THE BENEFITS OF TOURISM IN ECONOMIC GROWTH OF KILIMANJARO REGION IN TANZANIA (A CASE STUDY OF KILIMANJARO NATIONAL PARK)

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ABSTRACT: ***This study examined the benefits of tourism sector in economic growth of Kilimanjaro region in Tanzania with the case of Kilimanjaro National Park (KINAPA), the specific objectives was to find out the influence of KINAPA number of tourist arrival on per capita income in Kilimanjaro, to examine effect of KINAPA corporate social responsibility fund on social impact in Kilimanjaro and last was to determine relationship between KINAPA revenue collection and economic growth in Kilimanjaro. The theories guided this study were classical growth theory as a modern category of economic theory that is applied to the work of several economists who wrote about the process and sources of economic growth and Theory of Economic development introduced by Joseph Schumpeter in the 1930's with the role on entrepreneurship and innovations introduced in the process of economic development. The research design of this study was explanatory research design using quantitative research approach. Sampling techniques was random sampling with sample size of 27 respondents. Data collection method were documentary review and questionnaires. Data analysis method was regression and granger causality with help of STATA software and Excel. Finding of the study revealed that R square = 87.9 % is a suitable fitted level to explain the model. This is interpreted as per capita income of people of Kilimanjaro influenced by 87.9 % through number of tourist arrival at KINAPA and revenue collected at KINAPA while other unidentified factors can explain per capita income of people of Kilimanjaro by for only 12.1 %.The value of Durbin-Watson d-statistic (4, 21) = 1.071596 indicates there is no autocorrelation and there is a positive relationship among the variables included in the model, lastly granger causality result revealed that at lagged (4) per capita income granger cause CSR-Fund and vice versa, therefore tourism sector contribute economic growth in Kilimanjaro region, hence it is recommended that KINAPA management should provide soft loan to people around mountain to conduct business through corporate social responsibility fund, also it is advised KINAPA to apply force account construction mechanism to realize value for money in construction.***

Key term: Benefits, Economic Growth and Tourism.

1. INTRODUCTION:

By the early 21st Century the international tourism had become one of the world's most important economic activities, and its impact was becoming increasingly apparent from the Arctic and the Antarctica to which brought about great interests and importance, throughout the development of transport and communication, innovations and globalizations.

Walton, (2013) explored that tourism in Africa is termed as one of the key tools that are known as the backbone of the economy and Walton further explained that tourism has been a key tool for economic development throughout the world, and the sub-Saharan African countries can start/ continue to utilize tourism as a source of growth and poverty alleviation. Tanzania is ranked 4th among 140 countries with regard to endowment of tourism-related natural resources (MoFP,2015) It is no wonder why Tanzania has been a leading destination for Foreign Direct Investment (FDI) in the East African region. According to the 'National 5-Year Development Plan' (2016/17- 2020/2021) the Government of Tanzania targets tourism growth at the rate of 6.2%, and the tourism share in the GDP to reach as high as 18.3% and 19.5% by the financial year 2020-2021 and 2025-2026 respectively.

Furthermore, Kilimanjaro National Park (KINAPA) is one of the 23 national parks in Tanzania found in Kilimanjaro region, the national park consists of one of the most important heritage and tourism attractions in world Mount Kilimanjaro that has the potential of attracting many tourists around the world. The national tourism policy of 1999, seeks to promote the economy and livelihood of the people. It focuses on poverty alleviation and development of sustainable and quality tourism that is culturally and socially acceptable ecologically friendly, environmentally sustainable and economically viable.

It is also sought to market Tanzania as a favored tourist destination for touring and adventuring a country renowned for its cultural diversity and numerous beaches. Therefore, tourism is the movement of people from one place or from the country of origin to the other for the purpose of leisure or studying or business purposes. The tourists therefore are people traveling to and staying in places outside their normal environment not more than a year for leisure or business activities (Kisasembe, 2022).

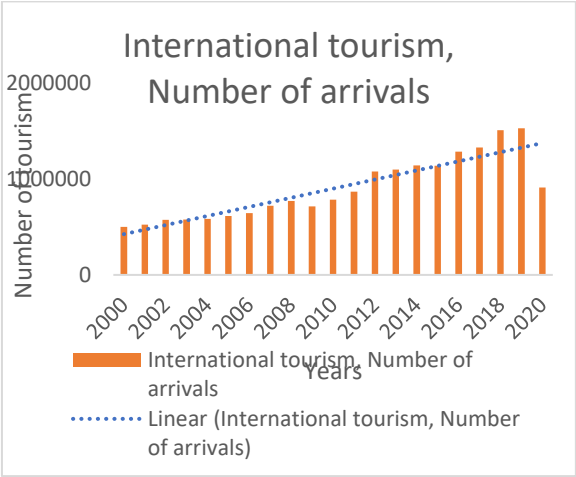


Figure 1.1: International tourism, number of arrivals in Tanzania from 2000 to 2020.

Source of data: World Bank (2020)
The figure above, shows the trend of international tourists in Tanzania since 2000 up date, the graph shows increasing trend although in 2008 and 2009 number of international tourists were decreasing by 56,000 due changes of tariffs, likewise 2019 tourism sector affected by covid -19 resulted to decrease in number of tourists as to currently case of Covid-19 whereby international arrivals decreased by 56,000.

National Park is consisted of a tourism millage, and everything that is around the compound is conserved by any means possible to enable people from different corners of the world to see it and promote Tanzania to the world but also collect more revenue that will be great for the development of the economy (Kazururu, 2014).Tourism is said to be the most important tool in the economy of the world to which is placed as the third aspect after fuel and chemicals termed as the third largest export industry (Tarique, 2021). Reviewed that tourism is widely perceived as an effective vehicle for development for many countries and considered as a powerful stimulator of national economies due its effects on economic sectors associated with it along with jobs creation and positive contribution to the balance of payments and enhancing a better allocation of wealth Sadiku (2017).

Studies have been done pertaining tourism impacts on economic development in the world. For instance, assessment of the impacts of tourism on economic growth in the western Balkan countries that included Bosnia, Serbia, Herzegorina, Montenegro, Croatia and Albania (Radulescu, 2022) Others investigated the relationship between tourism and economic growth among BRIC's countries that includes; Russia, Brazil, China, India and south Africa. Other studies focus on measuring how strong the linkage between tourism and economic growth in Europe (Antonakakis, et al, 2013).

Whereas studies have also been done in Tanzania for example the study on tourism expansion growth in Tanzania (Khanam & Kyara, 2021). Furthermore, other studied on the role of tourism in Tanzania's economic development (Malleo & Mtengwa, 2018). Other study was done on the history, performance and challenges of tourism industry in Tanzania (Kazuzuru, 2014). In addition to that other discussed on the analysis of challenges facing Tanzania Tourism Promotion (Jeremia, 2015).

Henceforth, studies have been done based on tourism impacts on economy development in Tanzania and in the world at large, but little is known pertaining the influence of tourism in economic development specifically in Kilimanjaro region to which the study conducted.

2. LITERATURE REVIEW:

The theories guided this study were classical growth theory as a modern category of economic theory that is applied to the work of several economists who wrote about the process and sources of economic growth and Theory of Economic development introduced by Joseph Schumpeter in the 1930's with the role on entrepreneurship and innovations introduced in the process of economic development. Tarique (2021) investigated on the relationship between tourism and economic growth among the BRICS Countries that includes, Russia, China, India, Brazil, and South Africa. The study viewed that tourism has become the world's third largest export industry after fuel and chemicals. Through which these has been a great turnover of international tourism to 7% shared the world's total export in 2016.

Through which the study attempts to examine the relationship between inbound tourism financial development and economic growth, through a range data from 1995-2015. The results indicated that the three aspects are co-integrate in the long run and has brought prosperity and economical changes. Moreover, the study suggests the BRIC's countries should promote favorable tourism policies to push up the economic growth and in turn economic growth will positively contribute to international tourism.

Murat et al, (2017) conducted a study on the impacts of tourism on economic growth in the western Balkan Countries including; Bosnia, Albania, Serbia, Montenegro and Herzegovina. The research aimed at empirical analysis of the effects of tourism on economic growth. The data consisted a panel of data from six countries over the period of 1988-2014.

The study investigated the random and fixed effects as well as individuality between the countries. Whereas the Husman Taylor estimator was used as the most appropriate model for this analysis findings showed that all types of models and indicate that tourism has a positive and significant impact on economic growth in the western Balkan countries; hence the model suggested that everyone tourist increase equals an output of 0.08%, that suggested the best percent in the economic growth.

Mtengwa & Malleo, (2018) conducted a study on the role of tourism in Tanzania's economic development. The aim of the study is to explore the role of tourism in the generation of employment in Tanzania's citizen and in income generation in terms of the GDP. The study used secondary data, thus through journals, documents, researches and reports from different institutions the study used a panel data analysis to demonstrate the potential contribution of tourism for economic growth in Tanzania, using the Pearson correlation method under inferential analysis.

The study's findings showed the relationship between the tourism and the two variables employment and income. Whereas the study illustrated that there are two ways used in maximizing the beneficial impacts of tourism on the economy of Tanzania. Moreover, the findings indicated that tourism has substantial impacts on the economy as shown by the increase GDP, employment opportunities and income generation. The study recommends that in the tourism sector there is a need to be a collaboration with other sectors this is to give an opportunity to other local people who base in agriculture activities so as to improve the livelihood of the citizens and also more economic development in the country.

The indicators include gross domestic product as the market value produced in a specific period of time, according to the UNWTO, (2014) illustrated GDP as an indicator is the sum value added generated by all industries in response to internal tourism consumption and the amount of net taxes on the products and imports included within the value of its expenditure. Per capital income, that is termed as the average income of the people residing in the country that indicates economy growth in the communities (World Tourism Organization, 2005). Quality of life that includes investing in transport, communications, roads, irrigations food, shelter and clothing, electricity and technology with higher capital formation.

Creation of employment opportunities, and increase in innovations and creativity through the updates in technology and new ways of transport and communication that leads to the improvement of tourism hence acts as an indicator for economic development (World Tourism Organization, 2005).

Dhungel (2015) made an effort to investigate causality between tourism and economic growth, In Nepal for the period of (1974–2012), by using Johansen's cointegration and Error correction model. The result states that unidirectional causality exists in the long run, while in short run no causality exists between two constructs. The study emphasized that strategies should be devised to attain causality running from tourism to economic growth (Dunge, 2015). Also, Mallick (2016) analyzed the nexus between economic growth and tourism in 23 Indian states over a period of 14 years (1997–2011). Using panel autoregressive distributed lag model based on three alternative estimators such as mean group estimator, pooled mean group and dynamic fixed effects, Research found that tourism exerts positive influence on economic growth in the long run (Mallick, 2016).

Belloumi (2010), examines the causal relationship between international tourism receipts and economic growth in Tunisia by using annual time series data for the period 1970–2007. The study uses the Johansen's cointegration methodology to analyze the long-run relationship among the concerned variables. Granger causality-based Vector error correction mechanism approach indicates that the revenues generated from tourism have a positive impact on economic growth of Tunisia. Thus, the study supports the hypothesis of tourism-driven economic growth, which is specific to developing countries that base their foreign exchange earnings on the existence of a comparative advantage in certain sectors of the economy (Belloumi, 2010).

Tang (20130, explored the dynamic Inter-relationships among tourism, economic growth and energy consumption in India for the period 1971–2012. The study employed Bounds testing approach to cointegration and generalized variance decomposition methods to analyze the relationship. The bounds testing and the Gregory-Hansen test for cointegration with structural breaks consistently reveals that energy consumption, tourism and economic growth in India are cointegrated. The study demonstrated that tourism and economic growth have positive impact on energy consumption, while tourism and economic growth are interrelated; with tourism exert significant influence on economic growth. Consequently, this study validates the tourism-led growth hypothesis in the Indian context (Tang, 2013).

Karim (2012), examined the causal nexus between tourism and economic growth in Malaysia by applying panel time series approach for the period 1998–2005. By applying Padroni's panel cointegration test and panel Granger causality test, the result indicated both short and long-run relationship. Further, the panel causality shows unidirectional causality directing from tourism receipts to economic growth. The result provides evidence of the significant contribution of tourism industry to Malaysia's economic growth, thereby justifying the necessity of public intervention in providing tourism infrastructure and facilities (Karim, 2012)

A number of literature and studies have been conducted pertaining to the impacts of tourism sector in economic growth. Some of them focused on the assessment of the impacts of tourism on economic growth in the western Balkan countries that included Bosnia, Serbia, Herzegovina, Montenegro, Croatia and Albania (Murat et al, 2017).

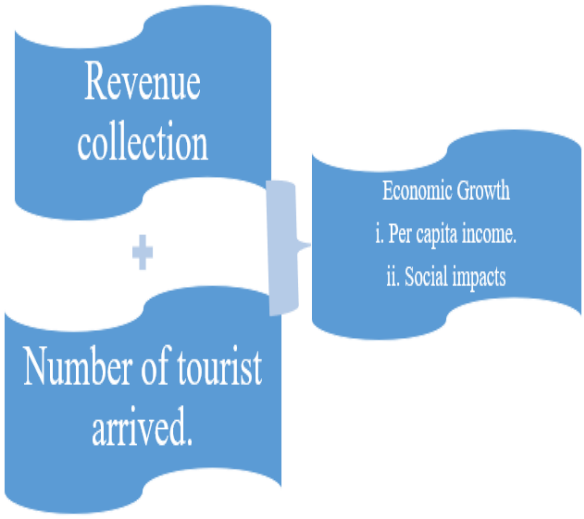
Others investigated on the relationship between tourism and economic growth among BRIC's countries that includes; Russia, Brazil, China, India and South Africa (Tarique et al, 2021)). Others were done on how strong is the linkage between tourism and economic growth in Europe (Filis et al, 2013). Moreover, other studies investigated on tourism expansion growth in Tanzania (Khanam & Kyara, 2021).

Furthermore, other studied on the role of tourism in Tanzania's economic development (Malleo & Mtengwa, 2018). Other were done on the history, performance and challenges of tourism industry in Tanzania (Kazuzuru, 2014). In addition to those others discussed on the analysis of challenges facing Tanzania Tourism Promotion (Jeremia, 2015).

However, studies have been done based on tourism impacts and roles on economy development in Tanzania and in the world at large, but little is known pertaining the influence of tourism in economic development: to which the study will be done, henceforth, the study will focus specifically on the Assessment of the influence of tourism on economic development in KINAPA Kilimanjaro in Tanzania.

Conceptual Framework:
The conceptual framework demonstrates on the relationship between the independent and dependent variable. In this sense, the conceptual framework shall illustrate the relationship between number of arrivals at KINAPA, Corporate social responsibility fund at KINAPA and KINAPA revenue collection as the independent variable Economic growth which termed as per capita income of people of Kilimanjaro as well with social impact generated from CSR fund since 2000 to 2021 as the dependent variable.

Figure 2.1a Conceptual framework.



Source: **Researcher (2022)**
The figure 2.1 demonstrates the dependent variable and independent variable, the researcher identified economic growth which will be measured by per capita income as a dependent variable while international tourism, number of arrivals and international tourism, expenditure as an independent variable.

The researcher assumes that number of arrivals at KINAPA, Corporate social responsibility fund at KINAPA and KINAPA revenue collection as the independent variable Economic growth, so the explanation of the figure is summarized in the following function $Y = f(X_1, X_2, \xi)$, Whereby

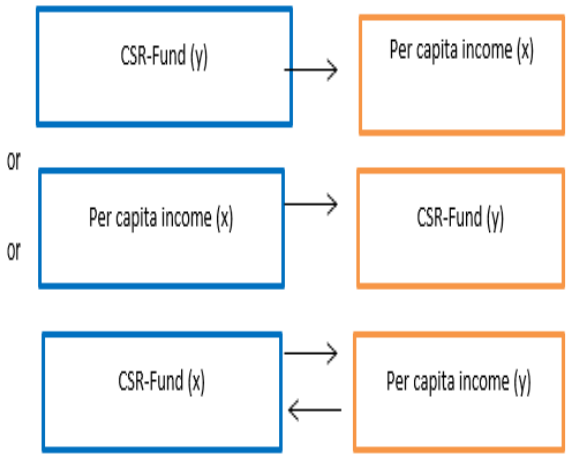
Y = Economic Growth
X_1 = Number of Tourist arrivals at KINAPA
X_2 = KINAPA revenue collection
ξ = Error time

The re searcher will run a model whereby

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \xi$

Based on the granger model, it's demonstrating that the CSR-Fund cause per capita income or per capita income CSR-Fund or both. This will be verified by using granger causality test. The figure revealed the granger causality that existed among variables CSR-Fund and Per capita income. In this study the simple granger causality employed where two variables of CSR-Fund and Per capita income will be tested in order to explain each variable can granger cause to another and vice versa.

Figure 2.1b Conceptual Framework (X) and (Y)



Source: Constructed from Granger Causality Model and modified through (Mwaitete,2018).

The above figure demonstrates that the CSR-Fund granger causes Per capita income or per capita income granger cause CSR-Fund or both. This will be verified by using granger causality test. The figure revealed the granger causality that existed among variables TASAF grants and Household income. It demonstrates a way study objective will be assessed by using granger. Researcher examined whether CSR-Fund granger causes per capita income or per capita income granger causes CSR-Fund or both ways. The underlying theory will specify the dependent and independent variables in the model, Therefor the model will be formulated in the following form.

$Pc_t = \beta_1 Pc_{t-i} + \beta_2 CSR_{t-k} + \mathcal{E}$ ……..……..i

$CSR_t = \beta_3 CSR_{t-i} + \beta_4 Pc_{t-k} + \mathcal{E}$ ……..……..ii

Hypotheses

Ho: CSR-Fund cannot granger cause Per capita income

Hi: CSR-Fund can granger cause Per capita income

Ho: Per capita income cannot granger CSR-Fund

Hi: Per capita income cannot granger CSR-Fund

Whereby;

Pc_t = Per capita income at time t

CSR_t = Corporate Social Responsibility Fund at time t

$\mathcal{E}$ = Error term

(β_1, β_2, β_3, β_4) =Coefficient

The above model assumes that, Pc_t and CSR_t is stationary and if not, so the stationary will be tested by using either unit root test or natural logarithms.

3.0 RESEARCH METHODOLOGY:

The research design of this study was explanatory research design using quantitative research approach. Sampling techniques was random sampling with sample size of 10 respondents. Data collection method were documentary review and questionnaires. Data analysis method was regression and granger causality with help of STATA software and Excel. The collected variables were treated for stationarity and the researcher used the stationarity data for predicting the model and analysis, the researcher examined how CSR-Fund granger causes Per capita income or per capita income granger cause CSR-Fund or both with the time series data so that data generated assisted the researcher to run the granger causality test to examine the causality and significance of the variables in the model, hence variables were tested to examine the level of significance at 5% decision criteria and the developed model was also tested for cointegration and serial Correlation, normality, heteroskedasticity, multicollinearity, Johansen and Unit root test was also applied to validate the model.

4. FINDINGS/RESULTS:

4.1 Johansen Test for Cointegration:

This test was applied in the study to examine whether variables have long-run movement association, as a result of their different order of integration. The test was guided by the following hypotheses;

H0: There is no cointegration among variables

H1: There is cointegration among variables

Decision criteria: Reject the null hypothesis when absolute value of trace statistic is greater than absolute value of critical value at 5%

Johansen tests for cointegration

Trend: constant — Number of obs = 20
Sample: 2002 - 2021 — Lags = 1

maximum rank	parms	LL	eigenvalue	trace statistic	5% critical value
0	4	-1430.0107	.	90.7383	47.21
1	11	-1402.699	0.93486	36.1149	29.68
2	16	-1392.3619	0.64432	15.4407	15.41
3	19	-1388.1269	0.34525	6.9707	3.76
4	20	-1384.6415	0.29428		

Table 4.1: Johansen tests for cointegration.

Before the vector error correction model (VECM) can be formed and used, there first has to be evidence of cointegration, given that cointegration implies a significant error correction term, cointegration can be viewed as an indirect test of long-run causality.

It is possible to have evidence of long-run causality. Cointegration refers to the fact that two or more series share a stochastic trend (Stock & Watson). Engle and Granger (1987) suggested a two-step process to test for cointegration (an OLS regression and a unit root test), the EG-ADF test.

Based on this suggestion, when we start at 0 maximum rank it is observed that the trace statistics is 90.7383 which is greater than the critical value of 47.21. Therefore, author rejected the null hypothesis that there is no cointegration among the variables and accepted the alternative hypothesis that there is cointegration among variables.

Also, when there is 1 maximum rank, author observe that trace statistics is 36.1149 which is greater than the critical value of 29.68, author thus reject the null hypothesis and accept the alternative hypothesis that there is cointegration among variables. This means that the two variables have long run relationship, they move together in the long run. Therefore, the two variables are integrated.

4.2 Granger Causality Test:

In time series analysis, sometimes, author intended to know whether changes in a variable will have an impact on changes on another variable. Granger causality test is a technique for determining whether one time series is useful in forecasting another. It can determine whether there is causality relationship between variables.

Decision criteria: If probability of chi-square is less than 5% significant level rejects the null hypothesis

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
dcsfgrant	dcapita	40.242	4	0.000
dcsfgrant	ALL	40.242	4	0.000
dcapita	dcsfgrant	100.33	4	0.000
dcapita	ALL	100.33	4	0.000

Table 4.2: Granger causality result table.

Case One Hypotheses

H0: Lagged (4) CSR-Fund does not granger cause per capita income

H1: Lagged (4) CSR-Fund granger causes per capita income

The results from table 4.8 shows that the probability value is 0.000 which is less than 0.05 level of significant, therefore reject the null hypothesis and conclude that lagged (4) CSR-Fund granger causes per capita income

Case Two Hypotheses

H0: Lagged (4) per capita income does not granger cause CSR-Fund

H1: Lagged (4) per capita income granger cause CSR-Fund

The results from table 4.2 shows that the probability value is 0.000 which is less than 0.05 level of significant, therefore author reject the null hypothesis and conclude that lagged (4) per capita income granger cause CSR-Fund.

4.3 Regression result:

The results of R square = 87.9 % is a suitable fitted level to explain the model. This is interpreted as that, per capita income of people of Kilimanjaro influenced by 87.9 % through number of tourist arrival at KINAPA and revenue collected at KINAPA while other unidentified factors can explain per capita income of people of Kilimanjaro by for only 12.1 %, below is a regression equation.

Per capita income = -50925.74 + 54.12607 Tourist arrival + 0.268 KinapaRevenue + Ɛ

	Ss	Df	Number of observations = 21		
			MS	F (1, 17) = 120.01	
				Prob > F = 0.0000	
Model	5.5229e+12	1	5.5229e+12	R-squared = 0.879	
Residual	8.5547e+12	19	4.5025e+11	Adj R-squared = 0.819	
Total	1.4078e+13	20	7.0388e+11	Root MSE = 6.7e+05	
					Conf. Interval]
Dcapita	Coef	Coef. Std.	T	P>t	[95% conf. interval
Dtourist	54.12607	14.16575	3.82	0.001	24.47681 83.77532
d.revenue	0.268	7.66e-06	3.50	0.002	.0000108 .0000429

Table 4.3: Regression result.

The model was chosen due to the linear nature of the dependent variable per capita income and the independent variables which was number of tourist arrival and revenue collection at KINAPA. The regression equation model indicates that there is a positive relationship between per capita income and number of tourist arrival as well as revenue collection at KINAPA.

Hence one unit increase in number of tourist arrival at KINAPA lead to the 54.12607 unit increase of per capita income of people of Kilimanjaro in Tanzania, while one unit increase in KINAPA revenue collection led to 0.268 unit increase in per capita income of people of Kilimanjaro, but based of coefficients between number of tourist arrival and KINAPA revenue collection, Author reveals that number of tourist arrival much unit increase influence than KINAPA revenue collection at KINAPA and this was due multiplier effect of a single tourist than revenue collection which shared in all part of the nation.

5. DISCUSSION OF FINDINDS:

5.1 Influence of KINAPA number of tourist arrival on per capita income in Kilimanjaro.

In regard to the regression result table, author of this study observed that, one unit increase in number of tourist arrival at KINAPA lead to the 54.12607 unit increase of per capita income of people of Kilimanjaro in Tanzania, while one unit increase in KINAPA revenue collection led to 0.268 unit increase in per capita income of people of Kilimanjaro, but based of coefficients between number of tourist arrival and KINAPA revenue collection.

Author reveals that number of tourist arrival much unit increase influence than KINAPA revenue collection at KINAPA and this was due multiplier effect of a single tourist than revenue collection which shared in all part of the nation, so for the author to find out at what extent and area of influence of KINAPA number of tourist arrival on per capita income in Kilimanjaro observed that.

stats	labour~t	businv	agrimpr	retail~r	buspar~p	employ~t	cultgo~s
mean	3.4	2.8	3	3.4	2.8	3.4	3
sd	.5163978	.7888106	.6666667	.5163978	.7888106	.5163978	.6666667
variance	.2666667	.6222222	.4444444	.2666667	.6222222	.2666667	.4444444
kurtosis	1.166667	1.846939	2.5	1.166667	1.846939	1.166667	2.5
min	3	2	2	3	2	3	2
max	4	4	4	4	4	4	4
skewness	.4082483	.3436216	0	.4082483	.3436216	.4082483	0

Table 4.4: Descriptive data showing influence of tourist arrival on per capita income in Kilimanjaro.

Result showed that labor intensive, retailers and employment had the highest mean score value of 3.4 and smallest standard deviation of 0.5163978, this signifies that has highest expectation to dependent variable, the above fact supported by the following author below.

World Bank Group report (2015) addressed that, tourism provides a robust stream of revenues for the country with benefits that reverberate widely through the economy a relatively labor-intensive sector in which tourism serves as a robust source of good quality jobs in the country, with the potential to alleviate poverty (WorldBankGroup, 2015)

T.Caber (2016) argued that, Number of retailers in tourism sector were increased due to the increase in number of tourists, this emerges a business named Retail tourism or shopping tourism refers as the important link between the tourist industry and retailing. Shopping, buying local products and trying out local cuisines are integral aspects of the tourist experience (T.Caber, 2016) Jiménez-Zarco (2020) argued that, tourism is an increasingly attractive alternative for improving local commercial activity and, at the same time, shopping can be an active potential for the city to differentiate itself as a chosen destination.

In this sense, there are different specific initiatives to promote cities as shopping tourism destinations, both in the city center and for other areas, most of which are centered on Madrid and Barcelona, since both occupy the second position among the best European cities as shopping destinations (Jiménez-Zarco, 2020).

5.2 Impact of KINAPA corporate social responsibility fund on social impact in Kilimanjaro.

The results from table 4.8 shows that the probability value is 0.000 which is less than 0.05 level of significant, therefore author rejected the null hypothesis and conclude that lagged (4) CSR-Fund granger causes per capita income. Also, results from table 4.8 shows that the probability value is 0.000 which is less than 0.05 level of significant, therefore author reject the null hypothesis and conclude that lagged (4) per capita income granger cause CSR-Fund.

Although, currently the reality showed that, CSR-Fund at L1 shows the effect of first lag of CSR-Fund on per capita income. The p-value of this first lag is 0.339 which is greater than 5% significant level; this means that the first lag of CSR-Fund is insignificant. Since the coefficient of first lag is (-10128.74) and the lag is insignificant, this implies that per capita income is negatively affected by its first lag value with coefficient of (-10128.74).

Furthermore, per capita at L1 shows the effect of first lag of per capita income on CSR-Fund. The p-value of this first lag is 0.0002 which is less than 5% significant level which means that the first lag of per capita income is significant. Since the lag is significant then author can conclude that CSR-Fund affected by first lag value of per capita income, as illustrated in table 4.13 below.

stats	employ~t	welbeing	schools	health	girlss~r	stchre~d	igas	road	fcapab~y
mean	3	3.8	3	3.6	1.7	2.9	3.5	3.2	2.9
sd	0	.421637	0	.5163978	.4830459	.5676462	.5270463	.9189366	.3162278
variance	0	.1777778	0	.2666667	.2333333	.3222222	.2777778	.8444444	.1
kurtosis	.	3.25	.	1.166667	1.761905	3.302021	1	1.432133	8.111111
min	3	3	3	3	1	2	3	2	2
max	3	4	3	4	2	4	4	4	3
skewness	.	-1.5	.	-.4082483	-.8728716	-.0768395	0	-.3984589	-2.666667

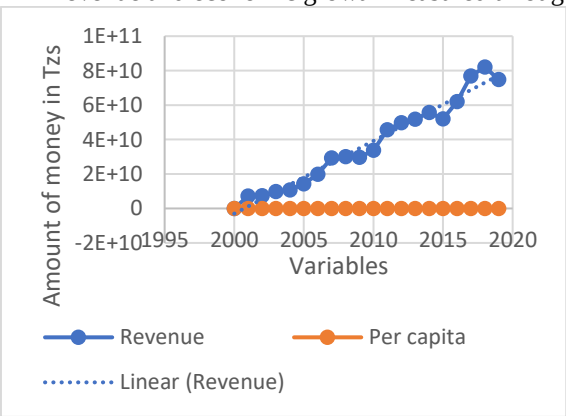
Table 4.5: Descriptive table of CSR-Fund allocation and influence on per capita income.

Since the wellbeing of people were 3.8 mean score as the highest mean score followed by school with zero standard deviation while health had 3.5, but also lead income generating activities which eventually lead to the families' capabilities to utilize their natural resource to transform their life

5.3 Relationship between KINAPA revenue collections on economic growth in Kilimanjaro.

One unit increase in KINAPA revenue collection led to 0.268 unit increase in per capita income of people of Kilimanjaro. Author reveals that number of tourist arrival has much unit increase influence than KINAPA revenue collection due multiplier effect of a single tourist than revenue collection which shared in all part of the nation. In regard to the figure below in align to the regression result whereby coefficient were positive 0.268, which imply that, there is positive relationship between KINAPA revenue and economic growth of Kilimanjaro through per capita income increased.

Figure 4.1: Relationship between KINAPA revenue and economic growth measured through per capita income.



The figure above demonstrates positive relationship between KINAPA revenue collection and per capita income of people of Kilimanjaro, this supported by The World Travel and Tourism Council 2020 report shows that globally, in 2019 tourism sector

contributed 10.3% (US$ 8.9 trillion) of global Gross Domestic Product (GDP) and 330 million jobs, which is about 10% of all global employment (WTTC, 2020).

6. CONCULSION AND RECOMMENDATIONS:

The researcher tested for stationarity using ADF (Augmented Dickey-Fuller) test and variables observed to be stationary, data were taken and put into STATA and run regression output generated and found that R square = 87.9 % is a suitable fitted level to explain the model. This is interpreted as that, per capita income of people of Kilimanjaro influenced by 87.9 % through number of tourist arrival at KINAPA and revenue collected at KINAPA while other unidentified factors can explain per capita income of people of Kilimanjaro by for only 12.1 % was significant at 5% significance level. Even though the researcher went the extra mile to check for correlation to examine the strength of the variables and found a weaker positive correlation of 0.0132, this means more effort need to be done between CSR-Fund that mean corporate social responsibility fund and per capita income of people of Kilimanjaro. The researcher tested whether the variables are moving together in long run or not? The study found number of tourist arrival and per-capita income found to move together in the long run, therefore giving a signal to develop interest. The researcher tested for heteroscedasticity, serial correlation, kurtosis for normality, normal data, and autocorrelation and found the named model can be used for policy decision making, therefore valid model, so based on the above analysis it conclude that three selected macroeconomic variables are relatively significant and likely to have effect in the per capita income of people of Kilimanjaro in Tanzania based on their coefficients and their significance relationship in the long-run effect of which its consistency with theories. Due to the positive relationship that exists between number of tourist arrivals, revenue collection at KINAPA, and CSR-Fund toward per capita income of people of Kilimanjaro, it is highly recommendable since variables are significant, the government should

i. Supervise CSR-Fund allocation to direct money to the potential sector which directly can influence per capita income of people since it's observed that, per capita income granger cause CSR-Fund.
ii. To realize the value for money, KINAPA corporate social responsibility fund in construction project should performed under force account mechanism in which some amount of money will be directed to soft loan for women and youth in Kilimanjaro region.

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