Strategy for Winning Medals at Elite Competitions in Athletics for Sri Lanka

Shemal Fernando

Sri Lanka Navy Headquarters, Colombo 1, Sri Lanka
shemal@email.com

Abstract— *This paper is a critical evaluation concerning numerous aspects of elite level athletics in Sri Lanka. It is focused on identifying a strategy for the development of athletics by adapting the existing systems that have led other nations to win medals. The literature shows that this subject is a global sporting arms race, where a country has to do something remarkably special to yield success. In this paper, the SPLISS Model which is a conceptual framework that can be used for comparison of elite sports policies will be presented. The nine 'pillars' of the model determine the gaps in scientific research on the relationship between elite sport policies and international sporting success. The method for data collection was qualitative interviews and the questions were highly structured to serve for a deeper exploration of the underlying issues behind the phenomenon. The data has been synthesized to provide an easy understandable analysis and displayed in the form of SWOT, to reflect and include a comparison within and in between interviews and combine separate descriptions to formulate a coherent interpretation. Sri Lanka could consider Asian Games Medals as the measure of success. A Sri Lankan version of the Long Term Athlete Development Model of Canada which is designed and developed combining the best research findings of latest sports science and best practices from around the world is recommended for all schools and universities in Sri Lanka, in order to produce athletes who reach their full potential. One of the possible means to achieve short-term success is through 'cross sport' talent identification and development. In the face of remarkable human resources and infrastructure facilities, if Sri Lanka properly concentrates on all pillars of the SPLISS Model, the country could certainly count on winning medals at elite competitions in the most important sport of athletics.*

Keywords — Athletics, Elite, SPLISS Model

I. INTRODUCTION

Sri Lanka is a country with a rich civilization, which can look back on a long and glorious tradition in athletics. It has taken part in all the Summer Olympic Games, London 1948 through London 2012, with the sole exception of Montreal 1976 edition, but appears to be under performing at international elite competitions. Sri Lanka has won two medals - silver in 400m Hurdles by Duncan White in London 1948 and silver in 200m by Susanthika Jayasinghe in Sydney 2000 but failed to produce even a finalist at any 'Track and Field' event at Athens 2004, Beijing 2008 and London 2012.

Lack of an effective framework for sustainable development of elite athletes appears to be the cause for Sri Lankans not reaching the Olympic Podium despite existence of a good sports development programme well executed across the island nation through schools and clubs and funded by the Government of Sri Lanka.

II. LITERATURE REVIEW

In order to identify strategic changes that need to be introduced in Sri Lanka to achieve sustainable performance at elite level, the required material for formulating and developing the research was found in already published material. By contrast, a prospective literature research for pertinent information on the topic of elite sports within Sri Lanka has been depressing.

Identifying the composite and learned variety of factors that lead to success is a challenge, which resulted in an emerging interest in elite sports systems, the desire to explain the success and to examine why some nations perform better than others in international competitions. This raised some important questions and the researchers around the globe investigating the phenomenon is growing daily.

They all point out one essential finding - nations need to be aware of the fact that sporting ambitions cannot be met on a long-term basis except with a systematic and strategic approach, which requires the need to gain a deeper understanding of the elite sports development in different countries, pointing out the successful ones.

Findings of these studies reveal that availability of finance is a necessary condition. Hogan & Norton (2000) even found a linear relationship between money spent and medals won by Australia since 1980. However, it needs to be emphasized that the financial investment is not a sufficient condition. There is a growing body of research explaining that success can be produced by investing strategically and prioritizing the investments.

Although it would be impossible to create one single model that would explain international success, it became clear that many researchers and policy makers around the world are addressing this problem from the same perspective. This has resulted in an increasingly homogenous elite sports development system that is ostensibly based around a near uniform model of elite sports development with suitable local variations.

Over the last couple of decades, the macro-level factors (economic welfare, geographic position, climate, population size, religion etc.) influencing international success have been the most discussed ones in the studies on the Olympic Movement. The aim of these studies was to focus on the organizational context of nations that are largely based on economic variables: Gross National Product of a nation, or the political system, the degree of urbanization and so on (Kiviaho & Makela, 1978; Johnson & Ali, 2002).

The micro level-studies focus on genetic qualities and the athletes close environment influences (family, coach, friends, personal dedication, motivation etc.) which led to the success. In between the macro and the micro levels, there is the middle level, which is called the meso-level. The factors of this level are determined by sports policies and politics. If we take into account all the elements that determine elite sports success, these are the only ones that can be directly influenced and changed through policy and management and a considerable amount of research has been done in this area (Clumpner, 1994; Green & Houllihan, 2005).

Competition between nations has always been a feature of the Olympic Games. Politicians and the media continue to compare international success, despite the International Olympic Committee's (IOC) protestation that the Olympic medal table is not an order of merit. As a consequence of the continuous escalating standards in international sport, competition has become a competition between 'systems' (Heinila, 1982).

The recent studies carried out in the United Kingdom (UK) - a Meta-evaluation of the Legacies of the Games the objectives of which include ascertaining why Great Britain was so successful at the elite level reveals that on elite sport the majority of activity had been led by UK Sport, the body responsible for supporting elite athletes which is a change in policy from the old system.

The impact of its 2012-related activities, most of which are ongoing core activities, which have been modified in scale because of the London 2012 Games, included Mission 2012, Team 2012, Pitch2 Podium and Elite Coaching Apprenticeships, illustrates the necessity for commitment to boosting elite sport.

Going forward, the focus of the meta-evaluation was on assessing the impact of additional investments in elite sport linked to the Games, and other catalytic effects, in terms of helping to maintain and exceed the Beijing benchmark in the short-term, and as a step on the road to build a sustainable elite sporting system longer-term.

In Australia, a National Elite Sport Council (NESC) had been established for this very purpose. NESC, in its role as the national coordinating group, is committed to fostering enhanced collaboration and coordination among the Australian Institute of Sports, state institutes and academies of sport. An integral component of this programme is a continued commitment to ensure that Australia remains at the forefront of high performance sport development.

The Long Term Athlete Development (LTAD) Model developed in Canada (Balyi, 2001) highlights the stages for the development of elite athletes. It is a framework for an optimal training, competition

and recovery schedule for each stage of athletic development. The principles of this research have been adopted by Athletics Canada as the framework for the proper management of youth and adolescent growth and development processes and identify critical periods of accelerated adaptation to training.

The United States (US) Olympic Committee (2001) surveyed US Olympic athletes from 1988 to 1996 and concluded that it took between 10 and 13 years of training just to make the Olympic team and between 13 and 15 years for those athletes who won a medal. It concludes that though the intensity required at the outset of the athlete development continuum is not the same as the intensity required at the end, the common thread among all stages of development is the coach.

Another study is a paper by Mick Green and Ben Oakley (2001) which explores the question of "Elite Sport Development Systems and Playing to Win: Uniformity and Diversity in International Approaches". This study points out the similarities in approach and that they helped to form a basis leading to the development of the efficiency of different systems.

However, the key text identified is, "The Global Sporting Arms Race: An international Comparative Study on Sports Policy Factors Leading to International Sporting Success", the SPLISS by Veerle De Bosscher, Jerry Bingham, Simon Shibli, Maarten van Bottenburg and Paul de Knop. It compares and analyzes sports structures, elite sports policy and performance in six different nations (Canada, Belgium, UK, Italy, Norway and the Netherlands) and aims to provide a better understanding of the factors which lead to international sporting success.

All of the analyzed literature follows a premise that performance in top-level sports is a mixture of all of the classified factors (genetics, environmental and physical circumstances in which people live), and the sporting systems are a product of a specific socio-cultural, economic and political background, which needs to be taken into consideration when analyzing the elite sporting system of a country.

The 'Input' represents the financial resources - the expenditure on elite sport, the 'Throughput' represents the efficiency of sport policies - the best way the inputs can be managed in order to produce the desired results, while the 'Outputs' represents the success, which is ordinarily measured by medals won in relevant competitions. There is a distinction between 'Outputs' (short term results of the operation of the system) and 'Outcomes' (more fundamental long term results/ impacts).

It is apparent that the specificity of the problem makes it impossible to 'copy - paste' the system that led to a success in one nation and make it work in another. This is important as the findings of the research will help the National Federation (NF) of Athletics to determine the key matters that should be focused on in order to develop an effective elite sport policy and understand the future investments we should concentrate on.

III. THEORETICAL FRAMEWORK

The theoretical framework that suited the research was the SPLISS model (Figure 1).

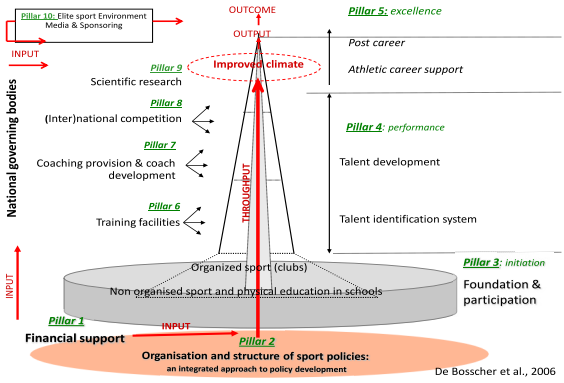

Figure 1- SPLISS Model: 9 Pillars of Sports Policy Factors Influencing International Success

The authors of the SPLISS international comparative study endeavoured to explain the relationship between elite sports policies, international sporting success and to benchmark their nation against competitors.

The literature review shows that this subject is a global sporting arms race, where a country or specific organization has to do something remarkably special to yield success. Thus, this research will look at developing a Strategic Plan that will provide NF the competitive edge it covets.

By comparing the 'Input', 'Throughput' and 'Output' results of six different nations, the study attempts to explain the relationship and to determine a

context within which an effective system can be developed.

Therefore, the findings of the SPLISS study (with suitable local variations of the nine pillars that may be specific in a Sri Lankan context), will help the NF of Athletics in Sri Lanka to develop the Strategic Plan which will be the best pathway to international sporting success.

The main focus will be to have views of all key stakeholders from different perspectives. Thus, a mixture of methods has been applied; document analysis, statistics, qualitative interviews and focus groups in order to collect a comprehensive volume of information.

As reasoning derived data leads to generalization, this involved an inductive, theory testing approach based upon a thorough and information-rich review of the principle sources in the existing literature, followed by data collection and analysis.

Although the approach adopted in this research was meant to be predominantly descriptive, the attempt was to move beyond the descriptive level to the subsequent analysis of all the contextual meso-level factors that affect the elite sporting structure and which are in direct correlation with the success or the lack of success.

The 'Nine Pillar' Analytical Model derived from the "SPLISS study of sport policy factors that lead to international sporting success" provided the basis for the research protocol and its simplified analytical framework with minor changes specific to Sri Lanka's context. The interview protocol was developed around 9 main themes that have been previously identified in the literature.

It provided a comprehensive assessment of the NF of Athletics in Sri Lanka and teased out the experts critical opinion concerning the diverse aspects of overall sports policy with particular focus on the 9 pillar factors that make the most significant contribution to the sporting success and their main strengths and weaknesses, opportunities and threats (SWOT), as well as the suggestions for their improvement.

The questions were highly structured, determined before the interview and served for a deeper exploration, understanding of the underlying issues behind the phenomenon in question. All interviews were recorded with consent and subsequently transcribed either totally or partially.

The interviewees comprised of personalities from the Ministry of Sports, Ministry of Higher Education, National Olympic Committee (NOC) and NF of Athletics as well as Olympians, administrators, coaches, technical officials and past athletes who have contributed towards athletics.

IV. CONCLUSIONS & RECOMMENDATIONS

This research recommends numerous aspects that need to be projected under each pillar to achieve sustainable development in order for Sri Lankan athletes to be successful at elite competitions.

Also, it extends the knowledge about the NF of Athletics and immensely help to clarify the understanding about the position and shortcomings that the NF is confronted with by illustrating the major aspects displayed in the form of SWOT analysis.

Pillar 1 - Financial Support

The results of the analysis proved that there is sufficient financial support and commitment from the Government of Sri Lanka for sustainable development of athletics at elite level. The general revenue includes several sources of income among which the most important are the government, sponsors, the International Federation and marketing.

However, it is important to note that whilst the availability of finance may be a necessary condition for success, it will no longer be a sufficient condition to succeed at elite level. The latter will be influenced by the methods used to invest the money. "More money in equals more medals out" is no longer true (De Bosscher & De Knop, 2009).

However, it is of vital importance for the NF of Athletics in Sri Lanka to focus on their ability to attract enhanced financial income through marketing and to work in close liaison with the IOC and the International Athletics Association of Federation (IAAF) in order to secure enhanced berths in the sponsored programmes for athletes, coaches and Technical Officials (TOs).

Pillar 2 - Integrated Approach to Policy Development

The NF of Athletics is backed by an unique administrative structure spread across the country.

It boosts efficient administration which effectively contributes towards the development of athletics in Sri Lanka. Furthermore, athletics is gifted with an acceptable policy development process as well.

The primary responsibility towards the development of sports lies with the Ministry of Sports and the ardent desire of the government to uplift athletics is very much evident from the pivotal contributions made to develop the infrastructure facilities especially since the end of the 30-year humanitarian operation in 2009.

With the existing stable political situation, Sri Lanka could do well in the development of athletics, provided that the NF keeps on enhancing coordination with the Ministries of Education and Higher Education in order to ensure a continuous influx of the cream of athletes through proper coordination of their development to elite level.

Pillar 3 - Foundation and Participation in Sport

The two vital facts that have been considered under this pillar are the number of registered athletes which is in the region of 75,000 and the clubs and associations affiliated to the NF which represents the schools, universities, private and state sectors, armed forces and all 25 administrative districts, totalling to 39.

The country is blessed with a free education system that affords 9 years of compulsory schooling for every child, in over 1000 schools evenly spread to cover all parts of the country. Further, a rich tradition of Inter-House Athletics competitions conducted annually with the active participation of parents is an impetus.

This platform provides a wide basis at foundation level supported by regular competitions from Under 9 to Under 23, organized by the NF of Athletics and Sri Lanka Schools Athletics Association. Further, it is mandatory for all schoolchildren to follow sport as a core subject for GCE (O/L) Examination.

Pillar 4 - Talent Identification and Development System

The positive and negative trends on this pillar suggests that in the ever increasing competitive environment, the influence that could be made by talent identification and development is undisputed and thus it is of vital importance for sustaining long-term international competitiveness.

Further, the interviewees rated talent identification and development as one of the most important pillars that needs to be improved, when asked of their priority, if they would have additional funds at their disposal towards utilization for development of athletics in Sri Lanka.

However, the need of the hour is to replace the existing visual based talent identification system with a scientifically proven system, with a systematic and strategic approach towards talent identification and development, as Sri Lanka seems to be under performing in this pillar with the ever increasing competitiveness.

Pillar 5 - Athletic and Post Career Support

It has now been recognized that professional planning and education during the sports career, significantly helps the athlete during and after their career. However, the government or the NF of Athletics have no specific programmes in place for elite athletes but endeavour to facilitate the transition by finding employment.

Though there is no general policy at the national level, the experience demonstrates that the schooling system is in most cases, supporting the elite athletes by adapting the school programme to their needs. Besides, the elite athletes who join the Armed Forces are benefitted through optimum facilities, along with a monthly salary and pension benefits.

Although, post career programmes have not been developed in Sri Lanka, it seems that athletes regardless of the inadequate compensation during their athletic career, do have an interest in pursuing athletics as coaches, administrators or TOs or to work with youth mainly because of their love towards their sport.

Pillar 6 - Training Facilities

There is a network of training facilities throughout the country and the athletes as well as coaches have commented that the facilities available in the country are adequate for elite athlete training. Also, over the years, the elite athletes have been afforded priority access to these facilities and other privileges.

The decision by the government to develop infrastructure at national level is commendable and praised by the stakeholders. The state-of-art training facilities being constructed in all nine

provinces and extending the provision of adequate training facilities upto grass root level, has won the admiration of all interviewees.

Pillar 7 - Coaching Provision and Coach Development

In Sri Lanka, there is a reasonable number of experienced coaches but all of them are volunteers. Amongst them, 240 are IAAF qualified yet they do not get adequate opportunities to develop their coaching skills to become world class elite coaches. This is a pillar where Sri Lanka is considerably weak in terms of professionalism.

Our coaches serve athletics through the attachment they have towards the sport and most of them are former elite athletes. Yet, they lack professional exposure to advanced technologies, opportunities to learn the latest trends, facilities to improve computer literacy and working knowledge in English.

Pillar 8 - (Inter) national Competition

The NF of Athletics in Sri Lanka conduct the National Championships annually. Further, athletes have sufficient opportunities to take part in international competitions. The country has hosted many international competitions to the entire satisfaction of the international fraternity and won the admiration of all stakeholders.

Apart from the economic and cultural benefits, hosting major international competitions is considered one of the most important factors in the overall development of the athletes pursuing excellence, as 'home advantage' afford the athletes to measure themselves against elite athletes and showcase their abilities.

Pillar 9 - Scientific Research

This is the most negative pillar in the Sri Lankan scenario, as the elite athlete development is not supported at all by scientific research at any level. In fact, recent trends in many countries, to increase the investment in scientific research, suggest that the sporting environment recognizes the importance and benefits that could be derived through scientific research.

It is evident that in order to change the current scenario it would be necessary to enhance the link between the NF of Athletics and the universities and seek to promote applied research in sport. Since scientific research is of vital importance for the development of sports, Sri Lanka needs to embark on a programme to avail itself of the existing facilities.

How to benchmark with elite Athletes Development Strategies used by other successful countries?

Winning medals on the international sporting stage is incredibly tough and the margins between success and failure become smaller as the years roll by and as countries strive for glory. In order to ensure that Sri Lanka's most talented athletes have every chance of realizing their potential, it is recommended to introduce a Sri Lankan version of the World Class Performance Programme (WCPP) which was meticulously utilized by Great Britain to achieve optimum results at London 2012 Olympic Games.

The WCPP's, 'Podium' styled programme of supporting athletes with realistic medal winning capabilities within an Olympic cycle, could be a short-term goal for Sri Lanka. Other distinct levels, 'Development' and 'Talent' mainly designed for athletes demonstrating the ability to be competitive in a period of time and athletes who have the potential to progress through the world class pathway, could be long-term perspectives.

What strategic changes need to be introduced to achieve sustainable performance at elite level in athletics in Sri Lanka?

Taking the traffic light summary as the yardstick, a determined strategic approach need to be adopted by the NF of Athletics in Sri Lanka, to improve on the Pillar 9 (Scientific research) which blinks 'Red', along with Pillar 4 (Talent identification and development systems) and Pillar 7 (Coaching provision and coach development) that blinks 'Yellow', to make them 'Green'.

In order to develop a systematic and strategic approach in a Sri Lankan context to achieve sustainable performance at elite level, the NF of Athletics should strive to boost up all 9 pillars of the SPLISS model and make them 'More Greener', by optimum utilization of the available financial and other resources such as the immense volume of volunteers who continue to contribute towards development of athletics in Sri Lanka.

The first and foremost need for the NF of Athletics in Sri Lanka would be to create a 'Strategic Plan' for a 2-year period for the duration 2014 - 2016. The

planning process should be comprehensive and should include a discussion of the operating environment, the role of vision, mission and objectives as well as developing plans to meet the objectives. The 'Strategic Plan' once drawn up with the active participation of all stakeholders, could be a unifying tool for management and internal communication.

In this regard, the 'Strategic Plan' developed by the NESC of Australia in 1993 would be of vital importance to benchmark the high performance level to be achieved by Sri Lanka. The strategies developed under the five 'Key Result Areas' of Effective National Network, Leadership, World's Best Practice, Strategic Partnership and International Perspective, could be of significance. The NESC network is collectively responsible for the provision of daily training and a high performance, sport-servicing environment to elite athletes.

Introduction of a 'Strategic Plan' will involve significant financial commitment mainly from the government. The NF of Athletics has succeeded in meeting this challenge upto now but will have to ensure that the required funding is forthcoming without any interruption. In this regard the policy adopted by the New Zealand Olympic Committee to fund only 6 sports that have the ability to produce athletes who will finish in the top 16 is ideally suited for implementation in Sri Lanka.

Sri Lanka has succeeded in winning a total of 27 medals which include 10 Gold, 6 Silver and 11 Bronze Medals at the Asian Games. During the last 25 years Sri Lanka has reached the Asian Games podium only in the sprint events of 100m, 200m, 400m (both Men and Women), 100m Hurdles (Women) and 4 x 400m Relay (Men). Accordingly, these events could be identified as amongst the high potential medal winning events for Sri Lanka.

It is recommended that Sri Lanka Athletics consider Asian Games Medals as the measure of success particularly considering the size of the likely medal haul in a very successful Olympic Games for a country like Sri Lanka. One of the possible 'short cuts' to achieve short-term success is through 'cross sport' talent identification and development. Here, the time required to reach elite level may have been accumulated in another sport and this was successfully utilized by Great Britain in London 2012 Olympic Games.

In the face of remarkable human resources and infrastructure facilities available in Sri Lanka, to the advantage of athletics and the extremely committed coaches, TOs and administrators, it is not surprising to see why Athletics remains one of the most popular sports disciplines in Sri Lanka and if she would properly concentrate on the proposed 9 Pillars of the SPLISS Model, Sri Lanka could certainly count on improved success at elite level in the most important Olympic Sport of Athletics.

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BIOGRAPHY OF AUTHOR

Rear Admiral Shemal Fernando is a Doctoral (PhD) Candidate at the Kotelawala Defence University, Sri Lanka and an IOC Scholar. His research interests include High Performance and Elite Sport Management. He has two Masters of Science in Defence Management and Sports Management. At present, he serves as the Director General Administration of the Sri Lanka Navy.