

ANALYSIS OF THE ANTICIPATED AND POTENTIAL CONTRIBUTION OF MEGA SPORTING EVENTS IN ACHIEVING SUSTAINABLE DEVELOPMENT GOALS: A CASE OF THE 2022 FIFA WORLD CUP IN QATAR

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Abstract

Purpose: This study sought to analyse and determine which of the seventeen Sustainable Development Goals will be impacted by the 2022 FIFA World Cup in Qatar.

Methodology: To achieve this, the study adopted an innovative approach and used ordinary linear regression as opposed to conventional logic models applied for such studies. The quantitative data collected was analysed using the SPSS version 25 for data analysis through the use of descriptive statistics such as frequencies and percentages as well as measures of central tendency such the mean. The target population that gave this data comprised of 100 respondends from the Qatari population, who were clustered into six categories through a multistage sampling design. The clusters included; migrant workers, Qatari nationals working with the government or the private sector, business people, experts in matters related to the SDGs under study, Government departments, and private practitioners such as lawyers.

Findings: The study found that respondents anticipate and cited possible Sustainable Development Goals that will be achieved as a result of preparation and actual hosting of the FIFA 2022 World Cup in Qatar. These Goals were; Better Health and Wellbeing of all, Gender Equality, Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for all, Improved Infrastructure, Promotion of Inclusive and Sustainable Industrialisation and Fostering Innovation, Peace and Justice for all), and Partnerships as a means of achieving the SDGs.

Unique contribution to theory, practice and policy: The study recommends that Qatar should leverage on the advantage of being World Cup hosts to achieve these sustainable Development Goals, and even more.

Keywords: Mega Sporting Event, Sustainable Development Goals, FIFA World Cup



1.0 INTRODUCTION

The 70th session of the United Nations (UN) general assembly that occurred in September 2015 ended in the adoption of the 2030 Agenda for Sustainable Development Goals (SDGs) as the successor to the Millennium Development Goals (MDGs) enacted in 2000. The 2030 Agenda contained 17 Sustainable Development Goals (SDGs) and 169 targets that were to build on the "leaving no one behind" principle. The Agenda placed a special emphasis on holistic development that encompasses all such as attaining zero hunger worldwide (SDG 2), ensuring gender equality (SDG 5), provision of quality education for all (SDG 4) and global partnership as a means of achieving all these (SDG 17).² If well harnessed, the Agenda is bound to inspire worldwide development in all sectors and help achieve a balanced world where people do not have to migrate in search of opportunities. Sports play a vital role in promoting peace and development agenda at relatively low costs. This fact is acknowledged in many resolutions of the General Assembly. For instance, Resolution 70/1, adopted in 2015, recognises this role by defining mega sporting events as enablers of sustainable development.³ Some of the best known economic and peace efforts have been achieved through mega sporting sports. For instance, the 2002 FIFA world cup co-hosted between Japan and South Korea saw Japan build seven new stadiums and refurbished three others for more than \$4 billion, while South Korea built ten new stadiums at a cost close to \$2 billion. The 2010 edition of the world cup saw the host, South Africa spend around \$3 billion, while it is projected that the economy received a \$6 billion boost from hosting the event. It is impossible to realise such magnitude of economic development in such a short space of time if there were no intervening factors, in this case, the FIFA World Cup event.

Football being the most recognisable sporting event in the world, perhaps contributes more than any other game in the promotion of peace and development and as such is the most vital sport for the realisation of the SDGs. Its contribution to peace efforts and cultural tolerance is well documented. Liverpool FC fans were once heard singing, "I'll be Muslim too" in appreciation of their superstar Mohamed Salah and his Islamic faith, a religion the western countries mostly blame for terrorism that undermines global peace because most terrorists have Islamic

¹ Lemke, Wilfried. 2016. "The role of sport in achieving sustainable development goals." *UN Chronicles* (United Nations Publications) LIII NO. 2: 1-2. Accessed April 12, 2020. doi:https://dx.doi.org/10.18356/7260830a-en.

² United Nations Department of Economics and Social Affair Disability. 2016. #Envision2030: 17 goals to transform the world for persons with disabilities. Accessed April 12, 2020. https://www.un.org/development/desa/disabilities/envision2030.html

³ Lemke, "Role of Sport"

⁴ Gavin, Cecil Fraser, and Luke Humphrey. 2016. "2010 FIFA World Cup stadium investment:Does the post-event usage justify the expenditure?" *African Review of Economics and Finance* Volume 8 (Issue 2).



orientation.⁵ In this case, football has helped the fans separate religion from terrorism and appreciate that it has no Religion. This scientific research sought to find out the possible and anticipated SDGs to be attained as a result of hosting mega sporting events. Fundamentally, achieving sustainable development requires various nations to address the need for good health and wellbeing, gender equality, decent work and economic growth, industry, innovation and infrastructure, peace, and justice as well as encourage partnership for achieving sustainable development.⁶ The FIFA World Cup is therefore undoubtedly a mega sporting event that most countries bid for the hosting rights anticipating realisation of the SDGs. The impact of such events, therefore, merits studies to discover how they can be leveraged to deliver even better results. This study sought to evaluate the contribution of the 2022 FIFA World Cup in achieving some of the SDGs in Qatar, a country known to grapple with human and labour rights as well as gender inequality issues.⁷

Research Rationale

The award by FIFA to Qatar to host the 2022 FIFA World Cup was controversial with accusations of corruption in the bidding process. Besides, essential questions have been asked regarding the treatment of migrant workers who make more than 70% of the Oatari population. Also, there have concerns about the suitability of the country to host the event given its weather conditions, cultural conservatism and the decision to move the event to November – December period as opposed to the traditional June – July period which is sure to disrupt normal club seasons. Nonetheless, it has helped initiate potential solutions to some of the problems, chief among them being the migrant workers' issues as the spotlight is shone on the country, thereby pressuring her to institute reforms. Indeed, widespread reforms have been initiated and the controversial Kafala law, which requires workers to be permitted by their employers to seek another job or travel out of the country expected to be abolished. This study focused on the amount of progress, made prior to the 2022 FIFA World Cup in Qatar and the anticipated contribution of the event in achieving various SDGs. Therefore, the study was significant because at the time it was conducted, no studies had been done concerning the anticipated role of mega sporting events in achieving the SDGs, apart from being recognised in research papers and policy documents.

⁵ Aljazeera. 2018. *NEWS/SPORT: Till be Muslim too': Fans embrace Liverpool's Mo Salah*. February. Accessed April 13, 2020. https://www.aljazeera.com/news/2018/02/liverpool-fans-embrace-mohamed-salah-muslim-chant-180216105515770.htm.

⁶ Envision2030: 17 Goals.

⁷ Day, Migrants. "Women and men migrant workers: Moving towards equal rights and opportunities."

⁸ Sofotasiou, Polytimi, Benjamin Richard Hughes, and John Kaiser Calautit. "Qatar 2022: Facing the FIFA World Cup climatic and legacy challenges." *Sustainable cities and society* 14 (2015): 16-30.

⁹ Dorsey, James M. "Activists and Gulf crisis turn Qatar into potential model of social change." *blog The Turbulent World of Middle East Soccer* 26 (2017).



Research Aims and Objectives

This study aimed at analysing the anticipated and possible contribution of mega sporting events in the realisation of the SDGs focusing on the upcoming 2022 FIFA world cup in Qatar. The study relied on the following objectives to achieve this aim;

- 1. To evaluate whether the government and local population anticipate that the FIFA 2022 World Cup will contribute to the achievement of various SDGs in Qatar.
- **2.** To evaluate which of the 17 SDGs will be achieved as a result of hosting the FIFA 2022 World Cup in Qatar.

Significance of the Research

The findings of this research are significant to various stakeholders in various sectors seeking to find a definitive measure on the level of influence by mega sporting events in achieving the SDGs. UN general assembly can use the results in assessing the extent of sport's contribution to SDGs and use it to leverage future sporting events towards achieving more SDGs. Moreover, the findings inform Qatar government on the need to assess the level of progress in the areas mentioned that prior preparation and hosting of the event would enhance the achievement of identified SDGs. Also, other governments can adopt these results to help find solutions to problems such as extremism through sporting activities and hosting global sporting events. Besides, the study adds to the body of literature already available to help inform policy measures based on concrete evidence. Furthermore, future scholars will be able to use it a basis for further research insofar as mega sporting events and attaining SDGs are concerned. Fundamentally, international organisations such as FIFA and consultants will be able to use this research to inform policies aimed at maximising the role of sport in attaining the SDGs and the change agenda in general.

2.0 LITERATURE REVIEW AND THEORITICAL REVIEW

Mega sporting events for Good Health and Wellbeing

A study by Kavetsos et al.¹⁰ found out that participation in sporting activities involves an intense level of physical exercises in pursuit of match fitness to compete successfully. According to these researchers, players have to abide by a strict fitness regimen to ensure they are always in the best physical condition. Besides, for both players and fans, mega sporting events play an essential role in promoting their mental health. According to an analysis conducted by the Commonwealth, ¹¹ physical activity is the fourth leading remedies for mental disorders as regular exercising and active participation as spectators minimise mental disorders such as depression,

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¹⁰ Kavetsos, Georgios, and Stefan Szymanski. "National well-being and international sports events." *Journal of economic psychology* 31, no. 2 (2010): 158-171.

¹¹ Oliver, Dudfield, and Dingwall-Smith Malcolm. 2015. "Sport for Development and Peace and the 2030 Agenda for Sustainable Development." *COMMONWEALTH ANALYSIS* (The Commonwealth Secretariat).



leading to lower mortality as a result of mental disorders worldwide. ¹² Furthermore, as players from different countries comprising their national teams, participate in mega sporting events, they enhance their physical fitness, leading to better health and general wellbeing. A study by Maennig ¹³ found out that mega sporting events are excellent opportunities for health education to reach people who otherwise cannot be reached during standard health education and awareness programs. The researcher argued host countries should take advantage of the huge crowd to create awareness on the need for physical fitness to enhance the health and wellbeing of both players and fans. Besides, the many numbers of stadia and public spaces set aside for mega sporting events, provide an opportunity for engaging in physical activities. ¹⁴ As a result, good health and wellbeing (SDG 3) are achieved with minimal investment, and the finances can, therefore, be saved for other interventions.

Mega sporting events for Gender Equality

In their research, Iain et al.¹⁵ contend that gender inequality is a problem that has perennially plagued the world as society raises the man as the dominant gender with women as supporting casts, despite living in a world where everyone is seen as equal humans with diverse capabilities. Further, these researchers found out that achieving gender equality and empowering women and girls is a priority for mega sporting events such as the FIFA World Cup for women. Fundamentally, these researchers concluded that female participation in sports could also help in challenging stereotypes and disassociate women with the traditional roles set for them as they get a platform to showcase their abilities and achievements to the broader society. Another study by Burnett and Uys¹⁶ found out that as women participate in mega sporting events as fans, officials and security personnel, they earn recognition for their skills, boosting their self-esteem and confidence levels due to the improved social standing. Moreover, mega sporting events, provide opportunities for social interaction and friendship that can help raise awareness of gender-based roles among male accomplices and result in social and psychological benefits for all parties involved.¹⁷ Besides, it is necessary to lobby societies that still place restrictions on women's participation in any meaningful sporting activities to acknowledge women as equal humans and

¹² Oliver and Malcom, Sport for Peace and Development

¹³ Maennig, Wolfgang. The feel-good effect at mega sport events: Recommendations for public and private administration informed by the experience of the FIFA World Cup 2006. No. 18. Hamburg contemporary economic discussions, 2008.

¹⁴ Iain, Lindsey, and Chapman Tony . 2017. "Enhancing the Contribution of Sport to the Sustainable Development Goals." *The Commonwealth Analysis* (Commonwealth Secretariat).

¹⁵ Ibid, 17

¹⁶ Burnett, C., and T Uys. 2000. "Sport Development Impact Assessment: towards a rationale and tool." *South African Journal for Research in Sport, Physical Education and Recreation* Volume 22.

 $^{^{17}}$ Darnell , S, and Hayhurst L . 2011. "Sport for decolonisation: Exploring a new praxis of sport for development." $Progress\ in\ development\ studies\ Volume\ 11\ (3).$



lift such restrictions and allow them to showcase their abilities. This will, in turn, earn women respect and recognition. 18

Mega sporting events for Decent Working Conditions

In his monthly documentation, Kaplan¹⁹ argued that developing nations strive to continually grow their economies to even better heights and reach a status of absolute comfort. However, the author noted that problems persist, more so in developing economies due to scarcity of resources, rampant corruption and sometimes harsh policies adopted by trade partners. According to this author, such countries are, therefore, plagued with soaring unemployment levels, which bring with it poor, and at times inhumane, working conditions for those able to secure employment, due over to oversupply of migrant labour. Citizens of such countries are usually forced to migrate to find work or better working conditions in other countries only to mostly end up with the same or more impoverished conditions as in their countries. 20 However, one of the sustainable development goals (SDG 8) aim at promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Again, the role of mega sporting events in achieving this goal is evident in their contribution of 1% of the global GDP, which is essential for economic growth.²¹ Investment in sports is, therefore, among the ways that can result in economic growth (SDG 8 - decent work and economic growth).²² Moreover, the sports industry promotes the growth of other sectors such as tourism and hospitality, which in turn ensures all-round economic growth and creation of employment creation. 23 The spotlight associated with sporting events also helps in highlighting the various social ills humans are subjected to.²⁴

¹⁸ Burnett and Uys, rationale and tool

¹⁹ Kaplan , R. 1994. "The coming anarchy: how scarcity, crime, overpopulation and disease are threatening the social fabric of our planet." *Atlantic Monthly*.

²⁰ John, W. McArthur, and Werker Eric. 2016. "Developing countries and international organisations: Introduction to the special issue." *The Review of International Organisations* Volume 11.

²¹ Kaplan "The coming anarchy

²² Lichbach , MI. 1989. "An evaluation of "Does economic inequality breed political conflict?" studies." *World Politics*.

²³ Ian and Tony, Sustainable Development Goals.

²⁴ Spaaij, Ramón. "Changing people's lives for the better? Social mobility through sport-based intervention programmes: opportunities and constraints." *European Journal for Sport and society* 10, no. 1 (2013): 53-73.



Mega sporting events Sport for Infrastructure, Industrialisation and Innovation

In their study, Gibson et al.²⁵ found out that mega sporting events such as the FIFA World Cup contribute significantly to the building of infrastructure, promotion of inclusive and sustainable industrialisation and fostering innovation. To support this finding, these authors cited the case of South Africa, which spent roughly \$3 billion to upgrade its roads, and railroad systems to the standard required to host a world cup in 2010, a significant event in a third world country while. On the other hand, Japan and South Korea spent around \$4 billion and \$2 billion, respectively, to build and upgrade stadiums for the 2002 world cup.²⁶ Such investments are significant and contribute to the industrialisation agenda. Moreover, mega sporting events boost other industries such as the hospitality industry, which directly benefits from sport through the provision of accommodation for fans and sports personalities.²⁷ It is no coincidence that developed countries also have developed sports facilities and advanced industries that directly benefit from sports.

Mega sporting events Sport for Peace and Justice

Perhaps the most vital role of mega sporting events such as the FIFA World Cup sport is the promotion of peace, justice and unity. There are examples of warring parties coming together, even for a time, to support their sporting teams or witness great sporting activities. For instance, warlords in the 1969 Biafran war in Nigeria agreed to a 48hour ceasefire to watch Pele play in Nigeria. Sports personalities have been known to use their standing as influential people to champion for peace and unity and encourage humanitarian practices. For instance, the football world came together to aid the victims of chemical attacks in Aleppo, Syria, by declaring their solidarity with the victims, thus offering hope in a time of need. Sports also promote human rights by shedding light on inhumane practices around the world. For instance, since the 2022 FIFA world cup was awarded to Qatar, there has been a sharp spotlight on their unacceptable treatment of migrant workers. Subsequently, there has been sustained pressure to amend such contentious labour laws such as abandoning the Kafala system, which requires employees to seek the consent of their employers before seeking other employment opportunities or leaving the

²⁵ Gibson PhD, Heather, Kostas Karadakis PhD Student, Matthew Walker PhD, Brijesh Thapa, Sue Geldenhuys PhD, and Willie Coetzee PhD. "Quality Of Life As A Mediator Between Event Impacts And Mega Event Support Among South African Residents: The 2010 FIFA World Cuptm." (2016).

²⁶ Gavin and Luke FIFA World Cup

²⁷ Marta , Peris-Ortiz, Garcia Jose Alvarez, and Rama Del Rio. 2017. *Sports Management as an Emerging Economic Activity. Trends and Best Practices.* Springer International Publishing. doi:DOI: 10.1007/978-3-319-63907-9.

²⁸ Pele. 2007. *Pele: The Autobiography by Pele New Edition*. Amazon ebooks

²⁹ Syria Call. 2017. A famous Footballer & International News Agency joining the campaign of solidarity with Karim (the child). December 17. Accessed April 17, 2020. http://www.nedaasy.com/en/news/3310.



country.³⁰ This pressure has yielded fruits as the process of abandoning such laws has been initiated.³¹ Indeed, the role of sport in promoting peace and unity is so broad that it merits a study on its own.

Mega Sporting Events for Partnerships

The popularity and global reach of mega sporting events and their strong affiliation with the youth make it a viable tool with which to promote partnership for the development and realisation of all the Sustainable Development Goals.³² Such events have been used to foster multi-stakeholder partnerships in all sectors for peace and development.³³ Moreover, mega sporting events have been recognised as a means of finding a truce between conflicting nations to foster friendships.

Theoretical and Conceptual Frameworks

The theory of change posits that engagement in social activities usually acts as catalysts for desired changes in the wider society.³⁴ It is within the confines of this theory that mega sporting events for change and development can be established. In acknowledging the role of mega sporting sport in achieving the SDGs, the UN General Assembly followed the basic framework of this theory as suggested by Sport for Development Coalition (2015).³⁵ Generally, the first stage entails the identification of the long-term goals, the SDGs. The second step involves consideration of a mega sporting event as a means of achieving the SDGs as the conditions required for the change. Nichola et al.³⁶, argue that the logic models that the theory applies are an effective way of linking a project's outcome to a more comprehensive program and policy objectives. Moreover, the authors contend that the theory of change approach offers a rigorous and systematic way of framing and conducting research on interventions designed to encourage engagement in sport and other forms of physical activity.³⁷ Therefore, this study sought to

³² United Nations Office on Sports for Development and Peace. n.d. "Sports and the Sustainable Development Goals: An overview outlining the contribution of sport to the SDGs."

³⁴ Hayes, John. *The theory and practice of change management*. Palgrave, 2018.

³⁰ The Maritime Executive. 2019. *Labor Reforms Signal End of Kafala System in Qatar*. October 19. Accessed April 17, 2020. https://www.maritime-executive.com/article/labor-reforms-signal-end-of-kafala-system-in-qatar.

³¹ 2019, Labor Reforms

³³ United Nations, Sports

³⁵ Dimitrios, Tourountsis, and Heel Emma . 2015. "SPORT FOR DEVELOPMENT: OUTCOMES AND MEASUREMENT FRAMEWORK." *SPORT FOR DEVELOPMENT COALITION*. Accessed April 20, 2020.

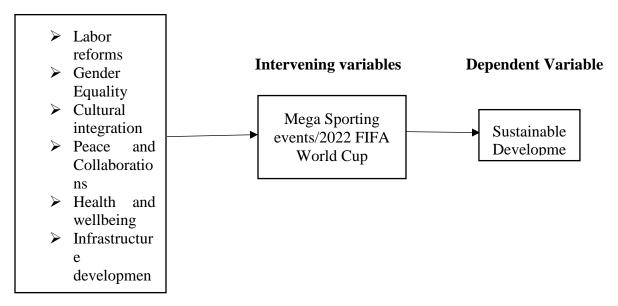
³⁶ Nichola , Bolton, Martin Steve, Grace Clive, and Harris Sandra. 2018. "Implementing a theory of change approach to research sport participation programmes targeting 'hard to reach' groups." *International Journal Sport Policy and Politics* Volume 10 (4). Accessed April 20, 2020. doi:https://doi.org/10.1080/19406940.2018.1476397

³⁷ Nichola, Bolton, Martin, Clive, Sandra, "Implementing a theory of change"



reinforce the theory by rubber stamping its useful application to Mega Sporting events, in this case, the 2022 FIFA World Cup in Qatar. Such events precede the theory and are therefore not held with such objectives in mind. Still, because of an obligation to host such events over a defined period, they usually bring forth changes, but not as pre-planned objectives. As such, it is possible to accurately apply the logic model advocated for the theory as well as enhance the applicability of the theory with an innovative way of modelling the outcomes using a statistical approach. The statistical model applied in this study is ordinary linear regression (OLS).

Figure 1 The conceptual Framework Explanatory Variables



The conceptual model above implies that the anticipated SDGs to be achieved as a result of preparing and hosting the FIFA World Cup relies on the measures and actual outcomes insofar as gender equality, cultural integration, peace and collaborations, health and wellbeing, and infrastructural development as well as labour reforms are concerned

3.0 RESEARCH METHODOLOGY

Research design

This study used a correlational research design to evaluate the relationship between the explanatory variables and the dependent variable (The SDGs in question). The study employed a statistical control technique to ensure the causation relationship established from the analysis is authentic. This was done because the results of a correlation analysis cannot be used to infer a causal effect due to the possibility of the presence of extra variables (known as third variables)



that influences the outcome.³⁸ Statistical control is where the third variables thought to influence the outcome are included in the analysis, along with the variables of interest to establish a full relationship when they are included. This way, experimental design techniques can then be applied in the study without the danger of arriving at the wrong conclusions. The primary experimental design technique used after adjusting for the third variables was multiple linear regression. This study adjusted for five third variables, classified as variables of interest and the third variables.

Table 1: Primary and third variables

Primary Variables	Intervening Variable	Third Variables
Labour reforms	Mega Sporting events/2022 FIFA World Cup	Longstanding lobby group pressure
Gender Equality	Mega Sporting events/2022 FIFA World Cup	Pressure from other governments
Cultural integration	Mega Sporting events/2022 FIFA World Cup	Pressure from donors if any and trade partners
Peace and Collaborations	Mega Sporting events/2022 FIFA World Cup	Trade sanctions
Health and wellbeing	Mega Sporting events/2022 FIFA World Cup	Intended change in government policy
Infrastructural development	Mega Sporting events/2022 FIFA World Cup	

Source of data and data collection method

This study designed and made use of a survey questionnaire administered through emails to collect the data relevant for data analysis. Questions were posed in such a way that respondents had five choices for each. The data was, therefore, of Likert scale type with five levels. The sample consisted of 100 respondents selected from the Qatari population. The study employed a multistage sampling design by categorising the respondents into six clusters. Each cluster comprised of both male and female migrant workers, Qatari nationals working with the government or in the private sector, business people, experts in matters related to the above –

³⁸ Rehfeld, Kira, Norbert Marwan, Jobst Heitzig, and Jürgen Kurths. "Comparison of correlation analysis techniques for irregularly sampled time series." *Nonlinear Processes in Geophysics* 18, no. 3 (2011): 389-404.



mentioned SDGs, Government department, and private practitioners such as lawyers. The response proportion was 20%, 20%, 15%, 15%, 15% and 15% respectively (Although respondents were still asked to indicate their working category (Cluster) in the questionnaire). Thereafter, respondents were selected randomly from each of the six groups to make up the sample.

Method of data analysis

The data collected were entered into the Statistical package for social sciences (SPSS) for analysis that would aid developing insights, test the formulated hypothesis and provide answers to the research questions.

Hypothesis

 H_0 : The 2022 FIFA world cup in Qatar will contribute significantly to sustainable development. H_1 : The 2022 FIFA world cup has no contribution to the UN general assembly SDGs in Qatar.

Multiple linear regression model

The study employed a regression model as the primary model for the data analysis. The model is of the form:

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_k x_{ik} + \epsilon$$
Where for $i=1$ observations:
$$y_i = \text{Dependent variable}$$

$$x_i = \text{Explanatory variables}$$

$$\beta_0 = \text{Constant}$$

$$\beta_k = \text{coefficient of } k^{th} \text{ indenpendent variable}$$

$$\epsilon = \text{error term of the model}$$

Explanation of the model

The multiple regression model is used to predict the outcome of one variable (dependent variable) based on the observed outcome other variables (explanatory/independent variables). The model makes the following assumptions:

- The dependent variable has a linear relationship with the explanatory variables.
- Multicollinearity among the explanatory variables is negligible.
- The residuals follow a standard normal distribution with mean equaling zero and variance equaling one
- The observations are independently and randomly selected from the population of interest.

R² (coefficient of determination) of the model measures the amount of variation in the dependent variable that is explained by the change in the independent variable (how well the model fits the data) with a high R² value indicating a high relationship. However, it increases with increase in



explanatory variables and thus cannot be solely used to explain the relationship. As such, adjusted R^2 is used in explaining the established relationship. It adjusts for the number of variables used in the model and only increases if a new variable introduced to the model improves it. Whether positive or negative, the assigned sign of the beta coefficients manifests the level relationship between the independent and dependent variables.

4.0 ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

4.1 Internal Consistency of the Data

The internal consistency of the data was checked before statistical techniques were applied to analyse the data. A low internal consistency in the data implies that it may be unreliable and would thus yield unreliable and inaccurate results if used in the analysis. On the other hand, high internal consistency suggests a reliably well-reasoned answer to the questions posed in the questionnaire. Such data is likely to yield reliable analysis outcomes. This paper employed Cronbach's Alpha as the measure of internal consistency of the data. Cronbach's Alpha indicates the degree of the relationship between the variables as a group. That is, if the variables are closely related, the responses of each subject are likely to be as close to each other as possible. Cronbach's Alpha ranges between 0 to 1, with values closer to 1 indicating a high internal consistency. Data that yields a Cronbach's Alpha of 0.8 is therefore considered reliable.

The data collected consisted of variables assessing the background information of the respondents as well as those evaluating their opinions as regards the research questions. The former variables were not included in the internal consistency test as they are majorly respondent classification variables. The variables assessing opinions were divided into two groups, one seeking to affirm the contribution of the 2022 FIFA World Cup to various development outcomes tied to specific SDGs. The other group of variables sought to assess whether other factors rather than the 2022 FIFA World Cup were responsible for the anticipated as well as the already achieved development outcomes. As such internal consistency for all the variables was predictably low at 0.552 (See appendix 1). However, when the variables were divided into their respective categories, the internal consistency significantly improved to 0.774 for the first class of variables and 0.695 (Appendices 2 and 3) for the second class. These values were close to 0.8; thus, the data were considered to be reliable.

4.1.1 Tables of Frequencies

The researcher issued 125 questionnaires to the targeted respondents with the researcher recording 80% response rate as 100 respondents filled and returned the questionnaire. The respondent's background information is summarised as follows;

³⁹ Helms, Janet E., Kevin T. Henze, Terry L. Sass, and Venus A. Mifsud. "Treating Cronbach's alpha reliability coefficients as data in counselling research." *The counselling psychologist* 34, no. 5 (2006): 630-660.

⁴⁰ Ibid, 642



Table 2. Respondent's demographic characteristics

Variable	Males	Females				
Gender	60%	40%				
Variable	Aware	Not Aware				
SDG Awareness	70%	30%				
What SDGs entails	70%	30%				
Qatar as hosts	100%	0%				
Variable	Yes	No				
Football fan	59%	41%				
Variable	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Working category	20%	20%	15%	15%	15%	15%
Variable	18-35years	26.45	46-55years	56-65 years	65years and	
Age	35%	36-45years 20%	20%	20%	Above 5%	

Out of 100 respondents, 40% were female, while 60% were males. 30% of respondents recorded total ignorance of the SDGs in general and by extension, those in question in the research. In contrast, 70% of the respondents were aware of the said SDGs. All the respondents who were aware of the SDGs were also aware of what they entail. Unsurprisingly, all those who reported ignorance of the SDGs also did not know what they entail. Majority of the respondents polled fell in the age bracket of 18-35years with 35% falling in this category. The categories 36-45years, 46-55years and 56-65years had an equal number of respondents with 20% falling in each of the mentioned categories. The last category, those 65years and above, recorded only 5%. The respondents working category was a predetermined outcome with 20% each for migrant workers as well as government-employed Qatari nationals. The remaining percentage was distributed at 15% each for business people, policy experts, and high ranking officials in various government departments and private practitioners in Qatar. All the polled respondents reported knowledge of Qatar being 2022 FIFA World Cup hosts while only 41% reported not being football fans. In contrast, 59% of the surveyed respondents were football fans.



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Table 3. Survey opinions

Variable	Strongly Disagree (1)	Disagree (2)	Neither Agree Nor Disagree (3)	Agree (4)	Strongly Agree (5)
Labour Reforms	0%	0%	19%	44%	37%
Gender Equality	0%	2%	14%	65%	19%
Cultural Integration	0%		21%	48%	31%
Health and Wellbeing	0%	3%	19%	56%	22%
Infrastructure Development	0%	0%	13%	51%	36%
Labour and Health Reforms	0%	0%	16%	55%	29%
Do the gains influence Achievement of SDGs?	0%	0%	12%	58%	30%
Foreign Pressure for Labour Reforms	24%	43%	32%	1%	0%
Health and Labour By lobby groups	8%	51%	28%	13%	0%
Donors for Labour Reforms	18%	42%	40%	0%	0%
Sanctions for Labour Reforms	15%	43%	37%	5%	0%
Anticipated Peace	0%	5%	15%	60%	20%
Anticipated Partnership in achieving SDGs	5%	15%	20%	55%	25%

Concerning reforms, 44% of the respondents agreed, while 37% strongly agreed that there had been significant labour reforms in Qatar explained by the country being the host of the 2022 FIFA World Cup. The remaining 19% neither agreed nor disagreed with such assertions. When polled about high expectations regarding health and labour reforms in Qatar due to the upcoming 2022 FIFA World Cup, 16% could not contextualise such information (neither agreed nor disagreed) while 55% agreed that indeed they expected even more reforms. 29% strongly agreed that more reforms were imminent. When asked whether such gains would help Qatar in achieving the relevant SDGs they fall under, even some of the respondents who recorded no knowledge of the SDGs agreed that they are vital, perhaps out of guesswork or strong instinct on what the SDGs were. In total, 58% agreed while 30% were in strong agreement that such would help Qatar achieve significant SDGs. The remaining 12% could not place the question into context.

Regarding gender equality, 84% of the respondents were in general agreement with the assertion that significant steps have been made towards achieving gender equality in Qatar (65% agreeing, 19% strongly agreeing). 2% disagreed while 14% neither agreed nor disagreed. Regarding the role of the 2022 FIFA World Cup on cultural integration, 48% were in agreement, with another 31% strongly agreeing that the FIFA 2022 World Cup will enhance cultural integration. The remaining 21% neither agreed nor disagreed. There was no disagreement with the notion.



Insofar as infrastructural development is concerned, 3% of the respondents refuted the notion that the 2022 FIFA World Cup has caused improvements in health infrastructure and by extension the health and wellbeing of the population in Qatar. Another 19% could not verify the claims while the remaining 78% were in various degrees of agreement (56% agreeing and the other 22% strongly agreeing). A large percentage of the respondents agreed that excellent health facilities and infrastructural developments have been realised in Qatar in preparation for the upcoming 2022 FIFA World Cup (51% agreeing and 36% strongly agreeing). Furthermore, these two categories anticipated more infrastructural development before the event takes place in 2022.

On being questioned whether such changes were due to pressure from foreign governments, especially those whose teams will be participating in the upcoming event and migrant workers from other countries rather than as a knock-on effect of Qatar being 2022 FIFA World Cup hosts, the trend in the questionnaire answers shifted with 24% strongly agreeing, 43% disagreed while 32% neither agreed nor disagreed. 1% of the respondents agreed, while 8% of the respondents strongly disagreed with this notion. Also, concerning pressure from lobby groups, 51% disagreed while another 28% neither agreed nor disagreed. The remaining 13% were in agreement that lobby groups had influenced infrastructural changes prior to the FIFA 2022 World Cup.

Moreover, 18% of the respondents strongly disagreed that the changes and labour reforms are due to pressure from donors to Qatar. 42% of them disagreed, while the remaining 40% did not have an opinion on this question. When probed whether these reforms were due to any form of trade sanction against Qatar, 15% were in strong disagreement with such a notion while another 43% disagreed. 37% neither agreed nor disagreed while the remaining 5% agreed that indeed the changes and reforms were due to trade sanctions. The average responses for each variable, gender and other classification categories are shown in appendix 4.

Regarding anticipated improvement in peaceful relations, the majority of the respondents agreed (20% strongly agreed while 60% agreed) that the 2022 FIFA World Cup in Qatar will enhance peace in the country and the region as a result of hosting the event bringing together citizens from different countries. Only 5% disagreed while 15% were neutral about this assertion. Moreover, majority of the respondents (25% strongly agreed while 55% agreed) that the event will enhance partnerships and collaboration in achieving sustainable development. However, 20% of the respondents were neutral, while 15% and 5% disagree or strongly disagreed respectively with this notion.

T-tests and ANOVA

There was a need to assess the responses for different groups of respondents to find out whether there were any significant differences in the responses from each of the groups. As a result, the findings would inform the nature of the model adopted for data analysis. The tests adopted for this purpose were T-tests for the difference in means and analysis of variance (ANOVA). The categories in which respondents were placed were gender, whether the respondent were football fans, respondent work category and age of the respondents. The former two categories were analysed using T-tests as they contained only two levels while the latter two were analysed using ANOVA because they had more than two levels.



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The null hypothesis for both cases was that there is no significant difference in means between the subject levels while the alternative hypothesis is that the mean responses from different subject levels are different. The null hypothesis is rejected if the significance level (p-value) is less than 0.05 while we fail to reject it if the p-value is higher than 0.05. Table 4 shows the result of the T-test, and Table 5 shows the results for the ANOVA test.

Table 4. T-test results

Variable	Gender	Football fan	_
Q9	0.617	0.916	
Q10	0.145	0.416	
Q11	0.396	0.800	
Q12	0.044**	0.147	
Q13	0.807	0.863	
Q14	0.713	0.920	
Q15	0.364	0.397	
Q16	0.793	0.774	
Q17	0.693	0.440	
Q18	0.825	0.787	
Q19	0.280	0.588	

^{***} Significant at 1% level

Table 5: ANOVA

Variable	Worker category	Age	
Q9	0.882	0.667	_
Q10	0.801	0.047**	
Q11	0.634	0.726	
Q12	0.413	0.005***	
Q13	0.599	0.325	
Q14	0.465	0.215	
Q15	0.524	0.125	
Q16	0.228	0.342	
Q17	0.593	0.488	
Q18	0.193	0.024**	
Q19	0.357	0.009***	

^{***} Significant at 1% level

The T-test result shows that the null hypothesis should be rejected for only gender-based response on whether the upcoming FIFA 2022 World Cup has resulted in better health and wellbeing of the Qataris. This was an isolated case which did not violate the equal means response pattern, hence not taken into consideration. Similarly, the ANOVA test showed that the null hypothesis should be rejected for four questions based on the age of the respondent; The gender equality question (Q10), whether the preparation for the upcoming FIFA 2022 World Cup has resulted in better health and wellbeing of Qataris, and whether they expect further changes insofar as gender equality (Q12), labour reforms and infrastructural development were concerned. Also, the null hypothesis was rejected regarding whether infrastructural

^{**} Significant at 5% level

^{**} Significant at 5% level



developments are due to donor pressure (Q18) and whether labour reforms are due to trade sanctions.

Regression analysis

Regression analysis was performed to assess the level of agreement with the assertion that the reforms, changes and development outcomes witnessed in Qatar as a result of the country being 2022 FIFA World Cup hosts, and that the event will help the country achieve SDGs under this study. Additionally, the third variables were included to assess whether the said changes were due to other reasons and if so, would they help in achieving the SDGs. There was a general disagreement on the importance of the third variables on the changes anticipated as well as those already experienced in Qatar. However, the researcher analysed if they would have been influential in achieving the SDGs. To achieve this, the mean response for each respondent was computed for the primary variables as well as the third variables. Table 6 shows the result of the regression analysis.

Table 6: Regression Analysis Results

Variable	Coefficient (standard error)	Significance	VIF
Constant	0.18 (0.515)	0.727	
Mean response	0.987 (0.106)	0.000	1.06
(primary variables)			
Mean response (third	-0.022	0.793	1.06
variables)			
\mathbb{R}^2	C	.491	
F-statistic (p-value)	4	6.776 (0.00)	

The model's analytical ability was determined through the coefficient of determination (R-squared) while the model goodness of fit was determined through the p-value of the F-statistic. R^2 takes values between 0 and 1 with a value closer to one indicating the explanatory ability of the independent variables is nearly perfect. In practice, however, this is rarely the case as other vital factors affecting the dependent variable are usually not captured in many models. For this regression model, 49.1% of the variation in the dependent variable was explained by the independent variables ($R^2 = 0.491$). Using a 5% level of significance, the researcher concluded that the model was significant in predicting the results of the dependent variable given, the p-value of the F-statistic was 0.00 < 0.005. The null hypothesis in this case was that the model was insignificant in explaining the variation in the dependent variable. If the p-value were to be higher than 0.05, then, the researcher would have been forced not to reject the null hypothesis and conclude that the model was insignificant in explaining the dependent variable.

A unit increase in mean respondent opinion about the primary variables caused a 0.987 increase in the dependent variable, while a unit increase in the third variable would cause a 0.022 decrease in the dependent variable. The coefficient's significance was calculated from the T-

Renaud, Olivier, and Maria-Pia Victoria-Feser. "A robust coefficient of determination for regression." *Journal of Statistical Planning and Inference* 140, no. 7 (2010): 1852-1862.



statistic of the said coefficients. The null hypothesis was that the coefficients were not significantly different from zero, thus did not contribute to explaining the variation in the dependent variable against the alternative hypothesis that the coefficients were different from zero and contributed to explaining the model. Therefore, the null hypothesis could not have been rejected if the significance value (p-value) was greater than the chosen level of significance (5% in this case). From the significance column, only the coefficients of the mean response for the primary variables provided explanations for the model while the rest were not significant in explaining the model. This confirmed the hypothesis that the reforms and developments in Qatar are as a result of the country being awarded hosting rights and commencing preparations for the 2022 FIFA World Cup, which has greatly enabled the country to achieve the SDGs identified in this study. On the other hand, the opinion that these changes are a result of other factors other than the upcoming 2022 FIFA World Cup was refuted.

The VIF (variance inflation factor) measures the degree of multicollinearity among the dependent variables to find out whether the independent variables are linear combinations of each other. ⁴² If this were true, then the integrity of the results would be affected as some of the independent variables would lose their predictive ability. A VIF value more than 10 indicates the presence of multicollinearity, and as such, the variables need to be rechecked before analysis is carried out. For this study, the model's VIF was 1.06, indicating that there was no multicollinearity among the independent variables.

Discussion of Findings.

The results discussed herein link the 2022 FIFA World Cup in Qatar with tremendous achievement in ensuring better health and wellbeing for all. This has been attributed to the construction of health facilities, stadia that promote physical fitness as well as the large crowd that will participate as fans, therefore, taking advantage of such crowd to create awareness about the need for healthy lifestyles, physical exercising and better general well being. This finding corroborates the findings of a study by the Commonwealth⁴³ that found out that mega sporting events enhance health and wellbeing by providing an opportunity for physical fitness for players and active participation of fans, which enables them to minimise mental disorders such as depression. Also, the findings showed that women are likely to benefit from the event by involving themselves as officials and fans, thus achieving higher social standing and self-esteem as their male counterparts, leading to gender equality. This finding is similar to the findings by Burnett and Uys⁴⁴ who found out that as women participate in mega sporting events, they earn

⁴² Craney, Trevor A., and James G. Surles. "Model-dependent variance inflation factor cut-off values." *Quality Engineering* 14, no. 3 (2002): 391-403.

⁴³ Oliver, Dudfield, and Dingwall-Smith Malcolm. 2015. "Sport for Development and Peace and the 2030 Agenda for Sustainable Development." *COMMONWEALTH ANALYSIS* (The Commonwealth Secretariat).

⁴⁴ Burnett, C., and T Uys. 2000. "Sport Development Impact Assessment: towards a rationale and tool." *South African Journal for Research in Sport, Physical Education and Recreation* Volume 22.



recognition for their skills, boosting their self-esteem and confidence levels due to the improved social standing. Moreover, the respondents anticipate enhanced peaceful collaboration as well as partnerships that will enable the government to achieve even more SDGs. Besides, the results indicate major labour reforms, development of infrastructure and decent working conditions for migrants work working in preparation and during the actual event. As a result, this will enhance sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Moreover, Qatar stands a chance to benefit from improvements in infrastructure that will promote industrialisation, economic prosperity and foster innovation.

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

This study sought to find out the opinion of the Qataris and migrant workers in Qatar, especially experts regarding the changes, reforms and developments in Qatar in preparation for the 2022 FIFA World Cup and to find out whether they believed such changes would promote sustainable development. Further, the study sought to find out which SDGs the respondents believed Qatar would achieve as a result of the preparations and actual hosting of the event. To achieve this aim, two objectives were formulated; to evaluate whether the government and local population anticipate that the FIFA 2022 World Cup will contribute to the achievement of various SDGs in Qatar and to evaluate which of the 17 SDGs would be achieved as a result of hosting the FIFA 2022 World Cup. From the response summaries in the frequency tables, the overwhelming majority report having witnessed sustainable development and are still expecting more to come during the hosting of the 2022 FIFA World Cup. A lot of changes were identified in the labour sector, where labour reforms have been initiated to protect the rights of both local and migrant workers.

Also, it was established that significant steps are being made towards achieving gender equality in Qatar as the traditionally male-dominated society is slowly accommodating women in managing sports and overseeing the preparations for the event. Moreover, in anticipation of the enormous number of fans from various cultural divides visiting Qatar to support their national teams, cultural integration in the country is expected to advance as the country aims to be accommodative to all. Also, in anticipation of these large numbers, several infrastructural developments, including health and accommodation facilities, have been actualised. Subsequently, the UN General Assembly SDGs that are in line with these changes and reforms have been initiated. The study also found out that various SDGs will be achieved as a result of the preparations and hosting of the FIFA 2022 World cup in Qatar. These SDGs are; better health and wellbeing for all (SDG 3), gender equality (SDG 5), sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (SDG 8), inclusive and sustainable industrialisation and fostering innovation (SDG 9) through infrastructural development, Peace and justice for all (SDG 16), and partnership for development and realisation of all the SDGs (SDG 17).

Recommendations

The study recommends that the government of Qatar should harness the contribution of the FIFA 2022 World Cup in achieving the identified SDGs. Fundamentally, the government should



collaborate with FIFA to ensure more women are involved during the preparation and the actual event as well as use the event to create awareness to fans on the importance and measures of enhancing good health and wellbeing. Moreover, the study recommends that Qatar should come up with appropriate measures that will promote cultural integration, peace and partnership during the event as respondents anticipate such outcomes. Essentially, the government should leverage the advantages and benefits of hosting the FIFA 2022 World Cup insofar as SDGs are concerned. For future research, this study recommends that future researchers should expand the sample size to capture more Locals to ensure the characteristics of the sample represent the host country for studies related to mega sporting events.

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Appendix 1: Cronbach's Alpha for all variables.

Reliability Statistics	
Cronbach's Alpha	N of Items
.552	11

Appendix 2: Cronbach's Alpha for primary variables.

Reliability Statistics			
Cronbach's Alpha	N of Items		
.774	7		

Appendix 3: Cronbach's Alpha for third variables.

Reliability Statistics			
Cronbach's Alpha	N of Items		
.695	4		



Appendix 4: List of Abbreviations

ANOVA – Analysis of variance

MDGs – Millennium development goals

SDGs – Sustainable development goals

VIF – Variance inflation factors

UN – United Nations

FIFA – Federation Internationale de Football Association

FC – Football club

UK – United Kingdom

GDP – Gross domestic product

OLS – Ordinary linear regression

SPSS – Statistical package for social sciences

P-value – Probability value