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Towards a Sustainable Sports Development Framework: A Socio-Economic, Environmental and Sectoral Growth Perspective

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Abstract

The sports sector has long served as a key driver of economic growth, social development, and environmental sustainability. While the extant literature highlights considerable importance of these dimensions and has drawn reasonable scholarly attention, the key antecedents and processes that ensure their sustainable achievement have remained under-explored. Thus, by undergoing an in-depth literature review and employing S-O-R & TBL as the underlying theoretical frameworks, this research identifies some key drivers, processes & enablers that help derive triple bottom line outcomes for sustainable development of the sports sector in the developing countries. To this end, the SOR framework offers highly relevant context in understanding the literature-identified key Drivers that serve as the Stimuli (S), Processes & Enablers that act as the Organism (O), and Outcomes & Impacts that serve as the Responses (R). When viewed in conjunction with the TBL framework in an effort to achieve multi-dimensional outcomes, these led to the development of a literature-supported & theoretically-validated "Novel Sports Development Framework". The framework assists in deriving triple bottom line (economic, social & environmental) & sectoral outcomes, thereby further expanding the TBL framework in the sports development context. In this regard, the influence of contextual and control factors governing the sports development offered a comprehensive understanding of the sports ecosystem in Pakistan. Being conceptual in nature, and calling for future empirical studies, the suggested framework offers comprehensive understanding of the key stakeholders (such as government, policymakers, sports associations, NGOs, media, athletes, visitors, educational institutions, etc.) along with practical recommendations for sustainable development of the sports sector in developing countries in general and Pakistan in particular.

Keywords

Sports development framework, Sustainable sports development, Socio-economic growth, Sports sector of Pakistan, Sports tourism

Introduction

In the global market, sport has been considered one of the most essential recreational activities, extending far beyond leisure into a driver of socio-economic competition (Huan, Jiang and Fotiadis, 2026). In many countries, a major share of GDP is driven by sports and related industries (Wu, 2025). It also generates substantial revenue, attracts large budgets, creates jobs across various domains, and boosts the tourism sector (Chen, 2025). Global events like the Olympics and the FIFA World Cup play a massive role in various economies, attracting international visitors, provide opportunities for various industries, including sports merchandisers, the media industry, local and global transporters, food and hotel industries, and many other industries that are directly or indirectly related to them (Ait Soussane and Ibourk, 2025; Zawadzki, 2022). Along with these advancements, the industry has also been recognized as a strategic driver of sustainable development, parallel to the entertainment industry (Navandar *et al.*, 2025). In recent years, many researchers, policymakers, and scholars have examined the importance of sustainable integration in sports and the strategies for sustainable sports development. These studies aim to generate a long-term economic, social, and environmental system that minimizes the negative aspects that harm communities and ecosystems (Millington *et al.*, 2022). This sustainable paradigm broadly aligns with John Elkington's concept of the Triple Bottom Line. Particularly in the context of sports, the concept of TBL highlights economic opportunities in tourism and event hosting, social cohesion through participation, and environmental stability through eco-friendly infrastructure and responsible event planning and management (Liang, Li and Xu, 2026).

Despite continuous growth in the sports sector, sustainable achievement remains a question mark, particularly for developing economies. Countries with limited resources often face challenges in sustainable sports development, resulting in poor integration, insufficient resources for athletes/management, and limited technological capacity (Hautbois and Desbordes, 2023). Over the last two decades, scholars have mainly examined isolated aspects of the sector, treating outcomes as independent phenomena, even though sports development spans interconnected systems whose combined outcomes remain understudied (Dastbarhagh *et al.*, 2023). As a result, the concept of sustainability in sports still lacks clarity due to an unbalanced understanding of the interconnectedness among various industries, leading to unsustainable outcomes. Another major concern is that it predominantly emphasizes the short-term benefits of sports associated with major sporting events, such as the Olympics and FIFA, and often overlooks broader dimensions of sustainability, environmental responsibility, and long-term system development (Lopes dos Santos and Gonçalves, 2022). Given the limited resources available to emerging economies like Pakistan, this research addresses a critical gap in the sports management literature by offering a conceptual framework that links drivers, processes, and sustainable outcomes, particularly in the sports sector. Given the multidimensional nature of sports development, the proposed framework is theoretically guided by the SOR model and additionally incorporates TBL principles. The framework conceptualizes sports development as a systemic process in which drivers (resources and actors) function as stimuli, institutional processes and enablers act as the organism stage, and economic, social, environmental, and sectoral outcomes represent the response stage. In addition, this framework considers contextual and control factors, which might impact the efficacy of relationships in the sports ecosystem.

It is argued that with effective sports management, including elements of sustainability, there is an opportunity to maximize various contributions of sports to national development.

Overall, based on recent sport management and sustainability literature, the conceptual framework suggests economic, social, environmental & sectoral sports dimensions. It provides useful insights for key sports sector stakeholders (such as policymakers, sports bodies, event managers etc.,) interested in designing strategies governing the sustainable development of the sports sector. It is thus critical to consider the suggested dimensions in order to harness the full potential of sport as a catalyst for sustainable economic growth, social development and environmental responsibility.

Literature Review

Evolution of Sports

Within every society, sports have evolved along three dimensions: sociocultural, economic, and technological Early sport emerged from local ritual games embedded in spiritual and survival practices, and these origins have shaped significant structural and functional developments over the past five decades (Li and Bo, 2023;Lombardo, 2012). In the recent century, the shift from local recreational practices towards structured, authentic systems has led every country to develop its sports into modern institutions (Holt, 2025). Commercial expansion driven by digital tools, global sponsorships, industry involvement, and media activity has created a new dynamic for athletes (Varea-Calero *et al.*, 2025). Such collaborations show that sport now extends well beyond physical activity, serving as a benchmark for socialization (Cabo *et al.*, 2026), revamp the tourism economy (Mousavi *et al.*, 2022), introduce technological innovations, and enhance geopolitical relationships (Postlethwaite, Jenkin and Sherry, 2023).

Global Sports Sector

The global sports sector is now a multi-layered system based on economic and socio-cultural activities that were previously embedded in localized community practices (Andreff, 2021). In this era, the industry is integrated with governing bodies, commercial activities, technology firms, and media corporations. One of the most prominent mega events, i.e., the Olympic Games and FIFA World Cup, operates at both global and geopolitical levels (Burton *et al.*, 2024). Such events not only generate substantial revenue but also build global linkages among nations. The Federation of International Football (soccer) dominates the global market in terms of revenue generated from events such as the FIFA World Cup, the European Football League, and the English Premier League. These events generate billions of dollars through media and various monetization models (Bradbury, 2021). According to a report by Teitelbaum and Knight (2025), soccer clubs are collectively worth around $72 billion, making it the world's most valuable sport. Besides soccer, cricket ranks second on the list, with revenue of approximately $3.84 billion in 2025. The global governing body of cricket, the ICC (International Cricket Council), generated revenue of $600 million in 2024, of which around 38% came from BCCI (India) (BestReads, 2025).

Sports Sector of Pakistan

In Pakistan, sports are not only about the game, but they are also a source of national identity and international representation. Among various sports, hockey became a source of national identity for Pakistan through its achievements in World Cup hockey during the 20th century (Nosheen and Aslam, 2022). However, over the past two decades, cricket has emerged as a more dominant sport due to its popularity and international visibility (Chunying and Awan, 2023). As it is understood that sports are widely associated with youth engagement, universities and provincial sports boards are contributing to identifying talent and athlete training. As shown in figure 1, the market size of Pakistan's fitness equipment sector is expected to reach $7.09 million by the end of 2026, and Pakistan is reported to be the 7th-largest fitness equipment-producing economy in the world. This suggests potential for the sports industry in developing economies like Pakistan, though its sustainable growth trajectory remains unclear.

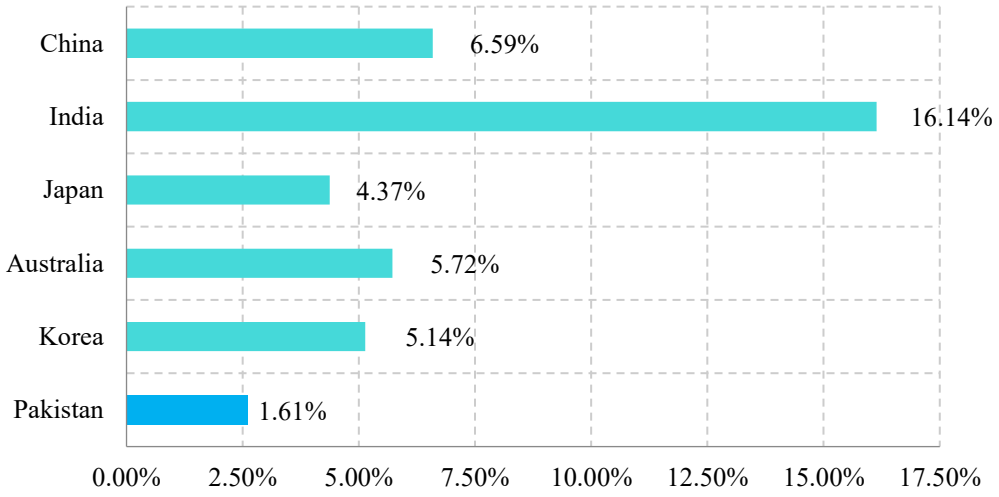

Figure 1: Fitness Equipment Market: Pakistan Vs Top 5 Major Economies in 2027 (Asia Pacific Region) [*Source*: (Bhandari, 2026)]

Key Sports Bodies & Associations in Pakistan

Various governing bodies are structuring the sports sector in Pakistan with the help of the government, led by the Pakistan Sports Board, under which forty-one different bodies run, including the Pakistan Olympic Association, Pakistan Cricket Board, Pakistan Hockey Federation, Pakistan Football Federation, Pakistan Athletics Federation, Pakistan Squash Federation, and many more (PSB, 2025). All these organizations are responsible for making policies, developing and training athletes, representing the country internationally, and managing domestic competitions. Their strategic direction has contributed to industrial expansion and economic and geopolitical growth (Ali, Wright and Dickson, 2023). The Pakistan Sports Board serves as the primary government-run body for the promotion and regulation of sports activities (Ali, Rehman and Saeed, 2025). Additionally, the Pakistan Olympic Association serves as the official body representing Pakistan's Olympic sports internationally. This body is

responsible for selecting athletes, preparing them for games, and collaborating with international sports federations to ensure they meet global standards (Laar *et al.*, 2021). Apart from these, the Pakistan Cricket Board stands out as one of the most independent, financially stable, and influential bodies. Their key role is to represent the Pakistan cricket team at the domestic and international levels and collaborate with the International Cricket Council for international competitions (Hameed, Rasool and Kiran, 2025; Khan, Rizwan and Irfan, 2023).

Key Sporting Events in Pakistan

The above-mentioned bodies play a crucial role in strengthening Pakistan's sports system by promoting Pakistani athletes internationally. Among the most prominent sports events in Pakistan, the Pakistan Super League (PSL) is the top commercial and successful cricket league in the region (Aftab and Naveed, 2021). The Pakistan Cricket Board organizes this league and features franchise-based teams, attracting international players, broadcasters, and sponsors. Since its first season in 2016, the tournament has significantly gained domestic and international prominence, collaborating with international sports bodies, media, and industries, and boosting Pakistan's stadium infrastructure and tourism economy (Hasaan, 2016). Apart from PSL, PCB also hosts various domestic leagues, including the Quaid-e-Azam Trophy, Pakistan Cup, National T20 Cup, President's Trophy, and Sindh Premier League (Naqvi, 2025). Beyond cricket, other sports bodies also plan notable competitions, including the National Hockey Championships by the Pakistan Hockey Federation and squash tournaments by the Pakistan Squash Federation, both aimed at sustaining Pakistan's legacy in international sports competitions (Iftikhar *et al.*, 2021).

Role of Federal & Provincial HECs in Sports Promotion & Development

The Higher Education Commission plays a vital role in promoting sports activities among universities in Pakistan. It promotes the development of student sports societies in universities and other higher education institutes, provides sufficient annual budget for sports activities, and organizes training camps for students interested in different sports (Abbasi *et al.*, 2021). It also arranges sports events, including inter-university competitions, in which students from different disciplines compete with each other. Such competitions are considered vital in discovering young talent and promoting sportsmen who may represent Pakistan in future sports competitions held in different parts of the world (Afshi, Zia-ul-Islam and Khan, 2020). Besides the federal government's role in promoting sports activities in the country, the provincial governments' higher education commissions also play a significant role in promoting sports activities in their respective provinces. For instance, the Sindh Higher Education Commission and the Punjab Higher Education Commission support the universities in their provinces by promoting sports activities among their students, providing sufficient annual budget for sports activities, and arranging inter-university competitions. Such higher education commissions often work in collaboration with the universities to promote sports activities among their students, providing them with training facilities and encouraging them to participate in sports activities (Khaskheli and Ansari, 2023).

These provincial bodies often collaborate with universities to strengthen sports programs, improve access to training facilities, and enhance student engagement in physical activities (Ali *et al.*, 2020). Considering all the facts, the federal and provincial higher education commissions' involvement in Pakistan is a significant institutional mechanism for boosting athlete development and sports participation in the academic sector (Ali, Wright and Dickson, 2023). These organizations support the larger goal of fostering a thriving and sustainable sports culture in the nation by encouraging student participation in sports, supporting infrastructure development, and supporting organized competitions (Khurram, 2024).

Emerging Technologies in Sports: An Overview

With the passage of time, as other industries adopted technology, the sports industry has also been dominated by technological advancements (Avcı and Bayrakdar, 2023). The integration of technology has transformed the industry in new ways, shifting traditional training and competition towards scientific and strategic performance systems (Prasad, Akram and Khan, 2026). This not only advances athlete training but also upgrades management systems, which help to reduce the risk of bias among decision-makers (Habibi and Khairandish, 2023). Monitoring devices for tracking physiological and biomechanical parameters of athletes refined the boundaries for their better performance (Li *et al.*, 2016;Olsen *et al.*, 2025). Catapult GPS trackers are another significant tool that monitors athletes' speed, workload, blood pressure, heart rate, and movement patterns (Ocak, Şentürk and Akyildiz, 2025). For better analysis, AI and machine learning tools are emerging as the most powerful tools, helping analysts analyze large datasets and capture athletes' performance and strategies (Guatam *et al.*, 2026).

Sports As an Engine of Tourism & Socio-Economic Growth

Sports tourism has emerged as another potential market for economic growth over the past few decades and is recognized as one of the most powerful drivers of tourism (Li and Ling, 2024). International sports events attract fans from around the world, generating significant revenue for host destinations (Ordiñana-Bellver *et al.*, 2026). Hosting countries gain market share in numerous ways, including air transport, local transportation, the hotel and restaurant industries, and many other recreational activities (Raso and Cherubini, 2024). As host of the 2022 FIFA World Cup, Qatar generated an estimated $1.575–$2.412 billion, contributing approximately 0.7–1% to national GDP (Nguyen, 2025; Quamar, Hameed and Kumaraswamy, 2020). Another important aspect, apart from the above-mentioned figure, was that the country was able to provide accommodation to more than 1.4 million international tourists, with the highest number of tourists being from the United States and Saudi Arabia (Al-Emadi *et al.*, 2025). Developing countries like Pakistan have considerable scope to gain from sports tourism, but this potential remains underutilized. Events such as the Pakistan Super League (PSL) offer a platform for international attention and national branding, but security concerns and regulatory challenges continue to hinder the sector's growth (Liang, Yasmeen Iqbal and Khan, 2022).

Guiding Theoretical Framework

SOR Model

The Stimulus–Organism–Response (SOR) model, originally developed by Mehrabian and Russell in 1974, provides a useful theoretical ground for understanding how environmental factors influence behavioral and systemic outcomes (Buxbaum, 2016;Mehrabian and Russell, 1974). The model proposes that external stimuli trigger the internal processing mechanisms within an organism, resulting in observable responses (Mehrabian and Russell, 1974). In the context of sports development, the SOR framework can be applied to explain how structural drivers within the sports ecosystem lead to sustainable sectoral outcomes (Zhang *et al.*, 2023). In this research, stimuli represent the foundational drivers of the sports sector, including key resources and institutional actors such as government bodies, sports federations, and private stakeholders that provide the inputs necessary for sectoral development. These drivers influence the second stage, i.e., the organism's stage, reflecting the internal mechanisms through which the sports system processes these inputs. In this framework, the organism consists of critical enablers such as policy and governance structures, sports infrastructure, and the capacity for effective event delivery. These mechanisms determine how efficiently resources and stakeholders are mobilized within the sports ecosystem. The third stage, i.e., the response stage, represents the outcomes and impacts generated by the functioning of the sports system, including economic growth, social development, environmental sustainability, and overall sectoral advancement. Thus, the SOR model provides a structured framework for understanding how drivers and institutional mechanisms interact to produce sustainable outcomes in sports development.

The TBL Framework

John Elkington introduced the concept of the Triple Bottom Line (TBL) framework, which is widely used to evaluate sustainability by emphasizing that development should balance economic, social, and environmental performance rather than focusing solely on financial outcomes (Elkington, 2008). To generate sustainable growth, TBL suggests that organizations and sectors simultaneously generate economic value, promote social well-being, and minimize environmental impact (Slaper and Hall, 2011). Within the context of sports development, the TBL framework provides a comprehensive lens for assessing the broader impacts of sports activities, infrastructure development, and event management (Cayolla *et al.*, 2023). The economic dimension reflects contributions from visitor arrivals and their spending, tourism and recreational activities, international trade, and FDI and contracts with local firms. At the same time, the social dimension highlights the role of sports in enhancing national pride, cohesion, and inclusion. Meanwhile, the environmental dimension focuses on sustainable practices in sports facility construction, such as green spaces and ecological renovations. Additionally, this research extended an additional component into the framework, i.e., sectoral (sports), which reflects safe sporting events, sporting capabilities, partnerships, and their alliances. By integrating these three dimensions, the Triple Bottom Line framework enables researchers to holistically evaluate the sustainability of sports sector development.

This research additionally evaluates and incorporates sectoral (sports) outcomes, which reflect safe sporting events, sporting capabilities, partnerships, and their alliances. By integrating these dimensions, the TBL framework assists in holistically evaluating the sustainability of the sports sector. The integration of TBL perspective extends the SOR process by providing a sustainability-based evaluation of the resulting responses. Rather than treating SOR and TBL as separate or parallel theoretical perspectives, the proposed framework embeds the social, economic, environmental and sectoral dimensions of TBL within the response and impact components of the SOR mechanism. In this integration, SOR explains how and why particular sport development outcomes emerge, whereas TBL determines whether these outcomes contribute to balanced and sustainable value creation. The framework, therefore, connects the process of sport development with the assessment of its long-term sustainability.

Methodology

This research outlines a conceptual framework for Sustainable Sports Development, which can be considered to facilitate an in-depth and comprehensive understanding of the major factors influencing the development and sustainability of sports in Pakistan. The research, being conceptual research, undertakes a structured approach to theory building through an extensive review and synthesis of existing literature to identify and select the most significant factors in the context of sports development in developing nations. The proposed framework for sustainable sports development in Pakistan is underpinned by the Stimulus-Organism-Response (SOR) model, which provides a framework to analyze the impact of external factors on internal system processes and eventually sustainable outcomes. The framework also undertakes the Triple Bottom Line (TBL) approach to analyze the impact of sports development on sustainable outcomes in the context of sports in Pakistan. The proposed framework aims to explain how factors such as resources and institutional actors shape internal enablers (policy and governance structures, sports infrastructure, and event mechanisms) that together contribute to sustainable outcomes for sport in Pakistan.

Literature Review & Synthesis: Identification of Key Variables for the Conceptual Framework

As discussed above, an extensive literature review was conducted using two leading databases i.e. Scopus and Web of Science, for identifying the key constructs relevant to sustainable sports development. The review primarily focused on several interrelated themes, including:

- Sustainable sports development and sports ecosystem studies
- Theoretical foundations such as the SOR
- Sustainability perspectives such as the TBL
- Sports governance, policy frameworks, and institutional management
- Sports infrastructure development and event management
- The sports sector landscape in Pakistan

A comprehensive search including combinations of keywords such as *sports sector development, sustainable sports development, sports governance, sports infrastructure, sports event management, SOR model, triple bottom line, sports sustainability,* and

Pakistan sports sector was conducted. In total, approximately 80 peer-reviewed journal articles were examined to identify and synthesize the most relevant constructs for the proposed conceptual framework. From this review, the initial variables were extracted and prioritized based on three main criteria:

- Previously validated empirical papers in sports management, sustainability and its related fields.
- Papers having conceptual relevance to the drivers and enabling mechanisms of sports sector development.
- Alignment with the economic, social, and environmental sustainability dimensions within the institutional and socio-economic context of Pakistan's sports ecosystem.

Moreover, the inclusion and exclusion criteria adopted for this research is discussed below:

Inclusion Criteria

- Studies that are particularly related to sports development, sustainable sports development, its technological factors and sectoral outcomes.
- Studies that support more than one component of the proposed framework.
- Studies that directly or indirectly reflect the Pakistani sports sector.
- Studies published related to SOR and TBL.
- Studies that are fully accessible and have enough bibliographic information.

Exclusion Criteria

- Studies that are not related to sports development.
- Studies that did not contain components related to our proposed model.
- Duplicate records have not been added.
- Studies published in a language other than English.

Table 1: Thematic Synthesis Supporting the Proposed Sports Development Framework

Proposed Framework Components	*Main Themes*	*Reference Articles*
Theoretical foundations and control factors	SOR, TBL, legal compliance, political conditions, social acceptance and environmental considerations	(Hautbois and Desbordes, 2023; Blanco, 2017; Buxbaum, 2016; Elkington, 2008; Mehrabian and Russell, 1974)
Drivers	Funding, sponsorship, sport professionals, governments, sports bodies, educational institutions, NGOs and fans	(Bardocz-Bencsik, Begović and Dóczi, 2021; Green, 2009)
Processes and Enablers	Policy, procurement, legacy planning, infrastructure, logistics, operations, volunteers, safety and inclusion	(Pott *et al.*, 2024; Hurt *et al.*, 2024; Martínková, 2023; Herold *et al.*, 2022; Lopes dos Santos and Gonçalves, 2022)

Proposed Framework Components	*Main Themes*	*Reference Articles*
Outcomes and Impacts	Tourism, local business, investment, cohesion, national pride, environmental improvement, safe events and sporting capability	(Liang, Li and Xu, 2026; Raso and Cherubini, 2024; Bradbury, Coates and Humphreys, 2023; Moustakas and Robrade, 2023; Hu, Chen and Li, 2023)
Contextual Factors	Governance, security, media and broadcasting rights, digital connectivity and human-rights norms	(Antunovic and Bien-Aimé, 2025; Mehra *et al.*, 2025; Li and Guo, 2024; Hums *et al.*, 2023a; Schwab, 2019)

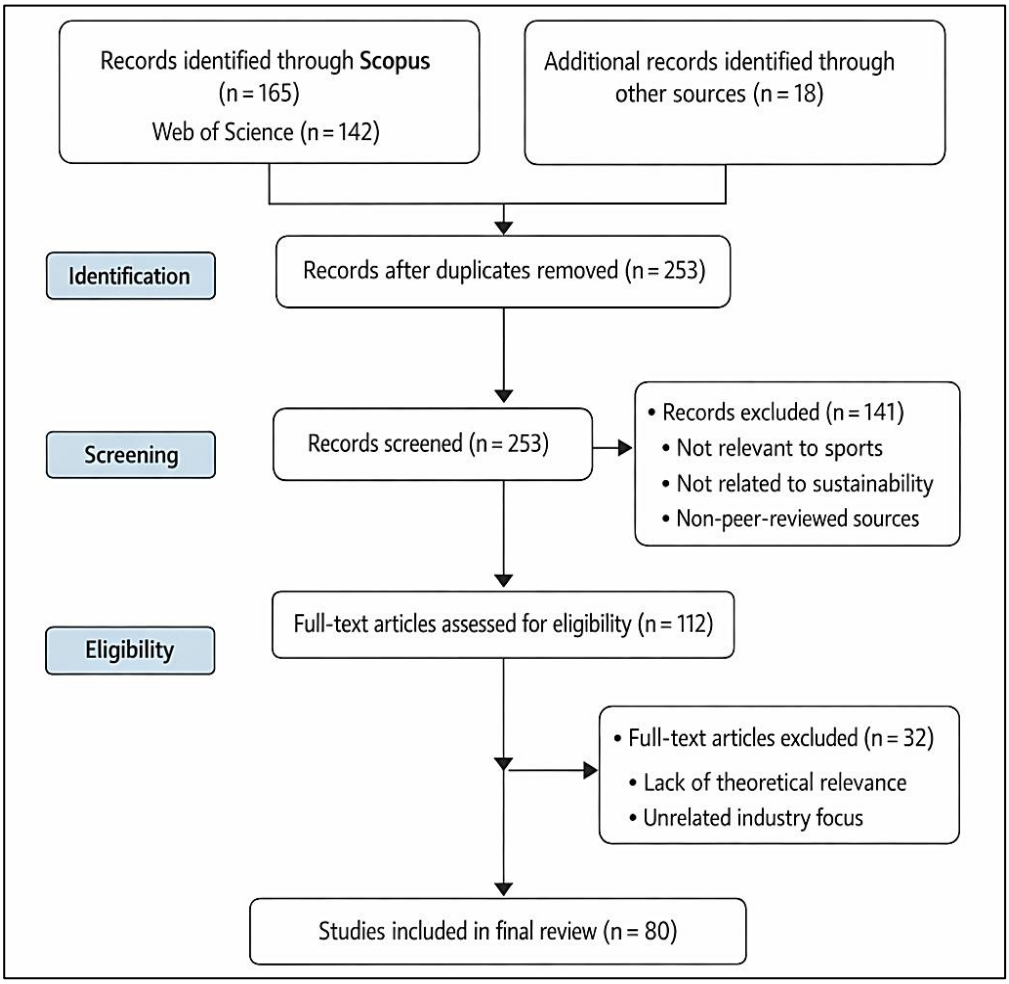

Figure 2: PRISMA Diagram

The table 1 shows the identified literature that was synthesized in the context of the proposed framework components. Of the 80 relevant studies reviewed, 23 that directly supported the framework's problem context were included in table. Other relevant studies, as discussed in the next to next section, help in comprehensively explaining the components of the proposed framework. The following section explains the accurate alignment of the proposed model along with its key variables.

Alignment of the Key Variables with Guiding Theories

The selected factors were then classified according to the SOR model:

- Stimulus (S): External factors influencing internal states (e.g., resources and actors).
- Organism (O): Affective and cognitive mediators (e.g., policy and governance, infrastructure, event delivery).
- Response (R): Behavioural outcomes (e.g., economic, social, environmental, sectoral).

Simultaneously, TBL factors (constructs) such as economic, social, and environmental were mapped onto Response components of the SOR model.

Proposed Framework for Sustainable Sports Development

The proposed framework reviews & synthesizes the sports literature, sport industry reports, and government evidence. It maps the drivers (inputs) through the enablers (processes) to the impacts (outcomes), alongside highlighting the influence of the underlying contextual and control factors. The model is explained through the adoption of the SOR model, where the sports ecosystem transforms key drivers into a multidimensional outcome. In the stimulus stage, drivers based on resources and actors initiate and shape sports sector development. These drivers trigger the organism stage, which represents the processes and enabling mechanisms, including policy and governance, sports infrastructure, and event delivery. The response stage reflects the outcomes in the light of the triple bottom line model, i.e., economic, social, environmental, and sectoral outcomes. Not only this, but this model also recognizes controlling outcomes and contextual factors as well, which collectively shape the effectiveness and sustainability of sports development initiatives.

The suggested framework is based on five building blocks at a broader level. These include Drivers, Processes & Enablers, Control Factors, Contextual Factors and Outcomes and Impacts. Drivers serve here as the key forces that provide direction to initiative sports development activities in a sustainable manner (Cook *et al*., 2023). Processes and enablers, meanwhile, generate the resources, systems, and capabilities needed to achieve sustainable sports outcomes (Morgan, Fletcher and Sarkar, 2019). Likewise, the control factors play an important role by offering internal governance, monitoring and evaluation mechanisms, the accountability of the system, and implementation of the rules. These ensure that the activities are aligned with the objectives, standards and expectations of the stakeholders. Moreover, the contextual factors help shape opportunities, address constraints and devise relevant strategies, thereby assisting the key stakeholders in achieving the desired outcomes. In addition, the

control factors offer the socio-economic, political, legal and environmental perspective to be considered by the stakeholders in the wake of the initiative taken, resources utilized and efforts applied in driving sustainable sports development. Lastly, the outcomes & impacts highlight collective performance & benefits along economic, social, environmental and sectoral fronts. We provide a literature-backed explanation of each building block, including each of its elements that collectively constitute the conceptual framework.

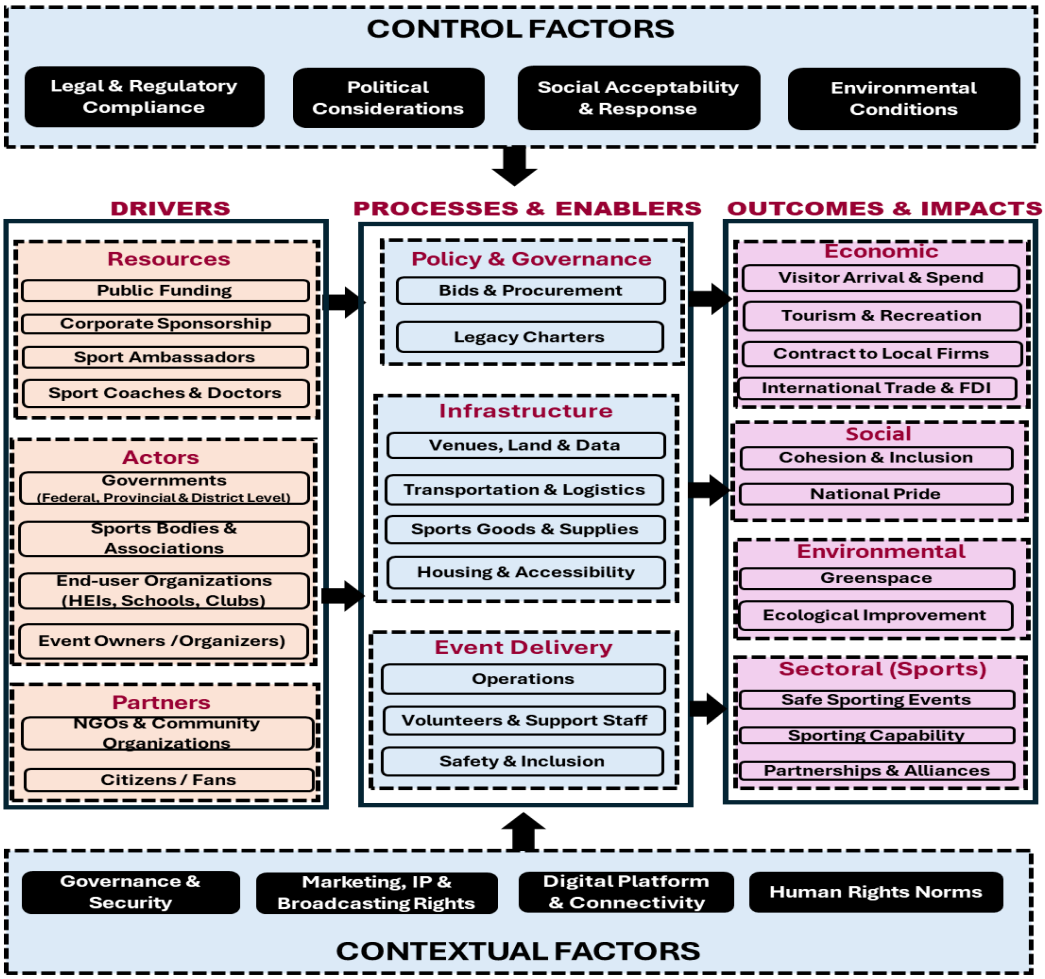

Figure 3: Conceptual Framework for Sustainable Sports Development (Source: This Research)

Drivers

The Drivers stage of the proposed framework involves three key inputs, i.e., Resources, Actors, and Partners that collectively serve as the inputs towards the development of the sports framework. One of the three inputs of the Drivers stage is 'Resources'. This includes Public Funding, Corporate Sponsorship, Sports Ambassadors, and Sports Coaches & Doctors. The second essential input within the Drivers stage is 'Actors', which includes: Government, Sports Bodies & Associations, End-user Organizations

and Event Owners / Organizers. The third input within the Drivers stage is 'Partners', which includes: NGOs & Community Organizations and Citizens/Fans. These elements are briefly discussed below:

- *Public Funding*: Financial support from the government for developing sports infrastructure and training facilities. The main purpose of public funding is to build sports facilities and to provide systematic, strategic support to athletes, helping them organize and improve their participation in sports (Kučera *et al.*, 2023). It also helps provide equal access to all sorts of events and helps them grow in international events. Moreover, it supports athletes with diverse talents and age groups, providing them with equal financial resources to enhance their performance (Hurt *et al.*, 2024).
- *Corporate Sponsorship*: It refers to the funding provided by private organizations that invest in sports athletes, teams, events, and leagues. In exchange, they require brand visibility and marketing (Mohammadi, Ghasemi Siani and Alonso Dos Santos, 2024). It helps companies gain visibility by displaying their logos and advertisements on athlete uniforms, at various stadium locations, on sports equipment, or through digital ads during short breaks. They help in defraying costs for events and leagues, provide green infrastructure for athletes, and boost the quality of the sport (Jacobs *et al.*, 2025). An analysis of the sponsorship pricing for the Pakistan Super League, spanning from 2016 to 2026, shows that the amount has increased to $26.2 million from $5.2 million. This growth in sponsorship value points to increasing commercial confidence in the league (Yaari, 2025).
- *Sports Ambassadors*: Sometimes, renowned athletes play an influential role in leagues, inspiring young athletes and enhancing the event's international visibility (Hautbois, Biscaia and Djaballah, 2025). They help to strengthen the image and reputation of events, brands, and their related organizations. Government and sports ministries usually hire well-known athletes to promote and develop their sports departments, major leagues, and youth engagement programs (Bardocz-Bencsik, Begović and Dóczi, 2021). Highlighting this trend, Saudi Arabia, where football has been expanding rapidly, signed Cristiano Ronaldo, one of the most prominent figures in soccer, as a global ambassador for the country (AlSheddi, 2026).
- *Sports Coaches & Doctors*: Provide technical training to athletes to optimize performance. They aim to design training programs for athletes, build strong teams, focus on tactical skills, monitor physical fitness, and prepare athletes for domestic and international competitions (Maksymchuk *et al.*, 2022). Besides these, their role in talent identification and long-term development programs is essential. Based on their expertise and mentorship, they are more inclined to contribute to and promote the overall sustainable growth of the sports industry (King *et al.*, 2023).
- *Government*: To support the development of the sports industry, the government provides policy directions, public funding, a regulatory framework, adequate infrastructure, and various opportunities for athletes to compete at the national and international level (Gharehkhani and Mohammadi Moghani, 2022). Their main aim is to establish core ministries, sports councils, and other regulatory bodies that help to organize national and international competitions and events. Moreover,

they promote sports as a tool for social development, create inclusive opportunities for people, and foster a strong national sports culture (Arman, 2022).

- *Sports Bodies & Associations*: These associations regulate specific sports bodies and their development programs. Their main aim is to coordinate with national teams and ensure their compliance with international standards (Simons and Bird, 2023). In addition, sports bodies and associations play a key role in developing talent by organizing training programs, coaching certifications, and grassroots development initiatives. They work closely with governments, sponsors, and educational institutions to support athlete development and improve the overall quality of sports participation and performance (Castellanos Dolk *et al.*, 2025).
- *End-user Organizations*: Various institutions, including schools, universities, and sports academies, that help the key platforms identify talent and support athlete development. At the initial level, their role is crucially important as they implement the training programs, organize competitions among schools, colleges, universities, and academies, which help to foster talent. Through their continuous effort, they are significantly contributing to the growth of sports and development.
- *Event Owners / Organizers*: These are the people responsible for planning, managing, and delivering sporting events at the domestic and international levels. They look over various aspects, including event management, selection of an appropriate venue, scheduling and arrangement of logistics, arrangement of sponsorships, and strategizing audience engagement (Bondar *et al.*, 2025). They focus on efficient and safe sporting events in accordance with global standards. Their strategic planning provides a platform for athletes to showcase their skills and generate economic benefits for the industry (Tsekouropoulos *et al.*, 2022).
- *NGOs & Community Organizations*: Through development programs and community engagement, these organizations focus on youth empowerment, social inclusion, and health promotion through sports. NGOs and community organizations use sports as a tool for social development by addressing issues such as youth empowerment, education, gender equality, and community connections (Giliomee, 2019). They often collaborate with educational institutions, local governments, and sports associations to create programs that promote leadership skills, teamwork, and positive behavioural change among participants. Furthermore, these organizations help to bridge the gap between policies and practices by implementing sports initiatives directly within communities. Based on advocacy, volunteer engagement, and partnerships with public and private stakeholders, NGOs and community organizations help to contribute to the sustainable development of sports and promote a culture of active and healthy lifestyles (Green, 2009).
- *Citizens / Fans*: The primary audience for any sports is based on their engagement, which is based on attendance, viewership, and community participation, sustaining the popularity and economic viability of sports activities (Tamir, 2022). Fans also contribute to the social and cultural significance of sports by fostering community identity, national pride, and collective experiences (Kolyperas and Sparks, 2025). Through their support and engagement, citizens and fans influence the popularity, financial viability, and long-term success of sporting activities (Varmus *et al.*, 2023).

Processes & Enablers

Processes & Enablers represent the organism stage of the framework, where drivers of the sports ecosystem are translated into the operations and sustainable sports development activities. This stage comprises three components: Policy & Governance, Infrastructure and Event Delivery.

Policy & Governance

The Policy & Governance aspect is based on the following elements:

- *Bids & Procurement*: The process for selecting host cities, partners, and suppliers for sports events. Their role is to ensure fairness, accountability, and the efficient allocation of resources. It includes different cities or countries who proposes their plans by showing up their capabilities and required infrastructure to host the event (Gamper *et al.*, 2025). Whereas procurement focuses on the arrangement of sports goods, services, and other required contracts to execute the event (Setiawan *et al.*, 2022).
- *Legacy Charters*: To ensure long-term benefits for sports communities, they design strategic commitments that focus on sustainable infrastructure use and community development. A key component of the legacy charter is sustainable infrastructure, including stadiums, coaching centers, training facilities, and physical and rehabilitation services for athletes, which encourage healthy lifestyles. Overall, it provides a transformative roadmap for sports events in the long run, ensuring sustainable benefits and appropriate long-term environmental goals.

Infrastructure

The second key component at this stage is the 'Infrastructure', which refers to the physical and operational facilities required for undertaking sports activities, including:

- *Venues, Land & Data:* Venues are the physical places where the sports events take place, including stadiums, sports arenas, and training and coaching centers. A proper venue assures the provision of high-quality services, which include designs, construction, safety and security measures to support athlete performance. Venues play a distinctive role in a successful event as it provides memorable experiences to the visitors (Bradbury, Coates and Humphreys, 2023). The proper allocation of physical area that is required for sports facilities and event zones. Land data involves collecting and managing information on land use for sports events and related activities, as well as the ownership, zoning, and environmental conditions for sports infrastructure development. Proper land data is required for planning venues, ensuring compliance with legal and international standards, minimizing environmental impact, and optimizing the use of available space (Li and Guo, 2024).
- *Transportation & Logistics*: Providing appropriate transportation for athletes at both domestic and international sporting events is termed transportation in sports (Pott *et al.*, 2024). It ensures the smooth movement of athletes, management, officials, the required tools for sporting events, and the audience. It extends beyond transport to include traffic planning and management, as well as supply

chain coordination and execution in accordance with the schedules. The timely execution of appropriate logistics maximizes the event's sustainable impact (Herold *et al.*, 2022).

- *Sports Goods & Supplies*: Sports goods and supplies include all equipment, materials, and resources required for training and competition, such as uniforms, gear, medical supplies, and technological tools. Highlighting one of the key sports goods manufacturers, Pakistan holds a strong reputation for producing high-quality sports equipment (Shahzad, Aslam and Javaid, 2023). The city of Sialkot serves as a global hub for sports goods and supplies, exporting to major international events such as the FIFA World Cup and the Olympics. The quality and cost-effectiveness position the company as a niche player in the Pakistani market, generating substantial opportunities in the long run (Jain, 2025).
- *Housing & Accessibility*: It includes accommodation facilities for athletes, officials, and visitors to ensure their comfort and convenience for all stakeholders. Giving the best example for housing and accessibility, Qatar FIFA World Cup 2022 created a fan village with temporary accommodation sites as the hotel capacity was limited. As 1.2 million visitors were expected in the event and they only had 30,000 rooms available, these unique tents and cabin rooms serve a novel concept as it is accessible, affordable, and sustainable for travellers (Berry, 2022).

Event Delivery

The third component of this stage is 'Event Delivery', which focuses on the effective organization and execution of sports events, as well as the coordination of volunteers and sports staff. It includes:

- *Operations:* Their main aim is to plan and manage event schedules and coordinate with on-site management. They ensure the smooth execution of events. At the event level, sports operations focus on delivering seamless experiences for participants, spectators, and media by coordinating ticketing, crowd management, security, and technology systems such as scoreboards and live broadcasting (Piekarz, 2020). In professional sports organizations, operations encompass performance monitoring, athlete welfare, sponsorship activation, and stakeholder communication to optimize both sporting and business outcomes (Schwarz, Hall and Shibli, 2015).
- *Volunteers & Support Staff:* Trained individuals who assist athletes and management in enhancing operational efficiency. Volunteers and support staff are essential to the sports ecosystem, supplying the human resources needed to run events, programs, and organizations efficiently (Dallmeyer, Breuer and Feiler, 2024). Volunteers often assist with tasks such as registration, ticketing, crowd management, guiding spectators, and supporting athletes during competitions. They help create a welcoming environment, enhance fan experiences, and ensure the smooth execution of events without significantly increasing operational costs (Teixeira *et al.*, 2024).
- *Safety & Inclusion:* To provide a safe environment for athletes, staff, and management, these individuals are available in cases of emergency planning, crowd management, and working with diverse communities. Inclusion, on the other hand, aims at providing equal opportunities to all persons regardless of gender, age, ability, socio-economic background, or cultural identity to participate

in sports. This includes providing facilities to persons with disabilities, promoting women's and youth participation in sports, and promoting diversity and anti-discrimination. Inclusive practices promote a sense of belonging, community engagement, social cohesion through sports, etc. (Martínková, 2023). Safety and inclusion provide a conducive environment where one can perform confidently, enjoy one's sporting experience, and benefit from the social, physical, and mental benefits associated with sports

Contextual Factors

Unlike the moderating factors, the contextual factors represent the structural environment in the sport policies. It helps influence the sports ecosystem and enables sports stakeholders to engage in sustainable sports development. The following are the key contextual factors:

- *Governance & Security:* Good governance and security are essential to ensuring that sports events are not only successful but also safe and enjoyable for participants and spectators. They help to prevent problems and aim to provide a guarantee that the country hosting the event looks good to the rest of the world (Hums *et al.*, 2023b). Governance encompasses more than logistics; it also encompasses openness, accountability, and moral leadership within the sports organization. There is a very low chance of disruptions occurring when a host country demonstrates a strong commitment to security. Such actions, in turn, help preserve the nation's reputation on the international stage (Muñoz *et al.*, 2023). Ensuring the safety of athletes, spectators, and dignitaries is an unavoidable requirement for hosting international competitions amid increased worldwide risks. In addition, efficient governance provides a surety that resources are not mismanaged, which helps to promote trust among the public and investors (Blanco, 2017).
- *Marketing, IP & Broadcasting Rights:* It focuses on the commercial and marketing aspects of sports and events. In today's ecosystem, intellectual property (IP) and broadcasting rights are essential to financial sustainability. Effective marketing strategies can allow sports platforms to further expand their worldwide reach as well as strengthen their brand presence (Buraimo, 2006). By securing trademarks, logos, and media rights, organizations can bring in the money that is needed to improve infrastructure and support local development. Along with strong values, making money from sports helps leagues go pro and gives athletes the stage they need to keep their careers going. (Smith *et al.*, 2024).
- *Digital Platforms & Connectivity:* In modern sports, digital connectivity and online streaming play a big role in gaining better fan engagement. Organizations that provide such facilities enhance real-time audience interaction and support data-driven decision-making in sports management (Mehra *et al.*, 2025). The experience of the spectator has changed a lot as a result of a shift from traditional media to digital "anywhere, anytime" access. Digital tools allow personalized marketing, more accurate fan analytics, and the inclusion of distant viewers who might never visit a stadium in person. This connectivity allows us to connect the actual events to a global fan base (Antunovic and Bien-Aimé, 2025).
- *Human Rights Norms:* To promote fairness, equality, dignity, and ethical standards, Human rights norms emphasize issues such as gender equality, non-

discrimination, rights for athletes and laborers, and improved initiatives for sports development aligned with global standards (Schwab, 2019). Such standards help ensure that sports development aligns with international humanitarian standards by prohibiting the exploitation of workers during infrastructure construction and by ensuring equal compensation and opportunities for all participants. By adhering to such standards, the sports sector promotes social justice and ensures that the "sustainable" aspect of development encompasses the preservation of human dignity. This ethical framework also helps the sports industry secure its "social license" to conduct business worldwide (Tak, Kim and Rhind, 2025).

Control Factors

These refer to conditions that may influence or moderate the effectiveness of the relationship within the proposed framework. These components are not the primary drivers of the ecosystem, but they could help in shaping better sports development initiatives. It includes:

- *Legal & Regulatory Compliance*: The subject matter deals with compliance with national and international laws, regulations, and standard operating protocols applicable to sports activities. This ensures transparency, ethical behavior, and accountability in the conduct of each sports activity (Kim *et al.*, 2025). In modern sports, this area has implications for athlete contract law, anti-doping regulations, and data protection provisions for athletes and spectators. Such stringent legal provisions prevent financial misconduct and corruption, which may undermine the development of infrastructure projects (Jonson and Thorpe, 2019). In a sports environment with a sound rule of law, there are greater prospects for attracting significant corporate sponsorships and partnerships, as investors feel secure in their investments. Moreover, working with international sports bodies like FIFA or IOC ensures support for local sports and maintains access to compete in international sports events (Kamenecka-Usova *et al.*, 2025).
- *Political Considerations*: These include government priorities, political leadership, and stability, which all aid in planning and developing sports sectors. A stronger political commitment could lead to better funding allocation, policy formulation, and coordination of activities with related institutions. Besides funding, political stability offers the guarantee of "Legacy" projects that may take several decades to come of age. Sport can be utilized as a tool for "Soft Power" and diplomacy in cases where there is priority in the political agenda, thus offering opportunities for international collaborations and trade. On the other hand, political unpredictability can lead to abandonment of facilities or redirection of funds, thus making it a critical factor in the sustainability of sports initiatives beyond a single election cycle (Houlihan, 2007).
- *Social Acceptability & Response*: For the success of a sports event or project, public perception and community acceptance are very important. Positive social response helps to encourage community participation, volunteer engagement, and broader support for sports development initiatives (Seippel *et al.*, 2018). The factor examines the "social license" granted by the local people. The success of the project may not do well if a community sees a new stadium as a "white elephant" that uproots locals or makes use of tax money without providing any benefits. However, the community becomes a stakeholder in the success of

initiatives created with social inclusivity in mind, such as accessible recreation and local employment (Owiti and Hauw, 2025). This is required in building a thriving sports culture where people take pride in their teams at both national and community levels.

- *Environmental Conditions*: Factors such as geographic, climatic, and ecological sensitivities can have a major influence on project and event planning. It also focuses on minimal ecological disruption, which promotes sustainable management of environmental conditions. Environmental factors have evolved from mere logistical issues to key strategic limitations as climate change is now effecting the schedules worldwide (Dastbarhagh *et al.*, 2023). For example, cutting-edge stadium cooling technologies and flexible scheduling are needed in order to protect the athlete's health and spectators' safety during periods of extreme heat or unpredictable weather. Moreover, the ecological footprint of sports is now used as a criterion for measuring its sustainability. Besides abiding by international ecological standards, programs that highlight waste management and space development help in enhancing the image of the organization as socially responsible and progressive (Atalay and Demir, 2024).

Outcomes & Impacts

This block serves as the ultimate result stage in the framework, involving Economic, Social Environment, and sectoral outcomes. These responses demonstrate how the drivers and enabling processes will translate into sustainable benefits for various stakeholder groups and communities.

Economic Outcomes

These serve as one of the four outcomes at this stage and can occur in the following forms:

- *Employment Creation:* A large number of job opportunities are created as a result of major sporting events and the construction of long-term infrastructure (Raharja *et al.*, 2021). These include positions in hospitality, security, maintenance, sports medicine, and high-level management. In addition to temporary event-based Labor, A flourishing sports industry also supports a permanent workforce in coaching, media, and retail (sporting goods).
- *Visitors' Arrival & Spending:* Visitors from domestic and international markets contribute to the host country's local economy through spending on local food, accommodations, transportation, and entertainment.
- *Tourism & Recreation*: One of the travel industry's fastest-growing segments is sports tourism. High-end tourists are drawn to international events, and their "ancillary spending" on lodging, transportation, and local cuisine boosts the local economy (Mirzaie, Salimi and Rahimi Sarshabadrani, 2022). The most frequently revitalized areas by this capital inflow are Urban areas, which also promote regional cultural heritage to a worldwide audience (Karimi and Honarvar, 2018).
- *Contracts for Local Firms*: stadium construction and league operations logistics offer a range of profitable opportunities for small- and medium-sized businesses (SMEs). Sports initiatives aim to ensure wealth stays in the community by

emphasizing local procurement, which promotes a secondary economy of suppliers and service providers (Van den Hurk and Verhoest, 2017).

- *International Trade & Foreign Direct Investment (FDI):* A strong athletic reputation serves as a nation's "calling card". Global exposure through broadcasting rights can help attract foreign investors to both the sports teams and the country's overall economy, signalling a stable, thriving business climate (Lertwachara, Tongurai and Boonchoo, 2021).

Social Outcomes

The Social Outcomes serve as the second component of the Response stage (Outcomes & Impacts stage). The social response in the sports development context is measured in terms of the ability to improve the quality of life and foster a sense of belongingness among diverse populations. It includes Cohesion & Inclusion and National Pride and Identity.

- *Cohesion & Inclusion:* Beyond racial, religious, and socioeconomic divides, sports serve as a universal language. Programs for underrepresented groups or "sports for all" campaigns help foster integration, which in turn reduces social isolation (Kwon, 2024). For decades, Sports have been used to foster peace and reconciliation in divided or post-conflict societies (Moustakas and Robrade, 2023).
- *National Pride & Identity:* Gaining success on the international stage, such as earning an Olympic medal or hosting a World Cup, provides a collective sense of achievement (Mutz and Gerke, 2024). This "feel-good factor" helps to boost national morale. This, in turn, strengthens the emotional bond between citizens and their country, often leading to increased civic engagement (Kurniawan *et al.*, 2025).

Environmental Outcomes

The third component of this stage is Environmental Outcomes. Modern sports development must account for its ecological footprint. It should guarantee that the response to sports stimuli is planet-friendly and not detrimental to the environment.

- *Greenspace Development:* The increasing need for outdoor arenas and training grounds frequently leads to the establishment of urban parks and "green belts". These areas provide both professional facilities for athletes and vital "lungs" for cities, helping improve air quality and offering the public recreational areas (Hu, Chen and Li, 2023).
- *Ecological Improvement & Sustainability:* Prominent sports organizations are currently implementing the concepts of the circular economy. This mainly consists of water-recycling systems, solar-powered venues, and stadiums with zero waste. By establishing such guidelines, the sports sector serves as a prominent test bed for environmentally friendly technologies that other industries may use (Henriksen *et al.*, 2024).
- *Environmental Awareness:* Sports events and icons are effective venues for environmental advocacy because of their large audiences. Campaigns that advocate for climate action or ocean health during international broadcasts can

shift public opinion on a scale that traditional policymaking often cannot (Li and An, 2025).

Sectoral Outcomes

- *Safe Sporting Events*: The effective planning in terms of safe and secure sporting events for athletes, spectators and the general public is important. It includes major initiatives like safety drills, emergency preparedness, risk assessments, and medical support, including compliance with safety standards (Mabagala, 2025).
- *Sporting Capability:* It refers to the extent to which high-quality events and programs can be organized. It involves the availability of skilled human resources, effective sport governance policies, proper infrastructure, and adequate financial resources. These aspects collectively help develop better sporting capabilities, including the active participation of the athletes in sports activities (Fried and Kastel, 2026).
- *Partnerships & Alliances*: A collaboration and active cooperation between the key stakeholders (such as sport development authorities, athlete associations, academic institutions, end-user organizations, sports communities, etc.) is important when it comes to arranging sponsorships for organizing mega sport events and consequently promoting tourism, creating new employment opportunities, and achieving sustainable socio-economic growth (Lindsey and Brown, 2025).

Implications & Contribution

Implications for Theory & Research

The proposed Sustainable Sports Development Framework offers several theoretical contributions to the scholarly literature on sports development, management, sustainability and related domains.

- First, it extends the theoretical applications of the SOR model beyond its typical understanding related to psychology and consumer behavior. This model conceptualizes sports management alongside SOR to explain complex situations rather than general management systems and their outputs. This model broadens the scope of the SOR model and its position in the literature by incorporating sectoral dynamics.
- Second, by integrating the Triple Bottom Line (TBL) idea into sports development, this research provides sustainable support for the industry and its activities. Specifically, it reconceptualizes TBL dimensions, economic, social, and environmental, not merely as results but as interdependent and simultaneous outcomes generated through the interaction of drivers and institutional processes within the sports sector. In addition, the inclusion of a sectoral (sports-specific) dimension extends the traditional TBL framework by capturing internal development outcomes such as sporting capability, institutional strengthening, safe event delivery, and strategic partnerships.
- Third, the mediating and moderating factors that reflect sports management are incorporated with contextual and control factors through this model. These

additions can enhance the explanatory power of the model and could help industries for better practical implications.

Implications for Policy & Practice

Sports Goods Manufacturers & Service Providers

The proposed framework provides various important implications for sports goods manufacturers and service providers in sports.

- Firstly**,** highlighting the importance of technology in sports, manufacturers are encouraged to invest in this field to develop smart equipment, wearable technologies, and performance-enhancing materials. Service providers can enhance performance by adopting digital tools, data analysis, and automated systems.
- Secondly, for sustainable sports management, this framework provides a significant urban and regional planning idea for manufacturers and service providers. Proper strategic alignment with urban development plans can help firms project long-term ideas.
- Thirdly, this model highlights business growth opportunities arising from the expansion of the sports sector. Increased investments in sports events, infrastructure, and community programs generate demand for sports goods, services, and support systems. Various collaborations between the public and private sectors can also generate demand for goods, services, and their supporting systems.

Implications for Sports Development Govt Departments & Ministries

The importance of government and sports ministry alliance signifies in every economy. Their strategic development, planning, and sustainable policies are extensively required with appropriate implementations.

- Firstly, this model provides evidence-based implications to the government and ministries through which they can plan appropriate policies for private associations, stakeholders, investors and other related departments.
- Secondly, for better infrastructure and sustainable planning, the government must collaborate with local authorities, ministries and sports facilitators to develop sustainable ideas which could lead to transformation within the sports sector.
- Thirdly, the inclusion of contextual and control factors in the model suggests that governments must ensure a stable and supportive environment for sports development. This includes maintaining political stability, ensuring legal compliance, upholding human rights standards, and providing adequate security for sporting events

Implications for Sports Promotion Clubs, Associations and NGOs of Pakistan

The practical implications for sports promotion clubs, associations, and NGOs can drive the sports department towards sustainable outcomes.

- Firstly, institutional collaborations with government bodies can provide them with an extra edge to perform more at a greater scale. Such collaborations could help them generate more funds, build better infrastructure, advance technology, and develop technical expertise.
- Secondly, these organizations should invest in training coaches, administrative personnel, and other technical expertise to integrate sustainable growth as proposed in the model.

Implications for Print, Electronic & Social Media Industry

As discussed in the literature review, the media industry and sport are closely linked, with media serving as a bridge between athletes and fans. The model proposes various implications for the media industry.

- Firstly, the media industry needs to develop international collaborations to expand viewership for local sports. This would help fans enjoy sports globally and also help athletes build their global presence.
- Secondly, given the growing focus on social media, the media industry needs a stronger presence across these channels.
- Thirdly, collaboration with industries indirectly tied to sports could also help the media industry gain viewership. Creating documentaries for sports tool manufacturers, athletes' health management stakeholders, and similar personnel could open new horizons for the media industry.

Implications for Federal & Provincial HECs & HEIs of Pakistan

- A proper strategic alignment of sports-related studies, degree programs, sports technology, and training from foreign sports faculty needs to be incorporated by higher education institutions. It will help academia to strengthen the field of sports to achieve better outcomes.
- HEC and HEIs should promote integration of sports with fields such as business, health sciences, engineering, and data analytics. This approach enhances innovation and prepares students for diverse roles within the sports ecosystem. For example, departments such as physical therapy and rehabilitation, nutrition and dietetics, exercise science, and psychology should be integrated with sports programs to improve outcomes.
- Institutions should focus on practical skill building through coaching certifications, event management training, and sports analytics. Developing industry-relevant competencies will enhance graduates' employability and professional readiness. Moreover, international workshops, training facilities, and events should be made available to young athletes through educational institutions.
- Universities should encourage research in areas such as sports policy, sustainability, performance science, and sports economics. This will contribute to evidence-based decision-making and the advancement of the sports sector. HEC must direct higher education institutions to educate their students and faculty members about sports and fitness. Universities should encourage their faculty members to pursue research related to sports management.

- HEIs should provide hands-on learning opportunities through internships, field projects, and collaboration with sports organizations and events. This exposure bridges the gap between theoretical knowledge and real-world application.

Higher education institutions should align sports programs with sustainability objectives by promoting health, inclusion, environmental awareness, and community development. This positions sports as a tool for achieving broader national and global development goals.

Implications for SDGs

SDG 13 (Climate Action)

The integration of eco-friendly sports infrastructure, sustainable operations, and management practices should be considered, as the model explains. Green stadiums, energy-efficient facilities, waste management systems, and eco-friendly event planning reduce the environmental footprint of sports activities. Additionally, sports organizations can raise awareness about climate change and promote environmentally responsible behavior among fans and communities.

SDG 9 (Industry, Innovation, and Infrastructure)

As discussed above in the literature, the latest technological sports tools, gadgets, and electronic devices need to be incorporated in sports to maintain sustainable standards, which could benefit athletes, sports management systems, and their operations.

SDG 3 (Good Health and Well-being)

Sports play a critical role in promoting physical and mental health by encouraging active lifestyles and reducing the prevalence of non-communicable diseases such as obesity, diabetes, and cardiovascular conditions. Organized sports programs, community-level participation, and university sports initiatives improve overall well-being, reduce stress, and enhance psychological resilience.

SDG 5 (Gender Equality)

Proper sports facilities should be provided for both men and women. Sports policies and programs aimed at promoting inclusivity are meant to break stereotypes in society, empower women, and increase confidence and leadership skills. Increased recognition of female players and investment in women's sports can lead to a decline in gender inequalities and promote gender equality in the sports industry.

SDG 8 (Decent Work and Economic Growth)

The sports industry plays an important role in the development of the economy by creating employment opportunities in various fields such as sports coaching, event management, sports medicine, manufacturing, and media. The sports industry also boosts tourism and increases consumer spending during major sporting events.

Limitations & Future Directions

This research presents a novel framework for sports sector development, yet it holds several limitations that need to be addressed by future researchers.

- First, the proposed framework is conceptual in nature and presented based on an extensive literature review. Future researchers should test the model empirically, both qualitatively and quantitatively. They can develop and refine measurement scales for each dimension discussed in this framework. By operationalizing these dimensions, their relative importance could be enhanced across different sports systems. The empirical testing of this model would establish its reliability and validity for practical applications.
- Second, the framework is based on two theories, i.e., SOR and TBL, which provide a constructive theoretical foundation in the field of sports management. Future researchers should examine the relationships between the elements of the drivers, enablers, and outcomes stage by utilizing quantitative techniques such as PLS-SEM.
- Third, the generalizability of this research might be questioned, as it primarily supports the Pakistani market context or related developing nations. Future researchers could focus on global perspectives, including developed and underdeveloped nations, and highlight their importance. This will also open the door for researchers interested in comparative studies of sports economies.
- Fourth, multidimensional studies can be conducted in the field of sports management, incorporating various economies, comparative analysis with other industries, and sectoral outcomes. Such studies will provide researchers with a broad area to dive into the practices.
- Fifth, the model already incorporates contextual and controlling factors based on the provided literature, yet they haven't been empirically tested. Future researchers need to incorporate empirical tests for such moderating effects.
- Sixth, as described above, the proposed model highlights the broader aspects, focusing on the macro level of the sports ecosystem and limiting micro-level understanding, including behavioural and cultural aspects. Future researchers could incorporate these aspects as well to apply a micro-level understanding of athletes, visitors, and other management personnel.
- Seventh, the overall model proposed a broader perspective on sustainable sports management, but it might limit in-depth understanding of these components. For future research, it is suggested that researchers empirically test the model across different dimensions by initially focusing on specific components instead of considering the entire framework. This practice could help the researchers deepen their understanding and derive practical outcomes.
- Last, the model provides another important direction for qualitative studies, enabling researchers to examine and develop various policies, strategic planning, and guidelines for sports ministries.

Conclusion

This research presents a novel conceptual framework for understanding the importance of sustainable sports development, particularly for Pakistan and similar developing nations. Through the integration of two theories, SOR and TBL, the proposed framework

highlights the importance of ecosystem sports by interconnecting various components, including drivers, processes, enablers, and multidimensional outcomes. Along with these, controlling and contextual factors have also been discussed in light of the literature review, which acknowledges the complexity of the sports ecosystem and its importance. This research contributes to the literature by offering a systems-based perspective that addresses the fragmented approaches common in sports management research. It highlights the importance of aligning governance structures, infrastructure development, and event delivery mechanisms with sustainability objectives to achieve long-term value creation. Moreover, integrating sustainability dimensions underscores that sports development should not be evaluated solely on economic gains, it must also consider broader societal and environmental impacts. From a practical standpoint, the framework provides policymakers, government agencies, sports organizations, educational institutions and industry stakeholders with actionable insights to design and implement strategies that enhance the sustainability and effectiveness of sports initiatives. Future empirical studies are encouraged to validate and refine the suggested framework, thereby advancing both theory and practice of sports management in the days to come.

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Wrote the article/paper	Yes	Yes	Yes	No
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