Performance could be credited to the TQM Practices.

Table 5.1.2 ANOVATable

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	2879.236	8	359.905	43.520	0.000
Residual	2786.914	337	8.270		
Total	5666.150	345			

Table 5.1.2 shows that the proposed model is significant ($p < 0.05$) and shows the amount of Regression out of the Total.

Regression Coefficients of TQM Practices in Multiple Regression

Table 5.1.3 Coefficients Table

Model	Unstandard Coefficient (B)	Standard Coefficient (Beta)	Sig
Constant	3.256		0.109
1. Leadership	0.600	0.401	0.000
2. Strategic Planning	0.050	0.049	0.349
3. Customer Focus	0.238	0.141	0.002
4. Measurement, Analysis and Knowledge Management	0.036	0.030	0.550
5. Workforce Focus	0.091	0.120	0.027
6. Process Management	0.386	0.233	0.006
7. Service Culture	0.077	0.044	0.513
8. Servicescapes	0.293	0.159	0.020

Dependent Variable: Organisational Performance

The above table 5.1.3 shows that five out of the eight TQM Practices are found to fit in the proposed model as their p value are found to be less than 0.05. The table also depicts the values of Regression Coefficients for various TQM Practices and we can predict the Organizational Performance of the Hospitals by forming a regression equation.

Organizational Performance = 0.600 Leadership + 0.238 Customer Focus + 0.091 Workforce Focus + 0.386 Process Management + 0.293 Servicescapes

The above regression model gives an idea about the overall fitness of the proposed model and shows a relationship between the hospitals' Performance and TQM Practices.

6.2 Comparative Analysis of TQM Dimensions

ANOVA is applied to each TQM Practice to test the second hypothesis, and a conclusion has arrived. The Post Hoc test is used only when a significant difference is found in the ANOVA results.

One way ANOVA to Check Whether there is a Significant Difference in the Leadership Practice of five Corporate Hospitals:

Table 5.2.1 One way Anova: Leadership

Model	Sum of Squares	df	Mean Square	F	Sig
Between Groups	221.989	4	55.947	8.169	0.000
Within Groups	2316.500	341	6.793		
Total	2538.588	345			

The One way ANOVA test explains a notable difference in five corporate hospitals' leadership practices ($p < 0.05$). As a significant difference is found in the above, a Post Hoc test is applied to compare the Leadership Practice of One Hospital with the other hospital, i.e., and pairwise comparison was made.

Table 5.2.2 Post Hoc Test: Leadership

Hospital	Mean Difference	Std Err	Significance
Premier	0.18889	0.53556	0.725
Olive	1.53968	0.49800	0.002
Care	0.80741	0.48459	0.097
Virinchi	0.42111	0.46786	0.369
Apollo			
Olive	0.18889	0.53556	0.725
Premier	1.72857	0.48261	0.000
Care	0.61852	0.46876	0.188
Virinchi	0.61000	0.45144	0.178
Apollo			
Care	1.53968	0.49800	0.002
Premier	1.72857	0.48261	0.000
Olive	2.34709	0.42534	0.000
Virinchi	1.11857	0.40618	0.006
Apollo			
Virinchi	0.80741	0.48459	0.097
Premier	0.61852	0.46876	0.188
Olive	2.34709	0.42534	0.000
Care	1.22852	0.38962	0.002
Apollo			
Apollo	0.42111	0.46786	0.369
Premier	0.61000	0.45144	0.178
Olive	1.11857	0.40618	0.006
Care	1.22852	0.38962	0.002
Virinchi			

Post Hoc LSD (Least Significant Difference) tool was used to compare the mean value of different hospitals' Leadership Practices.

Table 5.2.2 shows that Care Hospital has a significant difference in the Leadership Practice from the other four Hospitals ($p<0.05$), which means that Care Hospital is at its best in maintaining its Leadership.

One way ANOVA to Check if there is a Significant Difference in the Strategic Planning Practice of five Corporate Hospitals:

Table 5.2.3 One way Anova: Strategic Planning

Model	Sum of Squares	df	Mean Square	F	Sig
Between Groups	435.78	4	108.937	7.531	0.000
Within Groups	4932.359	1	14.464		
Total	5368.107	345			

The above One way ANOVA test explains a notable difference in five corporate hospitals' strategic planning ($p < 0.05$). As a significant difference is found in the above, a Post Hoc test is applied to compare the Strategic Planning of One Hospital with the other hospital i.e., pair wise comparison was done.

Table 5.2.4 Post Hoc Test: Strategic Planning

Hospital	Mean Difference	Std Err	Significance
Premier	0.28667	0.78149	0.714
Olive	2.76667	0.72668	0.000
Care	0.29630	0.70711	0.675
Virinchi	1.35667	0.68270	0.048
Apollo			
Olive	0.28667	0.78149	0.714
Premier	2.48000	0.70422	0.000
Care	0.58296	0.68400	0.395
Virinchi	1.07000	0.65874	0.105
Apollo			
Care	2.76667	0.78149	0.000
Premier	2.48000	0.70422	0.000
Olive	3.06296	0.62065	0.000
Virinchi	1.41000	0.52969	0.018
Apollo			
Virinchi	0.29630	0.70711	0.675
Premier	0.58296	0.68400	0.395
Olive	3.06296	0.62065	0.000
Care	1.65296	0.68270	0.004
Apollo			
Apollo	1.35667	0.68270	0.048
Premier	1.07000	0.65874	0.105
Olive	1.41000	0.59269	0.018
Care	1.65296	0.56852	0.004
Virinchi			

The Table 5.2.4 shows that Care Hospital has a significant difference in Strategic Planning from the other four Hospitals ($p<0.05$), which means that Care Hospital is at its best in Strategic Planning.

One way ANOVAto Check if there is a Significant Difference in the Customer Focus of five Corporate Hospitals:

Table 5.2.5 One way Anova: Customer Focus

Model	Sum of Squares	df	Mean Square	F	Sig
Between Groups	31.552	4	7.888	1.368	0.244
Within Groups	1965.5581	5.764			
Total	3930.647	345			

The above One way ANOVAtest explains a considerable difference in Measurement, Analysis and Knowledge Management ($p< 0.05$). As a significant difference is found in the above, a Post Hoc test is applied to compare the Measurement, Analysis and Knowledge Management of One Hospital with the other hospital i.e., pairwise comparison was made.

Table 5.2.7 Post Hoc Test: Measurement, Analysis, Knowledge Management

Hospital	Mean Difference	Std Err	Significance
Premier	0.55778	0.67770	0.411
Olive	0.80635	0.63018	0.202
Care	1.31358	0.61320	0.033
Virinchi	0.65222	0.59203	0.271
Apollo			
Olive	0.55778	0.67770	0.411
Premier	0.24857	0.61070	0.684
Care	1.87136	0.59317	0.002
Virinchi	1.21000	0.57125	0.035
Apollo			
Care	0.80635	0.63018	0.202
Premier	0.24857	0.61070	0.684
Olive	2.11993	0.53823	0.000
Virinchi	1.45857	0.51398	0.005
Apollo			
Virinchi	1.31358	0.61320	0.033
Premier	1.87136	0.59317	0.002
Olive	2.11993	0.53823	0.000
Care	0.66136	0.49302	0.181
Apollo			
Apollo	0.65222	0.59203	0.271
Premier	1.21000	0.57125	0.035
Olive	1.45857	0.51398	0.005
Care	0.66136	0.49302	0.181
Virinchi			

The Table 5.2.7 shows that Virinchi Hospital has a significant difference in Measurement, Analysis and Knowledge Management Practice from the other three Hospitals ($p<0.05$) which means that Virinchi Hospital is at its best in Measurement, Analysis and Knowledge Management.

One way ANOVAto check if there is a Significant Difference in the Workforce Focus of five Corporate Hospitals:

Table 5.2.8 One way Anova: Workforce Focus

Model	Sum of Squares	df	Mean Square	F	Sig
Between Groups	421.764	4	105.441	3.755	0.005
Within Groups	9574.077	341	28.076		
Total	9995.841	345			

The above One way ANOVAtest explains that there is a considerable difference in the Workforce Focus of five Corporate Hospitals ($p< 0.05$). As a significant difference is found in the above, a Post Hoc test is applied to compare the Workforce Focus of One Hospital with the other hospital i.e., pair wise comparison was done.

Table 5.2.9 Post Hoc Test: Workforce Focus

Hospital	Mean Difference	Std Err	Significance
Premier	0.32444	1.08878	0.766
Olive	1.95873	1.01243	0.054
Care	0.45432	0.98516	0.645
Virinchi	1.14556	0.95115	0.229
Apollo			
Olive	0.32444	1.08878	0.766
Premier	1.63429	0.98113	0.097
Care	0.77877	0.95297	0.414
Virinchi	1.47000	0.91777	0.110
Apollo			
Care	0.80635	0.63018	0.202
Premier	0.24857	0.61070	0.684
Olive	2.11993	0.53823	0.000
Virinchi	1.45857	0.51398	0.005
Apollo			
Virinchi	1.31358	0.61320	0.033
Premier	1.87136	0.59317	0.002
Olive	2.11993	0.53823	0.000
Care	0.66136	0.49302	0.181
Apollo			
Apollo	0.65222	0.59203	0.271
Premier	1.21000	0.57125	0.035
Olive	1.45857	0.51398	0.005
Care	0.66136	0.49302	0.181
Virinchi			

The Table 5.2.9 shows that Virinchi Hospital has a significant difference in Workforce Focus Practice from the other three Hospitals ($p<0.05$), which means that Virinchi Hospital is at its best in Workforce Focus.

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One way ANOVAto Check a Significant Difference in the Process Management of five Corporate Hospitals:

Table 5.2.10 One way Anova: Process Management

Model	Sum of Squares	df	Mean Square	F	Sig
Between Groups	157.147	4	39.287	7.022	0.000
Within Groups	1907.963	341	5.595		
Total	2065.110	345			

The above One way ANOVAtest explains a considerable difference in the Process Management between five Corporate Hospitals ($p< 0.05$). As a significant difference is found in the above, a Post Hoc test is applied to compare it from One hospital to the other hospital i.e., pair wise comparison was done.

Table 5.2.11 Post Hoc Test: Process Management

Hospital	Mean Difference	Std Err	Significance
Premier	0.11333	0.48605	0.816
Olive	1.23333	0.45196	0.007
Care	0.79753	0.43979	0.071
Virinchi	0.03667	0.42461	0.931
Apollo			
Olive	0.11333	0.48605	0.816
Premier	1.12000	0.43799	0.011
Care	0.91086	0.42542	0.033
Virinchi	0.15000	0.40970	0.715
Apollo			
Care	1.23333	0.45196	0.007
Premier	1.12000	0.43799	0.011
Olive	2.03086	0.38602	0.000
Virinchi	1.27000	0.36862	0.001
Apollo			
Virinchi	0.79753	0.43979	0.071
Premier	0.91086	0.42542	0.033
Olive	2.03086	0.38602	0.000
Care	0.76086	0.35359	0.032
Apollo			
Apollo	0.03667	0.42461	0.931
Premier	0.15000	0.40970	0.715
Olive	1.27000	0.36862	0.001
Care	0.76086	0.35359	0.032
Virinchi			

The Table 5.2.11 shows that Care Hospital has a significant difference in Process Management from the other four Hospitals ($p<0.05$), which means that Care Hospital is at its best in maintaining its various Processes.

One way ANOVAto Check a Significant Difference in the Service Culture of five Corporate Hospitals:

Table 5.2.12 One way Anova: Service Culture

Model	Sum of Squares	df	Mean Square	F	Sig
Between Groups	31.633	4	7.908	1.508	0.199
Within Groups	1788.263	341	5.244		
Total	1819.896	345			

The above One way ANOVA examination explains that there is no considerable difference in the Service Culture between five Corporate Hospitals ($p> 0.05$). As a significant difference is not found in the above, a Post Hoc test is not applied to compare it from One hospital to the other hospital i.e., pair wise comparison was not done.

One way ANOVAto Check a Significant Difference in the Servicescapes of five Corporate Hospitals:

Table 5.2.13 One way Anova: Servicescapes

Model	Sum of Squares	df	Mean Square	F	Sig
Between Groups	237.072	4	59.268	14.159	0.000
Within Groups	1427.381	341	4.186		
Total	1664.454	345			

The above One way ANOVA test depicts that there is a significant difference in the Servicescapes of five Corporate Hospitals ($p< 0.05$). As a significant difference is found in the above, a Post Hoc test is applied to compare it from One hospital to the other hospital i.e., pair wise comparison.

Table 5.2.14 Post Hoc Test: Servicescapes

Hospital	Mean Difference	Std Err	Significance
Premier	0.15778	0.42040	0.708
Olive	0.82222	0.39092	0.036
Care	1.61728	0.38039	0.000
Virinchi	0.10778	0.36726	0.769
Apollo			
Olive	0.15778	0.42040	0.708
Premier	0.98000	0.37883	0.010
Care	1.45951	0.36796	0.000

Virinchi	0.05000	0.35437	0.888
Apollo			
Care	0.82222	0.39092	0.036
Premier	0.98000	0.37883	0.010
Olive	2.43951	0.33388	0.000
Virinchi	0.93000	0.31884	0.004
Apollo			
Virinchi	1.61728	0.38039	0.000
Premier	1.45951	0.36796	0.000
Olive	2.43951	0.33388	0.000
Care	1.50951	0.30584	0.000
Apollo			
Apollo	0.10778	0.36726	0.769
Premier	0.05000	0.35437	0.888
Olive	0.93000	0.31884	0.004
Care	1.50951	0.30584	0.000
Virinchi			

The Table 5.2.14 shows that Virinchi Hospital and Care Hospital has a significant difference in Servicescapes from the other four Hospitals ($p<0.05$), which means that Virinchi Hospital and Care Hospital are the best in maintaining their Servicescapes.

From the above analysis of ANOVA and Post Hoc test, out of eight TQM Practices, a significant difference is found in six TQM Practices, and no significant difference is found in two TQM Practices, namely Customer Focus and Service Culture. Consequently, the second Null Hypothesis of the survey was rejected.

CONCLUSION

From the above analysis, it can be concluded that Total Quality Management provides a productive means to enhance the hospitals' performance. It is also supposed that there exists a difference in these practices from hospital to hospital. It had been observed that Leadership is the strongest predictor of performance. It was also observed that Customer focus practice remains the same across all the five corporate hospitals. It is a matter of concern that unique customer services are not provided. Hence the hospitals need to pay more attention to improving their customer service. The present study cannot be applied to the overall healthcare sector of India. It covers only the selected hospitals of Hyderabad city.

REFERENCES

R.P. Mohanty and R.R. Lakhe (2011),TQM in the service sector (5th Ed), Jaico Publishing House

Evans and Lindsay (1999). The Management and Control of Quality. (4th Ed), South-Western College Publications.

D'Souza, Sunil C. (2011). MBNQA - A Strategic Instrument for Measuring Performance in Healthcare Organizations: An Empirical Study. Zentih International Journal Of Multidisciplinary Research, 5(1), pp 120-129 http://dx.doi.org/10.2139/ssrn.2018091

D.H. Stamatis (2010). Total Quality Management in Healthcare: Implementation Strategies for Optimum Results, Irwin Professional.

Dr. M. Balasubramanian (2013), "Impact of TQM on Occupancy and Revenue in Two Tertiary care Hospitals in Mumbai", Master of Philosophy Dissertation, Department of Business Management, Padmashree DR. D. Y. Patil University. https://docplayer.net/62354887-Impact-of-implementation-of-tqm-on-occupancy-and-revenue-in-two-tertiary-care-hospitals-in-mumbai.html

Dr. Ujjwal M. Rao (2015), Impact of Total Quality Management, Accreditation and Electronic Medical Records on the Outcomes of a Healthcare Organization, Doctor of Philosophy thesis, Birla Institute of Technology and Science, Pilani. http://hdl.handle.net/10603/123783

Duggirala, M., Rajendran, C, and Anantharaman, R.N. (2008), Provider-perceived Dimensions of Total Quality Management in Health Care, Benchmarking: An International Journal, Vol 15(6), pp. 693-722.

Heidari Gorji, A. M., & Farooquie, J. A. (2010). "Organizational Excellence in Healthcare Industry: A Comparative Study of TQM Practices in India, Iran and USA", Doctor of Philosophy thesis, Aligarh Muslim University http://hdl.handle.net/10603/55589

National Institute of Standards and Technology (NIST). (2008–2017). NIST. http://www.nist.gov/public_affairs/factsheet/nqa_appdata.cfm

Goldstein, S., & Schweikhart, S. (2002). Empirical support for the Baldrige award framework in U.S.hospitals. Health Care Management Review, Vol 27(1), 62–75.

Manjunath U, Metri BA, Ramachandran S (2007): Quality management in health care organisation: a case of South Indian Hospital. TQM Magazine, 19(2):129-139.

Manjunath Usha *(2007)*. "*Development of an Integrative Framework for Total Quality Service in Hospitals-An Empirical Investigation",* Doctor of Philosophy thesis, BITS Pilani. http://hdl.handle.net/10603/124553

R. Rohini (2006), "TQM practices in healthcare services- An Empirical study", Doctor of Philosophy thesis, University of Mysore. http://hdl.handle.net/10603/92272

A Comparative Study of the Offline and Online Wealth Management Services

Dr. C. A. Pinky Agarwal*

ABSTRACT

The Indian wealth management market is developing exponentially. Reasons are improving economic conditions and rising level of income. About 25% of investments are of High-Net-Worth Individuals (HNIs). Wealth Management can be described as a discipline of investment advisory services. It comprises financial planning, asset portfolio management, estate and succession planning, individual retail banking, legal consulting, and tax planning. It is provided by advisors, asset managers, banks, financial planners, NBFCs and others. Wealth management services can be classified as human advisory, robo-advisory and hybrid advisory.

The prevailing environment of social distancing has made the model of Robo advisors' model a necessary way of receiving wealth management services. Capital markets have become very volatile. Participants of the Capital markets are increasing and the need for quality wealth management services has become imperative. This paper thus seeks to comprehend the various demographics of investors needing wealth management services and their preferred advisors.

Survey was conducted, and data was collected. The sample size was 200 respondents residing mainly in North and West India. Data were analyzed using statistical tools.

The study identifies that very few respondents had any prior experience with online financial advisory services and that online wealth management services' penetration and awareness rates are low. A significant chunk of respondents prefers to have face to face contact with their financial advisors.

To increase the level of penetration of online wealth management there is need for an improvement in online wealth management platforms in the fields of security, convenience, privacy, simplicity, and range of products.

Keywords: Wealth Management, HNI, Robo advisory, Financial planning, Investors

INTRODUCTION

Wealth Management can be described as a discipline of investment advisory that incorporates a mix of financial planning, asset portfolio management, estate and succession planning, individual retail banking, legal consulting, and tax planning. The said services are offered by advisors, asset managers, banks, financial planners, NBFCs and others. The Indian wealth management market is growing with improved economic conditions and rising income levels. The wealth managers in India address a market with Rs 100 Lakh crore of investable assets comprising mainly of only 25% of High-Net-Worth Individuals (HNIs) which is likely to grow at the rate of 10 to 15% over the next four years. (Ganesh Murthy, CFO, Dell Services, 2021). India's wealth management industry has grown at the CAGR of 36% from 2015-2019. The top 20 Indian wealth managers increased their AUM by 21% YoY to US$ 237 Billion as of 31st December 2019. Among them, Kotak Wealth Management was on the top, followed by IIFL Wealth, Edelweiss, HDFC and JM Financial in terms of AUM as of 2019. (Asian Private banker, 2019)

In terms of advisory mode, wealth management

* Head-Centre for Policy Studies, ITM Group of Institutions, pinkya@itm.edu, pinkyagarwalca@gmail.com

can be segregated into human advisory, robo-advisory and hybrid advisory. As per the survey of Statista 2021, in 2019 over 73% of India's total internet traffic was penetrated by mobile phone which clearly indicates that there is large scope for growth in online financial services. A steadily growing number of wealth management firms are finding technology solutions for offering advice using Robo Advisors (digital platforms that provide automatic, algorithm-based financial services with minimal interaction with humans). Robo-advisory uses technology and Artificial Intelligence (AI) to provide customers with an online platform that is accessible from anywhere in the world. Their clients can track their finances, investments, and plan according to their goals and risk appetite. The most popular models of robo-advisory services are fund based advisory, equity based advisory and comprehensive wealth advisory. In India, robo-advisory services are limited to portfolio allocation, investment recommendation and direct mutual fund investing. Other services related to business succession planning, estate planning, personal insurance, tax planning and investing and cash flow management are yet to be explored in the digital platforms. The main challenge faced by wealth managers today is the adaptability with technological advances to survive in the competition. As per Statista Report 2021, the total AUM of India's robo-advisory companies has reached to US$14,026 million in 2021, with an expected CAGR of 40.01% over the next 4 years

LITERATURE REVIEW

Manish H (2020) defines wealth management as the process of wealth creation, protection, and growth, followed by distribution among the successors. It includes identification of goals, development of plan, recommendation of plan, implementation of plan and lastly, continuous monitoring, changes, and communication with clients to maintain relationships and provide assurance during market volatility.

Santacruz (2018) defined wealth management as the business of providing financial advice, managing investment portfolios and individual assets for a charge. It is the fastest growing area of the financial services industry due to increasing AUM, globalization, changing client demographics, technological advancements and an increase in alternative investment avenues.

OFFLINE WEALTH MANAGEMENT SERVICES

According to Jonathan, Beaverstock, Hall & Wainwright (2010), wealth consists of investable assets and not income and earnings. The asset managers target UHNIs (ultra HNIs) for equity fund management, banking groups target HNIs for financial planning and investment management, and insurance target the masses with range of home, car, travel and life insurance services, private banks also target HNIs and provide services such as current account for businesses and investment management. Banks target the masses and provide them with services like current accounts, mortgages, and credit card services.

Brunel (2015), in the book *Goal-based wealth management*, suggests that financial advisors should help clients understand complex investment strategies, processes and financial jargons. Comparing the needs of investors with Maslow's need hierarchy theory, the book explains how an average individual investor has multiple goals and has a different risk profile for each goal.

Kahler (2017) found out that despite tremendous growth in wealth management services in India, a major obstacle for financial advisors in India is the unwillingness of most clientele to pay the professional fees these companies charge. They usually end up paying more in commissions that are charged in a hidden manner, rather than the lower and visible fees.

ONLINE WEALTH MANAGEMENT SERVICES

Hübner (2018), examines the need for technology in different segments of investors and the degree to which automation of the advisory process can provide satisfactory results. According to his study, robo-advisors can get a significant market share in the wealth management industry through continuous development of technology.

In their article, Kobler, Hauber, & Ernst (2015) have said that over 80% percent of millennials seek financial advice, and they use technology as means for not just communication but also investment. Many of them have some basic level of financial knowledge and tend to consult various sources and not fully trust their advisor. They also prefer self-directed investments. Due to this, traditional wealth management firms will inevitably need to make the transition into the digital age to keep up with changing needs and preferences of the investors of the future.

Lomazzo, (2016) has analyzed the impact of Fintech on the Wealth management sector. He has identified areas in the wealth management value chain where there is scope for implementation of more ideas. It also suggests that advisors should adopt automation (robots) to increase their efficiency and increase their profits by focusing on sales and client relationship management.

Rasiwalaa & Kohlib (2019) have described how the current generation of Robo advisors provides cost minimal solutions and the most simplistic wealth management options. Yet, there is a need to design a more comprehensive platform taking the behavioural peculiarities into account and enabling higher customization of investment portfolios. The researcher emphasized the greater need for creating awareness and education regarding Robo advisory platforms and the necessity to channel more funds for research in artificial intelligence to make Robo advisors accessible.

Impact of various factors affecting Offline and Online Wealth management services

Ernst &Young (2019) in their report "Digital Disruption in wealth management" emphasized the rapidly changing landscape of wealth management due to the emergence of new technologies. According to the report, wealth managers need to adopt client onboarding, advice, sale support, investment recommendations, fulfilment, and trading. Due to evolving client needs and to survive fierce competition in the future, it is necessary.

In their paper, Dimitrios, Mention, & Kaiser (2019) have discussed how the effect of emotions on the decision making of investors can be limited by use of online advisors. It is suggested that a mix of robo and human advisory should be used to provide desirable, feasible and viable advice on investment portfolios.

Lomazzo, (2016) has relied on behavioural finance. He has concluded that while robo-advisory can be innovative, it can also be disruptive. It looks to reach a new market and cannot completely replace human beings.

In his Global Wealth Management Report, Oliver Wyaman (2020) has analyzed the impact of Covid-19 on the wealth management industry. He has emphasized on the importance of investment in technology to overcome the long-term economic effects of the pandemic. It suggests that wealth managers need to develop a omnichannel delivery system in nature for the future. It will combine the expert knowledge and emotional reassurance provided by relationship managers, along with the convenience, ease, efficiency, and scalability of digital advisory solutions.

Faloon & Scherer (2017) found that robo-advisors have large scope for serving passive investors. However, at their present form, clients find it difficult to assess the quality of advice provided by online advisors and they have many doubts and lack trust and knowledge. The study examined that robo advisors lacks individualization and is unsatisfactory in providing an appropriate plan based on risk-profile and needs which act as a major deterrent for customers.

Koh (2018) has studied the shortcomings of online advisors. They include lack of customization for customers, offering simple asset allocation and easy to reach products and no personalized service to clients with different risk tolerance and needs. Due to this reason, the more elite clients like HNIs are likely to stay with traditional asset managers and private bankers.

Greenhalgh (2017) in his article published in Financial Times has discussed that most robo-advisors aim to cater to high earners. Companies like HSBC, RBS and Barclays are developing some form of robo-advice platform for their customers but still many in the industry believe that clients prefer the personal relationship over online providers.

Warchlewska & Waliszewski (2020) in their survey have evaluated online financial advisory services in Poland. They have found that those that view robo-advisors as being more ethical than traditional advisors, had higher probability of recommending them to friends and family. Age played an important role as it was found that older people made more investments. It was also concluded that those with higher levels of education invested higher value of assets and paid less consideration to the fees charged by robo-advisors.

GAPS IDENTIFICATION:

Wealth management's landscape is changing and evolving, and Robo-advisory platforms and Fintech are rising. But Indian investors prefer to use traditional techniques compared to online mode, especially HNIs and UHNIs who like to have face-to-face interaction with their advisors and entrust their large wealth to someone trustworthy to make all their financial decisions.

The view of financial advisors towards Fintech and online wealth advisory has already been studied by many in the past. Still, there is a very minuscule study on the view of individual investors towards these platforms and services. This study aims to understand the perception of investors' perception towards offline and online wealth management services and advisory platforms.

OBJECTIVES OF THE STUDY:

The primary aim of the study is to

- To study the Offline and Online Wealth Management Advisory Services
- To study the attributes affecting the level of satisfaction of the consumers concerning the wealth management advisor services

Hypothesis

1. (a) H_0: There is no significant relationship between Gender and choice of Online Advisory Service.

H_1: There is a significant relationship between Gender and choice of Online Advisory Service

(b) H_0: There is no significant relationship between Gender and choice of Offline Advisory Service.

H_1: There is a significant relationship between Gender and choice of Offline Advisory Service

2. (a) H_0: There is no significant relationship between age and choice of Online Advisory Services

H_1: There is a significant relationship between age and choice of Online Advisory Services

(b) H_0: There is no significant relationship between age and choice of Offline Advisory Services

H_1: There is a significant relationship between age and choice of Offline Advisory Services

3. H_o: There is no significant relationship between the level of satisfaction of investors with their gender and age.

H_1: There is a significant relationship between the level of satisfaction of investors with their gender and age.

4. H_o: There is no significant relationship between attributes of Level of Satisfaction with online and offline Advisory services

H_1: There is significant relationship between attributes of Level of Satisfaction with online Advisory services

RESEARCH METHODOLOGY

Research design

Primary Data source is used to study the investors' perception towards offline and online wealth management service. Secondary data has also been collected from published Annual reports of top wealth management companies in India; from Research papers and wealth advisories websites.

Sample design

A survey was conducted among the North and West India residents through closed-ended questionnaires. Sample size was 200 respondents residing mainly in North and West India. The sampling technique used for the questionnaire is convenience sampling. All the respondents were above the age of 20 and were using wealth management and financial advisory services. The sample size is adequate as per accepted norms.

Questionnaire design

Questionnaire was designed based on Table of Variables. (Table 1) Considering the secondary data, Independent and Dependent Variables were drawn:

Table 1: Dependent and independent variables

Independent Variable	Dependent Variable
Availing of Advisory Services (Offline and Online)	Gender
Availing of Advisory Services (offline and online)	Age
Level of Satisfaction	a. Security b. Accessibility c. Convenience d. Cost e. Transparency e. Algorithm driven f. Automatic Rebalancing

Data design

To analyze the data, suitable statistical tools are used to prove the hypothesis, i.e., Mean, Chi Square, Spearman's Correlation Coefficient, Anova, Regression and Relative Importance Index.

Data Analysis & Interpretation

Descriptive Statistics

	Total Number of Respondents	Mean	Mode
Age	200	40-50	50-60
Gender	200	Male	Male

Table 2: Descriptive Statistics of the respondents

Gender	Total	Percentage (%)
Male	120	60%
Female	80	40%

Table 3: Descriptive Statistics of Age and Gender

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30	37	18.5	18.5	18.5
	30-40	20	10.0	10.0	28.5
	40-50	59	29.5	29.5	58.0
	50-60	68	34.0	34.0	92.0
	Above 60	16	8.0	8.0	100.0
	Total	200	100.0	100.0	

Table 4: Total no. of responses from different age groups

The total number of respondents are 200. The average age is between 40-50, and the Modal range is 50-60. The majority of respondents (60%) were Male, while the remaining were Female (40%).

Inferential Analysis

Based on the responses, Chi-square test is used to determine the relationship between age and gender with offline and online advisory services.

Table 5: Relationship between Gender and Offline & Online Advisory services

Relationship of Gender with Offline & Online Advisory Services			
Pearson Chi square	Value	df	Asymptotic significance
Offline Advisory services	3.441	1	0.064
Online Advisory services	0.94	1	0.332

Considering Gender as Dependent variable and Offline and Online advisory services as Independent variable, it is observed that Pearson's Chi-square value is 3.441 and 0.94 respectively with a degree of freedom 1 and Asymptotic significance (p-value) is .064 and 0.332 respectively. At 5% level of significance, i.e., p-value> Alpha i.e., .05.

Therefore, null hypothesis-1(a) and 1(b) is accepted, for there is no significant relationship between Gender and choice of Advisory Services-Offline or Online.

Table 6: Relationship between Age and Offline & Online Advisory services

Relationship of Age with Offline & Online Advisory Services			
Pearson Chi square	Value	df	Asymptotic significance
Offline Advisory services	12.072	4	0.017
Online Advisory services	2.036	4	0.729

Considering Age as Dependent variable and Offline and Online advisory services as Independent variable, it is observed that Pearson's Chi-square value is 12.072 and 2.036, respectively with a degree of freedom 4 and Asymptotic significance (p-value) is .017 and 0.729 respectively. At 5% significance level, i.e., p-value of relationship between age and online advisory services> Alpha i.e., .05.

Therefore, null hypothesis 2 (a) is accepted there is no significant relationship between Age and Online Advisory Services

However, p-value of relationship between age and offline advisory services< Alpha i.e., .05.

Therefore, null hypothesis-2 (b) is rejected, there is a significant relationship between Age and Offline Advisory Services.

Then, level of satisfaction was tested with age and gender by using Two-way ANOVA test:

Between-Subjects Factors

		N
Gender	1	120
	2	80
Age	1	37
	2	20
	3	59
	4	68
	5	16

Descriptive Statistics

Dependent Variable: If yes, On a scale of 1 to 5, how satisfie

Gender	Age	Mean	Std. Deviation	N
1	1	2.27	2.282	15
	2	2.50	2.321	10
	3	2.52	1.679	33
	4	2.65	1.968	51
	5	2.55	2.207	11
	Total	2.54	1.957	120
2	1	1.64	1.814	22
	2	1.00	1.333	10
	3	2.58	2.139	26
	4	2.47	2.211	17
	5	1.80	2.490	5
	Total	2.05	2.037	80
Total	1	1.89	2.011	37
	2	1.75	1.997	20
	3	2.54	1.878	59
	4	2.60	2.016	68
	5	2.31	2.243	16
	Total	2.34	1.999	200

It is observed from the above table that significance (p-value) is value .009 which is below .05.

Thus, null hypothesis-3 is rejected. There is a significant relationship between the level of satisfaction and Age & Gender.

The figure given below depicts mean plot of age and gender in terms of their level of satisfaction.

Table 7: Relationship between Level of satisfaction and Age & Gender

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
If yes, On a scale of 1 to 5, how satisfied are you with your current financial advisor?	Based on Mean	2.549	9	190	.009
	Based on Median	.845	9	190	.575
	Based on Median and with adjusted df	.845	9	151.149	.576
	Based on trimmed mean	2.525	9	190	.009

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: If yes, On a scale of 1 to 5, how satisfied are you with your current financial advisor?

b. Design: Intercept + Gender + Age_A + Gender * Age_A

The adjacent figure depicts that, mostly, males have a higher level of satisfaction than females, except in the age group of 40-50, where females have a higher level of satisfaction than males.

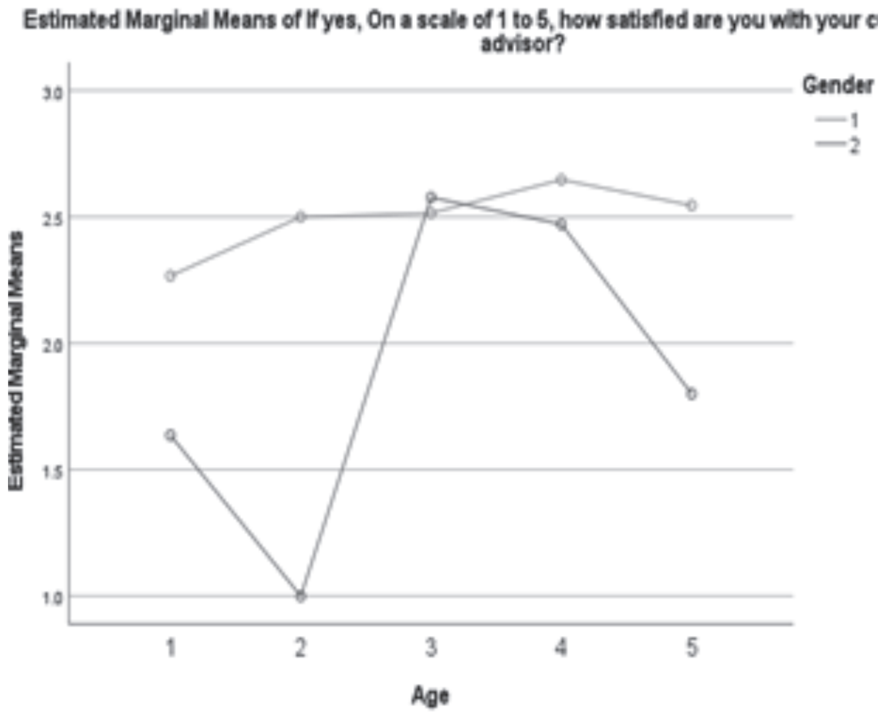

Figure 1: Level of satisfaction w.r.t to Age & Gender

To analyze the relation between various attributes of level of satisfaction of the investors and offline and online wealth management advisory services Spearman's rho is used on the various attributes affecting the level of satisfaction like trust and credibility, privacy, and face-to-face interaction, transparent communication, education & experience.

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Table 8: Correlation between various attributes affecting level of satisfaction of the investors

Correlation			Trust & Creditability	Privacy	Face to face interaction	Transparent communication	Education & Experience
Spearman's rho	Trust & Creditability	Corelation Coefficient		0.808	0.649	0.928	0.855
		Sig.(2-tailed)		<.001	<.001	<.001	<.001
	Privacy	Corelation Coefficient	0.808				
		Sig.(2-tailed)	<.001				
	Face to face interaction	Corelation Coefficient	0.649				
		Sig.(2-tailed)	<.001				
	Transparent communication	Corelation Coefficient	0.928				
		Sig.(2-tailed)	<.001				
	Education & Experience	Corelation Coefficient	0.855				
		Sig.(2-tailed)	<.001				

From the above table it is observed, there is a high positive correlation between all the attributes affecting the level of satisfaction of the investors.

Therefore, Null hypothesis is rejected, there is significant relationship between level of satisfaction and attributes like Trust and creditability, privacy, face to face interaction, transparent communication, education & experience of the financial advisors.

Relative Importance Index **(RII)** is then used to identify the most important criteria among a matrix of attributes that affect offline/online wealth management services and rank the factors in order of importance.

<u>Attributes affecting the level of satisfaction of the investors availing Offline wealth management services.</u>

Table 6: RII of the different attributes affecting the level of satisfaction of the investors availing Offline advisory services

Factor	VeryBad (1)	Bad (2)	Neutral (3)	Good (4)	Very good (5)	Total	Total Number (N)	A*N	RII (Relative Importance Index Vale)	Rank
Trust and Credibility	10	42	147	148	415	762	200	1000	0.762	3
Transparent Communication	10	54	126	164	400	754	200	1000	0.754	6
Education and Experience	8	48	138	192	370	756	200	1000	0.756	4
Cost and fees	12	68	144	192	290	706	200	1000	0.706	10
Personalized service	12	34	150	192	365	753	200	1000	0.753	7
Face-to-face interaction	10	46	168	180	330	734	200	1000	0.734	8
Accessibility	12	34	141	208	360	755	200	1000	0.755	5
Responsiveness	10	36	144	188	385	763	200	1000	0.763	2
Privacy	9	36	150	148	430	773	200	1000	0.773	1
Wide-range of investment products	13	46	174	140	355	728	200	1000	0.728	9

As per RII, the highest ranked attribute, **Privacy** is the most important attribute affecting the level of satisfaction of the investors availing Offline wealth management services followed by responsiveness trust and credibility. The lowest ranked attribute include cost/ fee, diversity of products and face-to-face interaction.

Attributes affecting the level of satisfaction of the investors availing Online wealth management services.

Table 7: RII of the different attributes affecting the level of satisfaction of the investors availing Online advisory services

Factor	Not Important (1)	Slighlty Important (2)	Moderately Important (3)	Important (4)	Very Important (5)	Total	Total Number (N)	A*N	RII (Relative Importance Index Vale)	Rank
Security	9	26	111	148	520	814	200	1000	0.814	2
Accessibility	7	22	105	220	460	814	200	1000	0.814	2
Convenience	7	12	114	224	465	822	200	1000	0.822	1
Low-cost	6	40	132	192	410	780	200	1000	0.78	5
Transparency	10	40	87	196	460	793	200	1000	0.793	4
Low-entry barrier	11	36	144	240	315	746	200	1000	0.746	6
Algorithm-driven Investing	15	40	171	236	245	707	200	1000	0.707	8
Automatic Rebalancing	12	48	171	220	260	711	200	1000	0.711	7

The most important *attributes* affecting the level of satisfaction of Online investors is **convenience**, followed by security and accessibility. The least essential *details* are automatic rebalancing features and the algorithm used for investing.

CONCLUSION

Going forward, the best model is a Multi-channel model that combines both offline and online wealth management to provide customers with the best of both sides and help retain and grow the customer base of wealth managers. Additionally, more research and development need to be done on the AI front to improve online financial advisory platforms' capabilities and service offerings. AI can further be used for Onboarding and Profiling. Companies can develop profiling systems by making use of behavioral analytics. Chatbots can be used to automate major elements in the client interaction process by providing regular updates and progression reports.

Managerial Implications

The findings would help advisory services to understand their clients better. It would help them identify service areas that still need human interaction. It would caution them to reap the benefits of technology expenditure. It would make them mindful of the behavioral issues of wealth management.

Limitations

The scope of the study is limited to Indian investors. Most respondents belong to West and North India, which may affect the study results.

Scope of the future study

The present study can be further extended towards the in-depth study of the wealth management industry development. In the future, with the advancement of women empowerment, there will be an increase in the working and self-dependent females, who will be looking forward for different avenues of investment opportunity. A study can be conducted to focus on the investment pattern of females as compared to males. Studies on hybrid models of wealth management and advisory services that combine the best features of Robo and human advisors can also be conducted. The impact of technological advancement in the profitability of the wealth advisory firms of India can also be studied.

BIBLIOGRAPHY

- 5 Top Robo Advisors for Investing in Indian Stock Market and Mutual Funds. (2020, January 22). Retrieved from Transfin: https://transfin.in/5-top-robo-advisors-for-investing-in-indian-stock-market-and-mutual-funds
- 5Paisa. (n.d.). 5Paisa Opening demat account. Retrieved from 5paisa.com: https://www.5paisa.com/landing/open-demat-account-trading-account-with-most-downloaded-trading-
- Anderson T (2017) More robo-advisors are adding a human touch to their services. http://www.cnbc.com/2017/01/31/more-robo-advisors-are-adding-that-human-touch.html.
- ArthaYantra. (2021). How it works. Retrieved from arthayantra.com: https://www.arthayantra.com/how-financial-services-works
- Baghai , P., Carson, B., & Sohoni, V. (2016, August 5). How wealth managers can transform for the digital age. Retrieved from McKinsey.com: https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/how-wealth-managers-can-transform-for-the-digital-age
- Brunel, J. L. (2015). Goals-Based Wealth Management: An Integrated and Practical Approach to Changing the Structure of Wealth Advisory Practices. Retrieved from https://www.wiley.com/enin/Goals+Based+Wealth+Management%3A+An+Integrated+and+Practical+Approach+to+Changing+the+Structure+of+Wealth+Advisory+Practices-p-9781118995907
- Cypress Wealth management. (2015). Financial Planning. Retrieved from https://www.cypresswm.com/: https://www.cypresswm.com/financial_planning.php
- Deutsche Bank. 2017. "Robo-Advice " A True Innovation in Asset Management." EU Monitor Global Financial Markets.
- Dimitrios, D. S., Mention, A.-L., & Kaiser, A. O. (2019). Wealth Management in Times of Robo: Towards Hybrid Human-Machine Interactions.
- Ernst and Young. (2017). Digital disruption in wealth management. https://www.ey.com/en_in/wealth-asset-management/how-to-transform-wealth-management-through-digital-technology
- Fisdom. (2021). fisdom. Retrieved from https://www.fisdom.com/
  1) Facundo,Sergio,Josse , (2019) "Robo-Advisors: Investing through Machines", Research and Policy Briefs, World Bank Group, https://documents1.worldbank.org/curated/en/275041551196836758/pdf/Robo-Advisors-Investing-through-Machines.pdf
- Friedberg, B. A. (2019, October 1). Pros & Cons of Using a Robo-Advisor. Retrieved from Investopedia: https://www.investopedia.com/articles/personal-finance/010616/pros-cons-using-roboadvisor.asp
- Funds India. (n.d.). ABOUT FUNDS INDIA. Retrieved from fundsindia.com: https://www.fundsindia.com/content/jsp/TopMf.do?utm_source=google&utm_term=funds%20india&utm_medium=cpc&utm_campaign=Beta-Branded-General&utm_content=Brand&gclid=CjwKCAiAirb_BRBNEiwALHlnD14auDocPMGjiG6ldjts-oqmODIX7t8n4vnl2zWYdplTLZvXE9hsnhoCYhAQAvD_BwE
- Goal wise. (n.d.). About Us. Retrieved from Goalwise.com: goalwise.com/about-us
- Greenhalgh, H. (2017). Wealth Managers shun the digital revolution. Financial Times. Retrieved from https://www.ft.com/content/0c3f310a-4d2a-11e7-a3f4-c742b9791d43.
- Groww. (n.d.). Explore. Retrieved from Groww: https://groww.in/
- Gupta, M. (2020). Re-imagining financial advisory in a virtual setup: transforming the client experience. Infosys Consulting.
- H., M. (2020, May 19). Everything You Need To Know About Wealth Management. Retrieved from Minty: https://www.mintyapp.in/blog/everything-you-need-to-know-about-wealth-management/
- Harness, N., Chatterjee, S., & Salter, J. (2014). Financial Planning for the Middle Market. Journal of Financial Planning, 27(1).

- Hübner, G. (2018). Will robo-advice make wealth management tasteless. Revue Bancaire et Financière, 6.
- Kahler, R. 2017. "What I Learned in India About Financial Advice." Money
- Kobler, D. D., Hauber, F., & Ernst, B. (2015, June). Millennials and wealth management: trends and challenges of the new clientele. Inside Magazine.
- Koh, K. P. (2018). Robo-advisors and wealth management. The Journal of Alternative Investments.
- Kotak Wealth Management. (2017). Top of the Pyramid. https://www.kotak.com/content/dam/Kotak/about-us/media-press-releases/2018/seventh-edition-of-top-of-the-pyramid-report.pdf
- Lee, J., & M.S. (2003). FACTORS AFFECTING INTENTION TO USE ONLINE FINANCIAL SERVICES. https://dblp.uni-trier.de/db/journals/ecra/ecra8.html#Lee09
- MarketsandMarkets. (n.d.). HNWI in Indian Wealth Management Industry - Trends, Analysis and Forecast (2010-2015). Retrieved from MarketsandMarkets.com: https://www.marketsandmarkets.com/PressReleases/indian-wealth-management.asp
- MEDICI Global. (2020, September 26). The Evolving Robo-Advisory Landscape In India. Retrieved from Bloomberg Quint: https://www.bloombergquint.com/opinion/the-evolving-robo-advisory-landscape-in-india
- Michael, B., & Andrew, C. (2015). Wealth Management and Private Banking Services in Developing markets. the journal of investment consulting, 16(1).
- Murthy, G. (n.d.). Wealth Management Industry In India. Retrieved from Consultants Review: https://www.consultantsreview.com/cxoinsights/wealth-management-industry-in-india-vid-516.html
- Oliver Wyman. (2020). Global Wealth Management Report. Morgan Stanley. https://www.oliverwyman.com/content/dam/oliver-wyman/v2/publications/2020/jun/Global-Wealth-Management-Report-2020.pdf
- Opolski, K., & Potocki, T. (2011). The use of behavioral finance in the wealth management process. https://www.econstor.eu/handle/10419/66764
- Overton, R. H. (2007). An empirical study of financial planning theory and practice.
- Patel, H. (2019, June 24). Robo-Advisors: Brand New Way To Invest. Retrieved from Outlook Money: https://www.outlookindia.com/outlookmoney/magazine/story/robo-advisors-brand-new-way-to-invest-209
- Rasiwalaa, F., & Kohlib, B. (2019). A Study on the Awareness and Perception of Robo Advisory Services Among Investors in Pune City.
- Reynolds, M. E. (2007). The Impact of Internet-based financial planning tools of financial planners.
- Santacruz L. (2018). The Journal of Wealth Management Winter, 21 (3) 95-115; DOI: https://doi.org/10.3905/jwm.2018.1.066
- ScripBox. (n.d.). Scripbox-How it works. Retrieved from scripbox.com: https://scripbox.com/pages/how-it-works
- Sironi, P., 2016. My Robo Advisor was an iPod–Applying the Lessons from Other Sectors to FinTech Disruption. The FinTech Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries, pp.152-154.
- Singh, I., & Kaur, N. (2017). Wealth Management through Robo Advisory. International Journal of Research - Granthaalayah, 5(6),33-43
- Tandon, S. (2019, October 16). Robo Advisory for Investments in India. Retrieved from Groww: https://groww.in/blog/robo-advisory-india/
- Tandon, S. (n.d.). Robo Advisory for Investments in India. Retrieved from Groww: https://groww.in/blog/robo-advisory-india/
- TechSci Research. (2020). India Wealth Management Market By Advisory Mode (Human Advisory, Robo Advisory & Hybrid), By Business Function (Financial Advice Management, Portfolio, Accounting & Trading

Management & Others), By Deployment Mode (On-premises & Cloud), By Enterprise Size. Retrieved from TechSci Research: https://www.techsciresearch.com/report/india-wealth-management-market/4226.html

- Ting, H.-I. (2017). Factors Affecting Wealth Management services: from investors' and advisors' perspectives. The Journal of Wealth Management, 20(1).
- Top10stockbroker. (n.d.). Robo Advisory – Concept, About Robo Advisors, Features, Services, Charges, Evaluation, & more. Retrieved from Top10stockbroker.com: https://top10stockbroker.com/robo-advisory/
- Upwardly. (n.d.). Upwardly Advantage. Retrieved from Upwardly.in: https://www.upwardly.in/en/about-us/upwardly-advantage?src=header-h4-l1
- V., P. J., Dr, B. D., & Wainwright, T. (2010). Scoping the Private Wealth Management of the High Net Worth and Mass Affluent Markets in the United Kingdom's Financial Services Industry. London.
- https://www.consultantsreview.com/cxoinsights/wealth-management-industry-in-india-vid-516.html
- https://asianprivatebanker.com/india-2019-aum-league-table
- https://www.statista.com/statistics/558610/number-of-mobile-internet-user-in-india/
- https://www.statista.com/outlook/dmo/fintech/personal-finance/robo-advisors

Impact of Exchange Rate on India's Foreign Trade

Ranjusha. N & Nandakumar V.T.*
Devasia M.D.**
N. Karunakaran*

ABSTRACT

The liberalisation and globalisation policies adopted by the countries of the current century have opened new vistas and accelerated the speed of trade and commerce over the borders on the globe. Every country in the world is always keen to maintain its trade relationship with the rest of the world. There was a rapid increase in export and import of India recently. The country's export was worth ₹32558 crores in 1990-91, and it increased to a level of ₹2154339 crores in 2020-21. In contrast, its import increased to ₹2909937crores in 2020-21 from mere ₹43193 crores. Most of the countries are sovereign, each of which has its currencies. The steadiness of the exchange rate is a significant concern for every economy as it limits the value and volume of a country's international trade. The value of Indian currency in terms of US Dollar $1:₹17.49 in 1990 had depreciated to an all-time high of a rate of $ 1: ₹74.09 in 2020-21. This paper will inspect the effect of exchange rate volatility on India's exports and imports using the Johansen co integration method. It is observed that a long-run relationship exists between the exchange rate and India's foreign trade.

Keywords: Foreign trade; exchange rate; volatility; unit root; Co integration

1. INTRODUCTION

No country today is self-sufficient in itself and so engage in trade and commerce with foreign countries. The history of modern trading can be traced back to exploration, discovery, mercantilism and imperialism. The liberalisation and globalisation policies adopted by the countries of the current century have opened new vistas and accelerated the speed of trade and commerce over borders on the globe. The countries can export their surplus and meet the scarce through imports, which will be reflected in their trade balance, say BoP account [7]. The rest in the Current Account component of the BOP means that country's export earnings exceed the import payments, and vice versa. Among the factors, the exchange rate of a currency is a significant determinant of export and import and thus the net trade balance. Most countries are sovereign, each of which has its currencies. Hence, the exchange rate-either flexible or rigid, performs as an indicator of the country's economic robustness. Shaikh and Hongbing (2015) studied how the exchange rate fluctuations affected the trade flows in countries like China, Pakistan and India. They observed that the exchange rate volatility is negatively associated with the Chinese exports and negatively associated with India and Pakistan's total trade volume. The exchange rate stability is at most important for every country since it regulates the country's value and volume of international trading. It influences the country's import, export, and direct investment and

* Dr. Ranjusha N & Dr. Nandakumar. V.T, Perumanna, Kozhikode (Dist), Kerala, India, ranjushannair@gmail.com, vtnandakumarclt@gmail.com

* Dr. Devasia. M. D, Associate Professor and Research Guide in Economics, Department of Economics, Nirmalagiri College, Kuthuparamba, Kannur, Kerala, India, drdevasiamd@gmail.com

*** Dr. N. Karunakaran, Principal and Research Guide in Economics of Kannur University, People Institute of Management Studies (PIMS), Munnad-Post, Chengala (Via), Kasaragod, 671541, Kerala, India, E mail: narankarun@gmail.com

penetrates several service sectors viz; banking, insurance, education, tourism, etc. It means that the performances of macroeconomic variables are governed mainly by the exchange rate. In a similar study, Hayakawa and Kimura (2008) and Choudhary et. al., (2016) could find a long-run relationship between exchange rate and export and concluded that the exchange rate volatility discouraged the intra East Asian trade over the period 1992 – 2005.

As part of India's economic reforms, the country's exchange rate system has been revised in the early 1990s. After that, it became more volatile as the country has adopted the market determined Exchange Rate System. The term exchange rate volatility indicates a situation of risk arising from the appreciation/depreciation of a currency's value, which affects the profitability of foreign traders. It is in this context Panda and Mohanty (2015) studied the effect of exchange rate volatility on India's export. They have utilised time series data 1970-71to 2011-12 and applied Johansen co integration technique and revealed that India's export volume is negatively affected by its own real exchange rate volatility. A similar study by Srinivasan and Kalaivani (2013) showed that the exchange rate volatility negatively impacts India's export sector both in long and short run. Sharma and Tiwari (2015) investigated the effect of exchange rate fluctuation on India's balance of trade applying the augmented dickey fuller test and OLS. They predicted that an appreciation of currency causes a fall in trade balance and vice versa. While Gondaliya and Dave (2015) studied the effect of export and import on India's exchange rate and showed a positive relationship between export and exchange rate while it is harmful on import. In this context the present paper attempts to examine the extend of exchange rate variability (Rupee-Dollar rate) on India's exports and importssince1990.

2. MATERIALS AND METHODS

Monthly time-series data extracted from Data Base on Indian Economy (DBIE) on the exchange rate (Rupee/Dollar), exports and import April 1994 to July 2021is the database of the present study. The tools like Unit Root test, Johansen co integration method, Vector Error Correction Model, Granger Causality Test, and Impulse Response Function are applied to find the relationship between the variables and expose the impact of exchange rate volatility on India's foreign trade.

3. RESULTS, ANALYSIS AND DISCUSSION

3.1. Trend in Exchange Rate and Foreign Trade

India was following a closed economy prior to 1991by imposing average tariffs exceeding 200 per cent and extensive quantitative restrictions on imports. Foreign investment was strictly restricted to allow only Indian owned businesses [1].In 1991 under the New Economic Policy, the government of India has introduced a series of economic reforms to liberalise, privatise and globalise the economy. The significant trade policies, including simplification of trading, removal of quantity restrictions and reduction in the tax rates, were enacted in the post-1991 period [5]. Consequently, the exports from 1991 to 2018 increased, registering 1698 percent growth from 1991-92. In value terms, the country's export was worth ₹32558 crores in 1990-91 has increased to a level of ₹2154339 crores in 2020-21, as shown in table 1. The country's import increased to ₹ 2909937crores in 2020-21 from mere ₹ 43193 crores.

Since 1990-91 India's trade balance (negative or BOP deficit) increased to a peak of ₹268727 crores in 2006-07. The period 2010-11 and 2014-15 witnessed a significant dip and the trend continued till 2018-19, making it an all-time low level equal to ₹1286948 crores. The improvement in the value in 2020-21 might be due to the Corona Virus pandemic spread out in the world.

Table1: Exchange Rate Movement and Foreign Trade since 1990-91

Year	Exchange Rate	Exports (in Cr of Rs.)	% Changes	Imports (in Cr of Rs.)	% Changes	Trade Balance (in Cr of Rs.)
1990-91	17.4992	32558		43193		-10635
1994-95	31.3742	82674	153.93	89971	108.30	-7297
1998-99	41.2677	139753	69.04	178332	98.21	-38579
2002-03	48.5993	255137	82.56	297206	66.66	-42069
2006-07	45.3070	571779	124.11	840506	182.80	-268727
2010-11	45.7262	1142922	99.89	1683467	100.29	-540545
2014-15	61.0295	1896445	65.93	2737087	62.59	-840641
2018-19	68.3895	2307726	21.69	3594675	31.33	-1286948
2020-21	74.0996	2154339	-6.65	2909937	-19.05	-755597

Source: Handbook of Statistics of Indian Economy

The growing deficit in trade balance is not a positive indicator of the country's economic progress, which causes for severe BOP crisis to the nation.

The post-reform period also experienced a drastic change in the foreign currency market. The value of the currency in terms of US Dollar had depreciated to a new high. It is argued that the steadiness of exchange rate is vital to every economy since it governs the value and volume of international trading. The value of Indian currency in terms of US Dollar $ 1: ₹17.49 in 1990 had depreciated to an all-time high of a rate of $ 1: ₹74.09 in 2020-21. As stated above, the objective of the present study is to examine a causal relationship between export and import with the exchange rate and find whether the change in the exchange rate does have a bearing on export and meaning of the country. The exchange rate of India concerning US Dollar is used as the independent variable.

3.2. Unit root tests

Generally, most time-series data are stochastic, meaning the observations are not stationary. The proper tests are required to detect the unit root: ADF, PP, DF-GLS, and KPSS test. Figure 1, suggest that each of them are non-stationary.

Table 2: The Result of Unit Root Test

Augmented Dicky Fuller Test		
Variables	**Level**	**FD**
LER	-1.013187 (0.7494)	-13.48105 (0.0000)*
LIMP	-1.474714 (0.5454)	-27.43138 (0.0000)*
LEXP	-0.803889 (0.8163)	-5.025888 (0.0000)*
Phillip-Perron Test		
Variables	**Level**	**FD**
LER	-0.949392(0.7716)	-13.54164(0.0000)*
LIMP	-1.414079(0.5757)	-27.77610(0.0000)
LEXP	-1.027406(0.7443)	-37.40045(0.0000)*

* Significant at 5% level

The Augmented Dicky Fuller and Phillip Perron tests are applied to detect the presence of unit root in the series. When the critical value exceeds the t-value, it can be concluded that the series doesn't contain any unit root or it is stationary. At the level, the variables such as LER, LIMP, LXP include unit root, and hence it is not stationary, i.e., all the variables are observed stationary at its first difference. Table 2 illustrates the result. The PP test substantiates the result. Hence both the ADF test and PP test reveal that the variables viz; LER, LEXP, LIMP are I(1) series and therefore eligible to proceed co integration techniques.

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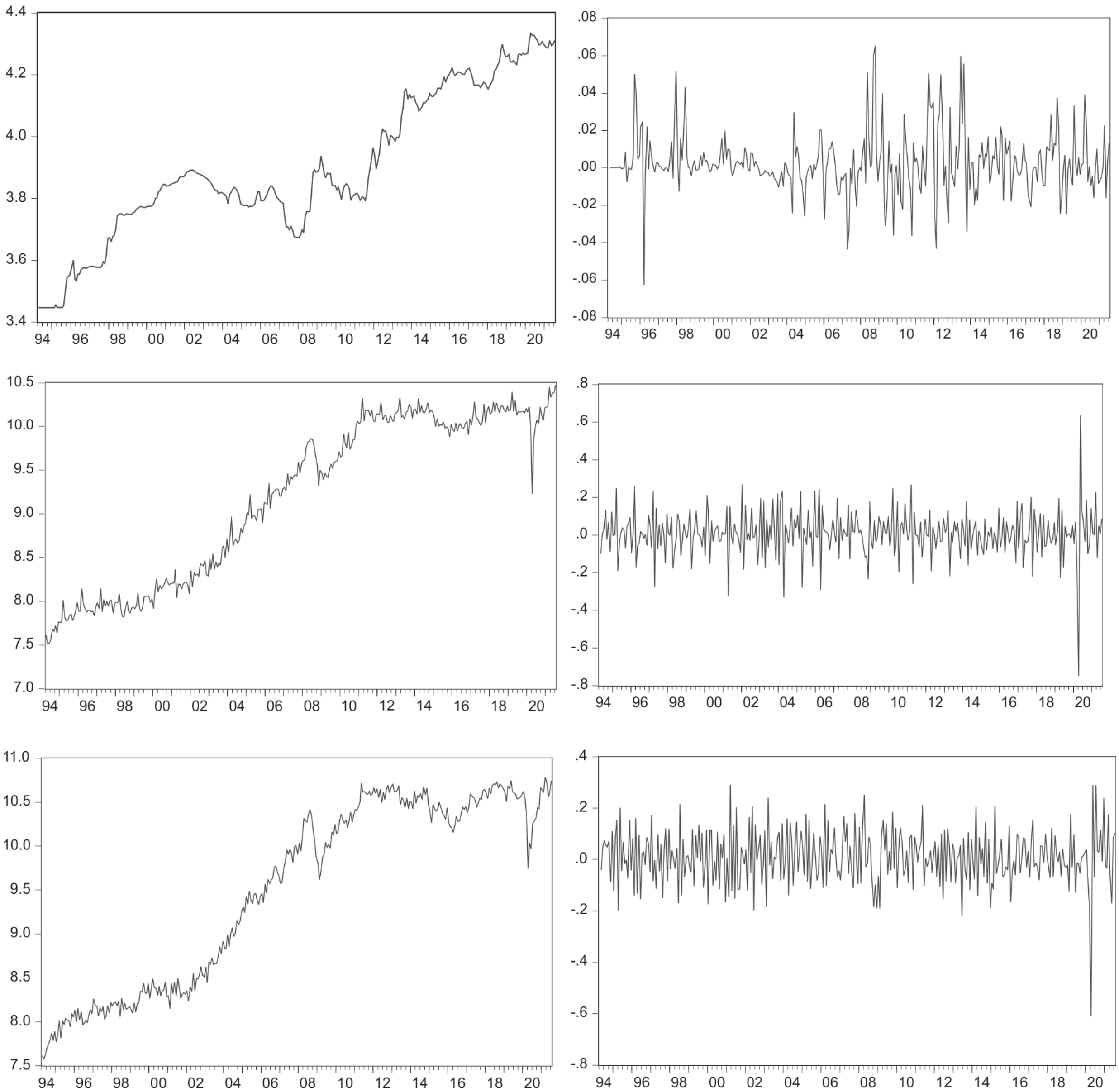
Figure1: Trend of Exchange Rate, Export and Import



Source: Handbook of Statistics of Indian Economy

Table 3:The Result of the Cointegration Analysis

Null Hypothesis	Alternative Hypothesis	Eigenvalue	Trace Statistics	Max-Eigen Statistics
r = 0	$r \geq 1$	0.104257	42.58116 (0.0010)*	54.68852(0.0000)*
$r \leq 1$	$r \geq 2$	0.017053	7.018300 (0.5755)	20.63262(0.0586)
$r \leq 2$	$r \geq 3$	0.004518	1.462764 (0.2265)	12.96476(0.0794)

* *denotes rejection of null hypothesis at df 5%level, figures in brackets are p-value*

The co integrating equation has the following form:

$$LIMP_{t-1} = 0.022854 + 0.329696\ LER_{t-1} - 1.171722\ LEXP_{t-1.} (1)$$
$$\quad (0.07972) \qquad (0.01999)$$
$$\quad [4.13585] \qquad [-58.6025]$$

$$LEXP_{t-1} = 0.019505\ 0.281378\ LER_{t-1}\ 0.8534451\ LIMP_{t-1.} (2)$$
$$\quad (0.06492) \qquad (0.01462)$$
$$\quad [-4.33434] \qquad [-58.3782]$$

Equations 1 and 2 shows that LIMP is positively related to LER and negatively with LEXP. When the exchange rate depreciates by 1%, LIMP will be collapsed to 0.32%. Similarly, LEXP is negatively related to LER.

3.4. Vector Error Correction Model

When two or more variables are cointegrated, the result implies whether there exists a long-run association between the variables. But it doesn't deal with the short-run dynamics. Hence, the Vector Error Correction Model is applied to estimate such short run dynamics in the model. The Error Correction Term indicates the extend of deviation from the long-run equilibrium. It acts as an adjustment parameter that explains a portion of disequilibrium corrected in subsequent periods. The result of the Error Correction Model is given in table 4.

Table 4:The Result of Vector Error Correction Model

Error Correction:	D(LEXP)	D(LER)	D(LIMP)
CointEq1	-0.071141 (0.08195) [-0.86815]	-0.002418 (0.01214) [-0.19920]	0.377806 (0.07400) [5.10537]
D(LEXP(-1))	-0.409437 (0.08482) [-4.82689]	-0.027795 (0.01256) [-2.21234]	0.184206 - (0.07660) [-2.40475]
D(LEXP(-2))	-0.264213 (0.07245) [-3.64678]	-0.005257 (0.01073) [-0.48986]	-0.072849 (0.06543) [-1.11344]
D(LER(-1))	-1.060040 (0.39138) [-2.70848]	0.317750 (0.05797) [5.48148]	0.628554 - (0.35344) [-1.77841]
D(LER(-2))	-0.125809 (0.38814) [-0.32414]	-0.117505 (0.05749) [-2.04401]	0.015589 - (0.35051) [-0.04448]
D(LIMP(-1))	-0.220240 (0.08032) [-2.74201]	0.022725 (0.01190) [1.91023]	-0.291541 (0.07253) [-4.01938]
D(LIMP(-2))	0.045382 (0.07625) [0.59519]	-0.000543 (0.01129) [-0.04809]	0.088354 (0.06886) [1.28317]
C	0.019733 (0.00612) [3.22538]	0.002217 (0.00091) [2.44635]	0.015499 (0.00552) [2.80522]

3.5. Granger Causality Test

A variable, say X, is said to be Granger cause to another variable, say Y, if the past and the present value of X can help to predict the value of Y. The causality test is conducting the Block exogenity wald test. The Vector Error Correction Granger Causality Block Exogenitywald test is shown in table 5.

Table 5: The Results of Granger Causality Box Exogeneity Test

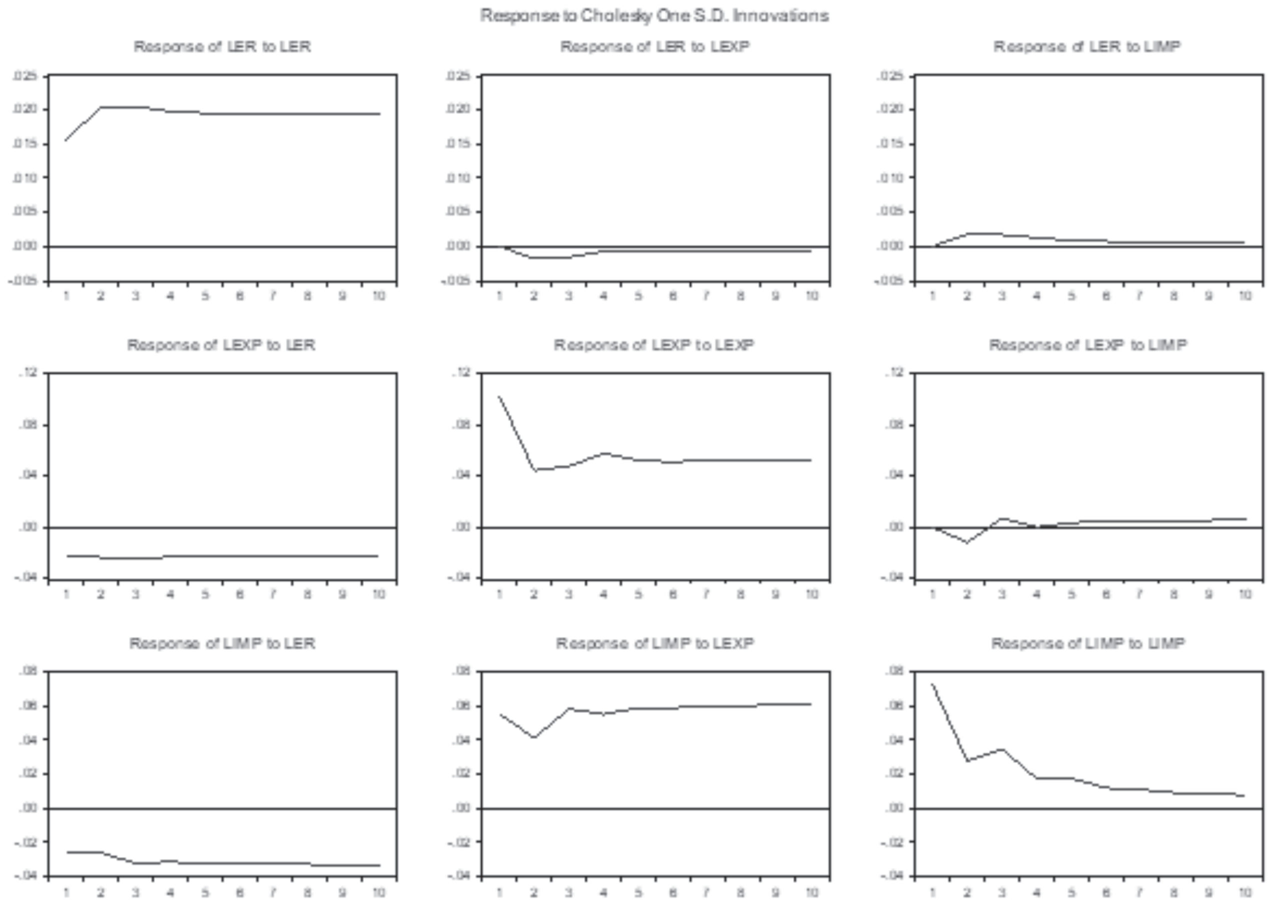
	Dependent Variable	Independent Variable	chi-square	probability	Direction of causality
I	LEXP	D(LER)	8.433768	0.0147	Yes
		D(LIMP)	10.82346	0.0045	Yes
		All	16.38628	0.0025	Yes
II	LIMP	D(LER)	3.426851	0.1802	No
		D(LEXP)	5.831221	0.0542	No
		All	9.351199	0.0429	Yes

It is observed that LER Granger cause LEXP. Similarly, LIMP also granger cause to LEXP. At the same time, LER and LER don't granger cause to LIMP. When all the variables are taken together,it Granger cause to LIMP.

3.6. The Impulse Response Function

The Impulse Response function sketches how far a typical shock to any single variable affects the VAR system's dependent variable. The result of the Impulse Response Function substantiates the findings. The standard deviation shock into the exchange rate has a negative impact on LEXP. A standard deviation shock on LER positively

Figure 2: Results of Impulse Response Function



impacts LIMP and persists for the whole period.

4. CONCLUSION

Foreign trade is one of India's most significant factors of economic development. It results in the outflow and inflow of foreign exchange from one country to another, consisting of the inward and outward movement of goods and services. The year 1991 laid an essential breakthrough in the history of the Indian economy that witnessed a successful transition of India from a controlled and slow-growing economy to a liberalised and open economy. Consequently, India has now found a prominent place amongst the fastest growing economies globally. Taking this momentum of growth trajectory over the last 30 years of her development experiment, India's Foreign Trade has undergone absolutely a dramatic change both in terms of its composition and direction. This is due to the introduction of reforms to liberalise and globalise the Indian economy and foreign trade policy, which was a critical element in the so-called LPG structural and economic reforms. Finally, the empirical analysis exposed a long-run association between the trade variables viz; export and import, and the exchange rate.

The exchange rate is a critical macroeconomic variable that affects the major macroeconomic indicators. It influences the decisions of exporters, importers, foreign investors and other economic agents. It is a crucial component of the modern financial system and is treated as a barometer of the economic robustness of a country. Hence, exchange rate stability is a significant concern for every economy. The exchange rate system of India has undergone rigorous changes over time and consequently affected the volume and value of India's international trade and transactions. Since 1990-91 India's trade balance was negative, increasing to a peak point in 2006-07. The period 2010-11 and 2014-15 witnessed a significant dip, and the trend continued till 2018-19. The growing deficit in the trade balance is not a positive indicator as it causes for severe BOP crisis in the nation. The post-reform period also experienced a drastic change in the foreign currency market. The currency's US dollar value had depreciated to a new high. In short, many factors are affecting the demand and supply of foreign exchange and so the exchange rate, thus, all economies are trying to attain stability in the exchange rate.

REFERENCE

[1] Devasia M D and Karunakaran N (2021), "Petroleum price volatility on macroeconomic indicators in India", **SMS Journal of Entrepreneurship and Innovation,** Vol. 7, No. 2, pp: 71-81

[2] Gondaliya, V. and Dave, P. (2015). The impact of exports and imports of exchange rates in India, International Journal of Banking, Finance & Digital Marketing, Vol.1, Issue. 1, pp. 01-08.

[3] Hashmi, S.H. and Khan, M.A. (2016). Exchange rate and foreign trade: a comparative study of major south Asian and South-East Asian countries, Elsevier Journal, May 2016, pp.85-93.

[4] Hayakawa, K. and Kimura, K. (2008). The effect of exchange rate volatility on International trade in East Asia, ERIA discussion paper series.

[5] Joby Thomas and Karunakaran N (2021), "Direction of India's rice exports in the post-liberalisation era", Journal of Management Research and Analysis, Vol. 8, No. 3, pp: 117-121

[6] Panda, S. and Mohanty, R.K. ((2015). Effects of exchange rate volatility on exports: evidence from India, Vol. 35, Issue. 1.

[7] Rema R and Karunakaran N (2019), "Trend and Determinants of Non- Performing Assets in India", Journal of Management Research and Analysis, Vol. 6, No. 4, pp:174-177

[8] Shaikh, A.S. and Hongbing, O. (2015). Exchange rate volatility and trade flows, evidence from China, Pakistan and India, International Journal of Economics and Finance, Vol. 7, No. 11.

[9] Sharma, P. and Tiwari, A. (2015). Fluctuating exchange rates and balance of trade in India: An empirical study, Prestige Journal of Management and Research, Vol. 2, Issue. 2.

[10] Srinivasan, P and Kalaivani, M. (2013). Exchange rate volatility and export growth in India: An ARDL bound testing approach, Decision science letters 2, Growing science, pp.191-202.

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A Study of Emerging Economy in the Era of Vocal for Local Economics Principle

Alok Johari*

ABSTRACT

India is MSMEs oriented economy. During a pandemic, MSMEs play a significant role in providing Employment and revenue. To recognise hon'ble prime minister appeals local for vocal has brought confidence in Indian brands to prove their mettle in Global market.The government has declared Rs 20 lakh crore stimulus package to keep the economy's pace to benefit MSMEs and create a start-up ecosystem. The present government self-reliant economy with the objective of "Atmnirbhar Bharat" is to promote local brands, supply chain, indigenous technology to achieve a US $5 trillion economies so many multinational companies compel to change their marketing, sales, product strategies to compete with local brands.

About 54% of the workforce is youth. This committed workforce builds a new age economy through various modes like E-Commerce, online trading, teleshopping, web technologies but excellent profit driver product is the indigenous product. It is estimated that by 2025 the E-commerce market will be Rs 25 million. The prime contribution to the economy comes from MSMEs, so the new Era of the emerging economy is local manufacturing products.

The research design is descriptive/exploratory based on secondary data collected through various published sources like journals, newspapers, and annual reports. Since there is more than two variable, the researcher used a linear/ multiple regression equation.

To achieve the objective of "Atma Nirbhar Bharat" and the importance of vocal for local the government must Restructured Regional imbalance through different Government policies like vocal for local and Rational stimulus package.

Though this present study gives insight views of future and sustainability of MSMEs product but this research paper used to publish data (annual report) which might be different collect data from various agencies.

This paper is based on published data but all the computation is original through various statistical tools.

Keywords: Indigenous, Import orientation, Balance of Payment, ReExport

INTRODUCTION

It is a well-known figure that MSMEs is the backbone of the Indian economy. About 35% Employment provided by the unorganised MSMEs sector nearly 40% , export of total export comes from MSMEs sector. during a pandemic situation, MSMEs plays a vital role in depressing the economic crisis to establish the importance of MSMEs Government of India revised MSMEs Definition which is as follows

Size of MSME's	Investment in Equipment, Plant and Machinery	Turnover
Micro	Inr 1 Crore	Inr 5 Crore US
Small	Inr 10 Crore	Inr 50 Crore
Medium	Inr 50 Crore	Inr 250 Crore

Source – Msme Portal

The revised definition may attract new MSMEs Entrepreneurs, more investment, output and Employment in the Economy **(Vaishnav & Surya, 2020).** The change of definition is to stir the

* Research Scholar (Department of Commerce) Sahu Jain (PG) College (MJP Rohilkhand University Bareilly 226007) Nazibabad District Bijnore https://orcid.org/0000-0001-5890-4166 E- MAIL - alok_johari@rediffmail.com

economy forward, and the economy has to reinforce its enterprises in the MSMEs sector **(Sipahi, 2020).** This is imperative to build liquidity support to address cash flow issues, protect jobs through varied schemes, ensure business growth, and measures to expand trade opportunities by building their capacities (**Chauhan, 2020; WTO, 2020).** India faces a real challenge in a pandemic situation (**Arundhati, Patnaik and Satpathy (2020)** to preserve the identity of 63.4 million informal MSMEs, these are the majority of micro-enterprises **(Prasad & Mondal, 2020).** The solution to a better economy is to adopt and recognise vocal products. For example, many raw materials are available in North East for cane industries.The MSMEs of cane industries is situated mainly in Bareilly (Uttar Pradesh MSMED Agra Region).

LITERATURE REVIEW

Hon'ble PM (Business standard Dec 27. 2020) appeals to all who should be inclined towards local products. Blindly used daily imported product economy made us captive. So let us adopt an alternative economy and resolve to use domestic products. which is produced by the hard work of domestic manufacturers.

Sanjeev Ahluwalia analyse that the government has declared a Rs 20 Trillion ($260 billion) stimulus "package" – around 10.5% of the GDP of Rs 190 trillion to the MSMEs to the struggling MSMEs (micro, small and medium industry).Most of the MSMEs are not competitive and depends on government support, for example, agriculture, which employs around 50% of the total workforce of 450 million.

Udayan Chakraborty, the researcher, found out that Indian problems of Local democracy can only be solved through a purely Indian perspective, and therefore the vocalisation of the economy is addressed through the local economy

Rochin Deb – presents a concrete example of the regional imbalance of the northeast economy with the mainland of India. A lot of raw material is available in the northeast to the domestic industries situated in UP.. the present government, chalk out a new strategy to overcome of this problem has taken new aspirational economy ***ONE DISTRICT ONE PRODUCT*** programme to encourage and innovative product to boost and sustain a northeast economy.

Dr. Sarika Srivastava– analyse that the fight against the pandemic COVID-19 has thought a lesson that only indigenous product can be prime driver against all odd.It is joint efforts of government and citizen of the country to buy 'Made in India' products and to create demand 'vocal for local'.If producers and consumers of India undertake appeal of the Prime Minister to appreciate the domestic business, the Indian economy can be converted into a US$5 trillion economy up to 2025.

Priyanshi Srivastava – highlight that No doubt "Make in India" created many job opportunities in India but being a member of WTO. Investment and imports from china have given a formidable challenge to the domestic companies so the Indian economy neither denied the importance of Chinese investment nor boycotted Chinese products. The result is since the balance of trade is still in favour of China. Statistics show that, in 2018-19 India's export to China were us $16.7 billion while imports were us$ 70.3 billion. So the balance of payments creates a lot of vacuum. this vacuum provides better opportunities for a domestic manufacturer.

OBJECTIVES

1. To find out the importance of the domestic product in the creation of employments .
2. To access the importance of traditional(local) products in national economics.

Hypothesis

H0 = growth of domestic product significant contribute in Employment

H1= growth domestic product is not significantly contribute in Employment

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Table 1. Contribution of MSMEs in Country's Economy at the Current Price (in Rupees crore).

Year	MSMEs GVA	Growth (%)	Total GVA	Share of MSMEs in GVA (%)	Total GDP	Share of MSMEs in GDP (%)
2011–2012	2,622,574	–	8,106,946	32.35	8,736,329	30.0
2012–2013	3,020,528	15.17	9,202,692	32.82	9,944,013	30.4
2013–2014	3,389,922	12.23	10,363,153	32.71	11,233,522	30.20
2014–2015	3,658,196	7.91	11,504,279	31.8	12,467,958	29.34
2015–2016	4,059,660	10.97	12,574,499	32.28	13,771,874	29.48
2016–2017	4,502,129	10.9	13,965,200	32.24	15,391,669	29.25
2017–2018	5,086,493	12.98	15,513,122	32.79	17,098,304	29.75
2018–2019	5,741,765	12.88	17,139,962	33.5	18,971,237	30.27

Source: RBI and PIB/DGCIS.

H0=Importance of traditional products is significant in national economics

H2=Importance of traditional products is not significant in national economics

Research Methodology – The methodology used in this article is descriptive cum explorative Research methodology secondory data of establishment of units (lakhs) and employments (lakhs) used for the analysis is taken from the period of 1991-1992 to 2020-21. The secondary data related to the share of MSMEs in total GDP and the share of MSMEs in GVA to total GVA is taken from 2011-12 to the year 2018-19. Since to increase Employment, it is imperative to boost exports, no MSMEs units and total export.Predict the future of employment researcher uses multiple regression analysis with the dependent variable and independent variable to find out Employment and Economic Development.

ANALYSIS

The Growth of MSMEs since 20011 is significant in 2012-2013 GVA growth against 2011-2012 is 15.17 but in the later year, it reduces in a continuous coming year till 2018-2019 as India" GDP is touching 2 trillion in the year 2017-18, the contribution of MSMEs in GDP is 29.75 by the end of 2016-17 though it reduces some extent from 2011-12, but contribution is significant 30.27 in the year 2018-19.

Employment is an indicator of export. If export increases, that will increase employment opportunities from 2012-13. % share in Export of MSMEs is 43%. It increases significantly by 49% by the financial year 2017-18, it indicates better employment opportunities and earning precious foreign currency.

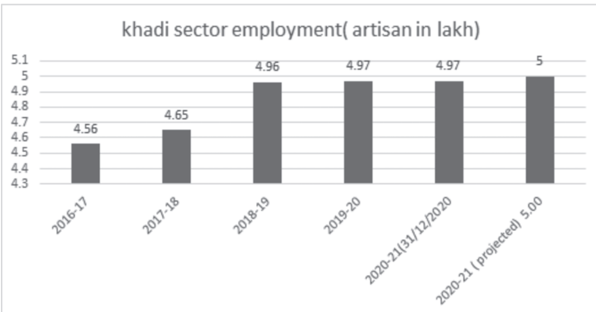
Table 2 Share of MSMEs Export in Total Export (Amount in USD Million).

Year	Total Export	Exports by MSMEs	Share of MSMEs Export in Percentage (Rounded off)
2012–2013	300,400	127,992	43
2013–2014	314,415	133,313	42
2014–2015	310,352	138,896	45
2015–2016	262,291	130,768	50
2016–2017	275,852	137,068	50
2017–2018	303,376	147,390	49

Source: RBI and PIB/DGCIS.

Khadi is the prime sector that provides significant employment opportunities to the Artisan. in 2016-17, only 4.56% of artisans were Employed in the khadi sector, which slightly increased 4.65 % in 2017-18 in the straight year Growth is significant it touches 5% (which is projected) in the financial year. Since khadi is traditional domestic industries.

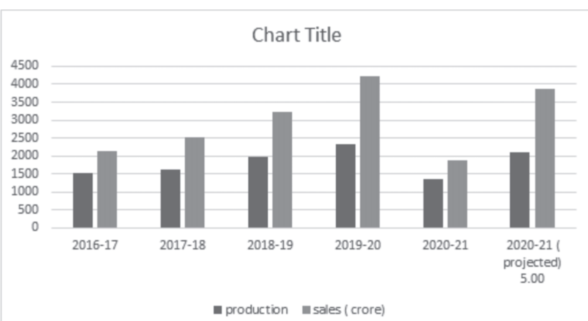
Chart - 1



Source: RBI and PIB/DGCI

The production and sales in a rural area are significant. Sales (crore) is growing significantly in over the year against output. Since sales are increasing continuously in over the year. It provides a large no of employment opportunities and also attracts investment. The revised definition of MSMEs is based on turnover which play a significant role in developing new indigenous, domestic local rural dominated economy.

Chart - 2



Source: RBI and PIB/DGCIS.

Establishment of MSMEs unit is growing continuously over the year from 1991-92 to the 2021 (projected) to strengthen MSMEs government has revised MSMEs Definition in 1991 MSMEs provide 165.99 (lakhs) Employments, but in the year 2020-21 the employment reach 1109.9 (lakhs) (projected) the importance of MSMEs in the local economy is significant.

Since MSMEs is the backbone of the Indian economy to get over the problem of Employment, Regional imbalance and disparity among rural and urban Economics the government has allocated sufficient budget to the MSMEs and given stimulus package to the MSMEs in pandemic duration. Up to December 31/12/2020). The allocated budget is 7.28 crore, and the government released 5.06 crore funds in 2019-20. The budget allocation is ten crores, and the funds released are 10 .00 crores. which is quite significant.

Table 3: An MSMEs budget and funds released (Amount in Crore)

Year	Budget allocation (RE)	Funds released
2016-17	10.15	9.42
2017-18	10.0	7.80
2018-19	10.0	8.89
2019-20	10.0	10.0
2020-21 (31/12/2020)	7.28	5.06

Source: RBI and PIB/DGCIS

Table 4: Establishment of MSMEs units and Employment (lakhs)

Year	Units (lakhs)	Employments (lakhs)
1991-92	70.63	165.99
1992-93	73.51	174.84
1993-94	76.49	182.64
1994-95	79.06	191.4
1995-96	82	197.93
1996-97	86.21	205.86
1997-98	89.71	231.16
1998-99	93.36	220.55
1999-2000	97.15	229.1
2000-2001	101.1	239.09
2001-2002	105.21	249.09
2002-2003	109.49	260.13
2003-2004	113.95	271.42
2004-2005	118.59	282.57
2005-2006	123.42	294.91
2006-2007	361.76	805.23
2007-20048	377.37	842
2008-2009	393.7	880.84
2009-2010	410.82	921.79
2010-2011	428.73	965.15

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2011-2012	447.64	1011.69
2012-2013	467.54	1061.4
2013-2014	488.46	1114.29
2014-2015	510.57	1171.32
2015-2016	361.76	805.24
2016-2017	361.76	805.24
2017-2018	633.88	1109.89
2018-2019	633.88	1109.89
2019-2020	633.88	1109.09
2020-2021	633.88	1109.09

Source: RBI and PIB/DGCIS.

Hypothesis (H1)

For the analysis, the researcher used a linear regression model

$$Y = a + bx + \alpha$$

Where Y is a dependent variable, b is tangent, a is constant

Where Y is the generation of Employment **(Vasanthi Srinivasan)** is a dependent variable which is depend on establishment of MSMEs unit to increase economic efficiency **(Komal)** and x is intendent variable which is depend on Employments **(1-Mirgul NIZAEVA 2-Ali COSKUN)** and alpha is error since data is taken from way back and it is secondary data so Derby Watson test is used to test auto correlation To analyse and established relation between MSMEs unit and Employment the researcher used SPSS 2.0 in regression analysis. Durbin Watson test is used to find out is there any auto correlation exist or not? since Durbin Watson is less than 1 (<1) which is quite significant that there is positive correlation among MSMEs unit and Employment,the model summary interpret R (square) is 95.7 which shows that significant impact on the established MSME' s that the regression model with the help of ANOVA that predicts the out come variable significantly good as p- value is less than .005 (.000<.005) hence H0 is not significant.

Table-5 : Model Summary[b]

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	.978[a]	.957	.956	43.911	.957	605.289	1	27	.000	.302

a. Predictors: (Constant), employments(lakhs)
b. Dependent Variable: units(lakhs)
Source: researcher

The significance value(p) is .000 which is less than significant value .005 (.000<.005), hence the relation between MSMEs unit and employment rate is not significant

Table 6: ANOVA[a]

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1167102.359	1	1167102.359	605.289	.000[b]
	Residual	52060.676	27	1928.173		
	Total	1219163.034	28			

a. Dependent Variable: units(lakhs)
b. Predictors: (Constant), employments(lakhs)
Source: researcher

The coefficient table interpret predictor value, the standardised value (25.48%) to explain the dependent variable

Table 7: Coefficients[a]

Model		Unstandardised Coefficients B	Unstandardised Coefficients Std. Error	Standardised Coefficients Beta	t	Sig.
1	(Constant)	-25.571	15.288		-1.673	.106
	employments (lakhs)	.512	.021	.978	24.603	.000

a. Dependent Variable: units(lakhs)

Source: researcher

$$y = -25.571 + .052x$$

the interpretation shows that R (square) = .957, F(649.515), p<.005. this finding supports the Hypothesis (H0) for the study

Hypothesis H(2)

Since Employment is depend variable and no of units, total export and exports by MSMEs is independent variable to establish this relation, researcher used linear Regression equation . since secondory data is taken from MSMEs annual report so established magnitude, and direction of data it is very important to established correlation coefficient

x msmes (no of units) = $\alpha 0 + \alpha 1a$ *(total exports) +* $\alpha 2b$ *(msmes export + +*ε

x (total export) = $\beta 0 + \beta 1a$ *(msmes units) +* $\beta 2b$ *(msmes export) +* ε

x (msme's export) = $\gamma 0 + \gamma 1$ *(no units)b +* $\gamma 2b$ *(total exports) +* ε

$\alpha 0$ $\beta 0$ $\gamma 0$ *are the inter preater*

while $\alpha 1, \alpha 2, \beta 1, \beta 2, \gamma 1, \gamma 3$ *are the slope while* ε *is error*

$$x = \alpha 0 + \alpha a + \beta b + \gamma c + \varepsilon$$

X = employment level, $\beta 1$, $\beta 2$, $\beta 3$ are the constant which depends on no of MSMEs, total export and exports by MSME's and ε is error

the researcher used linear regression analysis since Durbin Watson interpreted between 2-4, so there is no autocorrelation. p-value is (.083 >.005), which interprets a negative correlation. p-value is (.083 > .005) R (square) value gives 81.0% it shows that it affects significant employment level. the t value is > .005, so it is not significant.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.900[a]	.810	.683	57.52889	.810	6.398	2	3	.083	2.757

a. Predictors: (Constant), MSMEs export(us$), total export(us$)

b. Dependent Variable: total unit in lakhs

Source: researcher

Table 9: ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	42349.850	2	21174.925	6.398	.083[b]
	Residual	9928.721	3	3309.574		
	Total	52278.571	5			

a. Dependent Variable: total unit in lakhs

b. Predictors: (Constant), MSMEs export(us$), total export(us$)

Source: researcher

Table 10 Coefficients

	Model	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	Sig.
1	(Constant)	-1455.041	559.776		-2.599	.080
	total export (US$)	.003	.001	.610	2.334	.102
	MSMEs Export (US$)	.008	.004	.516	1.972	.143

a. Dependent Variable: total unit in lakhs

Source: researcher

$$Y = -1455.041 + .003x1 + .008x2 +$$

Table 11 Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.819[a]	.671	.452	15335.79682	.671	3.064	2	3	.188	2.532

a. Predictors: (Constant), MSMEs export(us$), total unit in lakhs

b. Dependent Variable: total export(us$)

Source: researcher

The model summary interprets the result that Durbin Watson test yields between 2-4 so there is no autocorrelation,the p-value is greater than .005 (.188>.005) the R(square) value yields 67.1,it means 67.1 effects on Employment

Table 12 ANOVA[a]

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1441077664.845	2	720538832.422	3.064	.188[b]
	Residual	705559992.489	3	235186664.163		
	Total	2146637657.333	5			

a. Dependent Variable: total export(us$)

b. Predictors: (Constant), MSMEs export(us$), total unit in lakhs

Source: researcher

The significance value is .188 >.005; hence it is not significant

Table 13 Coefficients[a]

	Model	Unstandardised Coefficients B	Std. Error	Standardised Coefficients Beta	t	Sig.
1	(Constant)	376532.985	158613.548		2.374	.098
	total unit in lakhs	214.081	91.710	1.056	2.334	.102
	msme export (US$)	-1.345	1.359	-.448	-.990	.395

a. Dependent Variable: total export(us$)

Source: researcher

The regression equation is to be calculated as follows

$$y = 376532.985 + 214.081x1 - 1.345x2 + c$$

Table 14 Model Summary[b]

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	.773[a]	.597	.328	5655.08344	.597	2.220	2	3	.256	1.931

a. Predictors: (Constant), total export(us$), total unit in lakhs
b. Dependent Variable: MSMEs export(us$)
Source: researcher

The Durbin Watson value is less than 4, so it gives that there is no autocorrelation between the data p-value is .256> .005, so it provides a different policy. The R(square) value is 59.7, it shows that it affects the employment level by 59.7.

Table 15 ANOVA[a]

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	141986769.248	2	70993384.624	2.220	.256[b]
	Residual	95939906.252	3	31979968.751		
	Total	237926675.500	5			

a. Dependent Variable: msme export(us$)
b. Predictors: (Constant), total export(us$), total unit in lakhs
Source: researcher

The significance value is .256> .005 hence it is insignificant

Table 16 Coefficients[a]

Model		Unstandardised Coefficients		Standardised Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	155013.527	42864.340		3.616	.036
	total unit in lakhs	73.849	37.457	1.095	1.972	.143
	total export (US$)	-.183	.185	-.550	-.990	.395

a. Dependent Variable: msme export (US$)
Source: researcher

The regression Equation is to be generated as follows

$$y = 155013.527 + 73.849x1 + 183x2 + c$$

since the significance value is more significant than .005, so null hypothesis is accepted

Findings

The above study gives the result that the H2 (.256>.005) null hypothesis is to be selected, so there is no difference in export total export and establishment of total units which is responsible for economic development for H1, it is less than significance value (.000<.005), so reject the null hypothesis and accept the alternative hypothesis. It shows that there are other factors is to be considered in developing an employment ecosystem.

Declaration of Conflicting Interests

As we declare, there was no conflict of interest while writing this article.

CONCLUSION

It is imperative to convert the import economy into re-export economy **Mogilevskii (2012),** government restructure economy policy to the traditional products, As the government is workout new economic policy to transform the domestic economy into 5 trillion dollar economy by 2025. To achieve this objective, the government has declared a PLI scheme (production linked incentive) and ATMA NIRBHAR BHARAT tag, ODOP programme to boost the urban and rural economy. A large no of MSMEs is established in rural economy which proved potential employer through government amended the MSMEs definition but the natural effect of new meaning and it's impact on the economy has not been examined so as far the revised definition show confidence in MSMEs performance **(Singh et al. (2012))** in increasing export, investment" **(Das, 2008a: 70**) and also rise in MSMEs units. However, there is a significant positive change in investment export and employments but there is a significantly strong correlation between employments and existing MSMEs units. So the government of India should have confidence in the performance of vocal for local products and Make in India products and also chalk out **Dubey and Sahu (2020)** concreate fund allocation, investment, tax holiday policy for rural MSMEs to create Employment, alleviation of poverty, eliminate regional imbalance **(Revell and Blackburn)** to convert present economy to 5 Trillion Dollar by 2025.

REFERENCES

[1] Atul Thakur, We can boycott China but at what cost?, Times of India,(Jun 20, 2020, 14:54 IST),

[2] Ali, A., & Husain, F. (2014). MSMEs in India: Problems, solutions and prospectus in present scenario. *International Journal of Engineering and Management Sciences*, *5*(2), 109–115

[3] Arvind Mediratta, Why India needs to go vocal for local stores

[4] Bhavna Vij-Aurora INTERVIEWS Ashwani Mahajan, 'Vocal-For-Local Will Stop Unfair Chinese Dumping of Goods', Outlook India, (22 May 2020)

[5] Banu, S., & Suresh, B. (2020). COVID-19 and its impact on micro, small and medium enterprises in India. *Mukt Shabd Journal*, *IX*(X), 606–617.

[6] Bhuyan, U. (2016). A study on the performance of micro, small and medium enterprises in India. *Global Journal of Management and Business Research: A Administration and Management*, *16*(9), 32–36.

[7] Chauhan, J. P. (2020). An impact of COVID-19 on Indian economy: A brief view of selected sectors. *EPRA International Journal of Multidisciplinary Research (IJMR)*, *6*(6), 9–12

[8] Das, K. (2008). Micro, small and medium enterprises in India: Unfair fare. *Gujarat Institute of Development Research, Working Paper No. 181*(5), 1–29.

[9] Dilip Bobb, Locally Vocal, Indian Legal Stories that Count, (14 July, 2020),

[10] Daniel Workman, India's Top Trading Partners, World Stop Export, (June 29, 2020),

[11] Ghosh, S. (2020). Examining the COVID-19 relief package for MSMEs. Economic & Political Weekly, LV(22), 10–12.

[12] Hariharan, A., Thomas, S., & Viswanathan, P. (2021). Impact of COVID-19 on the performance of micro, small andmedium enterprises (MSMEs) in India: A case study in Kerala. Annals of RSCB, 25(4), 14797–14816

[14] Indrakumar, D. (2020). COVID-19 and its impact on Micro, Small and Medium Enterprises in India. *Manpower Journal, LIV*(3 &4), 75–88.

[15] International Labour Organization (ILO). (2020). COVID-19 and the world of work: Impact and policy responses. *ILO Monitor*. http://oit.org/wcmsp5/groups/public/—dgreports/—dcomm/documents/briefingnote/wcms_743146.pdf

[16] Kishore, S. (2016). Growth of micro, small and medium enterprises in India. *BIMS International Journal of Social Science Research, 1*(2), 6–13.

[17] Kumar, N. K., & Sardar, G. (2011). Competitive performance of micro, small and medium enterprises in India. *Asia-Pacific Journal of Social Sciences*, *III*(1), 128–146.

[18] Ministry of Micro, Small and Medium Enterprises (MSMEs). (2006). *The micro, small and medium enterprises development act, 2006*. https://msme.gov.in/sites/default/files/gazette%20596-E-English.pdf

[19] Ministry of MSMEs. (2018–2019). *Annual report 2018–2019*. Government of India. Ministry of MSMEs. (2020–2021). *Annual report 2020–2021*. Government of India

[20] Minaketan Behera1 ,Sangha Mitra Mishra2, Niharika Mohapatra3 and Alok Ranjan Behera4COVID-19 Pandemic and Micro, Small and Medium Enterprises (MSMEs): Policy Response for Revival SEDME (Small Enterprises Development, Management & Extension Journal) 47(3) 213–228, 2021

[21] Prabhash Ranjan, What Does Being 'Vocal about Local' Mean for India's Global Trade Strategy? , The Wire, 22/MAY/2020,

[22] Prabhash Ranjan, What Does Being 'Vocal about Local' Mean for India's Global Trade Strategy? , The Wire, 22/MAY/2020

[23] Prasad, R., & Mondal, A. (2020). Impact of COVID-19 pandemic on Indian economy with special reference to Indian MSMEs sector. *Research Gate*, *XV*(7), 16–21.

[24] Raney, H. M. (2020). COVID-19 pandemic: Impact on MSMEs. *Studies in Indian Place Names*, *40*(68), 396–401. Rathore, U. (2020). From slowdown to lockdown: Effects of the COVID-19 crisis on small firms in India. *OxfordPolicy Management*, 1–32. http://dx.doi.org/10.2139/ssrn.3615339

[25] Reddy, K., Sasidharan, S., & Raj, R. (2020). Revitalising MSMEs. *YOJANA*, *64*(11), 24–29.

[26] Roy, S. (2020). First to be hit by the pandemic: This sector will take years to make up for the losses. *The Economic Times*. https://economictimes.indiatimes.com/small-biz/sme-sector/first-to-be-hit-by-the-pandemic-this-sec- tor-will-take-years-to-make-up-for-the-losses/articleshow/76456729.cms

[27] Singh, A. (Jun 12, 2020). What about India's MSME Sector: COVID-19 pandemic and Indian MSMEs sector out-look. Available at SSRN: https://ssrn.com/abstract=3696778 or http://dx.doi.org/10.2139/ssrn.3696778

[28] Tina Edwin, Boycotting Chinese products is a challenging campaign, Business Line,(Jun 10, 2020) https://www.thehindubusinessline.com/economy/boycotting-chinese-products-is-a-challenging-campaign/article31797664.ece

[29] Udayan Chakraborty Vocal for Local: Reviewing Global Experience with an Indian Insight Online International Interdisciplinary Research Journal, {Bi-Monthly}, ISSN 2249-9598, Volume-10, May 2020

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Regulation and Policy for Cleaner Technology in Sugar, Distillery and Cement Industry in India

Agnello J. Naveen. X[1], Arivoli. A[2]

ABSTRACT

The study covers a wide range of information of present scenario on the stringent adaptation of cleaner technology (CT) and environmental regulation, policy given by the pollution control board (PCB), and foreign regulatory bodies to highly polluting industries (Ultra-red category) in Select Sugar, Pulp and paper and Cement industry. The report classifies the verity of the technology to control pollution by using Advance Cleaner production technology like effluent treatment plant technology (Closed-loop system), Co-processing (recycling), Co-generation (Energy conservation), Add-on, Industrial ecology, Air pollution control, CPCB setting up continuous emission /effluent monitoring system (CEMs) on checking the permissible limit in air, water and in-built with the production process to get cleaner products, itself made has mandate regulatory policy and also considering the importance of consolidation and analyze part of the governance like Environmental Impact Assessment, Environmental statement report, and other management-oriented audits like Environmental, Energy Management and control systems. The regulation policies were collected from the secondary information sources (Qualitative data) from three different industrial sectors and showed how effectively pollution control is handled by a combination of technology with their operational and regulatory measures given by the CPCB and foreign market enforcement like the Environmental protection agency (P2-Pollution prevention), European Union (EU) is Best available technology (BAT), and United nation environmental protection (UNEP). The author points possible foreign strategies in the Indian context have a new platform on strict adoption of the regulatory framework with the economic and environmental advantage of using cleaner technology towards sustainable development.

Keywords: Cleaner technology (CT), Central pollution control board (CPCB), Regulatory system, Environmental technology, Energy technology.

I. INTRODUCTION

The Pollution Committee Board has been stated under the regulation act 3 of the environmental control. PCB, known to check, analysis for the assessment of Prevention of water in qualitative and quantitative statements made mandatory in Air quality assessment [1]. In 1981, the committee was responsible for implementing the Air policy to maintain, preserve, checking the air quality around the industry [11], by comparing with acceptable standards are linked with the operational and maintenance of environmental technology, management, and qualitative report by pollution control committee has given mandate to collect data, perform, analysis, execute, inspect, coordinate, review, feedback and implement a strict action plan [12], all relevant provisions on Environment regulations, 1986 rule framed thereunder. The schedule, Annexure 1, has a mandatory requirement for all the State environmental Committee Board across India should implement all firms to go for waste reduction, minimization, and utilization in the process itself, given by EU-IPPC to utilize the maximum optimum available technologies provided by standard procedures. (Environmental

* Agnello J.Naveen.X –Research Scholar, Department of Environmental Management, Bharathidasan University Tiruchirappalli.

** Arivoli.A -Assistant Professor, Department of Environmental Science, Government Arts and Science College, Ariyalur. Corresponding author Email id:agnello.naveen18@gmail.com

regulations, 1986) [13]. Cleaner technology cell classification by Environmental ministry of India has given scheme related to developmental and promotional activities for clean/green production technology for waste elimination/ illustration projects to develop green technologies to promote the access to green production technology and its implementation in small and medium firms collaboration with large firms in setting up pilot projects by technical norms[14]. For new available technology/Creating institutional-training background Research and development, 24 industrial sectors have been identified by the Ministry of Environment forest and climatic change (MOEFCC) [15].

II. MATERIALS AND METHODS

Secondary, published sources were resorted to understand the genesis of cleaner technologies and growth over the period. This exercise helped the authors to narrow down the type of industrial units for case studies. Nevertheless, even the aforesaid secondary source of information served as a potential base for the research study, which is underway, to proceed further. As discerned from the published information, the origin and growth of cleaner technologies are thus presented as under. It is relevant to highlight regulations are considered into three different manufacturing industries, and they are given Sugar, Distillery, and Cement industry in the study [16].

III. EXPLANATION

The case study taken for research in three industries have fundamental reasoning using the table gives a detailed survey of the environmental impact aspect under the classification types of pollution that occurred by Sugar, Distillery and Cement industries by operating it, the impact has been shown using qualitative analysis concerning the corporate responsibility of environmental protection (CREP) given by CPCB, 2003, 2016. The focus is to understand the level of pollution under the classification. These industries fall

Table 1: Sugar, Distillery and Cement Industry regulation policy for Cleaner technology in India.

S. No	Monitoring organization	Review	Sugar	Distillery	Cement
1	Red Category industry	[23,47]	✓	✓	✓
2	COINDS Report for Air pollution	[24]	✓	✓	✓
3.	Self-monitoring of the industry by environmental engineers	[25]	✓	✓	✓
4.	Online monitoring data (water, Air, Solid waste)	[26]	✓	✓	✓
5.	Environmental statement report (ES)	[27]	✓	✓	✓
6.	Quality Management system, International standard organization 9001:2008	[28, 29]	✓	✓	✓
7.	Environmental Management system International standard organization 14001:2004	[30, 31]	✓	✓	✓
8.	Energy Management system International standard organization 50001	[32,33]	✗	✗	✓
9.	EIA, Pre, and Post (MEP)	[34,35]	✓	✓	✓
10.	Energy conservation regulations	[36,48,49]	✓	✓	✓
11.	Notification by CPCB (recycling, Co-processing and industrial ecology)	[37,46]	✗	✓	✓
12.	CDM research and Development project (MNRE)	[38]	✓	✓	✓
13.	Water conservation ZLD in 2003, 2015	[39, 40,45]	✓	✓	✗
14.	GIS and GPS (satellite mapping)	[41]	✓	✓	✓
15.	Updating the information using data base analysis (data science)	[42]	✗	✗	✗
16.	Green chain management	[43]	✓	✓	✓
17.	Circular economics chain management	[44]	✗	✗	✗

under 17 “Ultra-red industries” given by CPCB notification. However, still, the sugar industry stands at two because the pollution level is high in 5 parameters, Distillery industry because the pollution level is high in 5 parameters, and Cement at 12, low in the water but high in other four parameters depending upon the range of pollution the relation between the technological up-gradation on including advance pollution technique depending upon on the “Abatement of pollution.”

Pollution Control Regulation

All the Distillery, Cement, and sugar units must obtain the Tamil Nadu state pollution committee under the Water and Air. Act, for the discharge of sewage/ effluent from the firms, has to be convinced the permissible standards prescribed by the pollution board depending on the mode of disposal technologies used, either into urban or rural areas. The Government order dated 30-03-1989 lists in CERP of most polluting 17 firms, including Distilleries, Tanneries, Sugar, Cement, Fertilizer, Pulp, paper and Chemical units. Distillery, Cement, and the sugar industry are classified as an Ultra-red large-scale polluting category under the Pollution Control Board. It is considered the quality of its effluent, and hence, significant pressure is on the industry to confirm the discharged effluent pollution control standards. Red category industries have to get the consent complaints renewed annually or once in three months a year and also environment technology (machinery) life cycle assessment.

IV. EXPLANATION OF TABLE:1

Regulation of Co-generation and auxiliary mechanism Energy Conservation

Distillery industry the advent of Biomethanation [3,4,18,19,20,21], The Commission’s Order No.3 of 2006 dated 15-05-2006 states as below: For Bagasse co-generation projects adding a mix for conventional and non-conventional fuel, up to 25% sent to microgrids for Tamil Nadu electricity generation and distribution corporation limited [5,11] from the Co-generation in Sugar industry, Cement energy conservation is given by UNIDO; Environmental protection agency (EPA) has given technical suggestions on using energy technology also given cost subsidies and exemption tariff.

Co-Processing, recycling, and reusing technology

CPCB has implemented many recycling and Co-processing technologies and has many notifications, Guidelines for Pre-Processing and Co-Processing of Hazardous and Other Wastes in Cement Plant per Rules, 2016 [9]. Plastics can be used as raw material and recycled in a cement kiln (As per Rule’ 5(b)’ waste Management Rules, GCPC, [7]. As part of a solid waste management system [11], Hazardous Chemicals Storage, handling, and transportation Rules on EPA, 1989 is followed effectively.

Green Belt

Green belt guidelines are given by CPCB, made mandatory to control air pollution naturally by planting specific trees around the industry, CPCB has given unique plantation guide depending upon the air pollution level in these three industries, Cement, Pulp and paper, and Sugar due to the stabilization of fly ash [6].

VI. DISCUSSION

Auditing of Cleaner technology in the large scale industry

Energy conservation using absorption technologies for rule 134 (3m) of the Company act, 2013, Rule 8(3) of the Companies on an economic system like input and output (Accounts) on Ultra Red Category complies with a compulsory regulatory mechanism [17] (technologies) for all firms in construction and operational cost audits, investment costs, operating costs, depreciation costs, macro electricity costs.

Mandatory functions of large scale Industry

Environmental Statement report (ESR) must be submitted once in 3 months for a Red category large-scale industry. The cleaner technology in use has to be mentioned as per regulation, policy and made mandatory. Environmental Impact Assessment like Mill expansion plan (MEP), Cleaner technology should be further improvised and monitored due to the mill production capacity level increasing the technology usage level to be raised as per norms. Quality management system, Environmental management systems are effective in Sugar, Pulp and paper, and Cement industries and have a linkage between the two QMS is a good housekeeping practice followed on safety measures of the workers cleaner technology compliance Environmental audit report. EMS's disadvantage is they upgrade technology in international compliance like the EU and EPA, but the adaptation to India's level is inferior. And the cement factory is a highly energy-intensive firm with an energy management system (EnMS). Due to the dry heat in the mechanism, there will be damage to compile and save the energy; there is an Energy Audit as per ISO regulations' norms. Frequent Training is essential and conducted by CPCB and the industry in cleaner technology at the macro and micro level, where employees should be aware of using technology. To develop technical skills and environmental awareness. Online Continuous Effluent/emission monitoring/hazardous waste (OCEMS) system has been connected to a large scale industry by CPCB to monitor the industrial pollution level 24×7, 365 days.

Zero liquid discharge

The pollution control committee has introduced a new technological-economic report. Legislation has been made mandatory for all water-polluting industries such as sugar, distillery, tannery, pulp and paper, textile, dyeing, and dairy to impose zero liquid discharge requirements consistent with sugar (Condensate Polishing Unit (CPU), Cooling Tower) RO, pulp and paper (RO) industries [7].

V. ROLE OF CENTRAL POLLUTION CONTROL BOARD (CPCB) IN PROMOTING CLEANER TECHNOLOGY

The Environment Act was founded in 1986, which has a comprehensive tool under the 6th Annexure-1. It states that every State pollution committee, the board should motivate the firms to go in for waste minimization (less use of raw materials) and utilization (recycle and reuse) by the optimum available technologies. The Central Government has classified many necessary regulations and policy programs, by the operational functions are prescribed and performed by the Indian government – power by rule and section 5 of EPA and Implementation of EPA rules: ensuring the compliance of industrial standards towards certain modifications towards Indian morphological, biodiversity (flora and fauna), demographic and climate changes regards to other standards notified under EPA rules as stated below.

1. Industrial development in critically polluted areas identified based on the Comprehensive Environmental Pollution Index.
2. Environmentally sound technologies for Solid and hazardous waste management and assessment.
3. Co-processing system on hazardous wastes in cement kiln firms and re-utilizing wastes from the Distilleries, Sugar industry with ecology concepts.
4. Developing standards and rules for particular firms for Government notification under European Union and Environmental protection agency.
5. Water and Air Quality data to consider future water bodies planning systems in urban and rural areas.
6. Cleaner production for pollution-free using green manufacturing raw materials/ renewable resources for energy. Plan and

execute nationwide pollution control programs: Central and state have to be national general programs relating to abatement policy for pollution.

7. Water, Air, and Noise Monitoring by the online platform on connectivity by using internet of thing by Water quality on checking the Physico-chemical parameter and quantity of discharge to be monitored in 17 highly Polluting industries and industries.
8. Action Plans for critically polluted industrial (CPI) clusters.
9. MoEFCC Schemes for research and development in clean technology in small scale enterprises (SMEs)
10. The Center should coordinate the State pollution control Boards in all activities like CPCB/GCPC/ENVIS regularly interacts with SPCCs to exchange valuable information evolving regulation operation strategies for the reduction of pollution.
11. The important matters being coordinated in the recent past include; uniformity in the issuance of consents/ authorizations, online monitoring, Action plans for critically polluted industrial clusters, management of common waste management facilities, etc.
12. Technical assistance and guidance/ guidelines are given to the state pollution control board by PCCs: CPCB provides technical guidance to SPCB on various matters. Some of the technical support includes the following; 1. Standards concerning industries and other sources, 2. Analytical Quality checks in laboratories 3. Water, Air, and Noise Monitoring 4. Setting up of continuous basis and ambient environment monitoring emission/effluent (Water, Air, Noise)
13. Constructing Common Effluent treatment plant and Effluent treatment plant for Small and medium firms.
14. Bio-remediation, Phytoremediation, Biotechnology
15. Co-processing like recycling, reducing, re-engineering of the hazardous waste material management system to control pollution.
16. Development of cleaner process technologies for industrial pollution control
17. Online and continuous monitoring devices and their application in monitoring
18. Eco-management/ Environmental informatics/ Enviro-monitoring from satellites by connecting remote sensing, geographic information system, and geographically positioning method to manage and control pollution
19. Planning, conference, institutional background, research, and development Training program. CPCB is organizing a training program for SPCBs and other target groups regularly. Organize mass awareness programs: There are many such programs like organizing a competition for students, (Non-governmental organizations) NGOs, etc.
20. The sample is collected, analyzed, calibrated, compiled, and published technical and statistical data relating to water and air pollution. Prepare manuals, codes, notifications, and cleaner technology guidelines, recycle, reuse, reduce related to treatment and disposal of wastes.
21. Research and development have given disseminated information regarding matters relating to water, air, hazardous waste management, solid waste pollution: CPCB has brought about 500 technical documents that have been widely used in India. The latest technology (database management system) is also placed on ENVIS, GCPC, and CPCB.
22. Industry-specific treatment options for compliance with the prescribed norms. Modifying water and air quality standards: developing “standards” and Permissible limits,” which is vital for SPCBs to apply their compliance.

23. CPCB has given standards for more than 100 red and yellow categories of industries
24. As well as including other sources.
25. The development process of standards is scientific and follows a comprehensive, transparent process. All standards evolved by CPCB are notified by MoEFCC under the EPA.
26. Updating CPCB regulation and the new amendment policy related to industrial pollution abatement technology is mandatory for every industrial environmental engineer and environmental manager. EnMS must be made compulsory in EMS and submitted towards ESR (CPCB).
27. CPCB has to include energy accountability by every Industrial usage and crosscheck to calculate the production rate per year like carbon footprint.
28. CPCB has to include the CSR feedback and opinion of every industry.
29. The study should go a long way in promoting widespread adoption/implementation of Cleaner production technologies in other industries to make tangible progress in sustainable development. It is also observed that significant gains are accruing from the merit goods viewpoint as well. By way of policy implications, we may add that the best efforts to promote cleaner technologies through suitable incentives, setting up state-wise information clearing in-houses on CT.
30. Cleaner Technology is becoming increasingly significant in recent years as focused by researchers, policymakers, and large, medium, and small industries. It proceeds to address economic, scientific, and technological issues, legal, and behavioral dimensions. Studies concerning financial aspects suggest the need for an economic evaluation of Cleaner Technology through regulatory policy and other decision-making. The other side explains scientific and technological developments like an add-on, inbuilt, process-modification, closed-loop system, green tech, co-processing, and co-generation availability of different technologies in a cross-section of industries. Coming to legal dimensions, a comparative picture of the prevailing scenario in the developed and developing country adaptation needs to be understood. Also, it drives the need for effective pollution control regulations. Studies on social (people) and employer behavior are essential to focus on the market for better awareness on society as a whole. Providing better information and networking systems gives an impetus to the driving forces and removes the barriers to cleaner technology. Provision of institutional background, Government support and technological support, self-reliance on manufacturing material of cleaner technology, research, and development, and finances for developing Cleaner Technology adoption are recommended. However, this study shows the efficiency of cleaner technology, which has brought a significant change to minimize industrial pollution, leading to a “WIN-WIN “situation.

VII. CONCLUSION

It is not possible to bring cleaner technology in all industries at once because of high investment requirements. Environmental policies may pay attention to replacing older and conventional technologies with cleaner ones in the coming years to achieve sustainable development. Cleaner pollution control technologies introduced were integrated into the process and, thus, more robust in pollution control. Despite the higher installation and O & M costs, these cleaner technologies would protect air, water, and soil sustainably. Constant reinforcement of pollution abatement measures was practised in all three study units due to stringent pollution control norms set by CPCB and other agencies.

VIII. FUTURE SCOPE

A crosscheck of qualitative and qualitative data between industrial data and CPCB regulation and policy can be done. By using different factors and variables by using an additional parameter check.

REFERENCES

[1] Tiwari, A.K. (2006) Environmental Laws in India, Deep and Deep Publishers, New Delhi, p. 59.

[2] Seth, R., Goyal, S. K., & Handa, B. K. (1995). Fixed film bio methanation of distillery spent wash using low-cost porous media. Resources, conservation, and recycling, 14(2), 79-89.

[3] Goyal, S. K., Seth, R., & Handa, B. K. (1996). Diphasic fixed-film bio methanation of distillery spent wash. Bioresource Technology, 56(2-3), 239-244.

[4] Kishore, VV N., and D. C. Pant, (2012). “Anaerobic Digesters in India. “Global methane.org. TERI University, the Energy and Resources Institute. Web. 28 Feb. 2012: PPT:1-49.

[5] Ministry of Power, Government of India (2012), PAT: Perform Achieve and Trade, http://beeindia.in/content.php?page=schemes/schemes.php?id=8.

[6] CPCB (2000). Guidelines for Development of Greenbelts, Programme Objective Series: PROBES/75/1999-2000, ENVIS Centre Central pollution control board (CPCB), (www.CPCB envi.nic.in).

[7] CPCB (2015); Guidelines on Techno-Economic Feasibility of Implementation of Zero liquid discharge (ZLD) for water-polluting industries, Pg: 14.

[8] CPCB (2010) Pollution control acts, rules and notification, Central pollution control board (CPCB) https://www.cpcb.nic.in/PollutionControlLaw.pdf : 1-1304.

[9] CPCB Notification report, 2011, 2014, 2015, 2016, 2017 (www.CPCB.org).

[10] Ghaisas Y.G., (2015). Electrical Energy Conservation in Cement Plants in India, Survey of Cement Industry and Directory: 3.

[11] UNION, P. (2008). Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe. Official Journal of the European Union.

[12] Bennett, M., James, P., & Klinkers, L. (Eds.). (2017). Sustainable measures: Evaluation and reporting of environmental and social performance. Routledge.

[13] Perelet, R., Mason, P., Markandya, A., & Taylor, T. (2014). Dictionary of environmental economics. Routledge.

[14] Calvo, V. L. V., Giner-Santonja, G., Alonso-Fariñas, B., & Aguado, J. M. (2021). The effect of the European Industrial Emissions Directive on the air emission limit values set by competent authorities in the permitting procedure: The case of the Spanish cement industry. Science of The Total Environment, 773,145491.

[15] Rahman, M. M. (2021). Assessing the progress and pitfalls of the Ministry of Environment, Forest, and Climate Change in achieving SDGs in Bangladesh. Journal of Public Administration (BJPA), 29(2).

[16] Ashby, M. F. (2012). Materials and the environment: eco-informed material choice. Elsevier.

[17] Puzzolo, E., Stanistreet, D., Pope, D., Bruce, N., & Rehfuess, E. (2013). Factors influencing the large-scale uptake by households of cleaner and more efficient household energy technologies.

[18] Nandy, T., Shastry, S., & Kaul, S. N. (2002). Wastewater management in a cane molasses distillery involving bioresource recovery. Journal of Environmental Management, 65(1), 25-38.

[19] Qarnain, S. S., Sattanatha, M., & Sankaranarayanan, B. (2020). Analysis of social inequality factors in the implementation of building energy conservation policies using Fuzzy Analytical Hierarchy Process Methodology. International Journal of Sustainable Energy Planning and Management, 29, 153-170.

[19] Acharya, B. K., Mohana, S., & Madamwar, D. (2008). Anaerobic treatment of distillery spent wash–A study on

upflow anaerobic fixed-film bioreactor. Bioresource Technology, 99(11), 4621-4626.

[20] Saha, N. K., Balakrishnan, M., & Batra, V. S. (2005). Improving industrial water use: a case study for an Indian distillery. Resources, Conservation and Recycling, 43(2), 163-174.

[21] Malik, S. N., Ghosh, P. C., Vaidya, A. N., & Mudliar, S. N. (2019). Ozone pre-treatment of molasses-based biomethane distillery wastewater for enhanced bio-composting. Journal of environmental management, 246,42-50.

[22] Environmental Statement report (ESR) must be submitted once in 3 months for a Red category large-scale industry.

[23] Ravendiran, E., Sontakke, Y. B., Sonawane, D. M., Ojha, A. R., Pawar, P. R., Kadam, A., & More, P. Industrial Water Footprint in the State of Maharashtra, India. His Excellency, The Governor of Bihar Shri Phagu Chauhan.

[24] Gulia, S., Shukla, N., Padhi, L., Bosu, P., Goyal, S. K., & Kumar, R. (2021). Evolution of Air Pollution Management Policies and Research Gap Assessment in India. Environmental Challenges, 100431.

[25] Tartari, V. (2013, January). The effect of self-monitoring on academics? engagement with industry. In Academy of Management Proceedings (Vol. 2013, No. 1, p. 11673). Briarcliff Manor, NY 10510: Academy of Management.

[26] Hameed, M., Bhat, R. A., Pandit, B. A., Ramzan, S., Dijoo, Z. K., & Wani, M. A. (2021). Qualitative assessment of compost engendered from municipal solid waste and green waste by indexing method. Journal of the Air & Waste Management Association, 1-10.

[27] Prashar, A. (2019). Towards sustainable development in industrial small and Medium-sized Enterprises: An energy sustainability approach. Journal of Cleaner Production, 235, 977-996.

[28] Nagar, J., & Salai, R. G. (2010). Proceedings of National Conference on.

[29] BILLION, O. M. R. T. OMNICANE LIMITED.

[30] Bravi, L., Santos, G., Pagano, A., & Murmura, F. (2020). The environmental management system according to ISO 14001: 2015 is a driver to sustainable development. Corporate Social Responsibility and Environmental Management, 27(6), 2599-2614.

[31] Oladinrin, O. T., & Ojo, L. D. (2021). Characterization of the drivers of environmental management system implementation. Engineering, Construction, and Architectural Management.

[32] Kaselofsky, J., Roðâ, M., Jekabsone, A., Favre, S., Loustalot, G., Toma, M., ... & Cosenza, E. (2021). Getting municipal energy management systems ISO 50001 certified: a study with 28 European municipalities. Sustainability, 13(7), 3638.

[33] Zimon, D., Jurgilewicz, M., & Ruszel, M. (2021). Influence of Implementation of the ISO 50001 Requirements on Performance of SSCM. International Journal for Quality Research, 15(3), 713.

[34] Yao, X., He, J., & Bao, C. (2020). Public participation modes in China's environmental impact assessment process: An analytical framework based on participation extent and conflict level. Environmental Impact Assessment Review, 84, 106400.

[35] Sikdar, P. K. (2021). Environmental Impact Assessment. Environmental Management: Issues and Concerns in Developing Countries, 253-283.

[36] Chandrasekhar, K., & Pandey, S. (2020). Co-processing of RDF in Cement Plants. In Energy Recovery Processes from Wastes (pp. 225-236). Springer, Singapore.

[37] Kleshchov, A. Y., Hengevoss, D., Hugi, C., Mutz, D., Terentiev, O. M., & Shevchuk, N. A. (2021). ²mplementation of co-processing of waste in cement kilns for Ukraine. Waste management issues.

[38] Malav, L. C., Yadav, K. K., Gupta, N., Kumar, S., Sharma, G. K., Krishnan, S., ... & Bach, Q. V. (2020). A review on municipal solid waste as a renewable source for the waste-to-energy project in India: Current practices, challenges, and future opportunities. Journal of Cleaner Production, 277, 123227.

[39] Chen, B., Yang, S., Cao, Q., & Qian, Y. (2020). Life cycle economic assessment of coal chemical wastewater treatment facing the 'Zero liquid discharge industrial water policies in China: Discharge or reuse?. Energy Policy, 137, 111107.

[40] Rögener, F. (2021). Upcoming Challenges of Water Reclamation from Unconventional Sources. In Towards Water Secure Societies (pp. 79-87). Springer, Cham.

[41] Zurmotai, N. H. (2020). GIS, Remote Sensing, and GPS: their activity, Integration, and Fieldwork. IJAR, 6(9), 328-332.

[42] Vicario, G., & Coleman, S. (2020). A review of data science in business and industry and a future view. Applied Stochastic Models in Business and Industry, 36(1), 6-18.

[43] Banik, A., Taqi, H. M. M., Ali, S. M., Ahmed, S., Garshasbi, M., & Kabir, G. (2020). Critical success factors for implementing green supply chain management in the electronics industry: an emerging economy case. International Journal of Logistics Research and Applications, 1-28.

[44] Del Giudice, M., Chierici, R., Mazzucchelli, A., & Fiano, F. (2020). Supply chain management in the era of circular economy: the moderating effect of big data. The International Journal of Logistics Management.

[45] Agnello, X., Naveen, J., Ravichandran, M., & Balamurugan, J. (2015). Clean technology and its efficacy: strategies of environmental management. J. Environ. Soc. Sci, 2(2), 1-10.

[46] Agarwal, P., Mittal, M., Ahmed, J., & Idrees, S. M. Smart Technologies for Energy and Environmental Sustainability.

[47] Naveen, A. J., Boopathi, S., & Arivoli, A. (2021). Case Experience on WIN-WIN Approach Towards Industrial Pollution Control-Economic and Environmental Efficacy of Cleaner Technology in Select Cement Industry in Tamil Nadu. In Bioremediation and Green Technologies (pp. 209-234). Springer, Cham.

[48] Naveen, A. J., Boopathi, S., Arivoli, A., & Kannan, A. (2021). Economic and Environmental Benefits of Cleaner Technology in Industrial Pollution Control: Case Study of Select Sugar Industry in Tamil Nadu. In Bioremediation and Green Technologies (pp. 185-207). Springer, Cham.

[49] Naveen, X. A. J., Arivoli, A., Boopathi, S., & Rajkumar, V. (2022). A Case Study on Evaluation of Energy Management System by Implication of Advanced Technology in Typical Cement Factory Tamil Nadu, India. In Smart Technologies for Energy and Environmental Sustainability (pp. 245-265). Springer, Cham.

Covid 19 Acting As A Provoke for De-globalization—A Review

Dr. Syeda Amtul Mahaboob*
Dr. Mohmad Mushtaq Khan**

ABSTRACT

The word 'being global' was meant a lot until now, to a large extent, until the outbreak of COVID 19. Although the de-globalization concept was heaped on geopolitical reasons with the Trump government COVID19 has triggered the process. COVID19 has affected the economic growth of thousands of firms who rely on doing their business cross borders. It brought turbulence to all those firms whose operations are scattered over various countries. Effects on global economy, disturbed geopolitical relations and global supply chain messed up were some of the eruptions that came along with the pandemic. The present paper brings an insight into how the disease COVID19 has provoked the process of de-globalization and revived the nationalization issue all over the world. The study presents an overview of the effect of COVID19 on geopolitical relations, nationalization of human resources and global demand and supply chains. It is concluded that until the pandemic recedes, the global businesses are to suffer from tribulations. The study also sheds light on some of the innovations that came into existence because of the pandemic.

Keywords: De globalization, COVID19, globalization, nationalization, turbulence, provoked

1. INTRODUCTION TO DE GLOBALIZATION

The term 'De-globalization' was coined for the first time by Walden Bello in the year 2001. According to Bello, de-globalization is not just another word to take a step back from the international economy. He defined it as a manner of restructuring the economy that was integrated to satisfy multinational corporations' needs into the economy that concentrates more on its people and communities (Walden Bello 2002).

De-globalization can be thought of as the reverse of globalization which is all about bringing different nations closer to each other through various means such as exchange of goods and services, transport, currencies, technology, culture. It also means increasing interdependence among the countries through such means. It had always been thought of as an issue for developing countries but not developed countries, as the developing countries rely more on international trade to prosper their economy. Many multinational companies search for opportunities in countries to invest, such as cheap labor and low tax, which can bring them good returns. Firms in developed nations usually set up their manufacturing plants in developing countries with cheap labour to get their work done in more than half the price in their parent countries. Such wise investment yields high ROI (returns on investment) but also help them gain a competitive advantage. However, the situation had not been the same with the outburst of the calamity COVID19.

1.1 Instigation of De-Globalization

There is much literature evidence that de globalization has repeated itself in the up and down movement just like musical chairs from the beginning of the nineteenth century. Before the

*Maualna Azad National Urdu University, Gachibowli, Hyderabad. Contact No: 8885963199 Email id: dramtulqadri@gmail.com
** K. L. University, Hyderabad. Email id: mushtaq42@gmail.com

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disruption created by COVID19, world trade had faced severe blows due to the financial crisis in the year 2008. The figure below shows the international trade as a percentage of global GDP, starting from the year 1970 to 2015 (Post-COVID Asia 2020)

Figure 1.1 Exports of goods and services worldwide as a percentage of GDP

Source: Post-COVID Asia, World Scientific 2020.

It can be observed from the above figure that until the economic crisis of 2008, international trade was at its peak, with the ratio of international exports to global GDP at 30.8 percent in the year 2008. But soon after the crisis, the ratio fell to 26.7 percent in the year 2009. The year hence named as the year of 'great recession'. It can also be seen from the figure that the rise and fall in world trade was on a regular basis from the year 1970 which means that de-globalization started spreading its wings long ago, and it is not a new concept.

Even before the Trump government, the government of Obama made deductions in taxes so that the American companies could make a way back home (Post Covid Asia 2020). The Trump government had intensified the de-globalization issue by asking American firms to bring their business back to their country. Even Japan joined hands with the US, and both promised to pay the firms for moving their plants out of China. The West had always believed that nationalization should be supported by the norms and policies of the government (CICIR 2020). While this started creating a depression in the global world, the COVID 19 added more to its outburst. Bans on travels, decking of aircraft, imports and exports restrictions made the firms which function in different countries suffer. World Trade Organization (WTO) pointed out an apparent depression of thirteen percent to thirty-two percent in global trade was pointed out by World Trade Organization (WTO) in the year 2020 (Prabir de , Suranjan Gupta 2020).

2. RESEARCH METHODS

The paper is written based on the theoretical review of many journals, books, research reports and websites related to the topic of de-globalization and its connection with the pandemic COVID 19.

3. COVID19 AS AN ACCELERATOR OF DE-GLOBALIZATION

Catalin postelnicu et al., (2015) explained that de-globalization could not be measured only by observing macroeconomic components such as imports and exports of goods restrictions, expatriates money remittance and foreign direct investments. But other factors like tariff and non-tariff barriers on trade, restrictions on the free labour movement, transfer of technology dynamics, administrative actions taken to promote purchase of local goods, the amount of subsidies to shield the agriculture sector should also be taken into account. In De-globalization, such factors get highly provoked, which happened during COVID19. It was predicted by Henry Kissinger, the United States former secretary of state, that the COVID19 will change the globe forever while some other influential people assume that there will be an end of globalization (CICIR 2020).

Although De-globalization started its intensification even before the pandemic, it is obvious to be said that COVID19 has sped up the process of De-globalization in many ways, which can explained as follows:

3.1 Impact of COVID19 on Geopolitical Relations

Pre Pandemic Relations: China made a secure entry into different Europe, Asia and Africa countries through its 'Belt and Road Initiative' and increased its foreign direct investments in these countries. In the year 2016, they invested thirty-five billion Euros in Europe alone. But the circumstances took a new turn in the year 2017 when the United States named China 'a revisionist power,' i.e., a country attempting to alter the global system. The land of China already had tense relations with the United States before the pandemic when the US government imposed tariffs on Chinese products in the year 2018. China also had weak ties with Europe even before the pandemic. Europe responded to China's 'Belt and Road Initiative' with its 'Connectivity Strategy' in the same year, spotlighting on the legality of the connection made through 'Belt and Road Initiative. On the other hand, in 2018 Trump government had almost imposed high tariffs on European products too, with a twenty-five percent tariff on the import of steel and a tariff of ten percent on aluminium imports (European Parliament Think Tank).

Post Pandemic: The pre-existing tensions between the countries fired more with US blaming China for the origin of the virus. President Trump also blamed Europe for not being able to tackle the virus and for the new emerging cases of COVID19, thereby banning all the flights from Schengen zone to United States. As a result of which, the United States of America had been acutely hit by the virus. The GDP of the country fell by 9.5% and a thirty million insurance claims for unemployment were filled during the early six weeks of the pandemic. In response to the ban imposed by America in March 2020, the European Union issued a list of countries to which travels were banned until July, including United States of America (European Parliament Think Tank).

The US worse its relationship with Europe on various issues existing even before the pandemic during the summer of 2020. When Trump ordered the American Troops to be removed from Germany, the situation became intense. Almost twelve hundred US military men serving Germany against Russia were released, which was another hit to the US- Europe relations. India also barred sixty applications of China due to the military conflict. Following the footsteps of India, the US also did the same (European Parliament Think Tank).

The world heavily relies on the medical supplies of China to different countries of the world. According to CICIR 2020, the medical supplies of China were eighty percent to the countries in Asia and Europe. China supplies sixty percent of paracetamol and ninety percent penicillin all over the world. This medical supply chain dependency added more to the tense relations of US and Europe with the country (CICIR 2020).

However, the geopolitical relations were thought to be taking a new direction with the presidential elections and Mr. Trump bidding goodbye to American parliament. But the new president carried on the strict policy of Trump by declaring openly that China will have to face the results of violating the human rights in the country with Uighur. While in another declaration, Mr. Joe Biden refused to involve in a conversation with Saudi Prince Mohammed bin Salman and will apply with King Salman bin Abdul Aziz (The Times of India 2021).

3.2 Impact of COVID19 on World Economy

The economic depression in the 1930s was the most extreme depression that affected the world economy in the twentieth century. The world income had fallen by fifteen percent during the year 1929 and 1932. The world economic crisis of 2008-2009 had taken away one percent of the global revenue. It was predicted by Professor Nouriel Roubini that the global income will be even more badly affected by the pandemic COVID19 than the global depression of 1930s (Post- COVID Asia 2020).

The International Monetary Fund (IMF) in World Economic Outlook (WEO) published in April 2020 predicted that there will be a depression of three percent in the worldwide income. It also indicated that United States income will shrink by 5.9 percent, a shrink of 7.5 percent for Europe income and a shrink of 5.2% in the payment of Japan. On the whole the developed economies were expected to contract by 6.1%. China which was all set to dominate the world trade was predicted to decline its growth from six percent to 1.2 percent. The IMF predicted a slow growth rate of one percent in the economy of developing nations, including China, South Asian Countries, and India. The IMF also predicted a shrink of 4.9% in the overall universal growth rate, a shrink of eight percent in developed countries' growth rate, and the future growth of the developing nations was expected to shrink by three percent (Post-COVID Asia 2020).

The following table shows the effect that COVID19 had on the gross domestic product (GDP) and growth rates of different countries of the world:

Table 3.2.1 Effect of COVID19 on GDP and Growth Rates in 2020

S.No	Area	Effect of Covid19 on GDP and Growth Rates (2020)
1.	United States of America	GDP raised by 0.3 percent in the first quarter and 9.5 percent in the second quarter of the year 2020
2.	European Union	GDP fell by 2.5 percent in the first quarter and 14.2 percent in the second quarter
3.	Spain	Growth rates were -4.1 percent and -22.1 percent in the second quarter
4.	France	GDP contracted by 5.7 percent in the first quarter and nineteen percent in the second quarter
5.	Germany	GDP declined by 2.2 percent and 11.7 percent in the first and second quarters
6.	United Kingdom	Growth rate declined by 1.7 percent in the first quarter and 21.7 percent in the second quarter
8.	Japan	GDP declined by two percent and ten percent in the first and second quarter
9.	South Korea	GDP declined by 1.4 percent in the first quarter and by 2.9 percent in the second quarter
10.	Malaysia	GDP fell by 17.1 percent on an annual basis
11.	Philippines	GDP fell by 16.5 percent on an annual basis
12.	Singapore	GDP fell by 12.6 percent on an annual basis
13.	Indonesia	GDP fell by 5.3 percent on an annual basis
14.	India	A decline of five percent in the first quarter and -4.5 percent in the second quarter

Source: Post- COVID Asia, World Scientific 2020

3.3 Impact of COVID19 on Global Demand and Supply Chain

World Customs Organizations conducted a survey involving fifty six countries as participants. Fifteen separate agencies were engaged in custom procedures in those countries passing through at least five custom regulatory bodies. It was observed from the findings how the different regulations and difficult paperwork can delay financial affluence. It was also found that more the tricky paper work of customs for the export and import of goods, the more it could even inhibit firms from playing a part on the global level. To ease the custom work, In the 2000s The United Nations (UN) even launched a concept called 'Single Window' to reduce the documentation issues across various channels. They required formalities to be done only at one single entry terminal (Globalization – Yesterday, Today and Tomorrow 2013). But sadly to say such efforts had been battered again and again, resulting in the creation of hindrances on the global supply chain.

Global demand and supply chain had already been affected by the US restrictions on non tariff barriers and increase of tariffs. The great pandemic has then laid panic on the consumer's mind to shop for their requirements. The economy has been badly affected by a depression in the consumer's demand of products. Unless the pandemic settles on its own or a vaccine which can give immunity even for the mutations of the virus is developed, the demand of the goods cannot be normal again. But it is not just that demand of the goods has declined, the global supply chain has been injured the most (Post-COVID Asia 2020).

The firms which operate its actions across various nations cannot manufacture the goods unless there are no bans on the transportation. Even for firms that function in a single country, the production process is in turbulence. The import and export of raw materials and products is hard to imagine.

For a global supply and demand chain to function appropriately, different countries in the world are to be linked through travel and transportation. A disorder in a firm's production process in one country also disturbs production in other countries. With the pandemic first started in the country of China put major disruptions in the global supply chain. The country is known to be the world's workshop assembling and producing products to other countries on one hand and producing parts to be made on the other. Majority of the multinational firms heavily rely on China for their production process. After China, firms look forward to Vietnam as their production ally. Disturbances created by COVID19 in the countries of Vietnam and Italy had a severe impact on the global demand and supply chain (Post- COVID Asia 2020).

With supply chains blocked and manufacturing unit shutdown, it is clear for the multinational companies to situate their factories closer. It is also predicted for some firms to move back their plants to their parent countries (CICIR 2020).

Sara Brown published an article on July 22, 2020 in which she explained in detail about the future of global supply chains. According to her, restructuring of the supply chains has been provoked by the COVID19 pandemic but firms are less likely to entirely dump China. She wrote that the idea behind restructuring is not new and has originated due to the increased tariffs of the trade war between US and China. According to her, some companies may swing out some of the production units from China while also bringing their capacities nearer to the demand of the market by shifting to Mexico, Brazil, and Eastern Europe. She also quoted Yassi Sheffi, an MIT professor, who said it will be around decades for firms to completely move their plants out of China, as the country had been an advanced developer of raw materials and intermediate goods. So it is difficult to imagine that complete restructuring could be a solution to the problems posed by the pandemic (Sara Brown 2020).

A rise in trade protectionism will profound the global economic depression, which will increase the recession. During the Great Depression of 1930s countries imposed more tariffs and non tariff barriers in order to make their markets secure. The result of which was that the global trade system collapsed. It is predicted that countries are repeating the same thing in the post COVID era. There are also high chances that developed nations' foreign direct investments (FDIs) will surely decline in developing nations (Post- COVID Asia 2020).

Biswajit Nag (2020) presented four scenarios for China's 2050 strategy that may be adopted by the country in the Post COVID world. He writes that it is predicted by some researchers that firms may now shift their manufacturing units to India, but it is not that easy process. He then presented four scenarios which the multinational companies adopt in the era of post COVID. In the first scenario he predicts that the firms might move their production houses out of China and shift it towards Southeast Asia and Eastern European countries. But according to him such a shift will result in dearth of goods and rose prices. In the second scenario, he explained that the Chinese firms and their partner firms might search for countries to escape political conflicts. An example of this can be a firm of American or European origin will function from Vietnam where a subsidiary of partner Chinese firm is already present. Thereby the materials or goods won't be exported through a direct channel from China but the country will have a control over the earnings on export in different countries (COVID19 Challenges for the Indian Economy: Trade and Foreign Policy Effects).

Nag (2020), in his third scenario stated that the Chinese firms due to the increasing costs of the wages and also rising appreciation of the Chinese Yuan occur since 2005, might decide to shift to other nations. In order to maintain the upward pressure on the currency, the government of China started investing in other nations like Asia, Europe, United States, and Latin America since the year 2005. The more the investment in abroad countries the more control will be on the currency of China. In the fourth scenario Nag (2020) predicts that China might increase its dominance in other nations by facilitating them in different development processes and this will also make sure that the products of China will flourish in their markets. Thereby China might keep their meddling in the political affairs of these countries too and might create blockage in the trade with other countries and achieving a supreme position. The country has been already grounded in many developing countries through its production units and this could be the scenario post COVIID19 too (COVID19 Challenges for the Indian Economy: Trade and Foreign Policy Effects).

3.4 Impact of COVID19 on Nationalization of Workers in GCC (Gulf Cooperation Council) Countries

The term 'Globalization' is also understood by one its factors: free movement of workers across the countries. It had become a trend to look out for jobs abroad including migrant workers and expatriates. Workers from different countries started migrating to countries in Gulf in the decade of seventies in twentieth century. These countries which were rich in oil treasures offered prosperity and economic development. These foreign workers were from countries such Yemen, Syria, Egypt, India, Iraq, Iran, Palestine, Lebanon and Sudan. The attractiveness of the pay packages and the readiness to perform any odd job, especially in blue collar jobs, let the GCC citizens handle their own businesses or jobs without much turmoil (Arab reform initiative). Although the process had been slowed down after the economic recession of 2008-2009, it was hit hardly by the eruption of COVID19.

According to the report of International Labor Organization, published on 23rd September 2020 approximated labor income globally declined by 10.7 percent in the first three quarters of 2020 when compared to 5.5 percent in the first three quarters of 2019. Labor income losses reached 15.1 percent in low middle income countries, 11.4 percent in upper middle income countries and 10.1 percent in low income countries. Although the government in many countries declared remittance and fiscal packages to support the migrant workers and expatriates, these policies were not enough (ILO 2020).

The majority of the expatriates and migrant workers working abroad, especially in GCC (Gulf Cooperation Council) countries, including Saudi Arabia, Kuwait, United Arab Emirates, Bahrain, and Qatar, suffered in turbulence during the pandemic. While majority of the migrant workers were treated unfairly by not getting paid for many months, others were forcibly deported to their nations. It was not just that the blue collar workers suffered from job insecurity and job losses, the white collar expatriates even suffered nearly the same resulting situation with many of them heading towards their parent countries.

The Quint in the first quarter of 2020 contacted Keralites who were living in Dubai, Abu Dhabi and Kuwait to highlight the concerns they were tackling in those countries. To surprise, it was found out that most of them were dealing with layoffs, pay cuts, and no pay. Many of them even wanted to return to India and appealed to the government of Kerala to make arrangements for bringing them back home. According to a statement given by the Chief Minister of Kerala on 29th April 2020, 3, 20,463 citizens of Kerala working abroad had enlisted themselves on the NORKA web portal to make a way back home and the number of such registrations keeps on increasing day by day. It was also reported that in Gulf countries, labor apartments or dormitories are owned by the companies where they work and where hundreds of laborers are forced to live in the same structure sharing the same roof. If workers leave the country for a short period, an enormous load will be lifted up from the government and assist sorting back things in order. The governments in such countries hence eased the relieving process of workers (The Quint).

Amnesty International reported how most of the Gulf countries abused the migrant workers who work for them during the COVID19 pandemic. It reported how the country of Saudi Arabia had deported hundreds of migrant workers from Ethiopia. The government in gulf countries deports the workers if their work permit even crosses the renew date. Sometimes even their sponsor's called 'kafala' fails to renew their permit. The deportation centers in such countries are dumped with illegal migrant workers where necessary sanitation and physical distancing are practically absent and the workers are mostly prone to catching infection. There are chances of more and more workers being sent to such centers. The domestic workers apart from migrant workers working in homes in Gulf also suffer the most, living under threats and abuse with no offs even during the weekends due to the pandemic situation (Amnesty International).

According to the OECD (Organization for Economic Co operation and Development) report of 2020, some GCC countries like Oman even allowed private sector firms to decrease the wages for the lower working hours, job rotation of workers and also allowed the consent to firms to repatriate their employees and cancel their job contracts. Whereas some GCC countries like Saudi Arabia and Kuwait provided full time unemployment benefits to cover the salaries of quarantined workers for their citizens only. It is only in the country of Qatar that the ministry of Labor, Social Welfare and Administrative Development which provided for three billion QAR by Qatar Development Bank as a remittance to make sure that the workers get their full payment. The scheme included the citizens of the country and the expatriates and migrant workers (OECD).

Arab reform initiative- a think tank reported that COVID19, oil crisis, and financial crisis have provoked GCC countries' nationalisation issue. These countries started intensifying their policies for nationalization of workers i.e., preferring locals over expats and migrants. The International Monetary Fund (IMF) reported that there will be a decline of 7.6 percent in the economy of GCC countries in 2020. The companies in these countries responded to such a crisis by cutting the wages of workers and replacing the migrants and expats with the country's citizens. Such an action was also based on the perception that the blue collar workers specially the migrants live in unhygienic and overcrowded areas and dormitories which was considered to be the major reason for the multiplication of the Corona virus. Some of such residing areas of migrant workers were declared to be the hotspots of the virus. The result of which was that the workers specially blue collar workers lost their jobs and are repatriated to their countries without being paid their legitimate wages, benefits and remuneration (Arab reform initiative).

The idea of nationalization of the workforce is not new and which had started taking its roots since the early twenty first century. During this decade the government in many GCC countries had vowed not to rely on the overseas personnel. The country of Oman termed it as 'Omanization' to replace the workers in delivery services, healthcare, technical fields with their nationals and planned to give vocational training to locals. The companies hiring expatriates were obliged to pay seven percent of the employee's salary to the government for getting the locals trained in Oman. The country of Saudi Arabia also did the same thing by introducing the 'Nitaqat' system to ensure that the firms attract more and more Saudi citizens. This concept was related to all firms in private sector and thorough which 6.3 million expats and national workers were touched. The aim was to promote 'Saudization' of employees in the country. The firms were then classified into bands called red, yellow, green and platinum based on the rate at which they were Saudizing (employing Saudi citizens) the employees (Arab reform initiative 2020).

The ministry of Kuwait planned not to issue job permit to personnel above the age of sixty and to deduce the jobs given to migrant workers from seventy to thirty percent which is predicted to half the population of Egyptians and Indians living in the country and which constitute the major part of the expatriates. Similar actions were taken Ministry of Human Resources in United Arab Emirates by a lapse of the job contracts of expatriates. On the other hand the petroleum company of Bahrain also ceased the work permits of expatriates in hundreds and initiated steps to increase 'Bahranization'- hiring only citizens of Bahrain (Arab reform initiative 2020).

Many GCC countries had used the pandemic for further intensifying their endeavors to nationalize their jobs by blaming the foreign workers responsible for the spread of the pandemic starting a new phase of de globalization of the workforce. However it is believed that the situation won't be permanent and tend to be dynamic over the coming years.

4. CONCLUSION

With severe consequences on the economy, global demand and supply chain of import and export, geopolitical relations between the countries and nationalization of workforce in different countries, de-globalization is predicted to be the new trend for 2020-2030. Fu Mengzi in his report of CICIR (China Institutes of Contemporary Industrial Relations 2020) stated that the pandemic could not hinder China from taking part in global trade. Even though the global trade declined due to the pandemic, it will take longer to build the global chain of demand and supply chain again, but it will not be halted forever (CICIR 2020).

While Adi Gaskell in his article "how the corona virus is transforming innovation" in Forbes wrote that the pandemic has escorted to new attempts of innovation. He gave examples of grocery stores using the shielding for staff, the pivots being used in restaurants, online education, digital healthcare and Amazon's latest Just walk out technology which does not require a customer to go through a checkout service and pay quickly.

REFERENCES

1) Amnesty International (2020). 'COVID 19 makes gulf countries' abuse of migrant workers impossible to ignore'. Retrieved from https://www.amnesty.org/en/latest/campaigns/2020/04/covid19-makes-gulf-countries-abuse-of-migrant-workers-impossible-to-ignore/ on 20 January 2021.

2) Adi Gaskell (2020). 'How the coronavirus is transforming innovation'. *Forbes*.

Retrieved from https://www.forbes.com/sites/adigaskell/2020/06/04/how-the-coronavirus-is-transforming-innovation/?sh=463ef625c73e on 20 January 2021.

3) Bello, W. (2008). De-globalization: Ideas for a New World Economy. Bangladesh: Zed Books.

4) Biswajit Nag (2020). Post COVID19 Economic Order and China Scenario Building for India's 2050 Strategy.

In COVID-19: Challenges for the Indian Economy - Trade and Foreign Policy Effects. New Delhi: ASEAN-India Centre (AIC) - Engineering Export Promotion Council of India (EEPC), 77-82. Retrieved from https://www.eepcindia.org/eepc-download/617-Covid19_Report.pdf on 9 February 2021.

5) Catalin Postelnicu et.al (2015). "Economic De-globalization – from Hypothesis to Reality". *Ekonomie*, XVIII, 2, 4-14.

6) Florence Gaub and Lotje Boswinkel (2020). The Geopolitical Implications of COVID-19 Pandemic. European Parliament's Committee on Foreign Affairs. Retrieved from https://www.europarl.europa.eu/RegData/etudes/STUD/2020/603511/EXPO_STU(2020)603511_EN.pdf on February 9, 2021

7) Fu Mengzi (2020). "The Future of Globalization under the Impact of COVID19 Pandemic". *CICIR*. Vol 30, 4, 15-20. Retrieved from http://www.cicir.ac.cn/UpFiles/file/20200819/6373342935992955111587094.pdf on February 9, 2021.

8) Guilherme F. Frederico (2020). "Towards a Supply Chain 4.0 on the post-COVID-19 pandemic: a conceptual and strategic discussion for more resilient supply chains". *Rajagiri Management Journal*, Vol Supply Chain, 4.0, 1-11.

9) Hag-Min Kim, Ping Li, and Yee Rim Lee(2020). "Observations of De-globalization against globalization and impacts on global business". *International Trade, Politics and Development*, Vol 4, 2, 83-100.

10) Huda Al Sahi (2020). "COVID 19 and the intensification of GCC workforce nationalization policies". *Arab Reform Initiative*. Retrieved from https://www.arab-reform.net/publication/covid-19-and-the-intensification-of-the-gcc-workforce-nationalization-policies/ on 20 January 2021.

11) Hyun-Hoon Lee and Donghyun Park (2020). Post –COVID Asia: De-globalization, Fourth Industrial Revolution, and Sustainable Development. World Scientific 2020, 5-41.

12) ILO (2020). COVID19 and the world of work, 6th Edition. Retrieved from https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/WCMS_755910/lang—en/index.htm on 18 January 2021

13) Jim Sheffield et.al. (2013). Globalization-Yesterday, Today and Tomorrow. United States of America: Emergent Publications Litchfield Park, Arizona.

14) Neil Dias Karunaratne (2012). "The Globalization-De-globalization Policy Conundrum". *Modern Economy*, 3, 373-383.

15) OECD (2020). COVID 19 crisis response in MENA countries. Retrieved from https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-mena-countries-4b366396/ on 20 January 2021

16) Prabir De et.al. (2020).World Trade and India: Multilateralism, Progress and Policy Response, United States: Sage Publications Pvt Ltd.

17) Sara Brown (2020). "Reshoring, restructuring, and the future of supply chains". *MIT Sloan Management*. Retrieved from https://mitsloan.mit.edu/ideas-made-to-matter/reshoring-restructuring-and-future-supply-chains on 1 March 2021

18) Sushma Shukla (2020). "COVID-19 and Globalization, an Analysis", *Cape Comorin*, Vol II, Issue IV, 60-63.

19) Tammy McClausland (2020). "COVID-19's Impact on Globalization and Innovation", *Research-Technology Management*, 63:6, 54- 59.

20) The Quint (2020). 'Layoffs pay cuts, no pay: Keralites living abroad want to return'. Retrieved from https://www.thequint.com/coronavirus/coronavirus-lockdown-lakhs-kerala-abroad-gulf-return-home-kuwait-abu-dhabi-dubai on 25 January 2021

21) The Times of India (2021). 'In Foreign Policy Reset, Biden plays tough with Saudi, China'. Retrieved from https://timesofindia.indiatimes.com/world/us/china-will-face-repercussions-for-human-rights-abuses-says-biden/articleshow/81067487.cms on 21 January 2021

22) The Hindu (2020). 'Indian Migrant Workers in gulf countries are returning home without months of salary owed to them'. September 19, 2020. Retrieved from https://www.thehindu.com/society/indian-migrant-workers-in-gulf-countries-are-returning-home-without-months-of-salary-owed-to-them/article32639165.ece

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Tracing the gospels of Present Human Value Education from the Epics of India

Himanshu Saxena*

ABSTRACT

The current education system has understood the importance of imbibing value education in the curriculum of academia, thus creating a whirlpool of positive change in the psyche of the younger generation. This curriculum is expected to bring positive changes in society by the various principles and gospels being propounded in this course.

In his ongoing journey of unfurling these values, the present researcher has found that the foundation principles of this course aren't contemporary. Rather, these had already been postulated by the ancient saints of India and are well written in the epics, but due to various reasons, these principles started losing their guiding gleam with time.

For instance, controlling and mastering the mind of the self is one of the modern teachings of the value education curriculum, which is already written as *"Atmavinigraha"* in the Gita. [1] .The present paper attempts to trace the gospels and principles of the current Human Value Education from the Epics of India. The researcher has traced these gospels from the epics like- The Gita, The Mahabharata, The Ramayana, The Vedas and the Upanishads etc. The researcher has also tried to provide a mapping of the same.

Keywords: Human Values Education, Epics, Gita, Ramayana, Mahabharata, Upanishads

INTRODUCTION

India is commonly called the land of culture and is known for its ages-old legacy, which got a little dusty with time due to various factors. However, tough times call for strict measures. This is one of the prime reasons behind imbibing well-developed courses on Human Values in the curriculum of professional courses like B.Tech, B.Pharma, MBA, MCA etc. This is an attempt by the nation's flag bearers to provide its youth with a right and just direction towards happiness and prosperity. With increasing unrest in the society, there was a need to anchor the astray ship of the people. Although many people and organizations had been trying to teach the principles and values of life in the psyche of people like a movement called *"Back to Vedas"* was given by Swami Dayanand Saraswati [2] to lead people towards contentment and happiness; other than this many organizations started various sermonizing ceremonies, meditation centres etc.

But a need was felt to imbibe these principles and preach in the younger generation's psyche, which is why this course called Human values were founded.

This course is expected to bring an optimistic change in society, for it starts working for the students at a tender age when their psychology is being shaped.

Various universities and colleges have also established fully developed value education cells for catalyzing this noble reaction wherein many faculty have been trained. They are still being trained to be the mentor for the next generation on whose shoulders the future of the nation and the world lies. This course mainly entails the following dimensions of human life-

1. A path towards happiness and prosperity.
2. Feeling of contentment within oneself.

* Assistant Professor (H&SS) KIET Group of Institutions, Meerut Road (NH-58) Delhi-NCR, Ghaziabad -201206, UP- India saxenahimanshu90@gmail.com

3. Taking right and just decisions based on ethical principles.
4. Establishing harmony in oneself, family, society and then with nature.
5. Development of emotional and spiritual dimensions of an individual etc.

The above mentioned are prime but not limiting objectives of teaching the present syllabus of Human Values to future professionals.

On observing these objectives minutely, the researchers have figured out that these principles aren't coeval rather, these were the prime objectives of the epics of Indian culture, which unanimously had one aim of showing the right path to the human beings in a different manner.

The epics like the Gita, the Mahabharata, the Ramayana, the Upanishads, the Vedas all tell how to live an ideal life with happiness and contentment. They may have different ways of telling, but the crux remains the same. The principles that we study today in the Human Values curriculum can be traced from the gospels of all these epics as these epics are considered to be ahead of their times and contain the secrets of human life.

The Gita, as mentioned by various scholars, motivates one to live one's life with discipline, honesty and integrity.

The Mahabharata encompasses various lessons like- standing with what is right even if you have to fight for it; one should not give up on life despite all the obstacles; the learning of sacred duty is again a prime lesson of this epic which is evident from its various characters and incidents.

The Ramayana tells one to choose the path of righteousness, about the unity that's of prime importance to win against anyone. The truth is always victorious and keeping your promises with your life.

The Upanishads deal with teaching wisdom, and the Vedas tell that one needs to earn wealth by glorious deeds. An individual must strive to have wealth by the righteous path.

All these erudition point towards the same objective of helping an individual find their purpose and live a life full of happiness and contentment by following the path of righteousness. These principles may have changed their names in the contemporary world or may have been paraphrased, but the essence is still the same and is required by an individual to live an ideal life.

HUMAN VALUES EDUCATION

Human Values are the principles and virtues that guide an individual to choose the path of righteousness and take effective decisions while considering ethics and other just factors. These values are supposed to be innate in a human, and the way sugar is supposed to be sweet. Similarly, a human is believed to have humanity.[3]

This assumption, however, doesn't hold excellent and increasing turmoils in the society is the right example to verify the same. Many factors contribute to such a pitiable state of the community.

“Ram Rajya”, a phrase used to depict a society with fearlessness, fair and ethical practices, prosperity and happiness, seems very Utopian due to reasons like- avarice, stiff competition, discontentment, hoarding and over-accumulation for future needs etc.

Thus, to establish harmony within an individual's self and then at various levels of their interaction, many organizations have been trying to formulate some strategy.

Human Values is one such strategy of the nation to establish the same harmony. Various erudite scholars have postulated multiple principles and fundamentals-based on extensive research and social-psychological experiments.

According to Google search engine IIT- Bombay is one of the pioneers of working on the curriculum of Human Values and imbibing the same in the regular academics which they started nearly in the year 2001.

The importance of this course has grown exponentially over the last two decades. Various universities of India are now offering this course under a categorical specialization and infusing the same in the regular academic curriculum of various professional and non-professional courses.

The apex educational regulatory authority of India, i.e., AICTE, has always shown by its action the seriousness it has for the curriculum of Human Values. AICTE has launched various schemes to promote this curriculum and train multiple faculty members to become mentors and potent agents of unfurling these values by permeating them in society through the younger generations.

The curriculum contains the golden principles of living a life full of happiness and contentment. According to the present researcher, these principles have been derived from various epics and scriptures of the Indian culture, which are still significant for the moral and ethical development of an individual, then the family, then the society and then nature.

ROLE OF THE EPICS OF INDIA

India is known for its copious treasure of culture and heritage. The diversity of this nation is the greatest strength, for it offers to view the same righteousness in the living through various angles using the varied sub-culture of the country.

The country also contains a rich heritage of great epics and scriptures which have acted as the guiding light for the masses, and these epics have taught the way of living by preaching how an individual must shape their character, how a family must bind itself together, how a society must work and how nature must be preserved. These principles have proved their worth time and again, which is why the epics in India hold a significant place in the countrymen's hearts and enjoy the highest stature over anything.

Various epics have given various characters and situations that help one understand how to deal with various life situations with ethics and being on the right path. The epics may be varied, but the supreme learning is humanity and ensuring happiness with contentment.

These epics contain the solution to almost every problem of human life and deal with various facets of human life.

Today's world talks of stress management, time management, taking effective decisions, anger management, being ethically upright, etc.; these concerns of human life are already discussed in these scriptures and hold contemporary significance.

However, due to the influence of modernization, western culture people have started forgetting these epics and are studying the same in the name of the Human Values course. But, it must be borne in mind that whatever they look today in the name of anything which shows the path of righteousness are not different from the gospels given by these epics.

LIMITATION OF THE STUDY

The epics of Indian culture are incredibly vast. Thus, there may be chances of getting even more comprehensive knowledge of the same and then mapping with the current curriculum of the value education. Moreover, almost all epics teach the same things yet, and the researcher has tried to map with the most relevant ones. Thus, a complete scope of further research may extend the present study.

Mapping the principles of the present human value education with the gospels of the Indian epics

Raju Roy, in his research article "Ancient Scriptures and Humans Values [4], has also presented a vibrant study on almost the same platform wherein he wisely said that the principles which we try to imbibe in the psyche of the students today in the name of moral values or human values were already curated by the ancient saints of India and are already well documented in the forms of various scriptures like Vedas, Gita, Mahabharata. In the exact alignment, the present researcher has tried to map the contemporary principles of Human Values with that of the ancient gospels of Indian scriptures.

The below table tries to illustrate the ten learning of the present curriculum of Human Values and tries to trace its origin from the Indian epics-

	Gita	Ramayana	Mahabharata	Vedas/ Upanishadas
Harmony in Self -Mindfulness (Self Control)	✓			✓
Harmony in Family		✓	✓	
Harmony in the Society		✓		
Harmony in the Nature		✓		✓
Solving the dilemmas of life and decision making	✓			✓
Value of Love	✓	✓		
The virtues of the righteous path	✓	✓	✓	
Contentment	✓			✓
Discipline in life and a healthy lifestyle				✓
Dutifulness	✓	✓	✓	

The researcher has tried to create this mapping as per his understanding and on the premise of the available literature. This table is a small indication of the broad objectives and learning traced from the Indian epics to the modern Human Values curriculum. There is a complete scope of a more comprehensive discussion on the same. All the Human Values course postulates are found in almost all the epics. Nevertheless, the researcher has tried to map the individual postulate with the most relevant epic of that dimension.

DISCUSSION

Harmony in the Self is considered the founding block of all learning. According to the Gita, an individual must first find out who they are and what is their purpose, and then only the individual can accept themself, which ensures harmony in the self.[5]

Vedic Samhita entails a lot of prayers that indicate that the body's health is to be maintained and that of the self, and to achieve the perfect harmony, one has to start with their own self by various means of controlling greed, hatred, envy etc.

"Atmavinigraha"- The Shlok 8 to 10 of the chapter13 of the Gita clearly depicts the nuances of self- control wherein Lord Krishna is making Arjuna understand that if a person doesn't have self- control , he becomes uncontrolled. Self control is one of the founding blocks towards achieving greater goal.

The shlok 27 of the chapter 17 clearly talks about the spiritual sacrifice and self- harmony which Lord Krishna believes to be leading to the ultimate truth.

Harmony in the Family- The Ramayana and the Mahabharata both the epics revolve around the families and depict the nitty-gritty of the dynamics of the families. In both the epics the parents are given due respect and their command is supreme for the progeny. The Ramayana manifested the human values by depicting the dharma for - the individual, family and the society.

The Mahabharata contains various incidents where harmony in the family was tried to be ensured. However, due to the evil deeds of the Kauravas the entire clan got finished. Such is the importance of ensuring harmony in the family.

Harmony in the Society- The Ramayana has shown the world the good example of the society where nobody is afraid and all the fair and ethical practices are followed. The term depicted is called "Ram Rajya". To establish harmony in society, Lord Rama did everything, i.e., from formulating society-friendly rules to slaying the evil that hamper society's progress. It is said that "Ram Rajya" supposedly had one of the most progressed societies of India.

Harmony in the Nature—The Ramayana spans almost the complete country until the then part of the nation, i.e., today's Sri Lanka. Thus, it provides a comprehensive picture of various landscapes and their importance. The exile of Lord Rama and their life in the woods imply harmony in the nature. A research has been done in the name of Plant diversity in the Valmiki's Ramayana which envisages the natural habitat of the then India. The Trio (Rama, Lakshmana and Sita) always revered nature and lived completely with it.

The Vedas have provided the nature with the highest stature and kept it above any man or the mankind. The ***Rigveda*** envisages the worship (paying gratitude) of the deities representing the elements of nature i.e., Air, water, sky, earth and fire.

These Vedas also sing the the glory of the nature and why one should be in complete harmony with it. These Vedas have also provided an impetus for the principles of present Environmental Sciences.[6]

Solving the dilemmas of life—The Gita is known to contain around 700 verses that talk about almost all the aspects of life. The Gita envisages the dillemas of the then life and the life of future humans (Present). Thus, it has provided various ways of overcoming the dilemmas and make effective decisions.

Lord Krishna while sermonizing Arjuna , clearly says that every human is bound to make choices some are easy while some are tough to make. Thus, if a man is clear with his self and other components he can make wise decisions. The chapter six of the Gita says never take any decision in extreme emotions, ask yourself if you are taking this decision out of immense attachment. The chapter 17th, Shloka 28th says to have faith in your decisions.

According to Taitriya Upanishad, one can have a calm and balanced mid-set , minimize personal interest, be away from prejudice, anger , and envy; remove any deformed thinking and thus overcome a dilemma and make effective decisions.

Value of Love—The current curriculum of Value Education says that love is the complete value the same has been propounded by the Gita and the Ramayana.

Lord Krishna says, "Giving, receiving, sharing and uniting" are the elements of love and through Love the souls of those on the divine path are healed.

The Ramayana is an embodiment of true love wherein the love of father and son was depicted, the love between the brothers, the love between the henchman and the God and above all the divine love between a husband and wife can be seen because of which a battle was fought.

The virtues of the righteous path—The Gita clearly mentions in the chapter 4 verse 8 that in order to establish the righteousness time and again, the lord will keep reincarnating himself.

Lord Krishna in the Mahabharata acted as a light house for the Pandavas to make them move on the path of righteousness and the ones (Kauravas) who deviated from the righteous path were slain.

The same kind of learning can be seen in the Ramayana where Lord Rama is an epitome of righteousness evident from Lord's deeds and words. Valuing father's promise the lord happily accepted the exile and kept on moving on the path of righteousness.

Contentment—The chapter 2, verse 17 of the Gita states that a man who abandons the avarice and is self satisfied attains the best mental peace. A non- satiated mind (dis contended) cannot attain peace.

Rig Ved Samhita on contentment says that one needs to differentiate between one's needs and desires to contend.

Discipline in life and healthy life style—Rig Veda says one who gets up early gets the treasure which shows the relevance of field in life. Ayurveda; a complete form of alternative medicine that is today a traditional form is supposed to contain the principles of a healthy lifestyle and is a part of Atharva Veda (knowledge of the procedures of everyday life).

The verse seventeen of chapter six of the Gita states that the sorrows can be diminished by those who lead a disciplined life in eating, sleeping and recreational activities. Lord Krishna in the Gita says that one cannot maintain one's physical health without exercise.

Dutifulness—This aspect can be found in almost all the epics wherein in the form of stories, someone always reminds the other one about his/her duties and why one should diligently carry out one's duties.

In the Gita Lord Krishna reminds Arjuna of his duties and thus, Arjuna came over his inhibitions. For instance, verse 19 of chapter 3 of the Gita says one must perform one's duty with diligence by practising detachment.

In the Mahabharata, many instances can be seen when the duties were reminded and thus performed. Yudhisthir was the one who was always serious about his duties towards everything and everybody.

In the Ramayana Lord Rama can be seen fulfilling all his duties with happiness; he is an obedient son, a caring brother, a protective master, a loving husband and a mighty king.

CONCLUSION

The above mentioned exposition clearly indicates that the founding principles of an ideal human life had been laid centuries ago, which still hold good in the contemporary era. The names and ways of proposing them may have changed over time, but the substance is still unaffected.

The idea behind a constant reminder of these principles is to help an individual live a healthy, happy and contented life.

The present study unveils the fact that the principles that we study today were laid centuries ago by the saints of India and can be seen even today in the forms of various epics. Thus, this paper's primary objective is to map the present principles with the past gospels.

Moreover, suppose these gospels from the epics are clear and transmitted from one generation to another. In that case, one can genuinely think of ensuring harmony at all levels, which is the essence of today's Human Values education already professed by the ancient scriptures of India.

REFERENCES

1. Swarupananda, S. Srimad Bhagavad Gita, Publication by Advaita Ashrama. ISBN: 978-81-7505-096-9.
2. https://en.wikisource.org/wiki/The_Complete_Works_of_Swami_Vivekananda/Volume_7/Epistles_-_Third_Series/XXIII_Mr._Bhattacharya.
3. Gaur RR, Sangal R, Bagaria GP. Foundation course on Human Values and Professional Ethics. Excel Books, New Delhi, 2010, ISBN 978-8-174-46781
4. Roy Raju. Ancient Indian Scriptures and Human Value. International Journal of Advanced Research, March 2021
5. https://www.holy-bhagavad-gita.org
6. https://www.yogapedia.com/definition/5507/upanishads

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