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# The Role of Sports Diplomacy in Advancing Environmental Security in Africa: Case of Forest Conservation in Kenya

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Environmental security remains a key challenge in the late 19th through to the 21st century, whose solution has attracted a number of initiatives. Sports diplomacy has achieved great strides in achieving international, regional, and local unity. However, the use of sports diplomacy in achieving environmental security has received much less research attention. This research examines the role of sports in diplomacy in achieving environmental security in Kenya. This study was anchored on the soft power theory and Conservation of Resources (COR) theory which offer frameworks for explaining the role of sports diplomacy in advancing environmental security. The study adopted exploratory research design. The target population was diplomats, marathoners, coaches, environmentalists, conservationists and government officials, academia as well as Water Resources Authority (WRA). The primary data were obtained through open and closed structured questionnaire. The collected data were analyzed through the use of frequency distribution, and thematic analysis. The study established that sports diplomacy advanced environmental security in Kenya, which was better for athletics and volleyball. Environmental security was also enhanced through training, sensitization, conservation efforts, and environmental education. Sport events also allowed a contact-platform for interaction between various groups involved in environment and forest conservation. This study recommends that sports diplomacy should be used in most of the regions in Kenya experiencing environmental perturbations and the current strategies should be applied in the sports diplomacy and environmental conservation as well as security. Further, the government is also encouraged to appoint more sports ambassadors with proper environmental knowledge to help in environmental management. The role of academicians in sports diplomacy and environmental security was found to be minimal where academicians should be at the forefront as the 21st century diplomats are incorporated into sports to be local ambassadors. Perceiving the significance of sports diplomacy and environmental security, there is need for coordination between various county governments to coordinate their efforts and in the process they should bring on board even the non sports actors to boost the role of sports in diplomacy and environment.

*Keywords:* sports diplomacy, environmental security, forest conservation, soft power theory, Conservation of Resources (COR) theory

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# Introduction

Sport is a physical activity where skills of individuals or teams are displayed against each other for entertainment (Hughes, 2019). It is the power of sports to bring different people together across the national and international boundaries that makes it unique. Subsequently sporting events are becoming more common worldwide social trend, which is increasingly attracting more participants, organizers, and fans (Kasemsap, 2014). This ability of sports to congregate people allows it to be a useful tool in resolving underlying problems for humanity (Grix, 2012).

Sports diplomacy uses sports, sports people, and events to connect, enlighten, and fashion a constructive picture helping to profile their opinions such that it is conducive to improving set of defined goals (Murray & Pigman, 2014). Although largely neglected in several studies, some of the implied goals include its role in the environmental protection (Kou & Shen, 2014). Nevertheless, in the past the intricate link between sports diplomacy and environmental security as a subject hardly came up in any conversation. More recently, there has been increased consideration focusing on sports diplomacy and environmental security with stakeholders involved (Hamafyelto, Nahshon, & Ndahi, 2018). It is essential, therefore, to bring policies that link stakeholders of sport diplomacy into the sphere of environmental security.

Environmental security was designated to maintain all aspects of ecological balance, which would allow the sustenance of environmental resource. Thus the concept of environmental security now surpasses the traditional concept of environmental conservation (Hough, 2019). As an emphasis of security in the traditional sense, environmental security makes reference to prevention and management of conflicts caused by tussle for the environmental resources (Trofymchuk, Okhariev, & Trysnyuk, 2020). Thus, environmental security places emphasis upon the environmental dimension. This broader conception of environmental security is crucial since, in long term projections, ensuring security can only be possible when security of the environment is guaranteed. Through a highlight of the existing challenges, environmental security places environmental threats and conventional security issues on the same table thus elevating the concept and exploring it in the realm of other traditional multi-stakeholder disciplines such as through sports (Justin, 2019).

Environmental perturbation leads to loss of biodiversity, poverty, and climate concerning humankind over the last 50 years and persists into the 21st century (Kazemi & Ghorbanpour, 2017). In fact, emerging environmental challenges in the last decades have been accumulated to the old ones bringing new disputes in environmental protection. Accordingly, the United Nations Environment Programme (UNEP) recognized a string of worldwide up-and-coming environmental predicaments to the national as well as the international environmental organizations (Desai, 2017). These challenges include but not limited to global warming, toxic wastes, natural resources depletion, biodiversity loss, water and air pollution. Most of these environmental challenges are caused more by anthropogenic means rather than by natural phenomena (R. L. Singh & P. K. Singh, 2017). These environmental problems are most damaging to natural resources, biodiversity, sustainability, and human health on this planet causing environment security. What mark them out is their inter-connectedness, complexity, ubiquity, and persistence in their lasting impacts. Among the environmental challenge, challenges in the forest remains marked out.

Towards the end of the 20th century into the 21st century, there was proliferation of a human induced and climate driven environmental perturbation that threaten life of humans on earth (Zięba et al., 2020). The environmental challenges are exemplified by increasing pollution, natural resource depletion, loss of

biodiversity including forests, and natural resource degradation. In Kenya's Vision 2030, the main environmental challenges concern deforestation, desertification, water quality changes, soil degradation, flooding, and biodiversity loss (Nyangena, 2012). Since solution to these forms of environment challenges has proved more difficult in the long run, they have morphed into an environmental security challenges, whose solution is still being sought through various stakeholders engagements and policy recommendations. As the environmental perturbation continues, humanity continues to practice various forms of sports that has now gained commercial status throughout the world.

Kenya is a very sportive country standing tall among many nations especially in athletics, cricket, rugby, and volleyball (Byron & Chepyator-Thomson, 2015). Locally, marathons and football are very popular. Kenyan fans flood the stadia to support their teams, sometimes accompanied by prominent personalities in government. There have been a number of advocacies to use sports in forest conservation and environmental security, with stakeholders including organizers, sportspersons, and fans coming together for sports purpose and in the process are involved in programmes that encourage conservation of the environment especially forests. However, there are fewer studies available linking the role of sports diplomacy in enhancing environmental security and conservation.

#### **Theoretical Review**

Soft power theory introduced by Professor Joseph Nye enlightens the new geopolitical formations that were taking place with the decline of the Soviet Union (Zhang, 2017). In the interview, Joseph Nye stated: "...soft power could be used in getting others to do one's bidding by being attractive to them in one form or another" (2017, p. 97). Accordingly, in soft power theory, there is ability of actors to exert a pull on something but not to force, coerce, or bully into submission (different from hard power) (Li, 2018). Simply put, soft power involves the power of appeal to profile their inclinations and emotions. They can be accomplished by culture attribution, political values, and diplomatic methods (Sun & Harris, 2020). Possibly sports, diplomacy and environmental conservation measures can be undertaken by actors through the persuasive soft power of appeal and attraction. By agreeing without coercion to take sports, one may unwittingly find himself resolving conflict with their nemesis through due to the persuasive action of soft power. This study employed soft power theory (Yukaruc, 2017), which proposes that to achieve diplomacy and international peace, there is need for the actors to attract and co-opt, but not coerce people into action. Soft power in this aspect is supposed to appeal to emotions so that engagement can be done in natural way. During the study there was an inherent need to establish ways of relating sports to diplomacy and achieve some beneficial effects geared towards enhancing sports diplomacy and environmental security in Kenya. While sports unite people across all the divisions of religion, race, and region, it has the ability to attract and persuade thus achieving diplomacy in a rather "soft wav".

The Conservation of Resources (COR) theory proposed by Dr. Stevan E. Hobfoll in 1989 owes its origin in psychology where it was launched as a theory in stress management (Hobfoll & Freedy, 2017). The COR theory was formulated to allow for enlightenment of issues connected to stress as a construct. Hobfoll posits the occurrence of psychological stress under three circumstances: First is occurrence of a threat to resource loss, actual loss of resource, and deficiency of increased resources after depletion of the original one. The COR theory illustrates the inspiration that allows humans to preserve their current resources while trying by all means to obtain new ones. By stating the resources, one has then the theory which can be applicable outside the

realm of psychology into natural resource management field. This can be achieved by defining resources as valuable objects including environmental goods and services that are helpful to individuals. According to COR, when these types of resources are lost, then they will become stressed (Madden et al., 2017). Therefore COR's main principles is protection of resources to avoid stressful situation (Carnevale, Huang, & Harms, 2018). Therefore, loss of resource is abhorred than gain of resources. In this study, it is painful to lose environmental and forest resources and therefore the need to conserve it. The process of forest conservation will therefore be approached through different lenses.

# **Research Methodology**

Research methodology consists of many formal procedures in designing the study, data collection, and final analysis (Nayak & Singh, 2021). Therefore, research methodology clearly illustrates the need for choosing a particular research method. This subsection consists of research design, target population, sampling design and sample size, research instruments, validity of the instruments, reliability of the research instrument, data collection procedure, and concludes with data analysis procedure.

## **Research Design**

The study adopted exploratory research design to investigate how sports diplomacy in advancing environmental security in Africa looks at forest conservation in Kenya. Exploratory research is useful to examine an issue that is yet to be well defined (Nattrass, 2020). This design allows for conducting a research to expand much better facts of the problem being explored, but the results will remain inconclusive. The researcher begins by exploring the basic thought and employs this research to recognize matters useful for future research focus. This research design allowed the research to change his/her direction upon discovering the insights from new data sets. Thus, the design was important for this research that was at the preliminary stage for which very little is known.

# **Target Population**

The target population comprised anybody in the field of sports, diplomacy, and environment. They included the diplomats, environmental envoys, members from athletes Kenya, marathoners, coaches, sports officials, Ministry of Foreign Affairs Officials, Environmentalists, KFS, KWS, NEMA, Water Resources Authority (WRA), Kenya Water Towers Agency (KWTA) Officers, Multi-Security Agencies Officers, policy makers, environmental advocates, and other relevant stakeholders.

# Sampling Design and Sample Size

It is worth noting that since the target population was not easy to determine due to changes in the rate of sports persons involved and wider stakeholders involved in sports diplomacy, environmental security protection, and forest conservation within a short time framework, the sample size was determined using purposive and snowballing techniques. The researcher strived to cover as many stakeholders as possible from a cross-section of the targeted population.

## **Research Instruments**

This study utilized primary and secondary data. Primary qualitative data were gathered using questionnaires and interview schedule (Helleiner, 2018) among the various targeted groups. Interview schedule was basically a list having a set of open and closed structured questions organized to serve as a guide for interviewer(s), researchers, and investigators to gather data about a specific topic or issue under consideration.

This helped capture what has already been done on sports, human development, environmental security, and forest conservation from a global, regional, and national to the local level and bring together sports, environmental security, and forest conservation. Secondary data were collected through published articles, published interviews, books, journal, databases, and periodicals.

# Validity of the Instruments

The researcher developed the research instruments to ensure it has optimal validity. Validity of an instrument is enhanced by expert judgment (Shen et al., 2021). Experts are asked their opinion on whether the intended concept is measured by an instrument. In this study, content validity of the instruments was sought by incorporating expert advice from the supervisors and other experts from the Department of Institute of Diplomacy and International Studies (IDIS) of University of Nairobi reviewing the items.

## Reliability of the Instruments

Reliability involves the degree to which the researcher can comfortably rely on the information collected for analysis from various data sources (Mohajan, 2017). In order to successfully test the research tool for reliability, research undertook a pilot study on a selected separate set of research participants and consulted other experts. This was purposely done to ascertain the research tools construct and content reliability. The experts examined the content and construct reliability in order to determine whether items to be measured are as they are supposed to be determined. They established whether the numbers of items (study indicators) are adequate for the purpose of the intended research.

#### **Data Collection Procedure**

It is worth appreciating that before the data collection exercise, the respondents were contacted in advance and asked to organize their time for the research. The researcher personally administered the interview schedule. The researcher made prior visits to the study area to assist in defining timings and distribution of research instruments.

# **Data Analysis and Presentation**

All interviews were captured electronically following participants' consent and transcribed verbatim (Loubere, 2017). The interview questions were in the form of audio-recording, where transcription, re-familiarization with the collecting data, and the phased coding procedures, and finally introduction of the narrative were involved in the analysis.

#### **Ethical Issues and Considerations**

Participation in the study relied on the ethical principle of anonymity, informed consent and confidentiality. Anonymity was encouraged by not gathering information including individuals' real identity. Informed consent for full participation in the study was obtained from the study participants. Confidentiality was guaranteed by not divulging the identity of the respondents or their organizations. These measures are believed to be enhanced by the willingness and objectivity of the respondents.

#### **Results and Discussion**

# **Participant Response Rate**

The researcher distributed a total of 100 questionnaires from which a total of total of 92 questionnaires were successfully completed. After only considering the dully filled and completed questionnaires, there were

90 questionnaires used and two questionnaires were incomplete, which resulted in a response rate of 90%. A response rate of 90% is quite high and thus sufficient since it is generally agreed that a response rate of over 70% validates any survey based studies (Hendra & Hill, 2019). Response rates can be influenced by mode of distribution, incentive provided, respondents loyalty, demographics etc., but not incentives as no incentive was provided (Baruch & Holtom, 2008).

#### **Socio-Demographic Characteristics of the Respondents**

The socio-demographic considered were: gender, age, level of education, and work experience. The data were summarized using frequency distribution and percentages. The results are presented in Table 1. According to the results males were dominant (n = 75, 83.5%) compared to female (n = 15, 16.7%). Dominance of males in sports and diplomacy activities was expected in Kenya where females are still not accorded full opportunities as males in various fields. Highest number of participants were in age range 25-35 years (n = 27, 30%) followed with 25-35 years (n = 23, 25.6%) indicating young sportspersons and diplomats. Majority (42, 46.7%) of the respondents attained secondary levels of education, followed by primary level (n = 21, 23.3%) indicating low levels of literacy among the sportspersons. Majority (23.3%) of the respondents were from sports, followed by those from academia (15.6%) and then those from KFS (14.4%). The table shows that most targeted participants were subject matter experts; thus they were considered viable and fit for the research study.

Table 1
Respondents Socio-Economic Status

Variable	Characteristics $(n = 90)$	Frequency	Percent
Gender	Male	75	83.3
	Female	15	16.7
Age	<25	9	10.0
	25-35	27	30.0
	36-45	23	25.6
	46-55	22	24.4
	>55	9	10.0
Level of education	None	2	2.2
	Primary	21	23.3
	Secondary	42	46.7
	Tertiary	20	22.2
	University	5	5.6
Organization	Academia	14	15.6
	Sports	21	23.3
	Aviation	5	5.6
	Defence	5	5.6
	Diplomats	5	5.6
	Foreign Affairs	4	4.4
	Kenya Forest Service	13	14.4
	Kenya Wildlife Service	4	4.4
	Kenya Water Towers Agency	8	8.9
	Others	11	12.2

Source: Field data: Author, 2021.

# Role of Sports Diplomacy in Advancing Environmental Security in Africa

The first aspect that was determined from the respondents was their view on environmental security in Kenya. A total of 81 (90%) respondents attested that there is indeed low environmental security in Kenya. In terms of knowledge about environmental security the respondents stated:

The concept of environmental security in many concerned the effects humans have on the environment and how if any danger is posed to certain communities or individuals. It does not just deal with heterogeneous communities but it also looks at cross border environmental effect or human effects on the environment. (KDF/Environmental Soldier)

Moreover, environmental security examines threats posed by environmental events and trends to individuals, communities or nations. Environmental security deals with ecological changes that result in such issues as softening ice tops and carbon outflows to value, conflict, and poverty. (KWS Official 2)

By acknowledging that there are environmental issues pointing to the existence of threats to the environment as already observed in other studies (Sjoberg, 2019), during the interview of the occurrence of environmental security issues one of the respondents stated:

In Kenya, there are threats to environment such as climate change, deforestation, depletion of natural resources, loss of biodiversity; and pollution. These problems occur due to population growth and poor forest governance in the country. Eventually these problems cause violent conflicts among communities due to water and forest resource shortage. (Academia 1)

The respondents were also asked to rate the extent to which sporting events enhanced environmental security and the results are as shown in Table 2. The rating of sports in enhancing environmental security was highest among the respondents from diplomats, defence, aviation, sports, Kenya Forest Service, and Kenya Wildlife Service.

Table 2
Rating of Use of Sporting Event to Enhance Environmental Security

	Very high High		High	Moderate		Low				
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Means	SD
Academia	2	14.3	6	42.9	5	35.7	1	7.1	2.64	0.19
Sports	8	38.1	7	33.3	5	23.8	1	4.8	3.05	0.15
Aviation	2	40.0	2	40.0	1	20.0	0	0.0	3.20	0.64
Defence	3	60.0	1	20.0	1	20.0	0	0.0	3.40	0.68
Diplomats	4	80.0	1	20.0	0	0.0	0	0.0	3.80	0.76
Foreign Affairs	2	50.0	0	0.0	0	0.0	2	50.0	2.50	0.63
Kenya Forest Service	5	38.5	3	23.1	2	15.4	3	23.1	2.77	0.21
Kenya Wildlife Service	2	50.0	1	25.0	1	25.0	0	0.0	3.25	0.81
Kenya Water Towers Agency	1	12.5	2	25.0	4	50.0	1	12.5	2.38	0.30
Others	2	18.2	3	27.3	5	45.5	1	9.1	2.55	0.23

Source: Field data: Author, 2021.

The respondents involved with sports were also asked to rate the level of sports in enhancing environmental security (Table 3). The rating of sports in enhancing environmental security was highest among the respondents from athletics, volleyball, and golf.

There were several ways that sports were used to enhance environmental security as shown in Table 4. These include training of the people on skills to enable them earn a living which has also been established in

earlier studies (Krakowka, Heimel, & Galgano, 2012). Sports also assisted in achieving conservation efforts as well as creating awareness of the significance of peace. Some of these strategies have also been highlighted in some study done earlier (Chevalier, Russell, & Knape, 2019).

Table 3
Rating on the Use of Sports to Enhance Environmental Security

	Ve	ry high	]	High	Mo	oderate	Ve	ery low		
Sports category	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Mean	SD
Athletics	5	71.4	1	14.3	1	14.3	0	0.0	3.57	0.13
Football	0	0.0	1	25.0	1	25.0	2	50.0	1.75	0.06
Handball	0	0.0	1	50.0	1	50.0	0	0.0	2.50	0.09
Hockey	0	0.0	0	0.0	0	0.0	2	100	1.00	0.04
Golf	0	0.0	1	100	0	0.0	0	0.0	3.00	0.11
Volleyball	1	50.0	1	50.0	0	0.0	0	0.0	3.50	0.13
Sports management	2	18.2	3	27.3	5	45.5	1	9.1	2.55	0.23

Source: Field data: Author, 2021.

Table 4
Strategies That Sports Is Used as a Tool for Advancing Environmental Security

Strategies	Frequency	Percent
Training of the people on skills to enable them earn a living	34	37.8
Sensitization about the importance of peace	21	23.3
Creating awareness of the significance of peace	29	32.2
Help in achieving conservation efforts	33	36.7
During sports, there are warning about environmental security	20	22.2
Keeping the playing field clean	13	14.4

Source: Field data: Author, 2021.

There were interviews to seek more information from the respondents and the following was stated:

The accomplishment of environmental security is likely to be achieved in Kenya by having the best strategies, but the current strategies do not seem effective and sports is just an indirect route. The environmental security challenges are exacerbated through increased population pressure, forest resource shortages, environmental change, and natural hazards. Strategies that solve environmental security challenges should be directed at curbing land degradation, natural resource extractions and water scarcity have been at the forefront of leading to increased environmental security challenges. <sup>1</sup> This trend will persist due to weak environmental governance. Non-sustainable environmental practices, migration, and resource shortages. (Sports Administrator 1)

The respondents were tasked to mention practical examples that sports diplomacy has been used to enhance environmental security. The following was the statement extracted:

The results indicated that there are numerous strategies that have been used one being the health aspect of sports through the Beyond Zero Marathon campaigns. There are also advocacy for water conservation during sports especially through the Ndakaini Dam Marathon. (Atheletic 4)

A number of athletics and football events have been organized to improve resource management and reduce resource conflicts such as the annual "Koth biro" tournament in Nairobi. When sports are organized, they ensure they perform environmental clean-up which help improve the health of the environment. (Atheletic 2)

<sup>&</sup>lt;sup>1</sup> Abrahamsen, R. (2013). Conflict & security in Africa. Boydell & Brewer Ltd.

There are some marathons that take place in the national parks and game reserves such as the Lewa Marathon, Maasai Mara Marathon, Nakuru and Hells Gate National Parks which enhance biodiversity conservation. There is the Kakamega Ingoo Forest Marathon and Mau Forest-Egerton University Cross Country which enhances forest Conservation. Eldoret City marathon and Mau-Egerton Cross Country race which are strategies to enhance climate change action and tree growing. (Sports Coach 1)

Finally, the study determined how sports diplomacy is used in advancing environmental security. Firsts, Kenya has seen an increase in sporting activities supported by various actors who are linked to conservation efforts. Therefore, it was established that:

The main objective of sports diplomacy is to enhance environmental security by actively advocating for increase in tree cover and reverse forest degradation through sustainable forest management and have well managed forests that can be sustainably utilized for forest-based economy, keeping in mind the environmental benefits but without neglecting the developmental role too, including development and improvement of livelihoods of forest adjacent and dependent communities. (KFS Officer)

The results on weather sports diplomacy enhance environmental security is presented in form of an interview thus:

There are diplomats in Kenya who have the capability and ability to use their training and experience in bringing sports diplomacy in environmental security measures but that is rarely achieved. (Diplomat 1)

There are instances where Kenya trains many environmentalists but they rarely engage in sporting event in their crusade for protection of the environment. (Academician 1)

The use of sports diplomacy can be used to achieve environmental security in Kenya but there are no strategies put in place to achieve such in large scale of things. (AK Coach)

The environmental security challenges are exacerbated through increased population pressure, forest resource shortages, environmental change, and natural hazards and therefore applying sports diplomacy may not solve these problems so in my opinion using sports diplomacy cannot help in achieving environmental security. (KDF/Environmental Soldier)

The Cross country, whose theme is "Run for the Mau Forest Restoration", is geared towards creating environmental awareness, promoting environmental security, and raising funds for the rehabilitation and restoration of the Mau forest ecosystem, and is organized by the Egerton University in partnership with the Ministries of Environment and Forestry, Natural Resources and Regional Development Authorities, and other stakeholders; this is a classic example of using sports diplomacy for resolving environmental security.

Another of the respondents stated that:

Sporting has been used as a means for providing a contact-platform for interaction between various groups involved in environmental and forest conservation. Further states that, athletics is also a strategy (essentially for popular sports) for youth development and integration into a new cultural consciousness for tree growing, peace and enhancing environmental security.

One of the areas which was consistent through the study is that environmental conservation efforts were being encouraged through sports and thus through such initiatives, it was easier to improve environmental security. This was determined through an interview with one of the marathoners.

The renowned athlete and World Record Holder Eliud Kipchoge EGH has adopted fifty hectares of forest land in the Kaptagat Forest, boosting government's conservation efforts. Kipchoge said forests; especially Kaptagat has played a key role in his endeavors. Eliud Kipchoge shocked the world when he ran Inspec Ethylene Oxide Specialities (INEOS) marathon under two hours, setting unbeatable world record.

This study was able to demonstrate the role of sports diplomacy in advancing environmental security in Africa. The findings in this study align with Alleny who contended that most environmental security issues are not restricted to a certain region. This is because environmental degradation usually links to the global ecology as a whole. Nevertheless, trans-boundary environmental problems, challenges, or concerns such as trans-boundary resource conflicts in nature should be handled at the regional and continental level preferably through diplomacy (Allenby, 2000).

#### **Conclusions and Recommendations**

Sports diplomacy advanced environmental security in Kenya, which was better for athletics and volleyball. Engaging in sports enhanced environmental security through training of the people on skills to enable them earn a living, sensitization about the importance of peace, conservation efforts, and environmental education. Several campaigns are for water conservation, environmental resource management, environmental clean-ups, and biodiversity conservation efforts through a number of sports events. Sport events also led to interaction between various groups involved in environmental and forest conservation.

Occurrence of environmental issues points to the existence of threats to the environment such as climate change and deforestation. These problems occur due to population growth and poor natural resources governance in the country. Eventually these problems cause violent conflicts among communities due to forest resource shortage. This study established that rating of sports in enhancing environmental security was highest among the respondents from diplomats, defense, aviation, sports, Kenya Forest Service, and Kenya Wildlife Service. Among the sportspersons, rating of sports in enhancing environmental security was highest among those from athletics, volleyball, and golf.

Perceiving the significance of sports diplomacy and environmental security, there is need for coordination between various national and county governments to coordinate their efforts and in the process they should bring on board even the non sports actors to boost the role of sports in diplomacy, environmental security, and forest conservation.

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