

COVID-19:

The New Economics for Economies

Edited By

Dr. Bholu Khan

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Preface

The outbreak of Covid-19 disease has, in most part of the world, started by January 2020. However, it was first identified in Wuhan province of China in November 2019 and it was identified as different from the other Corona virus family. In Nigeria, the first case was recorded on 17th March 2020. In an effort to contain the spread of the disease, just as in other parts of the world, Nigeria has imposed a strict social distancing and complete lockdown. The fear of financial and economic crisis led to panic buying and hoarding for future consumption. Consequently, economic activity in all sectors of the economy came to standstill. Most industries lay off their staff. The effects on the poor citizen was so enormous that the government had to introduce palliative packages to ease the impact of the pandemic on households.

The aim of this edited book is to provide wider and comprehensive literature about the present Corona virus which also known Covid-19 for the academics, Scholars, researchers, students and industry professionals to understand the world economies and their problems in general and Nigerian economy and its problems in specific. Current pandemic has almost changed the current global scenarios such as Labour Market, Labour Policies and Laws, Employment, Migration, Reverse Migration, Financial Development and Financial Inclusion, International Trade Direction and Central Banking and Monetary Policies, Environmental Changes, Covid-19 and its Impact on Tourism and Tourism Industry. This edited book comprises of 28 Chapters and various issues are deliberated by the authors and they tried to proffer a way forward in Covid-19 and Post-Covid-19 time. It will also help us understand governments' expansionary fiscal and monetary policies to combat the impact of Covid-19 and the policies required to bring back their economy on track.

Acknowledgement

First and foremost, we thank Almighty God that provided us the ability and patience to undertake this work. Our sincere thanks and deep gratitude to all the contributors who provided their scholarly work for this edited book. The contributors to the book are from Nigeria, Morocco, Turkey and India. We must express our sincere thanks to the Vice-Chancellor, Yobe State University, Prof Mala M. Daura for providing all kinds of support for this book. We also express our sincere thanks to the Deputy Vice-Chancellors, the Registrar, Bursar and entire Management of the University for their enormous support during this work. The publication of this edited book is sponsored by Yobe State University. We really appreciate, and we express our high esteemed to the University and the Management.

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Chapter 1

The Role of the COVID-19 Pandemic and Oil Prices on the US Stock Market in Different Volatility Regimes: An MS ARMA GARCH Approach

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Abstract

While the concerns about the future were reflected in the asset prices in a very short time, the reactions of the stock markets to the pandemic were seen as investors behaving very nervously and selling the financial assets. This study examines the volatility structure of the US stock market during the ongoing pandemic period with the help of Markov Regime Switching Autoregressive Moving Average Generalized Autoregressive Conditional Heteroskedasticity (MS ARMA GARCH) Models. The findings obtained from the study provide evidence that oil has got a vital role in explaining the yield difference for SP500 index between different volatility regimes as the low volatility and the high volatility.

Keywords: SP500, COVID-19, Oil, Markov Regime Switching Model, MS ARMA GARCH

JEL Codes: G10, G12, G15

Introduction

While the 2020 COVID-19 pandemic continues to spread throughout the World, the losses the pandemic will cause are discussed in the basis of global, territorial and sectoral respectively. These scenarios will become more known as the economic and social effects of the pandemic occur over time. On the other hand, Russia-Saudi Arabia's oil price war after failing to reach an OPEC agreement resulted in a collapse of crude oil prices and a stock market crash in March 2020. In the financial markets, while the concerns about the future were reflected in the asset prices in a very short time, the reactions of the markets to the pandemic were seen as investors behaving very nervously and selling the financial assets. In 2020, losses in the US and European stock exchanges fell nearly 35% below their

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highest level in history. The uncertainty led global investors to gold, which they saw as a safe haven in past crises, and the most convertible currency, the US Dollar. While various economic programs were announced by governments in the context of combating the pandemic, there were visible rebounds in the markets as a result of important decisions such as the liquidity-increasing decision affecting all financial markets at the global level, such as the Fed's unlimited government bonds and mortgage-backed securities.

On the other hand, oil prices dropped very rapidly with decreasing demand. The pandemic process and the slowdown in economies continued to lower this demand further and keep the price down. Moreover, the price of the May futures contract for the West Texas Intermediate / WTI type crude oil of the US fell to \$ minus 37.63 USD per barrel on April 20. The decrease in oil demand and the concerns that the warehouses would fill brought the price to minus levels. Energy prices have undergone major changes since the 1990s. Oil prices, which tended to decline in the 1990s due to political and economic reasons, fell to \$12. With the trend that started in 2002, it rose to \$140. In the last two decades, great price changes continued to be observed in other energy prices, such as natural gas, in both the spot and derivative markets. We will continue to see similar movements in energy prices both from supply-demand and from the structures of financial markets.

This study examines the volatility structure of the US stock market during the pandemic period. The pandemic first showed its effect on the slowdown in the world economy in oil prices. Although the drop-in oil prices were due to a contraction in demand and excess supply before the pandemic, it deepened with it. Following oil prices, major return losses and declines occurred in developed and emerging stock markets, including the US stock market. The fact that the USA has an important place among oil-producing countries brings with it a more corrosive effect on the decline in oil prices for the US economy. Within the scope of these relations, while examining the volatility structure of the SP500 index, which provides information about the US stock markets, it has become important to add the change in oil prices to the model. The number of cases of the pandemic that emerged in the USA on January 21, 2020, is another variable in the study. While trying to explain the change in the US stock market in parallel with the developments in the world with changes in oil prices, it is another sub-subject of the study to investigate whether the increasing number of cases in the country is important in explaining the volatility change in the stock market.

Literature Review

In addition to its main impact areas such as disease and death, COVID-19 also has significant social, economic, and financial impacts. While scientists all over the world use drugs, vaccines and etc. to solve the pandemic, other researchers trying to understand the effects of COVID-19 in various disciplines such as economy, banking, and tourism. When

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looking at the studies in the field of economy and finance, it is seen that issues such as production and consumption demands, government expenditures, loss of GDP, tourism, and travel are examined, and various predictions have been made. Studies examining the effect of COVID-19 on stock markets and financial markets are spreading rapidly in the literature.

Studying with coronavirus data between 23 January 2020 and 13 March 2020, Zeren and Hizarci (2020) use the sample of China, South Korea, Germany, Spain, and France, where cases are frequently seen. The study examines the cointegration relationship between stock market indices and the number of daily COVID-19 cases and deaths, and the structural break unit root tests used showed that the structural break in the stock market indices occurred in March. According to the findings of the cointegration analysis, they state that there is a significant long-term relationship between the COVID-19-day total case and the stock market indices of China, South Korea and Spain, but the relationship is not valid for Italy, France, and Germany. As a result of the study, investors are recommended to invest in cryptocurrencies, gold, and derivative instruments rather than stock market investments.

Like Zeren and Hızarcı (2020), Günay (2020) has also examined the cointegration between financial markets and COVID-19. Firstly, analyzing the impacts of COVID-19's on stock volatility is aimed at the study, the author also aims to investigate the correlation between stock market indices of countries such as US, United Kingdom, Spain, Italy, China, and Turkey. Using the data from 3 January 2005 and 3 April 2020, the author divided into the data four sub-intervals. In the study where modified ICSS, dynamic conditionally correlated multivariate GARCH, and DCC-MVFIGARCH models are used, it is reported that all stock markets experienced structural breaks during the audited periods. However, while the Turkish and Chinese stock markets do not show the structural breaks caused by COVID-19, and also it has been stated that the highest increase in the joint movement is seen between the Turkish and Chinese stock markets.

Examining whether the numbers of current COVID-19 cases and deaths and the number of new COVID-19 cases and deaths affect stock returns Alber (2020), worked on six different countries in which the highest number of total cases between 1 March 2020 and 10 April 2020. According to the result from China, France, Germany, Italy, Spain, and USA, it is concluded that stock market returns are sensitive to coronavirus cases more than deaths and sensitive to cumulative coronavirus cases more than new cases.

Sansa (2020) analyze the effects of COVID-19 on the financial markets for China and the USA. He uses the data of the Shangai Stock Exchange and Dow Johns Exchange as dependent variables while using the confirmed case numbers as independent variables.

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Covering the period 1-25 March 2020, findings from the study reveal a significant positive association between confirmed COVID-19 cases and financial markets.

Examining the impact of the COVID-19 pandemic on the global economy using data between January 21, 2020, and April 07, 2020, Şenol and Zeren (2020) use the number of cases and deaths as independent variables, while Morgan Stanley Capital International (MSCI) World Indices, Europe, Emerging Markets and They used G-7 countries as independent variables. According to the results of the Fourier Cointegration test used within the scope of the analysis of the study, it has been reported that there is a long-term relationship between exchanges and COVID-19. In another study, examining country-specific and systematic risks in financial markets under the COVID-19 outbreak, Zhang et al. (2020) state that financial markets are following a dramatic movement at an unprecedented scale. Research findings revealed that global market risks increased significantly with the pandemic. Stock market responses on country basis have been directly linked to the severity of the pandemic. Moreover, it is stated that the economic losses associated with the pandemic increased the volatility in the markets and caused the markets to become unpredictable.

Baret et al. (2020) argue that the pandemic generally causes loss of value in stock markets, stocks, and bonds. Describing this as the proof that this situation pushes financial markets and investments in a different direction, Baret et al. (2020) argue in detail that as of February 21, 2020, stock, bond, and oil prices dropped significantly and all asset classes were looking for a safe haven. Indicating that unlike other world markets, the Chinese market remains strong and stable regardless of the COVID-19 outbreak, Xinhuan (2020, p.1) reports in his study that the Chinese financial market remained more stable in general compared to overseas markets despite the new COVID-19 outbreak.

Examining the effects of COVID-19 on the financial markets in terms of imports, Larry (2020), state that imports almost stopped that worldwide imports are dependent on Chinese production and the pandemic seriously stopped production possibilities. Therefore, it is reported that COVID-19 is directly affected by the export economies of countries around the world.

Data and Methodology

The daily data used in the study covers the period 01.02.2020 to 04.13.2020. The study looks at a short period in which the covid19 pandemic caused stock market crashes in early 2020. Futures prices of both WTI crude oil (OIL) and SP500 index (SP500) are used instead of spot prices to make analysis with larger data. Total cases (TC) used in the study are the cases reported for the USA.

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The low volatility and high volatility regimes of SP500 are analyzed by Markov Regime Switching Autoregressive Moving Average Generalized Autoregressive Conditional Heteroskedasticity (MS-ARMA-GARCH) Model. The MS-ARMA-GARCH models are tested in OXmetrics. Before modeling the variables, the stationarity of the series is investigated using the Augmented Dickey–Fuller (ADF), Philips–Perron (PP), and Kwiatkowski-Philips-Schmidt-Shin (KPSS) unit root tests by E-Views. Test results concluded that series in difference should be used. Besides, the AR(2) MA(2) model is selected with the help of the automatic ARIMA forecasting function of E-Views.

The descriptive statistics for the variables in level and differences are shown in Table 1. While OIL and SP500 skewed to the left (left-skewed) in level (-0.4568, -0.6241), and in difference series (-1.1530, -0.5095); total cases is skewed to the right (right-skewed) (2.6215, 3.3697). The kurtosis' of OIL and SP500 in levels are less than 3, these series have lighter tails than a normal distribution, or we can say these series have light-tailed distributions. On the other hand, the kurtosis of other variables is greater than 3. Total cases in level, and all variables in differences has got heavier-tailed distributions.

Table 1. Descriptive Statistics

	OIL	TOTAL CASES	SP500	D OIL	CHANGE IN TOTAL CASES	D SP500
Mean	43.4954	52985.55	3016.373	-0.5260	7534.743	-6.4645
Median	49.9200	15.5000	3230.750	-0.4000	1.0000	-0.7500
Maximum	63.2700	557571.0	3387.380	5.0100	97819.00	227.0000
Minimum	20.0900	0.0000	2220.500	-10.1500	0.0000	-279.7500
Std. Dev.	14.2600	127628.9	355.0131	2.0986	18380.82	90.1241
Skewness	-0.4568	2.6215	-0.6241	-1.1530	3.3697	-0.5095
Kurtosis	1.6311	8.9536	1.8338	9.0491	15.2606	4.9195
Jarque-Bera	8.3511	194.0485	8.9971	129.2208	603.5358	14.5617
Probability	0.0154	0.000000	0.0111	0.0000	0.0000	0.0007
Sum	3218.660	3920931.	223211.6	-38.9200	557571.0	-478.3700
Sum Sq. Dev.	14844.38	0.0000	9200503.	321.4992	0.0000	592931.6
Observations	74	74	74	74	74	74

Source: Author's Calculations.

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Methodology

In 1982, Engle developed the Autoregressive Conditional Heteroscedasticity model (ARCH) to estimate the time-varying variance of financial assets. This model is generalized as the Generalized Autoregressive Conditional Heteroskedasticity model (GARCH) by Bollerslev in 1986. The GARCH class models, which still maintain their popularity with the presentation of Engle and Bollerslev, describe the features of the financial time series beyond the future volatility clusters, such as the extreme plausibility and thick tail. In the GARCH model developed by Bollerslev (1986) and Taylor (1986), the variance of error terms is affected both by their past values and by the values of their conditional variance:

$$\sigma_t^2 = \alpha_0 + \alpha_1 u_{t-1}^2 + \beta \sigma_{t-1}^2 \quad (1)$$

The GARCH models are successful in modeling the variances in time series that have continued to be developed to test different features of the series. The Thresholder Generalized Autoregressive Conditional Variance (TGARCH) model developed by Zakoian (1994), GJRGARCH (Glosten *et al.*, 1993), Integrated GARCH (IGARCH) (Nelson, 1990), Fractionally Integrated GARCH (FIEGARCH) (Baillie *et al.*, 1996), GARCH in mean (GARCH-M) (Engle *et al.*, 1987) are among the main linear GARCH models.

The exponential generalized autoregressive conditionally varying variance (EGARCH) model developed by Nelson (1991) is the first GARCH model to analyze the nonlinearity in a GARCH model. Logistics smooth transition GARCH (LSTGARCH) (Hgerud, 1997 and Gonzalez-Rivera, 1998), Volatility switching GARCH (SGARCH) (Fornari and Mele, 1997), Asymmetric nonlinear smooth transition GARCH (ANST-GARCH) (Anderson *et al.*, 1999) and Quadratic GARCH (QGARCH) (Sentana, 1995), are some of the other nonlinear GARCH models.

This study investigates the volatility of SP500 index by implementing the Markov Regime Switching GARCH (MS GARCH) models. The main structure of the MS GARCH model, which analyzes the financial markets in terms of the low volatility and high volatility markets, is created by Klaassen (1999). Kim (1993), Cai (1994), Hamilton and Susmel (1994), and Dueker (1997) are the studies that developed the constraints of the MS GARCH models.

MRS models are firstly implemented by Hamilton (1989). According to the MRS models, the economy (market) is not directly observable, the time series variable can be observed and the regime of the economy (s_0) can be obtained in probabilities. If the last state is known, it is also possible to estimate the following state s_1 based on the probability of regime-switching (Bildirici *et al.*, 2010). The MRS model has got a time series process dependent on an unobservable regime variable (st) (Krolzig, 2000). The regime-generating

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process is an ergodic Markov chain (Krolzig 2000) ($p_{ij} = P_t(s_{t+1} = j | s_t = i)$; $\sum_{j=1}^m P_{ij} = 1$; $i, j = \{1, \dots, m\}$) and s_t follows an ergodic M-state Markov process with an irreducible transition matrix:

$$\mathbf{P} = \begin{pmatrix} p_{11} & \dots & p_{1m} \\ \dots & \dots & \dots \\ p_{m1} & \dots & p_{mm} \end{pmatrix} \quad (2)$$

In a standard MS GARCH Model, there is a conditional mean, a conditional variance, a regime process, and a conditional distribution (Marcucci, 2005 and Günay, 2015). The methodology used in this study is the Markov Regime Switching Autoregressive Moving Average Generalized Autoregressive Conditional Heteroskedasticity (MS-ARMA-GARCH) Model.

While y_t is the dependent variable of the ARMA model, h_t is the conditional variance, and the parameters ($\phi, \theta, \alpha, \beta$) are dependent on the state of Markov chain, the formulas in the ARMA-GARCH model are as follows:

$$\begin{aligned} y_t &= C_{s_t} + \varepsilon_t + \sum_{i=1}^r \phi_i(s_t) y_{t-i} + \sum_{j=1}^m \theta_j(s_t) \varepsilon_{t-j} \\ h_t &= w_{s_t} + \sum_{i=1}^q \alpha_i(s_t) \varepsilon_{t-i}^2 + \sum_{j=1}^p \beta_j(s_t) h_{t-j} \\ \varepsilon_t &= \sqrt{h_t} * u_t ; u_t \sim N(0,1), \end{aligned} \quad (3)$$

Empirical Analysis

We employed MS-ARMA-GARCH models with two regimes to investigate the low volatility (regime 0) and high volatility regimes (regime 1) in the SP500 stock index. The estimation procedure implemented in the "Ox Metrics program" identifies regime 0 as the low volatility and regime 1 as the high volatility. With the help of the ARMA models, the regimes are also identified as expansion (regime 0) and recession (regime 1).

We formulated different ARMA models with different switching components as constant, oil, and TC. As shown in Table 1, four of the seven models installed have got switching TC variables, and four models have got switching oil variables. Among the seven different models, four models are found significant. Only one of these four models that are found significant contains the switching variable TC. However, three of the models with a switching oil is significant.

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Table 2: Models

SIGNIFICANT MODELS	INSIGNIFICANT MODELS
MODEL 1 MS_ARMA_GARCH(2, 2, 2) - C (Switching Constant)	
MODEL 2 MS_ARMA_GARCH(2, 2, 2) - CO (Switching Constant and Oil)	MS_ARMA_GARCH(2, 2, 2) - CTC (Switching Constant and Total Cases)
MODEL 3 MS_ARMA_GARCH(2, 2, 2) - O (Switching Oil)	MS_ARMA_GARCH(2, 2, 2) - CV (Switching Constant and Total Cases)
MODEL 4 MS_ARMA_GARCH(2, 2, 2) - COTC (Switching Constant, Oil and Total Cases)	MS_ARMA_GARCH(2, 2, 2) - OTC (Switching Oil and Total Cases)

Source: Author's Calculations.

The estimated equations for Model 1-2 are represented in Table 2. In the first model the only switching variable in the ARMA equation is the constant. The second model have got two switching variables as constant and oil.

According to Model 1, the coefficients of the autoregressive variables are positive (ar(1), 0.0777; ar(2), 0.2250), and the coefficients of the MA variables are negative (ma(1), -0.2883; ma(2) -0.1012), and the variable with the highest positive coefficient is the second autoregressive component. The constant in Model 1 is the only switching variable. In regime 0 which is described as expansion or low volatility, the constant is 5.7819, and it takes a value of -28.5710 in regime 1. This high difference explains the huge losses of regime 1 of SP500.

In the ARMA equation of Model 2, the second autoregressive component is positive (ar(2), 0.1242), the first autoregressive component and the MA variables are negative (ar(1), -0.1790; ma(1), -0.0721; ma(2) -0.0453). In Model 2, there are two switching variables as constant and oil. The constant is positive in regime 0 (5.4900) and a negative in regime 1 (-8.0628). Oil plays an important role in explaining the regime change in the ARMA equation of the second model. As can be seen from the coefficients, the role of oil in explaining the return difference in the sp500 index in regime 1 is nearly three times in regime 0 (oil(1), 5.7699; oil(2) 15.2146).

The variance equations have got three switching components as constant, alpha (the residual's square), and beta (conditional variance). It is seen in the variance equations for both two models that the coefficients are higher in the high volatility regime (regime1) and the vital role belongs to the constant (Model 1: constant (1), 24.1245; constant (2), 90.0796; Model 2: constant (1), 23.6097, constant (2), 95.3600). The fact that the constant in the high volatility regime is approximately four times the constant in the low volatility regime draws attention to the volatility difference. It is also seen that the conditional variance in

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the first model has a higher importance in explaining the volatility difference compared to other models (2-4) (Model 1: beta(2), 0.2690; Model 2: beta(2), 0.0503; Model 3: beta(2), 0.1064; Model 4: beta(2), 0.0655).

Table 3: Equations, Probabilities and Information Criteria for Model 1 and Model 2

MODEL 1			MODEL 2		
	Regime (0)	Regime (1)		Regime (0)	Regime (1)
ARMA Equation			ARMA Equation		
AR(1)	0.0777		AR(1)	-0.1790	
AR(2)	0.2250		AR(2)	0.1242	
MA(1)	-0.2883		MA(1)	-0.0721	
MA(2)	-0.1012		MA(2)	-0.0453	
Constant	5.7819	-28.5710	Constant	5.4900	-8.0628
			Oil	5.7699	15.2146
Variance Equation			Variance Equation		
Constant	24.1245	90.0796	Constant	23.6097	95.3600
Alpha	0.0000	0.1009	Alpha	0.0000	0.1187
Beta	0.0000	0.2690	Beta	0.0000	0.0503
Transition probabilities			Transition probabilities		
$p_{\{0 0\}}$	0.9724		$p_{\{0 0\}}$	0.9723	
$p_{\{1 1\}}$	1		$p_{\{1 1\}}$	1	
Information Criteria			Information Criteria		
log-likelihood	AIC	SC	log-likelihood	AIC	SC
-392.2268	11.2563	11.6674	-388.5403	11.2095	11.6838

Source: Author's Calculations.

Table 3 shows the estimated equations for Model 3-4. Model 3 has got only one switching variable in the ARMA equation as the oil. Model 4 has got three switching variables in ARMA equation as constant, oil, and total cases. Although they are not very different from in the other models in terms of value, the lowest AIC and SIC criteria are obtained in Model 3. Thus, Model 3 can be said to be stronger than other models.

In the ARMA equation of Model 3, one of the coefficients of the autoregressive and MA are positive (ar(2), 0.0760; ma(1), 0.0283) and the other variables are negative (ar(1), -0.2706; ma(2): -0.0230). The constant in Model 3 does not switch and it takes its lowest positive value among the constants in other models (4.2324). The coefficient of oil the high volatility regime is approximately four times the coefficient in the low volatility regime (oil(1), 4.8628; oil(2), 16.6188). Defining the switching mechanism between regimes in the

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ARMA model alone, oil is successful in determining the yield differences in the SP500 index.

While the ARMA equation of Model 4 is examined, it is seen that only the second autoregressive component is positive (ar(2), 0.1943), and the first autoregressive component and the MA variables are negative (ar(1), -0.0906; ma(1), -0.1832; ma(2) - 0.1482). Model 4 has got three switching variables in the ARMA equation, at the same time it is the only model with a switching TC variable. The constant in the high volatility regime is negative as in the Model 1 and Model 2, and it is approximately six times higher in absolute value (constant(1), 7.0680; constant(2) -43.4210). The coefficients of oil show its important role in determining the regimes as in the Model 2 and Model 3 (oil(1), 6.1287, 13.9931) and TC have got a significant effect too (TC(1), -0.0002, TC(2), 0.0017).

Variance equations for both Model 3 and Model 4 show similar results as Model 1 and Model 2. The coefficients are higher in the high volatility regime (regime1) and the vital role belongs to the constant (Model 1: constant (1), 24.6903; constant (2), 92.9959; Model 2: constant (1), 22.8972, constant (2), 86.3017). The constants in the high volatility regimes are approximately four times the constant in the low volatility regimes. It is also seen that the constant of alpha (the residual's square) in the high volatility regime of Model 4 is higher when compared to other models (1-3) (Model 1: alpha(2), 0.1092; Model 2: alpha(2), 0.2178; Model 3: alpha(2), 0.1092; Model 4: beta(2), 0.2178).

Table 4: Equations, Probabilities and Information Criteria for Model 3 and Model 4

MODEL 3			MODEL 4		
	Regime (0)	Regime (1)		Regime (0)	Regime (1)
ARMA Equation			ARMA Equation		
AR(1)		-0.2706	AR(1)		-0.0906
AR(2)		0.0760	AR(2)		0.1943
MA(1)		0.0283	MA(1)		-0.1832
MA(2)		-0.0230	MA(2)		-0.1482
Constant		4.2324	Constant	7.0680	-43.4210
Oil	4.8628	16.6188	Oil	6.1287	13.9931
			Total Cases	-0.0002	0.0017
Variance Equation			Variance Equation		
Constant	23.6903	92.9959	Constant	22.8972	86.3017
Alpha	0.0000	0.1092	Alpha	0.0000	0.2178
Beta	0.0000	0.1064	Beta	0.0000	0.0655
Transition probabilities			Transition probabilities		
p _{0 0}	0.9724		p _{0 0}	0.9712	

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$p_{\{1\}}$	1		$p_{\{1\}}$	0.9826	
Information Criteria			Information Criteria		
log-likelihood	AIC	SC	log-likelihood	AIC	SC
-388.7912	11.1886	11.6313	-386.5800	11.2383	11.8075

Source: Author's Calculations.

Figures 1-4 show the smoothed regime probabilities for Model 1-4. In the upper left part of the figures, it can be examined how much the actual data is overlapped with the 1-step-predictions. With the help of figures, it is seen that the success of the 3rd model higher than other models is in line with the information criteria.

The shaded areas seen on the left bottom side of the figures correspond to low volatility regimes (regime 0), and the shaded areas on the right bottom sides are related to high volatility regimes (regime1).

In this study, it is seen on the figures that regime periods with high volatility include periods in which the stock markets experienced collapse during the pandemic. During the sampling period, the first regime switching from low volatility regime to high volatility in all models occurred before the 40th observation. The only model in which the second regime switching is experienced is the fourth model with the TC variable.

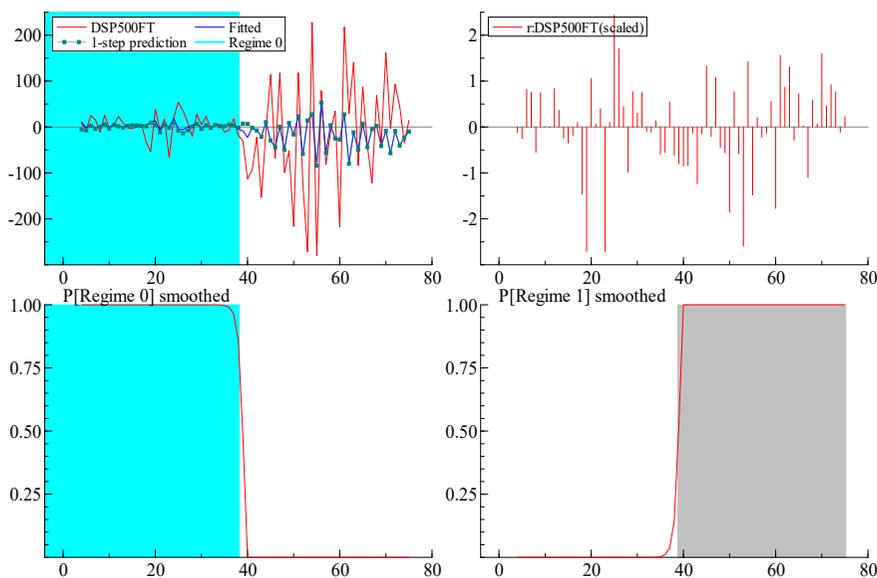


Figure 1: Model 1

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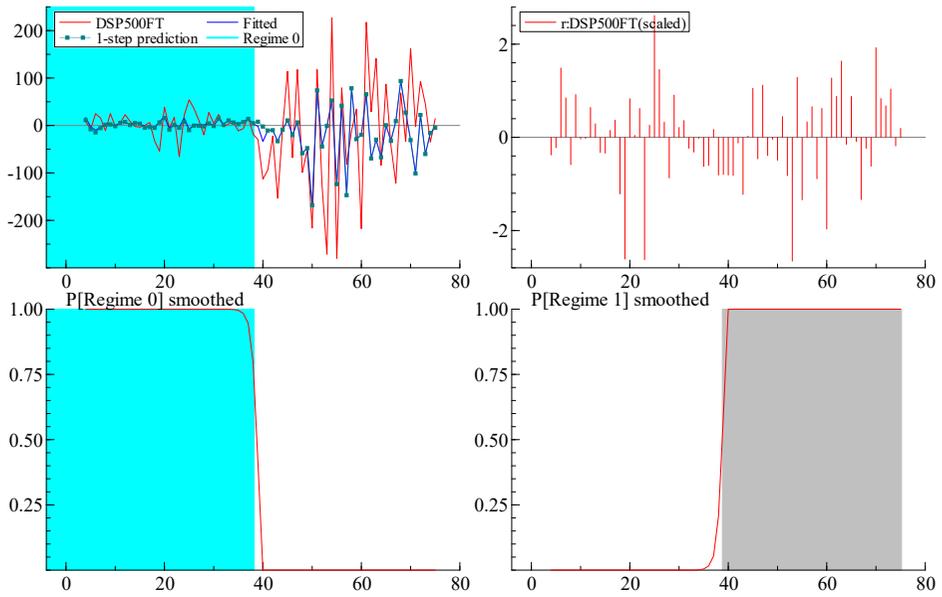


Figure 2: Model 2

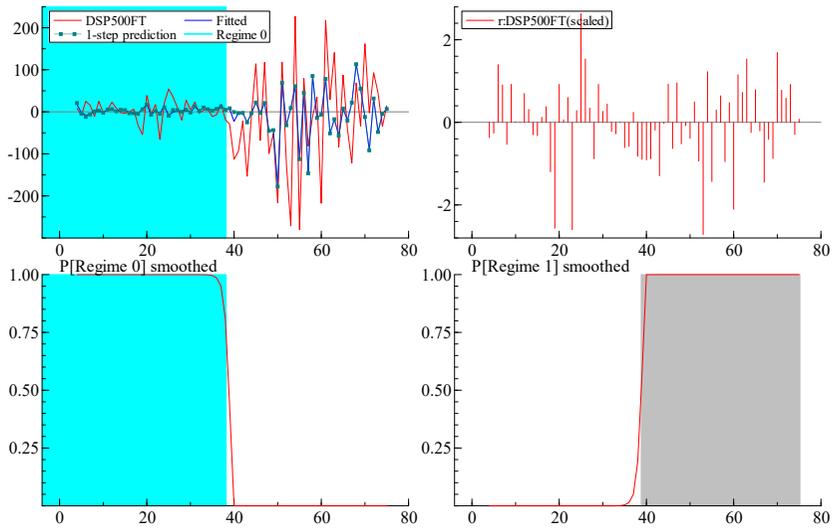


Figure 3: Model 3

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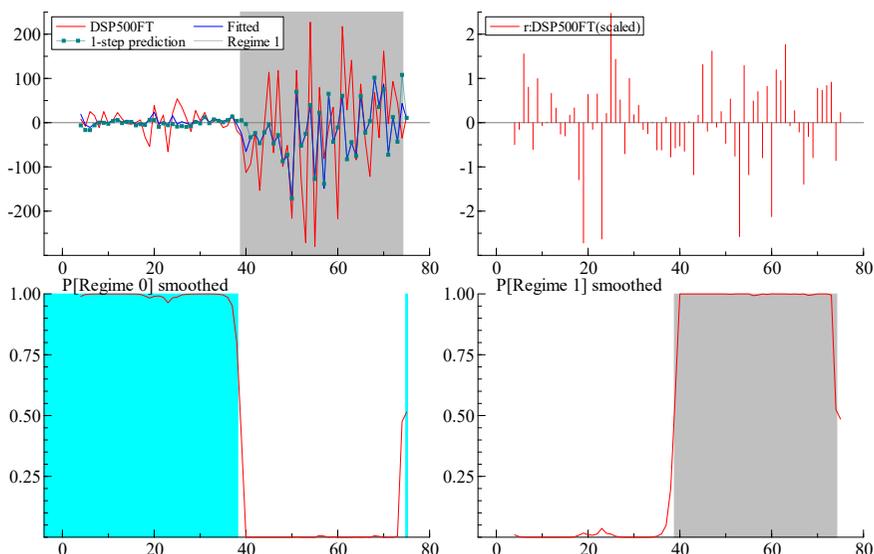


Figure 4: Model 4

Conclusion

This study examines the volatility structure of the US stock market during the pandemic period with the help of MS ARMA GARCH Models to investigate the low volatility (regime 0) and high volatility regimes (regime 1) in the SP500 stock index. We formulated different ARMA models with different switching components as constant, oil, and TC. Among different models, only one model contains the switching variable TC, but there are three models contain a switching oil as a variable in the ARMA equation. Moreover, the coefficients of oil in different regimes show that oil plays an important role in explaining the regime changes in the ARMA equations. Also, lowest AIC and SIC criteria are obtained in Model 3, which is the model that has got one switching variable in the ARMA equation as oil. We can conclude that oil is the most important variable in explaining the yield difference for the SP500 index between different volatility regimes as the low volatility and the high volatility.

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Chapter 2

The State of the Economy, Employment Conditions and Reverse Migration in India: Challenges and Prospects in the Times of COVID-19

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Abstract

The outbreak of COVID-19 has happened in the time when the entire globe was already struggling with recessionary tendencies and consequent upon the enormous extent of the spread of the infections and following economic lock down has led to the situation with little prospects of recovery in short span of time. In Indian scenario, the situation was even worse primarily on three accounts; first the country's health care system was completely inadequate to handle such a level of pandemic therefore long lasting effect of pandemic was not never beyond the expectation. secondly, an overwhelming proportion of India's working population was engaged in informal sector having hardly any social securities and therefore remained largely vulnerable to any external shock such as like this. Thirdly, for couple of years the health of the economy has been experiencing relative deteriorating on many accounts and consequently the distress was quite clearly visible on employment front of the country. The declaration of country wide complete lockdown triggered massive reverse migration, closure of various production units, increased unemployment at massive scale. Though the government later announced relief packages, given the extent of crises, the packages has hardly expected to cater much. Thus, there is a desperate need to rethink not only about the approach to address the crises led by Covid 19 in short terms such as revaluation of economic relief packages but also there is an urgent need to rethink about the entire development discourse of the country in terms of reprioritising agriculture and other labour intensive sectors of the economy, bringing about institutional changes such as land redistribution etc., formalisation of workforce with the provision of adequate social security and giving priority to health and education sector of the country in order to make India resilient to such unforeseen crises in future.

Keywords: Informal Sector, Labour, Reverse Migration.

Introduction

For country like India generation of decent work and livelihood conditions has been among the most important policy objectives of economic development since Independence.

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However, on this front, spanning over more than seven decades of Independence Indian achievement has not been satisfactory. The ‘dual economy’ model (Lewis, 1954) based on relatively smooth transitions derived automatically through the market route has hardly been realized so far. More precisely, a transition of workforce from low paid informal/agriculture/primary to high paid/secondary or tertiary has remained nearly off the track (Jha and Thakur 2013). Nearly 80 percent of the workforce in India is engaged in informal sector with either very low level of social security or even worse without any kind of social security. Evidently, vulnerability of the workforce in regard to any external shock can easily be estimated to be very high in case of India.

In fact, with the advent of neo-liberal policies the overall performance in regard to the well-being of labour has come under severe stress, especially in the context of provisions of adequate and sustainable livelihood options for a large section of the rural population and of rising number of informal urban labour. Factors like substantial compression of rural development expenditures, increasing input prices, vulnerability to world market price fluctuations due to greater openness, inadequate /non-existent crop insurance and substantial weakening of the provisioning for credit, along with the governments’ apathy to the demand for remunerative prices for farm produce are among the obvious causal correlates of the contemporary agrarian crisis in the country (Patnaik, 2007; Roy, 2017, Talule, 2020). The adverse effect of these policies was reflected in the substantial decline in the absorption capacity of the agricultural sector and a continuous deterioration in the quality of employment in the entire rural sector. The neoliberal policies with contractionary fiscal and monetary regime led to the demand contraction in the economy and sectors such as agriculture etc. witnessed sharp fall in their overall incomes (Jha and Thakur 2017). Concentration of economic activities in a few hands led to the nearly stagnant formal sector with nearly stagnant employment elasticities in most of the sectors of the economy. The agrarian distress has led to the sharp fall in the purchasing power of the rural population in general. Micro, Small, Medium enterprises also witnessed relative deterioration in their overall performance over the years. Employment elasticities in the entire formal sector remained very limited and thus creation of additional employment remained largely absent (Papola and Sahu, 2012).

Besides, during last couple of years the some of the indicators of the economy has been showing the sign of rising distress. Thus, outbreak of the Covid 19 and subsequent announcement of economic lock down are bound to effect Indian economy adversely and the impact can easily be predicted to be extremely severe in case of informal laborers constituting overwhelming share of total country’s workforce. In this scenario, this paper would examine that to what extent Indian economy has been affected by such outbreak and what has been the possible impact on workforce of the country primarily on employment front. Further, it would try to identity the challenges associated with providing quality

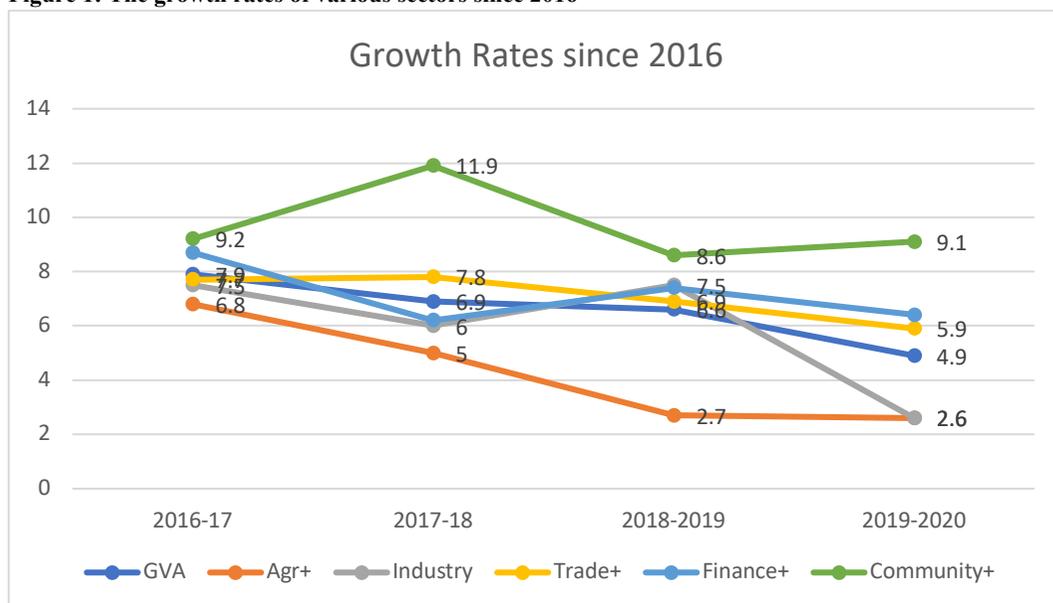
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employment in this scenario and would also evaluate the prospects of recovery. While explaining the prospects of recovery, this paper would also suggest some policy measures in order to address those challenges in a given time frame.

State of the Economy and Employment Conditions on the Eve of Covid 19 Outbreak

State of the Economy:

Figure 1: The growth rates of various sectors since 2016



Source: Government of India, Economic Survey 2020.

Particularly since 2015, with further deepening of neo-liberal agenda in the economic sphere and ignorance of agriculture sector in policy discourse led to the contraction in overall demand and triggered further deterioration in the economic conditions of marginal population in general and rural population in particular. Figure 1 shows that overall GDP growth of the country has decelerated from 7.9 percent in 2016 to 4.9 percent in 2019. In fact, India's GDP growth had dropped to 4.5% in the July-September quarter of 2019-20 and for the entire fiscal year it remained lower than 5 percent. A sharp deceleration in Agricultural growth has been witnessed since 2016 reflecting worsening of already existing agrarian distress in country. In 2019 there has been the lowest growth in industry since 1991-92 equalling 2.6 percent. Further, since July 2019, Except for November, there has been contraction in factory output. Capital goods and consumer goods output remained the worst hit. The monthly collection of GST, stuck below the Rs 1 lakh crore mark since May 2019. A sharp deceleration in the construction sector was witnessed during 2019-20 and the country's real estate sector witnessed one of the poorest years, faced with a poor housing

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demand. As on date, according to rough estimates, there is an unsold inventory of around 450,000 housing units. External Sector was also showing a deteriorating trends. The shrinkage of merchandise exports in the successive months of August (-6%), September (-6.6%), October (-4.6 %), November (-0.34%) and December (-1.9%) for 2019 showed an alarming trends (RBI Handbook). Similar was the trends of Import and overall trade during the same period. The decline was evident in import of consumption goods indicating falling demands in the economy. Indian rupees against the dollar touched the lowest even before the lock down was announced. A trend of rising external debt was also evident since the beginning of the fiscal year. Thus, before the outbreak of the Covid-19, the economic condition of the country was not good enough to provide with reasonable resistance. The year 2019-20 was already reflecting the trends of recession.

Employment Condition

Urban employment: A falling employment elasticities across different sectors coupled with recent trend of deceleration in growth rate for various sectors of the economy has strong negative implications for employment generation in the country (Basu and Das 2016). Quite recently, it is not that the capacity to absorb additional labour has halted in the major sectors in Urban India, but also there has been enough trends showing an expulsion of labour from the same. For instance, urban manufacturing sector has witnessed a significant decline of 2.1 million jobs between 2013–14 and 2015–16 (Mehrotra et al 2014). Construction sector which accommodated large part migrant labour in urban areas between 2006 to 2012 started losing its capacity to absorb additional labour during the more recent period. In fact, half a million jobs were lost in this sector since 2013 in urban area itself. However, some rise in employment in urban area was observed in the services sector (by nearly 2.9 million) it remained largely confined to unorganised sector (Abraham, 2017). Besides, there has been enough evidence of suppression of real wage in the urban sectors since 2014 (Anand and Azad, 2019).

Farm Employment- As discussed earlier Agriculture sector remained the worst victim of neo-liberal reforms and the situation was further exacerbated with further apathy of the government since 2013. This has a strong bearing on employment conditions in the farm sector. In fact, negative employment elasticity has been evident in the agricultural sector since 2004 (Basu and Das 2016). Thus, expulsion of labour from the agriculture sector has been visible since then. Between 2004-05 and 2009-10 nearly 20 million employments were lost in agriculture (Himanshu, 2011 and Thomas 2012). Further, between 2009-10 and 2011-12 such decline was estimated to be around 13 million (Mehrotra et al, 2014). The more recent estimates show that between 2012 to 2018 there has been further fall in agriculture employment amounted to nearly 27.3 million (Abraham, 2017; Thomas 2020).

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Nonfarm rural employment- the fall in agricultural employment would not have been a matter of concern if ‘pull factor’ would have existed in non- farm sector. However, non-farm sector has also come under severe stress in terms of providing additional employment. For instance, one of important sources of non-farm employment i.e. rural manufacturing has been witnessing falling share in total manufacturing from nearly 32% in 1994 to 22% in 2010 and nearly 17% in 2015 (Papola and Sahu 2012; GoI 2016). Mainly two sectors namely construction and trade witnessed increasing their share in rural non-farm employment which remained largely informal (Basole, 2017). However, construction sector which accounted to nearly 18.9 million additional employments between 2005 and 2012, provided only 1.6 million additional employments between 2012 and 2018 (Thomas, 2020). Further, deceleration in the growth of rural non- farm wage also indicates during the recent period also confirm the same (Usami and Das 2017). Further, a visible rise in the share of self-employed during 2004 to 2009 and from 2012 to 2015 were primarily attributed to push factor from agriculture (Abraham 2017; Himanshu 2011; Jatav and Sen 2012) and mostly remained confined under the low paid informal sector.

The Impact of COVID-19 Outbreak

As a response to COVID-19, the government of India announced a complete lockdown of the country since 24th of March. The announcement of lockdown was too sudden to give preparation time for various stakeholders of the economy. The announcement of lockdown happened in the time when the entire country was already struggling with the recessionary tendencies as discussed earlier. Needless to say that the impact of such unplanned and unprepared lockdown in a country like India where more than 85 percent of the workforce and over 75 percent of output are routed in the informal sector, is expected to be severe.

The Impact on the Informal Economy and the Incidence of Reverse Migration

The Indian economy at the time of COVID-19 outbreak was not resilient enough to handle any external shock. In this scenario the impact of lockdown on the economy was bound to be disastrous and far more longer. In short run the unemployment rate shoot up, many small industrial units closed down, supply chains disrupted, agriculture sector witnessed further problems with crashing of prices, rise in the input costs, irregularity in the supply of inputs, sharp fall in consumption of entire population living at the margin, rising indebtedness particularly from the non-institutional sources, along with many more. Thus, the entire informal sector comes under severe distress with the sudden announcement of lockdown and consequently, a large number of workers rendered jobless and most of them happened to be migrant labourers. Such lockdown has flagged off an enormously large movement of labourers (reverse-migration) in the country.

There is no pan India level official record of such migration, the estimation of its actual size is subject to speculations. There are various estimates of the possible extent of reverse migration, Amitabh Kundu and his team puts this number at nearly 18 million, Chinmay

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Tumbe puts the figure at least 30 million and Shridhar Kundu puts this figure higher than 23 million¹. Off these migrants a substantial number of migrants are coming from UP, Bihar, MP and Odisha. Based on various state level information and based on media coverage along with many field reports, it seems plausible to expect that the 'Covid-19 led lockdown' might induce at least 35-40 million reverse migration including intra state and circular migration. This indicates the extent to which Covid 19 and the policy responses to it has generated the crises particularly in terms of loss of means of livelihood.

Rural Employment Under COVID-19 Outbreak

With the announcement of country wise complete lockdown there was hardly any casual work available during the entire period of lockdown both in the agriculture and non-agriculture sector. Casual labourers which constitutes an overwhelming proportion of total rural workforce and rely only on daily wages for their livelihood remained totally devoid of any income for the entire period of the lockdown. This in turn has affected the purchasing power of the rural population and consequently the demand in the economy has fell down sharply. With a sharp fall in the demand, a large number of non-farm units are expected to lose their business. In fact, some field based observations (Thakur 2020a and Thakur 2020b) confirms these facts. One important implication of this is the sharp rise in labour force participation rate in villages coupled with shrinking work opportunities and consequently rise in unemployment rate in the economy. Thus, situation is expected to be even worse with reverse migration in rural areas. Higher labour force participation is expected from variety of reasons- Firstly, due to acute income deficiency a large number of children and older population are expected to join the labour force who otherwise were absent from job market; Secondly, many housewives are also expected to enter the labour force in order to supplement their family income; Thirdly, many households earlier engaged in non-farm activities are expected to quit their occupation subject to falling demand in the economy and expected to enter in casual labour force; Fourthly, many small and marginal farmers with loss in their income (due to higher input price and lower output prices) are expected to supplement their income from wage employment and therefore might seek wage employment. Lastly, a large section of these reverse migrant would join labour force in their native villages as they could not sustain without work for long. However, a sharp rise in the labour force participation rate with a sharp reduction in work opportunities has already led to a sharp rise in employment rate at pan India level.

Employment Prospects in Urban Areas

As far as prospects of recovery on the employment front is concerned the situation might be understood differently for destinations of migrations. At the destination of migration,

¹ <https://indianexpress.com/article/explained/coronavirus-how-many-migrant-workers-displaced-a-range-of-estimates-6447840/> ; <https://indianexpress.com/article/explained/coronavirus-india-lockdown-migran-workers-mass-exodus-6348834/>

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the prospect of recovery is very bleak at least in near future for following reasons- Firstly, an overwhelming proportion of units under the informal sectors usually have very small capital and savings, for them it is most unlikely that they would sustain even for a week under forced lock down. Secondly, a sizable proportion of these small units are highly indebted and without regular selling they are very likely to discontinue their instalments. The situation would be even worse if the loans are being taken from the non-institutional sources with higher rate of interests. Thirdly, because of reverse migration, the average wage in the destination might go up and it might render small units unviable. Similarly, a scarcity of labourers in these urban areas might be responsible for under production for relatively long period of times even after lock down is totally lifted. Besides, there is also a possibility that these small units might lose their business in hands of large businessman and in order to counter low profit rates monopolistic tendencies may arise in times to come. A possible shift from small to large scale production even within the informal sector might lead to lower employment elasticity in near future with lesser possibility of recovery of employment. Fourthly, the demand in the economy has already became too low and even if with some credit relief (or with other government support) they start their operation, there is a high possibility that they might not be able to sell their produce adequately in the market. Fifthly, with the possibility of rise in wage rate in the destination of migration along with lower availability of labour, a shift towards more capital intensive production is also not unexpected. This kind of responses is also likely in the agriculture sector in North Indian region. If it happens in good scale, there might be the fall in long term demand for labour in this region and the regaining employment might not be feasible in near future. And lastly, there is no surety about how long these crises would continue. It is evident that the large and organised units with reasonable resilience to counter such tendencies are under severe stress and working at less than the potential output. Thus, even if lockdown is completely lifted there is hardly any possibility of readjustment of absorbing migrants in any sizable manner in their original destination of migration. So the employment condition in urban sector with high probability would remain under distress unless a suitable support packages is delivered for their recovery.

COVID-19 Relief Packages: Response of the Government and Possibility of Recovery

There is hardly any doubt that the Indian Economy has come under severe distress and the impact on the workforce of such crises has been immense. The only possible way to get out of such crises is to get reasonable support from the government. The government in response to such crises announced a relief packages. Thus, it becomes an imperative to analyse that to what extent these packages would be instrumental in triggering suitable recovery in near future. In other words, one needs to explore whether the packages are adequate enough to handle the present crises the country is facing.

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Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

Given the higher demand for wage employment in rural areas one of the key policy targets might be MGNREGA. In short run it can address the problem in two ways. First, it can provide wage employment to the labourers and give them some relief in terms of cash at hand. Second, with higher injection of liquidity in rural areas through the wage payments under the scheme, purchasing power of the rural population can be enhanced. This in turn might give some respite to the shopkeepers or other self-employed in non-agriculture households in terms of rising demand of their goods in local areas. In general, higher allocation of funds for MGNREGA can provide with the government a breathing space to think about suitable long term policies. Thus, not beyond the expectation, the government of India as part of relief package announced 40,000 (nearly 61,500 crore allocation in the 2020-21 budget) crores additional allocation for MGNREGA on an immediate basis. Though the increment apparently seems reasonable, many caveats are attached to it. First, in the latest budget (2020-21) the central government had already cut the allocation of MGNREGA by nearly 14 percent (nearly by 10000 crores) Second, in 2019-20 fiscal year, (even with higher allocation in MNREGA) nearly 7.6 million workers who demanded for job did not get it. This year, with such a massive cut in allocation there was higher possibility of rising this gap during the present fiscal year. Thus, the extra allocation is only sufficient to absorb additional 4 to 5 million labours in rural areas for the entire fiscal year. This is completely inadequate not only for absorbing the reserve migrants (more than 30 million in size) but also insufficient to meet rising demand of work due to higher labour force participation in rural areas due to lock down induced crises. Besides, the amount it is going to disburse in rural areas would be far short of pushing the demand in the rural economy in any substantial manner.

Garib Kalyan Rojgar Yojana

The scheme will work in a mission mode in 116 districts across 6 states namely Bihar, Madhya Pradesh, Uttar Pradesh, Rajasthan, Jharkhand and Odisha that received the maximum numbers of migrant workers back. The mission will be a convergent effort between 12 different ministries and total Allocation is approximately 50,000 crores. Though this a welcome step, nonetheless there are some limitations of this scheme which are worth mentioning here. This scheme is only reorganisation of existing projects not entirely a greenfield scheme there for creation of additional employment would be limited to some extent. Secondly, the wage component of this scheme is not high enough to create more wage funds. Moreover, the coverage of this scheme is lower both in terms of areas and number of employment it could provide. Since it involves several departments and ministries the administrative complications in implementing the projects efficiently would be a tough task.

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Package for the Agriculture Sector

A very attractive package worth Rs 1 lakh crore was announced as ‘Agri Infrastructure Fund’ that will finance projects at the farm-gate and aggregation point for efficient post-harvest management of crops. Besides this, schemes for micro food enterprises, cattle vaccination, dairy sector, herbal plantation, beekeeping, and fruits and vegetables were also announced. The Essential Commodities Act was announced to be amended to deregulate trade in cereals, edible oils, oilseeds, pulses, onion and potato, and stock limits for these will be imposed only in exceptional circumstances. It was announced to enact a central law to permit barrier-free inter-State trade of farm commodities and ensure a legal framework to facilitate contract farming. The support package for agriculture has some inherent problems. The entire country’s economy is struggling with demand side contraction and viability of new investments is highly questionable unless a demand recovery is done properly. However, focus of the scheme is to provide loans for agribusinesses and for some post-harvest measures which will be disbursed largely as loans to the private players to create capacity. However, in situation like the present no investment would be viable if demand is not raised to an adequate level. And the packages have hardly directed in that direction. Essential commodities act amendment will have very limited impact on the farmers as it is more related to middle man and traders selling agricultural commodities. The most of the proposals presented by Finance Minister were long-term measures that are unlikely to provide immediate relief caused by the national lockdown. There has been very small allocation for government procurement and providing direct infrastructural development under the public sector investment. Cash transfer has been very meagre which amounted to only 6000 in three instalments. Provisions of input support, price support etc. have been very limited. Even in long term no institutional reforms was mentioned. Thus, the announce of relief packages in the agriculture sector is looking off the mark and it is unlikely that it would trigger recovery of this sector in any significant manner.

Package for the Support of Micro, Small and Medium Enterprises (MSME)

A relief package was also announced for MSME sector as ‘*Atmnirbhar*’ package, Basic aim of the packages as mentioned in the policy name itself is to use MSME sector as key to make India self-reliant. Although the allocation of package was reasonable high, its effectiveness is limited by the fact that it hardly gives focus on providing stress driven demand constrained economy with adequate cash support. The package was primarily in the form of concessional credit while the sector is constrained by infrastructural bottleneck, lack of cash in their hand, high level of indebtedness, lack of competitiveness vis a vis large manufacturing units, extremely poor condition of demand in the economy etc. Thus, the package for MSME sector hardly seems effective in terms of reviving the sector both in terms of output and employment recovery in near future.

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Thus, on the whole the packages announced by the government of India is hardly enough to put the economy at the recovery path. In should be put India on the recovery path it not only important to enhance the government relief packages significantly but also there is an urgent need to refocus the packages in giving priority to enhancing cash support to the various stakeholders of the economy and to expand infrastructural support with enhanced public sector investment on immediate basis.

Concluding Remarks and Policy Suggestions

Thus, it seems clear that the Indian economy needs a complete overhaul in order to get recovery in near future. The relief packages are neither sufficient not in the right direction to counter the distress the economy is witnessing now. Instead of providing concessional credits to various stakeholder of the economy there is an urgent need to enhance cash support along with a sharp enhancement in public investment in order to create better infrastructure support for agriculture and MSME sector. The role of MGNREGA is important both in terms of providing employment and raising the rural demand in general, therefore a sharp rise in the allocation for MGNREGA is needed. It is needed to make MGNREGA universal instead of one in a family and provision of working days is needed to be increased at least from 100 to 200 days per year. Besides, providing adequate free food to everyone should be continued for full fiscal year. Giving rural and agriculture sector higher priority in terms of increased public investment is the key to improve employment conditions in rural areas. Implementation of unfinished land reforms might also be proved instrumental in this regard. The focus must be shifted from large industrial houses led growth to higher labour intensive small units led development. Needless to say that social sector such as health and education are key to any country's long term sustainable growth and India has not been doing great on this front. Stepping up public investment in health and education is definitely need of the hour and must be realised immediately.

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Chapter 3

COVID-19-Impact: Violence Against Women in India

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Abstract

The present study covers the status of violence against women during the COVID-19 pandemic lockdown period in India. The analysis of this paper is framed based on available data at website of the National Commission for Women (NCW), Government of India. This suggests that the significant increase in the number of cases of different kinds of violence against women during lock down period between March 2020 to July 2020 which result in societal disturbance and impact upon Indian nationals. The list of selected violence against women is presented in this work and discussed about the challenges faced by women. The possible reasons of rising violence against women are- the joblessness of daily earners, meager engagement in economic activities and stay at home with fear situations, etc. This study reveals that violence against women during covid19 pandemic was found increased in India.

Keywords: Violence against women; Domestic Violence, Lockdown impact in India.

Introduction

As we are aware that most of the Indian society worships the women in the form of goddess, like Durga for powers, Lakshmi for wealth, and Saraswati for learning. As we see the look back in the history of women empowerment during Vedic period, there was no gender division in hunting, warfare, defense and political activities. The Girls were allowed to educate similar to boys and need to pass through a period of *Brahmcharya*. The marital age of women was not below 16 years. Many women made significant contribution to the advancement of education, viz. Sulabha, Maitreyi, Vadava Prathitey, Vachaknavi, and Gargi. Later, the patriarchy system was initiated in India in during the period of Atharva Veda. However, the significant importance of women (Gandhari, Kunti, Draupdi) may be seen in the period of Mahabharata, as these women are known to decide the warfare.

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During COVID-19 pandemic, with an intention to become educated and empowered like men, in addition to learn domestic activities, females may be found more interested in getting college education. Sometimes, as women get busier in getting college education, they do not have sufficient time to learn traditional domestic and household activities, due to this lapse; many females usually faced problems to carry out traditionally domestic work and kitchen activities including qualitative cooking. Thus, married life of such women became less valued (found unable to do traditional domestic work). However, in schools and colleges, system more facilitates females to get training for self-protection in the society vice to live jointly like a friend.

However, there is no doubt to say that women really work hard for development at every level in the family from child birth to fulfill the desires of her family. In general, women are applauded for this kind of devotion at every place. Usually, men always regard and protect women everywhere she needs helps & support. Apart from this, it is true to say that there may be few dominant men in the society who use women as an object & compel them to perform humiliating tasks; Contrary to the fact that there may be found few self-focused rarely performing women in the society, which is still under the lens of investigation.

The Indian society and traditional culture allow male to dominate in his family. Sometimes, he may feel irritational for any unwanted cause created by the family women. Unfortunately, man may be forced to commit domestic violence against his family women. In order to protect self, in place of rational and evidentiary discussion, women may found by using abusing insulting words loudly may be with an intension to humiliate to cause the insult of men (as there are many laws for women protection) or family male for any kind of demanding issue(s). Due to this, the feeling of humiliation and insulting of men or other family member(s) may be one of the reasons of violence against women. However, it is a matter of in-depth investigation, newspapers published many times of such kinds of incidents. Such type of violence may include burns. In the present days, the domestic violence is seen among the educated and well settled families.

In order to ensure the protection from COVID-19 virus, as per lockdown rules, Social Distancing, zero movement in public place are characteristic ideas. Due to this, during the lock down period, the news published in Hindustan, daily Hindi News Paper, published from Delhi on 28th April 2020 disclose about unseen mismatch in behavioral aspects amongst male and female felt in the families worldwide. As published in Hindustan, daily Hindi News Paper, published from Delhi on 19th April 2020, change in unseen behavioral aspects amongst male and female indirectly creates hidden conflicts between both men & women². During defensive lockdown from COVID-19 pandemic to protect and save human

² Hindustan, daily Hindi News Paper, published from Delhi on 19th April, 2020.

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life around the globe, several news has been published about increase in violence against women Internationally.

In India due to COVID-19 pandemic, the lock down in India was implemented from 25th March 2020, which was extended till July 2020. Some relaxations were allowed in the said lock down period in various parts of India from time to time on the basis of requirement of local population. During this lock down, most of the working populations including women were not allowed to come out from their homes during the corona virus spread sensitive time in India for the significant reason of their safety from COVID-19 with improved immune system. Most of the economic activities were closed down during this period, and dependent women became handicap due to zero income of her spouse, and could not able to cook minimum foods for their children, and unwanted financial burden increased in the household whose income was hand to mouth before implementing the said lock down in India. Spouse dependency for money is the common issue for create domestic violence. This economically dependency of women on her spouse was suggested as resource theory by William Goode (1971). Use of alcohol frequently by family men is the other reason to create unwanted violence in the poor families.

As far as domestic violence is concerned, in addition to women, men and other members of family like children and old parents, etc., also faced many kinds of problems (including physical assault) in their homes including unwanted ignorance & violence in their homes for meager important reason(s). In such kind of conflict situation(s), earning male member of the family may have felt the situation like **sandwich**. During COVID-19 pandemic lock down period in India, if such earning male member of the family want to live in their homes, wife and/or other family members may create unwanted disturbance, if such earning male member of the family wants to come out from their homes for their peace of mind peace, corona virus may attack on them. It may be stated here that there was no place to stay for earning male members of the families, as he may have different kinds of issues to be settled for own family survivals.

The National Commission of India (NCW) is a nodal organization of the Indian Government which helps to cover all kinds of complaints received from women in India for their safety and protection. As per NCW, violence against women are listed in India such as Acid Attack, Bigamy / Polygamy, Cyber Crime against women, Denial of Maternity Benefits to women, Domestic Violence, Dowry death, Gender Discrimination including equal right to education & work, Harassment of married women/Dowry harassment, Indecent Representation of Women, Outraging modesty of women/Molestation, Police Apathy against women, Rape/Attempt to Rape, Right to exercise choice in marriage/ Honour Crimes, Right to live with dignity, Sexual Assault, Sexual Harassment of Women at workplace, Sexual Harassment, Stalking / Voyeurism,

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Trafficking / Prostitution of women, etc. which is available on the website (<http://ncw.nic.in/>) of National Commission for Women (NCW), Government of India.

As far as violence against women is concerned, there are many examples which exist which reveal that males may also find victims of domestic violence and sexual assault too; but, in general, as discussed in Book Review, *The Second Sexism: Discrimination against men and boys* (2012), society considers such violence less seriously because of the prevailing attitudes towards male members of the family, it is believed that men are fearless, sustain greater pain, and are more capable of self-defence in comparison to women. While men are considered too responsible for harassment of women; likewise, women need to be responsible for discrimination against men. According to Lenore E. Walker, domestic violence is cyclic and has four phases, in which the abuser's tension situations are the cause of violence and peace.

We need parallel securities to protect females in the public place where women are working. As women's security needs more security personnel at public places, it may increase the cost of securities for women at public places. Female housemaids who generally come from needy and low-income families, in addition to taking specified jobs in low wages from such housemaids, such housemaids are also forced to face humiliation and various kinds of harassment at their working places.

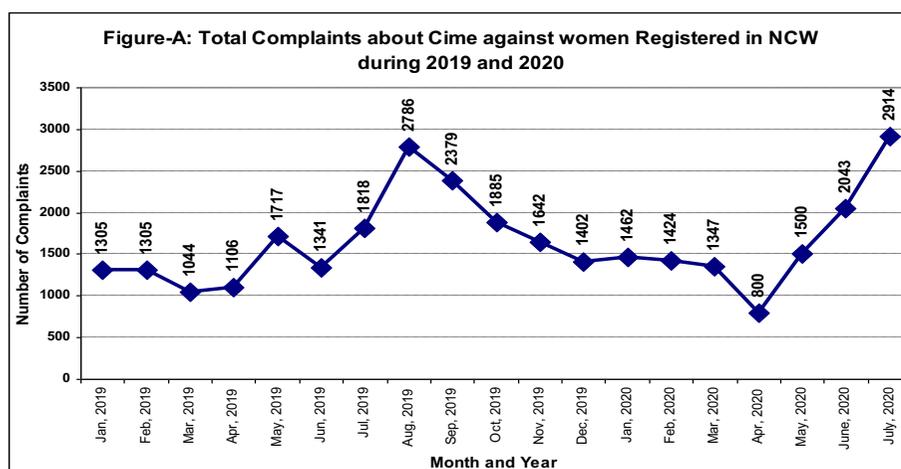
As most of the population was asked to stay at their home during the lockdown period in India, and all males and females including their children (if any) and their dependent parents (if any), to know the impact of lockdown on violence against women in India in a non-privacy environment which created during the lockdown period, the data collected from the NCW website on the selected complaints and placed in the table (below), and the total incidents against women given in the Figure-A (below) which shows significant changes in the number of complaints received in NCW on violence against women in India during January, 2019 to July, 2020.

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Table1: Number and Nature of Selected Violence Complaints Registered (month-wise) in National Commission of India during 2019 and 2020

Months	Bigamy / Polygamy	Cyber Crime against women	Dowry death	Harassment of married women/ Dowry harassment	Indecent Representation of Women	Other	Total
(1)	(2)	(3)	(4)	(5)	(6)	(8)	(9)
Jan, 2019	18	39	14	87	2	1145	1305
Feb, 2019	11	30	22	200	7	1035	1305
Mar, 2019	11	22	16	204	6	785	1044
Apr, 2019	14	35	13	228	7	809	1106
May, 2019	12	49	46	397	10	1203	1717
Jun, 2019	10	33	14	316	11	957	1341
Jul, 2019	11	43	31	361	14	1358	1818
Aug, 2019	14	61	49	468	11	2183	2786
Sep, 2019	11	40	56	468	13	1791	2379
Oct, 2019	9	35	38	391	7	1405	1885
Nov, 2019	9	35	32	368	7	1191	1642
Dec, 2019	21	37	42	275	9	1018	1402
Jan, 2020	10	32	32	267	2	1119	1462
Feb, 2020	7	21	17	221	1	1157	1424
Mar, 2020	6	37	18	203	1	1082	1347
Apr, 2020	6	55	9	62	1	667	800
May, 2020	18	73	27	159	8	1215	1500
June, 2020	14	103	27	273	3	1623	2043
July, 2020	23	110	49	493	1	2238	2914

Source: National Commission for Women (NCW)



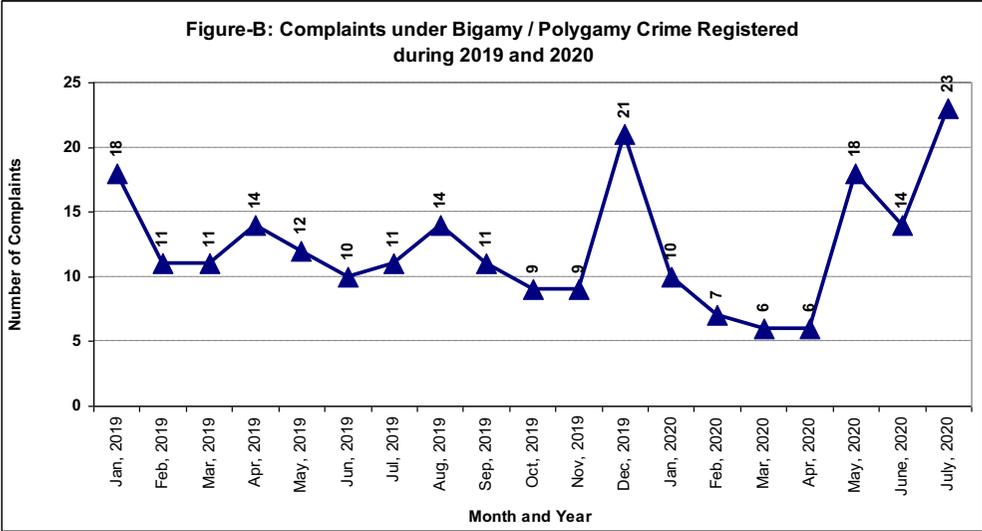
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Figure-A reflects that the number of complaints about Violence against women increased during lock down period in India during May, 2020 to July, 2020 while some relaxations were allowed in the said lock down. It reached to 2914 complaints in July, 2020 which includes 1096 more complaints in compare to July, 2019. However, there was a significant downfall may be seen in the complaints (only 800) registered in NCW during complete lock down in India in April, 2020.

Due to limitation of the paper, only few selected violence against women are discussed in this paper, Viz., (i) Bigamy / Polygamy, (ii) Cyber Crime against women, (iii) Dowry death, (iv) Harassment of married women/ Dowry harassment, & (v) Indecent Representation of Women.

Violence against women: bigamy / polygamy

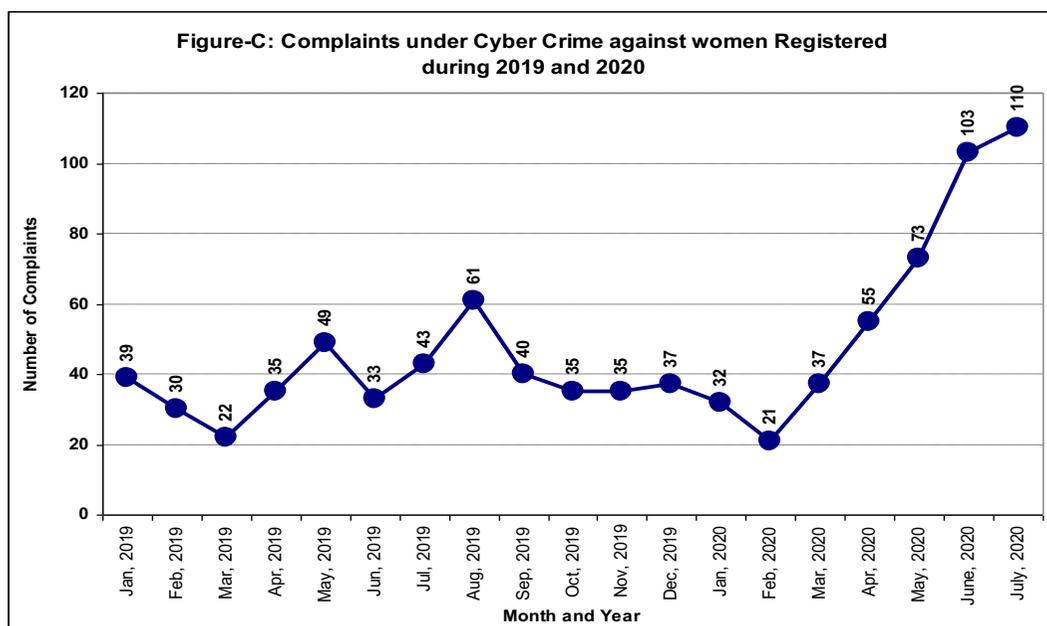
Bigamy is Violence against women which is treated as punishable offence. This Violence reduced in the beginning of the lock down India in March and April, 2020 but suddenly increased three times in May, 2020 as seen in the **Figure-B**. Further to this, the number of complaints reduced during June, 2020 but again it jumped to maximum number of this incident during July, 2020. During 2019, 151 complaints of Bigamy / Polygamy were registered in NCW, out of which only 87 complaints was registered during January to July, 2019. In compare to January, 2019 to July, 2019, 18 more complaints were registered in NCW during January to July, 2020. If we see the table, the number of this complaint was registered in NCW as 6 March, 2020 which increased to three times in May, 2020 and four times in July, 2020.



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Violence Against Women: Cyber Crime Against Women

During the lock down period in COVID-19 pandemic, peoples were found so busy on internet, chatting through WhatsApp, messenger, etc. The criminal minded persons were also found in this social media system in which any person can harm or hurt anyone without physical meetings. There are many identified cyber-crimes which committed against women, such as *Harassment* through e-mails, *Cyber-stalking*, Cyber pornography pictures, photos, writings etc., and cyber tort including libel. During the lock down period, the cyber-criminals were also in their homes, and as a mindset, in absence of other kind of economic activities during the lock down period, they committed more cyber-crimes against women to harass them.



The table reflect that 459 complaints were received in the NCW during January to December, 2019, out of which 251 (54 % of total of the year 2019 of this complaint) complaints were received during up to July, 2019. 61 complaints were highest (13%) in August, 2019, while 49 (11 %) complaints were registered in May, 2019. On an average, around 38 complaints are found monthly basis of this Cyber Crime against women registered in the NCW during 2019, and a significant downfall begin in October, 2019 which continued till Feb, 2020.

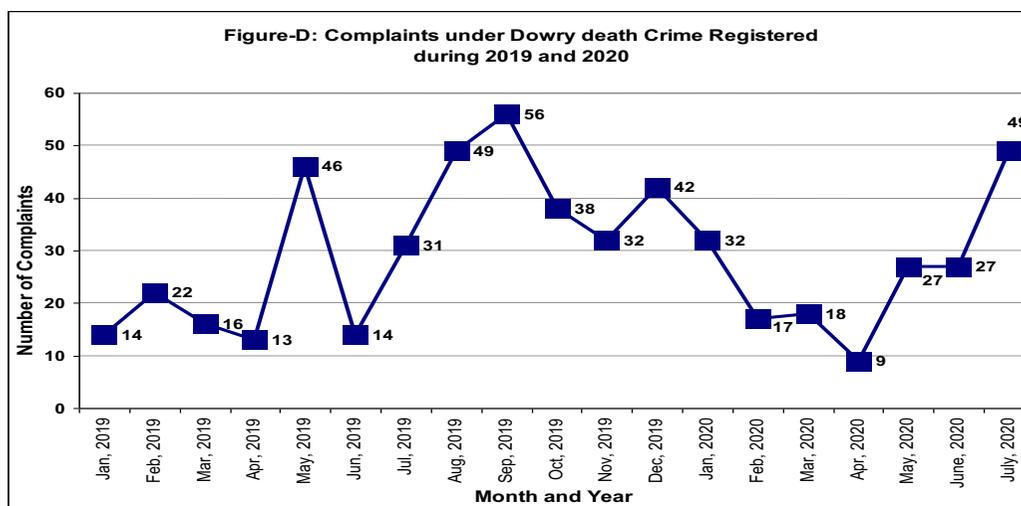
The national average of this complaint was found 2.33 % out of total complaints received in NCW during the year 2019. This national average reached 4.07 % (1.17 % more) only in seven months (Jan to July) out of total complaints received in NCW during the year 2020. During complete lock down for three months (March, April, & May, 2020) and

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partially lock down for two months (June, and July, 2020) due to COVID-19 pandemic in India, this kind of complaint found increased unexpected from the past average incidents against women (Figure-C). In compare to 2019, 15, 20, 24, 70, & 67 more complaints were registered in this kind of Violence Cyber Crime against women in NCW during 2020 in March, April, May, June, & July, 2020 respectively. We may conclude that the Cyber Crime against women was also increased during lock down period in India. Suddenly unexpected enhancement in the complaints in Cyber Crime against women registered in NCW may be the reason of lock down period in India as most of the cyber-criminals were locked in their homes.

Violence Against Women: Dowry Death

Most of the dowry death occurs when young women found unable to bear harassment and torture in their family, and forced to commits suicide. This dowry death number found reduced in the lock down period India in April, 2020 but after implement some relaxations in complete lock down, the number of incidents of such kind of Violence were suddenly increased in May, June, and July, 2020 as seen in the Figure-D. If we see the table, there were only 9 complaints registered in NCW during April, 2020. In compare to April, 2020, this kind of complaint was increased three times in May, 2020, three times in June, 2020, and more than five times in July, 2020.



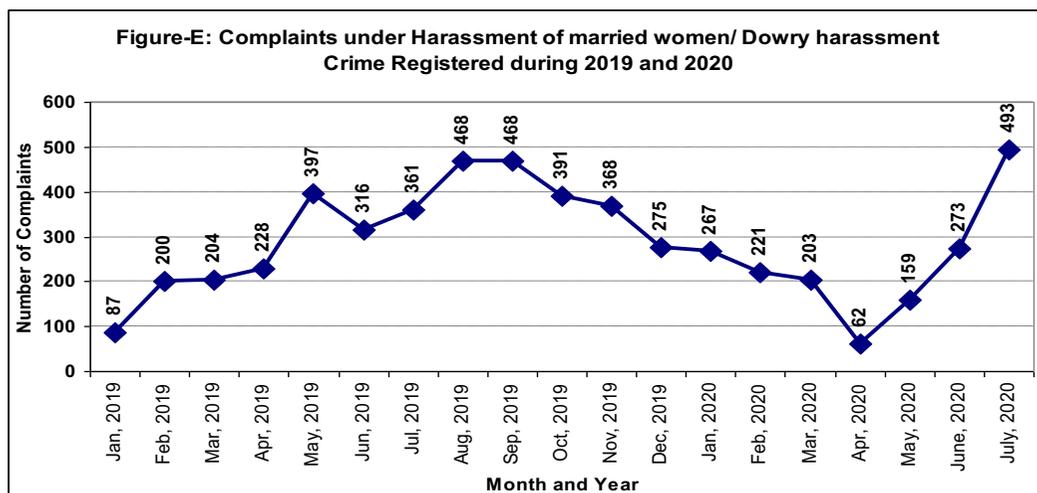
In total, in compare to April to July, 2019, 8 more complaints were registered in NCW during April to July, 2020. Out of total complaints registered in NCW, 1.89 percent complaints were registered in the year 2019 (January to December), and 1.92 percent (0.03 percent more) complaints were registered in the year 2020 in only seven months (January to July). We may assume, the enhancement in this kind of complaint may be the reason that

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financial crisis due to joblessness during lock down in India and married women may be forced to collect money from their parents.

Violence Against Women: Harassment Of Married Women/ Dowry Harassment

Harassment of married women/Dowry harassment are such kind of unsocial act in which only women are harassed. However, it is one kind of mind set of the society in which only women and girls are harassed on the basis of their gender. Harassment of men and boys can also happened, but people have less sympathetic behaviour for male victims in comparison to female.



In compare to Jan, 2019 & Feb, 2019, 180 & 21 more complaints were registered in Jan, 2020 & Feb, 2020 respectively in NCW. To keep safe from COVID-19 pandemic, the complete lock down in India was implemented in last week of March, 2020 to April, 2020. However, during the lock down period in the months of May to July, 2020, some relaxations were allowed to the general public in the lock down period in India. If we see the Table, the number of complaints about harassments women, i.e. Harassment of married women/ Dowry harassment were complaints registered in NCW, 97 more in May, 2020 in compare to April, 2020; 114 more in June, 2020 in compare to May, 2020; and 220 more in July, 2020 in compare to June, 2020. On the basis of seven months (January to July, 2020).

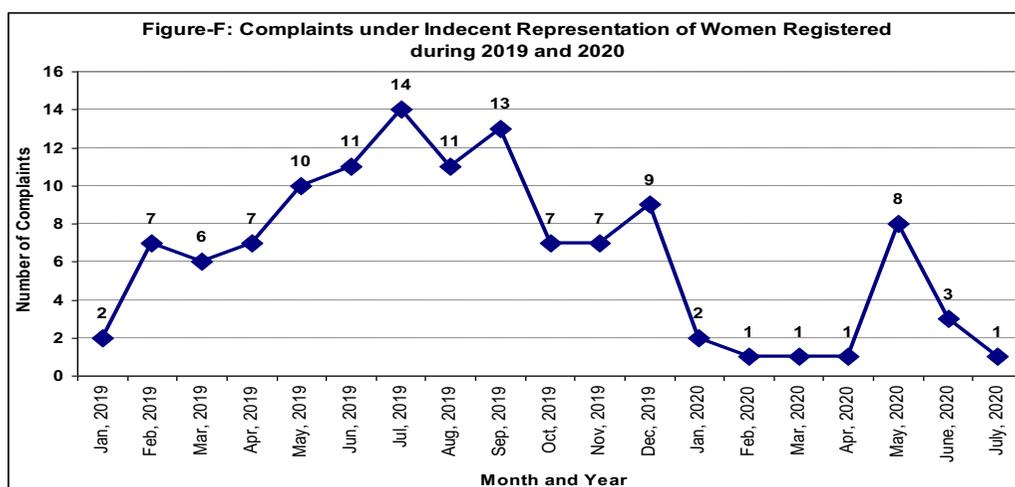
In last seven months in India, in compare to year 2019, 1953 (around 17 % of total complaints during the year 2020) from January to July in the calendar Year 2020, while it was 1793 (around 9 % of total complaints during the year 2019) from January to July in the calendar Year 2019. If we see the Figure-E, after implement of some relaxation in lock down in India, the number of complaints increased monthly basis till July, 2020 from April,

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2020. During the COVID-19 pandemic in India, as no one was allowed to move outside from their house or place where they are living, due to this non movement of any one, most of the couples were forced to live in a common place without moving to other optional places. Due to this, the incidents of this type of complaints were reduced during complete lock down in India during April, 2020.

Violence Against Women: Indecent Representation of Women

Indecent Representation of Women is treated an offence in India according to The Indecent Representation of Women (Prohibition) Act, 1986. According to this act, Indecent Representation of Women may be made through advertisement, Label, and Package, etc.



During lock down period in India, however, the number of this Violence Indecent Representation of Women was only 1 in March & April, 2020 while suddenly in May, 2020 it jumped to 8 (Figure-F), but it again reduced in the further months, i.e. June & July, 2020. If we see the table, during the calendar year 2019, 104 such complaints were registered in NCW, out of which 57 such complaints were registered in NCW in seven months during January, 2019 to July, 2019. This type of complaint was reduced in 2020 in total, Only 29 complaints were registered in NCW during January, 2020 to July, 2020. Over all, the number of complaints of this kind of Violence against women in India is reducing during lock down in India due COVID-19 virus pandemic.

Violence Against Women: Other Violence

There are various other Violence against women as discussed above in item i to v, such as, Acid Attack, Denial of Maternity Benefits to women, Free legal aid for women, Gender Discrimination including equal right to education & work, Not Categorized yet, Outraging

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modesty of women/Molestation, Police Apathy against women, Protection of Women against Domestic Violence, Rape/Attempt to Rape, Right to exercise choice in marriage/Honour Violence, Right to live with dignity, Sex selective abortion / female foeticide / amniocentesis, Sexual Assault, Sexual Harassment, Sexual Harassment of Women at workplace, Stalking / Voyeurism, Trafficking / Prostitution of women, and Women's right of custody of children in the event of divorce, etc.

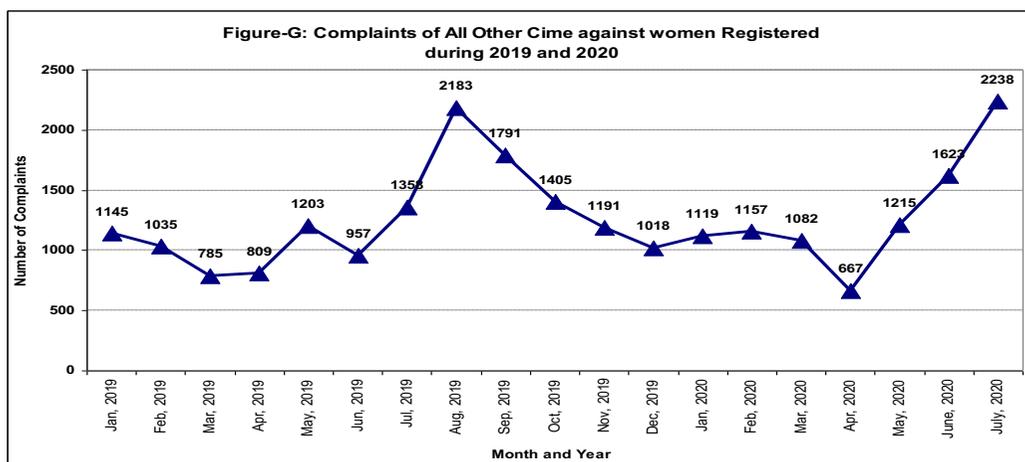


Figure-G reflect the enhancement of the Crime against women during lock down period in India after allow some relaxations to public. If we see the table, there is a downfall in other crime against women in India registered during complete lock down in the month of April, 2020. In compare to March, 2020, after reducing 415 of other crime against, only 667 complaints were registered in NCW in April, 2020. In compare to April, 2020, around 182 percent, 243 percent, and 335 percent enhancement registered in other crime against women during May, 2020, June, 2020, and July, 2020, respectively.

Conclusion

- The Violence against women as registered in the National Commission of Women, India are found increased on selected types of violence against women, viz. Bigamy / Polygamy, Cyber Crime against women, Dowry death, and Harassment of married women/ Dowry harassment.
- The Indecent Representation of Women Violence against women as registered in the National Commission of Women, India are found decreased during the year 2020 in compare to the year 2019.
- The complaints about Bigamy / Polygamy were found overall increased continuously from May, 2020 to July, 2020.
- Unexpected enhancements in the complaints in Cyber Crime against women were registered in NCW from March, 2020 to July, 2020 continuously.

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- The complaints in Dowry death Crime against women were registered in NCW from March, 2020 to July, 2020 continuously.
- The complaints in Harassment of married women/ Dowry harassment Crime against women were registered in NCW from March, 2020 to July, 2020 increased very fast continuously.
- Overall, in compare to the year 2019, unexpected enhancements in all other Crime against women were registered in NCW during May, 2020 to July, 2020.

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Chapter 4

The Impact of COVID-19 on Household Economy and Consumption Preferences: An International Survey

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Abstract

This study examines Coronavirus (COVID-19) pandemic how affects the household economy and consumer preferences between goods and services, which is commonly known from January 01; 2020 to time of ending survey period May 05; 2020. COVID-19 pandemic closure increased panic, anxiety, and depression level in both young and adult people. In this study, the attitudes of families in terms of food consumption and shopping preferences towards the COVID-19 pandemic outbreak and lockdown were examined. Four hundred eleven participants or families were included in this study. All of them agreed to participate in this study voluntarily (303 men and 108 women). An online survey was generated to get household economy data and the food preferences with their causes before and after the COVID-19 pandemic outbreak. The questionnaire was conducted during the lockdown period of COVID-19 when all participants were self-isolated at home. The Pandemic causes increasing unemployment, decreasing household income, also the consumption of luxury and semi-luxury commodities. Before the disease, the first and second preferences for food consumption were meat and bakery foods, but during the pandemic, the first and second preferences were fruits and vegetables. Before the outbreak, the first and second causes for choice were cost and health, but after the outbreak, the first and second causes for preferences were quality and health. The recovery path from COVID-19 is likely to see societies and economies opening and contracting with the waves of the pandemic. In this undulating new world of co-existing with COVID-19, countries and societies will need to deeply invest in new capabilities and capacities in order to rapidly

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adapt, anticipate change, manage risks and implement solutions to build a better normal. The findings of the present study show that COVID-19 pandemic outbreak has a powerful impact on food consumption preferences and their causes of families from various countries.

Keywords: COVID-19, Household economy, Pandemic, Consumption preference.

Introduction

In humankind, history was many epidemic and pandemic diseases, and many people were dead for this reason. As we know, such as SARS, MERS, EBOLA, LASSA FEVER virus depended on epidemic illnesses, were threatened people live in the last four-five decades. (WHO, 2018) However, humankind was founded remedy for them. The Coronavirus (COVID-19) is dangerous and effective than others, also spread wide faster than the preceding. (Radcliffe, 2020) The coronavirus first appeared from the Wuhan City in China in December 2019 and spread widely around the world in two weeks very fast. (Ruiyun Li, et al., 2020)

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Coronaviruses are a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). It depends on the virus, but common signs include respiratory symptoms, fever, cough, shortness of breath, and breathing difficulties. In more severe cases, the infection can cause pneumonia, severe acute respiratory syndrome, kidney failure, and even death. (WHO, COVID 19, 2020)

COVID-19 is a disease with a very high mortality rate. It resulted in the widest pandemic geography, and about 210 countries and regions around the world were occupied by its unbearable influences. Moreover, a second conveyance is being experienced. Meanwhile, the overall mortality rate of COVID-19 was started 35% averagely, then decreased until 9% today in the world according to the international institutions' reports about coronavirus disease. (Worldometer, 2020). As the World Health Organization (WHO) announces it is a public health emergency of international discomposure on January 30, 2020, and it called for collaboration and support of all countries to prevent the rapid spread of COVID-19, in response to this difficult situation all over the world (Euro.WHO, 2020). Consequently, on March 11, 2020, WHO has declared that COVID-19 disease is a pandemic. Eurozone, Italy, Germany, Spain, France, England with Turkey and Russia, was the most severely affected, consequently the epicentre of this pandemic that rapidly moved from China to Europe. Later, it has moved to the USA, through New York and severely affected the country. Also,

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COVID-19 Pandemic increased in Brazil, India, Peru, Iran, Chile, Mexico, Pakistan, Canada, Bangladesh, Qatar, South Africa, and other countries today.

The scientists are hardworking on the vaccine and special effective treatment for the remedy of coronavirus pandemic illness. Unfortunately, there is no vaccine and a cure for a novel coronavirus yet around the world.

Thanks to vaccines, hundreds of millions of deaths have been prevented. Polio has been pushed to the brink of eradication, and just in the past few years, new vaccines have become available for Ebola and malaria," said Dr. Tedros Adhanom Ghebreyesus, WHO Director-General. But vaccines only realize their true power when they are deployed to protect the poorest and most vulnerable. The COVID-19 pandemic is unravelling many of the gains we have made, with vaccination campaigns for polio, cholera, measles, diphtheria, and meningitis." (WHO, 2020).

For this reason, people afraid and many persons are in isolation either voluntary or compulsory. Nevertheless, governments got some urgent measurement; firstly, they stopped international flights, then domestic flights. Many countries are started to lockdown implementation and restricted all human indoor and outdoor collective activities. Then, they banned or restricted people's outdoor movement. Also, banned or restricted economic activities and public services without main phases. All this situation is affected the world economy drastically in a short time.

However, the fight against the COVID-19 pandemic is still getting very low levels of success across the world. To access success, people's positive approaches to the control measurements are incredibly important since the pandemic has severe vital influences not only physically but also psychotically. The SARS outbreak in 2003 taught us that knowledge and attitudes against viral infectious outbreaks are closely related to the panic emotion level of people because the panic fear can foreclose the governmental precautions. (Celik B., Dane S., Ozden K., 2020)

As part of the response to COVID-19, virtually all OECD countries affected by the virus have introduced strict restrictions to social and economic life, including social distancing and even full lockdowns. (OECD.org., 2020) The COVID-19 outbreak has various effects on human behavior, and on his environment, particularly lockdown implements have drastically impacted human life, such as; individual, social, and economical.

The epidemic outbreak and lockdown increase the psychological stress on people (Xiao, 2020) and (Li Duan; Gang Zhu , 2020). Steadily spread of the disease, the official hard isolation applications and closings of educational institutions are expected to affect the

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mental health of all people. There are many studies on the possible harmful effects of the infectious epidemics on the general public, patients, medical staff, children, and older adults (Qiongni Chen, et al., 2020) and (Yuan Y, et al., 2020). In a previous study, it has been reported that having relatives infected with COVID-19, its economic and social effects with impacts on daily life, as well as delays in academic activities, enhances anxiety levels among college students (Wenjun Cao, Ziwei Fang, et al., 2020). Also, in a previous COVID-19 study, Nigerian university students had high anxiety levels than normal people (O. Rakhmanov, S. Dane., 2020). In another recent study, it has been reported that there are low anxiety and depression levels in academic staff against COVID-19 (Dane S., Rakhmanov O, Demir A., 2020). They suggested that the knowledge levels of people should be increased to decrease their anxiety and depression by means of online distance education systems.

The COVID-19 isolation implementations are may a good measure method and beneficial for the protection of people's health, but they cause a lot of economic disadvantages. Moreover, as the isolation time increases, it causes people's physical and mental health to deteriorate. This situation causes personal, family, and social problems. Moreover, as the duration of COVID-19 measures prolongs, unemployment rates increase for economic reasons. It is already known that unemployment has many personal and social negative consequences. However, as COVID-19 and measures against its spread, unemployment rates increase.

Furthermore, some changes in food consumption preferences and their causes were reported in a recent study. Before the pandemic, the first and second preferences for food consumption were meat and bakery foods, but after the outbreak, the first and second preferences were fruits and vegetables. Before the outbreak, the first and second causes for preference were cost and health, but after the outbreak, the first and second causes for preferences were quality and medical concerns (Celik B., Dane S., Ozden K., 2020). Unfortunately, however, there is a lack of academic studies about the effects of the pandemic outbreak on the household economy (incomes and expenses). In this study, the effects of the COVID-19 pandemic outbreak on the family economy was investigated. On the other hand, International and regional human rights organizations want to pay attention to human rights while governments get measurement against the Covid-19 pandemic.

International human rights law guarantees everyone the right to the highest attainable standard of health and obligates governments to take steps to prevent threats to public health and to provide medical care to those who need it. Human rights law also recognizes that in the context of severe public health threats and civil emergencies are threatening the life of the nation, restrictions on some rights can be justified when they have a legal basis. Those are strictly necessary, based

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on scientific evidence and neither arbitrary nor discriminatory in the application, of limited duration, respectful of human dignity, subject to review, and proportionate to achieve the objective. (hrw.org., 2020.)

UN, International economic organizations such as IMF, World Bank, WTO, ILO, and communities, are in anxiety and warning countries for an expected hard global economic recession and crisis.

COVID-19 is hitting hard an already weak and fragile world economy. Global growth in 2019 was already the slowest since the global financial crisis of 2008/2009. COVID-19 has plunged the world economy into a recession with the potential of profound consequences and historic levels of unemployment and deprivation. Necessary measures to contain the spread of the disease through quarantines, travel restrictions, and lockdown of cities have resulted in a significant reduction in demand and supply. Economic activities in transportation, retail trade, leisure, hospitality, and recreation have been battered. And we have seen from plunging stock markets that public trust in the health response has direct and immediate economic effects. (UNSDG.UN.Org., 2020)

Since that is started the COVID-19 period, people are losing their job at a significant rate around the world. Even in the stronger economies unemployment rate is increasing drastically.

ILO estimates are that as many as 25 million people could become unemployed, with a loss of workers' income of as much as USD 3.4 trillion. However, it is already becoming clear that these numbers may underestimate the magnitude of the impact. (ILO, 2020)

Guy Ryder (2020) Director-General, International Labour Organization underlined, "those substantial reductions in employment were foreseen in Arab countries with 8.1% or 5 million full-time employees, Europe with 7.8% or 12 million full-time workers and Asia and the Pacific with 7.2% or 125 million full-time workers."

Also, the prediction of the unemployment rate for the future is very horrible. Mainly the unemployment rate can be worst for emerging economies around the globe.

COVID-19 to trigger roughly 195 million job losses: ILO. The present crisis is quite different from the previous ones. The impact of the lockdowns adopted to mitigate the pandemic has vastly surpassed that of the initial trade shocks and the travel restrictions introduced soon after the outbreak (these restrictions had significant but mainly sector-specific impacts). Non-essential services and production places were directly affected by the lockdowns, which led, among other things, to a reduction in the number of hours worked and to job losses. Unless they receive government assistance, previously viable businesses risk going bankrupt.

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Countries with greater dependence on the service sector, higher levels of informality, and weak safeguards against the termination of employment have experienced much higher initial job losses. (Kenny, 2020)

In this empirical study, the effects of COVID-19 on the household economy, which is the core of the economy: the income, expenditure, consumption preferences of families and their economic and psychological-sociological causes were investigated by interdisciplinary (Economics-Medicine-Political Sciences and International Relations) study. Consequently, in this case, the sectoral effects of COVID-19 have been tried to be explained. Besides, the results of quarantine and isolation on the family economy and family members' consumption preferences and unemployment rates were attempted to be revealed. For this purpose, 26 questionnaires (April 25-May 5, 2020) were sent online to 800 people covering 24 countries from all continents, of which 411 people-family have voluntarily participated in our survey. After the Chi-Square, weighted average, correlation tests, distribution, estimation, and verification tests were performed over the SPSS program, and analyzes were performed. In addition, we tried to reach a correct conclusion by making use of the literature review, evaluation reports of international organizations, and other studies on this subject.

Literature Review

Scientists have some studies on the effects of epidemic diseases, especially in the last 40-50 years, on human behavior and the economy. COVID-19 is an epidemic that has the most significant impact on human behavior and the economy due to the biggest outbreak of recent years. For this reason, many academic studies have been conducted and published about this epidemic disease in a short time. There are some studies related to changes in shopping or consumption preferences during previous pandemic outbreaks.

Junk E. and Sung H. (2017) investigate in their study, whether the Middle East Respiratory Syndrome (MERS) outbreak in Korea affected online and offline retail sales and determines the presence of substitution or delay effect between the two. They analyze the monthly retail sales of electronic goods, semi-luxury goods, and groceries using an autoregressive integrated moving average (ARIMA) model with intervention. Their findings are as follows. First, offline sales of electronic products declined by 7.9%, while online sales increased by 7.03%, indicating that these markets can act as substitutes. Second, the offline sales of semi-luxury goods decreased for two months, while online sales remained the same, meaning that there can be a delay effect in the offline market. Finally, despite the slight increase in online sales and the moderate decrease in offline sales, the MERS outbreak did not have a statistically significant effect on grocery sales. Also, their research findings imply that stakeholders such as the government and retail provided useful information on how to deal with the unexpected outbreak.

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Deleersnyder B, Dekimpe M.G., and et all. (2004) They specifically, worked on the concept of cyclical volatility, and derive a dynamic co-movement elasticity between the economy as a whole and the cyclical fluctuations in various performance series. To further enhance their understanding of how consumers adjust their purchasing behavior across different phases of the business cycle. Consumer durables are found to be more sensitive to business-cycle fluctuations than the general economic activity. This is evidence for consumer behavior change according to the condition of explicit effects on the economy, such as pandemic disease or common catastrophic dramatic events.

Also, Jung H.J, Park M.J, and et all. (2016) investigated the effect of an epidemic MERS outbreak in Korea on consumer expenditures. They used scanner panel data on consumers' debit and credit card transactions, the present empirical evidence that infestations cause considerable disruption in total consumer expenditures with significant heterogeneity across categories. Their findings strongly imply that customers alter their behaviors to reduce the risk of infection. The estimated effect of an epidemic outbreak is qualitatively different from that of other macroeconomic factors. The implications of this research provide valuable guidance for policy interventions and marketing decisions aimed at sustaining economic growth.

Ozden K. and Ozmat M. (2014) studied on the reasons and results of the epidemic plague of 1347 in Europe. They analyzed in terms of city life and local administration, economy, population, environment, religion, and medicine. In this context, the circumstances that led to the outbreak of the epidemic, city administrations in their struggle against it, and the convulsions due to the plague in different aspects of the city and social life are studied. Their findings summary as follow: Throughout the Middle Ages, people in Europe struggled with outbreaks of infectious diseases. While the outbreaks caused a loss in the society economically and socially with the loss of population; It initiated steps towards the development of preventive healthcare services in areas such as the development of the idea of contagiousness and contagion prevention, the establishment of new policies in the field of public health and the opening of institutions providing care services. The outbreaks of infectious diseases were causes of changed economic, social, and health systems completely in Europe throughout the Middle Ages.

Wang, K.Y. (2014) studied, "How a change of public transportation usage reveals the fear of the SARS virus in a city." According to this study: The outbreaks of the severe acute respiratory syndrome (SARS) epidemic in 2003 resulted in unprecedented impacts on people's daily life. One of the most significant impacts on people is the fear of contacting the SARS virus while engaging in daily routine activity. He uses data from daily underground ridership in Taipei City and daily reported new SARS cases in Taiwan to

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model the dynamics of the public fear of the SARS virus during the wax and wane of the SARS period. He has found that for each reported new SARS case, there is an immediate loss of about 1200 underground ridership (the fresh fear). These daily loss rates dissipate to the following days with an e-folding time of about 28 days, reflecting the public perception of the risk of contracting the SARS virus when traveling with the underground system (the residual fear). About 50% of daily ridership was lost during the peak of the 2003 SARS period, compared with the loss of 80% daily ridership during the closure of the underground system after Typhoon Nari, the loss of 50-70% ridership due to the closure of the governmental offices and schools during typhoon periods, and the failure of 60% daily ridership during Chinese New Year holidays.

Pepijn B., Hans K., and et al. (2020) worked on "Europe After Coronavirus: The EU and a New Political Economy." According to this group report paper: The COVID-19 crisis could lead to a broader rethink of Europe's political economy. This paper explores what such a model might look like, and what it would mean for the governance of the European Union. In consequence; The COVID-19 pandemic has created a health and economic crisis without modern parallel. The scale of its effects could prompt a far-reaching re-evaluation of the role of the state in relation to the market in Europe. This paper is a thought experiment examining the consequences of a change in Europe's political economy and the potential implications for the European project.

Jonathan Masters (2020) investigated some selected developed countries' macroeconomic indicators change the reason for COVID-19, such; China, Germany, Japan, United Kingdom, United States, also some multilateral institutions macroeconomic reports. According to that study: The coronavirus is throttling the global economy. In a matter of weeks, the highly contagious disease has pushed the world to the brink of a recession more severe than the 2008 financial crisis. The depth and duration of the downturn will depend on many factors, including the behavior of the virus itself, public health responses, and economic interventions. Given the extraordinary nature of the pandemic-induced crisis, fiscal and monetary policymakers are working without a playbook. Many, however, are moving forward with stunning bailouts that could collectively top \$10 trillion.

Another most important study is the second brief report of UNDP (UN, 2020). This report snapshotted global Socio-economic sight and snapshotted many countries, mainly African countries' Socio-economic position with COVID-19 effects. According to this study: Globally, the number of newly reported cases continues to be growing and waving. This wave is breaking precisely as many countries in the region are reopening their economies after months of lockdown measures, which indicates a likely worsening of both the epidemiological and socio-economic situations in short to medium term. The UN's work on socio-economic impact assessments and recovery frameworks must, therefore, be

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viewed as a fluid process, responding to national contexts and evolving over time. Furthermore, global human development, as the combined measure of the world's education, health, and living standards, is on course to decline for the first time in 30 years. COVID-19 has triggered massive disruptions in economies, jobs, and livelihoods. The economic shocks can hit countries before the health shocks, through macroeconomic transmission channels, and persist after the health crisis is over.

Methodology and Analyses

The majority of we used primary data in this empirical study. An online survey (questionnaire) was generated and shared only with participants, the people experiencing pandemic lockdown. The survey was conducted during the lockdown period of COVID-19 when all participants were self-isolated at their homes. The aim was to ensure the results obtained from the probing were valid and reliable. In the survey, the questionnaires for the changes in the family economy during COVID-19 disease lockdown were posted online for volunteers to fill out. Four hundred and eleven participants/families were included in this study. All of them agreed to participate in this study voluntarily (304 men and 107 women) (Table 1). The respondents' ages range were between 20 to 65. To keeping the confidentiality and privacy of the survey, a secured internet link for the survey was produced and shared only with participants who were willing to fill out. All participants have completed the survey voluntarily. The experimental protocol was held by following international ethical standards. The study was performed per under the Helsinki Declaration (1975, revised in 1996-2013)

The objectives and aims of the study were explicitly explained to the participants before the commencement of the study. All participants voluntarily submitted their written consent to take part in the study. The study kept anonymity, and it was done between April 25 and May 05, 2020.

However, while investigating the effects of the changes in consumers' psycho-sociological and Socio-economic behaviors related to COVID-19 on consumption, articles, and scientific research on this subject were used, a subject scan was done.

Our statistical analyses and findings are divided into two sections because of types of survey questions: The questions in the first part are intended to measure the overall and Socio-economic effects of the COVID-19 pandemic outbreak implementations. Questions in the second part is intended to measure the psychological effects of the COVID-19 pandemic outbreak lockdown and restriction processes on household consumption.

Statistical Analyses-1

Measured values are given as a mean +/- standard deviation (SD). Statistical analysis was performed by SPSS, Windows version 18. The Chi-Square Test was applied in order to

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find out and compare the rates (percentages) of chances in the family economy during the COVID-19 pandemic outbreak. A p-value of less than 0.05 was considered statistically significant.

Findings-1:

Table 1. Socio-demographic features of the participants (Number and percentage of participants)

Gender			Men: 304 (73.8%)	Women: 107 (26.2%)
Country	Nigeria: 180 (45.6%)	Turkey: 127 (32.3%)	USA: 28 (5.3%)	Europe: 76 (16.8%)
Income Level		Low: 161 (39.1%)	Middle: 227 (55.4%)	High: 23 (5.5%)

Source: Designed by the author according to survey data.

Unemployment (Joblessness):

According to the survey, 8,5% of those who answered stated that they are housewives and 91,5% of them say they are employees or business owners. Among this 91.5 %, from the beginning of the COVID-19 process to spread, according to the answers until May 05, 2020:

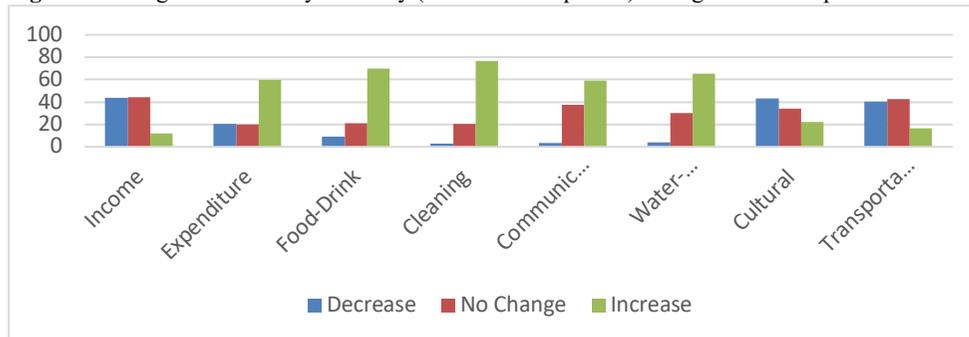
9,2% lost their jobs,

6.3% are about to lose their jobs,

24% may lose their jobs in the medium term if the process continues. The unemployment rate trend is upward.

Guy Ryder (2020) Director-General, International Labour Organization, has been explained, "those substantial reductions in employment were foreseen in Arab countries with 8.1% or 5 million full-time employees, Europe with 7.8% or 12 million full-time workers and Asia and the Pacific with 7.2% or 125 million full-time workers." Moreover, the fact that the number of people who lost their jobs due to this process reached 200 million around the world and more than 30 million in the USA are supporting our findings today.

Figure 1. Changes in the family economy (income and expenses) during COVID-19 pandemic outbreak



Source: Produced by the author according to survey data.

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Household income:

Participants reported a statistically significant decrease in their family incomes by the COVID-19 pandemic outbreak (Chi-square=435.87, $p=0.00$). Of 411 participants, 179 (43.6%) of the respondents of our survey stated that their income in the family decreased and only 49 (12%) have reported an increase in their family incomes due to the Covid-19 process at the following rates (Figure 1):

17.4% of the income of the family decreased between 0-25%, 16.4% of the income of the family decreased between 25-50% , 08.8% of the income of the family decreased between 50-100%.

According to weighted average calculation, families' incomes decreased by 14.92% in average. The theory of John Maynard Keynes, which has led to reduced demand in markets and reduced investments in the event of a decline in family income, has been proven many times in practice.

Household expenditures:

Participants reported a statistically significant increase in their family expenditures by the COVID-19 pandemic outbreak (Chi-square=162.913, $p=0.00$). And 175 (59.6%) have reported an increase, and only 82 (20.3%) have reported a decrease in their family expenditures (Figure 1). Household expenses were increased 59.6% but 20.3% decreased. Hence it has increased 39.3% clearly.

Household food and drink expenditures:

Participants reported a statistically significant increase in their nutrition expenses by the COVID-19 pandemic outbreak (Chi-square=269.915, $p=0.00$). And 281 participants (68.5%) have reported an increase, and only 37 (9.1%) have reported a decrease in their food-drink expenses (Figure 1). According to our questionnaire results, 68,5% of respondent families' expenditure of food and beverage are increased as below, because of COVID-19 outbreak process:

23.7% of the expenditure of the families increased between 0-25%, 28.7% of the expenditure of the families increased between 25-50%, 16.1% of the expenditure of the families increased between 50-100%

According to the weighted average calculation, families' expenditure of food and beverage is increased by 25.79% on average.

Household cleaning and hygiene expenditures:

Participants reported a statistically significant increase in their cleaning, hygiene expenses during the COVID-19 pandemic outbreak (Chi-square=348.15, $p=0.00$). And 308 (75%)

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participants have reported an increase, and only 12 (2.8%) participants have reported a decrease in their cleaning, hygiene expenses (Figure 1). As 75% of respondent families' expenditures of cleaning, hygiene, and personal care materials are increased as below, because of COVID-19 outbreak process:

27.5% of the expenditure of the families increased between 0-25%, 27.7% of the expenditure of the families increased between 25-50%, 19.8% of the expenditure of the families increased between 50-100%

According to the weighted average calculation, families' expenditure of cleaning, hygiene, and personal care materials is increased by 28,67% on average.

Household tap-water-electric-gas expenses:

Participants reported a statistically significant increase in their water-electric-gas expenses during the COVID-19 pandemic outbreak (Chi-square=248.943, $p=0.00$). And 264 (64.1%) participants have reported an increase, and only 16 (3.8%) have reported a decrease in their tap- water-electric-gas expenses (Figure 1). 64,1% of respondent families' expenditures of tap-water, electricity, and gas are increased as below, because of COVID-19 outbreak process:

26.4% of the expenditure of the families increased between 0-25%, 24.4% of the expenditure of the families increased between 25-50%, 13.3% of the expenditure of the families increased between 50-100%

According to weighted average calculation, families' expenditure of tap-water, electricity and gas is increased by 22.42% on average.

Household communication expenditures:

Participants reported a statistically significant increase in their communication expenses during the COVID-19 pandemic outbreak (Chi-square=393.586, $p=0.00$). And 245 (59.6%) participants have reported an increase, and only 15 (3.6%) have reported a decrease in their communication expenses (Figure 1). As 59,6% of respondent families' expenditure of telecommunication (telephone, internet, digital subscription) are increased as below, because of COVID-19 outbreak process:

19% of the expenditure of the families increased between 0-25%, 19.5% of the expenditure of the families increased between 25-50%, 21.1% of the expenditure of the families increased between 50-100%.

According to the weighted average calculation, families' expenditure of telecommunication (telephone, internet, digital subscription) is increased by 25.51% on average.

Household entertainment and cultural expenses:

Participants reported a statistically significant decrease in their cultural expenses by the COVID-19 pandemic outbreak (Chi-square=191.878, $p=0.00$). Of 411 participants, 178

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(42%) have reported a decrease, and 92 (22,1%) have reported an increase, and 141 (34,9%) have reported no change in their cultural expenses. (Figure 1). As 42% of respondent families' expenditures of entertainment, cultural and art activities are decreased as below, because of COVID-19 outbreak process:

12.6% of the expenditure of the families decreased between 0-25%, 14.1% of the expenditure of the families decreased between 25-50%, 15.3% of the expenditure of the families decreased between 50-100%.

According to weighted average calculation, families' expenditures of entertainment, cultural and art activities are decreased by 18.33% on average.

Household transportation expenses:

On the other hand, expenditures on transportation, vehicle maintenance, and service, entertainment, cultural, and art activities have been decreased significantly.

Participants reported a statistically significant decrease in their transportation expenses at the time of the COVID-19 pandemic outbreak (Chi-square=376.377, $p=0.00$). Of 411 participants, 399 responded this question and, 166 (41.5%) have reported a decrease, and 68 (16.6%) have reported an increase, and 164 (41,1%) have reported no change in their transportation expenses (Figure 1). As 41,5% of respondent families' expenditure of transportation, vehicle maintenance, and service is decreased as below, because of COVID-19 outbreak process:

18.5% of the expenditure of the families decreased between 0-25%, 12.5% of the expenditure of the families decreased between 25-50%, 10.5% of the expenditure of the families decreased between 50-100%.

According to weighted average calculation, families' expenditures of transportation, vehicle maintenance, and service are decreased by 14.87% on average.

Statistical Analyses-2

The participants' consumption priority preferences have changed the reason for COVID-19 anxiety and lockdown. These changes are calculated as below:

Measured values are given as a mean +/- standard deviation (SD). Statistical analysis was performed using SPSS for Windows version 18. The Mc. Nemar-Bowker test was used to compare the food consumption preferences and their causes between before and after the pandemic

outbreak. A p-value of less than 0.05 was considered statistically significant.

Findings-2:

There was a statistically significant difference in terms of the preference causes in food consumption or shopping between before and after COVID 19 pandemic outbreak (Mc. Nemar-Bowker test value=92.434, $p=0.00$). Before the outbreak, the first and second

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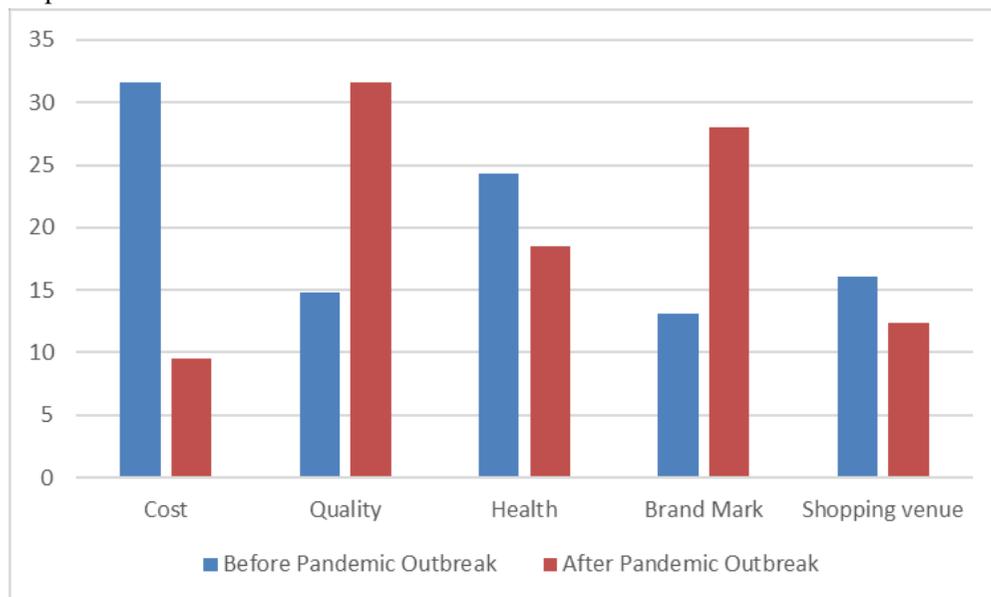
causes for preference were cost and health, but after the outbreak, the first and second causes for preferences were quality and health, respectively (Table 2 and Figure 2).

Table 2. The preference causes food consumption or shopping before and after COVID 19 pandemic outbreak.

	Before (N, %)	After (N, %)
Cost	130 (31.6%)	39 (9.5%)
Quality	61 (14.8 %)	130 (31.6%)
Health	100 (24.3%)	76 (18.5%)
Brand Mark	54 (13.1%)	115 (28%)
Shopping Venue	66 (16.1%)	51 (12.4%)

Source: Designed by the author.

Figure 2. The preference causes food consumption and shopping before and after COVID 19 pandemic outbreak.



Source: Produced by the author.

There was a statistically significant difference in terms of the food preferences between consumption, before and after the COVID-19 pandemic outbreak (McNemar-Bowker test value=43.493, $p=0.00$). Before the outbreak, the first and second preferences for food consumption were meat and bakery foods, but after the outbreak, the first and second preferences were fruits and vegetables, respectively (Table 3 and Figure 3).

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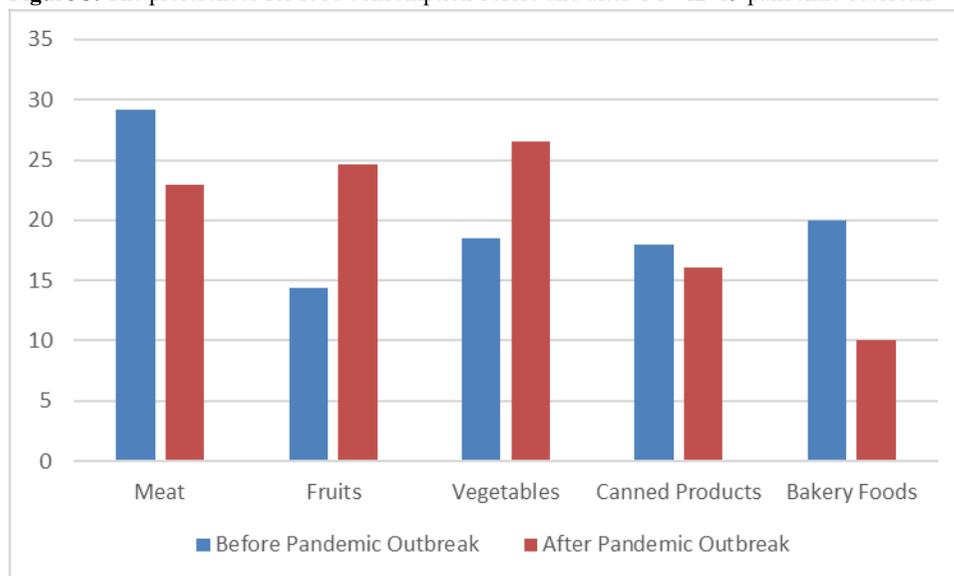
Table 3. The preferences for food consumption before and after COVID 19 pandemic outbreak.

	Before (N, %)	After (N, %)
Meat	120 (29.2%)	94 (22.9%)
Vegetables	59 (14.4 %)	101 (24.6%)
Fruits	76 (18.5%)	109 (26.5%)
Canned Products	74 (18%)	66 (16.1%)
Bakery Foods	80 (20%)	41 (10%)

Source: Designed by the author.

There were no statistically significant differences in both the preference causes in food consumption or shopping and the food preferences for consumption according to countries of families before and after pandemic outbreak. There were no statistically significant differences in both the preference causes in food consumption or shopping and the food preferences for consumption according to income levels of families before and after pandemic outbreak.

Figure 3. The preferences for food consumption before and after COVID 19 pandemic outbreak.



Source: Produced by the author.

Sectoral and Sub-sectoral effect of the COVID-19 Outbreak Pandemic; Particularly During Lockdown and Restrictions:

Looking at the results of the survey, with the COVID-19 process: It has been observed that the unemployment rate is in increasing trend around the world. Also, household expenses for food, beverage, hygiene, cleaning and personal care products, water, electricity, gas, and telecommunication (telephone, internet, digital subscription) have increased significantly. On the other hand, expenditures on transportation, vehicle maintenance, and service, entertainment, cultural, and art activities have been decreased significantly.

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Furthermore, some sectors are affected positively or negatively, though some sectors are both because of sub-sectors' differences (Table 4).

Table 4. Sectoral and Sub-sectoral effect of COVID-19 Outbreak Pandemic During Lockdown and Restrictions

Sector	+	-	+, -	Sub-sector	+	-	+, -
Service			+, -	Entertainment, cultural activities		-	
				Transportation, aviation, trip, tourism, hotels, Restaurant, cafe, etc.		-	
				Food and drink take away and delivery	+		
				Financial, Banking, and transaction		-	
				Communication, internet	+		
				Health sector and service	+		
				Education sector and services		-	
				Real estate		-	
				Tap-water, electricity, kitchen gas (Household)	+		
Trade			+, -	Food and drink take away and delivery	+		
				Main consume goods	+		
				Cleaning, hygiene and self-care material, etc.	+		
				Medicine and health equipment	+		
				Energy (Oil, electricity, gas)	+		
				Online trade	+		
				Semi-luxury and luxury commodities		-	
				Construction materials		-	
Textile, clothes, wearing, home art		-					
Agriculture and Livestock	+			Grocery and fruits	+		
				Grains and pulses	+		
				Meat		-	
Industry		-		Cleaning, hygiene, self-care material, etc.	+		
				Medicine and health equipment	+		
				Energy (Oil, electricity, gas)		-	
				Automotive, machine, spare parts		-	
Construction		-		Housing		-	
				Infrastructure		-	

Discussions

In order to obtain more accurate results suitable for the purpose of this research, the survey results were evaluated together with the literature study and the reports and studies of international organizations and other organizations. We also tried to compare past outbreaks with their impact on economy and consumption preferences.

Human history has many viral pandemics, and many people have died for this reason. It has been known that virus depended epidemics such as Lassa Fever (1969), Ebola (1976), HIV (1981), SARS (2003), MERS (2012) have threatened human life in the last five decades. However, the human being has founded out remedies for them. But in this new

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case, it should be accepted that the COVID-19 is more dangerous and fatal than others. (Celik B., Dane S., Ozden K., 2020)

The scientists are hardworking to discovering the vaccine and drug. Many people are in either voluntary or compulsory isolation. Governments are stopped international and domestic flights and restricted all human outdoor activities with lockdown implementation. All this situation may affect the national and global economy and shopping and consumption preferences.

In the MERS pandemic, sales in both online and offline grocery markets did not change considerably due to the MERS intervention. It seems that, by their nature, groceries are a necessity rather than an option for life; hence, an unexpected event like the MERS epidemic cannot dramatically reduce grocery consumption (Rakhmanov O, Dane S., 2020). However, during the COVID-19 pandemic, the online and offline sales of groceries are experienced a more considerable increase because of changes in the family consumption preferences, as compared to before the outbreak.

When infectious diseases such as MERS, Severe Acute Respiratory Syndrome (SARS), and H1N1 (a subtype of influenza A virus) spread, people worry about possible infections that can affect their outdoor activities (Jung H.J, Park M.J, et al., 2016) and (WMA, 2020), and thus consumer behavior (Dane S., Rakhmanov O, Demir A., 2020) and (Jung E., Sung H., 2017). But, in the present study, there was a significant difference in terms of the preference causes related to food consumption between before and after COVID 19 pandemic closure. Before the outbreak, the first and second causes for choice were cost and health, but after the outbreak, the first and second causes for preferences were quality and health, respectively. It can be stated that they have changed their preference causes in food consumption from cost to quality.

According to this research, although there are some minor differences, the effect of COVID-19 pandemic on families' income-expenditure and consumption proportionally is almost the same in all countries. However, countries with a robust economy have supported families at different rates. According to our survey and other researches, respondents from Europe and America stated that they received state aid. In contrast, others indicated that they received support mostly from NGOs, friends, and relatives.

The most devastating effect of COVID-19 pandemic on the economy is that it causes unemployment. Keynes' theory of aggregate demand comes into play here, namely, while the decrease in demand causes the production to decrease, the workplaces either decrease the number of staff or close temporarily or permanently. Therefore, the decrease in total demand turns into unemployment and recession over time, GDP decreases, and economies

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shrink. According to our survey, it indicates that unemployment rates increase as the pandemic duration increases and especially dependently lockdown period prolonged.

This change may be due to the fear and anxiety of death of COVID 19 because this pandemic outbreak increased panic, anxiety and depression level in both young and adult people (Qiongni Chen, et al., 2020) and (Wenjun Cao, Ziwei Fang, et al., 2020). During the SARS outbreak, many studies investigated the psychological impact on the non-infected community, revealing significant psychiatric morbidities [18-20]. It can be explained that the increased fear and anxiety enforced this directly proportional change in the preference causes for food consumption because they believe that quality food is related to good health and increased immune system of the body.

Additionally, there were significant differences in terms of the food preferences for consumption between before and after the COVID 19 pandemic outbreak. Before the outbreak, the first and second preferences for food consumption were meat and bakery foods, but after the outbreak, the first and second preferences were fruits and vegetables, respectively. The majority of the media cause of this change also maybe the knowledge and belief in which fruits and vegetables have more vitamins to fight viruses.

The big question is, how to manage these restrictions, and how to go back to a new normal living with SARS-CoV-2 (COVID-19); a social and economic life that co-exist with the virus.

Governments should take policy measures to buffer the economic impacts of COVID-19, which will affect lower-wage workers first and hardest. Social distancing, quarantine, and the closure of businesses may have enormous economic consequences. The most vulnerable people are low-wage workers in low-income households. Governments should create mechanisms so that workers affected by COVID-19 do not suffer a loss of income that might deter them from self-isolating to contain the spread of the virus.

Conclusion and Recommendations

According the results of this survey, it has been observed that the unemployment rate is increasing around the world with the COVID-19 process. Also, household expenses for food, beverage, hygiene, cleaning and personal care products, water, electricity, gas, and telecommunication (telephone, internet, digital subscription) have increased significantly. On the other hand, expenditures on transportation, vehicle maintenance, and service, entertainment, cultural, and art activities have been decreased considerably. Furthermore, some of the sectors are affected positively or negatively, though some of the sectors are both, because of sub-sectors differences

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The results of the present study show that COVID 19 pandemic outbreak has a powerful impact on food consumption preferences and their causes of families from various countries. Before the outbreak, the first and second preferences for food consumption as meat and bakery foods, but after the outbreak, the first and second preferences were fruits and vegetables. Before the outbreak, the first and second causes for preference were cost and health, but after the outbreak, the first and second causes for preferences were quality and health.

The pandemic has also shown that development is no longer going up the ladder; the direction has changed. Based on the socio-economic standpoint across countries, the recovery path must include a new human right based. Just and a fair social contract between governments and people, and advocate for social safety nets with a broader reach, universal health insurance, and affordable access to digital connectivity, as part of the new normal. Global collaboration and solidarity are needed for an effective response, as no country will be able to address the challenges alone. The recovery path from COVID-19 is likely to see societies and economies opening and contracting with the waves of the pandemic. In this undulating new world of co-existing with COVID-19, countries and societies will need to deeply invest in new capabilities and capacities to adapt rapidly, anticipate change, manage risks and implement solutions to build a better normal. (UN, 2020).

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Chapter 5

Women Empowerment and Minimization of COVID-19 Pandemic Effects on Households: An Empirical Investigation

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Abstract

In most developed countries, employment opportunities are expected to take care of diversity, equality and inclusion of minority while developing countries do not really pay much attention to such attributes due to their peculiar social characteristics. This is because socio-cultural belief of male chauvinism still dominates the thinking and discussion relating to gender issues in these climes. But this was proved otherwise at the peak of COVID-19 pandemic which broke out with the problems of morbidity and mortality, disruption of production, drastic reduction in global supply chain, aggregate consumption patterns' reduction, declining world transport activities and market anomalies. This was because women in businesses were able to minimize the negative consequences of COVID-19 pandemic on their households. Using Kwara State in Nigeria as a case study, 50 samples were selected from small businesses through questionnaire while adopting regression technique to analyze the data. The result shows that R^2 is 0.521 implying that 52.1% of variation in the productivity was explained by women empowerment while the remaining 47.9% is due to other variables not included in the model. Analysis shows that, in Nigeria as in many developing countries, women entrepreneurs tend to operate smaller businesses; use less finance for start-up; operate in more competitive industrial sectors with lower returns and survival rates; and undertake more of household duties in addition to their business activities. Therefore, public policy must be focused on financial inclusion that would help women succeed in business. Additional policies should include gender-targeted procurement activities, training, counselling and mentoring programmes so that women can be agent for reducing the spread of disease in the future.

Keywords: Women, COVID-19, entrepreneurship, Kwara State, Nigeria.

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Introduction

The sudden outbreak of Corona Virus in December 2019 (COVID-19) in the Wuhan city of China sent unsettled economic waves around the world. The so called or classified developed and prosperous nations were not left out of the economic downturns. However, the resonation of the effects soon spread to the developing countries with severe economic pains which to a greater extent worsens the already high rate of unemployment in this part of the world and of course, Nigeria is not an exception. Typically, the country is as usual dominated by the informal sector which perhaps more or less arises from its technological backwardness, misplacement of priorities, infrastructural deficit, economic mismanagement, lack of credit facility, bad leadership and to cap it up, large scale stealing of public funds with impunity.

All these problems have contributed to the underdevelopment of the informal sector that could have warranted growth of the economy, increased employment and income and consequently sustain the economy. All efforts such as entrepreneurship development programmes like National Directorate of Employment (NDE), Better Life for Rural Women (BLfRW), Family Support Programme (FSP), People's Bank of Nigeria (PBN), Community Banks and until recently changed to Microfinance Banks have all failed to solve the problem of unemployment. Upon realising that women play dominant roles in the informal sector that underlies the industrial development of any nation with about 60 million impoverished women constituting Nigeria population (Adepelumi, 2011) and living below international poverty line, it is imperative that some policies toward women entrepreneurship development (WED) be formulated. Hence along with the earlier programmes hitherto mentioned above, the National Commission for Women was established in 1990 so as to target all women in Nigeria. Despite the fact that these programmes had been faced with series of bottlenecks and unable to realize the main objective of enhancing small and medium sized enterprises, women had to a greater extent supported their households during the peak of COVID-19 in Kwara State of Nigeria.

Based on the selected businesses solely owned by women in Kwara State, it apparently shows that women can do better in managing resources and support families in time of emergency as witnessed during the peak and after COVID-19 pandemic flattened. This is however against the Nigeria culture for women to be the bread winner of the households. As aptly stated by Tella and Subair (2020), Nigeria women are mostly business tycoons in the Southwestern Nigeria while their men engage in paid employment or employers of labour. This really helped in supporting survival of the families during the peak of COVID-19 pandemic due to loss of jobs and imminent collapse of businesses of their husbands. Invariably COVID-19 pandemic could be said to be gender sensitive as it assigns unusual higher and significant roles to women during its peak and more so than half of the

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developing countries economic activities undertaken by women are mostly involved in informal businesses (Soetan, 1997; Thomson, 2002; Aina, 2003; Garba, 2011).

With gender sensitive nature of minimizing COVID-19 pandemic effects on family households, this chapter apart from the Introduction in section 1, focuses on presenting relevant Literatures on women empowerment and COVID-19 pandemic in Section 2. Section 3 contains Data and Methodology while Section 4 presents the Results and Discussion with the chapter being concluded by recommending policies for encouraging women entrepreneurship in order to alleviate the negative impacts of COVID-19 pandemic on households in Section 5.

Literature Review

Conceptual Clarifications of Women Empowerment and COVID-19 Pandemic

Women empowerment is a gender sensitive economic activity that emphasizes on women participation in small and medium sized enterprises. Women have been considered by FAO (2009) from the perception of the roles they play in the form of their activities, resources, needs and priorities. Though this set of roles according to Lubwama (1999) depends on their culture, attributes and roles assigned to them in the environment. In some countries the social order has not been kind to women due to the fact that they are exposed according to Moinoddin (2020) to physical, sexual and mental maltreatment in the areas of pay, class and culture. It is for all these reasons that made women to face diverse opportunities and constraints in entrepreneurship relatively to men. This therefore, affects their participation in entrepreneurship in some businesses that are regarded as ‘taboo’ most especially in the Northern part of Nigeria (Tella & Subair, 2020). Invariably, women are discriminated against and hence structurally prevented from accessing finance to start-up and enhance business growth compared to men with easy access to finance (Ahl, 2006; Calas *et al.*, 2009) despite the earlier submission of Hording (1987) that women and men are similar and equal in terms of ability to think rationally. The essence of women empowerment is to make them self-sustainable such that family values are not jeopardized while equally enhancing saving habits. More or less, women empowerment should as a matter necessity concentrates according to Ravi (2020) on “health and hygiene, family coherence, legal aid, utilization of government facilities and self-employment”.

From the foregoing, since women empowerment central focus is self-employment sustainability, it is equally akin to creation of ventures which Budig (2006) considers as being undertaken more by men relative to women. This is because men are risk lovers that can take certain business decision just for adventure apart from the reasons for being “more innovative, self-confident, rugged, undaunted and unrestricted from undertaken any business” (Tella & Subair, 2020).

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Based on Ravi (2020) submission, women empowerment should apart from alleviating poverty among the women folks must not neglect their roles in ensuring health and hygiene as well as family coherence. It is for this reason that women empowerment is considered as a cushioning means of minimizing COVID-19 pandemic effects on various households during the period of study. By extension therefore, there is a connection between quality of life and wealth creation. The outbreak of COVID-19 really exposes the need to empower women so as to support the households due to various health and economic challenges faced by the world. These include according to Mckibbin and Fernando (2020) morbidity and mortality, disruption of production, drastic reduction in global supply chain, aggregate consumption patterns' reduction, declining world transport activities and market anomalies. All these collectively aggravated loss of employment, output, income and negative growth. For the reason that Nigeria is an oil-dependent nation which never prepared for emergency economic somersault, the COVID-19 pandemic catapulted stagflation, poverty, hunger and family disintegration most especially in the semi urban areas.

Apparently, COVID-19 pandemic has imposed direct and indirect economic cost that necessitates uninterrupted relationship between disease and growth. To a greater extent, there have been various studies on the economic costs of large scale outbreaks of infectious diseases (See Robalino *et al.*, 2000a; 2000b; WHO Commission on Macroeconomic and Health, 2001; Hyams *et al.*, 2002; Haacker, 2004; Bloom *et al.*,2005). Buttressing the economic costs of the COVID-19 pandemic is the assessment of the International Monetary Fund (IMF) which according to Mckibbin and Fernando (2020) China is expected to “slow down by 0.4 percentage points (relatively) to its initial growth targets to 5.6 per cent (while) also scaling down global growth by 0.1 percentages”. This is a pointer to the fact that there is a very significant relationship among infectious disease, household welfare and overall economic growth. Therefore, the health of the population according to Jayaram *et al.*, (2020) in the economic process cannot be wished away since COVID-19 pandemic has engendered loss of expected income by households, firms and government as well as increasing expenditure on medical care and supplying services to contain the spread of the disease. Consequently the outbreak of COVID-19 pandemic has remained a clog in the wheel of achieving efficiency in the aggregate consumption and production. This soon affects the overall efficiency of the economy. It thus cripples economic growth since the vaccine to contain the spread of COVID-19 virus has not yet been discovered.

Empirical Review and Theoretical Leaning of Study

The significance of women in growth and development has not really been discussed extensively as copious of studies have failed to emphasize the fact that women are gracious and with hidden and endowed resources that could speed up economic growth (Minitti, 2009; Minitti & Naude, 2010) and sustain development. Some studies have discovered that

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women are more productive than men in some areas of businesses like household vocational activities including among others but food production, food processing, trading or service provision (Mabogunje, 1989; Horrel & Krishnan, 2007) often in small scale but characterized by low technological content, output and income base.

Apparently with the low technological content of production that resulted in low output and income to women, they still play very significant roles in entrepreneurial activities in order to overcome their dissatisfaction. Hence, Familoni (1997) while attributing this to 'glass ceiling' or what Stoner and Fry (1982) earlier referred to as limited earnings and business advancement, their quest is to achieve what Cooper (1983) identified as improved quality of life in their households. Women self-employment in Nigeria cuts across various sectors ranging from agriculture to non-agricultural activities. For instance, women have been involved in the production of cassava flour (see Adebayo, 2010), palm oil and its by-products like soap, bat-fat and basket to mention but few (Tella & Subair, 2020). In the United States however, women self-employment in the US non-agricultural workforce has according to Devine (1994a) and Aronson (1995) increased appreciably.

Some studies have however shown that most Nigerian women are petty-trading addicted rather than remain inactive and become obese. They engage in those businesses as subtle mode of protesting against men domination and hence, their independence rather than be subservient to any authority; more so that these businesses are less capital-intensive and therefore requiring low financing relatively to men businesses. Fundamentally, it is believed in the Nigerian culture that women should engage in trading while men engage in paid employment and hence, the reason why women would always involve in daily contributions, cooperative societies and what Abdulyakeen, Subair and Olaifa (2013) referred to as rotating savings and credit associations (ROSCAS) in order for these businesses to flourish.

The Global Entrepreneurship Monitor (GEM, 2012) also discovered that out of the 59 countries studied, the women in Ghana are more enterprising than their men. The expected gap in the job creation through small and medium scale enterprises (SMEs) by men compared to women was very low. While 57% of jobs created through SMEs were by men, about 43% of these jobs were created by the women. This has further been corroborated by the sole proprietorship structure of the Nigerian businesses from the various sectors of the economy. According to National Bureau of Statistics (NBS, 2017) while women owned about 48.7%, men owned 51.3% of the various sectors of the Nigerian economy. However, women have dominated the ownership of the manufacturing (68.7%), wholesale trade (64.5%), accommodation and food services (86.8%) and human health as well as social services (50.5%) of the Nigerian economy (NBS, 2017).

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The millennium development goals (MDGs) and the sustainable development goals (SDGs) have both emphasized on fighting diseases, poverty and squalor along with enhancing economic growth, social inclusion and environmental protection respectively but never envisaged the outbreak of COVID-19 pandemic and extent of its global spread. Arising from this therefore, is that there is an established relationship between macroeconomic variables and the disease. For more clarification, the macroeconomic effects of 2003 SARS epidemic engendered decline in aggregate consumption, high business operating costs and increasing risk premiums that further affected the world economy (Lee & Mckibbin, 2004; Chou *et al.*, 2004; Hue, 2004) depending the on the degree of countries' susceptibility to the disease.

The economic consequences of United States influenza pandemic for instance was estimated by Meltzer *et al.*, (1999) to be colossal loss of between US\$73.1 and US\$166.5 billion with the population being exposed to the gross rate attack with the expected deaths of 89,000 – 207,000. In the same vein, African economy going by Jayaram *et al.*, (2020) would likely lose between US\$190 and US\$200 billion due to sudden decline in household and business spending along with travel restrictions occasioned by the COVID-19 pandemic. This is more so attributed to the fact that nearly one-third of this total loss is mostly due to demand contraction in Africa's non-oil exports and delay or outright cancellation of investments from Africa's foreign direct investment partners with Nigeria having the largest share of the loss.

From the foregoing it can be observed that from a general perception, there is a linkage between macroeconomic performances and outbreak of diseases. Hence, the connection between improving the economy through enhancing women productivity and since they are *de-facto* resource managers, they could minimize the negative impacts of COVID-19 pandemic on the households. It is against this background that this study has been premised on the social feminism theory which assumes that men and women are different from each other (Ahl, 2006). Though, there exists feminist theoretical perspective (Acker, 1987), liberal feminist theory (Unger & Crawford, 1992) and other theories of motivation that affirm according to Locke (1991) that values tend to influence intentions. Hence, the value placed on expansion of businesses by female-entrepreneurs would contribute to their growth intentions.

Despite the distinction between men and women, social feminism is relatively superior to other theories because going by Brush (2006), women view their businesses as part and parcel of family, community and business relations. This females' socialization would therefore, create different perspectives, goal and choices for women. Based on the foregoing, it implies that mere considering businesses by women as part and parcel of the family and community, the assurance of health and safety along with material support to

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the households lend credence to the view that women are graciously endowed with hidden resources for economic growth and sustainable development. This is also supported by the Family Support Programme that was created some years back to enhance women status in entrepreneurial development without jeopardizing the health and safety of households in Nigeria. It is in line with the hitherto views that this study focuses on women businesses in Kwara State of Nigeria.

Data and Methodology

Population and Sample of Study

The sample for this study was drawn from the population of existing and emerging small businesses in Kwara state though, the state is part of the North-central Nigeria but equally inhabited by Southwest women. The convenient sampling method was employed for this study because the population chosen for the study was within the range of 0-50, therefore the whole population was considered (Creswell, 2004). This therefore, prevented the use of probability sampling method. Fifty respondents were selected which included small businesses at different level of operational activities. The study employed questionnaire, as a means of data collection.

This study was carried out in order to determine the extent to which the businesses owned by women in Kwara State had been able to cope, survive and support their households through what they earned from the sales of their output at the peak of COVID-19 pandemic.

Model Specification and Technique of Data Analysis

Based on the reviewed literatures, women empowerment in this study is measured by their productivity. It therefore behoves that the degree to which women empowerment minimizes the negative effects of the pandemic indicates that COVID-19 is gender sensitive. Hence the regression equation is given as:

$$PRDT_t = f(WEHS_t) \quad (1)$$

$$\text{By linearization: } \ln PRDT_t = \alpha_0 + \beta_1 \ln WEHS + \epsilon_t \quad (2)$$

Where: $PRDT_t$ = Productivity; $WEHS$ = Women empowerment; ϵ_t = Errors

The *a priori* expectation is that the level of productivity is positively related to women empowerment that minimizes the negative effects of COVID-19 pandemic on households. Therefore:

$$\sum_{i=1}^1 \beta_i \quad (3)$$

Descriptive and Inferential statistics was employed using ordinary least square to analyze the data collected through SPSS.

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Results and Discussion

Descriptive Analysis of Women Entrepreneurs

This study distributed 50 copies of questionnaires for the respondents and a total of 48 questionnaires were finally retrieved, giving a response rate of 100%. This accounted for 96% valid response rate. Therefore, a response rate of 96% is considered adequate for the analysis in this study since Sekaran (2003) suggested that a response rate of 30% is sufficient for surveys. Table 1 summarized the response rate for the data collected for the analysis.

Table 1: Response Rate of the Questionnaires

Response	Frequency	Percentage (%)
No. of Questionnaires	50	100
Questionnaires returned	48	96
Questionnaires not returned	0	0
Questionnaires Valid	48	96
Questionnaires not Valid (Due to outliers, double ticking and incomplete)	2	4
Valid response rate		96%

Source: Authors' Fieldwork (2020).

Demographic Profile of Women Entrepreneurs in Kwara State

The profile of the women entrepreneurs was analyzed by the researchers using their demographic characteristics in terms of gender, Occupation, age, academic qualification and years in business. This profile is thus summarized in Table 2.

Table 2: Demographic Profile of Women Entrepreneurs

Characteristics	Frequency	Percentage (%)
Sex		
Male	27	56.0
Female	21	44.0
Age		
< 20 yrs	05	10.4
21 – 25 yrs	05	10.4
26 – 30 years	18	37.5
> 31 years	20	41.7
Educational Qualification		
O – Level	08	16.7
NCE	02	04.2
OND – HND	15	31.3
B. Sc ⁺	23	47.9

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Years of Business	08	16.7
< 5 yrs	28	58.3
6 – 10 yrs	12	25.0
11 – 15 yrs		
Main Occupation		
Agric based	15	31.3
Service based	13	27.1
Retail based	09	18.8
Manufacturing	11	22.9

Source: Authors' Fieldwork (April – May 2020).

From Table 2, out of the 48 valid responses used in this study, 27 (56.0%) of them were men while the remaining 21(44.0%) were women. As revealed in the descriptive analysis, 5 (10.4%) of the respondents were below the age of 20 years, 5 (10.4%) were between 21-25 years of age, 18 of the respondents representing (37.5) % were in the age brackets of 26-30 years and 20 of the respondents representing 41.7% were above 31 years of age.

Furthermore, 8 (16.7%) of the respondents held O-level; 15 (31.3%) were either OND or HND holders, while 2 respondents representing 4.2% of the total number of valid questionnaires were NCE holders, while 23 were B.SC and above representing 47.9% of the respondents as shown in Table 2 above. Of the 48 valid respondents, the highest number of women entrepreneurs were 28 representing (58.3%) in business between 6-10 years, 12 representing (25.0%) were in business between 11-15 years, while 8 representing (16.7 %) were in business between 0-5 years.

Of all the 48 respondents, 15 representing (31.3%) respondents were Agric based, 13 representing (27.1%) respondents were in service based, 9 representing (18.8%) respondents were in retail based, while, 11 representing (22.9%) respondents were in manufacturing based as shown in Table 2 above.

Table 3: Model Summary

Model	R	R ²	Ĥ	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R ²	F Change	df1	df2	Sig. F Change	
1	.728 ^a	.530	.521	1.18709	.530	54.200	1	48	.000	2.583

Source: Authors' Computation using SPSS (2020).

a. Predictors: (Constant), Women empowerment

b. Dependent Variable: Productivity

The model summary as indicated in Table 3 above shows that R² is 0.53; this implies that

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53% of variation in the dependent variable (Productivity) was explained by women empowerment while the remaining 47% is due to other variables that are not included in the model. This means that the regression (model formulated) is useful for making predictions about the minimization of COVID-19 pandemic effects on households in Kwara State. The implication of the study is that women empowerment contributes more to alleviating COVID-19 pandemic negative effects on households in Kwara State in terms of survival most especially by bringing food to the tables for the families. Though some work men do cannot be done by women but all the same, their contribution cannot be over-emphasized as they all play significant role in entrepreneurship development.

Table 4: Analysis of the Variance (ANOVA)^a

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	76.379	1	76.379	54.200	.000 ^b
	Residual	67.641	48	1.409		
	Total	144.020	49			

Source: Authors' Computation using SPSS (2020)

a. Dependent Variable: productivity

b. Predictors: (Constant), Women empowerment

Table 4 summarized the results of an analysis of variation in the dependent variable with large value of regression sum of squares (76.379) in comparison to the residual sum of squares with value of (67.641). This value indicated that the model did not fail to explain a lot of the variation in the dependent variables. However, the estimated F-value (54.200) as given in the table above with significance value of 0.000; which is less than p-value of 0.05 ($p < 0.05$) means that the explanatory variable elements as a whole can jointly influence change in the dependent variable.

Regression Analysis

Table 5: Regression Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
Constant	1.458	1.326		1.100	.277			
<i>WEHS</i>	1.076	.146	.728	7.362	.000	.728	.728	.728

Source: Authors' Computation using SPSS (2020)

a. Dependent Variable: productivity

b. Predictors: (Constant), Women empowerment

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The dependent variable as shown in Table 5 explains the influence of women empowerment on productivity and its trajectory effect on minimizing the negative impacts of COVID-19 on households. This was used as a yardstick to examine the influence between the two variables. According to the result in the table 5 above *WEHS* T-test coefficient is 7.362 and the P-value is 0.000 which is less than 0.05 (i.e. $P < 0.05$).

$$PRDT_i = 1.458 + 1.076 WEHS_i \quad (4)$$

(1.100) (7.362)

This means that this variable is statistically significant at 5% significant level. The overall summary of this regression outcome in relations to the coefficient of women empowerment have significant influence on entrepreneurship development (productivity) and hence, on reducing the negative impacts of COVID-19 pandemic on households in Kwara State. This implies that the null hypothesis (H_{01}) is rejected that is, women empowerment had significant influence on entrepreneurship development (productivity) thus, minimizing the negative effects of COVID-19 pandemic at its peak. This therefore, supported the alternative hypothesis (H_{02}).

Conclusion and Recommendations

Based on the study, women entrepreneurs are lovers of smaller businesses because they devote more time to household production and child-rearing activities coupled with the low finance for start-up and low technological contents of their business activities. It is for these reasons that many women engaged in small and medium scale entrepreneurial ventures. However, the sudden outbreak of COVID-19 pandemic soon exposed the benefits of women engaging in low level of business activities as they were more conscious of keeping the household hygiene and supporting their families that keep many household afloat at the peak of the virus.

It is imperative that public policy must be focused on financial inclusion for their businesses to continue flourishing in order to increase their productivity. Furthermore and with their roles at the peak of COVID-19 pandemic in supporting their husbands to keep the households together, women should be organized as agents for distributing palliatives whenever the need arises in the future. More so, they should also be involved in training against future spread of diseases since by virtue of their nature, they are inclined to ensure hygiene and safety of their households. In addition, public policies on women should include gender-targeted procurement activities, training, counselling and mentoring programmes.

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Chapter 6

An Appraisal of The Impact of COVID-19 Lockdown on Hotels' Business in Adamawa and Taraba States, Nigeria

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Abstract

The emergence of the novel Corona Virus popularly known as COVID-19 has exposed the vulnerability and fragility of humanity all over the world thereby affecting the global economy sliding into recession. The pandemic has caused almost all countries in the world including Nigeria to place travel ban and restriction of borders consequently affecting the tourism/hospitality industry. It is against this backdrop that this study appraises the impact of the pandemic specifically on revenue lost per available rooms, occupancy rate and jobs lost attributable to the lockdown within the two selected states. The study employed the use of primary data collected across 61 representing 70% of the total hotels in the study area using multi-stage sampling strategy and 15 Key Informant Interviews KIIs were conducted mainly for management staff to generate qualitative information. Descriptive statistics such as the use of tables and weighted mean were use used to analyze the quantitative data and thematic analysis was used for the qualitative data. Findings from the data revealed that most of the hotels (85%) were operating at above 60% capacity utilization prior to the outbreak of COVID-19 and generated a gross daily average turnover of ₦195,960 equivalent to \$506.46 but lost approximately 64% of their daily revenue per available rooms. The occupancy rate declined sharply to 24% and about 70% reported 50% pay cuts of their staff and retrenched 45% of their total staff. It is therefore recommended that Hotel business should employ new resilience measures such as proper and effective hygiene that will make customers feel safe; government should consider granting them tax relief/exemption throughout the year 2020, Put in place an improved revenue management system and pricing models that is competitive and responsive to market recovery quickly, among others.

Keywords: Impact; COVID-19; Hotel's Business.

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Introduction

The outbreak of the novel corona virus popularly known as COVID-19 has exposed the vulnerability and fragility of humanity all over the world with the global economy sliding into recession attributable to the shutting down of all major production activities in most countries; having a devastating general impact. This pandemic has become a serious global threat, increasing from 197,590 infections and 7,954 deaths in March 17th, 2020, to 2,350,075 infections and 161,270 deaths as at April 19th, 2020- within a period of a month. As at August 28th, 2020 total global cases over exceeded 24 million with incident of death rising to over 800,000 (Pwc, 2020 and NCDC, 2020).

The first index case of COVID-19 case was announced on the 27th of February 2020, when an Italian citizen tested positive in Lagos. As at August 30th, 2020, Nigeria recorded 53,865 confirmed cases, 41,513 cases have been discharged and 1,013 deaths have been recorded in 35 states and the Federal Capital Territory (NCDC, 2020).

Global response in containing the spread of the disease led to the lockdowns and travel restrictions across countries, of which Nigeria is not an exception. President Muhammadu Buhari while adhering to the WHO protocol of controlling the spread of the virus directed the restriction of all movements in Lagos and the FCT for an initial period of 14 days, which took effect from 11 pm on Monday, 30th March 2020. This action led to the spontaneous travel restrictions and total lockdowns across most states in Nigeria with Adamawa and Taraba States announcing their first respective lockdown on the 6th of April 2020 and 10th of May 2020 (NCDC, 2020).

Historically, hotel industry has been vulnerable to threats posed by unexpected catastrophes such as natural disasters, epidemics and terrorists attacks. There is no doubt therefore, that the hospitality industry is one of the sectors that has been worst affected by the incident of COVID-19 pandemic, with sharp decline in the daily revenue per available space for hoteliers and many of their employees either retrenched or experiencing wages/salaries cut since it is largely driven by increase in disposal income, new travels and tourism.

Globally, the industry was projected to experience 50% decline in revenue for the entirety of 2020. It was also established that about eight (8) in ten (10) hotel rooms are empty at a moment generating 70% of total employees' layoff or furloughed due the impact of travel bans/restriction and total lockdown of most economies. For instance, occupancy rate in the greater China declined near to 15%, Europe and North America declined to 20% during March 2020, but was around 70% during the same March a year ago (2019) (Oxford Economics, April 2020).

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Furthermore, the pandemic has caused 71% drop in hours worked over the last few months in America which means about 36-hour week worth \$2.3 billion of wage income per week is lost with about \$16.8 billion loss in State, Local Tax Revenue for Hotels in 2020 in the United States (Research and Market Report April, 2020).

Confirming the impact of COVID-19 on the Hotels' operators in Nigeria, the President of Hotel Owner Forum, Abuja (HOFA) Chief Ezeudeh told Daily Trust that some Hotel owners were considering laying off staff members, while others were considering salary reduction. He further reiterated that the industry is second largest employer of labour after the Federal Government and therefore appealed to government for palliatives to cushion the effects on the business (Daily Trust, July 1st, 2020).

It is against this backdrop that this study appraises the impact of the lockdown/movement restriction on the hotel business specifically on the investors' daily returns, occupancy rates and employees of the industry within the selected states under consideration since there is limited empirical evidence at a moment in Nigeria.

Review of Relevant Literature

Tourism is conceptualized as the temporary movement of people to destinations outside their normal places of work and residence, the activities undertaken during their stay in those destinations, and the facilities created, and services provided to cater for their needs (Collins-Kreiner & Wall, 2015). Tourism was also viewed as people travelling abroad for period of over 24 hours (Vijaya, 2016). It involves the motivations and experiences of the tourists, the expectations of and adjustments made by residents of reception areas and the roles played by the numerous agencies and institutions which intercede between them (Collins-Kreiner & Wall, 2015). Tourism is, therefore, a multifaceted phenomenon which involves movement to and stay in destination outside the normal place of residence. It generates huge amounts of revenue in payment for goods and services available, accounting for appreciable component of the world's exports of goods and services. It has multiplier effect on employment generation in the service sectors of the economy. These service industries include transportation services, such as airlines, cruise ships, and taxicabs; hospitality services such as accommodations, restaurants including hotels and resorts; and entertainment venues, such as amusement parks, casinos, shopping malls, music venues, and theatres. World Tourism Organization (WTO) as cited in Vijaya (2016) defined tourist as a temporary visitor staying for at least 24 hours in a country visited when the purpose of the journey can be classified under Leisure - recreation, holiday, health, study of religion and sports- or business, family, mission meeting.

The hotel sub-sector is largely driven by networks of many other sectors in the economy including tourism, travel/transportation, education, agriculture, medical, construction, real

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estate, retails, to mention but a few. However, due to the Covid-19 pandemic, the entire global economy was shut down almost overnight (UNWTO, 2020). The impact has confronted the hospitality industry with an unprecedented challenge. Strategies to reduce the spread of the virus such as social distancing, community lock down/stay-at-home orders; travel and mobility restrictions have resulted in temporary closure of many hospitality businesses and significantly decreased the demand for businesses that were allowed to continue to operate (Bartik et al., 2020). Almost all hotels were asked to limit their operations. Restrictions placed on travel and stay-at-home orders issued by the authorities led to sharp decline in hotel occupancy rates and revenues per available room.

It is evident that the emergence of the pandemic and its speedy spread around the world has affected the tourism industry the most. Countries of the world have continued to place travel restrictions and closure of their borders, close companies' operations, translating to hotels and hospitality industries facing declining patronage. For instance, in Hungary alone, it was reported that about 40 to 50% of hotel reservations have been cancelled (CSEA, 2020). Furthermore, the pandemic is placing up to 8 million jobs in the leisure and hospitality sector at risk, with travel crashes and cancellations expected to continue (CSEA, 2020). On the same vein, the National Association of Nigerian Travel Agencies (NANTA) which has about 2000 registered members also confirmed that over 35,000 employees are seriously affected at the moment, with no any other alternative means of livelihood (Oruonye and Ahmed, 2020).

Narrowing the impact on the hotels across the world, it was established that the sub-sector has witnessed booking a dramatic booking cancellations worth billions of dollars, and the industry sought a \$150bn bailout (Ozili & Arun, 2020 as cited in Oruonye & Ahmend, 2020). Resorts and hotels that were booked by excited vacationers and corporate conference-goers before the present COVID-19 pandemic are receiving calls to postpone plans or cancel entirely their earlier proposed events. This has made most of the hotels and restaurants to embark on temporary suspension of normal operations which puts the estimated loss of jobs to 24.3 million globally, and 3.9 million in the US alone due to the decline in hotel occupancy during the pandemic period (Ozili & Arun, 2020). The economic losses attributed to covid-19 pandemic on the hotel industry. The impact of the noble virus has posed extremely challenge for many of the tourism industry's investors to continue paying staff with a sharp decline in sales and income, leading to job loss. Many hotels are already closing down because of low patronage and inability to meet up with payment of worker's salary and utility bills. Majority of them are already cutting down their workforce; while others slash their workers' salaries by 50 per cent.

Preliminary investigations of a longitudinal study conducted by the editorial team of the Journal of Hospitality Marketing & Management reveal that large portion of individuals

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(over 50%) are not willing to staying check in hotels. That suggest most customers (over 50%) are not willing to travel to a destination and stay at a hotel any time soon. Only around a quarter of the customers have already dined in a restaurant and only around one-third are willing to travel to a destination and stay at a hotel in the next few months (Gursoy et al., 2020). These findings suggest that most customers are still not comfortable to dine in at a sit-down restaurant, travel to a destination and stay at a hotel. While acknowledging that the hospitality industry has relatively high gestation period for breaking even due to high operating costs, hence the survival of many hospitality businesses depends largely on increasing the demand for their services and products. The research findings further indicate that around 18% of the customers will only feel comfortable to travel to a destination and stay at a hotel when that destination has very few COVID-19 cases and has the ability to test, trace, and isolate COVID-19 cases. Furthermore, there is a group of customers who will only feel comfortable to patronize a sit-down restaurant (around 14%) and travel to a destination and stay at a hotel (around 17%) when the COVID-19 vaccine becomes available (Gursoy et al., 2020). These findings clearly suggest that we need further suggest that there is need for further research to be conducted to establishing the magnitude of the impact on hotels across different countries.

Napierala et al (2020) assessed the impact of COVID-19 cases on hotels' performances in some selected cities in Poland where they adopted the generalized methods of moments to investigate the influence of the pandemic on both occupancy rate and revenue per available room. The results show a significantly negative impact on the performance of hotels in the country based on the indicators identified and were more significant in less populated urban destination.

Oruenye and Ahmed (2020) while gauging the potential impact of COVID-19 on tourism in Nigeria generated data from desk review such as secondary materials, online blogs and interview through social media chat. Records suggest that the outbreak and spread of covid-19 disease led to rapid shutdowns in cities and states across the country, which greatly affected the tourism industry. The industries affected in the tourism sector includes airlines, hotels, entertainment and hospitality industries which are facing declining demand and patronage with travel crashes and cancellations expected to continue. The increased cancellations of hotels and travel bookings resulted in billions of dollars in revenue loss and hundreds of thousands of job loss in the country. The findings of the study further establish that covid-19 is already worsening the unemployment situations in the country, resulting in loss of substantial revenue to the government, increasing incidence of poverty among others. The study therefore recommends the need for diversification priorities to alternative sectors such as tourism and agriculture and compensation to business operators in the tourism and other critical sectors of the economy.

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Methodology

The study essentially adopts the use of cross-sectional survey to generate data from established and functional hotels sited in Yola and Jalingo metropolis of Adamawa and Taraba states respectively. Both quantitative and qualitative methods of data collection were used in sourcing the primary data. The quantitative method employed the use of open-ended questionnaire using multi-stage sampling strategy. Priority was giving to hotels that have operated for at least five (5) years and have more than twenty (20) available rooms (capacity). This was adopted in order to have adequate information about their previous occupancy rate, revenue per available rooms and mode of employment (casual or permanent staff).

Eighty (85) hotels representing about 70% of the total across the two states were sampled, but sixty-one (61) valid instruments were successfully retrieved and analyzed comprising about 72% of the total sample. Fifteen Key Informant Interviews (KIIs) were conducted for high profile management staff to further validate the quantitative data collected or otherwise. It was also serving as platforms for collecting robust and reliable information. Table 1 gives a brief summary of how the data was collected across the two states.

Table1: Breakdown of Data Collected Across the two States

Activity	Adamawa	Taraba	Total
Quantitative Data Collected via Questionnaire	38	23	61
Qualitative Data Collected via KIIs	9	6	15

Source: Designed by the Researchers July 2020.

Descriptive statistics such as the use of weighted mean and tables were used to analyze the quantitative data. The key performance indicators were analyzed arithmetically using the simple equations 1, 2 and 3 below:

$$\text{Occupancy rate} = \frac{\text{Total rooms sold}}{\text{Total rooms available for sales}} \dots\dots\dots (1)$$

$$\text{RevPAR} = \frac{\text{Total rooms' revenue}}{\text{Total rooms available for sales}} \dots\dots\dots (2)$$

$$\text{ADR} = \frac{\text{RevPAR}}{\text{OCC}} \dots\dots\dots (3)$$

Where:

RevPAR= Revenue Per Available Rooms

ADR = Average daily Returns on Sales of room

OCC = Occupancy Rate

While as, the qualitative data was analyzed thematically to complement the quantitative data collected from the survey.

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Results Presentation and Discussion of Key Findings

As stated earlier, the main focus for this research is assessing the impact of the pandemic on key hotels' performance indicators namely: occupancy, revenue per available room and average daily rate. Occupancy refers to the percentage ratio of the number of rooms sold during a specific period of time and the total number of available rooms for sell during the same period. Furthermore, RevPAR is defined as the sum amount of sales made in a specific time, generated by each available room during that same period. Lastly, the average daily rate is expressed as the ratio of RevPAR and occupancy, which represents average revenue per occupied room in a specific time period (Hayes & Miller, 2011 and Mauri, 2013).

Table 2: Descriptive Statistics of Variables for Major Hotels Performance Indicators across Adamawa and Taraba States (Before and after the lockdown)

Variable	Obs	Mean	Std. Dev.	Min	Max
tra	61	36.65	16.78561	20	100
trsb	61	29.18333	14.44861	15	85
trsa	61	10.03333	6.724523	0	30
adcub	61	67.28333	14.06654	50	90
trrb	61	194956	108730.2	59800	496000
trra	61	63874.28	41323.67	7800	198400
adcua	61	19.33333	11.53575	10	50
occb	61	.7911515	.088373	.5263158	.9354839
occa	61	.262804	.1086055	0	.483871
revparb	61	5356.272	1838.529	2086.364	9761.904
revpara	61	1763.646	815.5887	278.5714	3533.333
adrb	61	6879.718	2618.09	2868.75	15400
adra	61	7207.416	3620.537	1300	22000

Source: Outcome of Field Survey June 2020 and Computed using STATA 14.

Note: tra= total room available for sales, trsb= total rooms sold before COVID-19 lockdown, trsa = total rooms sold before COVID-19, adcub= average daily capacity utilization before the lockdown, adcua= average daily capacity utilization before the lockdown, trrb= total rooms' revenue before the lockdown, trra= total rooms' revenue after the lockdown, occb= occupancy rate before the lockdown, occa=occupancy rate after the lock down, revparb= revenue per available room before the lockdown, revpara= revenue per available room after the lockdown,

A careful examination of table 2 shows summary of all the key performance indicators of hotel business before and after COVID -19 lockdown across the two states sampled within North Eastern Nigeria establishes that the hotels have an average of thirty-seven (37) rooms as the total available rooms or carrying capacity with the smallest having twenty (20) rooms, and the biggest having up to a hundred (100) rooms. It was also established that the hotels were operating at about 79% (occupancy rate of 0.79) of total carrying capacity thereby generating average daily revenue of one hundred and ninety-four thousand, nine

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hundred and fifty-six naira (₦194,956 equivalent to \$506.37) before the lockdown. The smallest hotel was able to generate average revenue of fifty-nine thousand, eight hundred (₦59,800 equivalent to \$155.32) and the biggest made about four hundred and ninety-six thousand naira (₦496,000 equivalent to \$1,288.31) daily.

However, the occupancy rate dropped significantly to just 26% after the lockdown thereby making an average daily turnover of just sixty-three thousand, eight hundred and seventy-four naira only (₦63,874 equivalent to \$165.90) losing about one hundred and thirty-one thousand naira (₦131,00 equivalent to \$340.47) This by implication suggests that seven (7) in every ten (10) hotel's room are now vacant in the study location. This finding is consistent with the finding of Oxford Economics which conducted a similar study in China, North America and Europe in March.

Revenue per available room also dropped from five thousand, three hundred and fifty-six naira (₦5,356 equivalent to \$13.91) to a thousand naira, seven hundred and sixty-three (₦1,763 equivalent to \$4.57). This by implication shows that hotels within the sampled states are losing about three thousand, five hundred and ninety-three (₦3,593 equivalent to \$9.33) revenue daily per room.

The thematic analysis for all the fifteen KIIs conducted with top management staff of the sampled hotels has been presented on table 3:

Table 3: Summary of Qualitative Data (KIIs)

Variable of Interest	Key Indicators	Frequency of Citation
Impact of COVID-19 on Key Performance indicators	Drop on Occupancy rate per day/week	*****
	Decline in Revenue Generated per day/week	*****
	Poor patronage of other services such as restaurants, bars, pools, clubs by outsiders	*****
	Inability to pay staff salaries/wages	****
	Sacking of staff (casual and permanent)	***
	Pay cut for staff	***
Coping Strategies	Depending on previous savings	*****
	Borrowing/overdraft from banks	***
	Depending on other investment(s) to subsidize for the hotels' business	**
	Depend on farming members for source of income	*

How frequently cited: * occasionally cited; ** Sometimes cited; * frequently cited; **** Usually cited ***** Every time. Source: Researcher Outcome of Field Survey, June, 2020.**

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Findings from table 3 above validate the results of the quantitative analysis on table 2 whereby the key indicators such as the occupancy rate, revenue generated, and patronage of other complementary services were all cited to have been worst affected by the lockdown attributable to the pandemic. Consequently, the management has been unable to pay staff salaries/wages. In some cases it has degenerated into pay cut and sacking of permanent and casual staff respectively. As part of coping strategies, most of the investors reported depending on previous savings and borrowing from banks; while as, a few reported relying on other investments and family members to subsidize the cost of running the business and providing to their livelihood.

This was what some of had to say while responding to some of the questions during the KIIs session and quote:

....we used to have high level of patronage before the emergence of the so-called COVID-19 lockdown whereby sometimes we turned the booking of our customers because of lack of reservations most especially if there are activities/even such as seminars and workshops organized mostly by NGOs. But we are really struggling this time around, sometimes we experience zero patronage, people don't travel any longer because of fear being infected with COVID-19. I have to fire all my casual staff because I don't have money to continue to pay them on daily bases and have also suspended some of my permanent staff...Mr. Linus Brano, General Manager Duraghi Hotel Barracks' Road, Jimeta-Yola, Adamawa State.

...the rate of patronage has declined significantly at a moment thereby affecting our daily income. In fact, we are currently operating at lost because at the end of the month we must incur cost of utilities such as payment of electricity bills, staff salaries, and even taxes/levies. The management has adopted a strategy of reducing staff and has asked the few ones to be having rotational shifts in order to reduce cost of operations...Mr. Samson Manager, Helen Beuty Hotel mile six Jalingo, Taraba State.

Conclusion and Recommendations

The outbreak of COVID-19 and its rapid spread across countries has led to spontaneous shutdown of cities and states across different countries in the world. Consequently affecting the tourism sector and having an enduring impact on the survivals of hotels business. This

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study therefore investigates the impact of the pandemic on key performance indicators of the business in Adamawa and Taraba States, North Eastern Nigeria. Empirical findings from the field established that the lockdown attributable to the emergence of the novel virus has translated into a sharp decline in the occupancy rate and revenue per available rooms of all the hotels sampled in the study location giving rise to job lost and pay cuts of most of the employees of this sector.

The study therefore concludes that COVID-19 lock down has much impact on hotels' business in both Adamawa and Taraba States.

Leveraging on some of the key findings, the study recommends that:

- (i) There is need for operators/investors to introduce new resilience measures such as cutting of operational costs on one hand; prioritize customers via the introduction of affordable pricing system/discount.
- (ii) Introduce top hygiene practices such as the provision of hand sanitizers, the use of effective disinfectant, temperature checking at the entrance and practice physical distancing in order to make the customers feel safe when checking in.
- (iii) There need to put in place an improved revenue management system and pricing models that are competitive and responsive to speedy market recovery.
- (iv) Government should consider granting tax relief/exemption throughout for hotel operators the period of 2020 and encourage them to re-absorb all staff that lost their jobs during the period of the pandemic.

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Chapter 7

COVID-19 and the Global Economy: An Implication for Aggregate Macroeconomic Performance and Budget Financing in Nigeria

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Abstract

We investigate the global economic impact of COVID-19 with implication to aggregate macroeconomic performance on budget financing in Nigeria using survey of the documented literature as well as the publication of various statistical organization to include CBN and NBS report to predict the future of 2020 budget financing and found that apart from the fiscal and monetary measures that came-up with cuts in both capital and recurrent expenditure by 20 and 25 percent taken to cushion economic effect of the pandemic in Nigeria, the global economic shocks caused by the coronavirus pandemic lead to decline in crude oil price and thereby reduce revenue in the country, decline in GDP to -6.10 percent, high level of inflation with CPI of 326.10 points, unemployment rate at 27 percent and decline in investment by NSE all share index of 1558 points or equivalent of 5.8 percent within first and second quarters, and therefore a possible recession and budget financing crisis ahead of the fiscal year is possible and finally conclude that, measures should be taken to ensure that fiscal and monetary measures taken are accomplished accordingly while social investment programs that are meant for the vulnerable citizens are to stick and adhere as designed to reduce the failure in household consumption.

Keywords: COVID-19, Macroeconomic, Budget Financing, Nigeria.

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Introduction

The history of COVID-19 can be traced back to the late of 2019 in December, which have been identified in the city of Wuhan-China. It was initially reported to be termed as 2019-nCoV caused by SARS virus (McKibbin, 2020), as an outbreak that turned the world at large into panic. To start with, the epicentre (after China) of the outbreak as at February of 2020 include Iran, Italy, Japan and South Korea but as at April same year, COVID-19 affected almost every country in the world justifying USA among the highest (WHO, 2020). The increasing alarming of the rates of spread and death toll across countries and regions turned the world to a new transition that impacted almost all the spheres of life, with socioeconomic not in exception. In order to save lives and reduce the impact on health service (as part of the quality of human capital), many governments across the globe have taken measures of restriction of movement by enforcing closing of shops and markets, industries, schools and colleges, foreign travel suspension and encourage people to work at home. Beyond doubt, this turns to be negatively impacted to many economies with Nigeria in inclusion (AFREC, 2020).

IMF (2020) suggests that, the global GDP could fall by -3% in 2020 compared to estimate of around 2% growth before the outbreak and projected to grow by 5.8% in 2020 if economic activities normalize. While US annual growth rate fell by 4.8% in the first quarter of 2020 as revealed by the US bureau of economic analysis in the period of restriction. On the other hand, France and China reported to be 5.6% and 6.8% in Q12020 accordingly. Recent private sector forecast out that, a substantial larger GDP short fall in the short term as a result of the impact of the COVID-19 pandemic than previous outbreak episodes, or indeed severe recession in the past may occur. For instance, the US quarterly contraction is expected to be largest in the second quarter. It is notably that, by the end of 2020, the level of the US GDP under these projections would still fall short of trend by 4-10%. For global economy, the contraction during the first two quarters ranges from 10-20% (Biossay and Rungcharoentikul, 2020). On the part of the sub-Saharan Africa IMF (2020) also further predict a contraction of the continent growth by -1.0%, while Nigeria economy to contract by -3.4%, but there may be likely future prospect for the economy to grow by 2.4% by 2020 with implementation and enforcement of effective policies in the country.

With restriction to curtail movement, transport sector also has been significantly knocked by the measures as available data shows that globally, around 75,000 fewer commercial flights were operating a day in April, which suggest around 75% below normal level. This shows by implication the drawback of the income stream of the sector accrued to transport industries as well as government revenue (tax) that serve as the basis for expenditure complement. Henceforth, oil consumption as well, behaved to be abnormal thereby caused shrank to the oil price. Beyond doubt, there is positive correlation between oil price and economic growth (see AFREC, 2020, Ftiti et al, 2016 and Rentschler, 2013), especially for

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the oil producers, the price fall to \$40/barrel in March as well as \$30 in April, 2020, and a project is made available to remain within the rages of \$40 through 2020. This crisis certainly affects the fiscal balances of most oil produces countries (including Nigeria) especially mono economies that largely re-laid on the oil market.

To end this background, this paper is aimed at assessing the impact of COVID-19 on global economy with particular reference to the implication of the selected macroeconomic aggregate performance toward the complement of budget financing in Nigeria. This is justifiable as most of the literature reviewed failed to cover such issues. To achieve this objective, a literature documentation survey was utilized and, the paper is organized into five sections including this introduction as section one. Section two briefly outlook the COVID-19 in Nigeria and the responses of the policy makers to address the challenges within the economy while section three offer a surveys of some selected macroeconomics aggregate indicators at the mix of COVID-19 within the first two quarters of the fiscal year. Section four dialled with fiscal responses and budgetary status and the possible implication for the future of the budget financing and finally section five conclude the paper.

COVID-19 in Nigerian and Fiscal Stimulus Package: An Outlook

COVID19 in Nigeria: The first COVID-19 case in Nigeria was reported to be identified and announce on 27 February, in Lagos. Since then the case is exponentially increases and as at the end of march, 35 state out of 37 including the state capital, were reported to have confirms cases of COVID-19 including the north eastern state that have being deteriorating by the insurgence of Boko Haram of Borno, Adamawa and Yobe state with 215 in Borno and 23 related death while 21 and 32 cases in Adamawa and Yobe respectively. And before the month ending, over 33,000 samples have been tested. Most of the cases identify are commonly bring into being in Lagos, Kano and Abuja occupying almost 60% of the total cases in the country (NCDC, 2020). Despite the increasing alignment of the case in Nigeria, only five testing centres/laboratories are available to take care of the suspected and/or related cases. Out of which three of them are in Lagos. This draw the attention of policy makers when WHO (2020) asserted that, a number of COVID-19 cases in Africa was likely to be higher than reported, due to limited testing labs and deficiencies in emergency preparedness. Since then, the country witness a number of private sector participation in support for provision of testing centres almost in all part of the country. As at 23th August, 378,023 samples are tested with 52,227 confirm cases, 12,280 active cases, 32945 discharge cases as well as 1,002 deaths (NCDC, 2020).

As part of the effort to curtail the spread of the case in the country, restriction of movement on 18th March, were imposed to include ban and suspension of visa on arrival for all travellers coming from countries that recorded more than 1000 cases domestically, and such ban were further extended to 7th June on the 6th of May. Following this restriction of

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movement measures, Lagos, Abuja and Ogun were also placed on total lock-down and later on the 30th March, Kaduna, Kano, Delta, Jigawa, Bauchi, and interstate travel ban for all the state have being announce by the government along with the closing of government offices, markets, shops, industries except for those on essential services are allowed to operate. With this effort, international trade became limited because of the land, sea as well as airport closure. Following the negative impact of these measures on the Nigeria economy on worsening of the living condition, high rate of unemployment and inflation cause by shortage of essential amenities across the country among others, the government have to announce the ease of the lock-down on the 28 April (acaps, 2020). Finally, the restriction of movement on the other hand course a lot of rigidities in the government revenue as most cooperates and other related taxes became insufficiently and incentive to encourage complementary of the enforcement via social security transfer became high sensitive.

Policy Response to COVID-19 in Nigeria: In an attempt to address the economic challenges of COVID-19 in the country, a number of fiscal and monetary stimulus packages have been put in place to include N500 billion COVID-19 crisis fund in other to address the upgrade of health facilities in the country; support states in improving healthcare facilities; finance unique public works and fund other identified intervention program. Another related response is the augmenting to the state allocation and moratorium on state debts that came along with the withdrawal of \$150 million from the Nigeria's sovereign investment authority (NSIA) stabilization fund to support federation account allocation committee (FAAC) disbursement and debt and interest moratorium to state on federal government fund and CBN-funded loans to state governments. This will free up debt services obligation and cushion the impact of the drop in FAAC allocation. Similar package is the loan received from regional disease surveillance system worth \$90 million and additional \$100 million to meet the COVID-19 emergency across the country have being requested from the World Bank (NESG, 2020).

Consequently, on the expenditure side, a medium term expenditure framework strategy paper for 2020-2022 frame work and fiscal strategy paper (MTEF/FSP) will be prepared to reflect the new realities on the crude oil price movement so as to attain proper reduction in revenue and new spending priorities. Again appropriation act of the 2020 will be amended in other to cater the downward review of the revenue estimates in the budget. For instance, the estimate in the 2020 budget benchmark of the oil price \$57 per barrel have adjust to \$30 per barrel and on the production side 2.1 million barrel per day has being also adjust to 1.7 million barrel per day. While non-oil revenue of taxes and custom receipts has also being reviewed dawn word. Finally, the insertion of the N500 billion COVID19 fund and other adjustments required as a result of the decline in the international oil prices (proshare, 2020).

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Another related response is the CBN measures by creation and making it available of N50 billion targeted credit facility; decrease in interest rate by 44% making it to be reduced from 9% to 5% for a period of year on all CBN intervention facilities with effect from March 1st, 2020; the CBN also granted all deposit money banks (DMBs) leave to consider to consider temporary and time limited restructuring of the tenor and loan term for business and households most affected by the outbreak of the COVID-19 particularly oil and gas, agriculture and manufacturing industries and also the CBN disburses N100 million credit support to health care industries. On tax palliative measures, the Federal Inland Revenue Services (FIRS) also submit that a waiver to late return penalty to taxpayers who pay earlier and file later; value added tax (VAT) and wit holding tax (WHT) has been extended to the last working day of the month as opposed to the 21st day of the month; taxpayers facing challenges in sourcing for FOREX to offset their liabilities can pay in Naira at the prevailing investors and exporters (I & E) FOREX window rate on date.

Meanwhile, the social intervention and welfare programs of trader money, market money and small scale government loans which provide petty trader, farmers and small business with access to capital has also provided to an estimated of 2 million beneficiaries and they would enjoy three month loan repayment. And conditional cash transfer scheme (CCTS) of stipend is made to vulnerable members of the society at the bottom end of the financial spectrum, this would enable them to meet their basic needs and cushion the negative impact of economic challenges caused by the pandemic.

Aggregate Macroeconomic Performance in Nigeria at the Mix of COVID-19

GDP at a Glance in Nigeria at Mix of Coronomics: To measure the level of growth in economic activities of a nation, GDP estimates serve the fundamental basis to be relied upon. From the beginning, the IMF (2020) predicts a drop in the Nigeria's GDP by -3.4% in 2020 with expectation to expand by 2.4% in 2021 if appropriate measures adopted are enforced and implemented. The case revealed to be justifiable as the component of GDP namely, household consumption, government expenditure and private sector investment constraint for the period of the lock down affected due to the spread of corona virus and are expected to perform poorly in the full year as compared to 2019. The indices of the first quarter of 2020 revealed that, the level of growth drop by -1.8% in relative term caused by health challenges, fall in oil price and restriction in international trade. The drop as compared to the first quarter of 2019 recorded a difference of -0.23% and -0.68 in the fourth quarter of same year reflecting earliest effect of the disruption in economics activities impacted by COVID-19 (NBS, 2020). Similarly, NBS account for the growth estimate of the economic activities in Nigeria for second quarter to be further drop by -6.10%. Reware (2020), assert that "Nigeria's stimulus plan was inadequate to cover for the shortfall recorded by NBS, as it reserved N2.5 trillion equipment to fight a 12 trillion contraction so the limitation and inadequacies as well inappropriateness of the tools compare to the probe

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we have is sacked, now we are away from the monetary policy compliment that we have to stimulate the economy, and it is time to something different”.

Global oil Price Response and COVID-19: Many researches submit a significant correlation between oil price (demand) and economic growth (see, Rentschler, 2013 and Ftiti et.al., 2016). During this period of COVID-19, the size of the oil demand is estimated by IEA (2020) as the world oil demand/consumption to be 9.3 million barrel per day while OEC (2020) positioned to be 6.9 million barrel per day in its monthly oil market report (MOMR). The implication of these focus revealed an average of 10% decline on global oil demand and therefore, for oil producing economies it meant their exports need to be equally fall by 10% on average in the 2020. Looking at the previous year, the average crude oil price is \$64 per barrel and in this year of the pandemic (2020) the price initially began to fall resulting from the ceased of cooperation between Saudi Arabia and Russia on production level. The price further drastically fall with the impact of COVID-19 that causes slow dawn of economic activities to \$30 per barrel in March to \$25 in April. The outlook for the rest of the year may be \$40 and even below is quite possible depending the corresponding response of the oil producing economies and how the pandemic develops (and/or otherwise) and the extent to which the economies can reset after the pandemic.

Unemployment and Inflation Revealed to be Worsen: COVID-19 increased unemployment rate as Nigeria recorded 27.1 percent in the second quarter of 2020, being the highest figure since that of 23.1 percent of the third quarter of 2018. The situation worsened due to several restriction and enforcement of lock down that aimed at curtailing the further spread of the pandemic of COVID-19 (NBS, 2020). Similarly, COVID-19 is intensifying inflation pressure, as statistics revealed inflation rate at 330.10 points base on the consumer price index (CPI) in July from 326.10 points recorded (representing 1.24 percent) in the previous month while the GDP Deflator account to have increase to 212.92 points in the first quarter of 2020 from 202.67 points when compared to the first quarter of 2019. However, much concern situation for the policy makers in Nigeria excessive hike at food prices that surged 15.48 percent from the previous year earlier in July 2020, the most experience since March 2018, after rising 15.18 percent in June. Food inflation is found to have continuously increasing by double digit for more than three years, amid of a weakened currency and continue border closures. On monthly basis, the food prices inched up by 1.52 percent, the most since June 2018 after increasing by 1.48 percent in the prior month (NEI, 2020).

Investment Crowd Out: Another macroeconomic variable that support to engender economic wellbeing is the investment level, at the mix of the pandemic of coronavirus Nigeria recorded a capital and financial deficit of \$6300.42 million in the first quarter of 2020. As available forecast suggest that capital flow in Nigeria is expected to fall by \$-4300.00 million by the end of second quarter. Looking forward, the estimate further

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revealed that capital flow in the Nigeria would stand to fall by \$-3600.00 in twelve month times. In the long term, the Nigeria capital flow is projected to trend around \$-1600.00 million in 2021 and \$-750.00 million in 2022 (NIE, 2020).

Nigeria's 2020 Budget Financing: A Recessionary Crisis Ahead

The Nigeria's fiscal position is being challenges as oil and non-oil revenue projection in 2020 budget are likely not to be met. Recent defy in revenue generation caused by the pandemic of COVID-19 is the falling in global oil price which necessitate the policy makers in Nigeria to reduce the 2020 budget by 22.51 percent as earlier approved as can be seen in table 1. Nigeria being an OPEC member and almost largely depends on crude oil market, the falling in global oil demand/price and adjustment correlate negatively with most oil producing economies over their revenue expectation with Nigeria in particular. Oil and gas represent only about 10% of the Nigeria GDP, but account for almost 50 percent of government revenue and over 90 percent of export earnings (Akabueze, 2020). As at April an average global crude oil price is \$25 per barrel which is far beyond the expectation of the policy makers in Nigeria that proposed 2020 budget at \$57 per barrel (and par below that in May). The gap make necessary to adjust the budget by 22.51 percent as reported in same table. To achieve our focus here an analysis of revenue (and other related source to fill the gap in) and expenditure are inevitable to discuss here and have predicts the possibility of 2020 budget financing and/or otherwise base on the available performance of the macro aggregate within the economy.

Table 1: Nigeria's 2020 Budget and COVID-19: Negative Revenue Signal Adjustment

Budget Items	(N in billion)	Present	Revised	Percentage of Changes
Statutory Transfer	0.56	0.56	0.56	0%
Recurrent Expenditure	7.57	5.68	5.68	-25%
Capital Expenditure	2.47	1.97	1.97	-20%
Budget Size (Total)	10.59	8.21	8.21	122.51%

Source: Budget Office, 2020

Revenue Measures: The budget office makes it necessary to undertake the necessary measure to address the short fall of revenue expectation of the 2020 budget by reducing NNPC's allowable deduction from oil revenue for strategic projects/programs by a total of N6.49 billion; transitioning to a PMS price modulation process to be driven by underlying global oil and gas price; accelerate marginal fields licensing and renewal of existing licenses; ramp up oil production on shut in wells; adjust all budgeted revenue line with new realities via customs revenue, stamp duty and privatization proceeds from 1.5 trillion to 9.43 billion, 4.64 billion to 200 billion and 2.52 billion to 1.26 billion respectively.

Notwithstanding, the indication of the macroeconomic variables seem to be disturbing as whether the actual measures can work in stimulating the budget performance over the

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fiscal. For instance, the NSE-all share index revealed a decreased of investment by 5.8 percent since the beginning of 2020. With the drop in investment (*ceteris paribus*) we expect the economic activities to via the same consequences. However, the growth in economic activities in Nigeria recorded a decline of -1.8 percent in the first quarter and -6.10 percent in the second quarter of 2020 (NBS, 2020) apart from the earlier projection of the IMF (2020) to decline by -3 percent, the situation is almost proved to positioned the Nigeria economy in a stage of recession. Dantama (2017), argued that, to record a decline of economic activities (GDP) in good three quarters of the same year in an economy that state is in stage of recession. This negative performance translate into high inflation pressure at the rate of 13 percent and unemployment of 27.1 percent as it was revealed in the second quarter of the year by NBS. This analysis, there might be possible crisis in 2020 budget.

To finance the budget under low revenue, a possible inflation of foreign reserve might emerge. Available data revealed that Nigeria's foreign reserve drop by \$261 from 45.17 within 15 days as CBN increased sales of forex because of the shortage of foreign currency especially the Dollar that caused by the fall in global oil price due to the pandemic of COVID-19 (Olisah, 2020), but similar channel can lead to adjustment of currency which also evident from situation at hand that CBN to devalued the local currency N380/\$1 that can also lead to deficit in international. The country's international balances within the two quarter (first and second) of this fiscal year recorded a deficit of N162.2 billion as at March, but in the first quarter along the trade account suggest of decline of 138 billion when compared to N831.6 billion surplus a year earlier. But the process can only further produce declined in growth and recession can emerge. Similar reaction from the side of household can produces same reaction. With low revenue, there will be high borrowing/debt crisis that will make the CBN to decrease the treasury yields via open market operation (OMO) and can equally cause susceptibility to external shocks that lead to decline in growth and recession at last to emerge.

Expenditure Measures: To undertake the necessary action against the down ward stream of the revenue side for the necessary accomplishment of the proposed budget of the fiscal year engendered by COVID-19, the Nigerian budget office adopt the following measures to address the signalling channel of the mismatched between revenue and expenditure by reducing capital expenditure by 20 percent; reduced overheads for the top GOEs (recurrent expenditure) in 2020 budget by 25 percent, 80 percent of savings from these GOEs' cut will be applied to increase their operating surplus to be transferred to the consolidation revenue fund (CRF) and similar cost cutting measures will apply to all other GSEs'. Other fiscal and administrative measures are controlling the fast growing personal cost by embargoing non-essential recruitment (with the exception of health and security services); restructuring social investment programs and designing other policy strategic with MDAs.

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But, the fact of this scenario have it economic consequences to a country like Nigeria that shows declined in almost all macroeconomic indicators.

To cut capital expenditure, this means investment should be discourage as Keynes postulated in his treatise of great depression of the 1930s. On this case, Gusau (1991a) supported Keynes assumption that “the only reason (for the wealth of cities) is that the governments is near and pour its money into them, like the water (of a river) that makes green everything around it and fertilizes the soil adjacent to it while the distance everything dry”. With contraction of both capital and recurrent expenditure in the budget, investment and household consumption is discourage and similar reaction will correlate with the trade balances and growth potential (GDP) and finally recession will show up. Available data release for both first and second quarters of the 2020 as earlier revealed for all the variables above, a possible poor performance (beyond expectation) of this year fiscal budget would be recorded.

Conclusion

The spread of the pandemic of COVID-19 began in Wuhan city of China in the late 2019 and subsequently spread to almost all over the globe in earlier 2020 with economic challenges ahead following the negative health impact. The pandemic came up with serious restriction of movement measures in other to curtail further spread of the virus which turn business and industries shutdown. The closure of economics activities revealed a negative declined of the world growth and individual countries revealing variation from country to country (depending on the economic capacity to accommodate the shock). In Nigeria, a total declined of 6.10 percent have been submitted by the NBS. Other macroeconomic variables indicate a fading recording Unemployment with 27 percent; inflation index of 326.10 points while capital and financial account deficit of \$6300.42 million in the first quarter of the fiscal year.

The growing task of health challenges and failure in revenue of almost all the component of government sources, several fiscal and monetary measures have been adopt to cushion the effect of the pandemic including reduction in expenditure and revenue projection in 2020 appropriation bill by reducing 20 and 25 percent’s in capital and recurrent expenditure of the budget. While N500 billion COVID-19 crisis found and other associated policies were introduces to control the needed action require necessary. We therefore, found that a serious shock indication across the macroeconomic performances at the mix of COVID-19 reviewed suggest a possible recession and budget financing crisis ahead and finally conclude that, measures should be taken to ensure that fiscal and monetary measures are accomplished accordingly while social investment programs that are meant for the vulnerable citizens are to stick and adhere as designed to reduce the failure in household consumption.

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Chapter 8

COVID- 19 Crisis through the Lens of Migrant Worker: An Indian Perspective

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Abstract

The problem of migration is not arisen recently due to coronavirus. But it has become a major issue due to COVID-19 pandemic driven lockdown. Millions of people are facing problems nationally and globally. Many international institutions have raised this issue. The Indian economy is facing two major challenges at this juncture health and economic emergency. During the crisis role of Government is more important considering interventions to support stranded migration and employment generation with proper planning. This would be priorities for skilled and unskilled labourers at their places. In this paper, the researcher has tried to focus on the problems faced by the migrant labours due to coronavirus pandemic, especially in India. Pandemic has triggered the issue of reverse migration from the "destination" to "source" all over the country. Thousands of labourers marched back to their native places to get empathy from friends and relatives.

Keywords: Migration, Health, Employment.

Introduction

The COVID-19 outbreak was triggered in December 2019 in Wuhan city in Hubei province of China and it has been continued to spread across the world. Initially, the epicentre of the outbreak was China, now the entire world is infected. This pandemic driven global economic shutdown have disrupted billions of lives and are jeopardizing decades of development. The globe is facing humanity's biggest crisis since World War II. The entire world is passing through great uncertainty and risk. We have experienced many crises in the world (like Spanish flu, Asian flu, Hong Kong flu, SARS, MERS, Ebola, HIV/ AIDS and now COVID-19 pandemic. The severity and intensity of corona crisis are more. As on 1st September 2020 total 2.58 crore people are infected and more than 8.57 lakh are died. After independence, India also faced many crises, but the impact of previous crises was limited to a few areas or sectors. The outbreak of coronavirus is affected not only the

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economy but also affected the lives of people without any social, regional or economic discrimination.

Today, the Indian economy is facing two major challenges at this juncture, first is to save the whole country from the spread of coronavirus (COVID-19), which is a *health emergency*. We know that health is wealth and saving lives is the most important concern of the government. But still, we don't have the required health facilities and infrastructure in our country. Second is to save the economy from the unfolding economic and social uncertainty arise due to the dual effects of the coronavirus pandemic and national along with global lockdown. We have completed 4 phases with near about 70 days of complete lockdown. Now started eight phase of the lockdown which is unlocking economy (4th stage) step by step. As on 1st September 2020 total 37.42 lakh people are infected and more than 66 thousands are died in India.

Migration termed as the movement of population from one place to another. It is, a global phenomenon, caused by many economic and non-economic factors. Factors are divided into push and pull factors. Push factors are those forced a person to leave a place of origin and migrate to some other place which is also known as out-migration. High population growth, inadequate educational and health facilities, unemployment, poverty, social insecurity, low consumption, political instability, environment-related factors such as disaster, lack of natural resources are known as important push factors of migration. On the other hand, pull factors or in-migration indicate those factors which attract migrants to the particular area where people move to a destination due to better employment opportunities, education facilities, availability of health care facilities, etc.

People are moving at the global level also. On the global level, migration is categories as internal and external migration. Internal migration is movement of people within a country (regional, within State or District) and in external migration people moves from one country to another country. Based on origin to destination, (internal) migration can be divided into 1) Rural to Rural, 2) Rural to Urban, 3) Urban to Urban, and 4) Urban to Rural.

The problem of migration is not arisen recently due to coronavirus. But it has become a major issue due to COVID-19 pandemic. Millions of people are facing problems nationally and globally. Many international institutions have raised this issue. In this paper, the researcher has tried to focus on the problems faced by the migrant labours due to coronavirus pandemic, especially in India. Pandemic has triggered the issue of reverse migration from the "destination" to "source" all over the country. Thousands of labourers marched back to their native places to get empathy from friends and relatives.

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Global Migration at a Glance

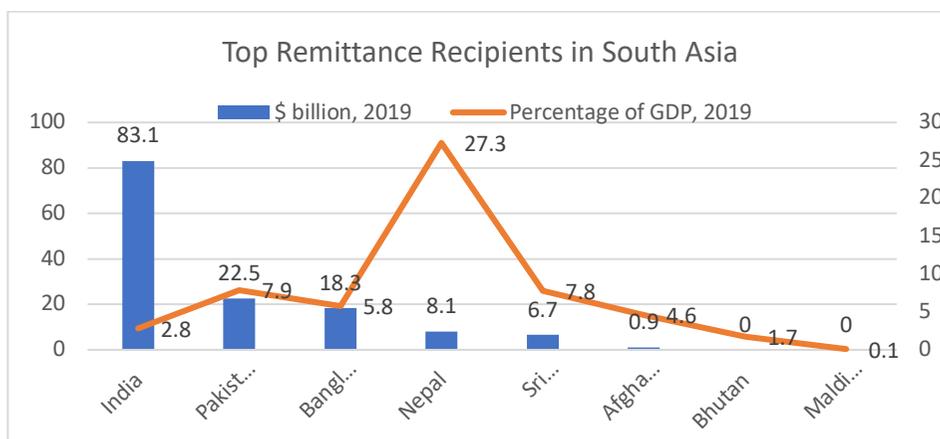
According to the World Migration Report 2020, there have been incremental changes in migration in recent years. Existing patterns of migration deepening as opportunities fetched by economic growth and reform, trade liberalization and long-term stability. The number of international migrants has been reached to 272 million globally in 2019 which is 3.5 per cent of the World's population. Out of this, 52 per cent of migrants were male and 48 per cent were female. India continued to be the largest country of origin of international migrants. Total 17.5 million Indian migrants were living abroad, followed by Mexico (11.8 million) and China (10.7 million) respectively. Top destination country remained the US with 50.7 million for migrants, followed by Germany and Saudi Arabia. One of the important things is that high-income countries experienced a slight drop in migrant workers from 112.3 million to 111.2 million and upper-middle-income countries observed the biggest increase from 17.5 million to 30.5 million between 2013 to 2017.

Increased in International Remittances

International remittance is a transfer of money from a foreign worker to his family in the home country. In many countries, remittance constitute a significant portion of GDP. Migrant remittances provide an economic lifeline to poor households in low and middle-income countries; a reduction in remittance flows could increase poverty and reduce households' access to much-needed health services.

According to the report, International remittances also reached up to USD 689 billion in 2018. The top 3 remittance recipients were India (USD 78.6 billion), China (USD 67.4 billion) and Mexico (USD 35.7 billion). The United States remained the top remittance-sending country (USD 68.0 billion) followed by the United Arab Emirates (USD 44.4 billion) and Saudi Arabia (USD 36.1 billion) (IOM, 2020).

Figure No. 1: Top Remittance Recipients in South Asia



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Source: World Migration Report, 2020 (IOM, 2020)

Trends of Migration in India

The magnitude of internal migration is about two-and-half times that of international migration. India has over 500 million internal migrants. For the weaker sections of the population, especially from underdeveloped rural areas, migration to urban economic centres provides an escape from poverty and unemployment. Remittances from these migrants are typically smaller amounts as compared to international migrants, but serve as a lifeline and insurance for families left behind.

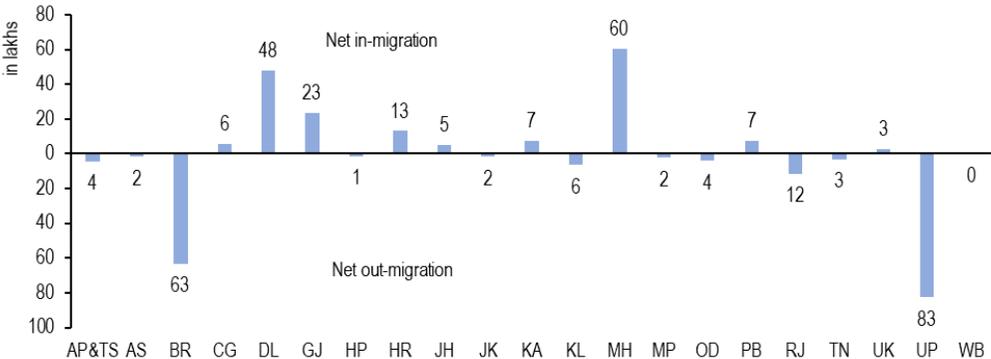
The Pattern of Migration in India

As per Census 2011, the total number of internal migrants was 450 million which is 30% higher than in 2001. This far exceeds the population growth rate of 18 % across 2001-2011. Another important change in the migration pattern in the last decade has been the inter-state movement to new growth centres, especially in small and medium-sized towns. The major concentration of the migrant labour in the urban economy was on the construction and supporting sites located at semi-urban areas. Most of the unskilled workers are working either on contract or daily wages in India. (Iyer Madunika, 2020).

Inter-State Migration

Data related to interstate migration shows variation across states. As per 2011 Census, there were 5.4 crore inter-state migrants. The data also indicate that Uttar Pradesh and Bihar are the biggest source States of migrants, followed by Madhya Pradesh, Punjab, Rajasthan, Uttarakhand, Jammu and Kashmir and West Bengal. The major destination states are Delhi, Maharashtra, Tamil Nadu, Gujarat, Andhra Pradesh and Kerala. Around 83 lakh residents of Uttar Pradesh and 63 lakh residents of Bihar had moved either temporarily or permanently to other states. Around 60 lakh people from across India had migrated to Maharashtra by 2011.

Figure 2: Inter-state Migration (in lakh)



Sources: Census 2011 (Iyer Madunika, 2020)

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Impact of Pandemic on Migrant Workers

The COVID-19 pandemic is greatly impacting mobility and migration throughout the country. Lockdowns, loss of employment, and social distancing incited a messy and painful process for internal migrants. Travel restrictions are passed to control the virus, including by prohibiting entry of residents from other states, region and districts. The outbreak has placed many internal migrant workers in dreadful conditions, many workers from the informal sector lost their jobs and unable to return home due to lockdown. This is the picture of the migrant informal workers living in slums in urban areas.

COVID-19 induced economic crisis could be a long time and pervasive impact on migrant especially on workers and their family. Every country in the world is impacted deeply in different ways. Delay in the antidote on a virus, the only lockdown was adopted as a preventive measure. Host countries or states have faced many challenges where migrant workers were largely employed. Due to lockdown migrant workers lost employment, wages, lack of food and health facilities and incurred unexpected expenditure on travel, etc. This crisis does not have a deep impact only on the economy but also have psycho-social impacts.

Issues Faced by Migrant Workers

Article 19(1)(e) of Indian Constitution, guarantees all citizens the right to reside and settle in any part of the country considering the interest of the general public or protection of any scheduled tribe. But peoples are migrating for different purposes and faced many challenges, some of them are discussed here:

i) Migrant workers and Informal Economy

As per the socio-economic data of migrants from the census 2011, peoples from different states migrated for long term as well as short term also. Most of the short-term migrants were belongs to lower income group. It is also clear that these migrants belong to SC, ST and OBC category. Migrant peoples are doing any work which received by the reference of their family member, relatives or friends. They received work as construction worker, drivers, industrial labour, work of loader and unloader etc. One of the biggest challenge in our country is the lack of robust data of labour working in informal economy in our country. Due to unavailability of proper data collection system it is very difficult to get exact figure about the temporary, seasonal and circular migrant workers. As per the government record, it is estimated that 93 percent of the working people are engaged in informal economy who are not eligible for any social security. A recent labour force survey indicates that more than 71 percent of the people with regular salary working in non-agricultural industries had no written job contract and nearly half of them also are not eligible for social security benefits. Lockdown has immensely impacted on these workers. They don't get the food

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from ration shops during lockdown. Even employers of workers had not been paid wages and it was very difficult to keep themselves remain survive for the rest of lockdown period. (Patel Champa, 2020)

ii) Impact on living standard and remittances

Extended lockdown massively impacted on economy and step by step unlocking process could not control on the increasing cases of the coronavirus in India. Risk of infections adversely impacting on the return migration and ultimately on the living standard of the workers. As per the data shown in graph no.1 India received remittance of \$ 83.1 billion (near about 3 of GDP) in 2019 which may shrink by 23 % to USD 64 billion in 2020. (Wire, 2020)

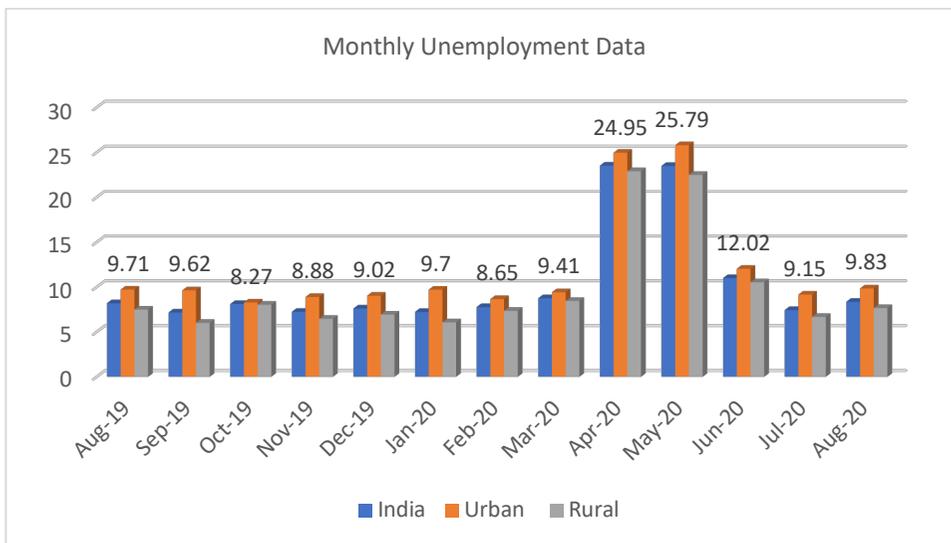
Due to Coronavirus driven lockdown, most of the workers have come back and their jobs are uncertain now. Similar situation is in domestic remittance also. Many workers are not returning their jobs. Remittances are playing important role as a source of income for poor states and entire country also. The ongoing economic recession may cause severely on the ability to send money at home.

iii) Increase in Unemployment

As per the government record, 93 percent workers are working in the informal sector. Millions of contract and daily wage workers lost their employment due to abrupt lockdown. In April and May, the unemployment rate has a sudden spike near about 200 percent from 8 to 25 percent. (See figure no. 3). Migrants don't have any option without returning to home town. Apart from this, the labour force participation rate is also decreasing in India. In 1995 it was 58.3 percent and decreased up to 49.3 in 2019.

Figure No. 3: Monthly Unemployment Rate in India

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Source: CMIE, (CMIE, 2020)

In order to increase employment in India, the government has increased allocation by Rs. 40000 cr. towards so-called employment guarantee programme MGNREGA. Now the total allocation has increased to Rs. 1.05 trillion Crore. MGNAREGA is playing vital role in providing employment specially during lockdown in rural India. On an average the MGNAREGA has provided 50 average days of employment per thousand in last five years. During April- May 2020-21, total 145 million application were received and 138 million job cards were issued. Out of them 79 million job cards were active. The scheme has provided an average 23.5 days of work in the first three months of this financial year and central government has released almost 40 percent of sanction amount to generate employment. (Sanjeeb Mukharjee, 2020)

iv) Lack of Identification

The biggest challenge of the informal sector is a lack of proper data. Still, we are lacking to maintain the proper data of the informal workers in the country. Government of India has started for many welfare schemes for the needy and poor people. But beneficiaries should be registered to claim the benefits of the scheme properly. Migrant workers come under the below poverty line and entitle to access under the various schemes along with PDS. Major problems with migrant worker are that lack of the portability of the benefits. Workers are registered for benefits at one place, but lose access of various benefits upon migration. Ration card issued by the state government is required to access benefits under the PDS scheme. This ration card is not portable across states. Due to the lack of portability of the benefits inter-state migrants are excluded from the benefits of the food items under PDS.

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Ministry of Health and Family Welfare directed state governments to start relief camps for migrant workers with arrangements for food, sanitation and medical services. Under Aatma Nirbhar Bharat Abhiyan the Finance Minister directed to provide free food grains to the migrant workers who do not register under PDS. The measure is expected to benefit eight crore migrant workers and their families. The Finance Minister also announced portability of ration card with One Nation One Ration card by March 2021.

v) Lack of facilities in Urban Areas

According to Bloomberg, India's urban population is expected to reach to 517 million by 2020 (Bender Marcel, 2020). The country is facing major challenges in mastering the rapid pace of urbanisation and modernisation. Merely 50 percent population of the migrants are living in urban areas. Due to the rapid urbanisation, urban areas are unable to provide facilities as per the requirement like, lack of basic amenities like affordable housing, educational facilities for the children, playgrounds, drinking water and sanitation etc.

Government has started to provide housing facilities for the economically weaker section and low-income group by assisting in the form of subsidised credit for home loan. Under the Pradhan Mantri Awas Yojana BPL family is entitle to get the interest subsidy under CLSS up to 12 lakhs.

vi) Poor Implementation of the Policy

The inter-state migrant workmen act 1979 provides certain protections for the inter-state migrants. Contractors recruiting migrant workers are required to follow some norms. Like, they should have licensed, migrant workers should be registered with government authorities, migrant workers should have identity etc. Contractors must have to follow the guidelines regarding wages, accommodation, medical facilities and other protections. But this law could not provide fruitful and concrete benefits to the migrant workers.

vii) Lack of Transportation Facility

The forced lockdown was implemented without prior notice and extended up to 70 days. The close of economic activities with travel bans have disproportionately affected internal migrant workers. Many people did not get time to reach a safe place where they can get food and other basic facilities. The lockdown in India has impacted nearly 40 million internal migrants. Around 50,000–60,000 moved from urban centres to rural areas of origin in the span of a few days. Without money, they started return journey towards their village without any means of transport. Thousands of workers with family travelled hundreds of kilometres by feet without any transportation facility. The government and NGOs set up camps to provide shelter and food in the cities. After many efforts, State and Central Government have arranged shramik trains and bus facility for the workers to reach the destination. For these workers have borne travelling expenses and completed a journey

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without food and water. Government operated buses and more than 5000 trains transported near about one crore migrants during lockdown period.

viii) Lack of Health Facilities

Most of the labour migrants have health vulnerabilities due to socioeconomic status. Being in crowded or slum areas workers have restriction to eligibility or access to health services. Due to migration status or cultural and linguistic barriers, migrants were unable to get health information. The lack of or inappropriate health insurance, often coupled to insufficient financial resources, negatively impacted migrants' ability to take preventive measures against COVID-19 and to receive medical care if contaminated. Irregular migrants face many difficulties to access health care facilities as not registered with the authorities. Crowded living environments may also affect the implementation of preventive measures of social distancing.

ix) Problems faced by Women and Children

The impact of COVID 19 is different on men and women. Women have faced more problems than men. Women as a daily wage worker and active participant in the agricultural workforce in the country have lost their jobs. They were unable to get essential supplies of menstrual hygiene products during a lockdown. Pregnant and old age women couldn't get a regular check-up and had many health issues. Some pregnant women gave birth to the children during their return journey without any medical facility. Children also faced the problem as they have to take a compulsory break from education for some time.

x) Finance related Problem

Money is the origin of all the problems. After lockdown, all the economic activities were stopped and workers lost their jobs and wages. It forced them for return migration. Due to the lack of social security, workers were unable to fulfil basic needs. Support through pre-existing initiatives such as PDS, DBT is not sufficient. Government is running many schemes for the workers but they are inflexible throughout the country. India's spending on public social protection excluding health is only 1.3 percent of the GDP. The social, cultural and psychological impact also forced the workers for return journey.

As a preventive measure, Bihar, Rajasthan and Madhya Pradesh announced one-time cash transfers for returning migrant workers. Uttar Pradesh government declared maintenance allowance of Rs 1,000 for returning migrants who are required to quarantine.

Conclusion

Government need to solve the problems of internal migrants including in health services and cash transfer, other social programs and protecting them from discrimination. Migration flows are likely to fall, but the stock of international migrants may not decrease immediately since migrants cannot return to their countries due to travel bans and

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disruption to transportation services. During this crisis role of Government is more important. Government would consider short, medium, and long-term interventions to support stranded migration. Employment generation with proper planning would be priorities for skilled and unskilled labourers at their places. Self-entrepreneurship, MSMEs and NREGA would be beneficial to all the workers especially those lost their job and returned home. Special efforts should be made regarding access to health, housing, education, and jobs for migrant workers including their families. This will help to create demand in the market which help to regularise economic activity. Government has increased contribution towards existing welfare schemes, but it is not sufficient. The pandemic has also highlighted a shortage of health professionals and there is an urgent need for long-term investments in medical training and infrastructure.

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Chapter 9

Effect of Corona Virus Pandemic Outbreak on Agricultural Production (Livestock Sub Sector) and Food Security in Yobe State Nigeria

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Abstract

The global pandemic started around September 2019. It was first identified in Wuhan a province of China in 2019; the virus later undergoes several mutation and spread across countries of the world. The first case in Nigeria was identified in March 2020. Livestock is an essential component of human nutrition; it provides protein and as you know our protein particularly in Sub-Saharan Africa is very low. Good state of nutrition produced good health and antibodies to deal with the virus; consequently lack of good nutrition is going to be detrimental to the health. The disease causes severe economic hardship and reduction in livestock production due to total or partial lockdowns of town and cities; it means that movement trade and every other thing are globally affected. In terms of livestock, the demand and the supply chains and all the activities within it; have been affected. The competition between animal and human's coupled with the planting season; this will greatly affect the feed value chain. The demand and supply chain will be definitely affected and there would be loss of animals. The researcher is interested in evaluating; effect of Corona Virus outbreak on livestock production and food security in Yobe State Nigeria. The data for this research will be obtained by the use of structured questionnaire: a total of 30 farmers will be given questionnaires to fill in the study area. It has been found that; effect of the outbreak is positive and, thus, it is concluded that majority of the livestock farmers have been negatively affected by the outbreak.

Keywords: Sub Saharan Africa, Livestock, health, supply and effect.

Introduction

Corona virus disease 2019 (COVID-19) is an illness caused by a novel corona virus now called severe acute respiratory syndrome corona virus 2 (SAR-COV-2; formerly called 2019 Nov.), which was first identified amid outbreak of respiratory illness cases in Wuhan city, Hubei province in China (CDC 2019). WHO on December 31, 2019. On July 30,

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2020, health emergency. (Ramzy and McNeil 2020), the WHO declared Covid 19 a global pandemic on March 11, 2020, its first such designation since declaring H₁N₁ influenza a pandemic in 2009 (The New York Times 2020). Illness caused by SARS-COV-2 was termed COVID 19 by the WHO, the acronym derived from 'Corona virus' disease 2019. The name was chosen to avoid stigmatizing the virus's origins in terms of populations (Update on Corona Virus 2020) (WHO Director General). On February 11, 2020, the Corona virus study group of the international committee on taxonomy of viruses issued a statement announcing an official designation for the novel virus: severe acute respiratory syndrome corona virus 2 (SARS-COV-2) (Gorbolenya 2020)

Corona virus comprise of vast family of viruses 7 of which are known to cause disease in humans. Some corona virus that typically infect animals have been known to evolve to infect humans SARS-COV-2 is likely one such virus, postulated to have originated in large animals and sea food market. Severe acute respiratory syndrome (SARS) and middle east respiratory syndrome (MERS) are also caused by corona viruses that "jumped" from animals to humans. More than 8,000 individuals develop SARS, nearly 800 of whom died of the illness (Mortality rate of approximately 10%) before it was controlled in 2003 (Abutelab, 2020). MERS, continue to resurface in sporadic cases. A total of 2,465 laboratory confirmed cases of MERS have been reported since 2012, resulting in 850 deaths (Mortality rate of 34.5%).

The pandemic and accompanying impact on livestock production is increasingly eminent as slow down are expected to wallop the sector, stay at home orders and the near short down of the food/feed services industry "have led to marketing problems throughout food supply chains with immediate and dramatic impacts across the country. It is estimated that only united states of America losses about \$13.6 billion in the livestock industry. The effect of corona virus pandemic on different agricultural value chains with major emphasis on how the livestock value chain can continue to breathe regardless of the pandemic, as a key provider of protein all Nigerians depends on. The problems facing value chains and a current research break through being effected to sustain the sector. Covid-19 pandemic has affected the whole world everything is totally locked down or partially locked down. It means that movement, trade and every other thing are globally affected. In terms of livestock, if you look at the demand and the supply chains and all the activities within it; all have been affected. Example food/feed supply and the displacement of labor, either there is lock down or not animals cannot do without eating, feeds have to be provided for them, even if you stock piled the feed before the lockdown your feed will finish and thus to sustain livestock production during this period feed must be supplied; where there is no sufficient supply of feed to the livestock production of; meat, milk and some processed feeds are greatly affected.

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To sustain efficient livestock productivity; people need to produce the feed, somebody needs to transport the feeds to essential places where they are required and people need to pick it up from there to feed the animals. Every day the livestock will produce meat, milk; layers will produce eggs every day and broilers in the circle of 4-6 weeks produce meat, and by this time the feed supply might have been cut off, the feed market would probably be greatly affected and the animals would not be in good diet at this period. As part of the effects of COVID 19 pandemic is the scarcity of meat and milk product in the urban markets due to.

The objectives of the study are to:

1. Study the effect of corona virus pandemic on beef/cattle production and marketing business.
2. To study the effect of corona virus pandemic on quantity and quality of milk yield during the outbreak.
3. To study the effect of corona virus pandemic on poultry feed supply.

Background of the Study Area

Yobe state is located in the north eastern Nigeria. A mainly agricultural state, it was created on 27th August, 1991. Yobe state was carved out of Borno state. The capital of Yobe state is Damaturu. The state borders four states: Bauchi, Borno, Gombe and Jigawa. It borders to the north the Diffa and Zinder region of Niger. Because the state lies in the dry savanna belt, conditions are hot and dry for most part of the year except in the southern part of the state which has more annual rainfall. The state agricultural produce includes; gum Arabic, groundnuts, beans and Sesame, animals such as Sheep, Goat, donkeys, Camels and Cattle including poultry of all species are also raised. The state has one of the largest cattle markets in west Africa, located in Potiskum. The major ethnic groups living in Yobe state are the Kanuri and Fulani, while other major ethnic communities include bolewa, Ngizim, Karai Karai, Bade, Hausa, Ngamo, Shuwa, Bura, Margi and Manga (Yobe State Online 2007).

Methods of Data Collection

The method used in this research for the data collection include sampling method through the use of questionnaire, the researcher used non probability sampling method in choosing the samples used in the study. Random sampling method was used. Sixty (60) farms were randomly selected from for the research. This was achieved by distributing a structured questionnaire forms to assess the performance of the respondents in Damaturu Local Government Area of Yobe State. The respondents were chosen randomly as sample in answering the questionnaire forms distributed. 60 questionnaires were distributed and 60 questionnaires were collected. Those 60 questionnaires represent 100% respondents.

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Result and Discussion

This study was undertaken to investigate and proffer solutions to effect of Corona virus pandemic on livestock production in Yobe state. Similar studies in this environment have not been reported extensively in the literature hence the problem of literature remain quite fundamental. None withstanding, the current study have revealed that majority of the farmers are of the middle age (20 – 50 years) group. The middle age group is the most versatile and enterprising in all works of life. It is thus not surprising that they constitute the majority of the farming group.

Total Percentage of Respondents and There Different Educational Level

It has been stated that various tribes engaged in livestock production in the study area which includes; Fulbe pastoralist, the Kanuri group which is made up of many sub-groups, (Badawi group are today more sedentary than some neighboring groups), just as these various groups/tribes exist with varying livestock keeping practice, culture, traditions, low level of education and ignorance. Their perception of research on livestock and adoption behavior is also expected to vary according to their level of education and awareness, (Seifert 1996).

The study also revealed that majority of livestock farmers possesses Qur'an education. This is true and peculiar to the study area because majority of the population in the area are Muslims, and Qur'anic education is a way of religious education, moreover, it has been reported that Islam came into Kanem Borno in the late 11th century and has since been well established. Thus majority of the people have embraced Qur'anic education as a way of live and livestock farmers are not left out in this case. A possible reason for the less number of livestock farmers with formal education could be that; people of this category take livestock production as a secondary means of livelihood.

Table 1

SEX	TOTAL	PERCENTAGE	EDUCATION
MALE	47	78.33%	
FEMALE	13	21.67%	
	15	25.01%	DIPLOMA/GRADUATES
	13	21.66%	SECONDARY
	32	53.33%	QUR'ANIC

Source: Field Survey, 2020.

Statement; Corona virus pandemic have a negative effect on the livestock production in Yobe state.

The effect of corona virus pandemic on livestock farmers' production in Yobe state, livestock research scientist during the field sample collection. A total of 60 questionnaires were field by the farmers in the study area, the analysis of the data shows that, majority of the farmers (83.34%) have a positive responses (from strongly agreed to agreed) regarding

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the statement, whereas only 16.67% of the farmers responded with undecided, meaning they have not yet suggested which statement is right among others. This shows that corona virus has impacted negatively on the beef cattle production and business through so many ways, which includes; inadequate and or lack of timely supply of feed (such as Cotton seed cake, Brewery brand Wheat offal, Soybean cake, Palm kernel cake among others) have greatly affected the production of beef cattle in the state, leading to the production of emaciated beef cattle which in turn affects the quality of the beef that is being produce and sometimes death of the animal may result due to partial or complete lockdown which resulted in the breakage of the supply chain of the feed materials from the point of production to the site where they are utilized. Mortality of the animals was recorded and as such corona virus has impacted negatively on the livestock production in the region.

The data from the questionnaire were subjected to statistical analysis to determine the range, total and percentage of the statements are calculated below:

This table relates effect of corona virus pandemic on beef cattle/marketing business during the period of lockdown.

Table 2

STATEMENT	STRONGLY	AGREED	UNDICIDED	DISAGREE	STRONGLY DISAGREE
TOTAL	19	31	10	-	-
PERCENT	31.67%	51.67%	16.67%	-	-

Source: Field Survey, 2020.

Statement: Livestock farmer has suffered a reduction in milk yield and quality during the periods of lockdown.

A total of 60 farmers responded to the questionnaire in the study area about the statement: Livestock farmer has suffered a reduction in milk yield and quality during the periods of lockdown. The analysis of the data shows that out of (60) farmers visited, 22 among which have strongly agreed and 34 farmers responded agreed too, whereas 2 farmers responded undecided and 2 among which have negatively responded disagree and none responded to strongly disagree. The study shows that livestock farmers suffer a decrease in milk yield and quality during the lock down period as a result of low supply of feed to the animals. Many factors can affect the composition of milk and therefore its quality. Along with environmental and genetic considerations, nutrition greatly plays an important role for the milk yield, composition and quality. Good quality milk depends on the following factors; firstly the quantity of the milk delivered. Second the fat and protein content and thirdly, the level of other quality parameters such as bacterial count, number of cells, medication residues and the freezing point of the milk. The higher the fact and the protein content of

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the delivered milk, the higher the price paid. Changes in the quantity and the quality of milk can inform the producer of any nutritional or health challenges faced by the herd. Therefore farmers had experience a drastic reduction in the milk yield and quality during the last couple of months as a result of corona virus pandemic which impacted negatively. Part of the negative effect of corona virus on livestock production include; displacement of workers from the farm, decline in the average daily protein intake (23g/head/day as stipulated by WHO) which in turn affects the health of the small income earners.

Table 3

STATEMENT	STRONGLY	AGREED	UNDICIDED	DISAGREE	STRONGLY DISAGREE
TOTAL	22	34	2	2	-
PERCENT	36.67%	56.67%	3.33%	3.33%	-

Source: Field Survey, 2020.

Statement: Corona virus pandemic has impacted negatively on poultry feed supply during the periods of lockdown.

In response to this question, 26 out of 60 farmers responded with strongly agreed, 28 responded to agreed making a total of 54 responses, 6 people responded undecided, no others responded strongly disagree and disagree, meaning that the statement is correct; due to the fact that Covid 19 pandemic has affected the whole country everything is totally locked down or partially locked down. This entails that transportation, trade and every other thing are globally affected. In terms of livestock, if you look at the demand and the supply chains and all the activities within it; all have been affected. Example food/feed supply and the displacement of labor, either there is lock down or not animals cannot do without eating, feeds have to be provided for them, even if you stock piled the feed before the lockdown your feed will finish and thus to sustain livestock production during this period feed must be supplied; where there is no sufficient supply of feed to the poultry for the production of; meat, eggs and some processed feeds are greatly affected. This means that Corona virus pandemic has greatly affects the production of poultry and poultry products. To sustain efficient poultry productivity; people need to produce the feed, somebody needs to transport the feeds to essentials places where they are required and people need to pick it up from there to feed the birds.

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Table IV

STATEMENT	STRONGLY	AGREED	UNDICIDED	DISAGREE	STRONGLY DISAGREE
TOTAL	26	28	6	-	-
PERCENT	43.33%	46.67%	10.00%	3.33%	-

Source: Field Survey, 2020.

Conclusion

From the result of study, it has been concluded that Corona virus pandemic has negatively affected livestock sub sector in Yobe State, leading to the reduced beef Cattle production and marketing business, declined quantity and quality of milk yield and low supply of poultry feed in the state, making the livestock products like; meat, milk and eggs to be scarce during the period of lockdown.

Recommendations

It is recommended that local farmers across the state should embark on local feed production to harness the challenges posed by restriction order. It is also recommended that local farmers producing perishable goods like; milk and meat should also embark on local processing and packaging to overcome such a challenge. Moreover farm settlements for the workers should be provided by the livestock farmers so as to ameliorate the challenges of restriction order that had badly affected the movement of laborers to such an extent that a times may bring about displacement of labor during the partial or complete lockdown.

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Chapter 10

The Impact of COVID-19 on Crop Production and Food Security in the North-Eastern Region of Nigeria

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Abstract

Disease outbreak has been the greatest threat to the sustainability of human existence. Humankind has witnessed many pandemics over time that killed thousands of people and ravaged the global economy and well-being. In the current context, the world and particularly Nigeria is facing yet another pandemic as Coronavirus disease of 2019 (COVID-19). Challenges, due to lack of a vaccine and lack of a cure, necessitates the non-pharmaceutical measures by the national government as possible preventive strategies to mitigate the spread of the virus. These measures include total lockdown, self-isolation, wearing of face mask in public, regular hand-washing with soap and water, use of alcohol-based hand sanitizers, maintaining social and physical distance and coughing or sneezing into the elbow and general enlightenment have significantly affected food security, and it's availability in the regions. In addition, movement and trade restrictions, imposed in majority of states to limit the transmission of the virus, have seriously disrupted economic activities, staple food prices and overall production has declined. The review intends to go through every possible impact of Covid-19 on food and Agriculture across the six states in the North-Eastern region of Nigeria, access the Covid19 protocols and provisions that interfere with the household incomes thus, affects the supply chain of the market with impaired production and distribution accompanied by lack of labour and supply of inputs.

Keywords: COVID-19, Agriculture, Non-pharmaceutical measures, Food Security

Introduction

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (WHO 2020). The outbreak was first identified in Wuhan, China, in December 2019 according to Huang c. et al., 2020. The World Health

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Organization declared the outbreak a Public Health Emergency of International Concern on 30 January 2020, and a pandemic on 11 March (WHO 2020).

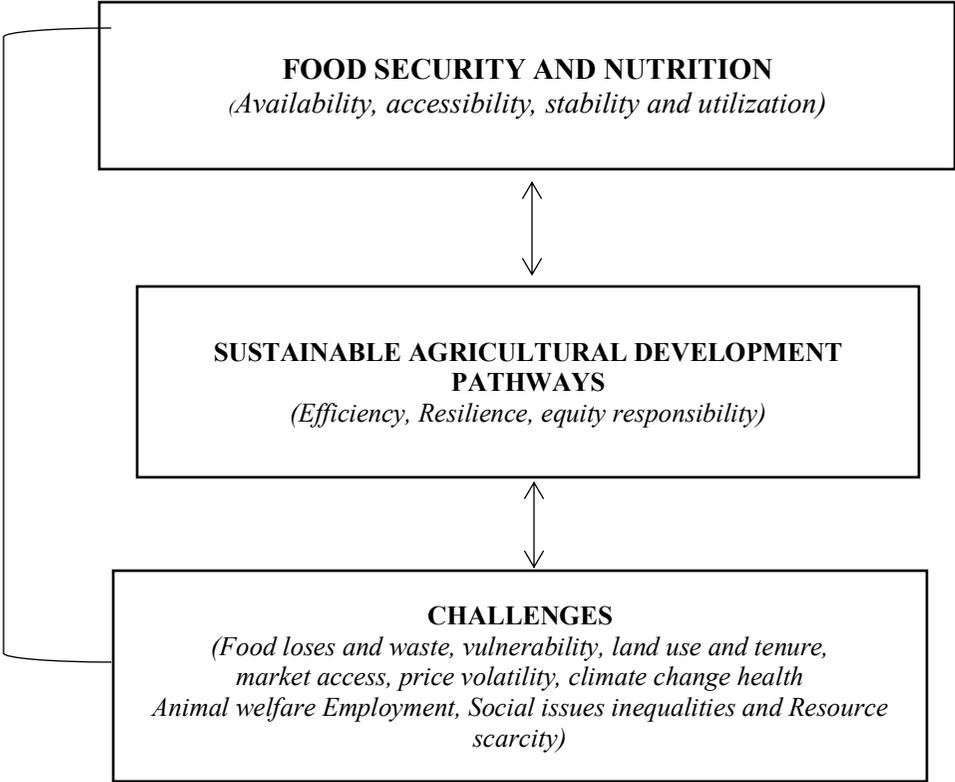
The virus is primarily spread between people during close contact, most often via small droplets produced by coughing, sneezing and talking (CDC 2020). The droplets usually fall to the ground or onto surfaces rather than travelling through air over long distances. However, research as of June 2020 has shown that speech-generated droplets may remain airborne for tens of minutes (Stadnytskyi V. et al., 2020). Less commonly, people may become infected by touching a contaminated surface and then touching their face (CDC 2020). It is most contagious during the first three days after the onset of symptoms, although spread is possible before symptoms appear, and from people who do not show symptoms. Common symptoms include fever, cough, fatigue, shortness of breath and loss of sense of smell (CDC 2020). Complications may include pneumonia and acute respiratory distress syndrome. The time from exposure to onset of symptoms is typically around five days but may range from two to fourteen days (Velavan TP et al., 2020).

Crop production and Agricultural development has a key role to play in relation to poverty reduction, in the context of economic development and growth as a whole. Also, given the economic and social importance of agriculture, which provides a livelihood to 38.3 percent of the world total labour force (FAO, 2015), and the importance of food as a basic human need, agricultural development is a key domain for the universally agreed human rights framework, including the progressive realization of the Right to Food. Considering the crucial importance of agricultural development to ensure FSN, to reduce poverty, and to ensure sustainable management of natural resources, SAD is central for the implementation of the 17 Sustainable Development Goals (SDG) agreed in 2015. However, Sustainable agricultural development is agricultural development that contributes to improving resource efficiency, strengthening resilience and securing social equity/responsibility of agriculture and food systems in order to ensure food security and nutrition for all, now and in the future.

The North East geopolitical zone comprises of states such as; Borno, Adamawa, Taraba, Bauchi, Yobe and Gombe in present day Nigeria. The North East Nigeria is an Agricultural region. However, there are also negative issues. In recent times, the States in the Northern region of Nigeria has experienced a lot of terrorist attacks by the Boko Haram. These attacks have led to the loss of thousands of lives and properties.

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Fig 1: Conceptual framework chart showing the Relationship between sustainable Agricultural Development and Food Security / Nutrition:



The Impact of COVID 19 on Food Security

As of early May, the international prices of some major food staples, such as maize, wheat, rice, millet, guinea corn and cowpea have declined. The only staple food that has seen rising prices is rice, and that was linked to the border closure and inter-state export restrictions. At the local level, in markets, especially in a state already affected by hunger and other crises, some food commodity prices are increasing mainly because of local logistical problems or import difficulties. Border closures, quarantines, and market, supply chain and trade disruptions are restricting people’s access to sufficient/diverse and nutritious sources of food, especially in countries hit hard by the virus or already affected by high levels of food insecurity. But there is no need for the world to panic

Recommendations to Mitigate the Risk of the Pandemic on Food Security and Nutrition

Pro-active measures are important and will cost less at a time when economic resources will be heavily needed. This is doubly the case given growing expectations of a global recession. Economic slowdowns or contractions were associated with rising hunger levels

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in 65 out of 77 countries in recent years, as FAO and partners warned in the 2019 The State of Food Security and Nutrition in the World report. To avoid disruptions to the food supply chain and food production, the following strategies should be adopted by government of States:

- Keep interstate trade open and take measures that protect livelihood and food supply chain (from obtaining inputs such as seeds to assuring smallholder farmers have access to markets to sell their produce).
- Focus on the needs of the most vulnerable, and scale up social protection programmes including cash transfers.
- Keep their domestic food supply value chains alive and functioning.
- Taking all necessary precautions, seeds and planting materials must continue to flow to smallholders; animal feed to livestock breeders; and aquaculture inputs to fish farmers.
- Keep agricultural supply chains alive by any means while the safety and wellbeing of everyone working along the food chain is protected.
- Maintain functional agricultural activities.
- Countries should meet the immediate food needs of their vulnerable populations: ensure emergency food needs are met; adjust and expand social protection programmes; scale up nutritional support; support management and prevention of undernourishment; adjust school meal programs so as to continue delivering school meals even when schools are shut
- Countries should boost their social protection programmes: This could entail: increasing transfer amounts to people already benefiting from social assistance through a one-off payment (prior to full blown impact of the crisis as an early action to mitigate impact) or ensure multiple payments to help families meet their basic needs; providing complementary entitlements to offset loss of income by small-scale producers
- Countries should gain efficiencies and try to reduce trade-related costs : These include: not impose measures that would restrict trade and mobility of commodities; reduce food waste and losses; resolve logistics bottlenecks; immediately review trade and policy options and their likely impacts; avoid generalized subsidies for food consumers; reduce restrictions on use of stocks; reduce import tariffs when governments think is appropriate to minimize, for example, when there is an increase in costs because of devaluation of their currencies and other restrictions; temporarily reduce VAT and other taxes; if needed, review taxation policy to imported goods to compensate from potential cost increases (because of exchange devaluation) and assess exchange devaluation's potential impacts.
- Policy makers must monitor trends and take care to avoid accidentally tightening food-supply conditions, something that China has managed so far with creative

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and adaptive methods. Digital technologies have a role to play in anticipating problems and smoothing temporary shortages as well as building the resilience of food chains to avoid similar occurrences in the future. New technologies could facilitate the interface between supply and demand, which would be of great value to highly perishable goods (like fruit, vegetables, fish and aquatic products).

- Building resilience is a duty for all if we are to reap the benefits of global interdependence.

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Chapter 11

Assessment of the Impact of Entrepreneurship Scheme on Income Generation Among Youths in Yobe State

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Abstract

Entrepreneurship scheme has been a powerful engine of economic growth and wealth creation, and is crucial for improving the quality, number and variety of employment opportunities for the poor and also an avenue of poverty reduction world-wide. Poverty is one of the major social problems which is affecting Nigeria. This paper will assess the impact of entrepreneurship scheme on poverty reduction among youths in Yobe State. The specific objectives of the study were to assess the impact of entrepreneurship on their level of income before and after the training, income bracket, ability to meet up with their basic needs of the youths in Yobe State and to test the hypothesis formulated. The paper will utilize primary and secondary sources of data. The primary data was obtained through the use of questionnaire and interview while the secondary data were gathered from the report obtained from Ministry of Youth and Social Development Yobe State, report from Business and Engineering skill training centres (BEST centres) and also report from the National Bureau of Statistics (NBS). A total of 307 respondents were administered with questionnaires and returned without any shortfall. Data was collected and analyzed into tables and percentages. The analyses were done through Statistical Package for Social Sciences (SPSS) version 21. T-test one sample was used to test the hypotheses formulated. The findings revealed among others that, entrepreneurship scheme has improved the income level of the beneficiaries and provided opportunities to meet up with their basic needs of life. The paper therefore concluded that entrepreneurship scheme has positive impact on poverty reduction among youths in Yobe State and recommended that, among others the Yobe State government should encourage the all 17 local governments in the

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state to establish such policies and programme so as to make their people to be self-reliant and should partner with non-governmental organizations to increase the number of beneficiaries and provide a start-up loan or interest free loan to the beneficiaries to assist them and establish their own business ventures after the training.

Keywords: Entrepreneurship, Poverty, Poverty Reduction, Income Bracket, Basic Needs.

Introduction

The progress and future development of any nation depends to a large extent on the youths and they occupy a prominent place in any society. The place and importance of the Youths in societies cannot be compromised. This was adequately captured in Nigeria youth policy which stated that: Youths are one of the greatest assets that any nation can have. Not only are they legitimately regarded as the future leaders, they are potentially and actually the greatest investment for a country's development. They serve as a good measure of the extent to which a country can reproduce as well as sustain itself. The extent of their vitality, responsible conduct, and roles in society is positively correlated with the development of their country.

Global development is entering a phase where entrepreneurship will increasingly play a more important role in the life of youths. The emerging countries, most notably Brazil, Russia, India and China impressive growth have been driven by a veritable entrepreneurial revolution. The need in these countries to sustain growth through sustainable access to resources, knowledge, markets, and low-carbon industrialization puts a premium on innovative entrepreneurship. The potential important role of youths in Africa's development cannot be quantified. Youths could be a source of labour inputs as well as human capital in production, which would improve total factor productivity in a region of the world where capital formation is limited. When employed, youths could be a reliable source of demand for the economy through their consumption activities. In addition, the youths of Africa could be critical for the development of a new class of entrepreneurs that African countries need to prosper.

Entrepreneurial activities have been found capable of making impacts on the economy of a nation and the quality of life of the people. Entrepreneurship is the engine of socioeconomic development both in the advanced economies and also in the developing economies. Entrepreneurship has a positive relationship with stimulation of economic growth; employment generation; and empowerment of the disadvantaged segment of the population, which include the poor men and women. In Nigeria, entrepreneurship has been a powerful engine of economic growth and wealth creation, and is crucial for improving the quality, number and variety of employment opportunities for the poor. Global

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Entrepreneurship Monitor (2008) showed that economic growth of a country is directly correlated to its level of entrepreneurial activity.

Poverty is one of the critical problems Nigeria is facing. The years of corruption, civil war, military rule and mismanagement have hindered economic growth of the country. Nigeria is endowed with diverse and infinite resources, both human and material. However, years of negligence and bad governance have led to the under-utilization of these resources. Nigeria, a country with an estimated population of 170 million people, (NBS, 2013) is well endowed with abundant human and natural resources. The current global financial crisis has impacted negatively on the economy of Nigeria. As at 2013, the situation has posed serious threats and challenges to both government and well-meaning citizens (Nwachuku, 2012).

In Nigeria and other African countries, poverty is described as a Socio-economic problem that affects growth and development in the region. As history would have it, Nigeria as a nation has experienced several forms of economic, political and social unrest. The menace of poverty in Nigeria has become a major issue of concern to the policy makers, individuals, government and many others (Bello, 2003). The higher the rate of unemployment in a country like Nigeria, the higher the level of poverty and associated welfare challenges. The government has designed and embarked on several measures to reduce the degree of poverty and improve the social well-being of the people. The federal government has initiated several measures and policies to reduce the level of poverty among the masses. Entrepreneurship is one of the measures embraced by the government to reduce mass poverty in the country.

Statement of the Problem

Youth development and empowerment are vital ingredients in the human capital that allows young people to avoid poverty and leave a better and possibly have a more fulfilling life. Africa is a continent with a massive population of young people, more than half of Africa's population is aged below 21 years and two-thirds below 30 years. According to the International Labour Organization (ILO, 2017) the increase in the number of youths in secondary and tertiary education is a positive development; however, labour markets in many countries are presently unable to accommodate the expanding pool of the skilled young graduates which increases the level of poverty among the youths. It is estimated that about 400 million new jobs would be needed to engage youths which will reduce the level of poverty. Youths in Nigeria suffer high level of poverty due to lack of opportunities, physical and psychological challenges resulting from joblessness. Some youths respond to these challenges by engaging in criminal or violent behaviour while others suffer from despair or depression. Poverty has created a wide range of social ills and young people are particularly susceptible to its damaging effects namely; lack of skills, low self-esteem,

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marginalization, impoverishment and wasting of enormous human resources. The proportion of Nigerians living below the poverty line of one dollar a day has increased dramatically during the last two decades United Nation Development Programme (UNDP, 2013). In the year 2000, more than 70% of Nigerians were estimated to be living below the internationally defined poverty level. However, successive governments in Nigeria have introduced various poverty reduction programmes. These programmes include the Family Economic Advancement Programme (FEAP), Structural Adjustment Programme (SAP), Green Revolution Programme (GRP), Directorate for Food, Road and Rural Infrastructure (DFRRI) and most recently, the National Poverty Eradication Programme (NAPEP), Subsidy Reinvestment Programme (SURE-P) and the current Nigerian Power (N-Power) that recorded marginal impact on poverty, despite large budgetary allocations.

In an effort to reduce poverty in Yobe State, the State Government in 2010 through the Ministry of Youth and Social Development created the Graduates' Empowerment Scheme where graduates of higher institutions from the 17 Local governments were placed on a N15,000 monthly allowance to reduce poverty among graduates. But still no laudable successes were recorded with regard to making the individuals to be self-reliant. In 2013 the State Government established the Entrepreneurship Scheme in Damaturu, Potiskum, Bade and other Local Governments of the State to train graduates who were ideal on Skills Acquisition in BEST Centers (Business and Engineering Skills Training) within the Local Governments with different Programmes in the Centers like computer training, welding, carpentry, tailoring etc., while some of the beneficiaries were taken to Sani Abacha Skill Acquisition Centre in Kano for Skills that cannot be rendered within the State BEST Centers. The target of the training was to make individuals to be self-sufficient and self-reliant instead of depending on the monthly allowance usually given to people. This will in the long run make them employers of labour instead of being employed and this will reduce the poverty level in the state. The aim was to allow the youths to have access to education, shelter, medical services, increase in level of income and the basic needs of life. Entrepreneurship skills like carpentry, tailoring, wood work, catering, computer training, cow fattening, fish farming was among some of the training given to the beneficiaries of the scheme. This paper therefore seeks to examine the impact of entrepreneurship scheme on income generation among youths in Yobe State.

Objective of the Study

The main objective of this study is to examine the impact of entrepreneurship scheme on income generation among youths in Yobe state while the specific objectives are to;

- i. Examine the impact of entrepreneurship scheme on income bracket of the youths before and after the training in Yobe State;
- ii. Access the impact of entrepreneurship scheme of the youths to provide their basic needs of life; and

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- iii. Test if entrepreneurship scheme has positive impact on the income level of the youths in Yobe State.

Methodology

This paper is a survey research and data were obtained using questionnaire. The research study made use of researcher- designed questionnaire to get information from the research population. The study was conducted in Yobe State with in which three (3) local government areas namely; Bade, Damaturu and Potiskum were used as a case study. A total of 307 respondents were issued with questionnaire to fill and return to the researcher. The questionnaire was filled and return without short fall from the three business and engineering skill training (BEST) centres which are Damaturu, Potiskum and Bade local government areas. The questionnaire contained structured statements used to seek respondent's views concerning the impact of entrepreneurship scheme on income generation among youths in Yobe State. Academic journals, articles, text books and other relevant materials were used as secondary source of data.

Theoretical Framework

This paper adopted Self-Empowerment theory as its premise. This theory was popularized by Honnadie (1979) who argues that the best way to induce development is to empower the people to be able to handle development by themselves. The basic assumption of the theory lies in the fact that, empowering individuals to be able to do things on their own is the necessary ingredient of making them to be self-sufficient and self-reliant. Empowerment is the process of obtaining basic opportunities for marginalized people, either directly by those people, or through the help of non-marginalized others who share their own access to these opportunities. Empowerment is aimed at increasing the power of the disadvantaged, marginalized women, men and children; empowerment should therefore focus on human capital development (Ife, 1995). Osuala (2004), opted for empowering individuals for self-employment through capacity building and entrepreneurship education.

Conceptual Framework

Concept of Entrepreneurship

Entrepreneurship has been defined by various authors to mean many things based on their perceptions. For instance, Akanwa and Akpanabia (2012) view entrepreneurship as the willingness and ability of an individual to seek out investment opportunities, establish and run an enterprise successfully. The National Directorate of Employment (NDE, 1989) in Onyebueke and Ochnongo (2002) sees entrepreneurship to be an art which involves recognizing a business opportunity, mobilizing resources and persisting to exploit that opportunity. Stevenson (2002) defines entrepreneurship as the pursuit of opportunity through innovative leverage of resources that for the most part is not controlled internally.

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Akanwa and Akpanabia (2012) observe that entrepreneurship development is the ability to envision and chart a course for a new business venture by combining information from the functional disciplines and from the external environment in the context of the extraordinary uncertainty and ambiguity which faces a new business venture. Entrepreneurial development has been found to be capable of making positive impacts on the economy of a nation and the quality of life of the people (Adejumo, 2000). However, it has to be noted that only business that have been able to adopt and actually practice the principles of creativity and innovation are positively impacting the economy and add value to the life of the people. Anayakoha (2006) sees the entrepreneur as one who chooses or assumes risks, identifies business opportunity, gathers resources, initiates action and establishes an organization or enterprise to meet such demand or market opportunity.

Tijani-Alawiye (2004) defines entrepreneurship as the process of increasing the supply of entrepreneurs or adding to the stock of existing small, medium and big enterprises available to a country by creating and promoting many capable entrepreneurs, who can successfully run innovative enterprises, nurture them to growth and sustain them, with a view to achieving broad socio-economic developmental goals. One of these goals is sustaining employment. Furthermore, Acs and Story (2004) noted that entrepreneurship revolves around the realization of existence of opportunities in combination with decision to commercialize them by starting a new firm. According to Gana (2001) entrepreneurship is the ability to seek investment opportunities and persisting to exploit that opportunity. Allawadi (2010) describes the carrying out of new combinations as “enterprise” and the individual whose function it is to carry them out as entrepreneur. He further tied entrepreneurship to the creation of five basics new combinations of introduction of a new product, a new method of production, opening a new market, conquest of new source of supply and creating a new organization.

Concept of Poverty

Poverty in the face of abundance is now the world’s greatest challenge and major developmental objective is the achievement of equality in the distribution of income and reduction of poverty. About 2.8 billion persons of the world’s population live on less than \$2 a day, and 1.4 billion on less than \$1 a day (World Bank, 2009). Poverty is a major limitation of economic development and the dearth of economic opportunity is seen to increase the poverty level of an individual or household. Defining poverty from social perspective, the United Nations Development Programme (UNDP, 2003) cited in Kor, Akaakohol and Mile (2013) stated that poverty is a multidimensional social phenomenon that can be analytically divided into two main dimensions; income poverty, which is the lack of income necessary to satisfy basic needs and human poverty which is the lack of human capabilities like life expectancy, material, health, education, nutrition, clean water and perceptions of well-being. Poverty goes beyond lack. It includes defenselessness,

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insecurity, vulnerability and exposure to risks, hazards and stress. According to Muo (2007) poverty is vulnerability to social injustice, powerlessness and voice lessness, war, conflicts, natural disasters, political instability, macroeconomic crises and deprivation, intellectual, ethical and moral poverty. Poverty as a longstanding problem in Nigeria has manifested itself in the low social status and poor living conditions of the peoples.

Poverty is a state where an individual is not able to cater adequately for his or her basic needs of food, clothing and shelter; is unable to meet social and economic obligations, lacks gainful employment, skills, assets and self-esteem; and has limited access to social and economic infrastructure such as education, health, portable water, and sanitation; and consequently, has limited chance of advancing his or her welfare to the limit of his or her capabilities. Poverty according to Nweze and Ojowu (2002) can be subdivided into three namely: absolute poverty, relative poverty and subjective poverty. Absolute poverty is a situation where an individual is constrained with limited financial resources and he is unable to meet his/her basic needs of life, such as food, clothes, shelter and health. In reference to the World Bank (1996) individuals, families or groups are considered to be absolute poverty oriented when they lack the resources particularly real income to obtain the types of goods needed to enjoy some fixed minimum standard of living by a given society. Relative Poverty according to Nweze and Ojowu (2002) is a situation where an individual's income is less than the average income of the population in the society being considered. The consequence is that the individual possesses goods and services lower than those other persons in the society. The third aspect of poverty considered is the subjective poverty which according to Lambos and Holborn (2004); World Bank (1996) is based on the individual perception about their standard of living. This feeling of being poor is a subject of the absolute minimum standing of living. Onibokun and Kumuyi (1996), see poverty as a way of life characterized by low intake, inaccessibility to adequate health facilities, low quality education, inaccessibility to various housing and societal facilities. Poverty is the major cause of high child and infant mortality rates in Nigeria. Unemployment and lack of access to regular means of livelihood in many households exacerbate the conditions of the poor people in the rural areas. Ignorance and low level of education contribute also to worsen the situation.

Preece (2007), described poverty as a human condition characterized by sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for enjoyment of an adequate standard of living and other civil, cultural, economic, political and social rights. Gore (2002), explains the concept of all-pervasive poverty. According to him, poverty is all-pervasive, where the majority of the population lives at or below income levels sufficient to meet their basic needs, and the available resources, even when equally distributed, are barely sufficient to meet the basic needs of the population. He reiterates

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further that pervasive poverty leads to environmental degradation. This is because people eat into the environmental capital stock to survive.

Concept of Income

Income is money that an individual or business receives in exchange for providing a good or service or through investing capital and income used to fund day-to-day expenditures. Income is the consumption and savings opportunity gained by an entity within a specified timeframe, which is generally expressed in monetary terms. However, for households and individuals, income is the sum of all the wages, salaries, profits, interests' payments, rents, and other forms of earnings received in a given period of time. Income is also referring to the accumulation of both the monetary and the non-monetary consumption-ability of any given entity, such as a person or a household.

Results and Discussion of Findings

Impact of entrepreneurship scheme on income bracket of the youths before and after the training.

The respondents were asked to respond to this question with the intention of knowing their income bracket before and after the entrepreneurship training. It also sorts to find out the there are changes in their income level or not.

Table 1.1: Distribution of the Respondents on Income level before and after the training monthly?

Before			After		
Income level	Frequency	Percentage (%)	Income level	Frequency	Percentage (%)
₦500 – ₦1000	159	51.8%	₦500 – ₦1000	30	9.7%
₦1000 – ₦2000	60	19.6%	₦1000 – ₦2000	45	14.7%
₦2500 – ₦3000	53	17.2%	₦2500 – ₦3000	54	17.6%
₦3500 – ₦4000	14	4.6%	₦3500 – ₦4000	89	29%
₦4000 and above	21	6.8%	₦4000 and above	89	29%
Total	307	100%	Total	307	100%

Source: Field Survey, 2019.

Table 1.1 shows that one hundred and fifty-nine (159), 51.8% of the respondents make a monthly income of ₦500 – ₦1000 before the training, sixty (60), 19.6% of the respondents make a monthly income of ₦1000 – ₦2000 before the training, fifty three (53), 17.2% of the respondents make a monthly income of ₦2500 – ₦3000 before the training, fourteen (14), 4.6% of the respondents make a monthly income of ₦3500 – ₦4000 before the

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training while twenty one (21), 6.8% of the respondents makes a monthly income of ₦4000 and above. This shows that majority of the beneficiary 51.8% make a minimal income of ₦500 – ₦1000 before the training.

Table 1.1 shows that thirty (30), 9.7% of the respondents make a monthly income of ₦500 – ₦1000 after the training, forty (40), 14.7% of the respondents make a monthly income of ₦1000 – ₦2000 after the training, fifty-four (54), 17.6% of the respondents make a monthly income of ₦2500 – ₦3000 after the training, eighty-nine (89), 29% of the respondents make a monthly income of ₦3500 – ₦4000 after the training while eighty-nine (89), 29% of the respondents makes a monthly income of ₦4000 and above. This shows that majority of the beneficiary 58% make a monthly income of ₦3500 – ₦4000 and ₦4000 and above after the training. This shows that there is an increased in their level of income after the training.

Impact of Entrepreneurship Scheme on the Provision of Basic Needs

The respondent’s opinion was sort to find out whether the entrepreneurship training has offer them the opportunity to provide their basic needs of life.

Table 1. 2 After the training, entrepreneurship scheme has greatly improved your ability to meet your basic needs?

Strongly agreed		Agreed		Undecided		Disagreed		Strongly disagreed		Total	
Freq.	%	Freq.	%	Freq	%	Freq.	%	Freq.	%	Freq.	%
192	62.5%	81	26.4%	17	5.5%	10	3.3%	7	2.3%	307	100

Source: Field Work, 2019.

Table 1.2 when the question relating to the entrepreneurship has provided the beneficiaries the ability to provide their basic needs, the result shows that one hundred and ninety-two (192), 62.5% of the respondents strongly agreed that the entrepreneurship scheme have improved their ability to meet up basic needs, eighty-one (81), 26.4% agreed that the entrepreneurship scheme have improved their ability to meet up basic needs, seventeen (17), 5.5% of the respondents remain undecided on improvement in their standard of living, ten (10), 3.3% of the respondents disagree that the entrepreneurship scheme have not increase their ability to meet up with their basic needs while seven (7), 2.3% the respondents strongly disagree that the entrepreneurship scheme have not improve their basic needs. The result shows that majority of the respondents 62.5% strongly agreed that the entrepreneurship scheme has increased their ability to meet up their basic needs.

Hypothesis: there is no significant relationship between entrepreneurship scheme and income level of the youths in Yobe State

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Table 1.3: T-test one sample, impact of Entrepreneurship Scheme on Income level of the Youths

Variable	N	Mean	Std. Deviation	Std. Error Mean
The establishment of the entrepreneurship scheme has greatly increased your level of income.	307	3.459	.9672	.0552

One-Sample Test

Variable	Test Value = 2					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
The establishment of the entrepreneurship scheme has greatly increased your level of income.	26.436	306	.000	1.4593	1.351	1.568

Source: Field Survey, 2019

Table 4.2.1 shows that the calculated T-test value is 0.001 less than 0.05. Therefore, the null hypothesis is rejected, and the study concludes that, the entrepreneurship scheme has significant impact on income distribution of the youths in Yobe State. By implication, the entrepreneurship training has provided opportunity to the beneficiaries to earn an income which they will use in providing their basic needs of life. During an interview conducted with the principle officers of the entrepreneurship scheme it was reveal that a quite number of those trained already have established their own business ventures and have even employed other people to work for them. To correlate this finding, Olayemi (1995) pronounced that lack of access to basic needs and necessities of life such as goods, clothing and decent shelter, inability to meet social and economic obligation in Nigeria, lack of skills and gainful employment are characterized by income inequality.

Conclusion

Going by the above, the conclusion of this paper was based on the major findings obtained in line with the specific objectives outlined to achieved in this paper. Therefore, this paper concludes that entrepreneurship scheme has significant impact on the income level of the beneficiaries; it has also provided avenue for the beneficiaries to meet up with their basic needs of life. The hypothesis further buttress entrepreneurship scheme has impacted positively on the income level of the beneficiaries in Yobe State.

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Recommendations

Based on the conclusion of this paper the following recommendations were proffered. Government should encourage the 17 local governments in the state to establish such a similar policy and programme so as to offer such opportunities for people at the grassroots level to be trained and empowered. Similarly, government should partner with Non-Governmental Organization so as to increase the number of beneficiaries and also provide an interest free loan or a start-up capital to the beneficiaries so as to enable the established their own business ventures.

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Chapter 12

COVID-19 Pandemic, Unemployment and Poverty in Developing Economies: Nigeria as a Case Study

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Abstract

Many economies of the world are facing serious challenges of the novel version of corona virus. Nigeria and her people inclusive, on the Nigeria, this new pandemic encounters numerous other crises such as widespread of unemployment, poverty and hunger. Lockdown of large swaths of movement of people and transportation in many countries, Nigeria is no exception. These outcomes have had serious adverse effects on the rise of unemployment and poverty, particularly for daily wages earners. The Central Bank of Nigeria in her financial stability mandate is committed to provide financial support for household and firms in order to cushion the adverse economic impact of this pandemic but this support does not affect the target population that were seriously affected by the pandemic. This effort should have prevented the rise of unemployment and poverty from occurring but it did not. Because of the lockdown and fear of contracting the virus by economic agents, refuse to engage in economic activities at the time of this study, which has a negative multiplier effects on unemployment and poverty of the poor economy. This paper analyses the impact of COVID-19 on unemployment and poverty and suggests possible recommendations for reforms in Nigeria.

Keywords: COVID-19, Pandemic, NCDC, Lockdown, Economic Crisis, Unemployment, Poverty and Nigeria.

Introduction

COVID-19 Pandemic is a major economic shocker since the great depression of 1930s which led to rise in unemployment and poverty in developing economies, Nigeria inclusive. However, the public health threat from COVID-19 is the most serious respiratory infections since the 1918 Spanish flu pandemic (Ferguson et al., 2020). COVID-19 is the fifth

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pandemic in the last 20 years and the ninth pandemic in the last century (World Economic Forum, 2020). Although epidemics have been present throughout human history, the frequency of pandemic is rising (Fischer, 2020).

To contain the pandemic, emerging economies had imposed lockdown and social distancing measures, which impacts negatively on economic activities. For instance, countries like Nigeria, Indonesia, Mexico and South Africa etc. have implemented total or partial lockdowns. Yet, the global epicentre is gradually moving to the emerging economies.

The economic impact of COVID-19 starts as a negative supply shock (Hausmann, 2020). Two things occur. First, workers get infected, reducing production capacity. According to Atkeson (2020) states that when 10 percent of the population is infected, key financial and economic infrastructure would face severed staffing shortages. Second, restrictions of activity that is needed in order to curtail the increment of the virus, eventually, these would cause to a demand shock.

In countries with incomplete markets and liquidity constrained consumers, the initial supply shocks could lead to amplified demand shocks (Guerrieri et al., 2020). Modeling by Eichenbaum et al., (2020) shows that disease control policies would save lives but exacerbate the size of economic crisis. Long-term effects could include unemployment, poverty, income inequality and destruction of supply-side chains.

An economic crisis would push millions of people into poverty. A rapid simulation covering 138 developing and 26 high-income economies finds that even in the mildest scenario, COVID-19 could impoverish an additional 85 million people (Sumner et al., 2020). The reason behind this increment is as a result of lost jobs which impact negatively on poor economy, Nigeria cannot be excluded. Essentially, despite the distribution of the palliatives, the crisis is causing large increase in unemployment, income inequality and poverty in Nigeria.

At the time of writing this paper, Most of the existing literatures examined the impact of COVID-19 on the economy as a whole, except that of Al Izzati and Suryadarna (2020) who's examined COVID-19 Outbreak on poverty: estimation for Indonesia. Nevertheless, few or no study that concentrate on the impact of COVID-19 crisis on unemployment and poverty particularly in Nigeria

This research, therefore, intends to examine the impact of COVID-19 on unemployment and poverty in Nigeria. The rest of the paper is dividing into five sections as follows: Section two discusses the literature on unemployment and poverty. Section three present

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an overview of the pandemic from global to Nigerian context. Section four discusses the impact of the pandemic on unemployment and poverty. Section five present the conclusion and policy recommendations.

Literature Review

Conceptual Literature

The Concept of Unemployment

Aminu et al., (2012) conceptualized the term unemployment as the total number of people who are willing and able to work, and make themselves available for jobs at the prevailing wage but no work for them. This therefore, implies that unemployment is a state of joblessness in the country (Seth et al., 2018). According to Balami (2006) unemployment is conceptualized as a situation whereby a worker is or workers are involuntarily out of work. This means that workers are willing and able to work but cannot find any job. However, unemployment has been defined by the classical economists as the excess supply of labour over the demand for labour which is cause by adjustment in real wage. The Classical or real wage unemployment occurs when real wages for job are set above the market-clearing level, causing number of job-seekers to exceed the number of vacancies. In the same vein, unemployment was defined by International Labour Organization (2009) as a state of joblessness which occurs when people are without jobs and they have actively sought work within the past four weeks.

Jhingan (2001) posited that unemployment can be conceived as the number of people who are unemployed in an economy, often given as a percentage of the labour force.

More so, Aiyedogbon et al., (2012) referred to unemployment as situations were people who are willing and capable to work are unable to find suitable paid employment. The International Labor Organization (ILO) as cited in Okafor (2011) defined the unemployed as numbers of economically active population who are without work but available for and seeking work, including people who have lost their jobs and those who have voluntarily left work.

Okafor (2011) then described unemployment as a condition of people with diverse background who are willing and able to work but are unable to find a job. And the situation usually results when the supply of labor outstrips the demand for labour at a particular time in a society.

From these definitions it can be deduced that unemployment is the situation in which people who are at the age of labour force, that qualified to work, searching for job to offer their service or labour at a current wages rate but cannot find any job in the economy.

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However, unemployment is an evil problem, but is grossly predominant in developing countries of the world, with its attendant macroeconomic consequences. Hence every responsible government is expected to monitor the rate in the economy. The higher the unemployment rate in an economy the higher would be the poverty level and associated welfare challenges. (Akwara, Akwara, Enwuchola, Adekunle, & Udaw, 2013; Okafor 2011).

In Nigeria, Okafor (2011) noted that the largest army of the unemployed is the secondary school leavers, 40% of the unemployment rate are among urban youth, and educated unemployed are the majority of the unemployed. This view was also supported by Obumneke (2012) who noted that statistics of Nigerian unemployment consists of the highly educated persons judging by the European and American standard, who are supposed to form the core of the productive vanguard in a developing country like Nigeria. He then enumerated factors responsible for unemployment to include poor economic growth rate, adoption of untimely economic policy measures, wrong impression about technical and vocational studies, the neglect of the agricultural sector, and poor enabling environment.

Poverty

Adebayo (2013) defined poverty as an enemy of man and a multi-dimensional phenomenon that affects many aspects of human conditions ranging from the physical, moral to the psychological, and humiliates and dehumanizes its victim. It is a state of being deficient in money or means of basic subsistence such as safe water, sanitation, solid waste collection, healthcare, schools and security. The World Bank (2003) described poverty as denial of choices and opportunities, a violation of human dignity, lack of basic capacity to participate effectively in society, not having enough to feed and clothe a family, not having a school or clinic to go to; not having the land on which to grow one's food or a job to earn one's living and not having access to credit, insecurity, powerlessness and exclusion of individuals, households and susceptibility to violence, and living on marginal or fragile environments, without access to clean water or sanitation. However, poverty can be described as lack of access to basic need.

The National Policy on Poverty Eradication in Nigeria (2000) lists the attributes of poverty as follows: not having enough food to eat, poor nutrition, unfit housing, high rate of infant mortality, low life expectancy, inadequate health care, lack of productive assets, lack of economic infrastructure.

Aidelunuoghene (2014) opined that poverty has been a major challenge to more than 50% of the Nigerian population in the last 10 years, while Omonona (2009) noted that on the average, the incidence of poverty in Nigeria has been on the increase since

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1980, that a major sharp increase was witnessed between 1980 and 1985 (from 28.1 percent to 46.3 percent) and between 1992 and 1996 (from 42.7 percent to 65.6 percent) though there were slight decline between 1985 and 1992 (from 46.3 percent to 42.7 percent) and between 1996 and 2004 (from 65.6 percent to 54.4 percent). And despite the reduction in poverty incidence between the two periods, the absolute number of the poor in Nigeria has been on the rise. Essentially, poverty is a rural phenomenon, as the majority of those in poverty are disproportionately located in the rural areas, where they are primarily engaged in agricultural production and allied activities. He therefore, concludes that rural poverty incidence, therefore, was higher than urban poverty between 1980 and 2004. Olowa (2012) noted a relationship between the poverty line below which an individual is poor and the average incomes of the population of a society. And that there exist an inverse relationship between poverty level and average income of the population of a society, where poverty rate decreases/ (increase) as the average income level of the Population increases/(decreases).

Corbett (2007) categorized poverty into the extreme poverty and the relative poverty (as cited in Oriahi & Aitufe, 2010) he described the extreme poverty as that which threatens people's health or lives, and is also known as destitution or absolute poverty, and it is described as a condition of having an annual income that is less than half of the officially stipulated poverty line and the relative poverty is the condition of having fewer resources or less income than others within a society or country, or compared to worldwide averages.

Aidelunuoghene (2014); Oriahi & Aitufe (2010) noted that the main causes of poverty includes income inequality, political instability, long-term ethnic conflict and civil unrest, lack of good governance, poor management of economic resources, low productive capacity, unemployment and corruption. They further opined that the causes and effects of poverty interact, such that the variables that make people poor also create conditions that keep them poor.

Overview of the COVID-19 Pandemic

Global Overview of the COVID-19 pandemic

Coronavirus is a family of contagious virus that can cause a range of mild to severe respiratory illnesses. These viruses can mutate rapidly and form new types of coronaviruses such as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) identified in 2019 in China, which is responsible for the current pandemic of COVID-19 disease.(Altakarli, 2020)

However, on 31 Dec., 2019, China, East Asia, most populated countries in the world is informed by WHO regarding pneumonia cases with unknown etiology. Till 3 Jan. 2020 a

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total of 44 pneumonia cases were detected. On 7 Jan. 2020, Chinese research authority announced that they were new virus from sea food market in Wuhan city; Named as 2019-nCoV. On 13 Jan. 2020 Ministry of Public Health Thailand were reported one patient imported from Wuhan,

China. On 15 Jan. 2020, the ministry of health, labor and welfare Japan were reported first case imported from Wuhan China. On 20 Jan. 2020, National IHR Focal point from the Korea was reported first case 2019-nCoV in Korea. On 23 Jan. 2020, United State of America were confirmed first case of 2019-nCoV in America. On 24 Jan. 2020, Vietnam reported first case of 2019-nCoV with not travel history from China, while his family member was a China traveller. So it is the first incidence of human to human transmission of coronavirus. On 24 Jan. 2020, the government of Singapore confirmed its first case of 2019-nCoV. On 25 Jan. 2020, the government of Australia, Federal Democratic Republic of Nepal and French republic were confirmed first of 2019-nCoV. Other countries also were detected and reported the cases of 2019-nCoV as On, 26 Jan. 2020 (Malaysia), 27 Jan. 2020 (Canada), 28 Jan. 2020 (Cambodia, Germany, Sri Lanka), 29 Jan. 2020 (United Arab Emirates), 30 Jan. 2020 (Philippines, India , Finland), 31 Jan. 2020 (Italy), 1 Feb., 2020 (Russian Federation, Spain, Sweden, United Kingdom), 5 Feb., 2020 (Belgium), 6 Feb., 2020 (Japan), 15 Feb., 2020 (Egypt). Almost if not all spreading history of Covid-19 has its root from Wuhan province of China.

In Africa, Egypt recorded the first confirmed case on the 14th February 2020, followed by Algeria on the 25th February 2020. Nigeria recorded her index case on the 27th February 2020. Senegal recorded its first case on the 1st March 2020 (WHO-Afro, 2020), followed by Morocco and Tunisia on the 2nd March 2020.

In the Southern African region, South Africa was the first to report COVID-19 on the 5th March 2020 while Cameroon reported two cases along with Togo on the 6th March 2020; and Burkina Faso on the 9th March 2020. The Democratic Republic of Congo was the 11th African country to report on the 10th March 2020 followed by Ivory Coast and Ghana on the 11th and 12th of March respectively while, Ethiopia, Gabon, Guinea, Kenya, Mauritania, Namibia and Rwanda all confirmed index cases along with Sudan on the 13th March 2020. Some other countries with confirmed reported cases include Angola, Benin, Cape Verde,

The number of confirmed cases is increasing every day with the availability of rapid testing kits. This pandemic is going to impact severely in the health and economy aspect. COVID-19 is being considered as devastating World influenza epidemic of 1918 (Jahangir et al., 2020)

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COVID-19 and the Nigeria Experienced

According NCDC on 27th of February, 2020, Nigeria confirmed its first case of coronavirus diseases (COVID-19) in Lagos state that is the first case to be reported in Nigeria since the outbreak of virus in Wuhan province of China.

The case is an Italian citizen who works in Nigeria and returned from Milan, Italy to Lagos, Nigeria 25th February 2020. He was confirmed by the virology laboratory of the Lagos University Teaching Hospital, part of the laboratory network of the Nigeria Centre for Diseases Control. However, since then the diseases is continue spread to order citizens of Nigeria in Lagos and other state of the country. The table 1 below mirrors the current data of the coronavirus diseases in Nigeria as at August 13, 2020.

Table 1: Update of COVID-19 Confirmed, discharged, deaths, and active cases

STATE	CONFIRMED CASES		DISCHARGED CASES		DEATHS		TOTAL ACTIVE CASES
	TOTAL	NEW	TOTAL	NEW	TOTAL	NEW	
Lagos	16,256	69	13,132	3	201	6	2,923
Fct	4,632	35	1,325	12	46	0	3,261
Oyo	2,935	40	1,504	76	31	0	1,400
Edo	2,399	0	2,121	0	100	0	178
Rivers	1,991	19	1,775	28	56	1	160
Kaduna	1,706	40	1,493	21	12	0	201
Plateau	1,665	22	736	50	24	1	905
Kano	1,661	17	1,320	7	54	0	287
Delta	1,626	5	1,430	0	44	0	152
Ogun	1,521	15	1,288	22	24	0	209
Ondo	1,373	17	770	0	28	0	575
Enugu	976	7	650	50	19	0	307
Ebonyi	908	0	852	0	26	0	30
Kwara	888	6	591	42	23	1	274
Katsina	746	0	457	0	24	0	265
Osun	719	41	341	0	13	0	365
Borno	698	1	576	0	36	0	86
Abia	677	14	546	29	5	0	126
Gombe	647	12	576	14	23	0	48
Bauchi	580	1	533	3	14	0	33
Imo	494	9	168	6	10	0	316
Benue	430	0	139	0	9	0	282
Nasarawa	372	1	223	0	8	0	141
Bayelsa	346	0	316	0	21	0	9
Jigawa	322	0	308	0	11	0	3
Akwa Ibom	241	0	207	0	8	0	26
Niger	228	2	168	3	12	0	48

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Ekiti	194	0	81	0	3	1	110
Adamawa	185	0	104	0	12	0	69
Anambra	156	0	131	0	18	0	7
Sokoto	154	0	138	0	16	0	0
Kebbi	90	0	82	0	8	0	0
Taraba	78	0	55	0	4	0	19
Zamfara	77	0	71	0	5	0	1
Cross River	73	0	42	0	8	0	23
Yobe	67	0	57	0	8	0	2
Kogi	5	0	3	0	2	0	0
Total	48,116	373	34,309	366	966	10	12,841

Source: NCDC, 2020.

From table 1 is shows a sporadic increase in the number of confirmed cases per day, this is due to the nature of the livelihood of the Nigerians, the fallacy of disbelief about the existence of the pandemic and its elitist status; many asymptomatic patients have become the agents of community transmission in the country. As at August 13, 2020 the total number of confirmed cases in Nigeria was stood at 48,116 with Lagos state and Kogi state has the highest and lowest confirm cases, the total number stood at 16,256 and 5 respectively.

However, the rate of confirmed cases in Lagos is self-explanatory because it is a strategic place in the nation's economy. Lagos state is the commercial nerve of the country and as a metropolis with a large number of migrants from the hinterland; hence, there is a high population density. This could have contributed to the increased number of cases. Another obvious reason for this high number is that Lagos state has higher testing capacity than other states. It is therefore, not astonishing for the state to have the highest number of confirmed cases.

The other two states that came behind are Oyo and Edo. While the increased number of cases in these states is because of their proximity to Lagos as the epicentre of the pandemic in Nigeria is not too far. As can be seen from the table 1 Kogi state has the total number of 5 confirm case which is the least number of cases among the 36 state of the federation including FCT. This is not surprises since the outbreak of the virus in Nigeria; Kogi has not recorded any significant number except recently.

The table1 also depict that Lagos recorded the highest death rate of the pandemic with a total number of 201, and Kogi state has the least death rate as the result of the virus. It is also shows a significance demographic distribution of the Covid-19 pandemic in Nigeria is as a result the flow of economic activities according to States. This also shows the nature of the dominant sectors in the States. This feature would ensure the efficiency of any social programme rolled out by the government to cushion the impact of the pandemic on Nigerians.

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The Government of Nigeria, through The Federal Ministry of Health has been strengthening measures to ensure an outbreak in Nigeria is controlled and contained. Therefore, before, the vaccine to be available Nigeria is not left behind in respond to the virus, the country implement some firm control measures to reduce the spread of the virus which includes: full or partial lockdowns, testing, contact tracing, case isolation, among others. Leveraging on previous disaster management and containment skills such as the handling of the Ebola virus that broke out between 2014 and 2016, the country instituted a proportional response by constituting a Presidential Task Force (PTF) which was saddled with the responsibility of managing the government response to the pandemic. Others measures are as follows:

1. Regularly and thoroughly wash your hands with soap and water and use alcohol based hand sanitizer
2. Maintain at least one and half metres (5 feet) distance between yourself and anyone who is coughing or sneezing
3. Persons with persistent cough or sneezing should stay home or keep a social distance, but not mix in crowd.
4. Make sure you and people around you, follow good respiratory hygiene, that is cover your mouth and nose with a tissue or into your sleeve at the bent elbow when you cough or sneeze. Then disposed the used tissue immediately.
5. Stay home if you feel unwell with symptoms like fever, cough and difficulty in breathing.
6. Stay informed on the latest development about COVID-19 through official channels such as NCDC, TV and Radio.

A summary of the macroeconomic policies undertaken by the government to insulate the economy from the impact of the pandemic is presented in Table 2:

Table 2: Macroeconomic Policy Responses by the Nigerian Government as of May 21, 2020.

CATEGORY OF POLICY	DETAILS
Fiscal	<ul style="list-style-type: none"> ➤ N984 million contingency fund released to Nigeria’s centre for disease control (NCDC). ➤ N6.5billion released for the purchase of testing kits, opening isolation centre and training medical personnel. ➤ Lagos State got a grant of N10billion to increase capacity for containing the outbreak. ➤ Review of 2020 Budget and a cut in capital spending by N1.5trillion.

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	<ul style="list-style-type: none"> ➤ Provision of N500billion fiscal stimulus package (styled Covid-19 Intervention Fund) to support healthcare facilities, provide relief for tax payers and incentive to employers. ➤ Introduction of Import duty waivers for pharmaceutical firms. ➤ Regulated fuel prices have been reduced, and an automatic fuel price formula introduced to ensure fuel subsidies are eliminated. ➤ Increase of the social register by 1 million households to 3.6 million to help cushion the effect of the lockdown.
<p>Monetary and macro financial</p>	<ul style="list-style-type: none"> ➤ Maintenance of current monetary policy rate (MPR) by the Central Bank of Nigeria (CBN) in March. Additional measures introduced include. ➤ Reduction of interest rates on all applicable CBN interventions from 9 to 5 percent. ➤ Introduction of one-year moratorium on CBN intervention facilities. ➤ Creation of a N50 billion targeted credit facility. ➤ Injection of 3.6 trillion liquidity into the banking system; N100 billion to health sector, N2 trillion to the manufacturing sector, and N1.5 trillion to the impact industries. ➤ N1 trillion support to the agriculture sector to prevent food shortages. Introduction of regulatory forbearance to restructure loans in impacted sectors. ➤ N120 billion private sector special intervention initiative targeted at fighting Covid-19. ➤ Receipt of N42.6 billion in April, including \$50 million grant from the European Union ➤ Establishment of Nigeria Solidarity and Support Fund to raise \$50 million to support physical infrastructure of healthcare centres in Local Governments and existing Social Investment Program.
<p>Exchange Rate and Balance of Payments</p>	<ul style="list-style-type: none"> ➤ Adjustment of the official exchange rate by 15 percent. ➤ Ongoing unification of various exchange rates under the investors and exporters (I&E) window, Bureau de Change, and retail and wholesale windows. ➤ The authorities committed to let the I&E rate move in line with market forces, and it has so far depreciated by about 4 percent. ➤ A few pharmaceutical companies have been identified to ensure they can receive FX and naira funding. ➤ The CBN has resumed FX supply in some other windows because I&E window turnover has been low since April

Source: IMF Policy Tracker (2020).

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Impact of COVID-19 Pandemic on Unemployment and Poverty

Impact of COVID-19 on unemployment in Nigeria

Workers and business are facing catastrophe, in both developed and developing economies. The COVID 19 pandemic has triggered one of the worst jobs crises since the Great Depression. There is a real danger that the crisis will increase poverty and widen inequalities, with the impact felt for years to come. As the effect of the pandemic and containment measures hit Nigeria unemployment rate. It disclose that the economic impact of the pandemic had caused an astronomic rise of unemployment to 33.6 percent, meaning that 33.9 million people would be unemployed by the end of 2020 if nothing proactive could be done to arrest the situation (Vanguard, 12/6/ 2020)

In Nigeria sectors identified as the most impacted sector by the COVID-19 include tourism, leisure, aviation manufacturing, construction, and real estate. This is because the current restrictions in place hamper the ability of these ventures to function and generate revenue. For example, in the aviation sector Arik Airline announced that it had ordered 90% of its staff to proceed on leave and implemented an 80% salary cut for April. IATA project that number of jobs at risk in Nigeria aviation industry is 91,380

However, by the ILO's analysis the impact of COVID-19 pandemic far exceeds that of the 2008 -2009 financial crisis. The expect that COVID-19 will wipe out 7% of working hours globally in the second quarter of 2020 equivalent to 195 million full time workers. The ILO has warned that nearly half of the global workforce is at risk of losing their livelihood.

The number of unemployed people in Nigeria has spiked to 21.8 million following the negative impact of the Covid-19 pandemic on the private sector. The National Bureau of Statistics (NBS) put the figure of unemployed Nigerians at 21,764,617 as at the end of June as the country's COVID-19 cases almost hit 50,000. Many private firms have rationalized their workforce and service industries have given up their sprawling office spaces and directed staff to work from home. The NBS noted that the unemployment rate among rural dwellers in the period under review increased to 28 per cent from 23.9 per cent in the third quarter of 2018. The unemployment rate among young people, age 15 to 34, in the second quarter of 2020 was 34.9 percent up from 29.7 percent in the quarter of 2018.

To limit the spread of the virus, the government acted promptly to restrict international and domestic flights, interstate road traffic, and the movement of people in urban areas. As experienced by other countries, it is inevitable that such preventive actions will have profound knock-on effects on services and industry in both the formal and informal sectors. As an unintended consequence, a steep decline in output can therefore be expected. Agriculture is the only sector that is projected to grow in 2020 it is somewhat shielded from

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the effects of lower oil prices. Nonetheless, it is highly probable that the disruption of supply chains due to lockdown measures will affect the planting season, lowering agricultural output later in the year. The difficulties arising from COVID-19 inevitably extend to the labor market, with significant impacts on employment anticipated for some time to come.

As of May 2020, 4 in 10 workers in Nigeria were already reporting a loss of labor income, and disruptions to markets and supply chains are impeding agricultural activity. Retail trade, for instance, which employs 1 in 6 workers, is being hit especially hard as income losses spread through the economy. Overall, the disruption of employment dynamics will affect household incomes and consumption

COVID -19 Impact on Poverty in Nigeria

The virus infects people regardless of wealth and social status; the poor will be the most affected. Living in a typically high density houses with reduced access to sanitation and a lack of savings facilitate self-isolation, poor Nigerians are at risk of contracting the virus. Moreover, due to the high cost of health care, greater economic fragility and higher mortality rates, we are bound to see many Nigerians fall below poverty line before the epidemic over.

Recently, the World Bank said the outbreak of the coronavirus pandemic could make an additional 5 million Nigerians poor given the imminent recession which is expected to be the worst since the 1980s. In 2019, Nigeria surpassed India in terms of people living in abject poverty, as a result of the pandemic the number will only grow if proper measures are not enacted.

The federal government of Nigeria said that before the pandemic runs out, millions more Nigerians would be under extreme poverty, while the gross domestic product, GDP, might likely fall between -4.40% and - 8.91 % depending on how long the crisis will last and the strength of the economic response Vanguard, (12/6/2020). This indicate that millions of citizens will join the population of the poor Nigeria

During the pre-pandemic era, 86.9 million Nigerians lived in extreme poverty (world poverty clock, 2018). The World Bank which anticipates Nigeria heading into its worst recession in 40 years as it projects 3.2 % and 7.4% this year, said COVID-19 shock along is projected to push about 5 million more Nigerians into poverty in 2020.

COVID-19 and Pre Existing Inequalities

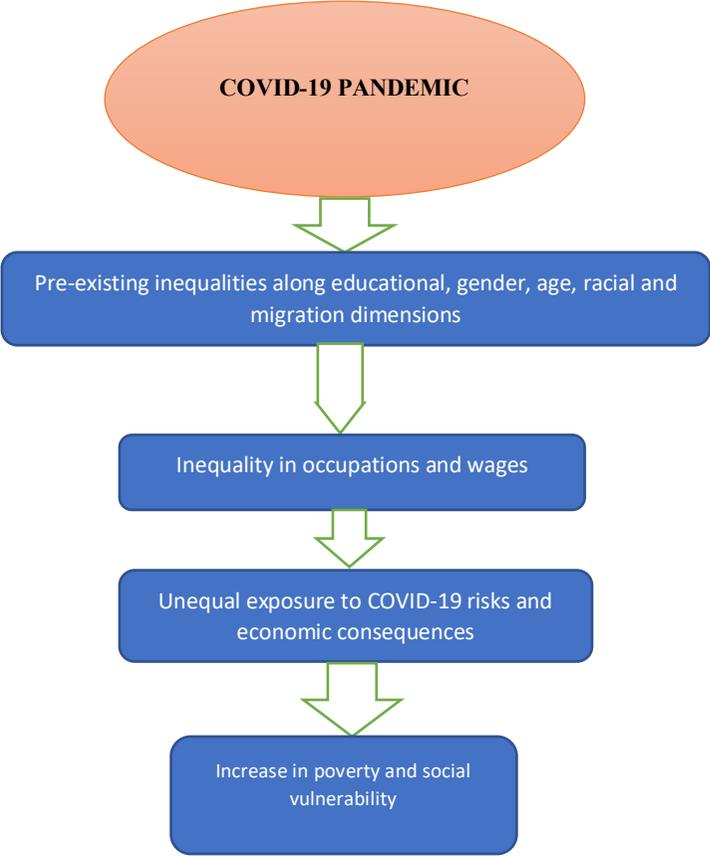
The COVID-19 pandemic causes inequalities on the structure of economy, inequalities in terms employment, poverty, genders developed and developing economies etc. however,

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the effects of the pandemic on employment are critically derived by pre-existing inequalities along educational, gender, age racial and migration divides as can be seen in figure 3. Low-skill workers are more expose to layoffs and wage cuts. For example, the case of Arike Airline of Nigeria. Women, youth, migrants and members of indigenous communities are especially vulnerable. Low-wages workers also tend to be in occupations that are more machine dependent or that require physical interaction and less ICT enabled which makes them less flexible to work remotely. These workers are predominantly in retail, restaurants, and hospitality, transportation and recreation sectors.

More so, these pre-existing inequalities in labour markets are amplified in emerging economies due to elevated informal sector. In Nigeria for example, where large number of her population are absorbed by the informal economy and about 85 million Nigerians are in extreme poverty with minimal social benefits.

Figure 3



Source: UN DESA.

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Conclusion and Policy Recommendations

This research work analyses the current COVID-19 crisis on unemployment and poverty in Nigeria. It showed that the COVID-19 epidemic into Nigeria which is the external shock, worsen unemployment and poverty in Nigeria in 2020. The scope and severity of this pandemic determine the rate of unemployment and poverty in Nigeria. However, in line with the findings, the following policies are put forward:

- Since government is engage in distributing the palliatives, for such palliative to have positive effect on the poor economy, proper and adequate monetary committee has to be initiated and enrolled to ensure that such palliative reach the target populists
- The international financial institution such as world bank, IMF etc. should supervised and monitored the impact of debt relief, debt suspension, donors and aid granted to receiving economy so as to ensure such intervention is properly utilized and impacted on the economy.
- Nigeria most advance on digital economy in order to prevent the impact of future occurrence of any pandemic on the economy
- Welfare package has to be put in place on every annual budget so as to reduce the gap on income inequality.

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Chapter 13

MEADS and Logistics of International Trade

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Abstract

The intervention of the customs administration and indirect taxes is mandatory during international operations; the role of the latter constitutes the most important phase in the logistics chain since it ensures its control and is the more difficult because of the intervention of other parties. The ever-growing development of international trade, the complexity of globalization, the multiplication of international trade agreements, changes in the rules of international Management, solidify the supply chain and revolutionize customs approval procedures.

The « MEADs » is defined as customs' areas that allow the storage, import and export, of goods handled in customs pending their clearance. The « MEADs » is here to make the supply chain operative. Its objective is to bring to the economic operators a quality of service advised on all the operational and legal aspects of the customs clearance. MEADs play an important role in international trade. What position do MEADs have within the logistics of international trade, we will first discuss some of the concepts, second, we will explain the approach used and then we will present the results and discussions. We will try as much as possible in our article to talk about the importance of MEADs platforms in managing global trade logistics.

Keywords: MEADs, International Trade, Customs, Logistics.

Introduction

Customs are an administration which plays an important role in international trade since it intervenes in commercial operations such as export and import and also international financial operations (Kafeero, E. 2008, Thillier, J. M. 2015). Any company that carries out purchase or sale operations abroad must go through the customs phase. Customs clearance

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is a mandatory formality for all goods entering or leaving the territory, the formalities of customs clearance of goods to a destination or coming from abroad allow customs controls and taxation (Lane, M. H. 1998).

These formalities must be completed by the holder of the goods (exporter, importer, authorized customs broker, holder of a customs clearance authorization). A customs clearance operation is carried out according to chronologically defined stages to define the respective roles of the parties, which intervene during a customs clearance operation (Hsu, C. I., Shih, H. H., & Wang, W. C. 2009).

The importing or exporting company must be subject to many obligations, of a declaratory or tax nature, in doing so, it must know how to make better use of all the facilities offered and implemented by customs: customs procedures and regimes, conditions under which the declaration must be carried out, then the specific elements that it includes and which are decisive for the subsequent establishment of duties and the taxes to be paid (Heaver, T. D. 1992).

Theoretical Concepts

What is a logistics platform?

Logistics hubs are very often located in easily accessible places such as highways or airports. They are recognized by their large scale to better increase the activities of a company, these are warehouses where goods are momentarily stored because they only pass through the platform. The impacts of building a warehouse are mainly ecological and social (Pettit, S. J., & Beresford, A. K. C 2009), Noumen, R. 2004).

MEAD and logistics flow of international trade MEADs (Magasins Et Aires de Dédouanement) stores and customs clearance areas are defined as customs spaces that allow the storage, import and export of goods brought to customs while awaiting customs approval, the objective of the establishment of MEAD is the adaptation of customs procedures to the evolution of international trade and the development of logistics (Moullé, F. 2018).

Methods and Approaches

As for the methods and approaches, we have relied in our research on a few studies in this field, in addition to field training in both the Customs Administration in Casablanca and Rabat, this training allowed us to learn about customs in practice, especially the interviews and dialogues that we conducted with several experts in the field of international trade and logistics, also, we have met a group of chiefs in various service Centers of the Moroccan customs administration. In addition, we have analyzed a set of data provided by the

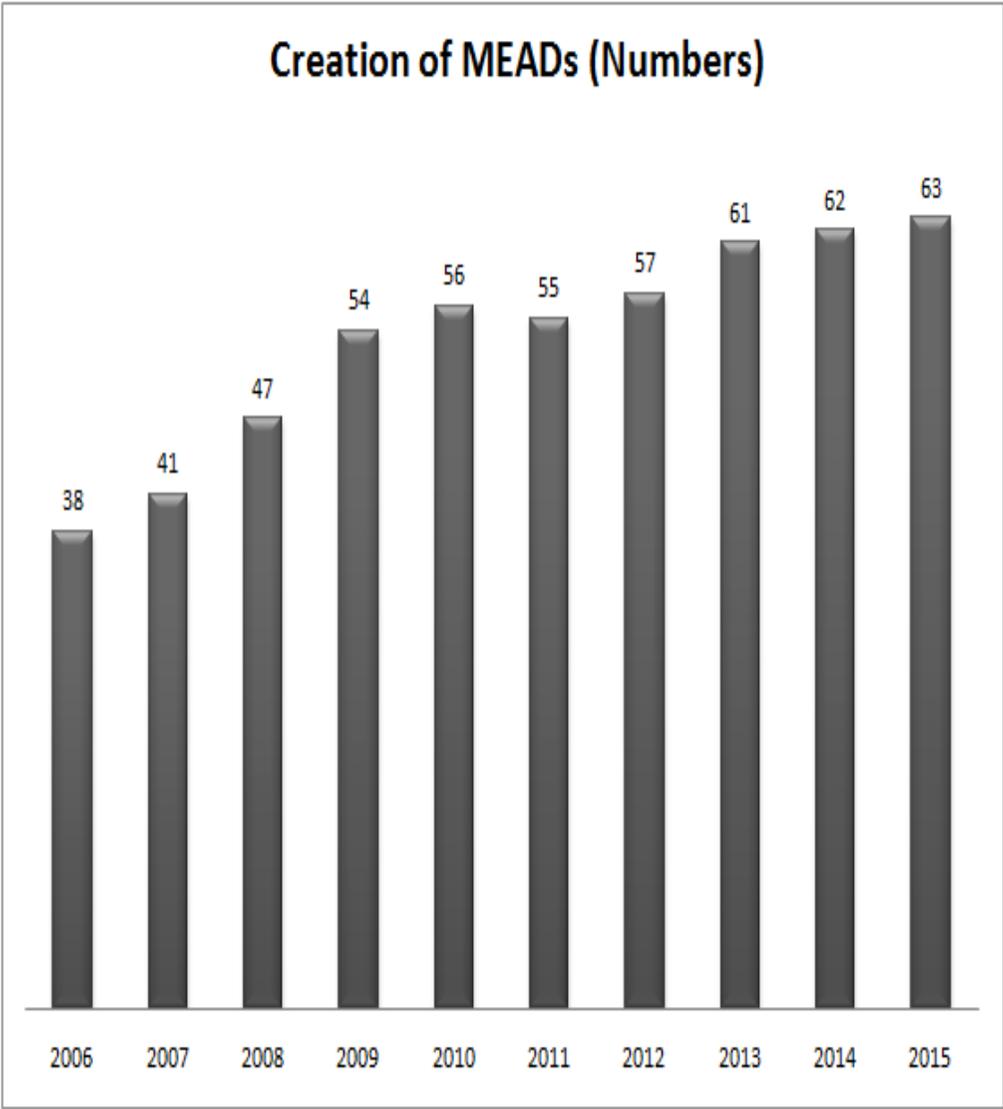
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Customs Administration. All these measures contributed to the collection of several information's in an attempt to highlight the role of customs in global trade.

Results

Creation of MEADs

Fig.1

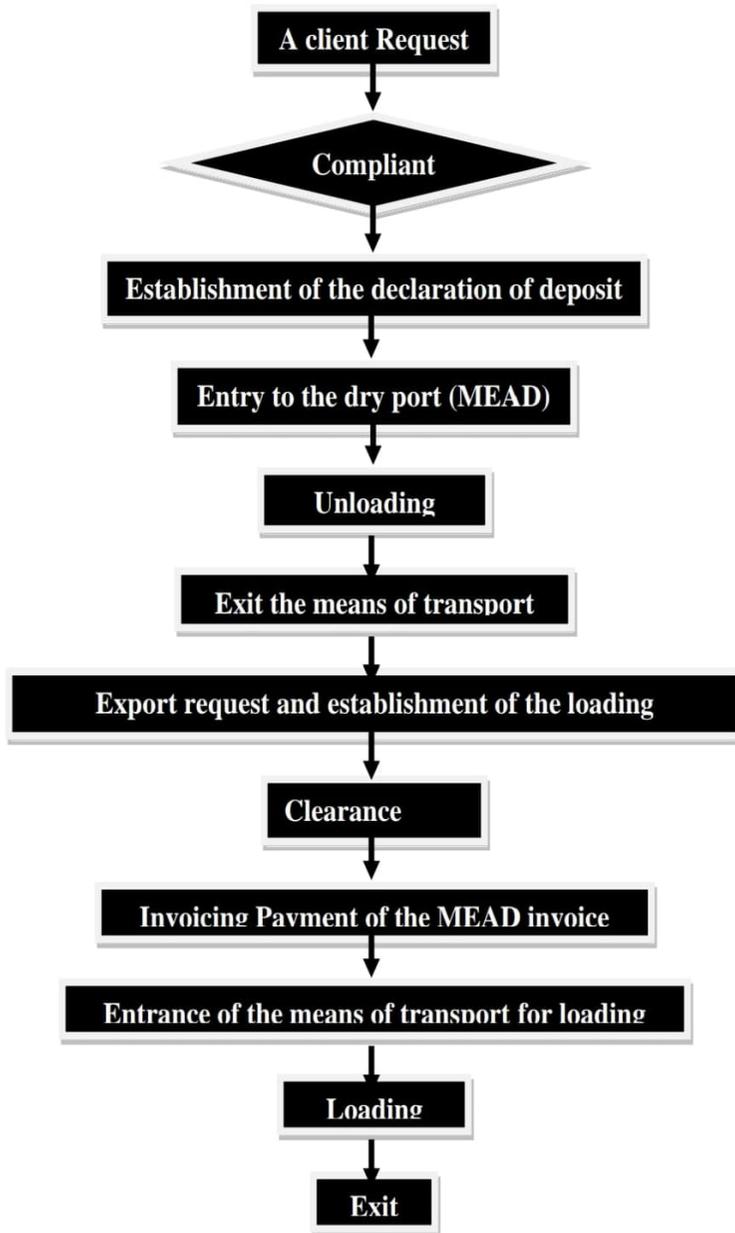


Source: Authors

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The transfer of containers is done through several stages:

Fig.2

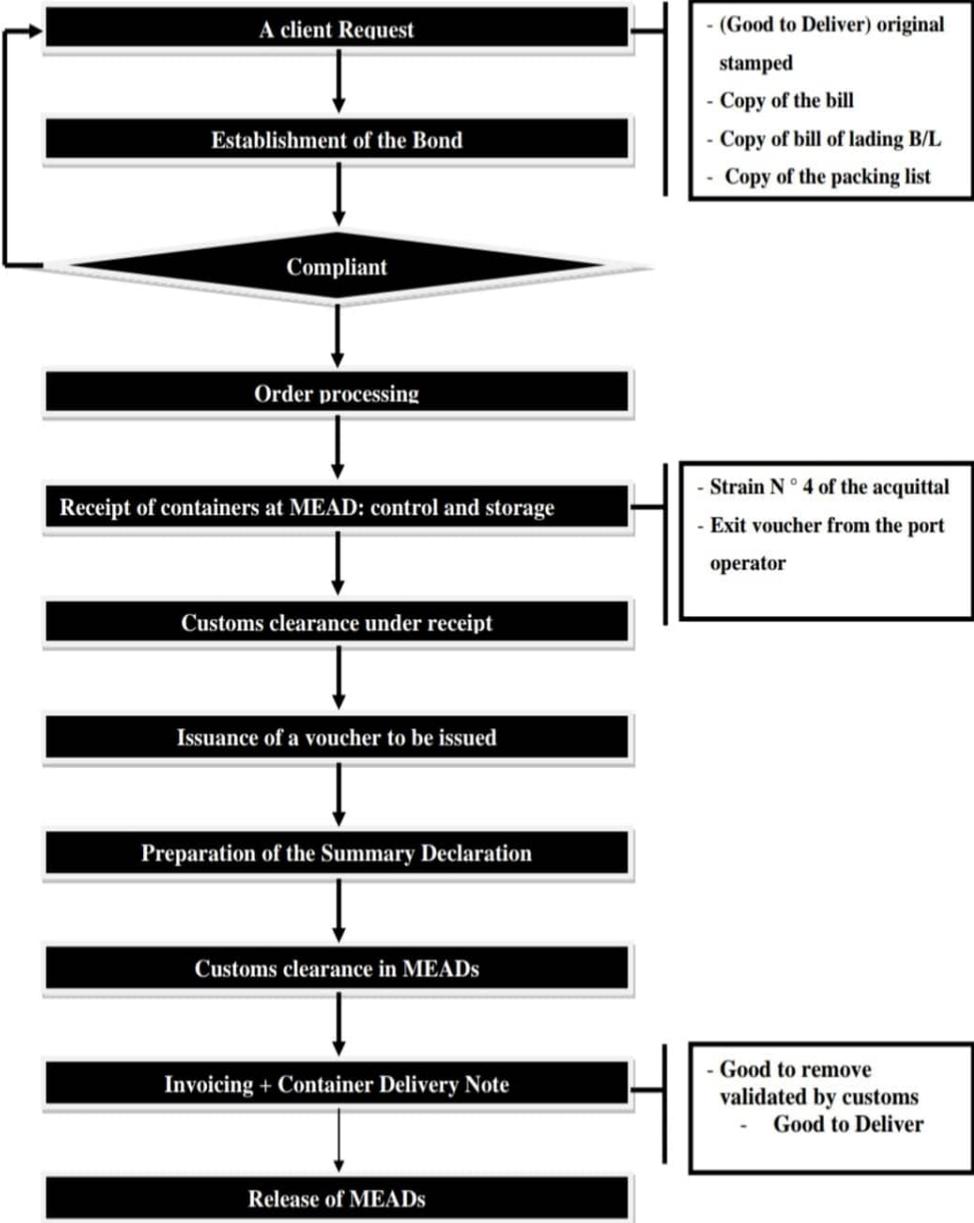


Source: Authors

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Import Process through MEADs

Fig.3



Source: Authors

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Discussions

With regard to the practical and technical procedures associated with the platforms, we will talk about them briefly below.

Table 1: Technical procedures associated with the platforms MEADs

Elements	Explanations
Creation of MEADS	The creation of MEADs is subject to the operating authorization granted by the customs administration. The operator wishing to benefit from this approval must meet the required conditions: First, the presentation of a file supported by the required documents: (request, site plan; RC copy, company status, etc.); It must also have all the equipment necessary for the operation of the MEAD.
Responsibilities of the Operator	Subscription of a bonded tender as a guarantee for duties and taxes and penalties, if any, incurred.
Operator's obligations	<ul style="list-style-type: none"> - Keep stock accounts; - Take all the necessary measures to secure the stored goods; - Present at first request to customs the goods staying in these enclosures; In addition, some matters must be submitted to the customs administration, hand over non-cleared goods to the responsible customs services at the end of the regulatory deadlines (45 days).
Goods eligible within the MEAD	All goods can be brought into the MEAD's enclosures with the exception of exclusions provided for by regulations, for example: <ul style="list-style-type: none"> - Goods in poor state of conservation; - Weapons, narcotics, objects contrary to morality.
Operating modalities	The premises erected in MEAD are subject to permanent surveillance by the customs service.
Storage procedure	The admission of goods to the premises of the MEAD is covered by a summary declaration.

Source: Authors.

By analysing the graph of MEADs above, we first see that the number of MEADs has evolved remarkably over the years, as an example in 2006 the data shows that the number of MEADs is 38 only, the following year the number increased to 41 MEAD in 2007.

Following the evolution of the number of MEADs continued to show in 2014, 62 MEAD, the year in which the finance law put in place new provisions to legally regulate the process of granting authorizations for the creation of MEADs

Finally, within the framework of the support of the national strategy for the development of the logistics competitiveness of Morocco, the Customs approved new MEADs thus bringing their number to sixty three warehouses in 2015, these stores, offer, to the operator, better customs clearance conditions, both for import and export, in terms of costs, security and time.

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Goods presented to customs must be the subject of a declaration assigning them a customs procedures, at the end of the working day following their arrival at the customs office or in places designated by the customs service. However, to meet the needs of operators (waiting for the documents necessary for customs clearance, current commercial transactions, etc.), the goods can be kept in MEAD.

The scale of the development of foreign trade following globalization and the establishment of free trade zones calls for greater fluidity in the movement of goods, by decongesting ports and airports.

The creation of MEADs outside customs and ports is part of this perspective, to reduce the transaction costs of companies and improve, as a result, their competitiveness, therefore Morocco through customs and those involved in international trade, will strongly engage in the process of trade facilitation through the creation of new MEADs.

Conclusion

The ever-increasing development of cross-border trade, the complexity of globalization, the multiplication of international trade, are modifying the rules of international management, solidifying the logistics chain and revolutionizing customs clearance procedures.

MEADs are there to make the supply chain operative. Their objective is to provide economic operators with an informed quality of service on all operational and legal aspects of customs clearance, to enable companies to optimize the costs and deadlines of customs clearance operations and to benefit from the facilitation and privileges associated with the procedures, also helping them to comply with customs regulations so that they become reliable and trusted partners for the customs administration.

MEADs are a strong link in the control and management of the global supply chain given the role it plays at borders and the nature of the missions assigned to it. All goods imported or intended for export must be presented to the MEAD for submission to customs clearance formalities.

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Chapter 14

Ethical Issues and Challenges Faced by Education Sector's Stakeholders

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Abstract

This work is an attempt by authors to have deeper investigation into the ethical issues and challenges faced by education sector's stakeholders. COVID-19 pandemic has put us in a situation where learners, educators, scholars, academicians, planners, regulators by whatever name stakeholders are known & above all us as guardians are now exposed to a horrific path of learn, unlearn and relearn. The result of survey conducted in relation to this study showed 79% of the respondents believe that the students don't follow the code of conduct during the online classes and there is a large section around 40% of respondents who believe that this has affected their psychological behaviour. For this work a questionnaire of 14 statements to focus further on the challenges and ethical issues that are faced by teachers and what problems are faced by the students in the current scenario. This study used descriptive mode for analysis and tried to statistically analyse the results and concluded that the education sector's stakeholders especially the teachers regarding the behaviour of students during the online classes and the students face challenges regarding the availability of the technology and their future with respect to this online education.

Keywords: Psychometric, Stakeholders, Online education, Stress, unethical issues and challenges.

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Introduction

This work is an attempt by authors to study different elements of health and ethical issues faced by stakeholders in education sector owing to the paradigm shift in teaching & learning. The area in this study is the field of education, specifically higher education, and is a pioneer attempt to have deeper investigation into the impact of student's behaviour on the teachers in India of both public and private sector. It has been observed that the teachers around are facing major problems and challenges because of the behaviour of students during the online classes. In this survey it was also found that 50% of the respondents have faced the issue of interruption by the students every now and then, while 42.1% of respondents agreed that students often sleep during the online classes. Also, 39.5% respondents believe that the parents peep through the cameras while teaching in online classes. Thus, this survey is an attempt to better understand the extent up to which these issues has impacted the psychological well-being of the teachers, are they able to cope up with this, whether this has impacted their daily routine or not. This study also investigates whether male or female teachers are more prone to this. The respondents were provided with 14 statements and they had to select the options given in the statements.

The Recipient- Students

Suddenly happened Janata Curfew and due to extension of lockdown several times has created an environment of pessimism and utmost uncertainty in the society. The student's education during this session was at stake. The students as well as the teachers had to adopt this new mode of imparting education which was new to everyone. In one survey conducted in relation to this study by a faculty in the Department of Business Administration at Institute Of Engineering and Technology, Lucknow it was found that 90% of the respondents believes COVID- 19 has impacted their career planning and 65% of them believes their academic routine has worsen in past 2 months during lockdown. Major students opined that it became extremely difficult to manage their studies and cope up with this new normal situation. In addition to this, in a survey conducted by popular national newspaper Daily Bhaskar showed 71% of students have become moody, careless and stubborn due to this new mode of online education. Also, 65% of students are facing physical problems and 70% are facing behavioural problems.

This showed low adaption on the part of students. Last section of survey showed impressive rather shocking results as less than one third of the respondents expressed satisfaction that they have actually willingly studied through this now mode of imparting education. Though maximum numbers of respondents surveyed feel that online education and use of ICT in education will see a surge in coming future, to which we all agree, but shockingly only 10% prefer online education and wish to have mix of both online/offline classes. Finally, more than 89% of respondent fear of worse outcome for their semester, in terms of job prospects, surprisingly less than 10% of them can see their future in work from

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home. Again, this is the sign of low adoption of changes in environment and low adaptability to newer norms.

The Backbone of Education Sector- Teacher

In this study, teachers are prone to massive realignment to the ethical issues and challenges due to this online education.

Between these two extreme ends of the continuum of education services lies group of other stakeholders and their vested interests lies with either in these two extreme participants or mostly in themselves or in betterment of society. Among the group one such stakeholder is the guardians or the parents that have visible interest in the long drawn process of learning of their wards. But the guardians or parents plays more or less a passive role in the process. The current scenario has forced them to provide their children with the smart phones, all kind of technology that can help their child get the education without any interruption. Being, somehow unaware of the fact how their wards might be using it.

The current scenario, has resulted in change of structure of education in a very dramatic way. One impact is on the enhanced use of E-learning by the use of ICT technology and the other impact on enhancement of skills required for using those ICT technology. But institutions all over the world reacted sharply seeing the never ending lockdown restrictions and adopted *Online Teaching Learning Strategy* on urgent basis This online teaching and learning has in fact directing us toward a new normal in education sector and is likely to be continued in same manner post COVID-19. So, all the stakeholders, regulators, human resource ministry, management and administration and above all teachers along with the students need to get evolve themselves more than ever. This adaptability and adoptability to new normal and attached concerns are a cause of pain, cause of stress among stakeholders.

The shift from the traditional set up of imparting education toward multi-dimensional, multi dynamic environment need one's inner calling more than any prompt from socio, economic or political side. Innovative ideas, newer concepts require critical thinking

The Brain Behind- Ministries, Regulators, Management and Administration

The regulators, planners, ministries and intellectual class of academicians and industry professional have felt the need of forming a completely changed course for teachers as well as students at the start of their professional journey. Certain programme have been developed to target the holistic approach right from developing pedagogical skills, inclination toward learning techniques based on research methodology, from participation in curriculum development to getting skill training for the enhanced use of information technology in self-development, career advancement and most importantly imparting education effectively.

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Literature Review

- **Educational Institutions in India**

The literature evidence shows that due to this COVID-19 pandemic various authoritative governing bodies like MHRD, UGC, CBSE etc. shows great concern towards students, faculties and other stakeholders by issuing timely advisory in form of circulars, notices, and letters. After nationwide Janta-curfew, the government of India has taken immediate measures in form of closing down the universities and colleges to check spread of virus. After all this, the educational institutions were asked to re-open the classes via online mode. Teachers were guided and provided with training by the government and higher authorities for easily conduction of online education. During the entire lockdown 1.0 to lockdown 4.0 immense losses occurred in form of discontinuance of regular lectures, postponement of exams, changes in the academic calendar for current as well as next session. The measures are not exhaustive and will require dynamic supervision and regular updating from time to time.

- **Challenges of Students**

The universities and colleges around the world struggled adopting the new mode of imparting education. In order to break the chain of transmission of the corona virus the governments and authorities at regulatory and universities level has taken various steps by implementing policies including stay at home, online learning etc. Several challenges like technological, availability of resources has been a major obstacle in imparting education via online mode. It leads to severe blow on various activities in fields of education. Sitting for hours in front of cameras and laptop has impacted student's eyesight, their mental health deteriorated and also impacted the disseminating of information between different stakeholders in education sector. In addition to this, an increase in the cases of student's behaviour in the classes have been reported.

Primary Objective and Hypothesis

The research work is an attempt to have a deeper investigation by the authors to know the ethical issues and challenges faced by the education sector's stakeholders. This work also studies how such issues and challenges has impacted the behaviour of teachers, their psychological health and their daily routine work. It is an attempt to have better understanding how their lives have changed due to the same. Whether they have adjusted themselves to new norms to fulfil their routine commitments thrust upon them unprecedentedly or not. How difficult it was for them to be able to maintain their personal relations. This survey also focuses on whether they are able to work on their personal growth or not due to these challenges and issues. It also highlights whether female or male teachers are more prone to this.

H₀: Online education has created no challenges and no ethical issues are faced by the education sector's stakeholders.

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H_a: Online education has created challenges and ethical issues are faced by the education sector's Stakeholders, Mostly By The Female Teachers.

Research Design

For the purpose of this study an online survey was conducted with a well pretested questionnaire, in order to collect responses from 360 students and 38 teachers through convenience non- random sampling method. Medium to collect responses was social media platform WhatsApp. The respondents in this survey were above 18 years of age and were explained the purpose of the study. The survey was conducted to assess the ethical issues and challenges faced by education sector's stakeholders and to know whether male teachers or female teachers are more prone to this. The information collected in the online survey was tabulated and analyzed statistically. The statistical tool used for this survey is z- Test. The statements provided to the respondents were grouped in male and female segments and then the results were calculated.

Data is primary in nature. The data is collected from 360 students (57.8% male and 42.2% female) 38 teachers (71.1% female and 28.9% male). And different age groups of students as well as different working sectors of teachers.

In this research work, a questionnaire was framed of 14 statements specifically focusing on different issues and challenges: Technological challenge, students sleeping during online classes, students passing comments in the chat box, relatives using the link or parents peeping through the cameras while teaching.

The statements provided to the respondents also investigated about the problems the education sector's stakeholders face due to these challenges that are problems in Personal Relations, problems in Positive Growth, problems in Self - Acceptance. The respondents have chosen the options provided to them and as a result it was observed that this shifting from traditional to new mode of imparting education has impacted the performance of students as well as teachers. The finding of the results also shows that this has impacted not only their psychological health but also their daily course of work also it was found that female teachers face more issues related to unethical behaviour of students when compared to the male teachers. In the study, the data has been collected through response sample of 360 students and 38 teachers and, z- test is used to analyze the ethical issues and challenges faced by education sector's stakeholders. To calculate the probable values, the total of male and female respondents was segregated and then, their probable answers towards every question in grouped was calculated, after the same values were put in the formula and the final result was obtained. The formula for the z- test used is :

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$$Z = \frac{\hat{p} - p}{\sqrt{pq/n}}$$

Data Analysis & Findings

The data collected from 360 students out of which 57.8% were male and 42.2% were female and 38 teachers out of which 28.9% were male and 71.1% were females was analyzed. A questionnaire of 15 statements was prepared, to investigate about their well-being and their challenges due to this new mode of imparting education, whether they are technologically equipped to cater these situations or not.

The data collected from the students revealed that 58.1% respondents believed that they are not equipped enough with technology to support their online education. While only 48.1% respondents agreed that they are well equipped with technology to support their online education. This shows that there is half the number of population on an average that are not able to get their education fully because they lack in technology.

When the respondents were asked if they see enhanced use of ICT tools in shaping their career in future whooping 73% see it as a distinct possibility, 21.6% expressed their inability to take a stand and the rest very small percentage of 5.4% said that that's happening. This shows low adaptability among the students.

The data collected from 38 teachers out of which 28.9% were male and 71.1% were female was analyzed. A questionnaire of 14 statements was prepared which was circulated through a social media platform WhatsApp. When the respondents were asked their opinion about whether they feel students were more engaged in contact or offline classes? 87% of respondents agreed to the fact that the students were more engaged in contact classes than in online classes. This shows low engagement of students, low engagement of students often leads to deactivation of the teachers. No or very low response from the students shows their low interest in the context being delivered to them, which results in less acknowledgement of the subject.

When the respondents were asked about the reliability of the classes. 82.6% respondents believe that offline or contact classes were more reliable and easy to conduct and they find it difficult to deliver their knowledge to the students during the online classes. On the other hand, 17.4% respondents believe that online classes are more reliable and easy when compared to the offline or contact classes. Such large proportion of respondents responding for contact classes reveals that teachers are not trained or well equipped with the resources to teach the students through online mode of education.

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When the respondents were asked about their performance whether they feel shifting from traditional mode to this new mode of imparting education has impacted their performance, around 47.8% of respondents believe that their performance has been impacted due to this sudden, precedence shift of imparting education. While 13% denied the statement and 39.1% of respondents were not sure about the impact on their performance due to this shift.

When the respondents were asked about the students following coded of conduct during the online classes and them facing any unethical behaviour. Around 78.3% of respondents agreed to the fact that the students don't follow the code of conduct during the online classes while 60.9% of respondents said that they have faced unethical behaviour of students while online teaching. This not only reflects the situation and the problems teachers face but also the behaviour and perception of students towards the online mode if education. This shows how less the students are aware and concentrated towards their studies and intend only to disturb the classes by various means.

When the teachers were asked about the different challenges they have faced, around 50% of respondents said that students pass unnecessary comments in chat box while teaching which creates disturbance while around 42.1% of respondents said that students often sleep during the online classes and not only this about 39.5% of respondents faced problem of parents peeping through the cameras while they are teaching. This reveals that how much disturbances and unethical activities the performed from the students side when the teachers are teaching.

When the respondents were asked about the challenges do they face while teaching around 68.4% of respondents said that less presence of the students is the major challenge they face, while around 65.8% of respondents believe that low response rate from the students is the challenge they face during online education. This shows low interest of students in attending the online classes being conducted, this also reveals the problems faced by the students as discussed could be a major cause of this that is low availability of resources to attend the classes. While 47.4% of respondents believe that the major challenge they face as a teacher is keeping the track of students' progress. This shows teachers find it difficult to have a check on the progress report of students well. Also, when the respondents were asked whether they feel any technological challenge, around 80.4% of respondents feel technological barrier in imparting education to the students through online mode.

When the respondents were asked whether such challenges or issue has impacted their psychological health, around 37% of respondents agreed to this while about 34.8% of respondents agreed to the fact that due to such behaviour of students they have started feeling stressed and anxiety. Also, about 45.7% of respondents agreed that such issues has affected their personal and family relations as well. While, when the survey investigated

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about their daily course of work, around 54.3% of respondents believed that these challenges and unethical behaviour of students has affected their daily course of work. That is, they are unable to do their daily household work on time.

Lastly, when the survey inquired about the impact on their teaching skills and whether they think this new mode of imparting education can replace the traditional mode of education. Around 23.9% of respondents agreed that student's behaviour and unethical activities during online classes have made them questioning their teaching skills while 47.8% of respondents don't feel that such unethical behaviour of students has made them questioning their teaching skills and they are satisfied with their teaching skills while 28.3% of respondents are unsure about this.

The respondents also revealed that 63% of them don't think that this new mode of imparting education that is this new normal online education cannot replace the traditional mode of imparting education while 21.7% of respondents believe about the same and 15.2% of respondents are not sure about this.

The findings are summarized in the tabular form below:

S. No.	Female Teachers		Male Teachers	
	Z - score	P - value	Z - score	P - value
01.	1.325	0.008198	-2.40	0.925

When a comparison was made to find which section either male or female faces more unethical issues and challenges, as the data is tabulated above. The findings revealed that female teachers are more prone to face these unethical behaviour of students including students sleeping during online classes, passing comments in the chat box, parents peeping through the camera etc.

When the respondents were asked about the activities they must get involved in order to cope with stress and anxiety? Approximately 66.7% respondents agreed that they must get involved in Physical Activities like meditation, exercises, yoga to stay psychologically fit.

Conclusion and Recommendations

The result of the survey reveals that there are a lot of unethical behaviour and challenges that are faced by the teachers and various challenges that are faced by the students which has affected their mental health as well. Also, the issues are mostly faced by the female teachers when compared to male teachers.

To conclude it is recommended to make use of netiquettes, teachers should create clear boundaries of what students can and can't do while online teaching. Safe sites must be explored for teaching.

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Chapter 15

Impact of COVID-19 on Indian Economy with Special Reference of Banking Sector

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Abstract

The Novel Corona virus, also known as COVID-19, has across countries in a very short period of time and has spread rapidly around the world. The Indian economy was already in a parlous state before COVID-19 struck. Due to the COVID-19 lockdown the economy is likely to face a protracted period of slowdown. The outcome of the economic impact will depend upon the duration and severity of the health crisis, the duration of the lockdown and the manner. Banks are the lifeblood of an economy. Banking sector perform an important role in economic development of a country. The feature of Indian banking system is large network of bank branches, providing several types of financial services of the people. The need for strong fiscal measures has become the voice of the banking sector to revive. This paper deals about the impact of COVID-19 on Indian economy with special reference of banking sector.

Keywords: COVID-19, Banking sector, Economic development.

Introduction

COVID-19 is a highly infectious disease caused by a newly discovered coronavirus. The corona virus seems to spread from person to person among those in close contact. Corona virus is a large family of viruses. The World Health Organization (WHO) has declared a public health emergency of international concern to coordinate international responses to the disease. On 11 March 2020, the WHO announced the outbreak of the novel Corona

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Virus Disease (COVID-19) as an pandemic and to treat detect and reduce transmission to save people's lives.

The banking sector is playing an important role for the growth of the economy. And it has now become necessary for every economy of the world. It is a difficult task for the Indian banking sector to provide accessible banking services, debt collection etc. in a country with such a population. Banking services are now declared as a basic need of every person. In recent pandemic situation there is a need to maintain social distance rules of lockdown as well as to avoid the covid-19. Banking sector is promoting the electronic/ NET banking. Banks allow to their customers to make transaction without visit to the bank branches. Electronic/ net banking services are becoming very popular during the period corona crisis due to its necessity.

The Government of India and RBI has introduced various economic and fiscal stimulus initiative to deal with the COVID-19 crisis. The Reserve Bank of India has taken certain measures to give some relief to the lending institutions in the areas of liquidity, regulation and supervision, and financial markets etc. government of India launched mobile App i.e. Arogya Setu App which can be used to track and monitor the movement of the people so that necessary action can be taken to stop the spread of covid-19. Mobile devices can be used for contact tracing of the travel history. This will stop the spread and reset the economy to the normal condition.

Literature Review

J.T. Pratheesh et al (2020): they study on **IMPACT OF CORONA VIRUS IN INDIAN ECONOMY AND BANKING SECTOR - AN OVER VIEW**” they conclude that RBI's governor, Shaktikanta Das, asked customers to use digital banking facilities as far as possible. RBI announced various steps to tackle the effect of the Covid-19 pandemic on Indian businesses and the economy.

M. Naik (2020): his research paper on **covid-19 outbreak impact on Indian economy**” is guided through the global economic scenario but mainly focused on the impact of a pandemic on the Indian economy. The aim of his paper is to analyse the constraints and impact of the Corona Virus on the Indian economy and seeking the solutions to the recent situation of India in economic perspective.

J.T. Pratheesh et al (2020): they study on **impact of corona virus in Indian economy and banking sector - an over view**” has covered the areas like the impact of corona virus towards the Indian economy and Overseas. Their study reveals the long-term implications of banks such as normalizing the workforce for multi-month stability, providing essential banking services to retail consumers, and fulfilling social missions to support households

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and businesses with credit. Anbu selvan and N.Vivek (2020): study on impact of covid-19 on the Indian banking sector conclude that Banking sector need to monitor the recent and possible effects of COVID-19 on their businesses and financial reporting.

Objective of The Study

1. To analyse the impact of COVID-19 on banking sector.
2. To study RBI's measure during COVID-19 period.

Research Methodology

The research study is made in a descriptive research. This study is based on the secondary data and data is collected from journals, newspaper and magazines etc.

Impact of COVID-19 Pandemic on Indian Economy

India is a developing country and it is one of the fastest-growing economies in the world. COVID-19 has hit our economy at a time when it is seen in our third-quarter GDP growth rate for 2019-2020. There are many sectors which are effected by the COVID-19 and their revival is not likely in the near future. Their profitability is steadily decreasing. Many organizations have taken loans from commercial banks and other financial institutions. They have to pay interest on the loan despite the poor financial condition.

Table-1: Sector Wise Debt to Equity Ratio

Sector	D/E Ratio
Real estate	0.86
Information technology (IT)	0.11
FMGC	0.49
Investment Banking and brokerage	0.083

Source: www.smallcase.com

High debt to equity ratio show that companies are raising more funds through debt rather than equity. In the above table, IT and investment banking and brokerage have low D/E ratio than Real estate and FMCG sectors. Impact of COVID-19 is likely to be less on those companies which have taken less debt as compared to those organizations which have taken high debt.

Moody's Investors Service said Covid-19 will likely depress global growth in 2020 below 2.5%, the recessionary threshold for the global economy. In the context of fiscal deficit, the revised budget estimate for the financial year 2019-20 was Rs.7.6 trillion which would increase further in the month of March 2020 amid the shock of COVID-19. In addition, the economic impact of COVID-19 will be visible. Budget estimate of fiscal deficit for the year 2020-21 which is Rs.7.9 trillion was estimated.

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Impact of COVID-19 on Banking Sector

Ministry of finance and RBI are stressed with the scare of contracting the coronavirus but more than they are worried about the percentage increase in the NPAs due to the huge negative impact of covid-19 on the different sector of the industries negative. Various factor like lockdown, lower consumption rate, higher casualties, higher job erosion higher expenses on health, reduction of imports and exports etc. are undoubtedly going to lower the financial health of the companies, firms and individuals. This will outcome in lower repaying capacity of the borrowers and further creating an long term effect on the level of NPA in banks.

The covid-19 crisis is past us, it is expected that the Indian Banks will shift gears to move away from traditional to modern banking. The traditional banks will stand the opportunity to leapfrog adopting cutting edge banking technologies and blaze the digital transformation trail. It is an opportune time for the banks explore better technology integration and customer adoption. The covid-19 outbreak has impacted both financial market and consumer emotions and with existing liquidity concerns and lockdown situations.

Measure Taken By RBI To Set-Off The COVID-19

RBI has taken a number of major initiatives to combat the covid-19 crisis.

1. **RR/RR:** Repo Rate/Reserve Repo Rate were cut by sizeable amounts, to 4.00% from 4.90%. The 91- day Treasury bill rate which measures the de facto stance of monetary policy, also reduced to 4.31% from 5.09% on 26 March 2020.
2. **LTRO:** Long Term Repo Operations (LTRO) mechanism, with a limit of Rs.1 trillion, was announced by RBI. Banks may find this attractive because they do not have to mark to market the investments made with these borrowed funds for the upcoming 3 years. However, there is a condition: the money that is borrowed here must be deployed in investment-grade corporate bonds, commercial paper, and non-convertible debentures, over and above the outstanding level of their investments in these bonds as on 27, March, 2020.
3. **CRR:** Cash Reserve Ratio (CRR) was decrease by 1 % to 3% or 100 bps. This is the first time when CRR has been changed in the last 8 years.
4. **Loan Moratorium:** RBI has now modified this regulation, so that banks can offer a moratorium of 90 days for term loans and working capital facilities for payments falling due between 1 March, 2020 and 31 May, 2020. If a firm applies for and receives a moratorium, the loan account in consideration will continue to be recognised as a standard asset and the SMA classifications will no longer apply. Interest on the term loans will continue to accrue during this period.
5. **MSF:** The Marginal Standing Facility (MSF) has been increased to 3% of the SLR available till 30 June. This step can be relaxed by allowing the banking system to get additional 137000cr liquidity under LAF window in times of low stress.

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6. **Working Capital Interest:** A 3month interest shall also be permitted to all lending institutions.

In addition to these initiatives actions, RBI took other action the CRR was exempted for all retail loans to ease funding costs for banks. On 1 April, the RBI created a facility to support with state governments' short-term liquidity needs. Earlier, RBI introduced regulatory measures to boost credit flow to the retail sector and MSMEs and provided regulatory emphasis on asset classification of loans to MSMEs and real estate developers. CRR maintenance for all additional retail loans has been exempted.

RBI Measure and its Impact

MEASURE	IMPACT
Another round of targeted TLTRO2.0 for banking that invest in NBFCs debt	Finance cost to get liquidity relief. Particularly small NBFC and MFIs as 50% of crore reserved for them
SRF of Rs.25000cr For SIDBI and Rs.10000cr NHB	Will benefit farm lenders, small business and housing finance companies who will get finance from institutions
RRR under the LAF deduct by 25bps from 4% to 3.75%	Will prompt the bank to give a share of Rs.6.9 lakh crore. That they have parked with the RBI
For all non-NPA loans, with late payment on March 1, which has the benefit of moratorium, will exclude the 90-day NPA criterion period	Banks will not have to classify some (non-NPA) stressed borrowers as defaulters even if they had trouble repaying before moratorium period
Banks to maintain higher provision of 10% on moratorium over two quarters	Will make sure that banks separate borrowers who are struggling with temporary liquidity and long-term problems.
210-day limit for resolving debt in default extended by 90 days; after this additional 20% provision will be made	Freezes the clock during the lockdown period; gives relief to banks on finalizing resolution plans
Commercial banks and cooperative banks stopped paying dividend for FY2020	Will help banks conserve capital and absorb debt losses; to be reviewed after 30september
RBI facilitates liquidity coverage ratio for commercial banks 80% from 100% ; to be restored by 1April,2021	Additional fund to be released for banks to lend
NBFCs can extend date of completion for commercial real estate project by 1 year	Relieves developers because they have more time, relief to NBFCs as they may delay NPA classification
Overdraft facility for state government under ways and advance' double to 60% of borrowing limit	Will ensure that the state government does not end its borrowing at the beginning of the year.

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Conclusion

After analysing the various reports, it is concluded that Indian economy has not been affected as badly as the other economies impacted. Banking sector one of the most vital sector to boost the any economy. Banking sector need to monitor the recent and possible impact of COVID-19 on its businesses and financial reporting. A number of steps have already been announced to provide liquidity, limit the immediate Non-Performing loan (NPL) impact, and ease personal distress for needy households in India. RBI and the government together are giving emphasis on encouraging electronic/digital payments. RBI advise bank's customers to use digital / electronic banking services amid Covid-19 outbreak.

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Chapter 16

Psychosocial Impact of COVID-19 on General Workers in Nigeria: A Review

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Abstract

The COVID-19 (Coronavirus) has now spread to over 50 countries in Africa. Nigeria reported its first COVID-19 case on 28 February, 2020. The psychosocial impact (Anxiety, Stress & Social connectedness) of this deadly virus cannot be over emphasized because many people are now very anxious and devastated about Coronavirus pandemic. As of 23rd August, 2020, the Nigerian Centre for Disease Control (NCDC) reported that there were 52,227 confirmed cases of Covid-19, 1,002 Deaths and 38,945 discharged. The world is now focused on testing, cure and preventing transmission of the disease and neglected psychosocial impact on people lives. The Nigerian government act quickly to control the spread by putting in place a number of measures, ranging from suspension of travelling, closure of schools, public gathering and enforcing of curfew as well as given fund to most affected states to control the spread of the pandemic. However, a more proactive approach by government is essential with regard to the presence situation because every crisis provides opportunities to think and reconsider of new strategies of re-structuring the entire sectors of society, particularly, healthcare sector. There is also need to draw a lesson from other contexts and rapidly design homegrown responses. In this regard, the central question is not just how to reduce the spread of the disease, but also how to implement these mitigation and suppression measures in a manner that is culturally and economically pleasurable. The government should provide more incentives to supply local needs through local production and innovation. Even though there is an efforts by some State governors in providing personal protective equipment locally. This idea can be expanded for other essential products and will boost supply chains and local industries to sustain jobs.

KEYWORDS: COVID-19, Psychosocial Factors, Nigeria, Anxiety, Social Connectedness.

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Introduction

Various nations across the world, are fronting unprecedented trials as a result of the Coronavirus (Covid-19) pandemic. Nigeria and her citizens are not exceptional (UNDP, 2020). The Nigerian ministry of health reported a case of COVID-19 on 27 February, 2020 in Lagos State, Nigeria, is the first case to be confirmed in the country since the beginning of the outbreak of the disease in Wuhan, China in December, 2019. The case was an Italian national who works in Nigeria and returned from Italy to Lagos. He was confirmed by the Virology Laboratory Network of the Nigerian Centre for Disease Control (NCDC). The government of Nigeria, through the Federal Ministry of Health has been strengthening various measures to ensure that the outbreak of COVID-19 is controlled and contained hastily. The multi-sectoral Coronavirus preparedness group led by the Nigerian Centre for Disease Control (NCDC) has immediately activated its national Emergency Operations Centers across the country in order to respond to the outbreak diligently and implement steady control measures. As of 23rd August, 2020, the Nigerian Centre for Disease Control (NCDC) reported that there were 52,227 confirmed cases of COVID-19, 1,002 Deaths and 38,945 discharged (NCDC, 2020). The Cases are becoming very alarming because of its daily increasing despite the consolidation efforts by both Federal and States government to contain the disease and this has associated uncertainty of increasingly testing psychosociological resilience of many Nigerians.

Globally, Coronavirus has been reported by almost all the countries of the world in which each government is doing it best with the little resource they have on how to contain, cure and prevent the disease. In a study by Varshney, et al., (2020) on initial psychological impact of Covid-19 and its correlates in India community. The findings revealed that one-third of the respondents (1106) had significant psychological impact and also reported higher psychological impact within young age, female gender and comorbid physical illness. This means that, presence of physical symptoms and contact history may predicted higher psychological impact on people. Another recent study from Denmark reported psychological well-being as negatively affected by COVID-19 pandemic (Casella, et al., 2020).

Similarly, a study from China also suggesting that more than half of the participants in the research on psychosocial impact of COVID-19 had a significant feeling of psychological impact of Coronavirus disease (WHO, 2020).

Therefore, the whole world is now focused on testing, cure and preventing transmission of the deadly disease. Nigerians and in particular workers are going through a numerous psychosocial trauma in adjusting to the current lifestyles and fear of contact of COVID-19 virus. The method of spreading and other related details about the disease continue to be

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updated in very few months, leading to enhancing uncertainty among the world populace (Huang et. At., 2019). During this trial time, most of the researches have been focused on understanding and preventing the transmission and exploring treatment options and issues with global governance (ECDC, 2019). Nevertheless, the psychosocial impact of this pandemic (anxiety, stress and social connectedness) among the general populace need a great attention from researchers. This aforementioned made us to reviewed some of the issues of the COVID-19 virus and see how it affect people lives psychosocially in Nigeria.

Anxiety and Stress

Anxiety and stress are both psychological construct. Anxiety is a physiological and psychological reaction to an expected danger, whether real or imagined (Ramalingam, 2006). Is also an emotional, characterized by feelings of tension, worried thoughts and physical changes like increased in blood pressure. That is, people with anxiety disorder are advising always to avoid certain situations out of worry like that of Coronavirus situation. In this COVID-19 era, workers and general public are anxious of contacting the virus either from places of work or from our daily interactions with others. While stress is the negative feelings and beliefs that arise whenever people feel unable to cope with demands from their environment (Aronson et, al., 2008). Is also a feeling of emotional or physical tension that our body react to any changes that needs an adjustment or response. There are most of a things occurred outside of control, including how long the pandemic will lasts, how other people behave and feel, what is going to happen in our communities. That is the tough thing to accept, and many of us respond by endless searching the internet for answer and thing over all the different scenarios that might happen. But as long as we continue focusing on questions with unknowable answers and circumstances outside our personal control, this strategy will get us nowhere apart from feeling anxious, weak and overwhelmed.

COVID-19 has a bearing on the social fabric of human society- stress initiated by the disease phobia and other economic losses always result in visible cracks where incidences of once socially unacceptable norms become more recurrent. Evidence suggests that health related pandemics are prone to increase the risks of domestic violence. Report from China revealed that domestic violence against health workers due to serious stress levels of pandemic on patients, abuse and exploitation of women and girls especially care givers is very alarming (UNDP, 2020). Though it's frightening time. We are in the midst of a worldwide pandemic, with many States and even the entire country shutting down. Many people not only the general worker are in the areas that have already been affected by the COVID-19. Others are bracing for what may come or wondering what is going to happen next. For most of the people, the uncertainty surrounding the disease is the hardest thing to handle because we don't know exactly we will be impacted or how bad things might get to us and this made many people very anxious about the issues surrounding Coronavirus.

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Social Connectedness

Social connectedness can be regarded as frequency of contact with others, personal relationship, and engagement in the community. That's a relationships you have with other people around you like your closed-friends, family, co-workers or more distant people you know casually. These kind of relationship with friends, co-workers or family members are all leaving with fear of contacting COVID-19 and this is making people to feel no confidence and isolate themselves, which is not good for our health considering the fact that we are in a time of gigantic turmoil. For instance, the issue of social distancing and lockdown by both Federal and State government has places many Nigerians on social unrest, hardship and frustration as a result of Coronavirus pandemic. Restriction measures like banning of inter-state travelling, public gathering, curfew, social distancing and quarantine implemented in context already characterized by fragility in conflict and humanitarian situations will remain a significant challenge to many governments. In such situations, social connectedness is the element that encourage the much needed resilience for societies to persevere in the face of crisis. As such, social networks and system which provide support and regulate well-being are always weakened through restrictive non-pharmaceutical measures. Implementing isolation measures without taking into consideration of the local context can further exacerbate the situation, lead to stress disorders, mental health and in some situations protracted violence (DFID, 2020).

Social distancing also adopts a certain level of spatial freedom. In highly populated compartments in Nigeria urban centres, this assumption may not hold. Consequently, for instance it will be difficult to enforce social distancing in congested IDP camps. There is also risk of further disintegrating the social values and the way safety networks required for healing and recovery in Nigerian contexts (UNDP, 2020).

Conclusion

Coronavirus pandemic has caused a lot of uncertainty in the lives of general workers and Nigerians in general, just like most of the countries in the globe. In the process of this review, we understood that significant proportion of Nigerians have had a psychosocial impact during the on-going crisis of COVID-19. The factor that inflict significant impact on many Nigerians is anxiety which left many individuals with fear of contacting the deadly virus (COVID-19) from many sources of live activities.

Recommendations

i. The gap chance is closing due to the rapid increase of COVID-19 confirmed cases in Nigeria. The government should immediately need to deepen efforts to reach out its people, to stimulate and mobilize them as the nation faces a collective threat. Policy options are

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dictated by many parameters including: existing weak health care system and governance deficits that have strained public trust.

ii. The government should provide more incentives to supply local needs through local production and innovation. Even though there is already an on-going initiative by some State governors to produce masks and personal protective equipment locally. This idea can be expanded for other essential products and will boost supply chains and local industries to sustain jobs.

iii. It's vital one to stay informed about the pandemic particularly what's happening in his/her community, so that one can follow advised safety precautions and do his/her part to slow the spread of COVID-19 because there is a lot of misinformation going around, as well as sensationalistic coverage that only feeds many people into fear (anxiety). But limit how often one check for updates because constant monitoring of news and social media feeds can quickly turn compulsive and counterproductive which result in fuelling anxiety rather than easing it. It is also good, one to stick to trustworthy sources such as Nigerian Centre for Disease Control, the World Health Organization and local public health authorities may quench one anxiety.

iv. There is need to draw a lesson from other contexts and rapidly design homegrown responses. In this regard, the central question is not just how to reduce the spread of the disease, but also how to implement these mitigation and suppression measures in a manner that is culturally and economically pleasurable.

v. A more proactive approach is essential in this concern. In coordination with UN, it is recommended that the government speedily mobilize procurement of adequate essential health equipment needed for testing, quarantine and medical care. Temporary hospital/quarantine centres could also be equipped and designated as emergency centres in addition to the present once on ground.

Recommendation for Post-COVID-19 Plan

The central question in the minds of many Nigerians and world at large is how affected communities would bounce back and in a sustainable manner recover from the pandemic. The health implications to those affected especially the most vulnerable in the community and economic distress caused by the pandemic could be enormous.

Any post-COVID-19 strategy recovery will need to re-establish the conditions for fast return to a path of economic growth, improved social contract, and overall human development that can foster more inclusive societies in the future. The survivors and others directly affected by the disease must be assisted to regain their dignity and affected communities supported to recover their livelihoods. Finally, a lot of innovation and

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infrastructures must be invest in order to improve and restore the glory of the entire health care system because the pandemic has exposed the weakness or poor of Nigerian healthcare delivery system (PTF, 2020).

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Chapter 17

An Overview of Economic Recession and Its Impact on Gross Domestic Product (GDP) in the Global Economy

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Abstract

Economic recession is the challenging phase in the business cycles. It will be occurred by changes of natural, social, political and economic factors .the result of recession is that great fall of country GDP and quality of life in particular period of time in the economy. Hence, all the government will be concern more about it. The aim of the study is to examine the level of GDP during the different recession scenario of the global economy. To do the same, the study has applied secondary data, statistical tools like the table, graph and descriptive analysis to show the changes of country's GDP during the study period. The study found that the advance economies have been last GDP greatly than other economies. In addition, the covid-19 economic recession in the global economy the regions like Europe and Central Asia, Latin America and the Caribbean, Middle East and North and Africa Sub-Saharan Africa have being affected by recession much greater than other regions in term of GDP and per capita GDP. The study suggest that the government must consider World Bank measures like Health and social protection, Fiscal policy, monetary policy and Financial, industrial, and trade policies to revive the economy from this economic recession.

Keyword: COVID-19, Recession, GDP, Per-Capita GDP, World Bank, Global Economy.

Introduction

In general term the recession means that it is situation where economy will downturn. It leads to high unemployment, slowing gross domestic product and high inflation in the economy. The international monetary fund defines as a global recession is a turn down in annual per-capita real World GDP backed up by worsening for one or more of the seven other global macroeconomic indicators like Industrial production, trade, capital flows, oil consumption, unemployment rate, per-capita investment and per-capita consumption. In other words, there is a decline in gross domestic product (GDP) for two or more consecutive quarters.

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A per this definition, since World War II there were six global recessions in the global economy have been faced like in the year 1974–75, 1984–85, 1990–93, 1996, 2008–09 and 2019–20. There are factors responsible for global economic recession such as High interest rates, increased inflation, reduced consumer confidence, Reduced real wages etc. In the micro contexts, an economic recession will reduce gross domestic product (GDP). It leads to reduce a person's individual jobs availability, income and purchasing power.

Finally, it will be affecting the quality of life persons and the society as whole. An economist believes that recession will become an economic, political and social issue in the country. Hence, recession is the more important phase for the government, business people and the individual to discuss and take appropriate decision. Therefore, this paper has been examined the GDP and per-capita GDP in the global economy with the different economic recession scenario.

Objectives and Methods Of Study

Objectives

- To examine the level of GDP during the different recession scenario of the global economy.
- To bring out the policy measures to improve the global economy of the post covid-19 scenario.

Methodology of the study

This study is based on the secondary data which has collected from various reports like: Global Economic Prospect 2020, Economic Time and other web sources. The period of the study years are like 1975, 1982, 1991, 2009 and 2020. To examine the level of GDP during the different recession scenario the available data have been processed and presented in suitable graph and tables.

Analysis and Interpretation

Comparison of GDP in the Different Recession Scenario in the Global Economy.

Table-1: Economies wise Global Recession and its impact on GDP in the different scenario of the time of the Global Economy.

Countries /indicators	GLOBAL RECESSION YEARS					
	1975	1982	1991	2009	2020	Average
World						
GDP	1.1	0.4	1.3	-1.8	-5.2	-0.8
Per Capita GDP	-0.8	-1.3	-0.3	-2.9	-6.9	-2.3

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Advanced Economies						
GDP	0.2	0.3	1.3	-3.4	-7	-1.7
Per Capita GDP	-0.7	-0.3	0.6	-4	-7.3	-2.3
EMDE's						
GDP	4.2	0.9	1.5	1.8	-2.5	1.2
Per Capita GDP	2	-1.2	-0.4	0.4	-3.6	-0.5
LIC's						
GDP	0	1	-0.7	5.9	1	1.5
Per Capita GDP	-2.4	-1.6	-3.6	3	-1.6	-1.2

Source: Global Economic Prospect 2020. Note: Percent changes in GDP and per capita GDP in respective groups are presented. “Non-recession” refers to all years excluding the five global recession years.

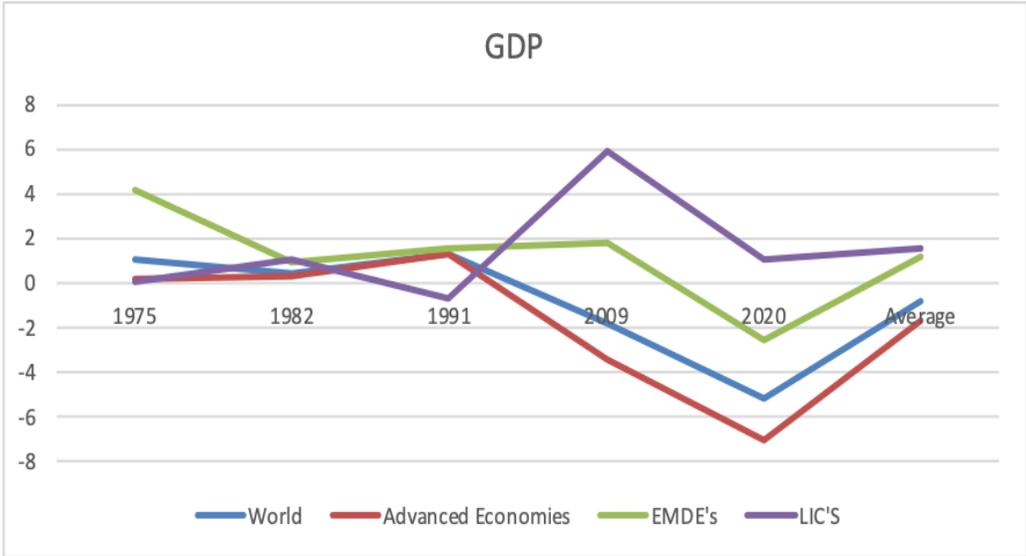
The above table -1 show that the two economic indicators like GDP and per-capita GDP to explore the impact of Economies wise economic Recession in the different scenario of the time periods such as 1975,1982,1991,2009 and 2020 in the Global Economy.

To begin, the advanced economies, which are developed country, had been affected greatly GDP at 0.2 from up to -7 and Per Capita GDP at 0.6 from up to -7.3 . Particularly during the time of covid-19, GDP and the per capita GDP percentage have been reaching below -7. It is the very least percentage GDP in the economic recession scenario. In the case of Emerging market and developing economies (EMDE)s, its GDP were 4.2% 0.9%, 1.5%, 1.8%,-2.5% during the economic recession time in the year like 1975,1982, 1991, 2009 and 2020. However, it’s the per capita GDP were 2 in 1975,-1.2 in1982,-0.4 in 1991, 0.4 in 2009 and its per capita GDP has been getting below -3.6 during the time of covid-19’s economic recession in the year 2020.

On the other hand the low income country (LIC), its GDP and Per Capita GDP in the years like 1975 at 0% ,1982 at 1% and -2.4% ,1991 at -0.7% and -1.6% ,2009at 5.6% and 3% and in the year 2020 at almost 1% and -1.6 . Its per capita GDP was greatly affected than GDP during the time of economic recession era. Over all, it can be seen that the advanced economies was higher impacted than other three categories of the economies. Moreover, the all three categories of the economies have being affected by covid-19s recession much greater than other economic recession in global economic scenario.

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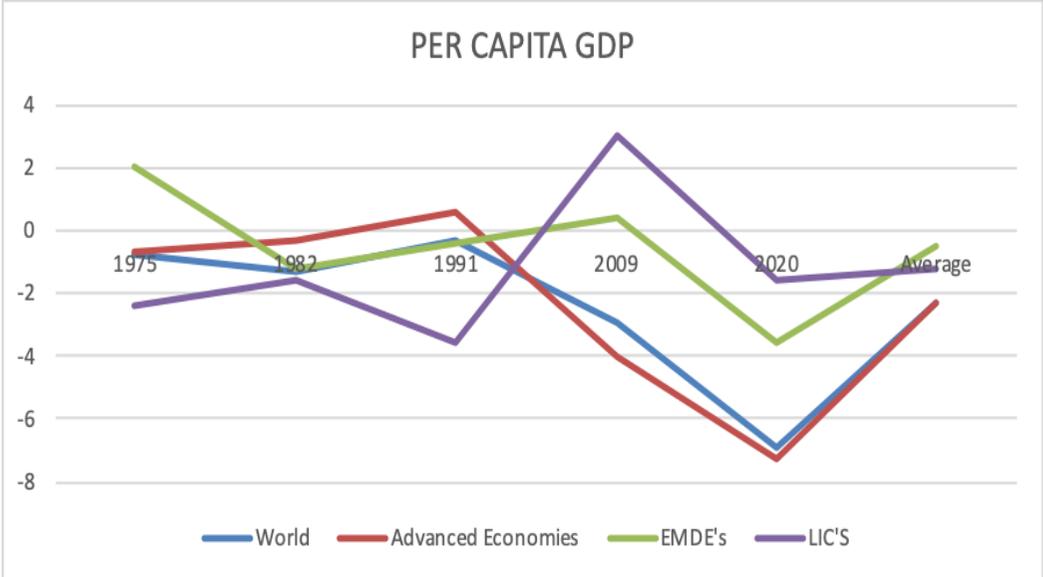
Graph-1: Economies wise GDP in the global economy during Economic Recession



The line graph reveals the Economies wise GDP during Economic Recession in the global economy. The years of economic recession were in 1975,1982,1991,2009 and in the year 2020 due to COVID-19. During economic recession, the advance economies countries were greatly affected. Particularly in the year 1991, 2009 and 2020, its GDP has been decreased to 2% and it went below -6% in the year 2020. In the case of Emerging market and developing economies (EMDEs) has been last GDP at below 2% and GDP went on almost -4% in the year 2020. However, the Low-Income Country (LICs) GDP was decreased below at 1% in the year 1975, 1982 and 1991. In the year 2009 recession time, it GDP was increasing above at 5%. Whereas the during the time of 2020, Low-Income Country’s GDP has been decreasing below at 2% level. Overall, it can be seen that the advance economies has been last GDP greatly than other country. Remarkably, the Low-Income Country (LICs) GDP much better off during the days of economic recession even in the period of covid-19.

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Graph-2: Economies wise Per-Capita GDP in the global economy during Economic Recession



The line graph indicating the Economies wise per-capita GDP during Economic Recession in the global economy. The years of economic recession were in 1975,1982,1991,2009 and in the year 2020 due to covid-19. During economic recession, the advance economies countries were greatly affected. Particularly in the year 1991, 2009 and 2020, its GDP has been decreased to 1% and it went below at -7% in the year 2020. On the other hand, the Emerging market and developing economies (EMDEs) has been last per-capita GDP at below 2% and GDP went on almost -3% in the year 2020. But, the Low-Income Country (LICs) per-capita GDP was decreased below at -3% in the year 1975, 1982 and 1991. In the year 2009 recession time, it per-capita GDP was increasing above at 3%. In 2020, Low-Income Country’s per-capita GDP has been decreasing below at -1% level. Overall, it can be seen that the advance economies and world economy have been last per-capita GDP greatly than other country. Particularly, the Low-Income Country (LICs) per-capita GDP decreased but per-capita GDP much less impact during the days of economic recession even in the period of covid-19.

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Table-2: Region wise Recession and it impact on GDP in the different scenario in the Global Economy.

Region /indicators	YEARS OF GLOBAL RECESSION					
	1975	1982	1991	2009	2020	Average
East Asia & Pacific						
GDP	6.6	6.3	8.3	7.5	0.5	5.9
Per Capita GDP	4.4	4.6	6.7	6.7	-0.1	4.5
Europe and Central Asia						
GDP	6.2	3	-5.8	-5.1	-4.7	-1.3
Per Capita GDP	5.3	2.1	-6.2	-5.4	-5	-1.8
Latin America and The Caribbean						
GDP	3.8	-0.6	3.3	-1.8	-7.2	-0.5
Per Capita GDP	1.4	-2.8	1.4	-2.9	-8.1	-2.2
Middle East and North Africa						
GDP	-1.3	-6.3	6.9	0.5	-4.2	-0.9
Per Capita GDP	-3.9	-9.4	4.4	-1.6	-5.8	-3.3
South Asia						
GDP	7.5	3.8	2.3	4.8	-2.7	3.1
Per Capita GDP	5	1.3	0.1	3.3	-3.8	1.2
Sub-Saharan Africa						
GDP	0.3	0.3	0.2	3.2	-2.8	0.2
Per Capita GDP	-2.4	-2.6	-2.6	0.5	-5.3	-2.5

Source: Global Economic Prospect 2020.

Note: Percent changes in GDP and per capita GDP in respective regions are presented. Only EMDEs are included. “Non-recession” refers to all years excluding the five global recession years.

The above table -1 reveals that the two economic indicators like GDP and per-capita GDP to explore the impact of region wise economic Recession in the different time periods such as 1975,1982,1991,2009 and 2020 in the Global Economy.

To begin with the East Asia & Pacific countries, this had been affected greatly GDP at 6% from up to -0.5% and Per Capita GDP at 4% from up to -0.1. Remarkably in the time of covid-19, GDP and the per capita GDP percentage have been reaching below at 0.5and -0.1. It is the very least percentage GDP and per capita GDP in the economic recession scenario.

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In the case of Europe and Central Asia, its GDP were 6.2% 3%, -5.8%, -5.1%, -4.7% during the economic recession time in the year like 1975, 1982, 1991, 2009 and 2020. whereas, it's the per capita GDP were 5.3% in 1975, 2.1% in 1982, -6.2 in 1991, -5.4 in 2009 and in the year 2020, its per capita GDP has been getting below -5.4 during the time of covid-19's economic recession .

On the other hand of the Latin America and The Caribbean, its GDP and Per Capita GDP in the years like in 1975 at 3.8% and 1%, in 1982 at -0.6 % and -2.8%, in 1991 at 3.3 % and 1.4%, in 2009 at -1.8% and -1.6%. In the year 2020 recession, its GDP and Per Capita GDP at almost -7.2% and -8.1. Particularly, it's GDP and per capita GDP was greatly affected in the years 1982, 2009 and 2020 economic recession era.

During the time recession scenario in the East Asia & Pacific countries, recession had been greatly affected on GDP at 6.9 % from up to -4.2% and Per Capita GDP at 4.4 % from up to -9.4. Remarkably in the year 1982 and in the time of covid-19 recession, its GDP and the per capita GDP percentage have been reached below at -6.3% and at -9.4% as well as at -4.2% and -5.8 in the year 2020 . In the year 1982 was the very least percentage GDP and per capita GDP in the economic recession scenario of East Asia & Pacific countries.

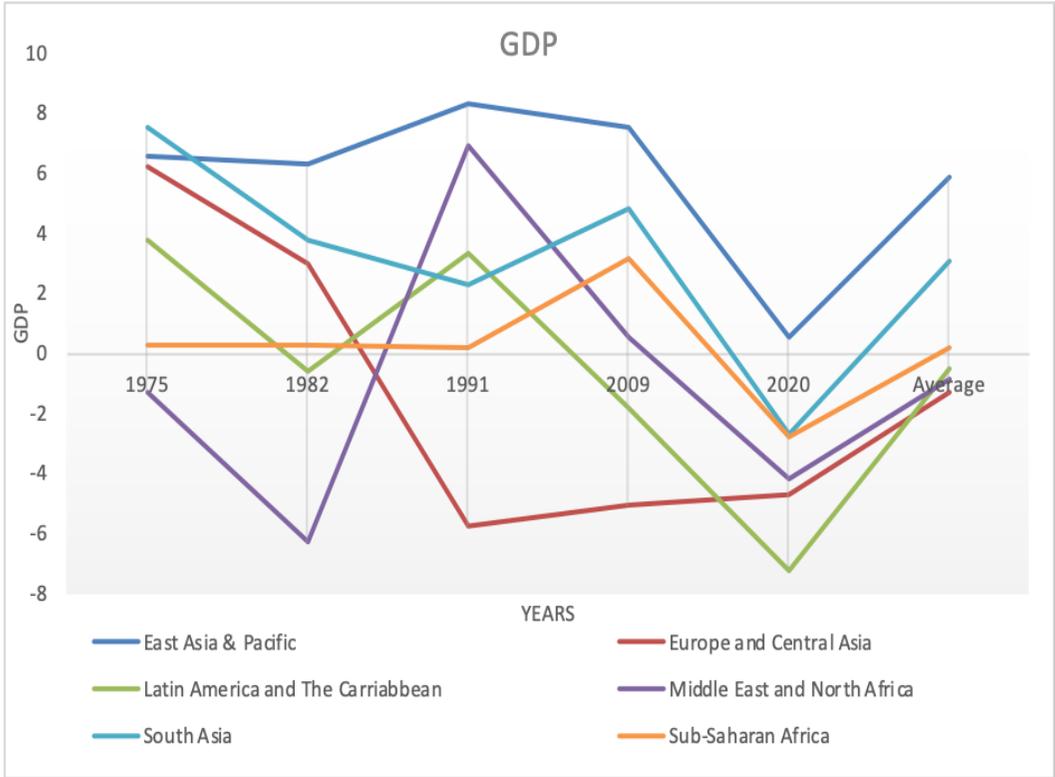
In the case of south Asia, its GDP were 7.5%, 3.8%, 2.3%, 4.8%, -2.7% during the economic recession in the year like 1975, 1982, 1991, 2009 and 2020. However, it's the per capita GDP were 5% in 1975, 1.3% in 1982, 0.1% in 1991 and 3.3% in 2009. Remarkably in the year 2020, its per capita GDP has been lasted greatly and per capita GDP went below at -2.4%. In addition, at the same year, its GDP reached at -2.7% during the time of covid-19's economic recession.

Finally the sub-Saharan Africa , its GDP and Per Capita GDP in the economic recession years like in 1975 at 3.8% and -2.4%, in 1982 at 0.3 % and -2.6%, in 1991 at 0.2 % and -2.6 %, in 2009 at 3.2% and 0.5%. In the year 2020 recession, its GDP and Per Capita GDP at almost -2.8% and -5.3%. Remarkably, it's GDP and per capita GDP was greatly affected almost all the economic recession scenario of sub-Saharan Africa.

Over all, it can be seen that all regions in the global economy has been affected by economic recession. Particularly, the region like Europe and Central Asia, Latin America and the Caribbean, Middle East and North and Africa Sub-Saharan Africa have being affected by recession much greater than other economic recession in global economy scenario. Moreover, the covid-19 economic recession has been creating great impact on GDP and per capita GDP in the world economy.

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Graph-3: Region wise GDP in the global economy during Economic Recession

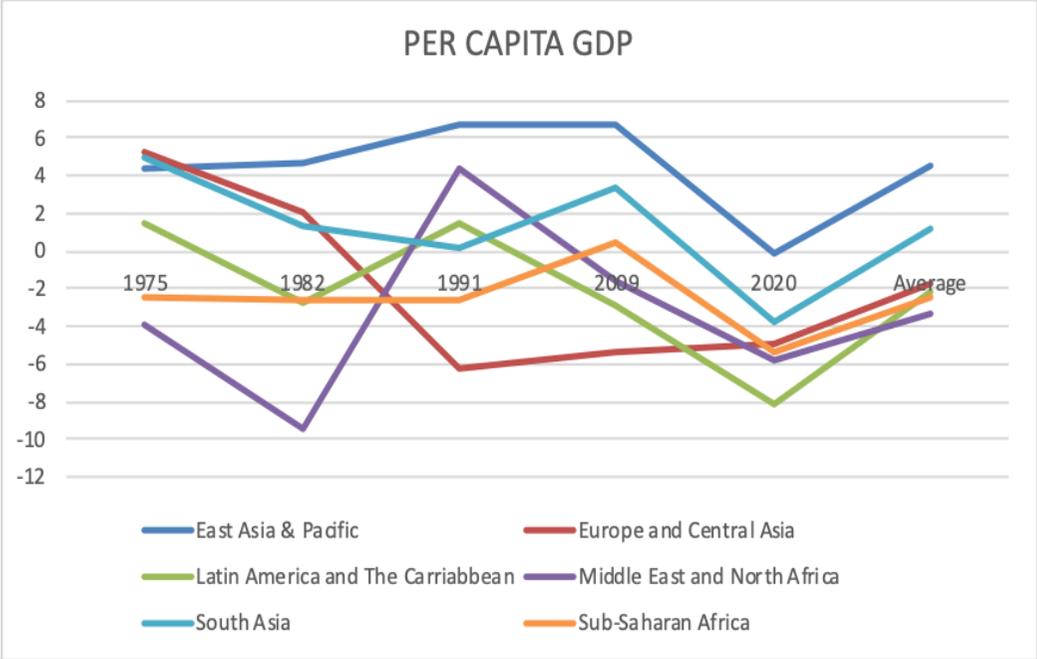


The line graph reveals the Economies wise GDP during Economic Recession in the global economy. The years of economic recession were in 1975,1982,1991,2009 and in the year 2020. During economic recession, the East Asia & pacific countries were moderately affected. But particularly in 2020, its GDP has been decreased to almost at 1%. In the case of Latin America and the Caribbean has been last GDP greatly and its GDP went to almost -6% in the year 2020 recession. On the other hand, the south Asia’s GDP being moderately affected by throughout the economic recession. Remarkably in the covid-19 recession, it made great impact on GDP in these countries. However, in the Europe and central Asia GDP was decreased below at 6% to -6% in the year economic recession. The countries like Middle East and North Africa have last GDP in the year 1975 and 1982 recession but it was much better in the year 1991 and 2009 recession. In the recession 2020, it has been greatly affected on these countries. Finally, in the sub-Saharan Africa countries have last GDP and went almost at 1% GDP in the year 1975, 1985 and 1991. But in the year 2020

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recession, it GDP fell to -3%. Overall, it can be seen that Europe and central Asia GDP has been last GDP greatly than other region countries. However, East Asia & pacific and south Asia GDP much better off during the time of economic recession except in the period of covid-19 recession.

Graph-4: Region wise Per-Capita GDP in the global economy during Economic Recession



The line graph indicating that the Economies wise per-capita GDP during Economic Recession in the global economy. During economic recession, the East Asia & pacific countries were moderately affected in per-capita GDP. But particularly in covid-19 recession, its per-capita GDP has been declined to almost at 1% level. In the hand of Latin America and the Caribbean countries were decreased per-capita GDP greatly and it went down to almost -6% in the year 2020 recession. On the other hand, the south Asia’s per-capita GDP being moderately affected by throughout the economic recession. Remarkably in the covid-19 recession, it made great impact on per-capita GDP in these countries. However, in the Europe and central Asia per-capita GDP was decreased below at 6% to -6% in the years of economic recession. The countries like Middle East and North Africa have last per-capita GDP in the year 1975 and 1982 recession but those were much better in the year 1991 and 2009 recession. In the year of recession 2020, it has been greatly affected on these countries. Finally, in the sub-Saharan Africa countries per-capita GDP were decline and went to almost at 1% per-capita GDP in the year 1975, 1985 and 1991. But in the year 2020 recession, it per-capita GDP great fell to at -3%. Overall, it can be seen that Europe and central Asia GDP has been last per-capita GDP greatly than other region countries. Whereas, the East Asia & pacific and south Asia GDP much better off

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than other countries during the time of economic recession except in the period of covid-19 recession.

The Policy Instruments to Improve the Global Economy in the Post COVID-19

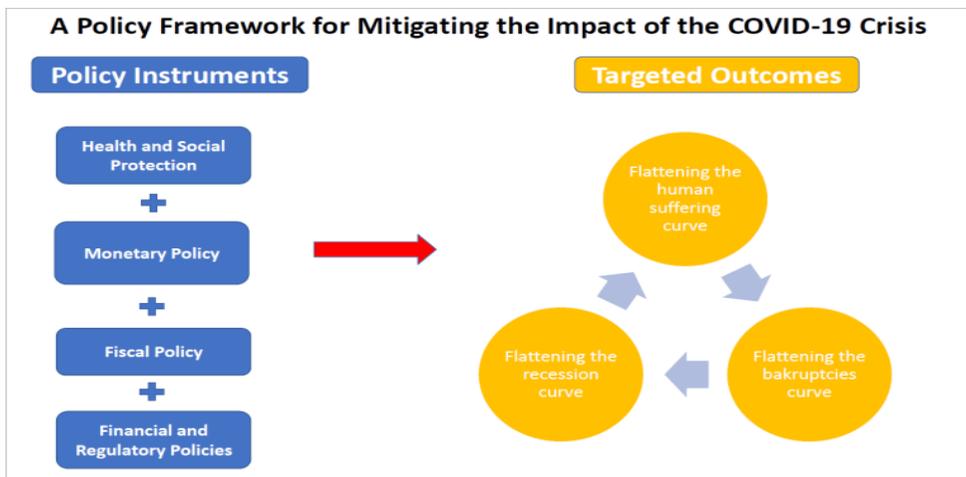
Scenario

COVID-19 is an exceptional to the economy. It has been changing our lives because it created severe unprecedented health and economic crisis. Its effects could be three in the economy such as Human suffering, severe global economic recession and deep financial and corporate sector distress. So, the set of policy instruments is needed to flatten the three effects. The World Bank, it has made a framework and measures to the government. It is related to health-sector capacity, fiscal space, financial sector development and monetary headroom. Definitely, this framework will be helpful to reduce the health and economic crisis in the current scenario in the global economy.

- This is the priority government policies related to **Health and social protection**. There are like ranging from testing and treatment, to hiring new medical staff, to expanding social assistance and implementing cash transfers to households.
- **Fiscal policy:** This policy is meant for revive the economic activities from the pessimistic environment in the economy. The Measures, it includes efforts on the revenue side like deferring filing and payment and reducing social contributions. The effort is to spending like low-interest loans to firms, reprioritizing spending and financing of the larger fiscal deficit.
- **Monetary policy.** This policy is related to the money supply of the central bank. The country can be cut monitory instrument policy rates and Provide liquidity to solvent banks.
- The government Interventions is much required in **Financial, industrial, and trade policies**. It include bank forbearance on domestic private loans with certain strict preconditions so as not to create financial instability down the road, reductions in collateral requirements, cancelling all but the most necessary procedures for firm registration, and reducing import restrictions and tariffs.

Figure 1 illustrates the main elements of the framework.

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Right now, the governments have to do all they can to limit the health, economic, financial, and corporate distress. It is important that these measures are timely, time-bound, targeted, and transparent while policy is implemented in the economy.

Finding of the Study

- The study found that the advanced economies were higher impacted than other three categories of the economies. Moreover, the all three categories of the economies have been affected by COVID-19's recession much greater than other economic recession in global economic scenario.
- The study reveals that the advanced economies have been last GDP greatly than other country. Remarkably, the Low-Income Country (LICs) GDP much better off during the days of economic recession even in the period of COVID-19.
- The study indicates that the advanced economies and the world economy have been last per-capita GDP greatly than other country. Particularly, the Low-Income Country (LICs) per-capita GDP decreased but per-capita GDP much less impact during the days of economic recession even in the period of COVID-19.
- The study finds out that all regions in the global economy have been affected by economic recession. Particularly, the region like Europe and Central Asia, Latin America and the Caribbean, Middle East and North Africa, and Sub-Saharan Africa have been affected by recession much greater than other economic recession in global economy scenario. Moreover, the COVID-19 economic recession has been creating great impact on GDP and per capita GDP in the world economy.
- The study reveals that Europe and central Asia GDP has been last GDP greatly than other region countries. However, East Asia & Pacific and South Asia GDP much better off during the time of economic recession except in the period of COVID-19 recession.
- The study found that Europe and central Asia GDP has been last per-capita GDP greatly than other region countries. Whereas, the East Asia & Pacific and South

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Asia GDP much better off than other countries during the time of economic recession except in the period of COVID-19 recession.

Conclusion of the Study

The recession in the economy will create high unemployment, slowing production and high inflation in the economy. As a result, there will be great fall of country GDP in the short periods of time. Moreover, it will be the influencing factor for social, political and economic crisis in the economy. So, all government will be more concern about this. During the study periods, in the year like 1975, 1982, 1991, 2009 and 2020 have been found that the advance economies have been last GDP greatly than other country. Particularly, the Low-Income Country (LICs) per-capita GDP decreased but per-capita GDP much less impact during the days of economic recession even in the period of covid-19. Moreover, the regions like Europe and Central Asia, Latin America and the Caribbean, Middle East and North and Africa Sub-Saharan Africa have being affected by recession much greater than other economic recession in global economy scenario. Particularly, the covid-19 economic recession has been creating great impact on GDP and per capita GDP in the world economy. So, the government must consider World Bank measures like Health and social protection, Fiscal policy, monetary policy and Financial, industrial, and trade policies to revive the economy from this COVID-19 economic recession.

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Chapter 18

Relevance of Gandhian Economic Thoughts in the Wake of Economic Downturn due to COVID-19 Crisis

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Abstract

India had adopted socialistic pattern of development since the time of independence wherein Mahatma Gandhi and other national leaders had called for the welfare of the masses and socialistic style of development focusing on self-reliance, village and small-scale industries, trusteeship, swadeshi, inclusive growth, social development, co-operative system of production etc. This liberalization, privatization and globalization (LPG) model of development has brought before us an era where, paradoxically, indigenous production units have died an untimely death due to cut throat competition, whereas at the same time, there have been prevalence of near monopolistic and oligopolistic market situation for foreign Multinational Corporations. This led to a shift away from the economic ideas as propagated by M.K. Gandhi and other national leaders. However, in the wake of COVID-19 pandemic and the consequent economic slump in 2020, it has been observed that there has been reversal of economic policies in the light of economic theories proposed by Gandhiji. This paper examines the rationality and relevance of Gandhian ideas in various spheres of economic activities of the country and highlights how the redesigned national policies to tackle the economic crisis as a result of global pandemic COVID-19 have brought back the renewed faith and relevance of Gandhian economic philosophies.

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Keywords: Small scale industries, COVID-19 pandemic, Gandhian economics.

Introduction

The growing economic order of privatization, liberalization and globalization with its strings in the hands of market forces of demand and supply has reduced the world to a mere global village wherein it calls for minimal economic controls for the private sector and also minimal restrictions for movement of goods, services, capital, technology and workforce. This new wave of globalization was introduced in India with its New Economic Reforms enunciated in 1991 and was given more structural and formal obligation when India became signatory country of WTO with its formation in 1995. India had adopted socialistic pattern of development since the time of independence, the seeds of which were sown because of the thinking and philosophies of our leaders of national movement. Mahatma Gandhi and other national leaders had called for the welfare of the masses and this philosophy found its roots in the socialistic philosophies of growth and development. However, this socialistic style of development had taken a backseat with the growing importance of market forces in all economic activities and nations across the globe resorting to market driven style of development, particularly the globalization.

This paper examines the rationality of Gandhian ideas that are implicit in various spheres of economic activities of the country co-existing with the liberalization, privatization and globalization(LPG) model of development and highlights how the redesigned national policies to tackle the economic crisis as a result of global pandemic have brought back the renewed faith and relevance of Gandhian economic philosophies.

Advent of Market Driven Economies and Fading Relevance of Gandhian Economics

Globalization means integration of economy of home country with that of the world. Integration means that all benefits from globalization should percolate and spread in all direction. In such a scenario of globalized and liberalized world, we often come across enormous literature and perspectives which basically criticize the Gandhian viewpoints on economy and declare his ideas of socialistic philosophy as a redundant in the present context. The ideas of socialism, self-reliance, swadeshi, co-operatives, village and small-scale industries, Sarvodaya, and doctrine of trusteeship had taken a backseat. The rationality of these ideas in the wake of new philosophies of globalization have been questioned and have been discarded altogether. In their place theories of foreign capital, minimal controls, free trade, competition, Multi-National Corporations (MNCs), private sector, minimal government intervention had made their places in the policies and programmes of the government. Economic reforms ushered in the era of growth wherein the nation registered spectacular rises in the growth of GDP and per capita income. The production enhanced and it seemed that fruits of globalization have started showing their results. However, in the social service front, not much could be said to have achieved. Even

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after twenty-nine years of New Economic Reforms 1991, we see that this integration has just made richer, even richer, and the poorer even poorer. The benefits of globalization have not benefitted and spread at all levels. Several researchers of several national and international organizations have shown through studies that poverty rate, especially squared poverty gap has increased post 1991, employment growth in public sector has been negative figures and in private sector too it has not been very remarkable; inequalities of income have increased wherein country ranks at number five amongst the countries having largest number of multimillionaires (World Wealth Report, 2019). In spite of this, it is not very unlikely that we come across several reports of starvation deaths happening in the country all over in newspapers. 95% of wealth is concentrated in the hands of the 10 per cent of business houses. Starkly in contrast to this, India is at 26th rank among 102 developing nations in the Multi-Poverty Index. We had left long back the ideas of socialism and establishment of egalitarian society as enunciated by M.K. Gandhi and other national leaders. The ideas of swadeshi, self-reliance, trusteeship, village industries could only find their places in books and libraries and not much was said or talked about them or any effort was made to bring them back to practice.

However, the turn of events in 2020, which directly did not have anything to do with Gandhian economic ideas, had created such an atmosphere that most of the aspects of Gandhian economic philosophies suddenly became relevant for the much-needed economic progress and development of the country.

COVID-19 Crisis and Break Down of Economies

The world, all over, witnessed a never seen before health disaster wherein the countries all over the globe awoke to a deadly virus, novel CORONA in December 2019 in Wuhan and since then the virus spread its feet all over the globe consequent upon any human physical contact. A person, infected with the virus, had the capability to transmit it ahead to other persons through physical contact and the disease COVID-19 would seriously damage the lungs, creating severe breathing problem culminating to death within very few days. Till the time World Health Organization declared this disease as global pandemic, it had struck almost every country of the world, taking millions of lives every day and creating a crucial health emergency in particular and overall emergency in general, because threat to human life being the most serious issue, was bound to affect all other spheres of activities too. In the absence any direct treatment for the disease available at the time, the countries all over the world including India resorted to complete lockdown of almost all activities involving human contact in a bid to curtail the spread and break the chain of infection. In India the complete lockdown continued for over two months wherein all activities, excluding those catering to the essential activities such as food, medical and others, completely came to a standstill. Business and economic development had majorly taken a backseat, reducing the overall production of the country, creating unemployment and reduced per capita incomes

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throughout. To bring the economy back to the rails in the post lockdown time, the Government of India had come up with a bailout package plan by introducing several incentives, policy packages, schemes etc. to bring reformation and revitalization in the economy. If we observe several of these policy packages offer by the government for the businesses throughout the country, these packages reflect the spirit of Gandhian economics. What had been considered as a redundant philosophy previously in Pre COVID times, had altogether become relevant and fruitful in bringing the economy back on track. Gandhian thoughts and economics have again found relevance in these times and several programmes have been designed keeping in mind the thoughts of what Gandhi had propagated long ago.

Co-Existence of Gandhian Philosophies with LPG Model of Development

Even amidst the rising debates of non- relevance and absence of Gandhian economic ideas with the present model of development, it is interesting to observe that these Gandhian philosophies were never non-existent. They are still present in some of the core areas of Indian economy and have been faring well and contributing in nation development. It is just that the focused approach towards LPG model have overshadowed its share in economic activities and have failed to highlight itself while assessing the determinants of growth of the Indian economy. It thus becomes pertinent to highlight those aspects of Indian economy which are still the building blocks of the economy and are waiting to get their due recognition.

- i. **Small scale, village and Khadi industries:** Gandhiji emphasized on development of village and cottage industries, an idea which has been incorporated in Article 43 of the Indian Constitution under Directive Principles of State Policy. Since the beginning of the planning era, the critics have been sceptic of the role of MSMEs in the economic development of the country. The emphasis on the large scale and heavy industries had taken away all the focus from the micro, small and medium industries (MSME). However, to put the figures right, with around 63.4 million units operating all over the country, the MSMEs contribute to 6.11 per cent of manufacturing GDP, 24.63 percent of service activities and account for 33.4 percent of India's manufacturing output. Today only 4000 enterprises out of all are large scale enterprises and the staggering 95 percent are MSMEs providing employment to 120 million people and contributing 49.66 per cent of exports from India(GOI, 2019) However, because of skepticism related with the working and role of MSMEs, only 16 percent of bank lending goes to cottage industries; a large number of MSMEs die an untimely death at the very nascent stage of growth and those willing to start up are running pillar to post for getting all approvals and clearances before actually starting up whereas countries like New Zealand and Singapore can start their startups in just a single day. No doubt India ranks 77th out of 190 countries in Ease of doing Business Index and New Zealand and Singapore are at 1st and 2nd positions respectively (Ease of Doing Business Report, 2019).

- ii. **Doctrine of Trusteeship:** Gandhiji emphasized on the role of capitalist class as the trustees of society. The capitalists who own vast resources should not consider the whole of their wealth as their own. They should rather hold their possessions in trust for the benefit of the underprivileged classes. They considered that capitalists are morally bound to share their wealth with the workers and the poor. Gandhiji suggested this doctrine as an answer to the growing problems of economic inequalities of wealth and income. He believed that adoption of this doctrine at the national and individual level is the only way to adopt egalitarian society. And by 1940s he had come to believe that state legislation was necessary for the compliance of this doctrine. However, in the present times of globalized economies, the doctrine of trusteeship no place as the wealth of the capitalist class is growing by each passing year post 1991. In today's market driven economies, the capitalists are the one who are the champions of growth and are considered as key drivers of innovation and investment activities in the economy. Under these circumstances the share of capitalists in the total national income has sharply increases, especially in the post globalization times. In such scenario they can, in no case, be considered as mere trustees of society. However, the government soon realized the need to mandate the involvement of capitalists in the nation and society development and hence Governments of India, in its Company Act 2013 made Corporate Social Responsibility (CSR) as mandatory for the corporate sector asking to spend at least 2 percent of their profits for the development and growth of society through development of schools, hospitals, and other social service activities. This rule applies to corporates having net profits of US \$ 0.68 million for three consecutive years. The government felt that corporate sector having earned and accumulated enormous wealth through developmental activities in the country, entail the responsibility of giving back a part of this accumulated wealth in the form of development programs solely done with the intention of philanthropy and social work. The government thus has clear cut guidelines for the activities to be included as CSR initiative by the corporate houses and it should in no way form the business activity of the company. In this regard several business houses and corporate groups have shouldered the responsibility of carrying out CSR activities and have been contributors for the growth and welfare of the society as a whole. Not just for the sake of law, the enterprises generally are contributing generously for philanthropy as they are focusing on shareholder capitalism versus stakeholder capitalism. While the former creates value addition for its stakeholders, the latter approaches the society at large. Azim Premji, the founder of WIPRO had increased their philanthropic commitments by \$ 7.5 billion in 2019 and transferred 34 percent of his shares of his company to Azim Premji Foundation, which is the charitable entity of the parent company. This brought the total value of the philanthropic

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contributions by Mr. Premji to \$21 billion including 67 per cent of economic ownership of Wipro. India's philanthropic contributions have gained its momentum with the social sector funding growing steadily at the rate of 11 percent between 2014-2018 (Indian Philanthropy Report 2019). Private funding has increased at the rate of 15 percent per year whereas the public funding has increase by 10 percent as per the report. Funding by individual philanthropists grew by 11 percent for the same duration. Infosys, the Indian IT major, spent INR342 crore (2% of the net profit) in various social activities. Tata Chemicals spent INR 25.68 crore in 2018-19 under various activities for improving the quality of life in the society.

- iii. **Importance of Self-reliance and Swadeshi:** Gandhiji firmly advocated the cause of swadeshi goods. This was the realistic way by which the nation and people may become self-reliant. The use of swadeshi would empower the domestic artisans and handicrafts and workers and would thus enhance their income and wellbeing. Such effort towards the empowerment of the working class would make the nation stronger and also self-sufficient without having to rely on the foreigners. However, in this era of globalization, the use of only swadeshi goods is considered as a hinderance for a free trade and development. Proponents of globalization advocate that competition is good for business because that would ensure the availability of variety and quality of goods for the people at fair prices. Competition is likely to lead to decline in prices of the goods which otherwise were available in very few quantities at high prices. However, the advent of MNCs in Indian economy has adversely affected the indigenous entrepreneurs in the country. Mergers & amalgamations and takeovers of the domestic, small enterprises of the country has nearly wiped out any competition which the entrepreneurs of the country could pose before the MNCs. It is ironic that the very competition argument which the advocates of globalization propose to favor the advent of MNCs has itself changed its course to eliminate any likely domestic competition that MNCs could have faced. On the face of it, we see heavy competition in the field of e-commerce companies namely Myntra, Jabong, Phon Pe and E-kart but in reality, they are subsidiaries of the same company Walmart. There are many other examples when the domestic Indian companies have gradually taken over the Indian firms and hence have created their near monopoly in their lines of business. Immediately after the New Economic Reforms were implemented in 1991, Atlanta-based Coke bought Parle's five leading soft drinks brands – Thums Up, Limca, Gold Spot, Citra and Maaza - in September 1993 for US\$40 million as part of its strategy to re-enter India again. And this was particularly in 'non priority area' in a major contrast to the actual commitment to invite foreign investment in only 'priority areas'. After this major takeover by a foreign MNC, takeover of the Indian firms had just

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become the firsthand priority of these foreign giants. In 2008, Japanese pharma major Daiichi Sankyo acquired 63.92% shares in Ranbaxy. Walmart acquired Flipkart in a hefty \$16-billion deal in 2018, valuing the Bengaluru-based firm at \$21 billion. Diageo acquired United Spirits in 2013 and became the largest shareholders with 25.02% stake. Adding to this, World biggest telecom giant Vodafone merged its Indian operation with Idea Cellular in 2018. The competition was thus only superficial, whereas in reality there is just illusion of any competition. In a scenario when most of the MNCs have all the more taken over the small indigenous companies, it is a relief that Swadeshi company as Patanjali whose turnover has crossed around US \$ 1362 million in just 10 years of its within its inception give tough competition and challenge to 75-year-old Unilever which is an MNC. Patanjali is a fast-moving consumer good (FMCG) manufacturing company, expected to register a revenue of INR 25000 crore in 2020-21 financial year and expected to replace Hindustan Unilever Limited for top FMCG company in India by next year with INR 40000 crore turnover. Similarly, another swadeshi brand Himalaya is leading with 19% share in facewash category ahead of all international brands like Garnier, Ponds and others. In automobile industry, the Indian corporate Tata Motors Limited is a global giant in automobiles and has had around 44% market share in commercial vehicle in India in 2019. It is giving stiff competition to other foreign automobile giants such as Toyota, Hyundai etc. The above data are testimony to the fact that swadeshi companies have held the responsibility of national development in a fairly responsible manner and the problem of unemployment and decelerating growth rate of GDP consequent upon the pandemic crisis in 2020, could well be tackled in an efficient and effective manner through the use and propagation of swadeshi, one of the Gandhi's ideology.

- iv. **Idea of Sarvodaya & Co-operatives:** Sarvodaya means 'Universal Uplift' or 'Progress of All'. The term was first coined by Mohandas Gandhi as the title of his 1908 translation of John Ruskin's tract on political economy, "Unto This Last"(Bondurant 1958). The idea of Sarvodaya calls for the idea of Co-operation, a system having a self-supporting community where the members co-operate in productive activities by contributing their labor, efforts, and resources. A co-operative is a joint organization owned by members collectively who are engaged in the production of goods or the supplying of services, for their mutual benefits. Workers' cooperative is a form of organization for the employment of a group of workers who are associated with one another for working together and joint reward by doing business activities. (Sapovadia & Patel). Several such worker's co-operatives have performed fairly well and have been able to generate not only earnings for the members but are also contributing for the GDP growth of the country and are providing quality products to millions of consumers. Self

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Employed Women's Association (SEWA), Ahmedabad, formed in 1972, comprises of self-employed women having membership of more than 1.6 million. SEWA enhances the capabilities of the women through skill development trainings and programs so that they become masters of their trade. The organization provides support for the growth and increased bargaining power of the workers. Another successful worker's cooperative is Shri Mahila Griha Udyog Lijjat Papad, a cottage industry, registered in 1966. It is an Indian women's cooperative, manufacturing and distributing food items and other FMCGs like detergents, snacks, pickles etc. starting with a seed capital of only \$ 1.5 in 1959, it has now a turnover of over \$109 million providing employment to 43,000 women across the country in 2018. It is famous for its products '*Lijjat papad*' (a spicy snack food) and '*Sasa*' detergent both of which have huge market. Another worker's co-operative which is making foray in business world with its unique business model is Mumbai Tiffin Box Supplier's Association (MTBSA). This tiffin service organization registered its commercial wing in 1968. Everyday approximately 5000 *dabbawalas* (lunchbox delivery boys deliver home cooked food from one's house/mess to their work place covering over 200,000 clients to every nook and corner of Mumbai. These service boys are self-employed getting salary approximately in the range of \$110-\$140 per month with a union initiation fee of \$410. The success stories of *dabbawalas* with their unique business model has its fan base all over the world. AMUL (Anand Milk Union Limited) is another major achievement and a success story in the field of co-operatives. The Gujarat Cooperative Milk Marketing Federation Ltd (GCMMF), is an Indian dairy co-operative society, jointly owned by 3.6 million milk producers. It stimulated India's milk production through India's white revolution and made the country the largest producer of milk in the world. which markets milk and dairy products under the Amul brand. The federation has achieved a turnover of INR 38,550 Crores for the financial year 2019-20 ending March 2020. The sales turnover achieved by Amul Federation is 17% higher than the previous financial year's turnover of INR 32960 crores. It has been registering Compound annual growth rate (CAGR) of 17 percent since last 10 years (News Release, 2020). Corollary to the arguments given for swadeshi companies, co-operatives are also another tool of nation building and development. At the time of COVID-19 pandemic crisis, co-operation in the economic activities at grassroots and village level, and through self-help groups, production of wage goods, food items and other non-food items can be scaled up which will at the same time generate employment and income of the nation. Gandhi's idea of co-operatives can thus serve as the nation saving tool at the time of crisis.

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Major Economic Policies to Tackle Economic Downturn in India

The COVID-19 crisis came at a time when the country was already going through a phase of economic crisis with GDP growth in January-March 2020 quarter ringing just to 3.1% leading to overall GDP growth of 4.2% in financial year 2019-20, which was an eleven-year low. Indian government adopted Unlock of the economy after the complete lockdown of 60 days. The phased unlocking of the economic activities led to gradual opening of business units, factories and enterprises. On May 12, 2020, the Government of India announced a stimulus package of \$260 billion to revive the Indian economy. This economic and COVID-19 relief package was worth 10 percent of India's gross domestic product (GDP). The Prime Minister in his speech called out for an *Atma Nirbhar Bharat*, a mission for self-reliance and use of swadeshi for the country in all its economic activities, an idea which was emphatically proposed by Gandhiji for nation building. The mission called for focus on self-employment schemes and also enunciated for the use of swadeshi goods to boost the demand for domestic enterprises and hence, accelerate the production of goods and per capita income. The mission is based on three parameters:

- Reduced dependence for trade on other countries and prioritizing domestic manufacturing
- Promoting Indian brands by becoming 'Vocal for Local'
- Continue to trade with foreign countries but focus on minimizing imbalances.

Keeping in mind these three parameters, the government announced several incentives and policy packages ensuring its focus on MSMEs, skill development, startup policies, public distribution schemes, employment guarantee schemes. Some of the highlights of the scheme are:

- i. collateral-free loan of up to INR 3 trillion (\$40 billion) to support small and medium enterprises (SMEs)
- ii. facilitating the ease of doing business by reforming start up policies such as time to register a property, the resolution of property disputes, and simplifying the tax regime for investors
- iii. Under Make in India campaign, disallowing global tenders for government procurement of up to INR 2 billion.
- iv. The scheme for migrant laborers who suffered loss of jobs during lockdown were offered '*Garib Kalyan Rozgar Abhiyaan*' implementing on a mission mode in 125 days in 116 districts of six states, where most of the migrants live.
- v. Ministry of Rural development to undertake infrastructure development work rural housing, construction of panchayat bhavans, cattle shed, community toilets, rural roads etc.
- vi. Women in self-help groups to be provided double the amount of collateral free loans amounting to INR 20 lakhs

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- vii. Below poverty line families to get free gas cylinders for cooking for three months under *Ujjwala* Scheme.
- viii. Make-in India scheme, Start-up India scheme, and Skill Development scheme to be implemented in more focused manner to create entrepreneurial atmosphere conducive for the growth of startups and new enterprises in the MSME sector.
- ix. New Education Policy 2020 announced focusing on skill based vocational development courses for students.

The several economic packages in post lockdown phase in the wake of pandemic have its focus on self-reliance, community development, donations and charities by the big capitalist classes, development and reformation of village and cottage industries, gender enabled development, removing inequalities of opportunities in the matters of finance, packages, incentives, subsidies, propagating and use of swadeshi, encouraging local brands and companies and skill development. The Prime Minister, in his speech, even reiterated Mahatma Gandhi's call for use swadeshi and self-reliance. He enunciated the skill development and focus on vocational education of children so that they may enable themselves to become self-employed. The renewed government focus on these aspects of the economy are a testimony to the fact that Gandhian economics has no way lost rationality and has potential to revitalize and revamp the economy with all its fervor. The ideas of trusteeship, self-reliance, skill development, swadeshi etc. have not lost their color and are still effective enough not only to fight pandemic led economic disaster but also to for the qualitative development of the economy in the long term and ushering in the Inclusive growth of the nation.

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Chapter 19

Changing Dynamics of Industrial Relations in India

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Abstract

With COVID - 19 paralysing the economy of India due to the lockdown it has made the businesses to re-evaluate their strategies as they are facing severe economic hurdles due to the lack of economic activity. The paper examines the way that industrial relations would be changing in the future as various State Government's has come out with changes in some of the labour laws as they feel that it might help the industries to survive and also to attract more investments in their respective states. The worst hit has been the labour class as they would feel the brunt in the future due to the changing dynamics of Industrial Relations. The laws which has protected them from a long period of time are being changed and the balance of power has shifted towards the employers due to the upcoming labour law changes.

Keywords: Labour Law, India, Industrial Relation.

Introduction

The power structure in the society has been towards the well to do section of the society towards while the weaker sections of the society need protection and India has been no exception. That was the primary motivation behind the organization of workers into Trade Unions according to profession, industries and also formulation of labour laws by the government. But the pandemic has led to various ordinances by the state governments of India to change the existing labour laws which could have a far reaching effect on industrial relations. These laws have been a source of protection for the labours from the exploitations of the employers and even acted as a source of job security for them.

Viewpoints on Indian Labour Laws

Deakin & Haldar (2015) in their article argued that India's labour laws are set at very high level for a developing economy, which would could have been used as a source of comparative advantage through use of low-cost labour .

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Banerjee et al .(2012) in their article said that India's labour laws are decades old and rigid in nature which has resulted in slow economic development. It has been argued that these labour laws are slowing the investment level and also delaying the growth of employment. The processes of liberalization of market have also led to various changes and challenges to the employment relations in the country.

CII-World Bank (2002) reported that the Industries found that several regulatory provisions had an adverse effect on the growth of industry and employment and there were demands for changes in laws for more flexible use of labour.

Labour Law Reforms

The supporters of labour market deregulation in India argue that the existing regulatory framework gives more power to workers and trade unions compared to employers, which creates inflexibilities, conflictual industrial relations and consequently lower industrial output. It is often argued that these labour laws were pro-labour in nature thus slowing the investment and holding up the growth of employment. Supporters of the reforms are of the belief that since labour laws and their provisions have been so poorly implemented in India that their suspension should not make much of a difference. These labour laws contain certain rights that workers and trade unions can use to secure their denied rights and privileges .As many as 10 states - Rajasthan, Punjab, Odisha, Maharashtra, Himachal Pradesh, MP, Haryana, Assam and Gujarat have allowed for the extension of daily working hours from 8 to 12 hours. While the Uttar Pradesh government has proposed for an exemption of almost all labour laws for the next three years by taking these ordinance route. The Gujarat government also announced that they would allow new companies setting up factories over the next 1200 days to be exempted from major labour laws. Even the Central government has been trying to increase the hours of work of factory workers from the last 6 years.

COVID-19 crisis has given the states an opportunity to go through the reforms like - Increasing the daily hours of work , meagre minimum wages ,Reduction of social security benefits to the workers, Permitting the engagement of contract labour for any kind of work.

According to XLRI Jamshedpur professor and labour economist KR Shyam Sundar the workers would be denied many rights after the suspension of the labour laws. The workers would lose the following rights if the reforms are carried out- the right to form unions, right to raise an industrial dispute, right to have grievance redressal machinery, right to gratuity, the right to have welfare facilities.

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Importance of Labour Laws

The near about suspension of labour laws in the various states might lead to chaos in the labour market. These changes will be terrifying for workers, who have always fought for labour rights since many past decades. The Government of India is working towards combining close to 38 Act into codes. This step is expected to bring about simplicity in the employment relations in the country. These three Labour Codes are - The Wage Code Bill, The Social Security Code Bill and The Industrial Relations Code. Moreover, labour laws not only provide labour rights and privileges but it is also helpful in creating a disciplined workforce. The employers will need support from these laws to maintain order when workers and labour unions behave in an indiscipline manner. The suspension of labour laws leads to the informalization of the formal sector through weakening of multiple labour market securities like employment, safety, skills, and income. This will result in the workers with limited skills being pushed out of the organized sector. Workers overthrown from the organized sector will crowd into the unorganized sector and so the large supply of labour will pave the way for the decrease in wages.

Role of Trade Unions

As many as 10 Trade unions such as Congress-affiliated AITUC and CPI's CITU have said these moves by the states is part of a larger plan to attract companies from China to India by projecting India as a cheap labour and also industry friendly destination. Political parties such as the CPI (M), the CPI, and RJD have given a letter to the President seeking his intervention at the suspension of various labour laws by states. The trade unions are also feeling betrayed as they were never consulted before bringing in the labour law reforms process despite the Government assuring the workers that the changes in the labour laws will be made after reaching an agreement with the trade unions besides the trade union would be consulted before any step is taken by the Government. In fact certain section of society feels that India's trade unions are hesitant to approach the judiciary. Even one former Supreme Court judge has criticized the judiciary for the way they have handled issues like labour in general and migrant workers. Even ILO has taken notice of the situation and is seeking information from trade unions in India on job and wage losses and in-depth details of bipartite and tripartite social dialogue that has taken place between the Government and the Trade Unions.

Conclusion

The state government should consult the trade unions before bringing in any ordinances as they should be able to trust the trade unions and take them into confidence as these trade unions represents the labour class. These ordinances even though it sounds exploitive in nature time would say whether these laws can really bring about economic development of both the country and the labour. Besides it would be noteworthy to see whether they can bring in any investments to the various states which has gone forward with various

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ordinances. Thus it can be seen that the dynamics of industrial relations would be changing in the future and time would say where the balance of power would tilt – towards the employers or labours or there would be perfect balance.

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Chapter 20

Financial Inclusion: An Inevitable Solution to Fuel Indian Economy

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Abstract

The arrival of banking technology with the realization that poor are bankable with good business prospects, with the push of financial inclusion initiatives by the government, has strengthened financial deepening further and provide resources to the banks to expand credit delivery. The banking technology initiatives meant for financial inclusion should be collaborative and innovative with an objective to reduce the transaction costs. Thus, financial inclusion along with the Governmental developmental programmers will lead to an overall financial and economic development in our country. In the case for most developing countries also, extending the banking services to everyone in the country, is the key driver towards an inclusive growth. The Reserve Bank of India has joined hands with Government of India in its constant efforts to spread financial inclusion as primary objective for country's economic development. Major steps have been taken in the last five decades that includes awareness campaign for managing personal finances, up gradation of banking infrastructure, extension of branch banking, setting up of co-operatives and regional rural banks, introduction of mandated priority sector lending targets, lead bank scheme, formation of self-help teams allowing BCs/BFs to be appointed by banks to supply door step delivery of banking services, zero balance BSBD accounts and other allied facilities to attract masses toward financial inclusion. The fundamental objectives of these initiatives are to bring under ambit large section of population under financial system, to provide them sources of fund, financial support for their sustained growth and development which till now remained financially excluded from India growth history in last few decades.

Keywords: Financial Inclusion, Developing Economies, Inclusive Growth

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Introduction

Financial Inclusion is the core aim of many developing nations for their inclusive growth. Many researches, in the last few years, have concluded and have correlated the financial exclusion and the poverty existing in developing nations. World Bank declares in a statement released that “Financial inclusion, or wide access to financial services, is defined as non-price barriers in the use of financial services.” The phrase Financial Inclusion is always interpreted in a relative dimension. Depending on the development of any specific country, the phrase and the extent of Financial Inclusion change its dimension. It’s been astounding truth that India ranks second in the world in terms of financially barred households just after China. For the comprehensive growth and development of economy the Reserve Bank of India has strived to provide high weight age to the financial inclusion. Broadly the poor and downtrodden sections of the society were fully ignored by the formal financial institutions in the past. In the race of making chunks of profits or the complexities involved in providing finance to the weaker section, this section was always ignored or often neglected.

Financial inclusion or more appropriately termed as inclusive financing is the delivery of financial facilities, at affordable expenditure, to sections of disadvantaged and low income segments of society. The field of financial inclusion pose much challenges to the regulatory bodies, institutions involved and society at large such as bridging the gap between the sections of society that are financially excluded within the ambit of the official financial system, providing financial education and intensification of credit delivery mechanisms etc so as to improvised the financial economic growth in the country. Uncontrolled access to public commodities and services is the basis for an open and efficient society. It is argued that as banking facilities are in the category of public services; the accessibility of banking and payment services to the entire population without discrimination is the prime objective of this public policy. Thus the term Financial Inclusion is a process of ensuring access to financial services and provides timely and adequate credit, needed by weak groups such as poor sections and low income e groups at an affordable cost.

Access to comprehensible, simple and convenient financial services and credit by the poor and susceptible groups in disadvantaged areas and underprivileged sectors is recognized as a pre-condition for increasing the growth and reducing income disparities and poverty. Access to a well-performed financial system, by building equal opportunities, permitting economically and publicly debarred people to join together into the economy and actively contribute to development and protects themselves against economic shocks. It has observed about the common global consensus regarding the importance of access to finance as a crucial poverty alleviation tool, it is estimated that globally over two billion population are currently not connected from access to financial services.

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Providing financial services to the wider sections of the population, a wide network of financial institutions has been established over the years in India. All types of Banks (commercial and non-commercial), Regional Rural Banks (RRBs), Urban Co-operative Banks (UCBs), Primary Agricultural Credit Societies (PACS) and post offices caters to the needs of financial services of the people. The initial steps taken by the Reserve Bank and the Government of India towards promoting financial inclusion since the late 1960s have considerably improved the access to the formal financial institutions. This sector has significant role in bringing financially detached people in to formal financial sector as policies of the government and Reserve Bank towards financial inclusion are implemented through banking sector.

Evolution of Financial Inclusion in the World

The term "financial inclusion" has gained importance since the early part of the year 2000, as a result of identifying financial exclusion and its direct correlation to poverty, according to a report released by the World Bank. According to United Nations Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that fulfil their requirements – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way. The goals UN has set for any country for the attainment of Financial Inclusion are

- Access to an inexpensive but variety of monetary services like savings or deposit services, payment and transfer services, credit and insurance to all the households.
- Financially secured institutions governed by clear regulation and performance standards.
- Sustainability of operations, continuity and certainty of investment and services by the stakeholders running and providing these services to all the section of society.
- Completeness or holistic approach to ensure choice and affordability for clients.

Former world organization Secretary-General Kofi Annan, on 29 December 2003, said: "The stark reality is that most poor people in the world still lack access to sustainable financial services, whether it is savings, credit or insurance. The great challenge is to deal with the constraints that exclude the society from full participation within the monetary sector. Together, we are able to build comprehensive monetary sectors that facilitate all folks improve their lives." Alliance for Financial Inclusion (AFI) Executive Director Alfred Hanning highlighted on 24 April 2013 that "Financial inclusion isn't any longer a fringe subject. It is currently recognized as a vital a part of the thought thinking on economic development supported country leadership.

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By establishing relationship between financial inclusion and inclusive growth and also by providing the full services of bank for agriculture and rural development, the UN aims to increase financial inclusion of the poor by developing appropriate financial products for them and increasing awareness on accessible monetary services strengthening monetary skill, particularly among women. The UN's monetary inclusion product is supported by the World Organization Development Program.

Evolution of Financial Inclusion in India

Prior to 1990, many initiatives were undertaken by Government of India, Reserve Bank of India and allied agencies for enhancing the utilization of the banking industry for balanced growth in the society. Right from nationalization of private banks, beginning of priority sector lending rules, the Lead Bank Scheme, branch licensing norms with focus on rural/semi-urban branches, interest rate ceilings for credit to the weaker sections and creation of specialized financial institutions to cater to the requirement of the agriculture and the rural sectors having the bulk of poor population. The different phases of financial inclusion measures at various points of time are been described as below.

The First Phase (1960-1990): Credit Channelling

The term Credit channelling was introduced in India in late 1960s. In the first phase (starting in the late 1960s to the 1980s), the focus was on channelling of credit to the neglected sectors of the economy. Particular stress was laid on underprivileged sections of the society. The term 'financial inclusion' was not in vogue in India then. During this period, 19 banks were nationalized to improve the rural and agricultural credit. The Reserve Bank promoted the institution of the Credit Guarantee Corporation of India in 1971 for giving guarantees against the risk of non-payment. The major emphasis of the branch licensing policy during the 1970s and the 1980s were the expansion of commercial bank branches in the rural areas, resulting in a significant expansion of bank branches thereby increasing effective services to the population in every branch. The branch growth policy was designed, inter alia, as a tool for reducing inter-regional disparities in banking development, deployment of credit and urban-rural pattern of credit distribution.

After the major emphasis of the branch licensing policy of commercial banks, the National Bank for Agriculture and Rural Development (NABARD) was established as an apex rural development bank in the year 1982, through an Act of Parliament. It aims to provide refinance for agriculture, allied activities, small scale industries, cottage industries, rural artisans and crafts in an integrated manner.

The Second Phase (1990-2004): Strengthening Financial System

In the second phase spanning the early 1990s to March 2005, the focus was mainly on strengthening the financial institutions as part of financial sector reforms. Financial Inclusion in this stage was encouraged mostly by the opening of SHG-bank association

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program in the early 1990s and Kisan Credit Cards (KCCs) for giving credits to farmers. An important step to bring monetarily excluded individuals at intervals the fold of formal financial sector was the promotion of Microfinance in Asian nation. The SHG-bank linkage program was launched by NABARD in 1992, with policy support from the Reserve Bank of India, to facilitate collective decision making by the poor and provide ‘door step’ banking. Banks, as wholesalers of credit, were to provide the resources, while the NGOs were to act as agencies to organize the poor, build their capacities and facilitate the process of empowering them.

To promote the SHG-bank linkage program in the country, banks were advised in 1998 that SHGs who were engaged in promoting the saving habits among their members would be eligible to open savings bank accounts. Successively to the Monetary and Credit Policy declaration in the year 1999-2000, banks were recommended that interest rates applicable to loans given by them to micro credit organizations or by the small credit organizations to SHGs/member beneficiaries would be left to their discretion. Henceforth, banks were advised that they should provide adequate incentives to their branches for financing the SHGs and the group dynamics of working of the SHGs may be left to themselves.

The Third Phase (2005 - 2019): Financial Inclusion

In the third phase, beginning in April 2005, ‘financial inclusion’ was explicitly made as a major policy objective and thrust was on providing safe facility to savings deposits through ‘no frills’ accounts. This phase focused on financial inclusion on the individual and household level. The important difference in the recent focus on financial inclusion is the adoption of market-oriented approach that recognizes the importance of business consideration of banks and other financial institutions for the long-term sustainability of the process. The Annual Policy Statement for the Year 2005-06 of the Reserve Bank of India observed that although there had been expansion, greater competition and diversification of ownership of banks leading together improved efficiency and complete resilience, there were lawful concerns with regard to the banking practices that tended to exclude vast sections of population, in particular pensioners, self-employed and those employed in the unorganized sector. The Statement further observed that while commercial considerations were important, the banks had been bestowed with several privileges, especially seeking public deposits on a highly leveraged basis and therefore should be appreciative to provide banking facilities to all sectors of the population on an equitable basis.

To conclude this third phase, financial inclusion in India, was adopted a strategy of Indian banks across India was to accelerate the growth and development and condense the income inequality and poverty, the access to safe, easy and reasonable credit and other financial services to the poor and underprivileged groups are recognized as a pre-condition. The

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major objective of financial inclusion is delivery of banking and financial services in a fair, translucent and impartial manner at reasonable cost to the vast sections of disadvantaged and low income group. More and more opening of bank branches in unbanked regions happened, in this phase, to take proper financial services across the country. Government of India along with the RBI have been making continuous efforts like the '*Jan Dhan Yojana*' announced in August, 2014 to promote financial inclusion and to promote and support the national objectives of the country in this direction

The process of financial inclusion received further impetus in November 2005, when banks were advised to make available a basic banking 'no-frills' (Nil balances) account with minimum charges, to enlarge the reach of such accounts to huge sections of the population.

It observed that there were legitimate concerns in the banking practices that tended to exclude vast sections of population, in particular, pensioners, self-employed and those employed in the unorganized sector. It also indicated that the Reserve Bank will:

- i. Implement policies to encourage banks which provide extensive services, while de-incentivizing those which were not responsive to the banking needs of the community, including the underprivileged.
- ii. Monitor the nature, scope and cost of services to assess whether there were any denial, implicit or explicit, of basic banking services to the common person, and
- iii. Urged the banks to review their existing practices to align them with the objective of financial inclusion.

The infiltration of financial services in the rural areas of India is still in the budding stages. The causes for low demand for financial services in rural areas could be low income level, lack of financial education, other bank accounts in the family, etc. Simultaneously deficit on the supply side include factors like no bank branch in the vicinity of population; lack of suitable products meeting the needs of the poor people, complex processes and language barriers etc. Both these supply and demand demerits had contributed in slow paced growth of Financial Inclusion and in turn sluggish inclusive growth in India.

Issues, Challenges & Strategies in Financial Inclusion in India

There are many challenges in the implementation of financial inclusion in India some of them are:

- a. **Change in the Approach of Banks:** Few banks do not have the desire to achieve financial inclusion. At places lack of cooperation from the bank employees is one of the major causes hampering the basic policy of financial inclusion. Providing affordable credit impacts the profitability of the banks and low cost credit to the poor or disadvantaged and low income group is the risky affair. Thus all this factors impact financial inclusion in India.

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- b. **No operation In Bank Account:** Only access to credit or banking facility in unbanked area is not financial inclusion. Studies reveal that there is hardly any transaction in such accounts.
- c. **Microfinance Institutions (MFIs):** The MFIS has served the underserved /unnerved populace in the last few years and improved access to credit. However there have been quite debatable issues on the style of corporate governance and ethics of conducting the business.
- d. **Business Facilitators (BFs)/ Business Correspondents (BCs):** Viability of BFs/ BCs model in general has remained a critical issue. Further banks and their BFs/ BCs also exposed to huge risk of cash management. There is also requirement of training of the BFs/ BCs to enhance the trust level of the end customer.
- e. **Mobile Banking:** The use of mobile has increased very rapidly and banks have started collaborating with mobile companies to develop alternate channel of delivery of banking business. However banks are yet to exploit this resource even for their existing customers.
- f. **Innovative Product Lines and Processes:** There is a need for innovation in the products offered in rural and urban area because the requirement of two different locations is totally different.
- g. **Financial Literacy & Awareness:** Banks are reluctant to organize regular campaigns for spreading awareness about financial inclusion and financial literacy.
- h. **Universal Financial Inclusion:** The current policy objective of inclusive growth cannot be achieved only by bank alone. The policy should be supported by regulators, government, IT solution providers, media and the public at large.
- i. **Viable Business Proposition:** Bank must view financial inclusion as a viable business proposition rather than just a policy or regulatory obligation. To remain viable banks need to offer various products and services to the customer so that they retained for a long period.

Financial inclusion must be followed as a strategy by every bank in India. All commercial banks and the RBI have been working in this area and have adopted various measures for its effective implementation. All these efforts have shown results also in areas like number of branches, number of ATMs, BSBDA, number of credit cards issued, provision of micro finance etc. However, on the other side there are issues like approach of banks towards FI, governance of microfinance viability of the BFs/BCs model; financial literacy and awareness need serious attention.

Present Status of Financial Inclusion in India

In order to study the important aspects of financial inclusion it is important to know the method to measure the financial inclusion. There are many methods for measurement of financial inclusion but according to Thorat (2006) one common measure of financial

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inclusion is the percentage of adults with bank accounts (deposit and credit). A study by Chakraborty (2006) showed that in India there are 17 credit accounts and 54 saving accounts per 100 persons and at the same time only 13 percent people are availing loans from the banks in the income bracket of less than Rs. 50000 per annum. Leeladhar (2006) study revealed that one of the benchmarks employed to assess the degree of reach of financial services to the population of the country, is the quantum of placed accounts (current and savings) held as a ratio to the adult population. In Indian context, taking into account the census of 2001, the ratio of deposit accounts to the total adult population was only 59 percent. But within the country, there is a wide variation across states. For instance, the ratio for the state of Kerala is as high as 89 percent while Bihar is marked by a low coverage of 33 percent. A study by Sharma (2007) has evolved a concept of "Index of Financial Inclusion" to make it a more comprehensive indicator of inclusion in an economy. The work is an mixture of three aspects of the financial inclusion; penetration of the banking system, its availability to users and its actual usage. All these aspects are measured by using data on number of bank accounts per hundred population, number of bank branches per thousand populations and the size of bank credit and deposits relative to the GDP respectively. According to this study in the group of 100 countries, India's rank was 50 while Spain's and Switzerland's ranks were first and fifth respectively. Sangwan (2008) revealed that as on 31st March 2006 in India the saving accounts per 100 adult populations were 63 and credit accounts were only 16. Conroy (2008) pointed out that the exclusion of people from financial services is a general problem, to which microfinance is one of the possible solution. It is a powerful tool for achieving higher levels of financial inclusion efficiency and equity benefits in developing economies. Subbarao (2010) pointed out that efforts at financial inclusion are not new; both the government and RBI have been pursuing this goal over the last several decades through building the rural cooperative structure in the 1950s, the social contract with banks in the 1960s and the expansion of bank branch network in the 1970s and 1980s. These efforts have returned in terms of a network of branches across the country. Yet the level of financial exclusion is overwhelming and the RBI approach to financial inclusion aims at 'connecting people' with the banking system and not just opening accounts.

Lyngdoh and Pati (2010) concluded that microfinance based financial inclusion has ensured that the underprivileged and downtrodden are taken special care of. It has led to their economic empowerment and subsequently in socio-political development outcomes i.e. inclusive growth. It is observed by Gokhran (2011) that the process of financial inclusion is going to be incomplete and inadequate if it is measured only in term of new accounts being opened and operated. Actually a huge proportion of the Indian workforce is either self-employed or in the casual labour segment which suggests the need for products that will make access to credit simpler to the previous, while contributing opportunities for risk easing and consumption smoothing to the latter.

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Banks and financial services have very critical role in the increase and development of an economy. Research shows that a well-functioning and wide-ranging financial structure is linked to a faster and equitable growth. It contains lot of variety of individual finance options for higher and upper middle income population in the form of financially engineered and pioneering products whereas a significantly large section of population still lack access to the most basic banking services that is holding a bank account. This is termed as “financial exclusion” which further leads to social exclusion. So it is needed to provide persons with easy and bearable institutional financial goods or services popularly called “financial inclusion”. Commonly, it is acknowledged that the aim of financial inclusion is to extend the scope of actions of the organized financial system to include within its domain the people with low incomes. There is a requirement for coordinated action amongst the banks, the government and related agencies to facilitate access to bank accounts to the financially excluded. Because of need for more financial deepening in India in order to boost monetary development, there is a awful need for expanding financial inclusion. Twenty-three years after economic reforms unfurled in India, the financial sector still suffers from many Maladies. There are a variety of socio-cultural, financial issues that hamper the method of financial inclusion. For example on requirement side, it includes lack of consciousness and illiteracy.

From supply side, lack of avenues for investment such as poor bank penetration, unwillingness of banks to do financial inclusion or high cost involved in financial inclusion seem to be some likely reasons for financial exclusion. Normally the weaker sections of the society are completely ignored by the formal financial institutions in the race of making chunks of profits or the complexities involved in providing finance to the weaker section. It can also be distinct as the method of ensuring access to financial services and favourable and enough credit where desirable by vulnerable groups such as weaker sections and low income groups at reasonably priced cost.

Financial inclusion widens the resource support of the financial system by increasing a culture of savings amongst large segment of country population and plays its individual role in the process of economic maturity. Further, by considering low revenue groups within the boundary of formal banking sector; financial inclusion saves their financial wealth and other property in testing circumstances. Financial inclusion also mitigates the exploitation misuse of weaker sections by the usurious money lenders by benefiting easy access to formal credit. The Government of India and Reserve Bank of India have uses lot of measures towards the financial inclusion such as Pradhan Mantri Jan Dhan Yojna, Customer Service Centers, Farmers Club Program, SHGs, NGOs and MFIs, National Rural Financial Inclusion Plan, Financial Literacy, Know Your Customer, Electronic Benefit Transfer Scheme, Adhaar Scheme, SHG-Post Office Linkage, Bank Branch extensions,

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General Credit Card, Financial Inclusion Technology Fund, e-Grama Project, Micro Pension Model, Micro Finance Development Fund etc.

According to Standard & Poor's 'Global Financial Literacy Survey –2014', 33% of adults in the world are financially literate. As a result, 3.5 billion adults across the globe, most of them from developing economies, do not have any understanding of financial products and services. The average financial literacy rate is 28% of adults among BRICS (Brazil, Russia, India, China and South Africa) economies with India are being 24%.

Due to huge resources investment in augmenting the financial inclusion, the gap in its usage needs can be filled with suitable strategies to impart financial counselling and digital literacy. Financial literacy enables bank customers to make informed decisions in using financial services for their entrepreneurial growth and well-being. The RBI has taken several initiatives that include a recent launch of a pilot project of setting up centres of Financial Literacy (CFL) based on the hub-and-spoke model.

In the last seven years, India has formulated various strategies towards financial inclusion. As per the first Global Findex Database which was released by the World Bank in 2011 stated that 40% of adult Indians had a bank account with an overwhelming majority of Indians, especially in rural areas, were financially weak and were effectively excluded from the formal economy. After Seven years of the publication of this report, the Global Findex Database was published another report in April 2018 stated that almost 80% of adult Indians have bank accounts. It shows the significant improvement towards the Financial Inclusion during the same period because of launch of different schemes by the government such as Aadhar, Pradhan Mantri Jan Dhan Yojana, direct benefit transfer, Rupay and digital payment infrastructure called BHIM. Today, 94% of India's 1.3 billion populations have a unique Aadhar identity, which is vital for meeting anti-money laundering requirements. Mobile penetration is expected to reach 90% by 2020. Internet penetration has soared, and the use of digital payments is also rising significantly.

The Reserve Bank of India (RBI) has started the grounding for pouring the next stage of financial inclusion, looking for the enhancement of penetration of pension and insurance coverage besides bridging the gaps in traditional banking services in the country's rural areas. As per the RBI progress report, till August 2018, the banking coverage reached 80% of the Indian population, although 23% of these accounts receive direct benefit transfers. The third phase of RBI's financial inclusion plan (2016-19) is being implemented. Further, the RBI has sent a draft National Strategy for Financial Inclusion to the Financial Stability & Development Council (FSDC), headed by the finance minister, for its review. The strategy, which is in the works, will cover a five-year period from 2019.

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Pradhan Mantri Jan - Dhan Yojana (Pmjdjy)

The Pradhan Mantri Jan Dhan Yojana (PMJDY) is a program under financial inclusion which is applicable to 10 to 65 years age group, that aims to expand and make affordable access to financial services such as bank accounts, remittances, credit, insurance and pensions, was launched on 15 August 2014 on Independence Day speech by the Prime Minister of India Narendra Modi, has been implemented in two phases up to August 14, 2018. The first phase until 2015 aimed at providing universal access to banking facilities, basic banking accounts for savings and remittance, and RuPay Debit card with an in-built accident insurance cover of Rs 100,000. Against the original target of opening bank accounts for 7.5 crore uncovered households in the country by 26th January, 2015, banks have already opened 12.54 crore accounts as on January 31st 2015 after performing survey of 21.06 crore households with deposits exceeding Rs 10,000 crores. The goal was made after conducting a survey of 21.02 crore households in the country.

In second phase, banks extended the overdraft facilities up to Rs 5,000 to Pradhan Mantri Jan Dhan Yojana Jan Dhan account holders, created the Credit Guarantee Fund for coverage of defaults in overdraft accounts, and introduced micro-insurance and unorganized sector pension schemes.

Tabel-1 Pradhan Mantri Jan - Dhan Yojana (PMJDY) (as on 06/11/2019)
(All figures in Crore)

Bank Name / Type	Number of Beneficiaries at rural/semi urban centre bank branches	Number of Beneficiaries at urban metro centre bank branches	No Of Rural-Urban Female Beneficiaries	Number of Total Beneficiaries	Amount Deposited (In Crore)	Rupay Debit Cards number issued to beneficiaries
Public Sector Banks	15.97	13.81	15.67	29.78	84346.94	24.62
Regional Rural Banks	5.2	1.19	3.57	6.39	19448.25	3.86
Private Sector Banks	0.7	0.56	0.67	1.25	3051.43	1.16
Grand Total	21.87	15.55	19.91	37.42	106846.62	29.65

Sources: <https://pmjdjy.gov.in/account> (as on 06/11/2019)

Table 1 shows that the total number of accounts opened under the Pradhan Mantri Jan Dhan Yojana expanded to 37.42 crore with Rs 106846.62 crore deposits as on November 06, 2019 out of which 21.87 crore accounts were opened in rural area and 15.55 crore

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accounts were opened in urban area. In total number of PMJDY accounts, the contribution of public sector banks were 29.78 crore, Regional Rural Banks were 6.39 crore and Private Sector Banks were 1.25 crore as on November 06, 2019. The total number of Rupay Debit Cards beneficiaries has 29.65 crore on November 06, 2019 in which public sector banks has 24.62 crore, Regional Rural Banks has 3.86 crore and Private Sector Banks has 1.16 crore Rupay Debit Cards.

Tabel-1 State-wise Account Opening Status Under Pradhan Mantri Jan - Dhan Yojana (PMJDY) as on 06/11/2019

S.No	State Name	Beneficiaries at rural/semi-urban centre bank branches	Beneficiaries at urban/metro centre bank branches	Total Beneficiaries	Balance in beneficiary accounts (in crore)	No. of RuPay cards issued to beneficiaries
1	Andaman & Nicobar Islands	32,996	16,729	49,725	23.47	41,477
2	Andhra Pradesh	50,81,063	52,01,169	1,02,82,232	2,027.02	83,89,260
3	Arunachal Pradesh	1,99,947	1,25,433	3,25,380	119.04	2,84,518
4	Assam	1,21,11,388	38,75,523	1,59,86,911	3,707.87	1,24,39,592
5	Bihar	2,69,72,388	1,55,97,382	4,25,69,770	11,306.77	3,47,63,068
6	Chandigarh	45,366	2,11,199	2,56,565	113.07	1,89,797
7	Chhattisgarh	94,13,389	51,84,316	1,45,97,705	3,235.53	1,04,35,654
8	Dadra & Nagar Haveli	99,007	25,947	1,24,954	56.56	83,275
9	Daman & Diu	24,560	29,992	54,552	22.16	42,391
10	Delhi	3,05,165	41,89,344	44,94,509	1,878.18	38,33,691
11	Goa	1,21,297	42,868	1,64,165	94.14	1,23,851
12	Gujarat	75,45,952	70,50,054	1,45,96,006	4,662.99	1,20,53,531
13	Haryana	36,36,441	37,31,095	73,67,536	3,383.59	62,05,242
14	Himachal Pradesh	11,12,468	1,48,969	12,61,437	669.02	9,98,370
15	Jammu & Kashmir	17,84,011	3,19,631	21,03,642	964.51	17,10,671
16	Jharkhand	94,41,009	35,87,837	1,30,28,846	3,674.18	1,03,62,871
17	Karnataka	81,80,167	65,90,671	1,47,70,838	3,813.08	1,03,53,749
18	Kerala	20,90,105	21,66,644	42,56,749	1,356.95	30,63,641
19	Ladakh	16,896	1,971	18,867	14.3	19,324
20	Lakshadweep	4,416	1,000	5,416	8.26	5,165
21	Madhya Pradesh	1,50,21,428	1,71,07,317	3,21,28,745	5,423.18	2,50,57,202
22	Maharashtra	1,30,00,914	1,33,63,686	2,63,64,600	6,375.66	1,89,25,104
23	Manipur	4,08,930	5,30,884	9,39,814	201.31	7,20,342

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24	Meghalaya	3,96,336	71,234	4,67,570	200.81	3,29,881
25	Mizoram	1,20,803	1,89,559	3,10,362	107.85	85,948
26	Nagaland	1,23,993	1,75,922	2,99,915	62.94	2,50,702
27	Odisha	1,10,50,232	40,19,252	1,50,69,484	4,733.16	1,25,08,729
28	Puducherry	69,882	86,493	1,56,375	42.77	1,17,798
29	Punjab	39,71,437	29,23,740	68,95,177	2,626.44	56,35,649
30	Rajasthan	1,56,72,994	1,07,84,113	2,64,57,107	8,044.30	2,07,65,201
31	Sikkim	66,344	27,448	93,792	40.03	71,563
32	Tamil Nadu	49,03,835	56,18,442	1,05,22,277	2,036.98	86,80,394
33	Telangana	49,14,596	48,58,667	97,73,263	1,633.04	80,04,680
34	Tripura	6,24,542	2,58,443	8,82,985	664.02	6,89,448
35	Uttar Pradesh	3,51,01,136	2,44,20,184	5,95,21,320	19,690.39	4,79,75,946
36	Uttarakhand	15,76,173	9,62,300	25,38,473	1,189.79	20,30,419
37	West Bengal	2,34,52,467	1,20,36,933	3,54,89,400	12,643.26	2,92,44,617
38	Total	21,86,94,073	15,55,32,391	37,42,26,464	1,06,846.62	29,64,92,761

Sources: <https://pmjdy.gov.in/statewise-statistics> (as on 06/11/2019)

Table 2 state that the total account opened under PMJDY in Uttar Pradesh was 5.95 crore with deposit of Rs. 19,690.39 crore on November 06, 2019. Out of which, 3.51 crore account was opened in rural area while 2.44 crore account was opened in urban area of Uttar Pradesh State. The total number of Rupay Card issued was 4.79 crore in Uttar Pradesh up to 06/11/ 2019.

The recent Report on Trend and Progress of Banking in India pointed out some early signs of slowdown in financial inclusion (FI) efforts. Financial inclusion got a boost from the Pradhan Mantri Jan Dhan Yojana (PMJDY). The banking infrastructure comprising bank branches, ATMs, digital kiosks, customer service points (CSP), business correspondents (BCs), point of sale (PoS) terminals and mobile ATM vans currently cover 5,69,547 villages out of the total of close to 6,60,000. But, of them, 5, 15,317 villages (90.47 per cent) are covered by BCs offering limited services.

There has been a decline in the number of newly opened bank branches from 8,749 in FY15 to 3,948 in FY18. But the fall is more perceptible in rural centres with population below 9,999 (Tier-5 and Tier-6). The number of new branches opened in such centres has dropped from 3,274 to 1,067 during the three-year period. The number of ATMs has also started to drop from 2, 08,354 in March 2017 to 2, 07,052 by March 2018. The spread of ATMs is already skewed with 56 per cent of them operating in urban and metro areas. The number of bank branches and ATMs will witness further drop in the next few years due to merger of Banks.

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Conclusion

The banking technology initiatives meant for financial inclusion should be collaborative and innovative with an objective to reduce the transaction costs. Thus, financial inclusion along with the Governmental developmental programmers will lead to an overall financial and economic development in our country. In the case for most developing countries also, extending the banking services to everyone in the country, is the key driver towards an inclusive growth.

The Reserve Bank of India has joined hands with Government of India in its constant efforts to spread financial inclusion as primary objective for country's economic development. Major steps have been taken in the last five decades that includes awareness campaign for managing personal finances, up gradation of banking infrastructure, extension of branch banking, setting up of co-operatives and regional rural banks, introduction of mandated priority sector lending targets, lead bank scheme, formation of self-help teams allowing BCs/BFs to be appointed by banks to supply door step delivery of banking services, zero balance BSBD accounts and other allied facilities to attract masses toward financial inclusion. The fundamental objectives of these initiatives are to bring under ambit large section of population under financial system, to provide them sources of fund, financial support for their sustained growth and development.

The United Nations (UN) has raised concern, about Indian's financially excluded population from time to time. NSSO records disclosed that forty five million farmer households in the country (approximately 51.4 per cent) out of a total of 89.3 million households failed to get access to credit either from institutional or from non-institutional sources. Monetary experts argue that checking of functional accounts is that the most simple step to bring such folks under monetary thought. Thus the primary objective of monetary inclusion ought to be to open bank accounts of unbanked folks.

Promoting the inclusion of people's economic activity into the economic system has profound consequences. It goes on the far side the slim monetary agenda of leaving a far better spreading of risks inside and across countries, which contributes to financial stability in the country.

On the basis of above discussion it may be concluded that despite significant growth of financial sector in India low income groups or underprivileged sections of society haven't been lined beneath monetary inclusion. The emergence of Self Help Group as financial intermediaries in recent year has raised hopes that excluded people and rural India could be effectively financial linked.

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Financial inclusion is the road which facilitate the Republic of India to reach towards a development self-evolved economy and in turning into a worldwide player. Better control of one's finances and participating in economic activities of the country result in more effective economic and social progress, thereby increasing per capita income. Monetary access can attract world market players to our country which will lead to increase in employment and business opportunities. This will render multi directional growth and fulfil the hopes of billions of Indian to become a developed society.

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Chapter 21

The Implications of Open Defecation on the Rural Households of Yobe State, Nigeria

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Abstract

Background: *Despite its recognition as a human right and key to socio-economic development, access to basic sanitation service remained a daunting challenge to developing countries, resulting in continued open defecation practice with various adverse effects. This is particularly in the rural areas, whose knowledge on the adverse effects of the open defecation could be least.* **Aim:** *This study underscored the implications of open defecation on the rural households of Yobe State.* **Methods:** *The study populations were the rural households in Yobe State, which necessitated the employment of the multistage sampling technique for the selection of participants, for the household survey and mixed-method of research for the data collection was used, whereas both descriptive and inferential tools of statistics were used for the analyses.* **Results:** *It demonstrated that the sizes of the households were very large, comparative to the national average, commonly sharing pit latrine, while extreme poverty and low literacy were evident. The study about 33.3% of the participants were found engaging in open defecation, which leads to the prevalence of diseases. However, the logit regression model revealed that the determinants (household size, income, toilet type and education) account for the open defecation prevalence in the study area.* **Conclusion:** *The study recommends the modifications of the relevant policies and programs to strengthen the socio-economic development indicators of rural households. The partnership for the expanded water supply, sanitation and hygiene (PEWASH) should also be emphasized in the rural areas, whose access to the basic services was very low. Additional funding for research and development in rural places, to generate data for responsive planning and development, was suggested.*

Keywords: Defecation, Households, Open.

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Introduction

The open defecation (OD) practice was conceptualized as a kind of poor sanitation activity which involves the unregulated disposal of human waste in garbage bins, waterways and bodies, public areas, forests, farmlands, green spaces, open fields and trenches (Abubakar, 2018; Saleem, Burdett & Heaslip, 2019). The term OD is credited to the publications of the 2008 Joint Monitoring Program (JMP) of the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) – which evaluate the global progress on water and sanitation goals of development (Saleem et al., 2019). Despite the years of commitments under global action plans of the Millennium Development Goals (MDGs), targets for improved sanitation were not met, resulting in 2.5 billion people without access to improved sanitation facilities and nearly 892 million people still practice OD. The OD was regarded as the highest expression of poverty (Desai et al., 2015; Abubakar, 2017; Gine-Garriga et al., 2017 was quoted by Abubakar, 2018); costing high healthcare expenditure and causes worldwide death of 842,000 people annually (Adedoyin, Emmanuel & Ohunene, 2019). The factors linked to the OD have been identified as the lack of toilet facilities and demographics of the households (Abubakar, 2018); remoteness and location (O'Reilly et al., 2017); socio-cultural and behavioural attitude (Coffey et al., 2014).

The man's right of accessing basic sanitation service in the last decades, OD accounts for about 10% of the global disease burden, causes malnutrition, diarrhoea diseases, neglected tropical and acute respiratory diseases (Mara, Lane & Scott, 2010). The WHO (2017) highlighted that 525,000 children die due to diarrhoea out of the 1.7 billion cases of annual childhood deaths worldwide. The OD formed part of the target 6.2 of the SDGs - aimed to "achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations by 2030". It's an environmental and public health problem mostly faced by the countries of sub-Saharan Africa (Usmanu, Kosoe & Ategeeng, 2019). The countries of the sub-region fall short of meeting the MDGs' target 7.C – which included reducing by half the proportion of the population without sustainable access to basic sanitation by 2015 (United Nations, 2015). The rural biasness of the OD practice in low-income countries such as Nigeria may be a major contributing factor to the deaths of many people, especially under-five children.

With the exit of India from the graph of the countries practicing OD, Nigeria now ranked the first in the global index of the problem, which requires huge commitments and partnerships. The rate of the OD in the country rather increased from 24% to 26% between 1990 and 2018, whereas 68 million people are estimated to be added in the next decade time (Adedoyin et al., 2019). This might not be distanced from the population exponential increase and the growing poverty levels in the land, adversely affecting the health system, economy and productivity. The poor sanitation practice amongst Nigerians is leading to an

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annual loss of ₦455 billion (US \$3.6 billion annually, equivalent to \$20/person/year) in addition to public exposure to acute excreta-related diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid, intestinal worms, schistosomiasis and trachoma (Adedoyin et al., 2019). The World Bank (2012) added that approximate 121,800 Nigerians, including 87,000 under five, die annually due to diarrheal diseases, poor sanitation and hygiene practices of the population. The FMWR (2016) reported the annual deaths of 122,800 Nigerians, including 87,000 children (< 5 years) from diarrhoea, intestinal worm infections, cholera, hepatitis, typhoid fever and other sanitation-related preventable illness. It added that 37% of Nigerian children (< 5 years) are stunted (height for age), 18% wasted (weight for height) and 29% under-weight (weight for age). The NBS (2016) report shows that, in Yobe State, 28.5% of the total population still defecate in the open and 34.6% of children (< 5 years) suffers from poor-sanitation-related diseases such as diarrhoea and cholera – which might have been triggered by the settings, lifestyle, poverty and low literacy of the area. Thus, this pioneering study examined the implications of OD on the rural households of Yobe State, where the households size, income, toilet type and education were used as determinants of the problem.

Materials and Methods

The Study Area Setting

The Fune Local Government Area of Yobe State, Nigeria, falls between longitude 10° 50'E to 11° 51' East of the meridians and latitude 11° 03' to 11° 30' North of the Equator (see Figure ii.i), with a total landmass of 4,985km² and a population density of 78/persons/km² (NPC, 2017). The study area, as shown in Figure ii. i, is within the Sahel Savanna belt of Nigeria characterized with natural water scarcity due to low and highly erratic rainfall and poor water supply infrastructure, in addition to hot and dry climatic conditions – the hottest months being March, April and May, and the temperature ranges between 30°C to 42°C (Babagana et al., 2018). It is the Sahel or semi-arid environment, conceptualized by Bukar and Daura (2015) as an area of natural water scarcity characterized by low and highly variable rainfall with an annual average of 250mm and a continuous decline in water availability, due to lack of water infrastructure, increasing populations occurring simultaneously leading complex water scenario. Babagana et al. (2018) maintained that it only rains for about 120 days usually from June to September. The soil of the area is generally sandy in nature and loose in texture, highly erodible, though supports the cultivation of crops such as millet, sorghum, beans and groundnut as well as livestock rearing.

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Study Design

This study explored the implications of OD on the livelihoods of the rural households of Yobe State, which led to the employment of the mixed methods of research, both quantitative and qualitative. The approach has deepened the study findings with a comprehensive and detailed account of the issues under investigation while offsetting the shortcomings of the independent application of the methods.

The population and Sampling Design

The study population targeted were rural communities (as shown in Table ii.i) and the employment of multistage sampling approach was necessitated. Firstly, the researchers' observations show the prevalence of OD and increasing challenges in access to general sanitation service, thus the study area was purposively selected. Secondly, the geologic map of Yobe State divided the area into the Chad Formation, Kerri-Kerri Formation and Fika Shale, which were adopted as study zones and three communities were purposively sampled from each zone (see Table ii.i). Thirdly, household heads (who served as respondents) were drawn using systematic random sampling, which demonstrates them proportional to the size of the communities.

Table ii.i Details of Sample Frame and Size of the Studied Communities

Study Zones	Communities	Longitudes	Latitudes	Households	Samples
Fika Shale	Daura	11.405567	11.553658	183	31
	Murba	11.504024	11.660501	243	41
	Ngelshengele	11.60465	11.550527	201	34
Kerri-Kerri Formation	Dadume	11.360187	11.839857	69	13
	Kafaje	11.251558	11.918324	99	16
	Kolere	11.286100	11.882700	165	28
Chad Formation	Dufuna	11.182238	12.257496	303	51
	Jajiburawa	11.148437	12.215455	165	28
	Gurungu	11.068409	12.13727	207	35
Total				1635	277

Source: Fieldwork (2019).

Data Sources and Analyses

The primary data sources include the household surveys whereas the secondary data were sourced through the desk review of relevant kinds of literature. The data were analysed with both the basic descriptive and inferential statistical tools, which include the tables, the linear correlation and regression models. The use of these statistical analytical models is scientific having been successfully tested by other studies. The logit model is specified as follows:

$$Y_i = X_i + \mu_i \quad (1)$$

where Y is a dummy variable such that Y = 1 if the factor is significant in influencing open defecation and Y = 0 if otherwise. Xi is a vector of the determining variables. Also, the participation shows that

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$$\beta_0 + \beta_1 \text{Household heads education} + \beta_2 \text{Household income} + \beta_3 \text{Household size} + \beta_4 \text{Ownership of toilet facility}$$

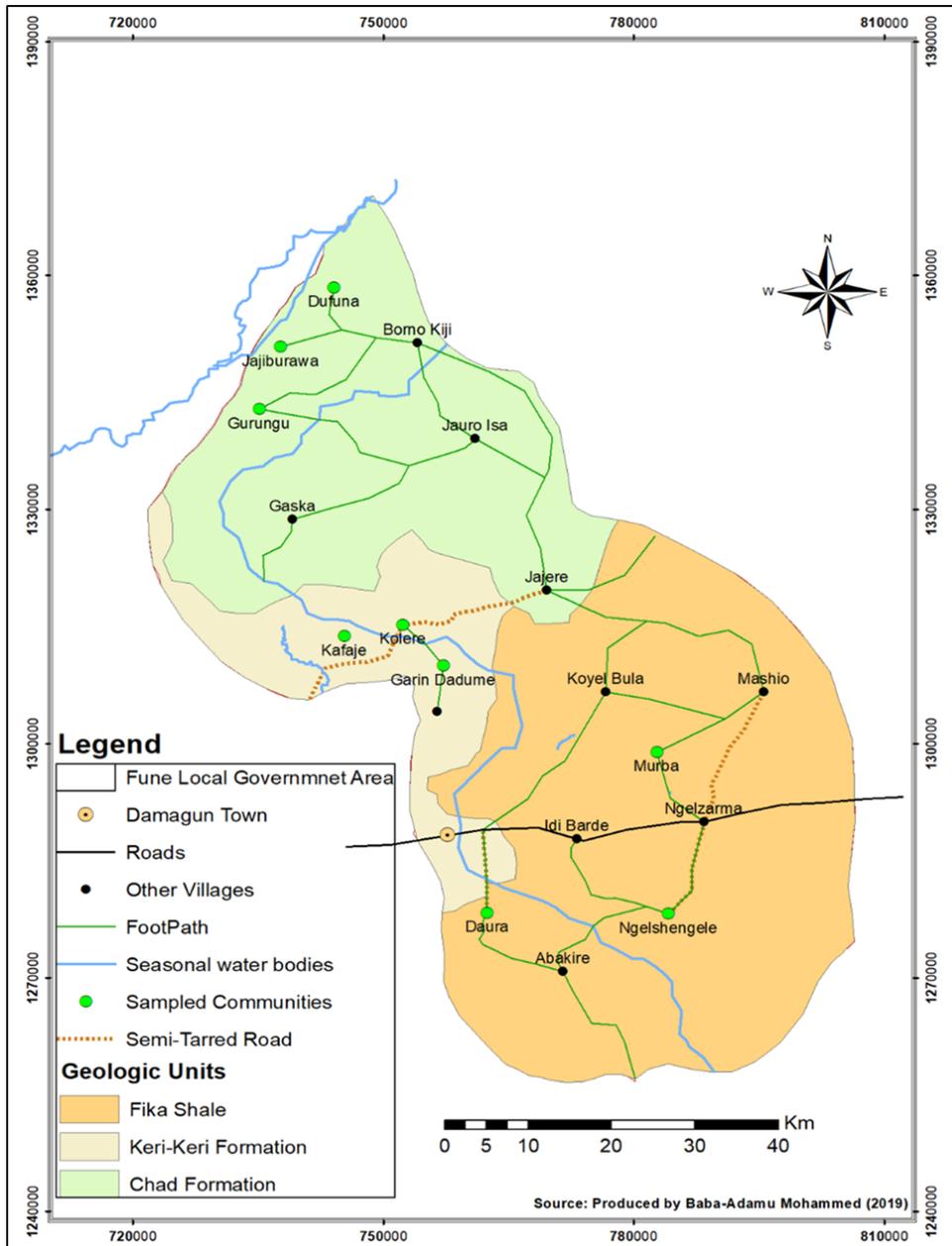


Figure ii.i Map of the study area showing the sampled communities

Findings and Discussions

The Rural Households' Characteristics

The size of the studied households, as revealed in Table iii.i, was very large and confirmed the practice of extended family system across the study zones. Studies (Bukar & Daura, 2015; Inkani, 2015) highlighted that the culture of large-sized family is a common practice in northern Nigeria, especially that married couples spend most of their reproductive years giving births, which consequently increases the need to engage in OD. The analyses show that the mean household has thirteen members in the study area, which is 260% higher than the national average of five members. The finding has the potential to encourage OD, especially among children who may frequently defecate and explicitly could not be queued. Invariably, during this COVID-19 pandemic, the recommended regular handwashing and washing of facemasks in an extended household, OD is expected to increase by manifolds – confounding the problem to a more complex situation. With the mean primary educational attainment among the vast majority of the household heads, as Table iii.i have shown, the knowledge about the negativities of OD on the public and environmental health as well as the social dignity may raise series of questions. Generally, level of education has commonly been used as a socio-economic indicator (Oakes & Kaufman, 2006 as cited by Inkani, 2015), and expectedly it's an improvement is likely to increase the option for access to better means of sanitation. The low rate of literacy level in addition to poverty could be ripe factors capable of necessitating the practice of OD. The households' commonly use shared toilet facility, as the study found, might have been implied by their poverty level and weak economic conditions. The sharing the unimproved sanitation facility by a large-sized household may result in OD prevalence and its surrounding implications.

The monthly income profile of the households as shown in Table iii.i highlighted that in Fika Shale the average income of a household was ₦18,886; ₦10,035 in Kerri-Kerri Formation and ₦12,982 in Chad Formation, are highly expected since the extended families are mostly subsistence rain-fed farmers. The mean household in the study area stands to generate only ₦13,967 per month, which is equals to ₦1,074/person/month. These, in relation to the income-poverty models of the \$1/person/day (in the international context) and the national poverty benchmark of ₦137,430/person/year, established that about 98% of the studied population were extremely poor and highly vulnerable to livelihood problems such as the OD. This study finding paralleled the only 43% of the households in the study area living in poverty as reported by YSPMSA (2017) and affirmed Adedoyin et al. (2019) that 71% of Nigerians living on less than \$1/person/day, due to declining income growth, have tremendously risen the practice of open defecation and violence against girls and women commonly known as social stigma. The low-income levels of the households may be a contributing factor to the prevalence of OD, which necessitates the expenditure of high time in search of a safe place to defecate and increases with the poorest of the studied populations. However, as the OD practice revolves around the household's socio-economic

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characteristics, the findings demonstrate that the poverty level of the households could reduce their capacity to build a toilet facility and/or access the facilities, thereby exposed to the OD. For example, a study by Osumanu et al. (2019) revealed that low-income households do not spend more than 2 – 5% of their income on excreta disposal. The extreme poverty level could lead to loss of time in search of a place to defecate and high expenditure on healthcare. This, and poor sanitation in general, leads Nigeria to an annual loss of ₦455 billion – which represents US\$20 per head as Adedoyin et al. (2019) revealed.

Table iii.i: Socio-Economic Background of the Households

Fika Shale		Kerri-Kerri Formation				Chad Formation						
Si	Educati	Inco	Toile	Si	Educati	Inco	Toile	Si	Educati	Inco	Toile	
ze	on	me	t	ze	on	me	t	ze	on	me	t	
		(₦)	Facili			(₦)	Facili			(₦)	Facili	
			ty				ty				ty	
Me	14	Primary	1888	SPL	14	Primary	1003	SPL	10	Primary	1298	SPL
an			6				5				2	
Ma	18	Tertiary	4000	SA	18	Tertiary	4000	SA	18	Tertiary	4000	SA
x.			0				0				0	
Min	3	None	5000	OD	3	None	5000	OD	3	None	5000	OD

SPL = Shared Pit Latrine; SA = Soak-away; OD = Open Defecation

Source: Researcher's Fieldwork, 2019

The OD Prevalence and Health Implications

The time expenditure for OD is economically critical, and its prevalence adds to the problems of human needs for development. The Table iii. ii shows the proportions of the OD (29.8%, 33.3% and 36.9% of the households in the Kerri-Kerri Formation, Fika Shale and Chad Formation, respectively) which were very high among the study zones. The rate of the OD (33.3%) across the study area was not only high but constitute threats to public and environmental health, which exposes the populations to various medical health and economic implications. It in the same vein it was found that 83.7% of the studied population was not aware of the policies and programs for ending open defecation. This proved that the commitments were not fully decentralized up to rural households. Balogun et al. (2017) revealed that improvements in living conditions reduce the link between poverty and diseases, prevents approximately 2.4 million deaths annually and averts nearly 7% of the burden of diseases and 19% of child mortality. In subsistent with this study finding, the NBS (2016) and Adedoyin et al. (2019) shows 70 million Nigerians using shared latrines, while 32 million Nigerians defecating in the open, and that without additional aggressive efforts, 68 million people are likely to be added between now and 2030.

The Table iii.iii shows that diseases such as malaria and typhoid fever (39.2%), diarrhoea (36.7%), cholera and dysentery (18.2%), bilharzia (4.7%) among others were prevalent in the study area, which might have been led to by the increasing OD practice and the extreme poverty conditions of the households. This is particularly that one gram of the human

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excreta contains 106 pathogenic viruses and infectious virions, 106 – 108 bacterial pathogens, 103 protozoan cysts and 10 – 104 helminth eggs (Saleem et al., 2019). However, a study by Osumanu et al. (2019) demonstrated that countries with the widespread practice of OD have the highest number of deaths of children under five, as well as large disparities between the poor and the rich. The report of the WHO (2014) linked the diarrhoea-related annual deaths of about 200,000 children under five and the high cholera cases to the poor sanitation and hygiene practice in sub-Saharan Africa. The diarrhoea-related deaths of 121,800 Nigerians, including 87,100 children under 5 was also reported by the World Bank (2012). FMWR (2014) highlighted further that 37% of Nigerian children (< 5 years) were stunted (height for age), 18% wasted (weight for height) and 29% under-weight (weight for age) due to poor sanitation service. The arguments could be that Nigeria is not only a large shareholder of the global morbidity but also mortality, especially of under-five children.

Table iii. ii Proportional Distribution of OD

Chad Formation	Kerri-Kerri Formation	Fika Shale
36.9	29.8	33.3

Table iii.iii The Prevalent Diseases

Diseases	Proportion (%)
Diarrhoea	36.7
Malaria/Typhoid Fever	39.2
Bilharzia	4.7
Cholera/Dysentery	18.2
Others	1.2

Table iii. iv Logit estimation of the determinants of the OD

Variables	Marginal effects	Std. error	Z value	p value	Coefficient
Education	-0.194	0.102	1.77	0.043	-0.881
Household Size	0.401	0.094	4.13	0.001	1.981
Income	0.344	0.092	3.76	0.001	-1.791
Ownership of Toilet	0.392	0.162	0.05	0.087	-0.041

Significance at 5% level of confidence

The logit regression model of the OD determinants was shown in Table iii. iv. The level of education of a household head, as a critical socio-economic indicator, has a critical influence on the OD problem of the study area. The marginal effect of the education level in the logit model was observed to be negative (-0.19), while the effect on OD is that households with uneducated heads were more likely to defecate in the open than those with educated heads. It means an increase in the level of education has the likelihood of decreasing the OD. The model indicates that the educated household heads have 19.4% higher chances of avoiding OD than those in the other groups, particularly that they understand its adverse effects and its implications. The OD is not only an affront to the

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dignity, health and well-being of the population but also gender-biased, impacts negatively on the girl child education, social safety due to vulnerability to social disorders and infectious diseases. The study finding aligned with those of Galan et al. (2013); Okullo et al., (2017). However, the finding established that the OD is critical to the achievement of SDGs 6.2 as well as targets of the global action plan, including those related to poverty and economic growth, nutrition and health, education and gender perspectives.

The household size determines the practice of OD, where the $p < 0.001$, with a marginal effect of 0.40. the model suggests that the large-sized households, with thirteen members, were 40% more likely to engage in OD against those with smaller sizes. This argument that the average household has possibilities of engaging in the OD, despite their awareness on its implications, which may also be burdened with the socio-economic needs of the household members, especially in the COVID-19 pandemic. Thus, such households opt to defecate in the open spaces, bushes, farmlands, water bodies and challenges the attainment of various development priorities. The finding of the study is corroborated by Abubakar (2018); Adedoyin, et al. (2019); and Saleem, et al. (2019). As every one-in-four Nigerian lacked access to the basic right to sanitation service and thus practicing OD, the situation could not be distanced from the increasing household size and composition, which sees the female group most challenged.

The negative statistical relationship (-1.79) between the income level of the households and OD practice, proves that the higher the income the lesser the likelihood of OD, whereas the coefficient of income in the logit model was not only negative but also significant ($p = 0.001$). Similarly, the marginal effect of income in the model was 0.344 which means households with lower levels of income were 34.3% likely to practice OD and indicates that high-income households stand to own and use toilet facilities. To buttress these findings, a study by Abubakar (2019) found that OD is the highest expression of poverty. The minimal progress in the achievement of the 2025 national policy of ODF (open defecation free), in Nigeria and indeed rural environments, might not be distanced from the weak income generation abilities of the governments (state and federal) and worsened by the COVID-19 pandemic.

Although some members of households that own toilet facilities may practice open defecation, the results of this study indicate that ownership of a toilet facility is negatively related with the practice of OD (a coefficient of -0.041) and significant at 5% level of confidence ($p = 0.097$). The estimated negative value (-0.041) and the significance of the variable (marginal effect of 0.392) means that the households, without toilet facility, have 39.2% opportunity of OD than those who own toilet facilities. This might have been prompted by the poor management of the toilet facilities, principally that people engage in the act of OD due to lack of accessibility, readily, to the toilet facility or the cultural needs. The wide practice of the OD leads to high human deaths, especially under-five children, in

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addition to the high malnutrition and poverty levels. The finding, especially that the sanitary conditions of the toilet facility deteriorate and breeds disease vectors, is consistent with Armah et al. (2018); and Abubakar (2018).

Conclusion and Policy Recommendations

The access to improved sanitation service is essential for the public health and socio-economic development in all human societies, as the findings of this study have shown, in the examination of the implications of OD on the rural households of Yobe State. The average thirteen-member household in the study area was not only large but has various adverse effects on their living conditions, one of which remained the vulnerability to diseases. This is especially that the poverty level was very extreme since the mean income of the large-sized household was ₦13,967 per month – less than half of the national minimum wage and serially constitute socio-economic problem. The poverty situation could also have been determined by the low literacy level of the households, who were usually in the primary education bracket. In the same vein, though 66.7% of the households have shared pit latrine, OD (33.3%) was still high and constitute implicative influence on the means of living, particularly that diseases such as malaria, typhoid fever, cholera, dysentery and bilharzia were prevailing. These situations were statistically accounted for by the determinants of the OD (household head education, household size, household toilet type and income level). As such, the study attributed the rate of OD in the area to the socio-economic background of the households as well as the ineffectiveness of the relevant policies and programs. The OD threatens the attainment of target 6.2 of the SDGs and other development priorities, especially that COVID-19 lowers economic growth, access to hygiene education and promotion.

Thus, the study recommends that the sanitation-related treaties, policies and programs of the Yobe State Government and the Federal Government of Nigeria should place a high degree of emphasis to the rural communities, whose knowledge about the adverse effects of OD stands to be grossly inadequate for successful achievements. The decade-old Yobe State Water Supply and Sanitation Policy, the Community-led Total Sanitation (CLTS) programme and the Open-Defecation-Free-Nigeria initiative should be modified to reflect special attention to the rural poor, particularly that their contemporary socio-economic development indicators fall below the minimum benchmarks. These modifications should appropriately place the rural households' roles in the policies in an attempt to end the practice of OD and strengthen their economic indices. The partnership for expanded water supply, sanitation and hygiene (PEWASH) should be emphasized in the rural areas, whose access to basic services remain very low. Sustained community training and awareness creation on the dangers of OD should be initiated and implemented by the local traditional authorities, in order to support the conventional policies and programs of the governments. The stakeholders (governments and concerned organizations) should also work towards significantly increasing the funding for research and development in rural places, which would help in generating scientific data for proper responsive planning and development.

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Chapter 22

Empirical Assessment of Socioeconomic Impact of COVID-19 Pandemic on Nigerian Households

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Abstract

A cross sectional survey was used in this paper to assess the socioeconomic impact of coronavirus on the Nigerian households in Kano state who engage in agriculture, private sector, public service and trade/craft by collecting data from 404 households using a stratified sampling technique and analysed the data using a descriptive method. Most of the surveyed respondents had a secondary education level and about 81% of them were males with about 56% that are not married. Majority of the respondents (74%) earn 20,000 naira while only 12% earn 40,000 naira as monthly income. In addition, majority of them (96%) opined to be unhappy with the ban on social gathering. And about 66% showed sadness about restriction on intra/interstate movement and more than half (51%) of them said to have experienced domestic violence during the lockdown. It was also found that about 99% of respondents were not comfortable with stay at home order. Nearly 95% of them were identified to be financially incapable during the lockdown period and about 96% said they did not get income support from their employers (especially the private sector workers). Similarly, 92% of the respondents did not get palliative support and 97% of them said covid-19 had negatively affected their business/economic activities. Findings revealed that Nigerian households have suffered both socially and economically from the pandemic and so more measures need to be taken to reach out those affected households in order to cushion the effects caused by the pandemic.

Keywords: COVID-19 pandemic, socioeconomic impact, Nigeria.

Introduction

The world has witnessed many epidemics which include among others the Spanish Flu of 1918, the HIV/AIDS, Severe Acute Respiratory Syndrome (SARS), the Middle East Respiratory Syndrome (MERS), the small pox, plague, polio and Ebola. Each of these individually has been severely pretty episode. However, coronavirus disease 2019 (covid-19) originated from China in December 2019 and in few months it spread rapidly to almost

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all countries of the world turns out to be the biggest health crisis in the global history. The disease is highly contagious and it spreads rapidly among people in the community. As a result, policy actions were taken by governments to implement social distancing, stay at home measure, closure of institutions and public facilities and eventually restrictions on mobility and finally lockdown of the entire country. To curb the spread of this pandemic, governments have quickly responded and adopted measures to close all schools, ban all form of public gatherings, invest in healthcare facilities, trace contacts, provide new forms of social welfare and the intervention to contain the spread of the virus by augmenting health systems and managing the economic consequences of these actions (Hale, et al., 2020). This paper investigates the effects of covid-19 pandemic on social and economic life of Nigerian households as it affects them during the lockdown period in Kano state. After the introduction, section 2 discusses the covid-19 pandemic on global and Nigerian context, its socioeconomic impact in Nigeria as well as the social welfare program in Nigeria, section 3 is the methodology, section 4 is the results and discussions and finally section 5 presents conclusion and recommendations of the paper.

COVID-19 Pandemic in a Global Perspective

The coronavirus outbreak began in Wuhan, Hubei Province, China. People living in Wuhan initially had some link to a live animal and large seafood market suggesting that the virus transmission was from animals to persons. The virus was named “SARS-CoV-2” and the disease it causes was named “coronavirus disease 2019” (abbreviated covid-19). The first patient of COVID-19 started experiencing symptoms in Wuhan, China on 1 December 2019. Since then, there has been several reported cases around the world (Ozili, 2020). Now there are about 21,952,824 million confirmed cases and 14,667,997 already discharged and about 776,344 deaths worldwide (Hopkin University, 2020).

Nigerian Experience of COVID-19

Coronavirus came into Nigeria through an infected Italian citizen who, then, came in contact with a Nigerian citizen who was subsequently infected with the coronavirus. The coronavirus then spread to other citizens in Lagos and to other parts of the country. It started in Lagos on the 17th of March, 2020 with 3 confirmed cases and later Abuja and Ogun state with 22 confirmed cases. On the 30th of March, 2020, it was increased to 131 confirmed cases including Lagos, Abuja, Bauchi and Enugu (Nigeria Centre for Disease Control (NCDC), 2020). Subsequently, the disease spread to 36 states of Nigeria including the FCT, Abuja. As at the time of submitting this article, total confirmed case stands at 47,743 with 33, 943 discharged and nearly 956 deaths (NCDC, 2020).

Socio-Economic Impacts of COVID-19

The economic impact of COVID-19 among most countries can be felt through three possible scenarios i.e. the labour productivity shock which comes from workers unable to do their job and it results into the average decline in labour productivity by 1.4% during

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the pandemic in 2020. The impact of COVID-19 also causes a total factor productivity shock that is felt through a temporary paralysis of domestic activities caused by disruptions to distribute and the inability to provide inputs and services due to quarantine for workers leading to a big enough reduction in global GDP by 1% in total factor productivity growth. The last impact is the trade shock. It is felt through the international trade disruptions bringing about cost of doing trade to rise by nearly 5% on the average. This is suffice to provoke the cost of global economic growth by 1% (Vos et al., 2020).

The COVID-19 pandemic has compelled the researchers into examining the impact of the virus on the economy and has drawn the attention of policy makers into designing a policy guidelines to tackle the pandemic globally. This is due to significant negative return witnessed on the foreign direct investment from China (Takahashi & Kazuo, 2020); the reduction of revenue from tourism countries (Dolnicar & Zare, 2020); the negative effects on oil prices (Akanni & Gabriel, 2020; Albulescu, 2020; KPMG, 2020); and the devastating and imminent recession (World Bank, 2020).

This has subsequently reduced labour supply in the labour market and made people to engage in more precautionary spending (Jordà, Singh & Taylor, 2020).

However, the research in 1918 on the economic impact of the pandemic revealed that shortage of labour and wage increase are temporary effects and does not hold in the long run as the economy would have stabilized (Garett, 2007). The impact of the pandemic in the short and long run could result through multiplier effect to disrupt multiple systems. In a similar case, Atkeson (2020) confirmed that the epidemics have a way of resurfacing if mitigation practices are not put in place and implemented properly. Considering the multiplier effect of the pandemic on the economy, it is important for government and stakeholders in the economy to understand the economic implications of the recent covid-19 and to take appropriate steps in cushioning the socioeconomic shock for the citizens in Nigeria.

Social Welfare Program in Nigeria

Before COVID-19 pandemic in Nigeria, major social problems include armed robbery, child abuse/abandonment, rampant divorce, mental health problems, and single parenting. Funding of social welfare activities in the country is very poor and is not available to many people who need them (Ahmed, et al, 2017). The country does not have standard national program on welfare that renders assistance to individual households such as healthcare assistance, unemployment compensation, food stamps, educational assistance and disaster relief. Lack of social program to provide welfare relief and basic societal needs became evident during the covid-19 outbreak in country. Many people had nothing if not little to rely on and they could not cope with the economic hardship during the lockdown period specifically due to lack of subsidies for housing, energy and utilities and assistance for

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other basic services. Ewalt and Jennings Jr (2014) affirmed that provision of social welfare services to economically deprived individuals is the only way to protect them during the economic hardship and lack of such services could cause to them a severe pain and economic hardship. Evidences show that social welfare programs can be used to alleviate poverty and help vulnerable people to cope with disasters (Luenberger, 1996; Dolgoff et al, 1980; Abramovitz, 2001). In addition to that, social welfare theories offer different perspectives on how the program can be designed to provide for the basic needs of poor individuals (Fleurbaey and Maniquet, 2011; Arrow et al, 2010; Andersen, 2012). Despite these evidences on the benefits of welfare program to the society, policy makers in Nigeria do not see it a policy priority.

Methodology

Data in this paper were gathered using a questionnaire survey administered to 404 households who engage in occupations such as agriculture, private sector, public service and trade/craft. The questionnaire is divided into two sections. Section A contains demographic information of respondents while Section B contains two central questions and follow-up questions that aim at achieving the objective. The sample size from each occupation was drawn proportionately to the population size in that occupation and a stratified sampling technique was applied to select respondents in accordance with occupation they engaged-in as shown in Table 1. Thus, a total of 404 responses were successfully collected and analysed using a descriptive method. Finally, the researcher adhered strictly to social distance order during the survey which was carried out after the lockdown was relaxed in the country.

Results and Discussions

It is always important to present basic demographic information of the respondents before making analyses and this is presented in Table 1.

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Table 1. Basic information of the Respondents

Variables	Obs	Description	Percentages
Education level	404	Primary	07
		Secondary	39
		NCE/Diploma	31
		BSC/HND	13
		Postgraduate	02
		Religious education	08
Gender	404	Male	81
		Female	19
Marital status	404	Married	44
		Not married	56
Occupation	404	Agriculture	12
		Private service	21
		Public service	19
		Trade/craft	48
Monthly income	404	< #20,000	74
		#20,001- #40,000	14
		> #40,000	12

Source: Field survey, 2020.

It can be seen from Table 1 above that 39% of the households surveyed reported to have secondary as their level of education and only 02% have postgraduate. Again, male respondents are 81% and 56% of them are not married. Respondents who engage in trade/craft occupation are 48% and this is simply because the survey was conducted within the Kano metropolis. Finally, about 74% reported to have less than 20,000 naira as monthly income equivalent to \$41.7 (this is equal to \$1.4 per day equivalent to 672 naira at current rate of \$1 = 480 naira) while only 12% earn above 40,000 naira per month. So this is not enough to take care of their basic needs particularly during the pandemic.

Presentation and Analysis of Research Question One

Research question one “Does COVID-19 have any significant social impact on household during the lockdown period?” seeks to assess the social impact of covid-19 pandemic felt by the household during the lockdown period by providing clarifications on challenges he faced such as restriction on social gathering, ban on transportation, stay at home order and domestic violence. The analysis is presented in Table 2 below.

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Table 2. Response on social challenges during the COVID-19 pandemic

Variables	Scale	Frequency	Percentage
Perception of ban on social gathering e.g. places of worship, cinema, clubs, etc.	Yes	388	96
	No	16	04
Restriction on intra/interstate movement	Yes	267	66
	No	137	34
Perception on domestic violence	Yes	204	51
	No	200	49
Stay at home order	Yes	401	99
	No	03	01

Source: Field survey (2020).

It can be seen from Table 2 above that 388 respondents (about 96%) expressed their dissatisfaction with the lockdown that completely banned social gathering e.g. observing prayers in the mosque, church service, going to cinema and clubs. About 16 of them (04%) said the lockdown was meant to curb the spread of the virus and they were happy with that measure. Similarly, households' perception due to restriction on movement reveals that about 267 households (66%) were not happy with the measure simply because it prevented them to go to their normal businesses (especially that about 48% of the surveyed households engage in trade/craft) while 137 of them (about 34%) expressed happiness on ban to inter and intrastate movement. However, regarding the perception on domestic violence, 50% of the households surveyed said they experienced problem with their spouses while 49% said it went well because they had happy moments with their spouses. In responding to stay at home order, about 99% said staying at home was boring and frustrating especially that children were not in school while only 1% did not show worry.

Presentation and Analysis of Research Question Two

Research question two "Is there any economic impact of covid-19 on the household during the lockdown period?" provides an insight into the economic hardship posed by the pandemic during the lockdown period. In providing answers to this research question, it is important to first underscore the intensity and frequency in which households respond to the follow-up questions on financial capability, income support, palliatives support and effects on trade/craft during the pandemic.

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Table 3. Response on economic challenges during the COVID-19 pandemic

Variables	Scale	Frequency	Percentage
Financial capacity during the lockdown	Yes	20	05
	No	384	95
Perception on income support during the lockdown	Yes	14	04
	No	390	96
Palliative support during the lockdown	Yes	33	08
	No	371	92
Covid-19 impacts on trade/craft activities	Yes	394	97
	No	10	03

Source: Field survey (2020).

Table 3 reveals that 95% of households were not financially capable of sustaining their family during the pandemic. The implication of this is that large number of households experienced economic difficulties and hardship during the lockdown, only 5% of them were financially buoyant during the period. In answering the question on income support during the lockdown, about 96% said “No” and this involves all 21% private sector workers while only 4% responded yes. This implies that those working in private sector had not been given any support despite stoppage of income by employers. On the palliative support, 97% said they did not receive any palliative support. This justifies the purported corruption allegation labelled against some government officials charged with responsibility of palliative distribution. Both the federal and state governments distributed relief materials to cushion the effect of the pandemic but unfortunately, the relief materials did not reach the targeted beneficiaries. The implication of this were seen in the increased rate of robbery and other forms of social vices in different parts of the state during the lockdown period. Finally, on the effects of lockdown on the economic activities, about 97% confirmed that the pandemic affected them negatively, particularly that most of them (about 48%) engage in trade/craft. By implication the lockdown has impacted negatively on their socioeconomic lives as the paper reveals.

Conclusion and Recommendations

In this paper, the empirical assessment of COVID-19 pandemic was carried out in Kano state of Nigeria. The disease is contagious that originated from China in December 2019 and in few months it spread to all countries of the world. To curb the spread of this pandemic, governments to implement social distancing, stay at home measure, closure of institutions and public facilities and eventually restrictions on mobility and finally lockdown of the entire country. This actions caused difficulties and hardship to the global economies especially the developing ones. Therefore, this paper assessed the impacts of covid-19 pandemic on social and economic lives of Nigerian households using administering 404 questionnaires to households in Kano state and analysed the data using descriptive method. Most of the households surveyed are male and they have secondary education level. Majority of them earn 20,000 naira per month and as such they were not happy with the ban on social gathering, restriction on movement and more than half of

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them experienced domestic violence. They financially suffered during the lockdown period due to stay at home order that prevented them to operate their businesses.

It is recommended that government should intensify efforts to reach out to those households who are less privileged and negatively affected by the pandemic in the country. There is also need to robust national response to align with development target of national economic empowerment policy. Such efforts should provide livelihood opportunities to focus on the households who lost their revenue stream during the lockdown and implement social safety nets programs to cushion the negative effect of financial disruption occasioned by the pandemic.

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Chapter 23

Impact of COVID-19 on Tourism Sector: An Overview

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Abstract

COVID-19, known as Corona virus originated from China and spread its wing around the world including India. It has adversely affected every sector of emerging economies of the world, but it has a significant impact on the domestic and international tourism due to prolonged lockdown, travel restrictions, shutdown of national borders and airports as well as slump in demand among travelers. Corona virus has massively affected the tourism sector. Tourism is a key sector in many advanced and developing countries of the world, as it is a source of revenue and employment generation. Outbreak of Covid-19 represents an important and evolving challenge to the tourism sector such as low demand, massive loss of tourism revenue, unemployment, business failure and so on. Due to high resilience and capacity to adapt, this sector can turn the challenges into opportunity. As per UNWTO report, the international tourism demand is expected to recover till 2021 with slow pace. It is estimated that tourism will recover partially till 2021 but will take long time to recover completely. According to experts, the domestic tourism demand would recover faster than international tourism demand. It is also estimated that recovery of internal tourism is more positive in Africa and Middle East. America is least optimistic to recover in 2020, while Europe and Asia are mixed. There is uncertainty in this sector. In such situation, policies, management & strategies are more important to increase future demand of tourism sector. The paper examines the impact of Covid-19 on domestic and international tourism and overviews the challenges & opportunities as well as future demand of this sector.

Keywords: COVID-19, Tourism Sector, Pandemic.

Introduction

COVID-19, commonly known as Corona Virus originated from China but after a short while it became pandemic and spread its wings around the world including India. The world is facing an unprecedented health, social and economic emergency caused by Covid-19 pandemic. The Pandemic has affected various sectors of emerging economies such as Aviation, Railways, transport, Hospitality, MSMEs, and Supply chain. It has significant impact on domestic and international tourism due to travel restrictions, shutdown of

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national borders and airports as well as slump in demand among the travelers. In fact, tourism sector has been massively affected by the spread of Corona Virus around the world.

Tourism is a key sector in many advanced and developing countries of the world. India is considered as the preferred destination for domestic and overseas tourism. Various places and states with cultural diversity in India are explored by International origin with the help of tourism sector. “Incredible India” campaign was started by the Ministry of Tourism for promoting tourism in India. Our motto “Atithi Devo Bhava” shows the culture of India and attraction of tourists. Tourism sector contributes 5.6% of India’s GDP as calculated by World Travel and Tourism Council. The Indian Tourism Industry employs 8.75 crore people. It has also strong forward and backward linkage to other sectors. India is the vast market for travel and tourism. This sector generates significant revenue for the Indian economy. India’s total foreign transit arrival stood at 10.9 million and foreign exchange earning of Rs. 210971 crores during 2019.

The Outbreak of COVID-19 represents an important and evolving challenge to the tourism sector. Like other sectors, tourism sector is also taking all the important measures in addition to social distancing and containment of pandemic situation. The United Nation World Tourism Organization (UNWTO) is coordinating with WHO to make sure for an effective response. There is uncertainty in this sector. It is impossible to predict what will happen in the next moment. In such situation governance, policies and planning as well as strategies are very important to increase future demand of tourism sector. My paper examines the impact of Covid-19 on tourism sector and overviews the challenges and opportunities as well as recovery and future demand of tourism sector.

Objectives

The main objectives of the study are-

- I. To examine the impact of Covid-19 on domestic and international tourism.
- II. To study the challenges and opportunities of tourism sector.
- III. To examine the recovery and future demand of tourism sector.

Methodology

For conducting the study explanatory research design has been adopted. The study is based secondary data derived from various websites, newspapers, magazines, reports, and published articles.

Hypothesis

The study is based on the hypothesis that how will the tourism sector be able to come up with new plans and strategies to recover and increase future demand of tourism sector.

Literature Review

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Riaz Munshi- Experts say that sharing of information and mutual collaborations are linked up to efforts towards a common goal and is equally important to everyone. Managing Director and President of “Outbound Tour Operator Association” of India says that things we could do only, do now is staying united, social distancing and stand together.

Loveleen Multani Arun- “Panache World’s” founder Director thinks it to be too early to spot signs that what customers are going to do. She says, we need to wait and watch to understand this scenario. She further adds that at Panache world is putting out international as well as domestic short haul programmes as it is likely to think that public is going to do this type of travel, once this lockdown is over.

Shravan Bhalla- CEO of “High Flyer”, India says that encouragement of lockdown and believing that things will go soon its normal is done. They are discouraging the lockdown and believe that things will go back to normal soon. He further added that on the business front, their team is making sure to be prepared for business after 4 months from now, by organizing various specialist programmes on destinations and also attending webinars.

CII Assessment Report-According to this report, the outbreak of virus since November has increased the number of cancellations and has almost reached the peak of 90% in June. The loss from this segment may be in millions and billions.

Rajesh Magow- CEO of “Make My Trip” has said that the period from February to March was normally a boom period because of examination season but due to the outbreak of the Corona virus, there has been slowdown in the sector.

Analysis of the Impact of COVID-19 on Tourism Sector

The ongoing COVID-19 pandemic has badly affected the domestic and international tourism. Thus, I have analyzed the impact of tourism in two parts:

- i.** The impact of Pandemic on domestic/Indian tourism
- ii.** The impact of pandemic on International tourism

A. The impact of Pandemic on domestic/Indian tourism -

Indian tourism has come to a halt due to prolonged lockdown as well as cancellation of Flights and Hotels booking. Foreign tourist arrival has been found to decline by 67% in the fourth quarter of 2019-20 while local tourist declined by 40%. Decline of foreign tourist arrival got worsened after cancellation of all the flights and Visas as to contain the spread of Corona Virus. Federation of Tourism and Hospitality has estimated a loss of 10 lacs crore for the industry due to spread of Pandemic. This will also impact the inflow of foreign exchange. Indian Association of Tour Operator (IATO) estimates that Hotel, Aviation, and Travel Sectors may incur a loss of about 85 billion dues to travel restrictions on foreign tourist in India. Social distancing norm will continue to impact tourism for the rest of the year. There is a significant decline in this sector during 2020. The sector estimates job loss

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of around 38 million which is 70% of total workforce. The Food and hospitality as well as Aviation sector are already reeling under pressure from a high fixed cost and no footfalls.

There are some places such as Srinagar, Amritsar, and Coimbatore which are used to be a hub of tourism during summer vacation but due to prolonged lockdown, the demand went down drastically. COVID-19 has directly impacted tourist states such as Uttarakhand, Rajasthan, Kerala, Himachal Pradesh, Sikkim and other Northern States which depend on tourism as a source of income.

B. The impact of pandemic on International tourism-

According to UNWTO report, 100% worldwide destinations have introduced travel restrictions in response to COVID-19 pandemic. The UNWTO estimated that international tourist arrival might decrease by 20-30% in 2020. In many cities of the world, travel bent down by 80-90%. Unilateral travel restrictions occurred regionally and many tourist's attraction such as Museums, Parks and Sports Venues around the world have been closed. International Tourist arrival decreased by more than 1/2 in the first five months of 2020 due to pandemic.

As a result of pandemic, many countries and regions have imposed quarantine, entry bans and other restrictions for travelers to the most affected areas. Many countries of the world imposed global restrictions or prevented their own citizens from travelling overseas. These restrictions to travel have had negative economic impact on travel sector. Travel restrictions and closure of national borders fell foreign arrival of different countries in March 2020. When I analyzed the region-wise decrease in tourist arrivals, I observed that-

- a. Asia and Pacific saw 35% decrease in tourist arrival in 1st quarter of 2020.
- b. Europe with 19% decrease followed by America (-15%), Africa (-12%), and Middle East (-11%)

International tourist arrivals decreased by 22% in 1st quarter of 2020 with arrival in March 57%. This translated into a loss US \$80 billion due to uncertainty and prolonged lockdown caused by pandemic.

The UNWTO data shows the cost up to May 2020 three times that of the 2009 global economic crisis and 56% drop in tourist arrival between January to May. The complete lockdown led to 98% fall in international tourism in the month of May 2020 as compared to 2019. This translates into the fall of 300 million tourists and US\$ 320 billion loss of revenue in international tourism.

The dramatic fall in international tourism places, many millions of jobs are at risk due to prolonged lockdown, travel restrictions and lockdown of airport and national border. It is estimated that 100-120 million direct tourism jobs are at risk, loss of revenue from tourism

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likely to be US \$910 billion to US \$1.2 trillion and the fall of tourist arrivals reached from 850 million to 1.1 billion which are major concerned. **In fact, this is the worst situation in the history of international tourism since 1950.**

Current scenarios point to decline of 58-78% in international tourists' arrival for the year, depending on the containment speed and the duration of travel restrictions as well as shutdown of borders.

Challenges

Tourism sector has following challenges:-

- i. Prevention of pandemic
- ii. Uncertain duration of pandemic
- iii. Unknown intensity of pandemic
- iv. Uncertainty of availability of vaccine
- v. Disruption in airlines industry
- vi. Uncertainty of imposing and lifting of lockdown.
- vii. Perception of tourist as travel is a risk in current scenario
- viii. Low demand by tourist due to social distancing
- ix. Unknown from new normal
- x. Unsafe accommodation and food services
- xi. Restructuring the regulation and Governance of Tourism
- xii. maintenance of tourist life
- xiii. Making attractive look of destination
- xiv. Quarantine measures
- xv. Travel restrictions and border closures
- xvi. Massive loss of tourism revenue
- xvii. Unemployment and business failure
- xviii. Closure of World Heritage and Cultural heritage

Opportunities

It is argued that tourism has high resilience and capacity to adapt and recover from unexpected phenomena. Due to pandemic, it is stressful to pass but some analysts believe that once the worst situation has passed, we will gradually return. To face the challenges of pandemic, there is an urgent need of future planning, management and structural change in tourism sector. This crisis presents us following opportunities:-

- i. Development of new governance
- ii. Maintenance of Social Distancing
- iii. Developing places to lives
- iv. Enhancing traveler with knowledge of travelling
- v. Domestic tourism can be buffer in post COVID crisis
- vi. Proven resilience of tourism in post COVID crisis

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- vii. Adaption of safety and hygiene
- viii. Re-thinking business model
- ix. Innovation and digitalization
- x. Sustainable segment- Rural, Nature, Health
- xi. Adaption plan in destination and companies
- xii. Leveraging to promote natural and cultural heritage.
- xiii. Critical contributor to the sustainable development goals.
- xiv. Offer of Destination closure to residence of tourist.

Recovery of Tourism Sector

Tourism is returning slowly in some destinations with low confidence due to travel restrictions, border shutdown and uncertainty of pandemic. Tourism experts expect that international tourism would recover by fourth quarter of 2020 whereas someone expects to rebound in the first part of the next year i.e. 2021. Re-start of tourism can be managed responsibly and with confidence of public by providing safest environment at the destination. We need greater co-operation and solidarity with the Government. In the contest of global economic recession, countries around the world are implementing a wide range measures to mitigate the impact of COVID-19 and to stimulate the recovery of the sector.

If the virus starts subsiding in the third and the fourth quarter of 2020, we can predict that tourism sector will recover partially till 2021 but will take long time to recover completely. The travel agent/company will have to regain the trust of the people in the recovery period to travel again after pandemic. To assist the tourism sector to recover quickly after pandemic, several actions must be carried out such as social distancing at major tourist destinations including hotels and airlines to regain the trust of the people.

As per UNWTO Panel reports, recovery of international tourism demand is expected in 2021 with slow pace. According to the experts, the world **domestic tourism demand would recover faster than international tourism demand**, since international tourism has several challenges in comparison to domestic tourism. In addition to that, the recovery of international tourism is also concerned with consumer and business confidence, spending decisions of the consumer and government state to support the international tourism. The estimate regarding recovery of **international tourism is more positive in Africa and Middle East, America is least optimistic to recover in 2020 while Europe and Asia are mixed.**

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Expected tourism demand is likely to recover as under mentioned table.

Table-1

Period	Domestic	International
July - September 2020	45%	24%
Oct-Dec	25%	34%
By 2020	15%	39%

Looking Ahead

- I. From April to December, travel restrictions are to be lifted and national borders are likely to be opened early in July/early September/early December. Above three scenarios reflect the gradual paces of the normalization in tourist sector.
- II. The scenarios are based on different patterns of recovery for different regions of the world. Asia and Pacific sees earlier change in trend as pandemic hit Asia before other regions.
- III. The economic recession resulting from pandemic is expected to have major important role on international tourism in near to middle term affecting consumers spending prosperity.
- IV. Monthly change in arrival is based on the gradual opening of national border and lifting travel restrictions on different dates. Arrival could drop 50-78% depending on space of normalization.

Suggestions

- I. Tourism sector need to increase the importance of products and destinations which should be in the interest of public and should ensure that they deliver value of money.
- II. Destinations should be environment friendly and provide all hygienic facility required.
- III. Reset button should hit and make the opportunities as the engine for economic development and growth.
- IV. The professionals of the industry should take all possible steps to make tourism sector sustainable by ensuring the required working capital.
- V. The chamber of industry and tourism association should come forward with common ideas to seek central government help in the form tax-relief and removal of fees/charges.
- VI. Tourism Minister can seek a national tourism recovery committee to look at the demand and issues of the tourism industry and to come up with ideas of recovery package.

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- VII. The Government should accept the proposals from TAAI and should consider complete GST tax-free holidays for the tourism, travel and hospitality industry for the next 12 months till the time of recovery.
- VIII. The tourism industry should adopt new normal of Travel i.e. health and hygiene should be given top priority for travelers at tourist places and airlines.
- IX. Personalized and tailored offering should be given preference.
- X. Collaborative effort should be made across various level of supply chain.
- XI. Stimulus package should be provided by the Government to revive the tourism sector.
- XII. The amount of all principal and interest payment should be deferred from 6-9 months.

Conclusions

The world is facing an unprecedented health, social and economic emergency caused by COVID-19 pandemic. COVID-19 has affected the various sectors of economy but it has a significant impact on domestic and international tourism due to prolonged lockdown, travel restriction, shutdown of national borders and airports as well as slump in demand by the tourists. In fact, tourism sector has been massively affected by the corona virus around the different countries of the world. COVID-19 has negative impact on employments & revenue of this sector. Tourism sector is facing a lot of challenges caused by Covid-19 but it can turn into an opportunity, as tourism has high resilience and capacity to adapt to recover from unexpected phenomena. To overcome the challenges of tourism sector caused by COVID-19, there is an urgent need to adopt new policies & strategies as well as good governance in this sector. The tourist's companies should also accept new normal and should follow the principles of sustainable tourism. Countries around the world are implementing a wide range measures to mitigate the impact of COVID-19 and stimulate the recovery of the sector. Tourism sector will recover partially till 2021 but it will take long time to recover completely. According to experts, the world domestic tourism demand would recover faster than international tourism demand. We affirmed that if our suggestions will be followed, then it would be helping to shoot out the problems of tourism sector to some extent.

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Chapter 24

Environmental Changes and Its Interrelationship with COVID-19: A Case Study of Assam

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Abstract

The global community addresses the task of ensuring sustainable development and saving the planet. With a growing population, environmental problems around the world are increasing day by day. Human beings have altered nature to meet their needs right from the start of human existence. Since human beings want to continue driving Nature as they please, their natural landscape has changed to drastic confinements. Industrialization and urban development were indispensable, with the resulting change affecting the global climate to satisfy the needs of the increasing population. Thus, global climate change, climate change, poor air quality, ozone layer depletion, species extinction, resource scarcity have emerged as global environmental concerns, posing threats to the mere existence of all the species on the earth's surface. But the impacts of the pandemic have stabilized to a large extent over the last few months, undoubtedly having a positive effect on global climate change [Chakraborty et al, 2020]. Although health, economy, trade, commerce, education, and socio-political sectors are facing challenges, the impact of this pandemic upon nature is constructive. The occurrence has changed the trend of anthropogenic activities drastically. The entire period of this pandemic has emphasized to change the mutually-affective man-environment relationship. These impacts are positively constructive for nature. Assam has observed several changes caused by this pandemic situation. Decreasing inter-state mobility among the states has reduced the problems of migration, wildlife trade, encroachment, and deforestation in the state of Assam. This present study provides a basis for acknowledging the positive changes, observed in the state of Assam, affirmed by the pandemic situation during the past months. This paper presents a brief overview of the impact of the current pandemic situation on the changes in the environment of Assam.

Keywords: Population, Environment, Industrialization, Pandemic.

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Introduction

A "pandemic is characterized as an outbreak that crosses international boundaries, and usually affects a great many people globally, or across a very large area." The classic definition of immunity, virology, or severe diseases does not include anything. An epidemic of a pandemic extends through countries and continents. Several people are affected and more lives are expected than an epidemic. When it became clear that COVID-19 was severe, and spread rapidly across a wide area, the World Health Organization declared COVID-19 a pandemic.

By this adjective, it can be said that annually pandemics occur in each of the temperate hemispheres in the south and the north as seasonal epidemics cross international borders and influence many people. Seasonal epidemics do not take into account pandemics, nevertheless. In general, pandemics are not just a serious concern throughout the world, instead, it triggers catastrophic socio-economic and political disruptions in the affected regions of the world. COVID-19 is regarded as an indicator of inequality and a deficiency in social progress, In addition to being the largest significant public health concern in the present year [Chakraborty & Maity, 2020]. But this worldwide pandemic brought along with it, tremendous changes in the environment over the world. Assam is an Eco-sensitive zone with huge reserves of forest resources and biodiversity. This environmental change that occurs due to lock-down stands to benefit the state enormously. The application of conventional sources of energy was significantly reduced, decreasing pollution drastically. The ecosystem is healing itself. River Ganga was pollution-free pouring clear water after decades. Ozone layer depletion which was a major environmental concern for mankind has revived due to the low emission of greenhouse gases.

Objectives of The Study

The objective of the proposed research work are as follows:

1. To understand what a pandemic is what are the challenges that come along with it.
2. To analyze the change in the trend of human activities due to the Covid-19 pandemic in Assam.
3. To study the environmental changes faced by the study area due to this pandemic situation.

Methodology

The methodology adopted for the study necessitated the use of a secondary study of the area. The information collected from various government sources, reports, and publications is collected and thoroughly analyzed, and personal observations are done throughout the study area. Reports of government, articles published through government sources like forest and climate change, and other various published sources are used in the study. Above all, information collected from personal observation in the study area is also helpful in preparing the report study area.

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Analysis of The Study

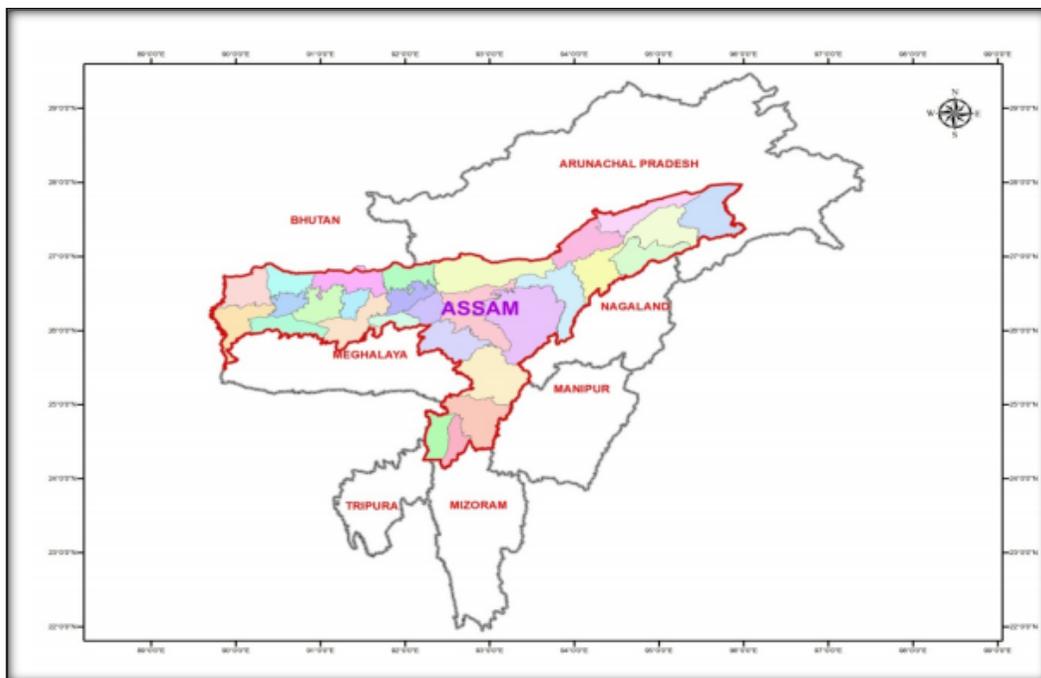
Study area:

The State of Assam is the gateway to North-East India, commonly abbreviated the Land of the Red River and blue hills. The state of Assam is situated along the Brahmaputra Valley and the Barak River valley to the south of the East Himalayas. The Assam state covers a total of 78,438 km². Assam's total population was 26.66 million and households in 2001 were 4.91 million. The total Assam population was 31,169,272 according to the 2011 census. The overall population of the state in the last 10 years grew by 16.93 percent from 26,638,407 to 31,169,272. The state is bordered on the north by Bhutan and Arunachal Pradesh; Nagaland and Manipur on the east; Meghalaya, Tripura, Mizoram, and Bangladesh in the south; and West Bengal on the south. Siliguri corridor which connects the state to the rest of India is a 22-kilometer bottleneck of land. It is one of the most populous plains in the country as well.

Figure 1: Location of the Study Area



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Covid-19 Pandemic in Assam

The World Health Organization (WHO) has been trying to persuade for years that habitat destruction shifts the dynamics of infectious diseases. This will include an increasing number of zoonotic diseases, which include rabies, Nipah, Ebola, SARs, Middle East Respiratory Syndrome (MERS), and COVID-19, which spread from animals to humans. Experts theorize the novel coronavirus (SARS-CoV-2) causing COVID-19 probably jumped over the intermediate animal host from bats to humans in a matter of weeks before a pandemic could be snowballing. Zoonotic diseases are more likely to come into contact as people enter hotspots of biodiversity— where there are many animals.

The highly infectious disease named COVID-19 started its journey from Wuhan city in China and speeded worldwide within a matter of two months. This disease has claimed over 732,000 lives globally, whereas total cases recorded were 19.9 million (10st August 2020). Deaths occurred in were, 44,386 out of 2.22 million cases in India and total recovered cases were 1.54 million. Total cases were 412,788. Assam has a total of 58,837 COVID-19 cases, of which 16,364 are active, and 4,2325 are recovered cases. There are 145 fatalities in the states as per 10th August 2020.

The outbreak of coronavirus has profoundly destabilized the global economy. Almost all nations are endeavouring to delay the transmission of the disease by monitoring and treating patients, quarantining suspected patients by detecting associations, restriction of large gathering of communities, complete or partial lockdowns, etc. Along with this global crisis changes in the environment are observed worldwide.

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Covid-19 and Environmental Changes

When civilization began, humanity began to exploit nature gradually to their gain. To meet the demand for increasing urbanization and industrialization, the obvious value of the global environment was found counterproductive. Also, air pollution, water pollution, climate change, ozone layer depletion, global warming, environmental pollution, decreasing biodiversity and wildlife and shift of ecosystem, increasing toxin level as well as many other environmental concerns are included [Bremer et al., 2019; Coutts et al., 2010,]. The increase in the level of greenhouse gasses (CO₂, CH₄, N₂O, etc.) is responsible for global warming. Since human beings wanted to drive nature as they desired, they started to destroy the nature of myriad ways. Pollution has become a serious problem today, as an inevitable consequence. However, due to the ongoing COVID-19 outbreak, almost all the large and small towns are affected in the areas. No industries are operating due to this lockdown, all transport functions are discontinued. In the meantime, efforts to minimize commute and industrial activities are ongoing. It had an incredible environmental effect by restricting movement. Industrial waste levels have typically decreased as a result of strong non-functioning. Vehicle emissions of greenhouses and small toxic suspended particulates into the environment are hardly recorded on the roads. The result is almost nil. The use of fossil fuels or renewable energy sources has been significantly decreased due to lower power demand in the industry. There is a great recovery in natural habitats. For the first time in their lives, the residents of many major towns see a clear sky. There is also a major reduction in the level of pollution from tourist spots like forests, sea beaches, rivers, etc. It was found that the ozone layer had stabilized to a certain degree. The pandemic has shown its opposing effect on human society, in that it has conducted foreign damage, on the one side, but it has also created very good effects on the world.

The question if the COVID-19 pandemic may or may not be a threat, but seems to be an environmental one. Many nations had locked-down measures since the coronavirus outbreak that stopped people from moving and shutting up stores or any other service. In the area of study, the following are just a few environmental changes.

Impact of Lockdown on Environment

Impact on Air Quality:

Just after a lockdown in India and Assam was enforced, people commute less by themselves, whether by automobile or by railways and flights. Even production facilities have been closed and have been unable to continue operating. Besides, this has ended up causing air pollution to drop considerably, as the production of pollution causing agents has dropped significantly.

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Impact on Water Quality:

Due to the lack of industrial waste production over the last few months, the quantity of solid waste and industrial contaminants is relatively small. The Har-ki-Pauri Uttarakhand Pollution Control Board Water was checked in Haridwar, and the test results also have shown that the water here was graded for the first time in decades as "good for drinking after chlorination." Major rivers like Basistha-Bahini, which carry enormous amounts and drains them into the Brahmaputra River have decreased the pollution in the catchment and ultimately reduced it. Without a question, the river habitat is thriving because of the smaller human footfall. Gangetic dolphins are evident in Brahmaputra's tributaries in many places. The disposal of industrial waste in river water is supposed to be eliminated and a significant change in water quality has been brought about as a result of the lockout.

Impact on Wildlife:

The government of Assam has decided to shut down the wildlife reserves, national parks, protected areas, and state zoos. This will help in reducing the disturbances in and around these Eco-sensitive and biodiversity-rich zones. With a lack of mobility among the people due to the lockdown, problems of illegal poaching and transportation of encroached wildlife have reduced tremendously over the past few months.

Impact on Forest Cover:

The rate of deforestation for lumbering, forest wood, and timber supply for industrial consumption has reduced tremendously. Forest and faunal resources are thriving faster because healthier air and water are accessible, and because again, human interference and anthropogenic activities are reduced. Plants are flourishing and creating more green cover and oxygen at this screeching halt. Less pollution, therefore, ensures that the river systems become less compromised and clogged due to urban and industrial waste disposal and this in turn is beneficial for the environment in the long run. Khonoma village, India's first 'green' village, situated in the neighboring state of Meghalaya, adapts to life without tourists and has reportedly maintained a sustainable lifestyle for biodiversity and conservation success.

Finally, although the environmental impact has been beneficial as a result of the lock-down, it is afraid that when people begin to commute again or return to their work, all the positive impacts will also crumble.

Conclusion

We can conclude by quoting Dr. Luz Claudio as he stated, "The lesson we should learn from the environmental effects of the pandemic is that if there was a global effort to do so, we might potentially have always had power. It is fascinating how cities with drastic levels of air pollution, from Los Angeles to New Delhi, see the disparity in environment and quality of life if there were a minimal number of cars and emissions from polluting

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industries”. Thus, if this sustainable trend of environmental management and resource use can be maintained we will be able to provide a long-lasting positive impact upon mother nature and conserve it for the future generation.

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Chapter 25

COVID-19 and Impact of Policies Measures on Indian Economy

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Abstract

After the great depression of 1930s, present economic slowdown caused by Covid-19 is worst recession faced by the global economy that has laid the adverse impact on all the economic activities across the world. After the spread of Covid-19 many countries, including India, locked down their economies. The present research paper is guided through the global economic scenario but mainly focus on the impact of various policies measures introduced in pandemic on the Indian Economy. The study empirically examines the impact of social distancing policies on corona virus active cases, death due to corona and economic activities. The study concludes that entire world economies are moving towards recession deeper than expected. Social distancing policies and lockdown restrictions were imposed in many countries, and there have been arguments that such social policies can trigger a recession. The effects of Covid-19 are still uncertain. The study further concludes that 3 months social distancing policy or lockdown restriction hit the economy adversely through a reduction in the level of general economic activities.

Keywords: Covid-19, Economic Slowdown, Indian Economy.

Introduction

The outbreak of COVID-19 disrupted the Chinese economy and then spread globally, leaving countries with no choice but to resort to lockdown mode. This is a global crisis with great magnitude and may be compared to the great depression of 1930s. The similarity between two is huge decline in aggregate demand. Because of lockdown, there is a huge loss in business. As a result, jobs were lost and hence income and demand declines. The IMF chief said that the year 2020 could see the worst global economic fallout and world is likely to experience negative per capita GDP growth. ILO estimates a maximum possible loss of 305 million full time jobs of 40 hours worldwide and OECD estimates a fall in real GDP growth of world of around 1.5 per cent.

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This deadly COVID-19 is seventh amongst the series of earlier known six such viruses. This impact of this virus is different from previous ones in several important ways. Mainly, the global lockdowns and trauma of financial markets reinforce one another into an unprecedented economic sudden stop. It is highly contagious and spreading at an unprecedented pace. It has affected 210 countries and territories around the world and infected more than 9 million people, of which more than 0.4 million people have died. The number of infected persons is increasing at exponential rate. ILO estimates suggest that 40-70 per cent of the world's population could become infected. In terms of absolute number of infected persons, the first five countries in order of rank are USA, Brazil, Russia, India and UK.

The global economy will experience the worst recession since The Great Depression. The IMF has predicted that a global GDP growth in 2020 will fall by 3 percent and cumulative global output loss of around US\$ 9 trillion from the COVID-19 crisis and a huge shrink in per capita income. While the forecasts for 2021 suggest a sharp rebound to 5.8 percent, the trends suggest that the world may need to endure this for a longer period than expected. This is a truly global crisis as no country is spared. Countries reliant on tourism, travel, hospitality, and entertainment for their growth are experiencing particularly large disruptions. The duration and the intensity of this impact in different countries would depend on the span of the health crisis in each country, the proactive policy measures put forth by the government, and their diplomatic, geopolitical and economic relations with other countries across the globe.

There is still uncertainty about the impacts of COVID-19 and governments' possible responses to limit the pandemic's human and economic effects. It is damaging economic and business, affecting every sector of the economy. WHO director-general, Dr. Tedros Adhanom Ghebreyesus said that "This is not just a public health crisis, it is a crisis that will touch every sector, so, every sector and every individual must be involved in the fights."

Maliszewska, et.al (2020); simulated the potential impact of COVID-19 on gross domestic product and trade, using a standard global computable general equilibrium model on two different scenarios: a global pandemic and an amplified global pandemic. It models the shock as underutilization of labor and capital, an increase in international trade costs, a drop in travel services, and a redirection of demand away from activities that require proximity between people. A baseline global pandemic scenario sees gross domestic product fall by 2 percent below the benchmark for the world, 2.5 percent for developing countries, and 1.8 percent for industrial countries. The declines are nearly 4 percent below the benchmark for the world, in an amplified pandemic scenario in which containment is assumed to take longer and which now seems more likely. The biggest negative shock is recorded in the output of domestic services affected by the pandemic, as well as in traded tourist services.

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Ma et al. (2020) conducted a study to examine the paths of countries' growth rates following a health crisis. The study found a decline in global GDP growth due to Covid-19. The study further concludes that, on an average, impact of Covid-19 is less severe in low-income countries experiencing a health crisis than it is in advanced economies experiencing a health crisis and is not statistically more severe in affected low income countries from unaffected low income countries. Moreover, they found a robust impact of fiscal policy stimulus on recovery performance. The question therefore arises whether COVID-19 might be less harrowing for developing countries than it had been for developed ones.

McKibbin and Fernando (2020) pointed that evolution of the disease and its economic impact is highly uncertain, which makes it difficult for policymakers to formulate an appropriate macroeconomic policy response. It examines the impacts of seven different scenarios on macroeconomic outcomes and financial markets using DSGE/CGE general equilibrium model. They found that even a contained outbreak could significantly impact the global economy in the short run. These scenarios demonstrate the scale of costs that might be avoided by greater investment in public health systems in all economies but particularly in less developed economies where health care systems are less developed and population density is high.

Data Base and methodology

Database

The data was been collected from websites of IMF, World Bank, WTO, ILO, UNIDO, Global Economy and 'Oxford COVID-19 Government Response Tracker (OxCGRT) database'. OxCGRT is a new database that monitors governments' policy response during the outbreak. For empirical analysis, the study took narrow sample of three months from 25th March, 2020 to 25th June, 2020. The reason for selecting 25th march,2020 is that PM announced lockdown in India on the day. The narrow sample size helps in finding the direct impact of various social distancing policies on the level of general economic activities (EC), number of Covid-19 confirmed cases (CC) and number of death due to Covid -19 (CD) in India at the peak of the coronavirus crisis.

For measuring economic activities, the study collected data on Purchasing Managers' Index (PMI) of India for the period. The PMI is an index of the prevailing direction of economic trends in the manufacturing and service sectors. It is calculated from monthly surveys of private sector companies. This index is used as a proxy for the level of general economic or business activities (EC). For the explanatory variables, the study uses nine variables to capture social distancing policies: the number of lockdown days or time variable (LD), School closing (C1), Workplace closing (C2), Cancel public events (C3), Restrictions on

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gathering size (C4), Close public transport (C5), Stay at home requirements (C6), Restrictions on internal movement (C7), Restrictions on international travel (C8).

The study uses the natural logarithm of the CC and CD variable observations to reduce the observed skewness in these variables. The LD variable was elaborated in the following way: the first day of lockdown is assigned a value ‘1’, the second day of lockdown is assigned a value ‘2’, the fifth day of lockdown is assigned a value ‘5’ and so on.

Methodology

The study uses multi-variate linear regression model estimated using a least square technique given as:

$$CCt = c + LDt + C1t + C2t + C3t + C4t + C5t + C6t + C7t + C8t + \dots \dots \dots 1$$

$$CDt = c + LDt + C1t + C2t + C3t + C4t + C5t + C6t + C7t + C8t + \dots \dots \dots 2$$

$$ECt = c + LDt + C1t + C2t + C3t + C4t + C5t + C6t + C7t + C8t + \dots \dots \dots 3$$

where,

t = business day of the week

Global Macroeconomic Impacts of COVID-19

Impact of the COVID-19 pandemic is highly uncertain and triggered the worst recession since the Great Depression. After the Great Lockdown, countries are now reopening and the pandemic is intensifying in many emerging market and developing economies. Several countries have started to recover but the strength of recovery and its impact on sectors are highly uncertain. Below are few macroeconomic impacts of Covid-19.

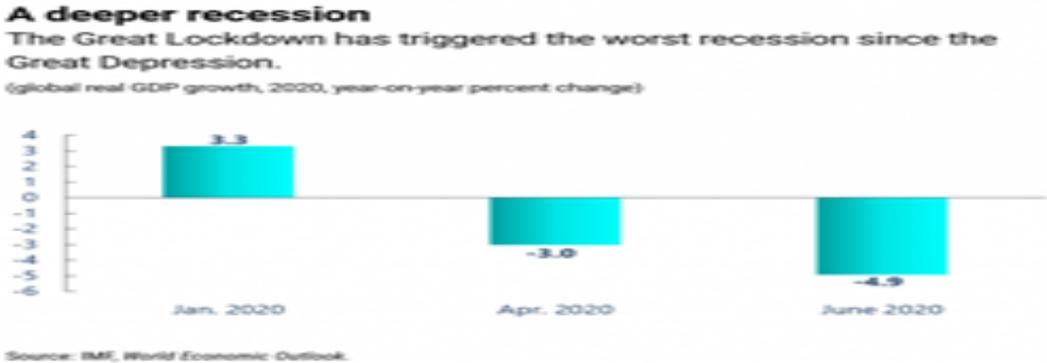
Global GDP

The global pandemic scenario assumes that the pandemic hit China the hardest, but also hurt other countries. For the first time both advanced economies and emerging market and developing economies are in recession. In April 2020, *World Economic Outlook* projected that global growth in 2020 would be -3 percent. This is a downgrade of 6.3 percentage points from January 2020. But in June 2020, *World Economic Outlook* forecasted that we are now projecting a deeper recession in 2020 and a slower recovery in 2021. According to the new projection, Global output is projected to decline by 4.9 percent in 2020, 1.9 percentage points below the April forecast. This may be because consumption growth has been downgraded for most economies reflecting the larger-than anticipated disruption to domestic activity. The projections of weaker private consumption reflect a combination of a large adverse aggregate demand shock from social distancing and lockdowns, as well as a rise in precautionary savings. Also, investment is expected to be subdued as firms defer capital expenditures amid high uncertainty. Policy support partially offsets the deterioration in private domestic demand (IMF, 2020). There will be partial recovery in 2021 with growth at 5.4 percent which is 0.4 percentage point lower than the April projection (shown

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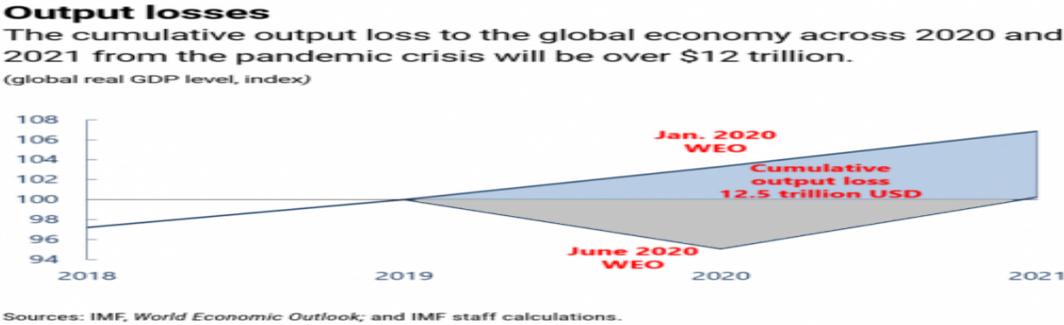
in Fig:1). Consumption and Investment are expected to increase gradually next year but to remain subdued.

Fig: 1



These projections imply a cumulative loss to the global economy of over \$12 trillion from this crisis as compare to \$9 trillion crises (April 2020 projection). The lower growth from April shows worse position than expected in the first half of this year, maybe because of more persistent social distancing and damage to supply potential in the second half of the year,.

Fig: 2



For the first time both advanced economies and emerging market and developing economies are in recession. The economic fallout could include recessions in the U.S., euro-area and Japan, the slowest growth on record in China. Growth in the advanced economy group is projected at –8.0 percent in 2020, 1.9 percentage points lower than in the April 2020 WEO. There deep downturns are foreseen in the United States (–8.0 percent); Japan (–5.8 percent); the United Kingdom (-10.2 percent); Germany (–7.8 percent); France (–12.5 percent); Italy and Spain (–12.8 percent). Emerging market and developing economies with normal growth levels well above advanced economies are also projected to have negative growth rates of -3.0 percent in 2020 which is 2 percentage points

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below the previous projection. The downgrade reflects larger spill overs from weaker external demand. Both advanced economies and emerging market and developing economies are expected to partially recover in 2021. In 2021 the advanced economy growth rate is projected to strengthen to 4.8 percent, leaving 2021 GDP for the group about 4 percent below its 2019 level. In 2021 the growth rate for emerging market and developing economies is projected to 5.9 percent, mainly because of high growth of China (8.2 percent). The growth rate for the group, excluding China, is expected to be -5.0 percent in 2020 and 4.7 percent in 2021.

Table: 1

**Latest World Economic Outlook
Growth Projections**

(real GDP, annual percent change)

	2019	PROJECTIONS	
		2020	2021
World Output	2.9	-4.9	5.4
Advanced Economies	1.7	-8.0	4.8
United States	2.3	-8.0	4.5
Euro Area	1.3	-10.2	6.0
Germany	0.6	-7.8	5.4
France	1.5	-12.5	7.3
Italy	0.3	-12.8	6.3
Spain	2.0	-12.8	6.3
Japan	0.7	-5.8	2.4
United Kingdom	1.4	-10.2	6.3
Canada	1.7	-8.4	4.9
Other Advanced Economies	1.7	-4.8	4.2
Emerging Markets and Developing Economies	3.7	-3.0	5.9
Emerging and Developing Asia	5.5	-0.8	7.4
China	6.1	1.0	8.2
India	4.2	-4.5	6.0
ASEAN-5	4.9	-2.0	6.2
Emerging and Developing Europe	2.1	-5.8	4.3
Russia	1.3	-6.6	4.1
Latin America and the Caribbean	0.1	-9.4	3.7
Brazil	1.1	-9.1	3.6
Mexico	-0.3	-10.5	3.3
Middle East and Central Asia	1.0	-4.7	3.3
Saudi Arabia	0.3	-6.8	3.1
Sub-Saharan Africa	3.1	-3.2	3.4
Nigeria	2.2	-5.4	2.6
South Africa	0.2	-8.0	3.5
Low-Income Developing Countries	5.2	-1.0	5.2

Source: IMF, World Economic Outlook Update, June 2020

Except China, no other country in the world will have positive growth. The global pandemic is expected to reduce Chinese GDP by 1.0 percent. The impact on China becomes progressively more negative as impacts of the shocks accumulate. First, the supply shock reduces GDP through reduction in employment (and capital) leading to lower production and exports, as well as lower imports due to lower income of households and shrinking production.

Second, with higher trade costs, the price of a unit of imports and exports increases and the competitiveness of Chinese production declines due to higher costs of exporting and higher costs of inputs; final goods' prices also increase. The rising trade costs represent a productivity loss, since additional inputs are needed to bring goods to their consumers, instead of being available for consumption and investment. Further, inbound and outbound tourism decreases significantly, resulting in further decline of Chinese GDP and exports. Finally, with the composition of expenditures changing with lower demand for sectors hit

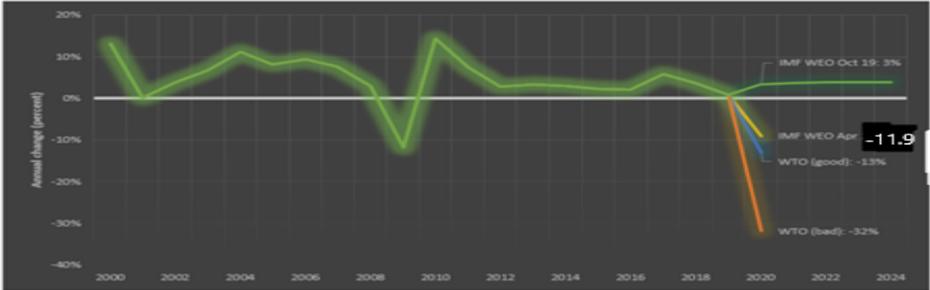
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by social distancing (transport, hospitality) and relatively higher demand for goods, the composition of output tilts towards manufacturing. (Maliszewska, et.al 2020).

Trade

The impact of Covid-19 outbreak on international trade is not yet visible in most trade data but some timely and leading indicators may already yield clues about the extent of the slowdown. Global trade will be expected to decline by 32 per cent (as per WTO, pessimistic scenario) and 11.9 percent (as per IMF projection) this year, reflecting considerably weaker demand for goods and services, including tourism. Moreover, capital flows are now being diverted towards advanced economies. There is expectation that there will be an increase in domestic demand next year, hence, trade growth is expected to increase to 8 percent by IMF and 24 percent by WTO.

Fig: 3



Note: Change in trade is calculated as the average in the change of exports and imports. WTO projections include only merchandise trade (excluding services). IMF figures include goods and services. The projections were carried out on the following dates: IMF = 24 June; WTO = 9 April. The projections conducted by the IMF in its World Economic Outlook (WEO) 2019 (green line) are used as the baseline for comparison. Source: UNIDO elaboration based on IMF (2019, 2020a) and WTO (2020).

Global Poverty

According to the World Bank April 2020 estimates, Covid-19 is pushing between 40 and 60 million into extreme poverty. Since then, the epicenter of the pandemic has shifted from Europe and North America to the global south. This has increased the death toll in low- and middle-income countries, induced longer shutdowns, and increased the economic costs of the pandemic. As a result, our estimates of the impact of the virus on global poverty have shifted as well. But as per June 2020 report global poverty could rise to over one billion people and more than half of the 395 million additional extreme poor would be located in South Asia. It is likely to increase dramatically in middle-income developing countries and there could be a significant change in the distribution of global poverty. The location of global poverty could shift back towards developing countries in South Asia and East Asia. More than 90 percent of emerging market and developing economies projected to have negative per capita income growth in 2020. Further, school closures in about 150 countries

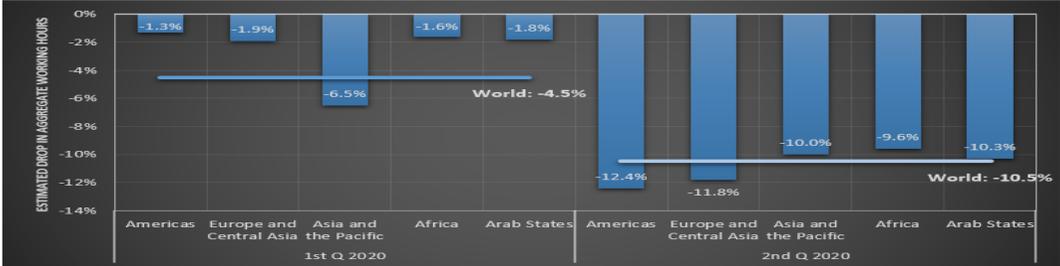
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as of the end of May, the United Nations Educational, Scientific and Cultural Organization estimates that close to 1.2 billion schoolchildren (about 70 percent of the global total) have been affected worldwide. This will result in significant loss of learning, with disproportionately negative effects on earnings prospects for children in low-income countries.

Unemployment

Unemployment rates are skyrocketing to unprecedented levels. The third edition of the ILO Monitor on Covid-19’s impact on labour contends that the share of workers affected by temporary workplace closures has decreased from 81 per cent to 68 per cent over the last two weeks. Working hours have declined by 10.7 percent relative to the last quarter of 2019, which is equivalent to loss of 305 million full-time jobs. While working hours are expected to decrease in all regions, the ‘Americas’ and ‘Europe and Central Asia’ will be hit hardest with 12,4 per cent and 11,8 per cent, respectively (Figure 4).

Fig: 4



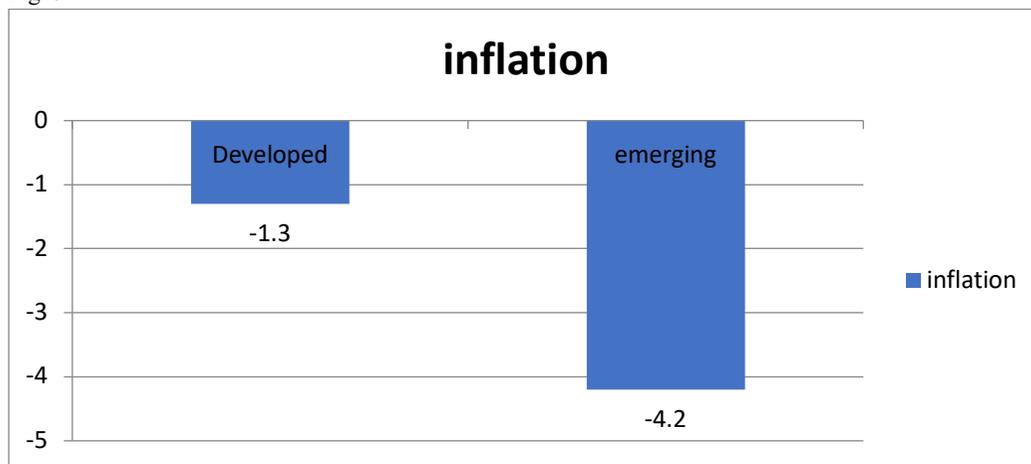
Source: UNIDO elaboration based on ILO (2020)

Weaker Inflation

The global economy is expected to slump into recession in 2020, as Post-Covid projections indicate. There was a sharp reduction in aggregate demand and international crude oil prices. Hence, average inflation in advanced economies had dropped about 1.3 percentage points since the end of 2019, to 0.4 percent (year over year) as of April 2020, while in emerging market economies it had fallen 1.2 percentage points, to 4.2 percent.

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Fig: 5



Source: IMF

Public Debt

To protect livelihoods, finance the immediate health response, provide support to households and firms, and invest in the recovery once the pandemic is under control. At an equivalent time, revenues are collapsing, particularly for commodity exporters and tourism and other services-dependent countries. Hence, more than two-thirds of governments across the world have scaled up their fiscal support to mitigate the economic fallout from the pandemic. Hence, fiscal measures estimated at around \$11 trillion globally, up from \$8 trillion estimated in the April 2020 Fiscal Monitor. One-half of these measures i.e., \$5.4 trillion are additional spending and forgone revenue, directly affecting government budgets and the remaining is for liquidity support. These measures help in maintaining cashflows and limit bankruptcies, but there can be an increase government debt and deficits. The average overall fiscal deficit is expected to rise to 14 percent of GDP in 2020, 10 percentage points higher than last year. Whereas, Global public debt stocks are projected to jump by 13 percentage points of gross world product in just one year, from 83 to 96 per cent . The IMF expects fiscal balances to turn sharply negative in developing countries, to -9.1 and -5.7 per cent of GDP in middle-income and low-income countries, respectively (IMF Fiscal Monitor, 2020).

Empirical analysis: Impact of Social Distancing Policies on Indian Economy

India's economy is the fifth-largest in the world with a gross domestic product (GDP) of \$2.94 trillion. Covid-19 has pushed Indian economy in a deep economic crisis. The sudden decline in economic activities due to the lockdown was unexpected. International Monetary Fund (IMF) has projected the GDP growth as -4.5 percent the worst growth performance of India. Corona virus has disturbed the entire economy of India.

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To control the spread of corona virus social distancing policies and lockdown restrictions were imposed in many countries like India, and there have been arguments that such social policies can trigger a recession. The effects of Covid-19 are still uncertain. There are eight policy measures taken by India. These are

1. School closing (C1),
2. Workplace closing (C2),
3. Cancel public events (C3),
4. Restrictions on gathering size (C4),
5. Close public transport (C5),
6. Stay at home requirements (C6),
7. Restrictions on internal movement (C7),
8. Restrictions on international travel (C8).

Indian Government announced Janata Curfew on 22nd March followed by nationwide initial lockdown for 21 days. This lockdown was further extended and some part of India like Maharashtra, West Bengal and other containment zones are still under lockdown. In India, this lockdown was placed when the numbers of Covid positive cases were approximately 500 in the country. As per recent data, total numbers of cases are approximately 5 Lakh. In this section, the study analyzes the impact of above mentioned policy measures on number of Covid active cases (CC), number of deaths due to Covid (CD), Purchasing Managers' Index (PMI) by using regression analysis.

The results of the empirical analysis are summarized in **Table 2**.

Table:2

Model	CC		CD		PMI	
	Coefficient (1)	t (2)	Coefficient (3)	t(4)	Coefficient(5)	t(6)
(Constant)	-.179	-13.720*	-.513	-4.203*	67.086	8.895*
c1	.012	1.227 ^{NS}	-.063	-.712 ^{NS}	.566	.103 ^{NS}
c2	.007	.916 ^{NS}	-.010	-.155 ^{NS}	-1.694	-1.442***
c3	.043	2.612***	-.010	-.075 ^{NS}	3.617	.431 ^{NS}
c4	-0.02	.000 ^{NS}	.015	.295 ^{NS}	0.002	.000 ^{NS}
c5	-.036	-2.403***	.024	.195 ^{NS}	3.111	.406 ^{NS}
c6	-.017	-2.576***	.269	4.927*	-12.648	-3.753*
c7	.050	2.448***	-.094	-4.565*	8.263	4.802*
c8	.164	23.453*	.325	5.638*	-6.446	-
LD	.05	2.520**	.048	31.213*	-.634	-6.625*
R ²	0.89		0.89		0.716	

Note: *, **, *** represent statistical significance at the 1%, 5% and 10% level. t-statistic are reported in column 2, 4 and 6 .

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The DL coefficient given in column 5 of the table is negative and significant. It indicates that the number of lockdown days significantly affected general economic activities (EC). Whereas with the passage of time Number of Covid patients and deaths due to Covid increases significantly (shown in column 1 and 3). C1, C2, C3 and C4 have insignificant effect. Whereas all the variables have negative impact on deaths due to Covid (given in column 3). Workplace closer (C2) has effect negative impact on economic activities. C5, C6, C7 and C8 affects significantly to the confirmed cases of Covid and number of deaths due to Covid. Internal movement restriction can decrease the death rate. Stay at home (C6) and restrictions on international movement (C8) the affects negatively and significantly the economic activities.

Overall, the results show that the increasing number of lockdown days, and international travel restrictions imposed at the peak of the coronavirus crisis severely affected the level of general economic activities and active cases and deaths due to Covid. On the other hand, the imposed restriction on internal movement had a positive impact on the level of economic activities; similar result was found Ozili and Arun (2020); whereas international movements have negative impact on economic activities.

Conclusion

The increasing widespread of Covid-19 has pushed the world into a great degree of uncertainty but one thing that seem fairly certain is the current downturn into the economy. It is a global crisis with great magnitude and may be compared to the great depression of 1930s. There is still uncertainty about the impacts of Covid-19 and governments' possible responses to limit the pandemic's human and economic effects. The study concludes that the entire world economies are moving towards recession deeper than expected. Social distancing policies and lockdown restrictions were imposed in many countries, and there have been arguments that such social policies can trigger a recession. The study further concludes that a 3 months social distancing policy or lockdown restriction hit the economy badly through a reduction in the level of general economic activities.

Limitations

The study has some limitations. The main limitation of this research paper is the short period of analysis due to limited dataset. A longer study period may capture the socioeconomic consequences of coronavirus crisis. The empirical findings of this study are limited to India only. Future studies will try to find out global impact of all the policy.

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Chapter 26

COVID-19 and Migrant Workers in India: An Appraisal

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Abstract

A democratic society is marked by constitutionalism, human rights and social justice. One of the key features of a democratic community is that it should be free from inequality, injustice and unfairness in treatment. However, a country like India is still struggling to avoid these unacceptable occurrences. Recently, we saw a great human tragedy during the lockdown period when the migrant workers were forced to abandon their place of work due to the loss of jobs and decided to walk out on foot under severe conditions. Migration is associated with economic endeavours leading to inter and intra State migration. But the situation arose due to pandemic COVID-19 is panic and became a tragedy in the history of India. The outbreak of Corona Virus with continuous reporting of fatality of the disease created consternation among the workers staying miles away from their near and dears. The imposition of lockdown and shutdown in phased manner also created uncertainty on their food security. The migrants without job and money have no other option to sustain in the host city except coming back to their native land. This desperate movement of huge number of migrants in the pandemic situation has created a bigger challenge for the state to address the life and livelihood issues simultaneously with a limited resource and infrastructure facilities. The increasing trend of COVID-19 and its prolong nature has posed challenged for the State government to contain it and revive the economy at the earliest. Hence, an attempt has been made here to view the influx of migrants to India during a period of health crisis from the dimensions of challenges and opportunities for the State which will pave way to address such vulnerability in future.

Keywords: Pandemic, Lockdown, Corona Virus.

Introduction

The government obvious of the hardships they suffered, announced the lockdown which brought on them untold miseries, so that migrant workers were forced to leave for their homes by whatever means of transportation they got. They were tired and ran out of their

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food stock also out of their pockets so that they marched barefooted to their homes. The government must be more sensitive and compassionate towards their plight and must have made appropriate arrangements to ensure that they did not suffer from the miseries of life. However, this did not happen and general people, media, courts and even the governments remained mute spectators to their plight. It prompted the Supreme Court to take *Suo Motu* cognizance of the plight of migrant workers. The court accordingly directed the Central and State Governments to adopt welfare measures for the betterment of these workers. Taking into consideration these very serious issue of migrant workers this paper aims to analyse the various problems arises due to lockdown and challenges come before these migrant workers. For the convenient of the study, this paper has been outlined in the following heads. These are:

- I. Introduction
- II. Legal framework for Migration
- III. Plight of Migrants : An overview
- IV. Steps taken by the Government
- V. Challenges Before the State Governments
- VI. Role of Indian Judiciary
- VII. Conclusion

The outbreak of Corona Virus Disease (COVID-19) has become a global challenge. As on 1st September 2020 it has affected about 216 countries and two international conveyances around the world infecting 25,806,736 People, out of which 857, 885 death cases are reported. When we look at the Indian scenario there are 3,766,108 confirmed Corona cases, out of which 66,460 are death cases. As it is contagious and spreading very quickly, it has created an alarming situation across the country. Fears and rumours are going on among the different communities about the disease. It has not only created the health hazards and economic regression but also affected livelihoods of the different sections of people due to declaration of nationwide lockdown from 25th March 2020 to 31st May 2020. Particularly, the migrant workers are worst sufferers who live without a safety net as were looked nobodies' babies. It is worth to mention here that migrant workers contributing to nearly 80% of the total workforce⁴ are treated as the silent contributors to the national economy but till date the government has not a clear database or registration mandate for inter and Intra State migrant. Though, a number of measures have been taken by the Central as well as the State governments to contain the pandemic COVID-19 and to ease the distress still they are being pulled into the zone of vulnerability by disruption of economic and social life. Hence, it is high time to focus on issues related to migrant workers in the context of COVID-19.

⁴ See, Chatterjee, Patralekha (2020). The pandemic exposes India's apathy toward migrant workers. The Atlantic, 22 April.

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The lockdown decision of government compelled many people to live in anxiety and distress. Due to this pandemic, economic loss at national or State as well as individual level cannot be ignored, which is becoming an upcoming challenge for food security. A large number of migrant workers and their families, including women and children, had to leave the cities across the country, as the lockdown rendered them jobless and helpless due to lack of social security network. While thousands of migrants were stranded in different parts of the country, many had to walk hundreds of kilometres from cities to their homes. This desperate movement has created problem for the destination State by spreading infection to new areas which are asymptomatic, surveillance and screening issues along with quarantine facilities for the migrants, enrolling in PDS and creation of job to ensure their food security etc.

Migration is considered as an integral part of the process of evolution and closely associated with human civilization. Intra and inter migration with respect to a particular geographical area is a continuous process. The word migration connotes temporary or permanent geographical area is a continuous process. The word migration connotes temporary or permanent movement or shifting to an individual from one place to another place which is derived from the Latin word 'Migrate' means 'change of one's residence'. Tracing back to the evolution of human civilization, i.e., from pre-historic Palaeolithic era to Neolithic era it is found that human went on moving in search of food and lead a nomadic life. Later, after settling down in a particular region, human started exploring options to satisfy their needs which pushed them to move from one are to other for appeasing the requirement. History also evidences about the migration in forms of invasions and conquests. Hence, when Geographers are mapping the migration with reference to time and space, the Social Scientists look at the social and economic driving forces behind the mobility. "Migration is a response of human organisation to social, economic and demographic forces of the environment." At the same time, it envelops different aspects on the basis of 3 D's such as distance, duration and direction.⁵

In post-economic liberalization era mobility of human beings are mostly influenced by the improved transport and communication system where unavailability of livelihood options in the native area insists people for outward mobility in search of their livelihood options. Sometimes due to development projects people of a particular area also forced to migrate to the neighbouring districts or States. Kaul⁶ highlighted that there are four components of migration movement, i.e., economic, social, technological and environmental, and these are considered interdependence between the sending and receiving areas. This indicates that migration is a complex but integral part of the society as it influences the economic

⁵ See, Behera, Narendra K. (2017). Internal migration from Odisha: A reflection on KBK districts. Kalpaz Publications, Delhi.

⁶ See, Kaul, Ravender Kumar (2005). Migration and society: A study of displaced Kashmiri Pandits. Rawat Publications, Jaipur.

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system of the society by bringing economic change whereas it needs to understand the problems encountered by the people at both the receiving and sending end.

Though migration is a by-product of socio-cultural, economic and political arena, most of the time it is viewed in terms of economic progress as it is directly linked with the enhanced economic status of the migrants as well as influences the consumption behaviour of the family. Particularly, in the agrarian State where agriculture is considered as a seasonal activity majority of rural population migrate seasonally to different areas in search of alternative livelihood options during lean period. A migrant is a person who moves from one administrative unit to another, with an intention to settle permanently in a different region or a country. But seasonal migrants are having special characteristics as they migrate internally from rural set-up to urban or industrial areas in search of their livelihood which is generally categorized as labour-migration. The object poverty and unavailability of adequate employment opportunity or livelihood options in the locality forces rural people to migrate to more developed areas. Besides, lack of interest in agriculture and exploring employment opportunity in the industrial area or trade centre matching to the aspiration are the major motivational factors of internal migration for the youth mass. As recorded in Census 2011, about 37 per cent of the total population in India are internal migrants and with change of years the trend is in an increasing order. Basically, unequal economic development causes short duration internal migration in the form of inter-State, inter-district or intra-district migration. Among the migrants in both rural and urban areas nearly 99 per cent were internal migrants out of which 91 per cent migrated from the rural areas.

Many migration studies are carried out focusing on push and pull factors as well as analysing positive and negative factors. But during the pandemic COVID-19 situation issues of reverse migration go beyond those factors, for which there is an urgent need to think about the migrants from a different dimension. The outbreak of Corona Virus and the consequent lockdown decision of the government as a preventive and protective measure have a greater impact on the livelihood as well as socio-psychological state of the migrants working in different cities.

When the honourable Prime Minister of India declared nationwide lockdown on 24th March 2020, the migrants who are basically labourers were hopeful of resumption of their work soon. But the second phase lockdown declaration on 14th April 2020 shocked them and forced to stay in anxiety. At that time most of the migrants had already spent their money to meet their day to day need in the lean period. This was an unplanned and unnatural crisis for them. They were exposed to confront with brutality of the house owners as well as hungry stomach. Because of joblessness, hunger and feeling of insecurity thousands of migrants tried to come back to their native land. But it was difficult for them to reach their home due to seize of transport system.

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In order to manage such a huge influx of population in the period of health crisis was a challenge for the State for surveillance and screening issues along with quarantine facilities as well as job assurance for them. Print media as well as electronic media highlighted the issues in a periphrastic way. Polemic statements about migrant workers from different stakeholders were also coming from different corners of the society. Hence, return of inter-state migrants during pandemic COVID-19 situation drawn attention of administrators, policy makers, civil society organisations as well as health functionaries. Thus, the present work tried to throw light on the coping mechanism adopted by the migrants as well as government to address the issues of migrants. Besides, attempt has been made to analyse the opportunities and challenges emerging before the State government for accommodating the returned migrants as well as their livelihood security. After looking all these situations, it is very pertinent to see that what kind of legal frameworks are available to tackle these problems.

Legal Framework for Migration

It is very interesting to note here that in a country like India where democracy has given a prime importance. In such a situation, in a democratic society is marked by constitutionalism, human rights and social justice. One of the key features of a democratic community is that it should be free from inequality, injustice and unfairness in treatment. However, a country like India is still struggling to avoid these unacceptable occurrences. Recently, we saw a great human tragedy during the lockdown period when the migrant workers were forced to abandon their place of work due to the loss of jobs and decided to walk out on foot under severe conditions.

Battling migrant labourers have raised concerns regarding their legal and constitutional rights. Protecting the rights of migrant workers is the duty of the State and the State must legislate upon providing legal rights to compensation from the employers and in case of unemployment from itself. The legal rights also relate to fairness of treatment in times of crisis such as the one that is happening now due to outbreak of COVID-19 and resultant nation lockdown.

In so far as the constitutional rights of these workers are concerned it is the bounden duty of the State and Courts to give full respect to Article 21 which provides for a decent living for all individuals residing within the territory of India. It also encompasses within its fold the issue of human rights. It simply means that these workers must be ensure not only a respectful life by making the provision for the basic amenities of life but also a fair treatment that a human being deserves.

The recent mass reverse migration of workers has exposed the apathy of the employers besides exposing the apathy of the State as well. Now, it is has become clear that the

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employers used these workers to get their work done without making any provision for the future security of these workers. The State on the other hand colluded with these employers in not bothering about the security of them. Further, the “hire and fire” policy adopted by the private employers supported by the legislation cited above has further rubbed salt on the wounds of these workers. The recent crisis that they find themselves in is the outcome of all the above factors which must immediately addressed.

The Indian Constitution has considered mobility of the individual as a fundamental right under Article 19(1) on the basis of which an individual gets freedom to go anywhere and settle where within the Indian Territory. When the Emigration Act, 1983 regulates the mobility of people to outside India (International Migration), the Inter-State Migrant Workmen (ISMW) Act, 1979 deals with the migration of the people within the country. As this paper basically deals with the issues of inter-State migrants during COVID-19 there is a need to look at the provisions and applicability of the Inter-State Migrant Workmen Act, 1979.

The applicability of the Inter-State Migrant Workmen Act, 1979 extends to the establishment or working place where five or more inter-State migrants are engaged, registrations of the employer and the migrants as well as license of the employer are made mandatory. It also gives certain rights to those migrants like:

- i. Equal wage for equal nature of work according to the Minimum Wages Act, 1948 and Minimum Wages Rule, 1954.
- ii. During recruitment they are eligible to get non-refundable displacement allowances equal to 50% of monthly wage (15days wage), home journey allowance as well as wage and food for journey period.
- iii. Provision of suitable accommodation and health check-up facilities.
- iv. Regular payment of wages without any gender discrimination.
- v. Rights to file complain within three months of the happening of incident.
- vi. Violators will be fined or punished with one-year imprisonment.

Besides, there are other Acts and Rules which are also applicable for the migrants like:

- i. The Workmen’s Compensation Act, 1923 and Rules, 1924
- ii. The Minimum Wages Act, 1948 and Rules, 1945
- iii. The Equal Remuneration Act, 1976
- iv. The Contract Labour (Regulation and Abolition) Act, 1970 and Rules, 1975
- v. The Child Labour (Prohibition and Regulation) Act, 1986 and Rules, 1994
- vi. The Payment of Gratuity Act, 1972 and Rules, 1974
- vii. The Unorganised Workers’ Social Security Act, 2007 and Rules, 2010
- viii. The Building and Other Construction Workers’ Welfare and Cess Act, 1996 and Rules, 2002

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Recently, the Centre and various State Government have changed various labour laws to facilitate “each of doing business”. For example, the Central Government had already attempted to change in September 2019 labour code in the name of Code on Wage, 2019 which includes The Payment of Wages Act, 1936, the Minimum Wages Act, 1948, the Payment of Bonus Act, 1965 and Equal Remuneration Act, 1976.⁷

However, in order to avoid complex procedure of registration many labourers are going to the workplaces through agents or through their peer groups for which they are facing problem in later stage.

Plight of Migrants: An Overview

Generally temporary migrants belong to people from poor economic class and mostly from unprivileged or under privileged areas of every States. Their destination also selective basing on the contact with friends and relatives. Though migration is coming under the demographic feature of the society, their contribution to economic growth cannot be ignored. The remittance of migrants’ supporters’ economic upliftment of the concerned families. Besides, current life style of the people and matching aspiration are major promotion factor for migration. The hierarch of needs as state by Abraham Maslow in also applicable for migration factors. When all the earning doors at the locality are closed or inadequate to meet the basic needs of the people, they think about migration as an alternative option of livelihood. A widely-quoted figure based on the 2011 census and on NSSO (National Sample Survey Office) data, asserts that there are 65 million inter-State migrants, of which a third are workers in the informal sector.

The State governments have no data base for such migrants. These migrants, particularly the labourers have faced a lot of difficulties due to the national lockdown declared by the Central Government from 25th March, 2020 till 31st May 2020 in different phases to contain the spread of novel coronavirus disease. The sudden announcement of lockdown and the frequent media coverage on the pandemic of COVID-19 forced them to stay in social, psychological and emotional trauma. When the lockdown to control spread of COVID-19 snatched their bread and butter, their survival in the host city became a question. The government has also not thought about their rehabilitative food security measures before declaration of lockdown. The perception of risk and fear of being infected as well as starvation instigated them to leave the working cities and opt for reverse migration. But seize of transport system made thousands of migrants stranded in different parts of the country whereas some to them tried to reach their native place by walking or cycling. The

⁷ How Modi Govt’s labour law changes hope to raise India’s ‘Ease of Doing Business’ ranking, dated: July 27, 2019, available at: <https://theprint.in/india/governance/how-modi-govts-labour-law-changes-hope-to-raise-indias-ease-of-doing-business-ranking/268663/> (Last visited on June 11, 2020)

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plight of society's moral compass, paralysis of politics and today's India: obscene class inequalities, loss of society's moral compass, paralysis of politics and toxic media.

When the lockdown was declared, the migrants desperately started their journey to reach home. Newspapers bearing photographs of migrants walking on roads, railway tracks started coming regularly. All the Television channels, social media also focused on their desire to be with their families. It is well understood from the scenario that at the initial phase of lockdown they became invisible for the planners as well as politicians. But when they have no work, no food and no roof they rushed to the railway stations and bus stands to go back to their native place as no other alternative option was left for them. Since the migrants live in two worlds, i.e., urban insecure employment and stable homeland, they are forced to come back to homeland during such pandemic. The migrants who were staying in densely populated and unhygienic condition, social distancing bore no meaning for them. The only thing in their mind was how to survive. Thus in the crisis of lockdown they came together to the road and desperate crowds at different stations shown in different media were evidence of gravity of situation of the reverse migration.

The migrants who are backbone of the informal sector are felt insecure and trapped. They used to stay in slum areas in group where house owner's livelihood depends on their rent only. When they have undergone a no work no money situation the house owners forced them to vacate the rooms. Migrants mostly working in small industrial units like garment, textile industries, gem polishing industries, shoe making industries were struggling for their survival during lockdown period and hence, employers were unable to extend their support. Tragedies of physical torture issues as well as death due to mile long walk have come to limelight also. As they were deprived of accessing the food security cards, they had to remain in starvation. Hunger and uncertainty as well as messages about the deadly Corona Virus started frightening them and compelled them to return their native place.

When the migrants were walking on the railway tracks and roadways, the scenarios questions the imbalance of power between capital and labour as well as the limitations in the State welfare measures. Government has also negotiated with the Chief Ministers of other State to provide food, was too late to address their sufferings. The Central Government took 53 days to set up NMIS (National Migrant Information System), an online dashboard for the States to put up figures so that they can monitor the movement of people. On the other word, it can be said that the pandemic-induced lockdown has taken the lid off and exposed the existing structural gaps in economic growth of States and India. In order to bring the migrants home, the State Government launched a web portal for the registration of the migrants. However, many workers faced problem in registering due to lack of an Aadhaar Unique Identity Number. However, there was no sign to travel arrangement. The women migrants particularly suffered mental stress as nobody heed to their plight. While some migrants were able to come home by arranging buses, other faced

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problems in arranging transportation and stranded in different places. Further, the desperate decision to return home brought them together in different places thereby failing to follow physical distancing and regular hand wash, which made them susceptible to COVID. Even though the State government arranged special buses and trains for the return of migrants, they faced a number of problems. The problem did not leave the migrants, even after they return to the home. Many complained about the poor facilities and foods provided to them in institutional quarantine centres.

This forced the State government to issue strictures for strong action against such migrants, which put them under stress who had already come across many hurdles due to the lockdown. Even though the State government has declared provision of MGNREGS works to the unskilled migrant workers after quarantine, the semi-skilled and skilled migrants' workers have not got any work assurance. These workers who were sending remittances to the family have not become burden on the family as they have no source of earning at present. After discussion of the above constitutional and legal provisions we will have to see that what kind of steps have been taken by the government to achieve those objectives which are conferred under the Constitution of India as well as under the various legislative enactments.

Steps taken by the Government

Excessive media reporting regarding the fatality of COVID-19 pandemic created havoc among the migrant worker. As these workers were living far away from home in major cities like Delhi, Bombay, Surat and other where the chance of catching COVID-19 was more as reported by the leading national media, it created panic among the migrant labourers to go back home. Hence, during the pandemic COVID-19 the desperate reverse migration of lakhs of migrants in starvation on rail tracks and highways of "Shining India" compelled the government to take immediate steps. Besides, they also demanded for intervention and assistance of government in this regard. The Prime Minister of India had a dialogue with all the Chief Ministers of States and as on emergency basis free kitchen for all migrants was provided during the 2nd phase lockdown. But nobody monitored that whether it is reached to the targeted people or not. The State Government has also taken a number of steps for the relief of migrants. All the States had requested to other State Governments to provide shelter and food the stranded State workers in their State, unless until the transportation system is unlocked. Subsequently special aero plane, train and bus services were arranged to bring back the stranded workers and those who want to return back. Step has also taken to ensure zero walking inside the State. Besides, quarantine camps or temporary medical centres were established at Gram Panchayat levels across the districts of States to keep the migrants for 14 days observation. Different committees were formed to watchdog the Corona situation.

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However, an increasing trend of confirmed Corona cases has been noticed after influx of migrant workers, i.e., from 1st week to May 2020 though the recovery rate is high and fatality rate is quite low in comparison to other States. The trial of COVID-19 also evidences a wide variation across States as well districts.

The Central Government has announced the second tranche of COVID-19 relief package for the migrants who do not have NFSA cards or State Cards, free ration of 5 Kgs. Of wheat or rice per person or 1 Kg Chana per family per month for two months through the State governments. It planned to entail Rs. 3500 Crore and is like to benefit 8 crore migrants. Besides, additional funding of Rs.40, 000 crore was provided for MGNREGS to absorb the return migrants' workers as well as rental accommodation incentives to private manufacturing and industrial units to develop affordable housing under Pradhan Mantri Awas Yojana for migrant workers.

Challenges Before the State Government

The State government had to face many challenges in tackling the situation of desperate return of migrants like spreading infection to new areas, surveillance and screening issues along with quarantine facilities and food security measures for the migrants. Most of these migrants returned to State without informing the State government, which has created problems in the management of their stay at the institutional quarantine centres as well as become a major cause for spreading infection as they returned from most infected States. The extraordinary and massive inflow of returnee-migrant workers to their native places in the wake of the imposition of lockdown across the country has brought about a major challenge for ensuring their health, safety and means of livelihood.

The migrants who did their registration came in groups by different modes of transport, which became a challenge for the administration to accommodate them in institutional quarantine centres. The government also faced the challenge in the quarantine centre due to indiscipline created by some migrants. Some migrants while on the way to the institutional centres in rural areas few to their homes without informing the government, which not only became problems for management but also created potential threat for the local spread of coronavirus. Though Government imposed many stringent conditions and restrictions to ensure quarantine of migrants, due to improper quarantine facilities in the TMCs, the migrants were reluctant to stay there.

The influx will be a welfare burden on the government for ensuring access to social security schemes. Identification of the returned migrants and interdepartmental coordination to address their livelihood issue with a realistic and holistic approach in order to guarantee their income will be a big challenge. There is a need for accreditation of informal sector and investment in training and skill development of the migrants.

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Out-break of Corona virus and subsequent lockdown led the migrants to impoverishment due to loss of livelihood. Their reverse migration will stop the remittance flow which will affect the socio-economic status of the family. It will not only affect their food habits and nutritional status but also impact on the access to health care services and education of the children. They may be deprived from different entitlements and social security schemes. The enrolment of returned migrants under MGNREGA as well as identification of the potential skills with them needs to be taken up immediately. Accordingly, they need to come forwards for up-gradation of their existing skill matching to the government scheme and register themselves. As these migrants are not only unskilled, but also semi-skilled migrants. Further, past experience of implementing MGNREGA shows that it has outlived the utility. Time has come to have a fresh look at how to create employment opportunities for all those who have had to leave their homes in search of employment and go to other States. Besides, mere declaration for creation of man days would not suffice as it had not attracted the migrants prior to the COVID-19 situation. However, this can give temporary relief to the migrants. The State government should try to rectify the past mistakes. It should create actual potential and make timely payment for the MGNREGS works; otherwise it would only be a mere slogan.

Looking at the spreading rate of COVID-19 size of the reverse migration it can be assumed that it will be a massive logistic challenge for the government to ensure exclusive accommodation for the Corona infected patients. Managing or handling the people in negative pressure isolation area seems a difficult task for the designated personnel. The influx of huge number of migrants to their own States may be an added constraint to the disease surveillance strategy as the usually forego treatment and resort to the migrants are mostly treated as carrier of the disease hence, trust building with the community will be a challenge for the migrants. The community will develop prejudice of job saturation in the locality. The reverse migrants may influence the sanity of the culture, lifestyle and approach of the local people which needs to be addressed by engaging community.

Further, during unlock period, the inter-district and inter-State mobility of people cannot be restricted which will worsen the situation. In the current testing capacity of the State and facilities to manage Covid and Non-Covid patients will also create implementation challenges. To meet the crisis, State will require more investment on public health sector in economic regression period due to prolong lockdown.

The State government has faced two major challenges: first, to contain the COVID-19 and second, to provide employment to the migrants who have become jobless. Though government is planning to double man days under MGNREGA, it may not be possible in the coming monsoon. It is required to design the employment generation activities plan under MSME which has all time demand like food processing and value addition, stitching and designing etc., and involves some sort of skilled or semi-skilled work. The

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Government can utilize the information captured on migrant by “Mo Sahay App”. It has collaborated with industry bodies like CII and FICCI and could capture 308 skills demanded across 24 industries. Hence, the migrants should be sensitized so that they will come forward to register themselves mentioning their details and about their preferable or desire are of work.

The other challenge for the State government is to map the skills of the migrants, based on which the employment needs to be generated. Many migrants may not stay after the COVID-19 situation improves and the previous workplaces open. The State government should therefore make a mapping of the migrants to take stocks of their skills, period of stay, etc., at the earliest at all the gram panchayat level. Accordingly, the State government should develop plants for generating employment. The State government may also need to enrol the migrants in Public Distribution System (PDS) to ensure their food security. From the above discussions it clear that governments have taken various measure to tackle this crucial situation but somewhere governments are not able to protect the rights of these migrant workers. But at the same time Indian judiciary is very proactive towards the protection of human rights. During the COVID-19 Pandemic crisis our judiciary played a very significant role to protect the fundamental rights which are guaranteed under the Constitution of India and other rights which are protected through the various legislations. The Indian judiciary from time to time shown its interest to protect these rights.

Role of Indian Judiciary

Over the past two and half months as many as 12 High Courts in India took cognizance of the humanitarian crisis caused by the reverse migration of the worker.⁸ Some of them like the Madras, Andhra Pradesh and Delhi High Court has issued direction to the Central and State government asking them to take up measures for alleviating the pain and miseries suffered by these migrant workers. In the month of May, the Madras High Court⁹ made scathing remarks against the authorities taking note of migrant labourers who walked back to their native places during the lockdown. The Court said that it was the human tragedy, but one should not remain a mute spectator to the pathetic conditions of these workers which could be seen in media. Holding the authorities responsible it directed the Central government and the Tamil Nadu government to submit before it an Action Taken Report related to the welfare of these workers during the lockdown period. The Court also wanted the data of the stranded migrant workers and assistance given to them so far, the date of the hapless migrant workers who died on the way the compensation given to their families and assistance provided to the returned workers.

⁸ SC can't 'monitor' walking migrants, but 12 HCs have issued orders on food and shelter, The Print, Dated: May 18, 2020, available at <https://theprint.in/judiciary/sc-cant-monitor-walking-migrants-but-12-hcs-have-issued-orders-on-food-and-shelter/424241/> (Last visited on June 18, 2020).

⁹ Migrant workers situation 'a human tragedy', says Madras HC, dated: May 16, 2020, available at: <https://thefederal.com/news/migrant-workers-situation-a-human-tragedy-says-madras-hc/> (Last visited on June 19, 2020).

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The Andhra Pradesh High Court also expressed unhappiness and anguish over the pain suffered by these workers and directed the State government to make arrangements such as food, drinking water, glucose packets, temporary toilet facilities etc., for the walking labourers until they reached their homes.¹⁰

The Delhi High Court asked the Delhi Government to set up a hassle-free helpline number to help the migrant workers to make contacts their homes and also help the family members of these workers to contact the migrant labourers.

The Gujarat High Court took *Suo Muto* cognizance of the crisis and ordered the State government to make concrete plans to address the difficulties suffered by these migrant workers. It asked for more humane approach to tackle the situations.

The Kerala High Court has itself stepped in monitoring the steps taken by the State government regarding the provision of food and shelter.

The Odisha, Bombay and Himachal Pradesh High Courts also asked the respective State Governments for making appropriate arrangements such as food, shelter and medical facilities to these workers. The Himachal Pradesh Court asked the State government to file and Action Taken Report in this regard.¹¹ It is in line with the order of the Jammu and Kashmir High Court which in March itself directed the Union Territories Administration of Jammu and Kashmir and Ladakh to see that free accommodations, healthcare facilities and other needs of the migrant workers are met properly.¹²

Similar orders have been passed by the Telangana and Uttarakhand High Court with the former asking the civil supply commissioner to provide free ration and other essentials to even those who do not have ration cards, while the latter asking the Uttarakhand government to address the plight of 40,000 migrant workers, and also to properly implement the National Food Security Act, 2013.¹³

¹⁰ Their pain has to be alleviated at this stage": Andhra Pradesh High Court passes directions for measures for benefit of workers on the move, available at: <https://www.barandbench.com/news/litigation/their-pain-has-to-be-alleviated-andhra-pradesh-high-court-passes-directions-for-measures-for-benefit-of-workers-on-move> (Last visited on June 19, 2020).

¹¹ Himachal HC Seeks Action Taken Report from State Govt On COVID Related Advisories from Centre Dated: April 23, 2020, available at: <https://www.indialegallive.com/constitutional-law-news/courts-news/himachal-hc-seeks-action-taken-report-from-state-govt-on-covid-related-advisories-from-centre> (Last visited on June 21, 2020).

¹² HC asks J&K, Ladakh to take care of stranded migrant labourers, dated: March 30, 2020, available at: <https://www.tribuneindia.com/news/j-k/hc-asks-jk-ladakh-to-take-care-of-stranded-migrant-labourers-63222> (Last visited on June 21, 2020).

¹³ Uttarakhand HC Gives State Govt "24 Hour Ultimatum" To Detail Steps Taken to Mitigate Migrant Miseries available at: <https://www.indialegallive.com/constitutional-law-news/courts-news/uttarakhand-hc-gives->

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The Supreme Court of India agreed to entertain a petition on behalf of the migrant workers in the 1st week of March 2020.¹⁴ The Court asked the Union Government to file a status report on the issue related to the plight of migrant workers. In its report, the Central Government mentioned that the migrant workers fearing to face survival challenges started moving towards their homes. The government also listed welfare measure undertaken by it which the court seems to have endorses. The court also did not entertain a plea regarding the payment of minimum wages as it thought that the government was dishing out enough policy measures to address it.

In the sequence in the third week of May, the Supreme Court rejected a PIL which sought its intervention in directing the District Magistrates to identify and provide relief to these workers free of cost. It happened in the face of almost two dozen workers being run over in Aurangabad in the State of Maharashtra. But the Court took the stated position of not interfering in governments' policy matters.

On 26th May 2020, the Supreme Court of India expressed unhappiness over the State of inadequacy regarding appropriate provisioning for the migrant workers and accordingly asked the Union and State Governments to address their concerns without delay. Accordingly, the Court specified that the Centre and States should provide free food, shelter and transportation facilities to the stranded workers. A short while before this ruling came senior lawyers from Mumbai and Delhi wrote in very strong tones a letter to the court reminding it of its duty to protect the rights of these worker.

The Supreme Court of India recently took up the issue of migrant workers with all seriousness and directed the government to take strong remedial measures mainly the transportation of stranded workers to their native places. A three-judge bench led by Justice Ashok Bhushan asked Central, State and Union Governments to send these workers to their respective homes within 15 days either by bus or train. It also directed the above government to provide such workers ration food and even jobs as and when required. It ruled that the railways would provide *Shramik* trains to ferry these workers. Such trains will be in addition to 171 *Shramik* trains that have already been pressed into service by the railways on the request of the State.¹⁵ Moreover, the Court also asked the government to do skill mapping so that these workers are provided fitting jobs. In addition to these

state-govt-24-hour-ultimatum-to-detail-steps-taken-to-mitigate-migrant-misereries (Last visited on June 22, 2020).

¹⁴ Panic, Fear Bigger Problem Than Coronavirus: SC on Plea On Migrant Workers' Exodus, Dated: 30 March 2020, available at: <https://www.outlookindia.com/website/story/india-news-supreme-court-to-hear-today-petition-seeking-amenities-for-migrant-workers/349698>(Last visited on June 22,2020).

¹⁵ Migrant workers must be sent home in 15 days, says Supreme Court, dated: June 10, 2020, available at: <https://www.hindustantimes.com/india-news/migrant-workers-must-be-sent-home-in-15-days-says-supreme-court/story-YQsRZroVIJFzUdw2GaTgCL.html> (Last visited June 23, 2020).

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directions the Court also asked the governments to drop all criminal cases against these workers for violating lockdown regulations. The above bench directed the States and Union Territories also to prepare a complete list of these workers specially those who have already reached their homes and got a job. It also specified in its direction that the jobs, these workers are doing prior to lockdown should also be mentioned by concerning States. Besides the Supreme Court of India also asked the governments also to specify the schemes for employment and details of the welfare schemes that might benefit these workers.¹⁶

Hence the Apex Court of the Country attempted to protect the human rights of these workers and also of their fundamental rights enshrined in Article 21 of the Constitution of India in order to directly intervene in the matters that the State has been negligent of. The three-judge bench in its June 05, 2020 order also regretted that the governments have not been sensitive enough to the plights of these workers. Accordingly, in its preliminary remarks which were later included in its order the bench asked the governments not only to provide adequate transportation arrangement but also food and shelter, and all that free of cost.

Conclusion

All the above measures have been taken with a view to stopping these workers from suffering the pangs of life and get gainful employment at the places of their homes. The State of Uttar Pradesh has announced to set up a commission to look into the welfare of these workers besides conducting skill mapping. It is to be seen as to which extend the plight of these workers is addressed in days to come. Moreover, in order to witness the green shoots in our economy, it is necessary that the industry and business should revive. It is not possible without employing the migrant worker. Hence, what is required to draw up a massive plan for the reabsorption of these migrant workers with adequate safety measures some of which have already been announced by the Centre? It would be interesting to see as to what extent these migrant workers come back to the places of their work.

Migration cannot be checked as it involves economic issues. The migrants need to register at the panchayat level with their details which will be subsequently helpful for the labour department and district administration to tackle any unforeseen problem like COVID-19. There is a need to develop a pro-migrant policy and stringent mechanism to monitor the working condition of the migrants in regular intervals. Besides, the migrants should be aware about their rights, provisions and claims. Public Distribution Services (PDS) may be extended by adopting one nation on card by e-transaction of AADHAR card.

¹⁶ Direction to Transport Back Stranded Migrants In 15 Days Is Mandatory: SC available at: <https://www.livelaw.in/top-stories/direction-to-transport-back-stranded-migrants-in-15-days-is-mandatory-sc-158584> (Last visited June 23, 2020).

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Those who do not prefer to go back to their work destination there is a need for generating employment opportunities for them. More working days under MGNREGA should be incorporated to absorb the returned migrants. Besides, identifying the knowledge and skill, skill development trainings need to be organized to absorb them in local industries. Cottage and handloom industries of the State may be restructured and revived with required marked linkage strategies. Agro-allied activities along with related infrastructural development should be undertaken along with the storage and value addition of the agro-products.

The public health system with improved diagnostic services needs to be strengthened. Emphasis may be given on development of district level health plan. Development of different models for different districts are required as the geo-physical situation of one district varies from other.

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Chapter 27

The Economic and Health Impact of COVID-19 in Nigeria

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Abstract

COVID-19 is an artificial virus and it is different from the other natural Corona virus's family. The origin of the virus is still unknown but it first time it was appeared in Wuhan, a city of China. The virus was named SARS-Cov-2 and the disease it causes was named Coronavirus disease -19 (COVID-19, WHO, February 2020). This article attempts to shade the light on the economic and health impact of the global pandemic (COVID-19) in Nigeria. The pandemic has duelling impact on the economy. After, the identifying of the Virus in the country, the Nigerian government has imposed a total lockdown in most part of the country. Consequently, the economic activities have been choked completely. Likewise, most economies in the world were locked their borders. Hence, demand for crude oil and its prices drastically dropped. As result of that Nigeria's revenue from crude oil dropped sharply in May 2020 with almost 125 Billion Naira. The drop in the revenue had significant impact on the economy. The impact of the virus also raised the alarm on the healthcare system and its structure in Nigeria. Therefore, the study suggests a massive reform in both economic and health sectors such as for now to combat with the COVID-19 by increasing more fiscal and monetary stimulants and in future to have a more coverage of universal healthcare system for its poor citizen and open more primary healthcare unit in villages and remote areas of the country.

Keywords: COVID-19, Lockdown, Economy, Oil Prices, Revenue, Health Structure.

Introduction

In Nigeria, on the first case of COVID-19 discovered on 17th March 2020. The federal government of Nigeria imposed a strict social distancing and complete lockdown in Lagos, Abuja and Ogun states on 30th March of 2020 and later implemented in Kaduna and Kano. However, in other parts of the country, the lockdown and social distancing policy were not followed strictly. Therefore, the pandemic becomes spread quickly to most parts of the

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country. The fear of the pandemic leads to a financial and economic crisis, which led to panic buying and hoarding for the future. Consequently, the poor citizen became more vulnerable. Moreover, most of the business houses wish to reduce the cost of production and therefore they layoff some workers and asked some to work from home. Due to the pandemic, the country closed its borders export and import of the good and services.

To overcome the situation, the Federal Government of Nigeria constituted a committee on COVID-19 to collect information about the situation of the pandemic in the country working together with the Nigeria Centre for Disease Control (NCDC). The government announced a stimulant package of 500 billion Naira. Furthermore, the Central Bank of Nigeria declared support of 45 billion Naira for Small and Micro Enterprises (SME's) in Nigeria.

COVID-19 and World's Perspective

The Corona Virus first emerged in a Chinese city of Wuhan, Hubei Province. The virus is speculated to have emanated from large seafood and live animal market, which caused the means of transmission of it from animal to person (Ozili, 2020). The virus has been named "SARS-CoV-2" and the disease it causes has been named "coronavirus disease 2019" (abbreviated "COVID-19"). The first known patient of Coronavirus started experiencing symptoms in Wuhan, China on 1 December 2019. Since then, there have been over 18,476,302 cases and 698,224 death reported and out of the reported cases 11,702,380 have been recovered so far (August 2020). Table 1 shows coronavirus cases in top five countries with Nigeria.

Table- COVID-19 Statistics, 4th, August 2020

Countries	Total Cases	Total Deaths	Total Recovered	Active Cases	Serious Critical
Global	18,476,302	698,224	11,702,380	6,075,698	64,722
USA	4,862,513	158,968	2,448,295	2,255,250	18,725
Brazil	2,751,665	94,702	1,912,319	744,644	8,318
India	1,861,821	39,044	1,233,589	589,188	8,944
Russia	861,423	14,351	661,471	185,601	2,300
South Africa	516, 862	8,539	358,037	150,286	539
Nigeria	44,129	896	20,663	22,570	7

Source: Worldometer, 4th August 2020.

The pandemic has been affected the global economy in two ways. One, the spread of the virus encouraged social distancing which led to the shutdown of the economic activities, including corporate offices, businesses and events. Two, the rate at which the virus was spreading, and the heightened uncertainty about how bad the situation could get, led to flight to safety in consumption and investment among consumers and investors (Ozili and Arun, 2020). There was a general consensus among top economists that the coronavirus

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pandemic would plunge the world into a global recession¹⁷. Top IMF economists such as Gita Gopinath and Kristalina Georgieva stated that the COVID-19 pandemic would trigger a global recession and Nigeria has already registered a negative economic growth for the financial year of 2019-2020.

In financial markets, global stock markets erased about US\$10 trillion in wealth in since the pandemic has been started. The S&P 500 index also lost about \$7 trillion in value in the same periods in the US while the S&P 500's largest 10 companies experienced a combined loss of about \$3.2 trillion¹⁸ due to fear and uncertainty among investors about how the pandemic would affect firms' profit (Ozili, 2020). The travel restriction imposed on the movement of people in many countries led to massive losses for businesses in the events industry, aviation, entertainment, hospitality and the sports industries. There were also spill overs to poor and developing countries that had a weak public health infrastructure and non-existing social welfare programmes.

Coronavirus and Nigeria

The virus had a substantial impact on the Nigerian economy. After, the identifying of the Virus in Nigeria, the government has imposed a lockdown. Consequently, the economic activities were chocked completely. Likewise, most countries in the world lockdown their borders. So, the demand for crude oil and its prices dropped drastically. The country's revenue from sales of crude oil dropped sharply, (See Table 2). In May 2020 the country's oil revenue dropped by almost 125 Billion Naira, (CBN report, 2020). The lack of economic activities and the fall in the revenue from crude oil had a significant impact on the economy. That lead to so many lost their jobs. The impact of COVID-19 also manifested in the health structure of the country (See Table 3 for the COVID-19 cases in top ten states of Nigeria).

Table-2: Crude Oil Price (US\$/Barrel), Production (mbd) and Export (mbd)

Month	Year 2020		
	January	February	March
Crude Oil Price (Bonny Light)	66.68	58.45	32.29
Domestic Production	2.07	2.07	2.04
Crude Oil Export	1.62	1.62	1.59

Note: mbd (Millions of barrels per day)

Source: Nigerian National Petroleum Corporation (NNPC) and Reuters.

¹⁷ [19_impact_on_the_Global_Economy](https://www.ft.com/content/be732afe-6526-11ea-a6cd-df28cc3c6a68)³ Financial Times: Global recession already here, say top economists. <https://www.ft.com/content/be732afe-6526-11ea-a6cd-df28cc3c6a68>

¹⁸ <https://www.reuters.com/article/us-health-coronavirus-stocks-carnage/coronavirus-then-oil-collapse-erase-5-trillion-from-u-s-stocks-idUSKBN20W2TJ>

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Table-3: COVID -19 Cases in Top Ten states of Nigeria

States	Confirmed Cases	No. of Cases (On admission)	No. of Discharge	No. of Deaths
Lagos	15,355	13,003	2,160	192
FCT	3,997	2,767	1,188	42
Oyo	2,771	1,347	1,396	28
Edo	2,311	240	1,984	87
Rivers	1,842	308	1,481	53
Kano	1,597	274	1,270	53
Delta	1,520	118	1,359	43
Kaduna	1,498	238	1,248	12
Ogun	1,407	207	1,176	24
Plateau	1,240	686	535	19
Total in Nigeria	44,129	22,570	20,663	896

Source: Nigeria Center for Diseases Control, NCDC, 4th August 2020.

Economic Impact of COVID-19 in Nigeria

Nigeria is a mineral rich country and its size of GDP is largest in whole Africa. However, it is one of the poorest nations in the world. In 2015-2016 financial year, Nigeria was in recession and registered a negative growth rate but after 2016, it has started registering a positive growth rate. Unfortunately, due to this current global pandemic it has again started experiencing a negative growth rate for the 2019-2020 financial year. There are some few ways through which global affecting the Nigerian Economy. Borrowers' capacity to service loans, which gave rise to NPLs that depressed banks' earnings and eventually impaired bank soundness and stability. There were oil demand shocks which was reflected in the sharp decline in oil price. The most visible and immediate spill over was the drop in the price of crude oil, which dropped from nearly US\$60 per barrel to as low as US\$30 per barrel in March (CBN, March 2020). There were supply shocks in the global supply chain as many importers shut down their factories and closed their borders particularly China. Nigeria was severely affected because Nigeria is an import-dependent country and as a result Nigeria witnessed shortage of crucial supplies like pharmaceutical supplies, spare parts, and finished goods from China.

The national budget was also affected. The budget was initially planned with an oil price of US\$57 per barrel. The fall in oil price to US\$43 per barrel (CBN, July 2020) meant that the budget became obsolete and a new budget had to be formed that was repriced with the low oil price (CBN, 2020). Major market indices in the stock market plunged when investors pulled out their investments into so-called safe havens like US Treasury bonds. Stock market investors lost over NGN2.3 trillion (US\$5.9bn) barely three weeks after the first case of coronavirus was confirmed and announced in Nigeria on January 28, 2020 (investing.com). To combat with COVID-19, the Federal government announced a 500

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Billion Naira as stimulants package in April 2020. Apart from it, the Central Bank of Nigeria announced 45 Billion Naira for the SME's (CBN, May 2020).

Health Impact of COVID-19 in Nigeria

The status of public health sector in Nigeria is not very impressive. However, the sector struggling to get the sufficient health infrastructure such as 24 hours well equipped emergency services, ambulance services, sufficient primary health care centers and full coverage of Nigeria National Health Insurance Systems. Because of the lack of these services in the health sector, Nigeria has experiencing high infant and maternal mortality rate in the world (Muhammad et al, 2017). At present, Nigeria having two-tiered health system, one is the largest public healthcare centers and other one a smaller private health care system as compared to other developed countries and also it is highly expansive.

Furthermore, the majority of Nigeria's healthcare spending is still dominated by out-of-pocket expenditure which account for nearly 70% of total health expenditure (NBS, 2019), which suggest that the citizen of the country either do not rely or trust the health insurance systems in the country or they are unaware of the availability of it. Despite the introduction of the National Health Insurance Scheme (NHIS) in 2004, the population covered by the health insurance in 2019 was about 4-5 percent of the total population (NBS, 2018).

The Nigerian pharmaceutical industry is one of the largest in West Africa, and accounts for about 60% of the market share in the region. However, only 10 percent of the active pharmaceutical ingredients (API) used in Nigeria are manufactured locally in the country and the remaining are imported from China and India. Currently, the pharmaceutical industry is facing many challenges in Nigeria such as lack of good infrastructure and unreliable utilities, scarcity of skilled workers, poor access to finance, lack of appropriate government incentives, policy incoherence by the government, poor demand due to robust competition from Asian companies particularly China, high cost of doing business as a result of imported and expensive production inputs, regulatory problems, among others. But currently most State Governments of Nigeria have started a contributory healthcare system for the people to cover from the health issues.

Because of the above-mentioned challenges in the healthcare sector made it was difficult for Nigeria to fight with the fast- spreading COVID-19 pandemic during the outbreak. Local drug manufacturers could not produce manufacture drugs that could temporarily suppress the coronavirus in infected patients because the APIs used to manufacture suppressant drugs could no longer be imported from the China and India. Due to the shut down the factories and the borders are closed to control the global pandemic. Also, there were insufficient isolation centers in many states including in Abuja, Lagos, Kaduna, Kano and other states of the country. Apart from that the testing centers are not sufficient to test the disease and due to that most of the cases were not registered. The number of infected

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patients in Lagos grew worse to the extent that a stadium had to be converted to an isolation center (<https://businessday.ng/coronavirus/article>). It was evident that the current COVID-19 pandemic has exposed the poor public sector infrastructure in Nigeria.

Conclusion

The COVID-19 pandemic in Nigeria has had a significant impact on the economy and the healthcare system. The shutdown of the economic activities due to the Covid-19 in Nigeria has negatively affected the economy and the health care system. The demand for crude oil and prices in the global market has dropped (currently it is \$42.2/barrel, CBN, July 2020). Consequently, the Nigeria economy is drifting into recession. The structural problems in the health system were also exposed with the pandemic. Therefore, this paper suggests that to quickly recover from the current economic and health care problem in the country, a massive structural reform in economic and health sectors is needed. For instance, a universal public healthcare system for every citizen needs to be introduced. Also, more primary healthcare units in remote areas need to be set up to make health care services more accessible to the lower section of the society.

The scope and severity of the problem witnessed with the pandemic is a clear signal that growth and development reforms are needed in Nigeria. The Federal government needs to more use more expansionary fiscal and monetary stimulus packages as a partial solution to revive falling aggregate demand during the pandemic. Meanwhile, to contain this virus, there is a need to create more awareness, maintain social distancing, avoid mass gatherings and most importantly, make more TEST, TEST & TEST (WHO, March 2020).

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Chapter 28

COVID-19: Challenges and Opportunities in Health Sector

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Abstract

COVID-19 originated from Wuhan in China but soon spread around the world including India and Nigeria, infecting millions and causing numerous deaths. COVID-19 was declared a global pandemic by the World Health Organization on 11 March 2020. The COVID-19 is an unprecedented and unexpected pandemic sparking uncertainties of unparalleled magnitude and has affected various sectors of world economy like employment, tourism, hospitality, aviation, trade along with the health sector.

The rampant infection has acted as a catalyst accelerating the slowdown global economy. The disease affects output either directly by making people sick or indirectly through the effects of the lockdown in response to the pandemic. While the infection affects the health of people immediately, its impact on the economy is felt in myriad ways. This article examines the effect of COVID-19 on society, economy, education and research in context of its direct effect on the health sector. While the medical sector in India and elsewhere is facing a huge challenge, there is also an opportunity for innovative ideas to fight the pandemic. India is among the top-20 markets for medical devices and is the 4th largest in Asia. The pandemic has brought the focus back on improvement of health infrastructure and universalization of affordable and quality healthcare services surpassing borders and income disparities. This is an opportunity to transform and rejuvenate India's health and social sector . At the same time India can provide a lot of help to other countries including Nigeria through resource sharing and providing medical equipment and supplies. The present work draws on secondary data collected through various government reports, newspaper articles and press briefings of international agencies to collate information and provide suggestions for moving ahead in these trying times.

Keywords: COVID-19, Indian health sector, coronavirus

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Introduction

The human corona virus was first isolated in 1965 by Tyrell and Bynoe but the term “Coronavirus” describing the characteristic morphology of these agents was accepted in 1968 (Myint, 1995). The disease COVID-19 is caused by a specific strain of coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-COV-2). In December 2019, cases of COVID-19 were announced in Wuhan city of Hubei province in China and eventually the infection spread all over the world. Seeing the large-scale impact of the virus, the World Health Organization (WHO) declared COVID-19 a pandemic on 11 March 2020. The disease spread to various parts of the globe and today almost all the countries are affected by it. India saw its first case in on 30 January 2020. Despite attempts to contain it, the disease spread to various parts of the country and now India is the third country in terms of infection behind US and Brazil. Among the African countries South Africa is the worst affected but the other African countries are also suffering. Seeing the spread of the COVID-19 disease all over the world, the government of Nigeria set up a Coronavirus Preparedness Group on January 31, 2020 to mitigate the impact of the virus if it entered the country. The Nigeria Centre for Disease Control (2020) reported the first case in Nigeria on 27 February 2020 but eventually it spread to all provinces of Nigeria. By the end of July 2020 Nigeria had nearly 40,000 active cases of COVID-19.

Table 1 Confirmed cases in India and Nigeria on select dates

Date	Worldwide	India	Nigeria
19 May 2020	47,31,458	1,01,139	6,401
3 June 2020	62,87,771	2,07,615	11,166
17 July 2020	1,36,15,231	10,03,832	35,454
1 August 2020	1,73,96,940	16,95,988	43,537

Source: World data: Wikipedia; India data: Ministry of health and family welfare, accessed from https://en.wikipedia.org/wiki/Timeline_of_the_COVID-19_pandemic_in_India ; Nigeria Data: <https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20update%20of%20COVID-19%20outbreak%20in%20Nigeria>

The Table 1 shows total number of confirmed cases of COVID-19 in India and Nigeria for selected dates. The dates selected are relevant as India crossed the one lac, two lac and ten lakh mark on these dates. The last row shows relevant data at the start of the month of August 2020. While initially in both countries, the spread was slow as steps were attempted to contain its spread, nevertheless the very contagion nature of the virus provided it opportunities to spread across populations leading to rising cases of COVID-19.

Challenges of coronavirus in health sector

The coronavirus caused COVID-19 disease has brought to the fore the poor state of health infrastructure in India. The rapid rate of spread of the contagion has put India's meagre

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capacities to the test. In an article in the Economic Times (2020, May 14) the Fitch Solutions Country Risk and Industry Research (a unit of Fitch Group) pointed out in its outlook for India's pharmaceutical market, that the country is not equipped for such a crisis. It has only 8.5 hospital beds per 10,000 citizens and eight doctors per 10,000 people which is much less than most other countries. The availability of free medicines in public healthcare facilities has declined from 31.2 per cent to 8.9 per cent for inpatient care, and from 17.8 per cent to 5.9 per cent for outpatient care over the last 20 years, the rating agency said citing a Public Health Foundation of India study. Further, the report says that more than 80 per cent of the population still does not have any significant health insurance coverage, and approximately 68 per cent of the Indians have limited or no access to essential medicines.

In fact, the per capita availability of beds and hospitals is much lower than the national average in some of the more-populated states. A majority of the Indians have to pay for medical expenses out of their own pockets and are generally beyond the ambit of any kind of insurance cover, health or general.

The structural problems of the India are reflected in the health sector in terms of inefficiency, malfunctioning and acute shortage of trained and motivated work staff. With a burgeoning population , these problems have gained mammoth proportions. Further the pace of testing in case of COVID-19 is very slow although steps are being taken to ramp up the process. The reliability of the tests has been questioned as a number of times discrepancies have been observed. Due to all this identifying, isolating and treating coronavirus patients remains a challenge.

Symptoms of COVID-19

The signs and symptoms of coronavirus disease 2019 tend to appear anywhere between two to 14 days after exposure. This period is called the incubation period. While some common signs and symptoms include fever, cough and tiredness, often a loss of taste or smell, these are by no the only identifying signs. The list of symptoms has been expanded to include shortness of breath or difficult breathing, muscle aches, chills, sore throat, runny nose, headache, chest pain. Lately there have been reports of patients complaining of rash, nausea, vomiting and Diarrhoea. As per the Mayo Clinic website the severity of COVID-19 symptoms can range from very mild to severe. While older people have a higher risk of the illness, children are also affected though they may suffer only mild symptoms. The website points that existing chronic conditions put patients at greater risk of serious illness from COVID-19. Some such medical conditions are: serious heart diseases like heart failure, coronary artery disease, cancer, chronic obstructive pulmonary disease, Type-2 diabetes, severe obesity, Chronic kidney disease, Sickle cell disease, weakened immune system due to solid organ transplants (Mayo Clinic, n.d.).

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The World Health Organization has pointed out that the infection can spread through several modes like contact, droplet and airborne transmissions well as through environmental contamination associated with fomite and facial- oral routes of transmission.

While countries and organizations are working hard to come up with cures for this disease as well as develop vaccines to prevent it, the situation today demands practicing safety measures like social distancing, maintenance of personal and community hygiene, inculcating habits like hand-washing, using masks and self- isolating in case of infection to prevent the spread of the disease.

Impact of Corona Virus:

The only way of controlling the spread of the coronavirus contagion is social distancing and minimal interactions with outside world. As such countries across the world including India and Nigeria had to go for complete or partial lockdown. This effectively cut down human interactions to the minimum but was associated with high social, economic, financial and educational costs.

Social impact:

People have become particular about practicing hygiene and cleanliness in personal as well as public spaces, but the fear psychosis triggered by the pandemic has had many negative social effects. The COVID-19 pandemic brought to the fore several forms of racism and diversionary actions in the form of religious hatred, caste-based discrimination and stigmatization of people from China and North-east India that have tended to damage the fabric of our society. During the prolonged lockdown people were forced to live within their homes only and this compulsory absence of social interactions led to much negativity and depression in sections of people. Persons who had to self-isolate or quarantine themselves often complained of such negative thoughts and in some cases even led to loss of life due to suicides.

Another facet of human psychology which became evident during the last few months was the sense of hostility that some individuals (with travel history) when asked to go for testing displayed towards neighbors due to misunderstanding, misbehavior and even aggressive actions. A similar hostile behaviour was also observed against the corona warriors like doctors, nurses, health professionals, cleaners and police who are at the forefront of the battle against COVID-19.

The large-scale unemployment ensuing in the wake of the lockdown showed another chasm in the society where people were embroiled in petty quarrels and even fighting and snatching get their hands-on grocery from ration shops or free food being distributed.

Another consumerist tendency which can be identified as a breaker of social relations was

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the large- scale panic-buying. The unwarranted buying and storing of food items and other articles by people with no consideration for resultant shortage issues for others highlighted to selfish and unreceptive nature of people (Javdekar & Vaidya-Kannur, 2020). The issue of migrant workers who were forced to relocate due to joblessness and had to travel without money food and shelter in an attempt to reach their native places has been highlighted in the media. An associated social ill that did not receive as much attention but is just as heartbreaking is the increase in domestic violence and child abuse that has been exacerbated with rising unemployment, lack of security, money and wealth (Singh, (2020).

Economic impact:

In an article '*Economic impact of Covid-19 pandemic to vary in sectors*' published in the Hindustan Times, Roshan Kishore and Abhishek Jha have pointed out that the impact of the pandemic will vary across sectors and hence geographical areas, sectors, states and social groups. Asserting that agriculture and government sector which contributed nearly 30% in total Gross Value added in 2019-20, would not see much of a contraction during the pandemic, they caution that the economic pain would be comparatively more severe in the other sectors. Further the non-farm, non- government economy consists of many sub-sectors with varying impacts of any contraction therein on jobs and different areas of the country. For a place like Delhi the economic pain would be much more severe than a place like Arunachal Pradesh as the Gross State Value Added (GSVA) for the former (86%) in the non- farm, non- government sector is much higher than in the latter (38%). Similarly, contraction in labour intensive sectors like construction would lead to more hardships for the masses than any contraction in say the financial sector.

Both consumption trends and production patterns have suffered during the pandemic. Without a revival of consumer demand there is little viability in providing support to manufacturers and producers which is what the government policy has been focusing on over the last few months (Kishore & Jha , (2020).

India's industrial production index contracted by 55.5% in April 2020 as compared to the same period in the previous year. While it can be said that there was negligible production due to the nation-wide lockdown, the fact remains that a number of sectors had been witnessing slower growth rates over the past year. Business activity in the services sector also suffered heavily with the hospitality and tourism sector coming to a virtual standstill and shops observing fewer footfalls due to lockdown and later due to consumer reluctance even after easing of restrictions.

As per RBI press release consumer confidence and perception on the general economic situation, employment scenario and household income plunge deeper into contraction zone and expectation on general economic situation and employment scenario for the year ahead were also pessimistic.

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Media reports and experts have often said that millions had lost their jobs due to the lockdown seriously affecting daily wage earners and low-income households. The Centre for monitoring Indian economy (CMIE) data has shown that during the pandemic, the urban and rural unemployment rose sharply late March and April while recovering somewhat in May and June (Choudhury, 2020). While small and medium businesses have suffered, e-commerce has gained popularity everywhere.

Financial impact:

The COVID-19 disease has led to unprecedented loss of lives due to disease in recent history and its economic and financial fallout is still being analyzed. Trade, production, employment and incomes have been severely hit and their financial repercussions are being felt by stock markets, banks, non-banking financial institutions and the general public as well. The reduction of incomes has meant that demand has reduced in the market and people are spending only on necessary items preferring to hold money to meet emergencies. Due to lack of incomes loan repayments have become difficult which has put these lending institutions in a precarious position. For the public sector banks, the proportion of NPA loan amounts was already very high and the current situation is more like the straw that broke the camel's back. Government and the Reserve Bank of India (RBI) have had to come out with some packages to bailout the sector, increase liquidity and provide relief to the general public. Government has been providing support to numerous beneficiaries through flagship programmes like the Pradhan Mantri Jan-Dhan Yojana (PMJDY), Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) apart from providing free ration and gas cylinders to the poor people. Concessions on home/consumer loans and easy repayment schedules are also aimed at easing the financial burden of the middle-class. As pointed out in the McKinsey report, 'It is imperative that society preserve both lives and livelihoods.' This requires a concerted set of fiscal, monetary, and structural measures that help the country recover from the pandemic and lockdown and more importantly underline the sanctity of human life (Gupta & Madgavkar, 2020).

Educational and research impact:

The woes of the current pandemic have been enlarged as there happened to be no cure for the disease when it was initially identified. Since then researchers and scientists all over the world have been working continuously to find a cure to it. Attempts are being made to develop vaccines against the novel coronavirus 2019. The academic and scientific community of India and Nigeria are also deeply involved in this knowledge development. The Indian government has been encouraging research focusing on the development of diagnostics, vaccines, antivirals, disease models and other R&D to find a cure for this disease. Government labs and private sector industries are working together to develop solutions to problems faced by the people including shortage of Personal Protective

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Equipment (PPE) kits, sanitizers, masks and face covers etc. Science and Engineering Research Board (SERB), Technology Development Board (TDB), Artificial manual breathing unit (AMBU), Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), National Innovation Foundation (NSF) are some of the autonomous bodies under the Department of Science and Technology that have been actively involved and have ramped up their R&D efforts in this discipline (Baral, 2020).

The ministry of Science and Technology and the ministry of Health and Family Welfare have through their various departments initiated a number of programmes aimed at developing solutions to combat the COVID-19 pandemic. Vigyan Prasar (2020), a national level organization of the Department of Science and Technology, government of India has been providing information about relevant research-driven and technology-based initiatives and efforts undertaken by the government agencies battle the pandemic. The aim is to provide policymakers, scientists, researchers, scholars and other stakeholders in knowing the various aspects of COVID-19 and contribute to the coronavirus warfare in any way they can.

Regular learning in schools, colleges, universities has been hampered and now the general trend has been to resort to online teaching. Most school's and institutions of higher education have shifted to this mode of teaching and students too are coming to terms with this new mode of education. But limited access to internet facilities, smartphones and computers/laptops for many students have made it difficult for many students of weaker economic background to partake in this mode of education. Including them into the folds of new teaching methods remains a challenge for communities and nations.

Opportunities in health sector due to COVID- 19

COVID-19 and the opportunities thrown forward by this pandemic show that many start-ups have come up with innovative ideas to cope with or fight the pandemic. Covid-19 containment efforts have shown that tracking and testing were key to "flattening the curve." Effective use of Personal Protective Equipment (PPE), mass communication of quarantine measures, effective quarantine monitoring measures, as well as digital solutions to regulate essential logistics had a vital role in mitigating the spread of the disease. Several start-ups rose to the occasion by providing quick solutions relating to each of these areas. Calligo Technologies, Fourth Frontier, O2Matic, Niramai to name a few, are start-ups in the medical field that have been able to create due to the opportunities given by COVID-19 (Ramadorai & Singh, 2020).

India has often been called the 'pharmacy of the world' and is among the top-20 markets for medical devices and 4th largest in Asia. The pandemic has brought the focus back on improvement of health infrastructure and universalization of affordable and quality healthcare services surpassing borders and income disparities. The COVID-19 Taskforce

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and the Biotechnology Industry Research Assistance Council (BIRAC) have been working towards public and private partnerships like BIRAC's Biotechnology Ignition Grant (BIG) to accelerate development of diagnostics, vaccines, novel therapeutics and repurposing of drugs for this novel coronavirus, which is the largest early stage biotech funding program in India that supports high level innovation in the biotech sector (Economic Times, 2020). Although India has an edge in the pharma sector, many aspects of general healthcare have been neglected over the years evident from poor health infrastructure, dependence on imported medical devices and low spending on research and development in the sector. COVID-19 provided a challenge and an opportunity to build a robust health system for the future, emphasizing the triple helix model of innovation, that is, bringing together the government, academia and industry. Several such collaborations are already underway. The Defense Research and Development Organization (DRDO) which has developed ventilators is collaborating with the industry to scale up production to 10,000 units per month. Nocca Robotics, a start-up incubated at the Indian Institute of Technology Kanpur, has entered into an agreement with Bharat Dynamics Ltd. (BDL), a public sector undertaking where the latter will be involved in the large-scale development of ventilators. Start-ups like Marut Dronetech are partnering with various state governments to employ drones to monitor adherence to social distancing norms. The Pune-based startup, MyLab Discovery Solutions, has developed a cost-effective indigenous testing kit, Pathodetect, and has not only received approval from ICMR and CDSCO but has also been selected to receive financial assistance from the Technology Development Board to ramp up the manufacturing of these kits (Nabar, Reddy, Singhanian and Sasidharan, 2020).

Moving ahead

The International Labour Organization (ILO) has pointed out in its Briefing Note dated 26 June 2020 that the public health systems in many countries are overburdened and the COVID-19 crisis has generated challenges in *'recruiting, deploying, retaining and protecting sufficient well-trained, supported and motivated health workers'*. The need of the hour is to increase *investments 'in health systems including health workforce, providing decent working conditions, training and equipment'* (ILO, 2020) to these professionals. Also, social dialogue must be nurtured to create a positive work environment for the medical staff as well as help build resilient health systems that are part and parcel of the social fabric of the society. Public health services all over the world have proven to be the most suitable for meeting the challenges of the pandemic and need to be upgraded to make them better equipped to face another such outbreak. Even within the public health services, primary healthcare and outreach-based services need to be strengthened to provide immediate care to patients and also reduce pressure on the specialty hospitals. the proportion of frontline workers must be increased by filling up vacancies (Shukla, 2020).

The rapid urbanization has led to growth of cities. COVID-19 has shown us that our cities are not very healthy and future policies must be geared in revamping them for the better.

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Another facet that must be stressed is the nurturing of a community feeling in the citizens. Through public education and awareness, society needs to develop a respect for complying with safety measures to curb the spread diseases, along with instilling a sense of respect for the dignity of individuals as well as dignity of labour (Khanwalker, 2020). In its first virtual meeting, the delegates of the 73rd World Health Assembly (2020) resolved to intensify efforts to control the COVID-19 pandemic and provide equitable access to fair distribution of all health essential technologies and products to combative virus. The WHO Director-General Dr Tedros Adhanom Ghebreyesus, in his closing remarks said that,

“COVID-19 has robbed us of people we love. It’s robbed us of lives and livelihoods; it’s shaken the foundations of our world; it threatens to tear at the fabric of international cooperation. But it’s also reminded us that for all our differences, we are one human race, and we are stronger together.”

As the countries of the world gear up to defeat and contain the virus, these musings will provide direction to our efforts.

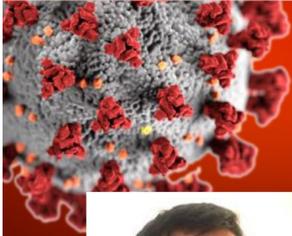
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