

Impact of Sporting Activities on the Environment in Kenya: Proposal for a Specific Policy on Sports and Environment

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Abstract

Sport is a necessary part of life that is intricately interconnected to the environment. On one hand, sports need a good environment to be played on whilst at the same time, sports through its activities affects the environment. When the world was hit with a global pandemic in 2019, sports was one of the areas that was most affected. With the encouragement of social and physical distance as a means of reducing infection rates and limiting physical contact in sports, it also acted as a period of restoration of the environment. This article emphasizes how sport promotes good health, physical fitness, mental well-being, social interaction and contributes to the socio-economic, political and cultural development of a country. The article highlights how sports can attract infrastructure that requires heavy machinery that can impact the environment negatively, this in addition to the economic activities linked to it, and how this directly affects man. The article delves into sports in Kenya identifying how there are no clear guidelines on how to do sports while taking care of the environment. The study will recommend policies that will encourage a balance between having sports while also giving consideration to the environment.

1. Introduction

Sport, like any other human activity, is set in the physical environment and is bound to have effects on it and be affected by it. Sport is a major component of society, but as one of its effects, it also impinges on the environment¹. Most environmental problems are deeply rooted in conditions

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¹ Abhi., Impact of Sport on Environment. 2015.

and actions directed to it, therefore the interaction of the sporting activities with the environment must be viewed with a keen eye, with the intent of ensuring that there is benefit of all. Since the concepts of sport and environment are intertwined, there is need for the issues arising to be addressed simultaneously.

McCullough notes that the active participation in sport and physical activity in and of itself has an environmental impact adding that likewise, watching sport or spectating, whether at home or at an event has an impact as well, since consuming sport through spectating is much more about an emotional experience, i.e. An intangible experience which has tangible and actual impacts on the natural environment.² The bilateral relationship between sport and environment, whereby the impact of environment on sport is more profound and direct as it influences the planning of certain sporting events depending on how appropriate the venue is in terms of climate and the physical environment.

The Brundtland Commission, in 1987, defined a “sustainable society” as one that “meets the needs of the present without compromising the ability of future generations to meet their own needs.” This definition calls upon mankind to harmonize its activities on earth and thus environment with the aim of achieving a sustainable development³. It is on this premise that this study seeks to demonstrate a link between sporting activities and the impact they have on the environment and how these impacts have created the need to reduce the ecological footprint of sports activities. This study finds evidence that there is no direct policy guiding how sports should be handled with regard to the environment, an area that is usually overtaken by current events, usually political. It is therefore, appropriate to bring together sports and environment and identify sport management practices that promote

<https://www.sportskeeda.com/sports/detailed-look-impact-sports-environment>

² McCullough, B. P. "Introduction to environmental sport management." (2015).

³ World Commission on Environment and Development, and Gro Harlem Brundtland. *Presentation of the Report of the World Commission on Environment and Development to the Commission of the European Communities, the EC and EFTA Countries...* 5 May 1987, Brussels. World Commission on Environment and Development, 1987.

environmental sustainability. This study seeks to recommend policies that will address the gap.

The study will provide a historical background of sports, the relationship of sport and environment, highlight the issues arising from the practice of sport amidst current views of sustainability in sport, and provide an overview of sporting in Kenya, current policies in Kenya followed by an in depth analysis of the problem and bring in the aspect of how sporting activities have been affected by the COVID 19 pandemic and how this has affected the environment and the sporting world. Finally, we offer a recommendation to policy and suggest ways of balancing sporting activities with the intention to minimize sports impact on the natural environment while achieving common objectives.

2. Brief historical background on sports

Sports and sporting events are as old as the existence of humanity. This results from the fact that sports form part of social cultural events. Man in nature, reaches out to the other to manifest themselves, and in so doing, discover themselves and more often, become more, by doing 'things' with the other. Etymologically, the English word 'sport' has its roots in old Latin, '*deportare*' which means to divert oneself or have fun⁴. Diverting oneself refers to change of activity from the normal usual one to another one, usually lesser in intensity; and coupled with fun, may refer to the present meaning of recreation and leisure. In the olden times, some of the contests held were footraces, the long jump, *diskos* and javelin throwing, wrestling, the pentathlon (a combination of these five events), boxing, the pankration (a combination of wrestling and boxing), horse races, and chariot races.⁵ The word would evolve into 'athletes', to include more outdoor events such as cycling and skating, implying a paradigm shift.

⁴ Arda alan ışık. 'Origins of sports philosophy and Greek athletics'. Daily Sabah, April 2020

⁵ Hemingway, Colette, and Seán Hemingway. "Athletics in Ancient Greece." *Heilbrunn Timeline of Art History* (2002).

The earliest recorded sporting events was from 700 BCE to 450 BCE in ancient Greece⁶. The games were mainly in honor of the god Zeus⁷. The games would later evolve into a more complex and organized event that moved from a day to three to five. As the sporting events progressed, there would be judges who checked that athletes had trained and the competing grounds were standard. In those times, one cared only to win, a notion in tandem with the word ‘athletes’ with connotes contest (*athlos*) and prize (*Athlon*), unlike in modern times where a lot more goes into the preparation, the actual games and even aftermath. Ethics and morals were observed by all the players and the spectators.

In those ancient times, the games were by males only. Women were neither allowed to participate nor spectate. During the eighteenth and nineteenth centuries in the Western contexts, women were restricted, or forbidden, from participation in sport due to concerns over their perceived frailness and inability to cope with the competitive nature of sport.⁸ History also informs us that the participants were naked; completely nude⁹. This regulation has highly evolved such that women are literally involved in all types of sport. In the modern tradition of sports, the Greek ways have been professionalized. Currently, there is an array of sports gear, each team adorning in their chosen colours and each individual participant with their unique label. Sports gear enables us to identify a team, country or person, a great deal to do with identity. In addition, the sporting events are now global, involve bigger and more sophisticated infrastructure and has economic activities linked to it. Sports are also a big event in international relations. The mere fact of getting to host these games speaks a lot of what a country can do. Other than showing its might and prowess, a host country should be able to interrelate with all participating states and individuals.

⁶ ibid

⁷ Swaddling, Judith. The ancient Olympic games. University of Texas Press, 1999.

⁸ Coakley, J. J. 2007. *Sports in Society: Issues and Controversies*. New York: McGraw-Hill Higher Education.

⁹ Christesen, Paul. *Olympic victor lists and Ancient Greek history*. Cambridge University Press, 2007.

Ancient Olympia is where the oldest sporting events took place, in modern Greece, it hosts the lighting of Olympic lights.¹⁰ These games continued into early Christian times, inspiring the modern Olympic games. The first ones were held in Athens in 1896. For the first time as an independent country, Kenya participated in the 1964 Summer Olympics in Tokyo, Japan.

In Africa, the modern sporting events were introduced during the colonization period¹¹. Sports such as football (soccer), cricket and hockey were spread by European Colonial Government as part of their civilizing and conquering programs. This is notwithstanding the fact that the African people had their own sporting events. Another was the aspect of discipline and further down, physical exercise.

In the period of decolonization, the Africans started emerging independently in their sporting events, organizing Pan African Games and later on, All African games. Kenya competed at the 1987 All-Africa Games which was held at Kenya's capital city of Nairobi, at the then Moi International Sports Centre in Kasarani (now Safaricom Stadium), and won 63 medals in total. In so doing, they consolidated their National and Pan African identities, creating a unique place in the international community. Racism was frowned upon and incidences of boycotts were manifested in countries such as South Africa¹², when racism was rampant due to apartheid.

Onyebueke, categorizes sports on the African continent into three broad categories i.e. team sports which include football, basketball, and hockey; individual sports which includes athletics, cycling, golf, tennis, etc.; and combat sports that comprise boxing, judo, taekwondo, etc. He further adds that there are other popular sports that have become widespread in Africa

¹⁰ Gaitatzes, Athanasios, Dimitrios Christopoulos, and Georgios Papaioannou. "Virtual reality systems and applications: the ancient olympic games." In *Panhellenic Conference on Informatics*, pp. 155-165. Springer, Berlin, Heidelberg, 2005.

¹¹ Mählmann, Peter. "Sport as a Weapon of Colonialism in Kenya: A Review of the Literature." *Transafrican journal of history* 17 (1988): 152-171.

¹² Sikes, Michelle. "Sport History and Historiography." *Oxford Research Encyclopedia of African History*. 20 Nov. 2018; Accessed 14 Jan. 2021.

include basketball, athletics, cricket and rugby. Noting that Kenya is a key international player in marathons, while South Africa is world renowned for cricket and rugby champions. Other famous traditional sports in Africa include Dambe boxing (Nigeria), Nguni or 'stick fighting' (South Africa), donkey racing (Kenya), etc. are also thriving.¹³

3. Sport and environment

There are several definitions for environment depending upon the subject and area where it is applied. The Kenya National Environment Policy of 2013 defines environment in a broad sense. It states that "environment characterizes the totality of the surroundings including physical factors, plants, animals' microorganisms, socio economic and cultural factors, the biological factors of animals and plants and the social factors"¹⁴. The Merriam Webster dictionary defines environment as the "aggregate of social and cultural conditions that influence the life of an individual or community"¹⁵. These definitions encompass other areas of one's being that are not necessarily related or linking to the physical world. Whilst, Environmental Encyclopedia (1999), describes environment is the total of the things or circumstances around an organism – including humans though environs are limited to the surrounding neighborhood of a specific place, the neighborhood or vicinity.¹⁶ In summary, environment can be defined as a sum total of all the living and non-living elements and their effects which influence human life. While all living or biotic elements are

¹³ Onyebueke, Victor U. "Globalisation, football and emerging urban 'tribes': fans of the European leagues in a Nigerian city." *Department of Urban and Regional Planning University of Nigeria Enugu Campus, Nigeria* (2015).

¹⁴ National Research Council, and Committee on Population. "US health in international perspective: Shorter lives, poorer health." (2013).

¹⁵ Hernandez, Lyla M., and Dan G. Blazer. "Institute of Medicine (US) Committee on Assessing Interactions Among Social, Behavioral, and Genetic Factors in Health Genes, behavior, and the social environment: moving beyond the nature/nurture debate." *Proc Natl Acad Sci USA* (2006).

¹⁶ Environmental Encyclopedia (1999): JaicoPublishing House,121, M.G. Road, Mumbai

animals, plants, forests, fisheries, and birds, etc. The non-living or abiotic elements include water, land, sunlight, rocks, and air, etc.¹⁷

What is the meaning of sport? Sport as a concept has many definitions depending on various approaches. Matt defines sport as involving some type of moving the body through the environment and burning calories doing so¹⁸. This involves the experience of a physical activity.

Since sport may also involve some type of competition, Matt further explains that sport deals with conflict because of the struggle between individuals or teams that usually tends to end with winner(s) and loser(s).

The United Nations Interagency Task Force (UNIATF) on Sport for Development and Peace defines sport as “all forms of physical activity that contribute to physical fitness, mental well-being and social interaction¹⁹”. These include but are not limited to play; recreation; organized, casual or competitive sport; and indigenous sports or games. These two terms are intertwined.

As much as these definitions focus on sports as only being limited to the practice of physical activities, it is important to note the assertion of the International Organization for Peace Building that sport environment is “a recreational space where a healthy lifestyle is promoted, through physical and mental development”, adding that “it is a place where individuals converge to improve their social skills, strengthen cultural values and adapt to rules”²⁰. In this regard, there is need for the sports authorities to provide

¹⁷ *Byju's' app* by Think and Learn Pvt Ltd - <https://byjus.com/commerce/meaning-and-functions-of-environment/>

¹⁸ Matt K. ‘First Shift Protect Profiling Women in Sport. What is Sport?’. 2009 <http://faculty.elmira.edu/dmaluso/sports/members/matt/whatisport.html>

¹⁹ What is 'sport'? - United Nations Inter-agency Taskforce on Sport for Development and Peace.

<https://www.sportanddev.org/en/learn-more/what-sport-and-development/what-sport0#:~:text=%E2%80%9CIncorporated%20into%20the%20definition%20of,and%20indigenous%20sports%20or%20games.%E2%80%9D>

²⁰ International Organization for Peace Building. ‘Sport, a tool for peace?’ April 5, 2017, <https://www.interpeace.org/2017/04/sport-tool-peace/>

a peaceful and secure environment for sporting events. Mählmann while commenting on sports and colonization in Kenya; notes that sport aids in self-development through play-like activities, which lead to high performance, making one agile having its own rules, specific organization and are highly competitive²¹.

Sports has been a form of entertainment for people since time immemorial. Schmidt explains how sports exemplifies good health and ironically, notwithstanding as sports contributes towards good health, they can also degrade the environment upon which good health depends.²² Environmental markers are always left behind whether sports are played or watched through its use and abuse of natural resources. Using golf courses as an example, they occupy large tracts of land, which requires maintenance thereby consuming large amounts of pesticides and water.

In 1995, the International Olympic Committee (IOC), together with the United Nations Environment Programme (UNEP), hosted a World Conference on Sport and the Environment. The IOC President Samaranch remarked that

“The International Olympic Committee is resolved to ensure that the environment becomes the third dimension of the organization of the Olympic Games, the first and second being sport and culture²³”.

This elicits a worrying issue and a subsequent question. What has Kenya done on the same? While it is true that as a country no Olympics have been hosted yet, sports and culture have been key for the country. Yet this study reveals little emphasis on the issue of taking care of the sporting environment both materially e.g., the states of sporting venues like the stadia and

²¹ Mählmann, Peter. "Sport as a Weapon of Colonialism in Kenya: A Review of the Literature." *Transafrican Journal of History* 17 (1988): 152-171.

²² Schmidt, Charles W. "Putting the earth in play: environmental awareness and sports." (2006): A286-A295.

²³ Jagemann, Hans. "Sports and the environment: ways towards achieving the sustainable development of sport." *The sport journal* 7, no. 1 (2004).

immaterial e.g. the ambiance and circumstances surrounding sporting events.

4. Sporting in Kenya

Kenya is a very sportive country. It stands among the firsts internationally especially when it comes to games like long distance running and rugby. Locally, marathons and football are very popular. Kenyan fans flood the stadia to support their teams, sometimes accompanied by prominent personalities in government.

However, most modern sports in Kenya owe credit to the British colonization.²⁴ This included the settlers and missionaries whose perspective was that African (native) games were evil and savage thus discouraging or discontinuing them²⁵. Post-independence, the country's main focus was on matters unity and development rendering sports to depend on the government of the day. Then there was the issue of foreign aid that was directed to funding various sports such as cricket and rugby while also commissioning football coaches from time to time to help boost the national teams.

Olympics put Kenya on the international map. The athletes would scoop the gold, the silver and the bronze. Kenya, new from independence, used sports to forge a narrative of decolonization, dialoging with the past while building platforms for the future.²⁶ Athletics became a symbol of international diplomacy and public relations.

Sports in Kenya are organized from two perspectives; educational for schools, and out of school for recreational or competition. For the schools,

²⁴ Godia, G. (1989). Sport in Kenya. In E. A. Wagner (Ed.). Sport in Asia and Africa: A comparative handbook (pp. 267–281). Westport, CT: Greenwood Press, Inc.

²⁵ Rintaugu, E. G., S. Munayi, and I. Mwangi. "The Grand Coalition Government in Kenya: A recipe for sports Development." (2011).

²⁶ Bale, John, and Joe Sang. *Kenyan running: movement culture, geography, and global change*. Psychology Press, 1996.

it is coordinated by the Ministry of Education and the latter, by the Ministry of Sport, Culture and Arts.

3.1 Sporting venues in Kenya

In Kenya, there are over ten classy and big resorts for excellent golfing such as the Limuru Country club and the Muthaiga golf club to name a few. These golf resorts are very well manicured, and going by the rules and regulations in golf clubs, the golf courses are environmentally friendly. Since they are exclusive, they are easy to manage.

Stadiums and arenas required large areas of paved surfaces. The stadia were strategically constructed to attract international sports and even hold large events like the aforementioned African Cup of Nations. Schmidt states that major sports events use energy which at times emit greenhouse gases and end up producing voluminous trash.²⁷ There are many people who go to the stadia in Kenya to watch especially football. Some of them come in their cars, some come walking and other by cycling. As a result, parking becomes a matter of concern aside from the impact of the spectators on the ground surface. In addition, these people carry food and drink, calling for a proper way of disposing trash. This if not regulated, is a disaster to the environment.

When it comes to long distance running, a lot of the preparations take place at the countryside whereas others such as the *Standard Chartered Nairobi Marathon*, happens in the city. Others like *Lewa Safari Marathon* in the great outdoors away from the city. Other professional marathoners do their preparations mainly in sports camps that have specialized equipment for their needs. All in all, there is a huge effect on the environment in terms of the preparations and the races all involving participants, supporters and spectators.

²⁷ ibid

Swimming in Kenya is both public and private, competitive and recreational. Competitive swimming activities in Kenya are coordinated by the Kenya Swimming Federation. Swimming pools need a high maintenance because of the direct contact of water by the swimmers. Other issues include source and treatment of water and safety of swimmers in terms of life savers.

3.2 Sporting policies in Kenya

A policy is a primary organ that are utilized by nations and governments to attempt to their meet national development goals as they seek to provide guidelines and operational principles that can be used in governance²⁸. This paper delves into the workings of the sporting policy in Kenya or its lack of.

Sports is widely accepted and well liked in Kenya especially since it contributes greatly towards social, cultural, economic and political development of the country. As a result, the various governments in Kenya have gradually underscored the significance of sports in the country's development. In doing so, the government has put in place management and administrative structures to oversee the running and development of sporting activities in the country through the ministry of sports. The Kenya National Sports Council, which was established through the Societies Act CAP 108 in 1966, is the umbrella organization that coordinates the activities of all the national sports federations and organizations, and also acts.²⁹

According to Mahlman, Asembo and Korir³⁰, between 1970 to 1974, Kenya's second national development plan was rolled out. Emphasis was laid on values of participation in sports so as to gain the benefits of good health, physical fitness, nation building, corporation, capacity for excellence

²⁸ Byron, Kipchumba, and Jepkorir Rose Chepyator-Thomson. "Sports policy in Kenya: deconstruction of colonial and post-colonial conditions." *International Journal of Sport Policy and Politics* 7, no. 2 (2015): 301-313.

²⁹ Mwisukha, A., Njororai, W. W. S., & Onywera, V. (2003). Contributions of sports towards national development in Kenya. *East African Journal of Physical Education, Sports Science, Leisure and Recreation Management*, 1(2), 73-81.

³⁰ Mahlmann, P, Asembo, J.M and Korir M. (1994). A Target oriented Analysis of sport in Kenya. *Journal of East African research and development* 24, 102-117

and a positive image. As the country rolls out different developmental plans, some of these values are inculcated.

In 2005, Kenya presented in Sessional Paper no. 3 on Sports and Development, a framework on sustainable growth and development of sports countrywide. Further, were policy guidelines that would realize a holistic approach to sports governance.³¹ Currently, the Ministry of Gender, Sports, Culture and Social Services is charged with the responsibility of sports policy formulation and facilitation.

3.3 The problem

Sport and the Environment is regarded as an important subject in many countries as they epitomize an important part of people's lifestyles and is part of the daily life. Jagemann (2004), notes that many sports associations which have built professional and voluntary structures, factor in environmental issues in their public relations.³² These issues are dealt with by scientists, sports associations, relevant arms of authorities, and conservation groups. Moreover, issues concerning lifestyle have been on the agenda for environmental debates since the World Conference 1992 in Rio de Janeiro³³.

Despite the fact that the Kenya National Environmental Policy of 2013 calls for sustainable management of terrestrial and aquatic resources to improve the livelihoods and raise the standard of living for Kenyans, it does not make any references to the impact of sporting activities in the country in relation to the environment. This goes too for the Sports Act of 2016 which is more of what is required to register a sport or a sports club. Clearly then, there is a gap in policy on how the environment can be conserved even as the citizens

³¹ Ministry of Gender, Sport, Culture and Social Services Handbook, 2005. Sessional paper no. 3 of 2005 on sports development. Nairobi: NBO: Government of Kenya, i-35.

³² Jagemann, Hans. "Sports and the environment: ways towards achieving the sustainable development of sport." *The Sport Journal* 7, no. 1 (2004).

³³ United Nations. "United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June, 1992." (1992).

enjoy their sporting activity of choice. There is no specific policy guiding sports and the environment.

3.4 Analysis of the problem

In today's society, sports play a key role and an indispensable function in a person's development. They also offer opportunities for physical activity in a world where physical movement and activity is reducing exponentially due to in part technological advancement. The days of lockdowns and sessions due to the COVID 19 pandemic have only advanced this problem. However, when pursued in moderation, sports promote good health and personal well-being, providing means of social contact and intensive experiences. In the same vein, sports have caused substantial destruction to nature and the environment. This destruction occurs directly as a result of the practicing of sports activities on the environment and or the construction and operation of the basic infrastructure, or it can be caused by indirect factors such as the use of cars to travel to and from sports activities.³⁴

The conflict between sport and environment can be attributed to two causes. The first one is inherent in sport itself and the second one is deep rooted social changes. Some sports in themselves like football, racing or marathons and car rallies, popularly known in Kenya as Safari Rally have direct impact on the environment. Impact of sports on the environment can be thus in three fold (i) by the sporting activity i.e. the impact of football or rugby on earth (ii) by the spectators i.e. they come to watch the sports by car, air, sea or foot and in so doing, affect the earth and cosmos (iii) the third fold is the reverse, the effect of environment on sports i.e. not being able to run or play because of rain or fog, or too much sun or cold³⁵.

From aforementioned, one can discover that the impact and effect of the environment is two ways. Balance between doing the sport enjoyment of the sport has to be exercised because these kind of sports attract so many people at once which comes with its own demands. For instance, car rallies are

³⁴ *ibid*

³⁵ Schmidt, Charles W. "Putting the earth in play: environmental awareness and sports." (2006): A286-A295.

directed to virgin lands away from people. This in turn either opens up the places for other activities such as cultivation or micro business. As it follows, it is a slippery slope. The president of Green and Gold in Ottawa, Canada perceives it as a dichotomy in the sense that as an activity it has environmental consequences while on the other hand, it is also heavily impacted by degraded environments that eventually affects an athlete.³⁶ Essentially, to play good sports, one needs a good environment while sports may affect the environment negatively if not well managed.

Since the meaning of environment is beyond the physical, there is the general social milieu, powered by individual's behaviour and personality or character, and the psychological and mental environment. If sports are good for the body, they are then good for the mind- a healthy mind. If a body is physically fit, the chances of elevating mentally are higher than in an unfit body. Social changes are increasing as the world advances in terms of technology, more exposure through education, better communication and infrastructure and enhanced delivery of services among others. Additionally, there is evidence of an improved income, greater agility more leisure and the growth of individualization which have formed the basis for major and continuing changes in sport. Social change efforts, for example those of Nelson Mandela in South Africa, have utilized sport as a rallying point, an impetus for a society to come together and forge an identity^{37, 38, 39}.

More and more people are now pursuing sport activities even to a professional level thanks to the invention of more sports each requiring specialized

³⁶ Chernushenko, David. "Greening our games: Running sports events and facilities that won't cost the earth." (1994).

³⁷ Billings, A. C., P. J. MacArthur, S. Licen, and W. Dan. 2009. "Superpowers on the Olympic Basketball Court: The United States versus China through Four Nationalistic Lenses." *International Journal of Sport Communication* 2 (4): 380–397.

³⁸ Carlin, John. *Playing the enemy: Nelson Mandela and the game that made a nation*. Penguin, 2008.

³⁹ Cho, Y. 2009. "Unfolding Sporting Nationalism in South Korean Media Representations of the 1968, 1984, and 2000 Olympics." *Media, Culture & Society* 31 (3): 347–364.

sporting areas and equipment. There is noted fewer ties of the emerging sports with tradition and culture among others. There are some sports pursued for leisure and recreation while other is for competition and income generation. These sports are played out in private or public areas but all in all on mother earth that is, same environment, and same resources however in different degrees and measures. Some sporting activities takes place in the rural others in urban areas. The impact on the environment will be different in either of these places.

Environmental issues can directly cause conflict, and as such, sporting activities are used to bring people together. The “Ndakaini Half Marathon” directly tackles the issue of lack of water as a basic resource which causes conflict⁴⁰. The annual marathon aims at increasing awareness amongst Nairobi residents on the importance of conserving the capital’s main source of drinking water⁴¹.

On the western part of Kenya in the Kakamega County, there is the “*Ingo Marathon*”, organized by the Kakamega Forest Heritage Foundation as a way of protecting the environment. It is worth noting that environmental degradation is a threat to livelihoods, jobs, children and its future, all of which can lead to conflict among a people⁴². In all these, it is observed that there is not a coordinated way see through the marathons taking place. Each County is trying to do something unique and better than the other, sort of introducing competition. Now, competition will not be healthy if the environment, both physical and abstract is not taken care of.

There is an element of production and consumption when it comes to sports, and this has the prospects of an economic growth, not just for the country,

⁴⁰ NEMA working towards zero waste 2030 JULY SEP ISSUE. Sep 17, 2016. <https://www.nema.go.ke/images/Docs/Mediacentre/Publication/NEMA%20News%20Magazine%20July-Sept%202016.pdf>

⁴¹ *ibid*

⁴² (www.ingomarathon.or.ke).

but also the participants.⁴³ Development of cities such as Eldoret on the Western side of Kenya is both progress for the country, but has tremendous effects on the environment as some flora and fauna will be lost. Another significant impact on the environment is in terms of sports gear and equipment. As more and more people buy the sport merchandise for use, issues of storage and dumping will arise. The government has to be clear on the procedures to deal. If not well handled, it ends up creating uncondusive environment for engaging in the sporting activities. Sports and environment is like an ecosystem where one activity has an effect on other areas and aspects of being/life.

4 Sporting activities and the COVID 19 pandemic

According to Reilly, Skogvang et al, sporting activities attract millions of participants and spectators all over the world.^{44, 45}. This is because sports make substantial contribution to the socio-economic, political and cultural development of a country.^{46, 47}. Mass sport is important in enhancing the health of the general public, thereby, making them more productive and at the same time, reducing expenditure on healthcare. It pulls people together and hence, provides opportunity for socialization and national integration.⁴⁸

The COVID-19 pandemic has affected all areas of life - and sports has not been spared either. Social distancing measures, as one of the ways adopted to reduce the spread of coronavirus, has adversely affected how sports is done, if done at all. With each aspect of sport has been touched, from the athletes, to media coverage and nations. In other ways competitions were cancelled and or postponed and millions of monies lost in the process and

⁴³Byron, Kipchumba, and Jepkorir Rose Chepyator-Thomson. "Sports policy in Kenya: deconstruction of colonial and post-colonial conditions." *International Journal of Sport Policy and Politics* 7, no. 2 (2015): 301-313.

⁴⁴ Reilly, T. (1996). *Science and Soccer*. London, E & FN Spon.

⁴⁵ Skogvang, Bente, Birger Peitersen, and Karen Stanley-Kehl. *Soccer Today*. Wadsworth/Thomson Learning, 2000.

⁴⁶ McPherson, Barry D., James E. Curtis, and John W. Loy. *The social significance of sport: an introduction to the sociology of sport*. Human Kinetics Publishers, 1989.

⁴⁷ Mwisukha & Onywera, *Contributions of sports towards national development in Kenya*. 73-81.

⁴⁸ Coakley, Jay J. *Sport in society: Issues and controversies*. No. Ed. 4. CV Mosby Company, 1990.

rendered a breather to the environment for regeneration of earth⁴⁹. E.g. grass was able to grow, the air clear due to less air travel, the waters clean due to less pollution. Practicing sports and staying active during this pandemic needs for one to be very creative.

This has also significantly affected everyone in terms of economic, social life, mental health and the environment. The World Health Organization - WHO recommended social distancing and human-to-human contact was discouraged to control the transmission.⁵⁰ It has put many countries in a state of lockdown and sporting events (including the 2020 Olympics) have been affected. Kenya saw the postponement of three major global sports events: The World Athletics Under-20 Championships, WRC Safari Rally and the Magical Kenya Open Golf Championships. Participation in sports and exercise, which is generally regarded as healthy activities, became impossible to do.

In March 2020, the Ministry of Sports, Culture and Heritage called for a cessation of sports competitions and group sports activities in the country following the reporting of the first positive cases of Covid-19 in Kenya. Contact sport is a sport in which the participants necessarily come into bodily contact/interaction with one another.⁵¹ Contact sports, even without spectating crowds, pose an infection risk; while exercising with face-masks significantly increase in physiological demand, transmission risk for the spectators and on-field players. Large spectating crowds are well-known to be infectious hazards.⁵²

⁴⁹ Hancock Stephanie & Horne Felix . Can Covid-19 Help Ease the Climate Crisis? The Global Pandemic Offers Chance to Embrace Clean Energy. May 22, 2020. <https://www.hrw.org/news/2020/05/22/can-covid-19-help-ease-climate-crisis>

⁵⁰ World Health Organization. "Key Messages and Actions for COVID-19 Prevention and Control in Schools." (2020).

⁵¹ Guidelines for Resumption of Sporting Activities During the Covid-19 Pandemic.

⁵² Wong, Ashley Ying-Ying, Samuel Ka-Kin Ling, Lobo Hung-Tak Louie, George Ying-Kan Law, Raymond Chi-Hung So, Daniel Chi-Wo Lee, Forrest Chung-Fai Yau, and Patrick Shu-Hang Yung. "Impact of the COVID-19 pandemic on sports and exercise." *Asia-Pacific journal of sports medicine, arthroscopy, rehabilitation and technology* 22 (2020): 39-44.

WHO (2019), recommended that “countries should actively combat the disease through critical preparedness, readiness, and response actions” according to the “Strategic Preparedness and Response Plan for COVID-19”.⁵³ These included measures to control local spread by raising public awareness, promotion of personal hygiene, and postponement or cancellation of large-scale public gatherings.⁵⁴ Therefore, for sporting activities to be taken up again, there must be a way to minimize the number of people gathered at one place and time through closed events without spectators and minimizing nonessential staff present at the event.

One recommended way to manage COVID 19 is through exercising which can be achieved through sports. Shepherd and Shek observed that moderate-levels of exercise can boost the overall immunity of a person,⁵⁵ while Nieman, and Pedersen reiterate that intensive and prolonged physical exertion has been linked with an ‘open-window’ of impaired immunity up to 72 hours after the exercise.⁵⁶ Peterson et al states that common infections for athletes mostly comprises of dermatological related infections especially in contact sports, including upper respiratory tract infections, and gastrointestinal infections.⁵⁷ Further, previous studies show that coronavirus is a respiratory pathogen and the risk of upper respiratory tract infections was almost six times more likely in endurance races.⁵⁸

⁵³ World Health Organization. Critical preparedness, readiness and response actions for COVID-19: interim guidance, 22 March 2020. No. WHO/2019-nCoV/Community Actions/2020.3. World Health Organization, 2020.

⁵⁴ *ibid*

⁵⁵ Shephard, R. J., and P. N. Shek. "Potential impact of physical activity and sport on the immune system--a brief review." *British journal of sports medicine* 28, no. 4 (1994): 247-255.

⁵⁶ Nieman, David C., and Bente K. Pedersen. "Exercise and immune function." *Sports Medicine* 27, no. 2 (1999): 73-80.

⁵⁷ Peterson, Andrew R., Emma Nash, and B. J. Anderson. "Infectious disease in contact sports." *Sports health* 11, no. 1 (2019): 47-58.

⁵⁸ Pedersen, B. K., T. Rohde, and M. Zacho. "Immunity in athletes." *The Journal of sports medicine and physical fitness* 36, no. 4 (1996): 236-245.

Additional crucial preventive measures should be encouraged to minimize human-to-human contact since physical contact cannot entirely be avoided and the practicing of proper personal hygiene. Sportsmen and athletes should also avoid on-field own risky behaviors to reduce the risk of as close contact with others is unavoidable during contact sports. The decision to resume sporting events should correlate to the local number of cases and strict adherence to preventive measures. Sports and exercise is important, but safety is still paramount.

5 A perspective

It has to be noted that sports in Kenya have undergone tremendous changes from pre-colonial, through colonial, to post-colonial times when Kenya is now a leading nation in the world of sports. The three main sports areas in which Kenyans have excelled are football (soccer) which is the most popular; athletics, which is the most successful sport and boxing. Members of particular communities have been strongly associated with each of these sports (Kalenjin with athletics, Luo with soccer and Kikuyu with boxing). (Mahlmann & Mählmann 1990).⁵⁹

Different groups are now concerned with sports sustainability including environmental groups, businesses, and nongovernmental organizations; the United Nations Environment Programme whereby in 1994, it created a Sports and Environment Program⁶⁰, and charged it with promoting environmental awareness through sports as well as the design of sustainable sports facilities and equipment.

A worldwide meeting held in Nairobi in November 2005 by the Nairobi Declaration on Sport, Peace, and Environment, which calls upon the International Olympic Committee - IOC and public Olympic advisory groups to go about as pioneers in advancing ecological sustainability

⁵⁹ Mahlamann, Peter, and Peter Mählmann. "Physical Activity and Development in Kenya." *Transafrican Journal of History* 19 (1990): 165-179.

⁶⁰ This is currently headed by Eric Falt, UNEP's director of communications and public information in Nairobi, Kenya, the program has fostered numerous initiatives

through sports. ⁶¹ UNEP worked with the IOC to build up an "Agenda 21" for the Olympic Movement dependent on ecological manageability rules. the IOC is focused on advancing maintainability among its part countries and sports administering bodies. This plan has been received by a few National Olympic Committees for supportable improvement work at the public level.

⁶²

In Kenya, there is an example of a youth organization known as Mathare Youth Sports Association (MYSA). It started in 1987 as self-help youth sports and community development project in Nairobi's Mathare valley slum, where more than 100, 000 people live in shacks made of old plastic, cardboard and rusted corrugated iron sheets.⁶³ The main aim of MYSA is to use sports as a tool for change in a community that is poverty-stricken, environmentally unhealthy and crime-infested ⁶⁴. From the findings, one discovers a dire need for concrete direction on how sporting activities will take place while conserving the environment in the best way possible.

6 Recommendations on a way forward

The achievement of sustainable development through sport should involve the reconciliation and the improvement of economic and social living conditions of human beings, while also giving consideration to the environment. This is how it can be protected in the long term, consequently also safeguarding the opportunities for future generations. The promotion and development of forms of sport which are compatible with nature and the environment should be adopted not only by governments, but also for the large industries, corporations and citizens. Centers of authorities should ensure that sports-related infrastructure are more attuned to the environment with reduced damage to vulnerable areas.

⁶¹ UNEP has also organized three meetings of the Global Forum for Sport and Environment (G-ForSE) since 2001, in which sports stakeholders in and beyond the Olympic Movement review their contributions to sustainable development.

⁶² Sitarz, Dan. "Agenda 21: The earth summit strategy to save our planet." (1993).

⁶³ Awuor, George, and James Njuguna. "The Mathare Youth Sports Association (MYSA) ShootBack Project." *Children Youth and Environments* 17, no. 3 (2007): 227-235.

⁶⁴ *ibid*

Jagemann recommends the provision of secure and improved opportunities for sport and physical activity away from vulnerable areas. He proposes the following steps towards making sports facilities ecological⁶⁵. The commencement and backing of green counseling administrations for sports office administrators; the subsidizing for sports offices through awards and advances to satisfy ecological norms; and the permitting of utilizing existing territories and structures for sports offices while consolidating natural administration into the activities of sports organizations, clubs, affiliations and business sports administrators. The Government of Kenya can benefit immensely from these steps.

The area of sports and environment is so wide and diverse. For example, it extends to health of people working in the industries that make sports equipment. This particular area also keeps evolving. It thus requires top notch strategic planning and actualization of the ideals. In order to formulate policy on this matter, the Government of Kenya can concentrate on four thematic areas:

- The nature and type of sport; to check if the sport for competition or for recreation.
- The sport facilities; to check on the stadia; to check if the sports indoor or in the natural environment e.g. water, forest areas
- The sport equipment; to check if they are manufactured goods e.g. hockey sticks, footballs, or just the natural resources or playfields or arenas?
- Environmental Education; there should be a concerted effort to make aware the whole notion of sports impact on environment know.

The proposed policy should include;

- Education programs environmentally sound sports.

⁶⁵ Jagemann, Hans. "Sports and the environment: ways towards achieving the sustainable development of sport." *The Sport Journal* 7, no. 1 (2004).

- Encouraging the recycling or environment-friendly disposal of widespread sports articles.
- Expansion opportunities for sports, game and physical activity by enhancing the residential environment within the urban and rural areas.
- Encouragement of use of bicycles or walking to link to sport arena. Set up good secure parking for the bicycles while providing security for the pedestrians.
- Improved methods of hiring and storing facilities for sport equipment.
- Allocation of national sports resources distributed to all counties.

7 Conclusion

As much as sporting activities are a good thing for the person in different measures and capacities, at the centre of either sports and or the environment, is the Person. As a rational being, he needs to reason out how he ought to take of himself and care for his surroundings. It takes this intrinsic experience to move man to realize what needs to be done to achieve that, thus policy formulation. Therefore, as man drafts policy, it has to be for his good and the good of others, and mother earth where he resides.

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