IMPACT OF CONFLICT ON THE MACROECONOMIC VARIABLES OF J&K STATE: A CASE OF TOURISM SECTOR

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ABSTRACT

Jammu & Kashmir State is a unique tourist destination in the sense that it offers attractions for varied type of tourists as Jammu is known for Pilgrim tourism, Kashmir for scenic & Ladakh for adventurous tourism. This kind of distinctiveness is seen only in the state of Jammu & Kashmir in the whole country. The state has a huge tourist potential while the growth & development of other sectors was restricted due to certain natural limitations. With the growth of population, there has been increase in the work force that needs to be engaged. Given the capacity of other sectors in the state, tourism has been the main sector which offers great scope to the growing able body work force. However, the on-going situation in the state has not only squeezed the space for adjustment but also left already absorbed large chunk jobless and adversely hit/affected the macroeconomic variables of the state economy. In this backdrop the present study has been undertaken to evaluate the impact of conflict on the macroeconomics variables and how it affected the physical[1], social, human[2] & institutional capital of the state. Being an agrarian economy, Jammu and Kashmir has a promising tourism sector which became the major target of the decade long unstable conditions. It is pertinent here to analyze the overall impact of conflict on the tourism sector of state economy. It was proved that tourism sector has both long-run as well as short-run causality running from real gross domestic product to other economic variables of the state economy during the conflict situation. So any underperformance in this sector would be detrimental for the growth of state economy. In order to revive the sector there is urgent need to invite all the stakeholders and evolve a strategy providing required incentives and concessions, to 'put the state back on the confidence map' so that the tourism sector would cope with the difficult situation and regain the sheen of its normal functioning and thereby would engage the masses in great numbers and benefit the state economy as well.

Keywords: Tourism, Conflict, Co-relational Analysis, Economic Sectors, Impact, Able body, Macroeconomic Variables, Co-integration, Granger Causality, Unit Root

INTRODUCTION

Tourism[4] used to be restricted to a certain class of people, however, now it has become a lifestyle and a consumption habit for many people in both the developed and the developing world. It is a growth rather an export growth engine and employment generator having the capacity to create large scale employment both direct and indirect, for diverse sections of society from the most specialized to unspecialized work force and gives a tremendous impulse to the economy. The state of Jammu & Kashmir in the context of development has some characteristic economic disadvantages [5] and for the past few decades has been suffering due to particularly hostile circumstances which have not only disadvantaged the scope and nature of its developmental scenario but given rise to serious problems like unemployment. Being a mountainous region, the state's peculiar geography did not allow its industrial sector to gain momentum. Agriculture, being the spine of the state economy, has its own limitations [6] like single crop season and small size of holding to grow. Despite the fact, the landmass of Jammu &

Kashmir[7] has a great potential for development of various sectors especially tourism in view of its native potential which places the State on the map of national as well as international tourist destinations. It is an acknowledged fact that with the increase in the influx of tourists, more economic activity is generated which has a multiplier effect on the revenue of the populace reliant on this sector. But because of the outbreak of conflict[8] Jammu & Kashmir has had to experience the cauldron of macroeconomic uncertainty[9] rather volatility[10] since 1989 which amplified the cautionary savings and demands[11] that eventually reduced the investments on productive capital (*i.e.,* fixed capital[12]+working capital[13], & invested capital (*i.e.,* fixed capital+physical working capital[14]) which froze the macroeconomic variables in general and hit the human capital in particular of the province as a whole. Nonetheless, a host of researchers across the country have theoretically scrutinized the issue of the impact of conflict on tourism sector, but as such no one has examined empirically the dynamic and causal relationship between conflict and macroeconomic variables of the state. Thus, an absence of such kind of research on the impact of conflict on the macroeconomic variables of the J&K state is the central objective of this study. The present study, therefore, attempts to bridge this research gap with broader objectives to study: a) the impact of conflict on the macroeconomic variables of Jammu & Kashmir State; b) the impact of conflict on the physical, social and institutional capital of Jammu & Kashmir state; and c) the corelational impact of conflict on the overall economy of Jammu & Kashmir state.

Data

The study is based on the time series data of 26 years from 1990-2016 and the data of various macroeconomic variables has been collected from different government agencies & organizations, namely Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India; Annual Survey of Industries (ASI), Ministry of Statistics and Programme Implementation, Government of India; Central Electricity Authority (CEA), Ministry of Power, Government of India; Ministry of Road Transport and Highways, Government of India; Issues of State Finances: A Study of Budgets, Reserve Bank of India; Basic Statistical Returns of Scheduled Commercial Banks in India, RBI, Various Issues; National Crime Records Bureau, Ministry of Agriculture and Farmers Welfare, Government of India; Ministry of Home Affairs, Government of India; World Travel & Tourism Council, Ministry of Tourism Government of India; Department of Planning & Monitoring Government of J&K; JKTDC Government of J&K and Directorate of Handicrafts Government of J&K etc.

Model Specification

In order to examine the impact of conflict on macroeconomic variables of the state economy, the following regression model has been adopted.

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + - - - - - - - - - + \beta_{nn} X_{nn} + \varepsilon.$$

In order to measure (Jammu & Kashmir tourism Model) the dynamic, causal and corelational relationship among various macroeconomic variables of the state economy, the following model has been used.

$$i.e.\ RGSDP = \beta_0 + \beta_1 FTOAR + \beta_2 FER + \varepsilon,$$ Where RGSDP is the real gross state domestic product; FTOAR is the foreign tourist arrivals and FER is the foreign exchange earnings. However, the above regression model is subject to check the stationarity of time series data with the help of Augmented Dickey Fuller and Phillip Perrons unit root tests.

$$\Delta y = \alpha + \delta t\ +\ \beta + \varepsilon\ (\text{Equation } 1) > \text{Intercept with trend}$$
$$\Delta y = \alpha + \delta\ \ +\ \beta t\ +\ \beta + \varepsilon\ (\text{Equation } 2) > \text{Intercept \& without trend}$$
$$\Delta y = \delta t\ \ \ \ +\ \beta + \varepsilon\ (\text{Equation } 3) > \text{No intercept \& no trend}$$

Relevance

Being an agrarian economy, Jammu and Kashmir state has a promising tourism sector which became the major target of the decades long unstable conditions. The present study is an attempt to investigate the issue and try to help the sector to return back on the track in the prevailing conditions so that the large section of the society are engaged and would also fetch large revenue to the government.

Limitation

The paper has evaluated major macroeconomic variables of Jammu & Kashmir economy as a whole but conflict conditions squarely impacted the Kashmir province only. Since the data was not available on province level, it was rather cumbersome job to study the valley of Kashmir separately. Therefore, the whole State was taken into account to draw the inferences.

Impact of Conflict on the Macroeconomic Variables

Conflict in any form slows down the sustainable growth of an economy. Minor conflicts, however, which are manageable, have often been supportive of peace if the disputes are addressed in an appropriate fashion & involve cooperation among the concerned parties. Nonetheless, the decades long conflict in Jammu & Kashmir has not only adversely affected its society but potential economic sectors (like tourism) of the state as is made apparent by the state's macroeconomic variables. Macroeconomic variables of an economy are perceived as an approach which can enhance social, political and economic reconciliation efforts in post-conflict settings. If macroeconomic variables are operating with sustainable principles and practices, it can have positive impacts in reducing the tensions of the host economy. Such initiatives highlight the correlational and causal relationship between the macroeconomic variables and peace and support the theory that can be helpful in alleviating conflict and accelerating peace and also there are interconnections among the 'impact of conflict on tourism'[15;] 'impact of tourism on conflict'[14]; and 'impact of peace on tourism & conflict'16. It has been found from the empirical results that there is significant impact of conflict on the various macroeconomic variables of Jammu & Kashmir state (table 1).

Table 1					
REGRESSION RESULTS OF MACROECONOMIC VARIABLES OF J&K STATE					
Macroeconomic Variables	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	1987.268	2.370		838.594	0.000
$GSDP_{FC}$ of Agriculture(X_1)	1.717E-006	0.000	0.057	0.389	0.723
$GSDP_{FC}$ of Industry(X_2)	1.500E-005	0.000	1.061	0.773	0.496
$GSDP_{FC}$ of Services(X_3)	1.895E-005	0.000	2.908	2.367	0.099
$GSDP_{FC}$ of Manufacturing(X_4)	-4.377E-005	0.000	-1.004	-1.243	0.302
$GSDP_{FC}$ of Construction(X_5)	-3.376E-005	0.000	-1.006	-1.372	0.264
$GSDP_{FC}$ of Banking & Insurance(X_6)	0.000	0.000	-1.907	-1.235	0.305
Gross Capital Formation(X_7)	0.000	0.001	-0.115	-0.324	0.767
Net Fixed Capital Formation(X_8)	0.000	0.001	0.083	0.319	0.770

Capital Expenditure(X_9)	-0.147	0.187	-0.494	-0.788	0.488
Fixed Capital(X_{10})	-0.001	0.001	-2.040	-1.352	0.269
Working Capital(X_{11})	0.000	0.000	-0.463	-1.919	0.151
Invested Capital(X_{12})	0.000	0.000	-1.073	-1.188	0.320
Social Sector Expenditure(X_{13})	0.249	0.183	1.073	1.356	0.268
Gross Fiscal Deficit(X_{14})	0.409	0.200	0.831	2.049	0.133
Revenue Deficit(X_{15})	-0.394	0.193	-0.706	-2.042	0.134
Own Tax Revenue(X_{16})	0.020	0.433	0.052	0.046	0.966
Own Non-Tax Revenue(X_{17})	0.193	0.412	0.196	0.469	0.671
Number of Workers(X_{18})	-0.001	0.001	-1.417	-1.130	0.341
Total Person Engaged(X_{19})	0.001	0.000	1.338	1.549	0.219
Total Emoluments(X_{20})	0.004	0.003	1.505	1.510	0.228
Total Inputs(X_{21})	0.000	0.000	1.454	2.600	0.080
Net Value Added(X_{22})	5.985E-005	0.000	0.130	0.235	0.829
Tourist Inflow(X_{24})	0.018	0.006	0.323	3.061	0.003
Tourist Earnings(X_{23})	0.031	0.006	0.513	4.860	0.000
R	:	1.00(Coefficient of multiple correlation)			
R Square	:	0.7384(Coefficient of multiple determination)			
Adjusted R Square	:	0.993			
Std. Error of the Estimate	:	0.656			

From the multi-regression model analysis (table 1), it is implied that most of the macroeconomic variables were affected since 1991 which had adversely impacted the economic growth of the state economy. Taking as the whole of GSDPFC of Agricultural (X1) (b1=1.717) is not significant (p=0.723), and the coefficient resulted positive which indicates that conflict has largely impacted agriculture sector. The GSDPFC of Industry (X2) (b2=1.500, p=0.496) and the GSDPFC of Services (X3) (b3=1.895, p=0.099) and net value added (X22) (b22=5.985, p=0.829) were insignificant and their coefficients were positive which means that conflict has greatly affected the industrial and services sector of the state economy as well.

Taking together the GSDPFC of manufacturing (X4) (b4=-4.77, p=0.302); GSDPFC of construction (X5) (b5=-3.376, p=0.264); Capital Expenditure (X9) (b9=-0.147, p=0.488); Fixed Capital (X10) (b10=-0.001, p=0.269); Revenue Deficit (X15) (b15=-0.394, P=0.134); Number of Workers (X18) (b18=-0.001, p=0.341) were not significant but have negative coefficients which indicates that conflict had minor impact on these variables all together during the reference period (1991-2016).

While the GSDPFC of Banking & Insurance (X6) (b6=0.00,p=0.488); Gross capital formation (X7) (b7=0.00, p=0.767); Net Fixed Capital Formation (X8) (b8=0.000, p= 0.770); Working Capital (X11) (b11=0.000, p=0.151); Invested Capital (X12) (b12=0.000, p=0.230) and Total Inputs (X21) (b21=0.000, p=0.080) were all insignificant but having the coefficient's zero which indicates that conflict had no impact on these variables throughout the reference period.

However, the Social Sector Expenditure (X13) (b13=0.249, p=0.268); Gross Fiscal Deficit (X14) (b14=0.409, p=0.133); Own Tax Revenue (X16) (b16=0.020, p=0.966); Own Non-tax Revenue (X12) (b12= 0.193, p=0.966); Total Person Engaged (X19) (b19=0.001, p=0.219); Total Emoluments (X20) (b20=0.004, p=0.228); were statistically insignificant having coefficients approaching to zero which indicates that conflict had low impact on these macroeconomic variables but tourist inflow (X23) (b23=0.018, p=0.003) and tourist earnings (X24) (b24=0.031, p=0.000) were statistically significant which means that these variables had not been impacted adversely so much. However, the value of R-Square in our multi-regression model(1) is 0.7384, which implies that there is 73% impact of conflict on the macroeconomic variables of Jammu & Kashmir state which halted the expected growth process of the state economy since 1989 to till date. Despite the fact, from the given regression model (2) it has been analyzed that 87.5% of growth rate of RGSDP has been affect by foreign tourist arrivals and foreign exchange rate. On the basis of this result we tried to prepare the tourism model of Jammu & Kashmir State.

$$\ln RGSDP = 0.093 + 0.0373 \ln FTOAR + 5.15 \ln FER \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots(2)$$
$$(0.17)^* \quad (0.47)^* \quad\quad\quad (17.80)^*$$

R-Sq=87.5% and R-Square (adj.)=87.1%

Tourism Model of J&K State

According to regression model (2), tourism happens to be a vital source of foreign exchange earnings, can support the economic growth with equity, has a great capability to create large scale employment of diverse kinds and hence can play a major role in the creation of additional employment opportunities. Nevertheless, using the E-Views [9,] the results (table 1 & table 2) of the Augmented Dickey Fuller (ADF) test shows that all the variables except economic growth were not stationary at level while the Phillip Perron (PP) test suggested the presence of a unit root for the variables at level. Therefore, entire series were subjected to further test at first differencing. It is evident that all the variables achieved a stationary trend process after the first differencing for both the ADF and PP test. Hence, the null hypothesis of unit root could no longer be accepted for the variables at this level. This means that the series could be regarded to be integrated to order [1] process.

Table 2 AUGMENTED DICKEY FULLER (ADF) UNIT ROOT TEST-STATISTICS AT					
Variable	Level*	Intercept*	Intercept & Trend*	1st Difference*	Remark
lnRGSDP	0.334250 (-1.945823) (p=0.7790)	-0.482833 (-2.906210) (p=0.8873)	-2.033196 (-3.479367) (p=0.5725)	-7.967208 (-1.945903) (p=0.0000)	Integrated to order 1
lnFTOAR	0.226070 (-1.948686) (p=0.7471)	-3.040391 (-3.931404) (p=0.0137)	-3.785154 (-3.518090) (p=0.0271)	-7.327695 (-1.948886) (p=0.0000)	Integrated to order 1
lnFER	1.641598 (-1.945987) (p=0.9745)	-0.647371 (-2.907660) (p=0.9900)	-1.673349 (-3.481595) (p=0.7517)	-6.280932 (-1.945987) (p=0.0000)	Integrated to order 1

Source: Stationary trend at 5% level of significance

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<tbody>
<tr><td colspan="6" align="center">Table 3
PHILLIPS-PERRON(PP) UNIT ROOT TEST-STATISTIC A</td></tr>
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Variable	Level*	Intercept*	Intercept & Trend*	1st Difference*	Remark
lnRGSDP	0.334250 (-1.945823) (p=0.7790)	-0.482833 (-2.906210) (p=0.8873)	-2.045232 (-3.479367) (p=0.5660)	-7.967208 (-1.945903) (p=0.0000)	Integrated to order 1
lnFTOAR	0.215731 (-1.948686) (p=0.7441)	-3.706732 (-3.931404) (p=0.0074)	-3.941900 (-3.518090) (p=0.0185)	-9.006466 (-1.948886) (p=0.0000)	Integrated to order 1
lnFER	1.975551 (-1.945823) (p=0.9878)	0982480 (-2.906210) (p=0.9960)	-1.489619 (-3.479367) (p=0.8234)	-6.103568 (-1.945903) (p=0.0000)	Integrated to order 1

Source: Stationary trend at 5% level of significance

The Augmented Dickey Fuller (ADF) test results indicated that all these variables were non-stationary in their levels and stationary at first difference I(1).[16] Therefore, it is necessary to determine whether there is co-integrating relationship between real gross state domestic product, foreign tourist arrivals and foreign exchange earnings of the state economy by applying Johansen's Co-integration Test which utilize both the trace and maximum Eigen statistic in determining the significance or otherwise of the co-integrated series as suggested by the unit root results. However, evidence from the trace and maximum Eigen statistics (table-1.4) revealed at least one co-integrated equation for both statistics. The existence of a co-integrated series from the result thus implies the existence of possible long-run relationship (long-run association-ship or move together) among the variables over time then we can run restricted VAR that is VECM but if the variables are not co-integrated, we cannot run VECM, rather we shall run unrestricted VAR, but our variables are co-integrated so we can easily run restricted VAR (table 4).

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<tr><td colspan="8" align="center">Table 4
JOHANSEN'S CO-INTEGRATION RANK TEST OF (TRACE) & (MAX-EIGEN VALUE)</td></tr>
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</table>

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	Critical value(5%)	Prob.**	Max-Eigen Statistics	Critical value(5%)	Prob.**
None *	0.619601	45.65614	29.79707	0.0004	39.62787	21.13162	0.0001
At most 1	0.135237	6.028276	15.49471	0.6922	5.957306	14.26460	0.6187
At most 2	0.001729	0.070970	3.841466	0.7899	0.070970	3.841466	0.7899
Trace and Max-Eigen value test indicates 1 co-integrating equation(s) at the 0.05 level.[19] * denotes rejection of the hypothesis at the 0.05 level. **MacKinnon-Haug-Michelis (1999) p-values.							

Analysis of the normalized coefficients (table 5) reveals a significant long-run relationship between tourism arrival, foreign exchange earnings and real gross state domestic product (economic growth) in Jammu & Kashmir state. Importantly, a percentage change in tourist arrivals results to 3.62% change in economic growth of the state. This indicates that the degree of the responsiveness of economic growth to changes in tourism arrival is highly elastic. Foreign exchange earnings shows a significant relationship with economic growth such that a percentage change in foreign exchange earnings leads to 4.72% change in economic growth holding other factors constant. Moreover, the foreign exchange earnings coefficients show that the degree of responsiveness of economic growth to changes in foreign exchange earnings is also highly elastic within the domain of the current study.

Table 5		
JOHANSEN'S NORMALIZED CO-INTEGRATING COEFFICIENTS		
Co-integrating Equation(s):	Log likelihood	-83.68552
Normalized co-integrating coefficients (standard error in parentheses)		
Ln_RGSDP	Ln_FTOAR	Ln_FER
1.000000	3.628727 (0.42807)	-4.727954 (0.23684)

Table 6				
VECTOR ERROR CORRECTION MODEL (VECM)				
Error Correction	**D(ln_RGSDP)**	**D(ln_FTOAR)**	**D(ln_FER)**	**Prob.**
CointEq1	-1.031109	-0.032709	-0.051941	0.000
Std. Error	(0.09912)	(0.07138)	(0.03674)	
t-value	[-10.40313]	[-0.45823]	[-1.41360]	

The vector error correction model was applied given the existence of a co-integration thus it become imperative to determine the direction of causality between economic growth, tourism arrival and foreign exchange earnings in Jammu & Kashmir state. We find that there is long-run causality running from FTOAR and FER to RGSDP because our error correction term means that RGSDP has negative sign and is significant.[17] However, in order to show the short-run relationship running from FTOAR and FER to RGSDP we have to use Wald Test.

Table 7			
VECTOR ERROR CORRECTION MODEL (VECM) OF WALD TEST			
Test Statistic	**FTOAR**	**FER**	**Probability**
F-statistic	36.03216	27.77543	0.0000
Chi-square	108.0965	83.32630	0.0000
Null Hypothesis: C(5)=C(6)=C(7)=0		Null Hypothesis: C(8)=C(9)=C(10)=0	

In the above table it is evident that the value of χ^2 is highly significant at 5% level of significance, therefore, we accept the null hypothesis which means that there is short-run causality running from tourist arrivals and foreign exchange earnings to economic growth of the state economy. Henceforth, it is proved that tourism sector has both long-run as well as short-run causality running from GSDP to other economic variables of the state economy during the conflict situation. So any underperformance in this sector would be detrimental for the growth of state economy. To determine the nature of the causal relationship among the included variables in the growth model, the study is further tested to a granger causality test.

Table 8		
GRANGER CAUSALITY TEST		
Null hypothesis	**F-Statistics**	**Probability**
Ln_FTOAR does not Granger Cause Ln_RGSDP Ln_RGSDP_does not Granger Cause Ln_FTOAR	3.25731 0.25688	0.0334 0.8559
Ln_FER does not Granger Cause Ln_RGSDP Ln_RGSDP does not Granger Cause Ln_FER	7.97495 0.58574	0.0002 0.6285
Ln_FER does not Granger Cause Ln_FTOAR Ln_FTOAR does not Granger Cause Ln_FER	3.00167 0.58574	0.0439 0.6285

The results presented in table (8) shows that the causal relationship between foreign tourist arrival and foreign exchange earnings indicates no causality from either side. It could be observed that neither economic growth granger causes foreign exchange earnings nor foreign exchange earnings granger causes economic growth. However, it is important to note here that unidirectional causality runs from tourist arrivals to economic growth; exchange earnings to economic growth and tourist arrivals at 5% level of significance. This implies that tourism causes growth but no evidence of causality is observed that growth causes tourism arrival. Hence, it could be easily concluded that it is the natural advantage which causes growth of tourism flow in J&K in general and Valley of Kashmir in particular.

Policy Conclusion

The conflict has torn down the hopes of J&K and in particular of the valley as it has adversely affected the economy and the large chunk of masses involved in the trade. However, dancing around the fire does not offer a resolution. In spite of a stream of strong words and announcements made by the past rulers of the State and the centre, nothing concrete has been done in order to introduce a suitable economic reinforcement plan; rather the situation has taken a leap for the worse. Therefore, in order to revive the sector there is an pressing need to invite all the stakeholders and develop a scheme providing requisite motivations & concessions, to 'put the state back on the confidence map [17] so that the state economy, especially tourism sector would cope with the difficult situation and regain the sheen of its normal functioning and thereby would engage the masses in great numbers and benefit the state economy as well. It is imperative to develop resilience[18] and adaptation[19] among the indigenous population so that the system will function in a way that could be similar to or more efficient than the way it did before the disturbance.[20] While framing a comprehensive strategy, following points are suggested:

Formulate a tidy and inclusive image of the state's tourism sector and broadcast to the world by various smart and effective means.

Counter seriously and efficiently the negative image of the state created by the vested interest groups.

Highlight natural and heritage wealth of the state:

Mughal Gardens;

Mohanmarg a place in Bandipora where Sir Aurel Stein-a far-famed and highly acclaimed Hungarian born and British explorer, lived most of his life;

Parihaspora-ancient archeological monument site – a place 20 km away from

Srinagar towards north;

Holy and historically famous Shrines, Khankahs, Mosques and Maqbaras;

Silk Route remnants in Leh, Kargil and Kashmir valley;

Arts and Crafts of the state;

Important Temples and gompas;

Trekking and skiing sites;

Stay in house boat in world famous lake.

Manage cultural events at potential places.

Hold tourism festivals at prospective spots inside and outside the region.

Highlight the state as a cost-effective tourist destination.

Offer package tourism.

Establishment of separate market for tourists where there is complete availability of every commodity at reasonable prices.

Enhance the appeal of the city and all other tourist places.

Easy access for the tourist to solve their difficulties and problems, if any, by providing a unique contact number.

The ascending performance of the tourism sector would engage the masses in countless ways and advantage the state economy as well. All of this could help go a long way in bringing prosperity and therefore peace to the state.

ACKNOWLEDGEMENT

END NOTES

1) Violent conflicts result in the destruction or removal of physical capital, including bridges, buildings, and communications and energy sector infrastructure. This lowers standards of living in ways that cannot be captured by GDP measures.

2) Destruction of Human Capital means the skills and abilities of a labor force alter as a result of conflict. As with physical capital, human capital flees a country during a conflict through migration. This could be because educated workers may have more means to quit a country, or it may be because they specifically are targeted for ideological or tactical reasons. Human capital is also lost through declines in health through the spread of diseases. Worsening health conditions, like declines in investment, affect economies well after war ends.

3) The activities of persons traveling to and in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes.

4) Like remoteness and poor connectivity, high cost mountain economy, susceptibility to natural disasters, poor infrastructure and 'missing multiplier factor' etc.,

5) Limitations like Small and fragmented land holdings, fragile Soil in hilly areas susceptible to soil erosion, extreme limits to irrigation of cultivated land, single cropping season in temperate/high altitude areas, etc.

6) The landmass of Jammu & Kashmir is having vast natural resources, which promises prosperity to the people when such resources are properly conserved and exploited.

7) The economic cost of the conflict cannot be confined to a particular sector of industry or investment prospects rather it has affected the important sources of livelihood of local people such as tourism, horticulture, handicrafts and industries of the state.

8) Macroeconomic instability is 'a situation of economic depression where the economy does not seem to have settled in a steady position'. It can take the form of volatility of key macroeconomic variables and of un-sustainability in their behavior. In addition to volatility, unsustainable performance in the macroeconomic variables like low and unstable growth rate, high inflation, large unemployment, unsustainable and current account deficits are also the attributes of macroeconomic instability. Macroeconomic volatility refers to fluctuation in macro variables and to the uncertainty associated to them.

9) J&K economy is not experiencing normal volatility but 'crisis volatility' which (Crisis volatility) refers to extreme shocks exceeding certain cut off points. The continued curfew in the state due to unrest is the instance of 'Crisis volatility'. The major costs of macroeconomic instability are significant in terms of i) Welfare loss ii) Increase in inequality and poverty and iii) Decline in long term growth.

10) In Kashmir valley people save more for future shocks that are caused due to conflict economy. During the unrest of 2016, we could see that the people of the valley could sustain only when they had kept good savings apart on which they sustained during 5 month long inactivity.

11) Fixed Capital represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year. Fixed assets are those, which have normal productive life of more than one year. Fixed capital covers all type of assets, new or used or own constructed, deployed for productions, transportation, living or recreational facilities, hospitals, schools, etc. for factory personnel. It would include land, building, plant and machinery, transport equipment etc. It includes the fixed assets of the head office allocable to the factory and also the full value of assets taken on hire-purchase basis (whether fully paid or not) excluding interest element. It excludes intangible assets.

12) Working Capital is the sum total of the physical working capital and the cash deposits in hand and at bank, the net balance of amounts receivable over amounts payable at the end of the accounting year. Amounts receivable include value of credit items on revenue account, such as sums due to the factory for goods sold, amounts advanced in connection with normal factory work, bills of exchange payable to the factory, payments made in advance such as for fire insurance, telephone charges, rates and taxes, call deposits and security deposits having a normal life of less than one year, etc. It excludes unused overdraft facility, advances for acquisition of fixed assets, long-term loans including interest thereon and investment.

13) Physical Working Capital is defined to include all physical inventories owned, held or controlled by the factory as on the closing day of the accounting year such as the materials, fuels and lubricants, stores etc., that enter into products manufactured by the factory itself or supplied by the factory to others for processing. Physical working capital also includes the value of stock of materials, fuels and stores etc., purchased expressly for re-sale, semi-finished goods and goods-in-process on account of others and goods

made by the factory which are ready for sale at the end of the accounting year. However, it does not include the stock of the materials, fuels, stores, etc. supplied by others to the factory for processing. Finished goods processed by others from raw materials supplied by the factory and held by them are included and finished goods processed by the factory from raw materials supplied by others, are excluded.

14) Tourism is perceived as an approach which can supplement social and political reconciliation efforts in post-conflict settings. If tourism is operating with sustainable principles and practices, it can have positive impacts in reducing tensions between visitors and host communities. The potential role of tourism in contributing peace from sociocultural, political, human rights, social justice, environmental (climate change), corporate social responsibility, health, globalization, intergenerational tourism. Such initiatives highlight the co-relational and causal relationship between tourism and peace, and support the theory that tourism can be helpful in mitigating conflict and accelerating peace.

15) Conflict, a state of dispute and distrust, decelerates sustainable growth of the tourism sector if it leads to violence and threatens peace. However, minor conflicts which are manageable have often been conducive to peace if the issues are addressed in a timely manner and involve cooperation among the concerned parties. Destinations are less appealing to tourists if they are insecure or likely to experience serious conflict – war, political unrest, terrorism, violations of human rights or heavy crime regardless of the abundance of scenic or cultural attractions. Although, there are instances of tourist attractions based on war and atrocities, tourism in general is highly vulnerable to turmoil and can thrive only under peaceful conditions.

16) Peace is a state that not only indicates the absence of direct violence but also sustains peaceful relationships among all levels and segments of society and between society and nature. It is based on human rights, economic wellbeing, and sociopolitic equality for all the people. It is also found to have a direct relationship with tourism

17) * indicates at 5% level of significance

18) Rule-1: If the (absolute) test statistics is greater than the critical value (absolute) then we can reject null hypothesis and accept alternative hypothesis. But if the (absolute) test statistics is less than the critical value (absolute) then we cannot reject null hypothesis rather we accept the null hypothesis. Symbolically, If test-statistic>Critical value=reject the null hypothesis and if test-statistic<critical value=accept the null hypothesis.
Rule-2: Secondly, if the P-value is less than 5% (0.05) we can reject null hypothesis and accept alternative hypothesis. But if the P value is greater than 5 % (0.05) we cannot reject null hypothesis rather we accept null hypothesis. Symbolically, if P-value<5%(0.05)=Reject null hypothesis and if P-value>5%(0.05)=accept the null hypothesis.

19) If the error correction term is negative in sign and is significant, then we can say that there is a long run causality running from the independent to dependent variables so far as the rule is concern.

20) To involve the electronic and print media to counter/or to erase the negative image and highlight the benefits of tourism sector of the state.

21) Resilience is the ability of countries, governments, communities, and households to manage change, by maintaining or transforming living standards in the face of shocks or stresses, while continuing to develop and without compromising their long-term prospects.

22) Adaptation is defined as 'the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects'.

23) A non-resilient system will collapse or have its functioning significantly impaired as a result of the disturbance.

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