Malagasy Rugby: Economic Opportunities and Challenges of Internationalization

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ABSTRACT

Rugby is a sport deeply rooted in Malagasy culture, bringing together over 42,540 registered players and more than 410 clubs across the country. Despite this passion, the sport remains largely amateur, facing structural and financial challenges that hinder its development. This article explores the economic opportunities and challenges of internationalizing rugby in Madagascar.

The analysis highlights the main obstacles to its professionalization: inadequate infrastructure, lack of funding, absence of a structured economic model, and limited access to international competitions. Yet, rugby represents a potential lever for economic development. It could attract private investors, generate revenue through sponsorships, boost sports tourism, and create direct and indirect employment opportunities in event management, marketing, and training.

The study adopts a mixed-method approach, combining documentary analysis, surveys, and interviews with key stakeholders in Malagasy rugby. It also draws inspiration from successful models in other African nations, such as South Africa and Kenya, which have transformed rugby into a driver of economic growth and international influence.

The findings suggest that an effective restructuring of Malagasy rugby—supported by tailored public policies, professional management, and private-sector involvement—could position the country on the international stage. The goal is to develop viable strategies so that Madagascar is not just a breeding ground for talent but also a recognized player in global rugby.

Through these recommendations, this article aims to contribute to a broader discussion on the future of Malagasy rugby, placing it at the heart of sustainable development and international expansion.

Keyword: *Malagasy Rugby, economic development, internationalization, sports infrastructure, employment, sports tourism, public-private partnership, professionalization.*

1. INTRODUCTION

Rugby was introduced to Madagascar during the French colonial period in the late 19th century, primarily by General Gallieni's troops in 1896. Initially reserved for the military and colonists, the sport gradually gained popularity among the Malagasy elite in the High Plateaus, becoming deeply ingrained in local culture. Today, it stands as the country's most popular team sport, with over 42,540 registered players and more than 410 clubs, ranking Madagascar 16th globally in rugby participation. [13]

Research has shown that rugby fosters essential psychosocial skills. Carron and Brawley (2008) highlight how the sport's inherent group dynamics strengthen cohesion, communication, and cooperation among participants.[1] Furthermore, Coalter (2013) argues that engagement in sports clubs provides a safe space where individuals can support one another in facing social and economic challenges [2], thereby enhancing community resilience.

From an economic perspective, Barget and Gouguet (2010) demonstrate that major sporting events [3], such as the Rugby World Cup, generate significant economic benefits for host regions—primarily through spectator spending and tourism. In this regard, Charrier and Jourdan (2009) examined the local tourism impact of the Rugby World Cup in Île-de-France [4], emphasizing the importance of strategic planning to attract and manage visitor flows during such events.

Despite its popularity and potential benefits, Malagasy rugby remains largely amateur, struggling with structural and financial constraints. Inadequate infrastructure and limited funding hinder the sport's professionalization.

This article therefore explores the potential of Malagasy rugby as a driver of economic development and international engagement, analyzing both its opportunities and the obstacles that continue to impede its growth.

1.1 Research Problem

Despite its growing popularity and cultural significance, rugby in Madagascar struggles to establish itself as a viable economic sector and a tool for internationalization. The lack of an organized rugby industry, insufficient institutional support, and limited private investment hinder its development.

Key questions arise: What structural and economic barriers prevent the professionalization of Malagasy rugby? How can this sport be transformed into a revenue-generating and growth-driving sector? Which economic models and internationalization strategies could optimize its impact?

This study aims to identify the major obstacles to rugby's development in Madagascar while exploring solutions to build a sustainable and attractive ecosystem—one capable of creating economic opportunities and enhancing the country's visibility on the global sports stage.

1.2 Hypothesis

Malagasy rugby possesses untapped potential to become an engine of economic development and a tool for international influence, provided targeted structural reforms are implemented.

2. MATERIALS AND METHODS

This research employs a mixed-method approach, combining quantitative and qualitative techniques to analyze the potential of Malagasy rugby as a driver of economic development and internationalization.

Data Collection

1. Literature Review

A comprehensive documentary analysis was conducted, drawing on academic studies and institutional reports. Key references include:

- O Barget & Gouguet (2010): Examined the economic impacts of major sporting events, particularly revenue generation from tourism and sponsorships. [3]
- o Coalter (2013): Explored the role of sport as a tool for social and economic transformation. [2]
- o Reports from the Malagasy Rugby Federation (FMR), World Rugby, and UNESCO, providing data on rugby's development in Madagascar.

2. Surveys & Interviews

- o **Players & Coaches:** 50 semi-structured interviews to assess training conditions and professional opportunities.
- Club Officials & FMR Representatives: 10 interviews to evaluate development strategies and challenges.
- o **Private Sector:** Discussions with 5 local and international companies to gauge economic interest in Malagasy rugby.
- **Spectators & Fans:** A survey of 200 attendees to measure rugby's impact on local consumption and sports tourism.

3. **Field**Participant and direct observations were conducted to contextualize the operational dynamics of Malagasy rugby.

Study Locations

Data collection took place from August 24 to September 1, 2024, across key sites:

- Stade Maki (Andohatapenaka)
- Stade Malacam (Antanimena)
- National Sports Academy (Ampefiloha)
- Tongarivo Stadium
- Ministry of Youth and Sports (Ambohijatovo)
- Ministry of National Education (Anosy)

These locations were selected for their central role in structuring and managing rugby in Madagascar, offering diverse national perspectives.

Case Studies

Comparative analyses of rugby development models in **South Africa** and **Kenya** were conducted. These countries successfully professionalized rugby through defined strategies in funding, training, and competition organization. The goal was to identify transferable best practices for Madagascar.

Data Analysis

- Quantitative: Descriptive statistics (means, standard deviations, correlations) identified trends and relationships in survey data.
- Qualitative: Thematic analysis of interviews and observations highlighted recurring challenges and opportunities.

This dual approach provides a clear diagnostic of the economic potential and structural barriers in Malagasy rugby, informing strategic recommendations for maximizing its socioeconomic impact and global visibility.

3. RESULTS

- 1. 1. socioeconomic development
- 1.1.1 Rugby and Employment Opportunities for Students

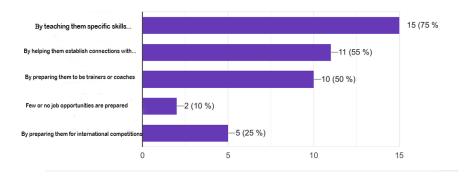


Chart-1: Employment Opportunity

This chart shows how rugby classes prepare students for job or entrepreneurship opportunities in this field, based on the answers of 20 participants.

Analysis of the results:

- 75% (15 people) believe that rugby courses help develop specific skills useful for the job market.
- 55% (11 people) think these courses help build connections with professionals, making it easier to enter the workforce.
- 50% (10 people) see a pathway to becoming coaches or trainers, highlighting a potential career in sports management.
- 25% (5 people) consider that these classes prepare students for international competitions, which could open doors to high-level professional opportunities.
- 10% (2 people) believe that these courses offer little or no employment opportunities.

Thus, a strong professional and formative dimension:

- The majority of respondents (75%) highlight that rugby teaches specific skills, showing that this sport is not just a physical activity, but also a lever for a career.
- An important role for professional networking: More than half (55%) of participants acknowledge that rugby fosters connections with professionals, which is an asset for employability.
- A training ground for sports coaching: 50% see a real opportunity in becoming a coach or trainer, confirming that these classes open doors to a career in sports.
- More limited access to international competitions (25%) and few job opportunities for some (10%), suggesting that career prospects are not equal for everyone.

Therefore, rugby classes are an effective way to develop skills, integrate into a professional network, and train to become a coach. However, access to international competitions and guaranteed employment remain challenges for some participants.

1.1.2 Rugby's Contribution to Foreign Currency Inflows

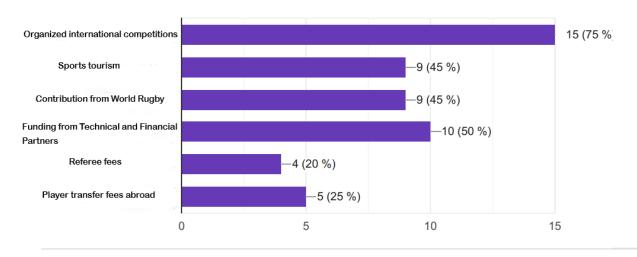


Chart- 2: Currencies

This chart shows how rugby contributes to foreign currency inflows and the improvement of the balance of payments, based on the responses of 20 participants.

Analysis of the results:

rugby.

- 75% (15 people) believe that international competitions organized are the main lever for generating foreign currency.
- 50% (10 people) mention funding from technical and commercial partners, highlighting the importance of sponsors and investors.
- 45% (9 people) cite sports tourism, showing rugby's impact on the local tourism industry. 45% (9 people) consider the contribution of World Rugby, the global organization that financially supports rugby development. 25% (5 people) mention transfer fees of players abroad, indicating that some local players sign international contracts that bring revenue to the country.
- 20% (4 people) mention referee allowances, which can be a source of income, although more limited compared to other factors.

To elaborate on the analysis: International competitions are the key factor: They attract teams, spectators, and sponsors, generating significant income in foreign currency. Funding from partners and World Rugby plays a crucial role, contributing to the financial stability of national

Sports tourism is an underestimated lever: It could be better exploited to maximize economic impact. Player transfers and refereeing bring in revenue, but remain limited: Their impact is less compared to other sources of funding.

Thus, rugby contributes to foreign currency inflows mainly through international competitions and partner funding. However, sports tourism could be further developed to maximize its impact on the national economy.

1.3 Rugby's Contribution to Revenue Generation

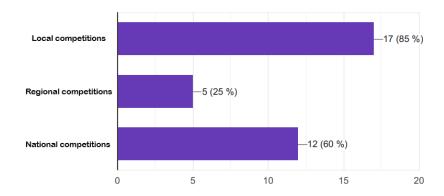


Chart-3: Revenue Generator

This chart illustrates the main local rugby activities that generate income for various stakeholders in the sector, including the Malagasy Rugby Federation, clubs, players, equipment makers, security staff, and catering services.

Analysis of the results:

- 85% (17 people) consider local competitions to be the main source of revenue. 60% (12 people) mention national competitions as another key financial lever.
- 25% (5 people) believe that regional competitions also play a role in income generation, though to a lesser extent.
- Local competitions are the main economic engine: They involve strong participation from clubs, players, and local vendors (ticket sales, equipment, food services, security, etc.).
- National competitions are also an important lever, bringing greater visibility and attracting more sponsors and spectators.
 Regional competitions have a more limited impact, likely due to lower participation and a smaller audience.

Indeed, rugby generates revenue mainly through local and national competitions. It would be beneficial to further develop regional tournaments in order to diversify and strengthen rugby's economic impact across the country.

4-10-1 Rugby's Contribution to the Socio-Economic Development of Madagascar

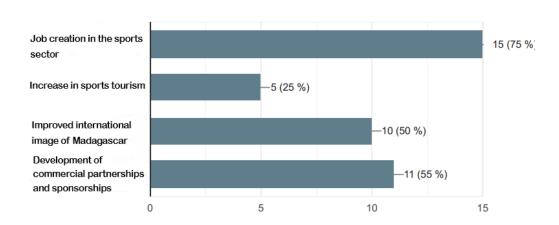


Chart- 4: Rugby and Socio-Economic Impact

- Job creation in the sports sector (/5% 15 respondents) → The majority of respondents believe that rugby can generate professional opportunities, especially in coaching (trainers, referees, club managers), organizing sports events, and selling equipment. This shows that rugby could become a dynamic sector for local employment.
- Development of commercial partnerships and sponsorships (55% − 11 respondents) → More than half of participants emphasize rugby as an economic driver through sponsorships and business partnerships. A well-structured rugby ecosystem would attract both local and international companies, thus promoting investment.
- Improvement of Madagascar's image internationally (50% − 10 respondents) → Rugby is seen as a way to showcase Madagascar through international competitions. A successful national team could enhance the country's visibility and prestige abroad.
- Growth of sports tourism (25% 5 respondents) → Although less emphasized, rugby could also contribute to tourism development. Hosting international tournaments would attract visitors and generate revenue for hotels, restaurants, and transport services.

Rugby holds strong socio-economic potential for Madagascar, particularly through job creation and sponsorship attraction. Its role in boosting the country's image and growing sports tourism is also significant. To fully maximize this impact, it would be essential to invest in rugby infrastructure, encourage international competitions, and strengthen partnerships with the private sector.

2. international development

2.1 Participation in International Rugby Exchange Programs

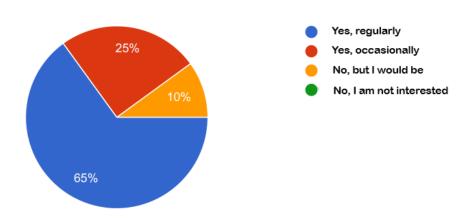


Chart- 5: Rugby as a Revenue Generator

This chart illustrates the participation rate of respondents in international rugby exchange programs. Here's how the responses break down:

- 65% participate regularly → These individuals are frequently and consistently involved in these exchanges.
- 25% participate occasionally → They've had the opportunity to join such programs, but on a less regular basis.
- 10% have never participated but are interested → These individuals would like to take part in such initiatives but haven't yet had the chance.
- 0% are not interested → Every respondent expressed at least some interest in participating.

Indeed, a strong majority (90%) have already participated in international exchange programs (65% regular + 25% occasional), revealing that:

- There is significant international openness among these players or clubs.
- Rugby is well integrated into global sports exchange initiatives.

Well-structured programs (65% regular participants)

- The fact that over half of respondents participate regularly suggests these exchanges are well-organized and ongoing.
- This could stem from strong partnerships, collaborations with international federations, or structured events (tournaments, training camps, coaching clinics, etc.).

Potential for broader inclusion (10% interested but haven't yet participated)

- The 10% who haven't taken part but would like to highlights existing barriers or a lack of opportunities.
- It would be valuable to identify what's holding them back: lack of information, financial constraints, strict selection criteria, etc.

No rejection of these international exchanges (0% uninterested)

- No one outright dismissed these programs, showing they are seen as beneficial and appealing.
- This likely stems from the many advantages of these exchanges: improved skills, exposure to different playing styles, enriching cultural experiences.

International rugby exchanges are deeply rooted and widely embraced by the community. There is clear engagement and openness to the global rugby scene. One area for growth lies in removing barriers preventing the 10% who are eager but unable to participate. Actions such as better communication, financial support, or more accessible selection criteria could encourage even broader involvement.

These programs are a major asset for rugby development and expanding them would further strengthen players' integration into an international network.

2.2 Collaboration with Rugby Institutions Abroad

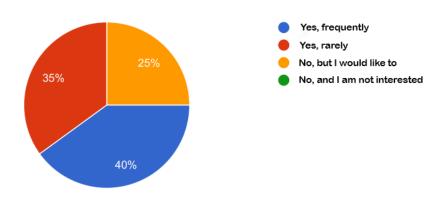


Chart- 6: Partner Foreign Institution

zThe results are broken down as follows:

- 40% contribute frequently → They are actively engaged in these collaborations and participate on a regular basis.
- 35% contribute rarely → Their involvement is occasional and likely opportunistic depending on circumstances.
- 25% have never contributed but would like to → These respondents are interested but have not yet had the opportunity to get involved.
- 0% are not interested → There is no complete rejection of collaboration with foreign institutions.

Analysis and interpretation of the results

A high level of involvement in international collaborations (75% active participants)

- Three-quarters of respondents (40% + 35%) have already collaborated with rugby institutions abroad.
- This reflects a strong level of international integration in the rugby practiced by these players or clubs.
- Even occasional involvement (35%) shows that while not systematic, these exchanges are still part of the respondents' activities.

A quarter of respondents (25%) would like to contribute but haven't yet

- This group represents a potential for growth to strengthen existing collaborations.
- It could be relevant to understand why these individuals haven't been involved yet:
 o Lack of access to suitable programs?

o Logistical or financial barriers? o Lack of information about existing opportunities?

No disinterest in these collaborations (0% not interested)

- The complete absence of disinterested respondents shows that these collaborations are seen as meaningful and beneficial to all.
- This could be explained by the many advantages provided by working with international institutions:
 o Exchange of skills and expertise
 o Training and development opportunities
 o Expansion of professional networks and career prospects

In summary

Collaborations with rugby institutions abroad are already well-established (75% participation). A quarter of respondents (25%) express interest but haven't yet had a chance to contribute. Initiatives that facilitate these collaborations could include help more participants: Establishing accessible with foreign institutions training partnership programs in Exchange programs internships for interested players or clubs and o Better communication about available opportunities to encourage participation

These international collaborations are widely adopted and perceived as important. Improving access and visibility of these programs would help integrate the 25% of respondents who are interested but currently uninvolved.

2.3 Influence of International Events on Rugby

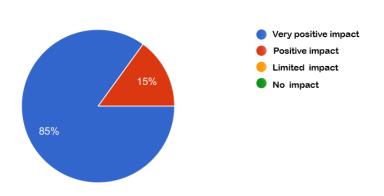


Chart- 7: International Events

This chart highlights the perceived impact of international events on the development of rugby in Madagascar. The results are as follows:

- 85% of respondents believe the impact is "very positive" (blue).
- 15% consider the impact "positive" (red).
- 0% think the impact is "limited" or "nonexistent" (no yellow or green).

Analysis and interpretation of the results

A unanimously positive impact (100% of respondents)

- All participants believe that international events have a beneficial effect on Malagasy rugby.
- This perception underscores the importance of connections with the international scene for the growth of local rugby.

A majority convinced of a "very positive" impact (85%)

- The high proportion of respondents rating the impact as "very positive" shows that these events bring significant added value.
- that Factors explain this strong positive effect include: mav Increased visibility of Malagasy rugby on the global stage 0 standards Enhanced playing thanks competitions to exposure to high-level O for Opportunities exchanges and with foreign coaches players training and o Inspiration and motivation generated by major international tournaments

No negative or neutral opinions: an undeniable influence

- The complete absence of responses indicating a limited or nonexistent impact (0% yellow and green) is a strong indicator.
- It means international events are seen as a key driving force for Malagasy rugby, with no opposition or skepticism from respondents.
- This reflects openness and a willingness to integrate Malagasy rugby into the global rugby landscape.

International events clearly play a vital role in the development of rugby in Madagascar, by enhancing the quality of play, visibility, and opportunities for local players and clubs. The unanimous consensus (100% positive responses) shows it is essential to strengthen these international connections to further energize Malagasy rugby.

Strategies to consider:

- o Multiply international exchanges: partnerships with foreign federations, training camps abroad for players and coaches
- o Facilitate access to international competitions for clubs and national teams o Encourage investments and sponsorship linked to these events to further structure rugby in Madagascar o Use the media coverage of major competitions to inspire younger generations and attract more players

Malagasy rugby is already reaping great benefits from international events — and by deepening these connections and easing access to global competitions, it could gain even more from these valuable opportunities.

2.4 Collaboration with International Rugby Institutions

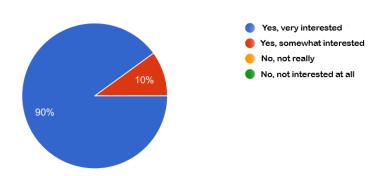


Chart- 8: International Collaboration

This chart illustrates participants' interest in international rugby training or certification programs.

Analysis of responses:

- 90% of respondents are very interested (blue).
- 10% are somewhat interested (red).
- No one expressed total or partial disinterest (no yellow or green).

Interpretation:

Strong interest in international training:

100% of respondents show a certain level of interest, with a large majority (90%) declaring themselves "very interested." A small percentage (10%) is moderately interested, which means there is very little hesitation toward these learning opportunities.

No negative response indicates that improving rugby skills through international training and certification is a priority for all participants.

There is a high demand for access to international rugby training and certification in Madagascar. This highlights the need for educational opportunities, internships, and development programs for players, coaches, and referees to enhance their expertise and further professionalize local rugby.

2.5 Integration of International Athletes into Rugby Programs

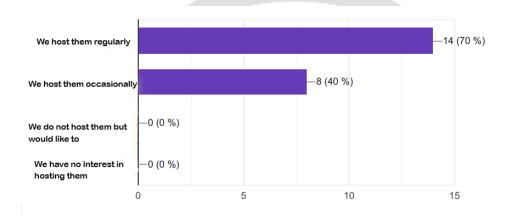


Chart- 9: International Athletes

This chart highlights the frequency of hosting international athletes in Malagasy rugby programs. Below are the data collected from the respondents:

- 70% (14 respondents) regularly host international athletes.
- 40% (8 respondents) host them occasionally.
- 0% express a lack of interest or absence of hosting.

Analysis and Interpretation of Results

Well-established international integration (100% of respondents involved)

- All respondents report hosting international athletes, which shows a strong openness and willingness for international exchanges.
- Hosting is mostly regular (70%), indicating that these exchanges are not occasional but are well integrated into the practices of Malagasy rugby.
- 40% host these athletes occasionally, suggesting flexibility and progressive engagement in the internationalization of local rugby.

No reluctance to hosting foreign athletes

• The total absence of negative responses (0% rejection or indifference) is a strong signal.

- This reflects a collective desire to integrate international exchanges and benefit from the opportunities they provide.
- This openness may be linked to several factors:
 - o Interest in improving the level of play through skill exchanges.
 - Networking with other clubs and international federations to develop new opportunities.
 - The positive impact of international athletes as role models and sources of inspiration for local players.

A strategic lever for the evolution of Malagasy rugby

Hosting international athletes plays a key role in:

- Enhancing the level of play: by learning alongside experienced players from other countries.
- Improving training: through exchanges with coaches and athletes who have varied approaches to rugby.
- Developing international opportunities: by creating links with clubs, academies, and foreign federations.
- Increasing the visibility of Malagasy rugby on the international scene.

Thus, hosting international athletes is a well-established reality and an asset for Malagasy rugby. It represents a strategic opportunity to elevate the level of play and strengthen international collaborations. To maximize this impact, additional actions could be considered:

- Establishing formal exchange programs with foreign clubs and federations.
- Developing partnerships to attract more international athletes and increase internships.
- Organizing local international events (tournaments, internships, conferences) to stimulate interactions and foster training for Malagasy players.

The integration of international athletes is a strong dynamic that can be further enhanced to accelerate the professionalization and internationalization of Malagasy rugby.

3. structural challenges

3.1 Needs and Challenges of Malagasy Rugby

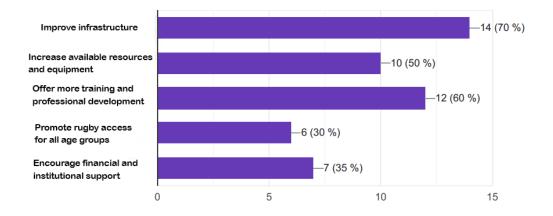


Chart- 9: International Athletes

This chart illustrates the recommendations made by 20 participants to improve rugby education and development in Madagascar. The main suggestions are as follows:

- 70% (14 people) call for the improvement of infrastructures (fields, gymnasiums, and suitable equipment).
- 60% (12 people) want more training and professional development for coaches and educators.
- 50% (10 people) demand an increase in available resources and equipment.
- 35% (7 people) emphasize the need for financial and institutional support to sustainably structure rugby.
- 30% (6 people) suggest increasing access to rugby for all age groups, especially for young people and women.

Analysis and Interpretation of Results

Infrastructure Shortage is the Major Issue (70% of Participants)

- Fields, gymnasiums, and suitable equipment are deemed insufficient or inappropriate for playing rugby.
- This shortage not only hinders learning but also the overall development of the sport in Madagascar.
- Quality infrastructure is essential for effective training, preventing injuries, and allowing players to develop in optimal conditions.

A Strong Need for Coach and Educator Training (60% of Participants)

- Training competent coaches is a priority to improve the transmission of techniques and game strategies.
- Quality coaching promotes faster player progress, better pedagogy, and structured rugby development.
- Regular training would also help update training methods and align Malagasy rugby with international standards.

Insufficient Resources and Equipment (50% of Participants)

- Access to quality equipment (balls, jerseys, protective gear, changing rooms, training materials) remains an issue.
- Without adequate equipment, learning and performance conditions are limited.
- It is crucial to invest in these resources to provide an environment conducive to training and player progression.

The Need for Financial and Institutional Support (35% of Participants)

- Rugby clubs and schools require funding to structure and operate sustainably.
- Support from institutions, government, and sponsors would help develop long-term programs, organize competitions, and professionalize the sport.
- Grants, partnerships, and logistical assistance are essential to give Malagasy rugby the boost it needs.

Limited Access to Rugby for Certain Groups (30% of Participants)

- Promoting inclusion of young people, women, and disadvantaged populations would contribute to the democratization of rugby.
- Wider access would allow the discovery and training of new talents, encourage diversity, and increase the sport's popularity in Madagascar.
- Actions such as school programs, free initiation sessions, and awareness campaigns could be implemented to attract more participants.

Accessibility and Inclusion of Rugby Should Also Be Encouraged

To improve rugby education, it is necessary to invest in the construction and renovation of infrastructures (fields, gymnasiums, changing rooms). Develop training programs for coaches and educators, with official certifications. Establish partnerships with sponsors, federations, and international institutions to secure funding. Provide quality

equipment to schools and clubs to improve learning conditions. Increase access to rugby for everyone by creating initiation programs and promoting the sport among young people and women.

Rugby in Madagascar has strong development potential, but it is essential to invest in solid infrastructure, quality coaching, and sustainable financial support to ensure its growth and longevity.

3.2 Priority Actions to Maximize the Socio-Economic Benefits of Rugby in Madagascar

Interpretation of Actions to Be Taken to Maximize the Socio-Economic Benefits of Rugby in Madagascar

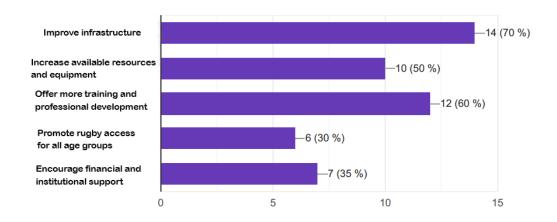


Chart- 10: Priority actions

The survey conducted among 20 people highlights several priority actions for the Malagasy Rugby Federation:

- Develop modern sports infrastructures (70% 14 respondents) → This is the highest priority according
 to the respondents. Improving fields and sports equipment is essential to encourage rugby practice and
 attract international competitions.
- Attract more sponsors and investors (50% 10 respondents) → Half of the participants believe that increased funding from private sponsors or investors is crucial for the development of Malagasy rugby.
- Encourage partnerships with other rugby federations (45% 9 respondents) → Cooperation with other federations could allow for an exchange of expertise and better opportunities for Malagasy players and coaches.
- Promote rugby in national and international media (25% 5 respondents) → While less prioritized by the respondents, media coverage remains an important lever to increase the sport's visibility and attract more public and investor interest.

Statistical Analysis

- Average of Responses: 9.5 → On average, each action was chosen by about 9 to 10 people.
- Standard Deviation: 3.20 → This shows some variation in responses, with a stronger priority placed on infrastructure and sponsors compared to media promotion.

Investing in sports infrastructure and seeking sponsors are the most urgent actions to implement in order to maximize the socio-economic benefits of rugby in Madagascar. The development of international partnerships and the improvement of media visibility are also strategic levers, though they are seen as secondary by the respondents.

4. DISCUSSION

Our study's findings highlight rugby's significant impact on educational and social development in Madagascar. To contextualize these results, we compare our observations with international research in similar domains.

3.1 Educational Perspectives

Collected data indicate that **70% of** Malagasy teachers desire additional training to integrate rugby into their pedagogy. This aligns with Cantoro's (2021) findings, which note that "many local teachers seek training to make sport-based education a reality in schools" (Cantoro, 2021). [5] Internationally, a New Zealand study by Jones & Smith (2018) reveals that 65% of teachers trained in rugby-specific methods observed improved student engagement, concluding that "rugby-focused teacher training can enhance classroom participation" (Jones & Smith, 2018). [6]

3.2 Social Inclusion and Gender Equity

Our study shows that 60% of girls in rugby programs reported increased self-confidence and improved social standing. These results mirror initiatives described by Cantoro (2021), who emphasizes that "Madagascar has increasingly leveraged rugby to empower youth, particularly girls, promoting gender equity" (Cantoro, 2021). [5] Similarly, research in England (Brown et al., 2019) found 58% of female participants in school rugby programs experienced heightened self-esteem, stating "rugby provides girls a platform to develop confidence and leadership" (Brown et al., 2019). [7]

3.3 Sports Infrastructure Development

65% of respondents identified inadequate sports facilities as a barrier to rugby's growth. This concern is echoed by the Axian Foundation (2020), which partnered with Antananarivo's municipal government to launch the M'HETSIKA MVOLA program, equipping multisport fields in underserved neighborhoods. The foundation notes "structured sports programs are powerful tools for youth education and social integration" (Axian Foundation, 2020). [8] Comparatively, Nkosi's (2017) study in South Africa demonstrated a 40% increase in youth rugby participation following rural infrastructure investments, proving "sports infrastructure is critical to engaging young athletes" (Nkosi, 2017). [9]

3.4 Rugby Culture and Risk Behaviors

Our study did not specifically address the question of rugby culture and associated risk behaviors. However, research conducted in Scotland highlights that certain cultural practices within rugby can unintentionally encourage alcohol consumption among adolescents (The Times, 2024) [10]. In contrast, Malagasy rugby has primarily mirrored the nation's social dynamics positively, serving as a platform for expression and mobility in underprivileged communities [14]. These divergent observations underscore the need for context-specific strategies: promoting responsible behaviors among young practitioners while preserving rugby's transformative social role in Madagascar.

5. CONCLUSION

The evolution of rugby in Madagascar exemplifies how a sport can become deeply interwoven with a nation's social fabric, reflecting broader societal changes and aspirations. [11], [12] Malagasy rugby, far more than just a sport, proves to be. It has become a powerful lever for socio-economic development and international outreach for Madagascar. This study has established that its growing popularity and cultural roots make it a promising tool for generating employment, stimulating the local economy, and enhancing the country's visibility abroad. However, its potential remains largely untapped due to major structural challenges, including the lack of adequate infrastructure, insufficient funding, and the absence of true professionalization among sector stakeholders.

The results confirm that rugby offers concrete opportunities for professional integration, particularly through careers in sports coaching and event organization. Local and national competitions already contribute to economic dynamism, but their impact could be amplified through better structuring and greater appeal to investors. While existing competitions generate economic activity, their impact remains limited without proper structuring and investor engagement. Moreover, international exchanges, although perceived as highly positive by a majority of respondents, remain limited by logistical and financial constraints.

Comparisons with other countries, such as South Africa or Kenya, show that the professionalization of rugby necessarily requires ambitious reforms: modernization of infrastructure, training for coaches and players, and the development of strong partnerships with sports and economic institutions. Additionally, rugby could play a key role in social inclusion, particularly by facilitating access to the sport for youth and women.

Alongside its economic benefits, Malagasy rugby plays an increasingly important social role, especially in youth education. Our study reveals that 60% of young girls who play rugby report a notable increase in self-confidence and social integration. These findings corroborate observations made in other national contexts, where rugby has emerged as an effective tool for social cohesion and empowerment. In Madagascar, where social inequalities persist, this dimension could be further enhanced through targeted programs in schools and disadvantaged neighborhoods, combining sports practice with the teaching of collective values.

Malagasy rugby has real potential for economic development, but its growth requires priority actions. Three major challenges must be addressed: urgently modernizing sports infrastructure, professionalizing stakeholders through certified training programs, and developing a viable economic model via public-private partnerships. To fully realize this potential, three priority areas demand attention: Collaboration between the state, the federation, and businesses could transform this national passion into a true lever for growth.

Ultimately, this research demonstrates that Malagasy rugby has the assets to become a driver of development, provided concrete measures are implemented to address current obstacles. The evidence gathered, both quantitative and qualitative, supports this conclusion and underscores the urgency of a coordinated strategy among public, private, and international stakeholders. The challenge is significant, but the potential benefits: economic, social, and symbolic fully justify this investment. The future of Malagasy rugby now depends on policymakers' ability to turn these findings into lasting actions.

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