



## FOOTBALL IN PANAMA CONTINUES TO GROW, WHICH IMPLIES ECONOMIC AND SOCIAL BENEFITS

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### ABSTRACT

Social benefits for developing football by the Tigers organization Real Chorrillito AD is B / . 3.24 for every dollar invested by managers, parents of younger players and players of the U23. The general objective was raised: To assess the costs and benefits provided by the organization "AD Tigers VA" in Panamanian football over a period of 136 days between April 16 and August 30, 2016. The investigation is of type descriptive and design of it rests on the hypothetical-deductive approach, which tries to validate the hypothesis through the correlation of the variables used by the regression method. The data is obtained through the implementation of 28 surveys a population consisting of parents of players from youth level and players under 23, in order to know the costs and benefits generated by the sport. The results show that there is a highly significant correlation between investing or paying football and the economic and social benefits given in society.

**Key Words:** Panamanian Football League, national league promotion, European leagues, economic and social benefit.

### Introduction

According to FIFA football it is the most popular sport in the world, as more than 240 million people play at 1.4 million units and 300,000 clubs across the five continents (Vollert, 2013). This coverage is huge because it is easy for any extract or social group to practice this sport, which usually are children and youth from slums in each country.

In the reference part, are the background of the topic, the approach taken to involve the needs of the population, the rationale and objectives of the study.

In the experimental part, the methodological process of the research, the hypothesis is based on this study, the description and analysis of variables studies and the collection of the information necessary for this research is highlighted.

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In the part of results and discussion, we find the variables identified and explained. Considering the results, correlative analysis between these variables will be made to give validity to the study, among other considerations.

### **3. Methodology.**

#### **3.1 Research Process**

The research was conducted between April and September, that is 140 days from April 16 to September 3.

##### **3.1.1 Type and design research**

The research is descriptive based on primary source (an instrument designed 31 questions for information on costs and benefits of management of the organization and another 16 questions with the same objective but applied to parents of players under categories and players under 23) and secondary information (data Panama Football Federation, social indicators 2009-2013, all developed by the National Institute of Statistics and Census of the Office of the Comptroller General of Colombia and information World Bank per capita health expenditures, among other institutions).

##### **3.1.2 Collection of information**

The process of collecting the information will be as follows and are presented below:

- a) On April 16 starts the process of collecting secondary information of the Panamanian Football Federation and the National Institute of Statistics and Census.
- b) After April 30 surveys were applied to parents of younger players.
- c) On May 14 polls were applied to players under 23.
- d) On May 28 he met the manager of the organization.

##### **3.1.3 Analysis of information**

- a) The analysis began on May 29, 2016 (survey data, interview of FEPAFUT and INEC) as the first stage, which will consist of obtaining descriptive statistics obtained results.
- b) Follow the analysis of cost - benefit on June 5.
- c) After the June 12 article and the final report of the investigation was initiated, including graphics, documentary and social economic interpretation analysis.

#### **3.2 Treatment statistical and sampling design**

The statistical treatment for managing the sample was through proportional sampling rate by No-probabilistic criteria are presented below:

- a) .....The population should be AD team Tigres Real Chorrillito.
- b)..... The population should be of an age considering they can play in sub-11, U-13, U-15, U-17, U-20 and U-23 leagues; West developed in Panama.

Considering these criteria, data templates were obtained teams in different leagues in 2016, selecting parents of children under 18 and players under 23. The sample is defined in the following table:

Table No. 1  
Sample of the study population

FIELD RESEARCH		
Sample Distribution		
Categories	SAMPLE OF PLAYERS	
	world population	Sample size
Players Sub-11 Distritorial	29	5
Players Sub-13 Provincial	24	4
Players of the U15 Provincial	17	3
Players U-17 Provincial	36	7
Players Sub-19 Book	19	3
Players in the Under-23 Provincial A	19	3
Players in the Under-23 Provincial B	15	3
Total players	159	28

Source: Prepared by the author based on the analysis and selection of the sample.

### 3.2.1 Estimation and margin of error

The sample collected presents an average age of 14 years and approximately nine months and a margin of error of 6.6%, since 75% of respondents are minors and the average age test. This allows the reliability of the data to ensure the expected results of the study in question, in the table below age ranges of AD Tigers players appreciated.

## 4. Results.

### 4.1. Economic costs of operational activity of the football

#### 4.1.1. Operating costs and expenses of the organization

Costs are classified in training costs and costs for development of parties. While expenditures are classified into administration and maintenance.

##### 4.1.1.1 Costs of training

They estimated 312 hours of training, which are held on Mondays, Wednesdays and Fridays throughout the year, except to clear holidays and holidays. Friday being the highest concentration of different categories.

Foto1: Players of the U-17 to U-23 train right at the Misti.

The work period is 2 hours is, from 4:00 to 18:00, representing B /. 1,620 in payment of coaches and B /. Utiliteros to approximately 900 per year.



Foto1: Players dela U-17 to U-23 train right at the Misti.



Photo 2: The categories from the sub-11 to U-15 work left on the stage of Misti.

vessels and two ice bag training, which represent B / is also Coast. 496.80 approximately a year. This gives a grand total of B /. 3016.80

#### 4.1.1.2 Costs for the development of games

Parties on Saturdays develop and Sunday following a process or calendar by category, beginning in January of each year with the sub-11 and sub-13, which should conclude March, then starts the sub-15 in April and should conclude in July, parallel to this category initiates the sub-23 and should conclude in August. This all developed in the tournament Arraiján District, but this is a winning team and its sub-13, U-15 won their tournaments and represent the District of Arraijan in the provincial and much of the equipment sub-15 it is in the selection that represents this category also in the provincial.

When estimating costs, considering the purchase of food for players of categories of sub-11 and sub-15 is divided into two processes, through March were spent by party B /. 130, which represented an expense of B /. 1,170 from April and the sum per match was of B /. 73, or until July cost is estimated by food B /. 1,314. While for the sub-15 spending per game it is B /. 30, which represents that at the end of the campaign have spent B / .540 and ends with the categories of sub-17 upwards, to which it leads them to eat once a month yielding approximately the sum of B / 650.

Meanwhile on average is spent on transportation of players to three dollars per game, representing B / .81 in the aforementioned tournaments. Also they add B /. 155.25 in glasses and ice, as well as around B /. 405 in moisturizing, this gives a grand total of B /. 4234.25 in costs linked to the development of parties.

### Costs active 4.1.1.3

Among the main assets (see table 2), available to the organization have: a barrier to free throws, throw balls machine, which between them account for about B /. 7,700. It also has a vehicle valued at B /. 7000, office equipment (computer, air conditioning and printer), valued at B /. 1,200 and furniture (two tables, a table and two chairs) valued at B /. 160.

**Table N. 2**

### **EVALUATION OF THE ASSETS OF THE ORGANIZATION AD TIGERS VA, REAL CHORRILLITO**

items			Rode
Fixed assets			<b>16,060.00</b>
	Furniture, Machinery, Equipment, Materials and Supplies		<b>16,060.00</b>
		Barrier free kick and pitching machine balls and other implements	7,700.00
		Rolling Stock	7,000.00
		Office equipment (computer, printer and air conditioning)	1,200.00
		Furniture (tables, two chairs and a desk)	160.00
Nominal assets		Assets necessary for the organization, but no tangible	<b>40.00</b>
		Training (5 license type c)	40.00
Total			<b>16,100.00</b>

**Source:** Department of Management AD Tigers VS, Real Chorrillito.

### 4.1.1.4 Administrative Expenses

Administrative costs are among others to pay travel expenses for both permanent and temporary workers, who on average earn per season around B /. 378; inputs for players (tacos or boots in February for sub-11), by the order of the B / are also purchased. 240 and the payment of arbitration and friendly transportation of around B /. 710.



medical expenses are also the order of the B /. 105, fuel B /. 120, in cell card purchases around B / .576 and a variety of expenses by the order of B /. 790. electricity consumption Office B / is calculated. 60 per month, resulting in B /. 720 dollars a year and water that would be B /. 5 dollars a month, which gives as a total of B /. 60 a year.

During the months of October, November and December were spent B /. 2,000 in renting a sports field to prepare the U-23 team contesting the Copa Rommel. This situation was forced, because players could not reach early hours for their job duties, and thus the importance of the tournament to have done this expense.

This gives a grand total of B /. Approximately 5.699.

#### 4.1.1.5 Maintenance expenses

Between maintenance costs are the repair of rolling stock, up to half of the year have made three (B /. 1,600, B /. 2,800 and B /. 800), for a total of B /. 5,200. Then there are repairs boots or heels by the order of the B /. 12 and other repairs by B /. 140.

The total of these repairs is the order of the B /. 5,352.

#### 4.1.2 Socioeconomic characteristics and costs incurred by parents of players under categories

They surveyed 15 parents of which 11 are female or is the 73.33%, showing that mothers are those guarantors of compliance with the organization for the purposes of training and league games. The study seeks to understand the characteristics of the families, their socioeconomic status and expenses incurred by the practice of sport.

##### 4.1.2.1 Overview of the families of the players smaller categories

The families of the players reside in 86.7% in the District of Arraiján and the rest are from La Chorrera (a player) and Tocumen (a player), ensuring assistance players to practices and games. It also owns 86.7% homeownership, which gives social stability to the family, to contribute to the integral development of children.

Another important fact is that 80% of families have to live more than 10 years in the places they currently reside (11 Arraiján and 1 Tocumen), the other specially rented reside between 3 months to 3 years in their places residence and the family of Puerto Caimito in La Chorrera who have 9 years of living, understanding that once lived in Arraiján.

According to respondents 53.3% had families of 5 members, bringing the average number of people per household families players sub-11 to the sub 15 4.8 members per household, which means they have families above to the average household in the province of Panama (3.6 persons per household) and the District of Arraiján (3.8 persons per household) and La Chorrera (3.6

persons per household), it means that you have to manage well the economic resources obtained . By getting the data civil status, only 13.3% of parents are single and have on average up to 2 children, while 40% of married parents and together have up to 3 children at home.

#### 4.1.2.2 Socio-economic level of the families of the players smaller categories

Parents have college at 61.5%, meaning that the rest have secondary education, while 66.7% of players enrolled in primary, 26.7% enrolled in the secondary level and 6.6% have not entered school. Other data according to respondents, the head of household is the father with 91.7%.

On the other hand, 66.7% in families have up to two people working, of which 38.5% have independent work, 30.8% work in private companies and 30.7% make the government. As for the professions are from vendors, lawyers, teachers, caretaker, manual worker, contractor, ship managers, assistant qualifying international flight crew and officers pay.

Finally, 100% develops complete working day and earn up of B /. 700 61.5% of respondents, 30.8% earn between B / .600 and B / .700 and 7.7% earn between B / . 301 and B / . 400.

#### 4.1.2.3 Costs and expenses incurred by parents of players

##### 4.1.2.3.1 supplies or items to play football

Respondents state that 100% will Costean tacos players, where the cheapest taco is B /. 25 and the most expensive is worth B /. 100; this implies that the average cost of this important piece is B /. 44.33. The second item Costean most parents are means with 53.3% of the sample by averaging B /. 4.4 per pair ranging from B / .2.25 to B / .10

Finally as regards the necessary tools to play football, 20% of parents surveyed spent on the purchase of shirt and pants, the shirt still on average more expensive than pants, that is worth B /. 10 on average, while pants are worth B / . 8.17

##### 4.1.2.3.2 Monthly expenses to attend practices and games

Respondents argue that parents 100% spent on transport, with an average of B /. 29.6 per month, while the cost of transporting the lower cost of B / .6 and more costly B / . 64 (fuel). While spending moisturizer has an average spending by parents of B / .7.8 and 66.7% do the total sample obtained, meanwhile 40% of respondents say they spend on monthly average B / . 16.33 in water bottles.

6.67% claim to spend on lunch a few B / 40 and B / . 4 chopped.

#### 4.1.2.4 Expectations players to play professional football, considering the parental support

Football players in these categories have dreams and hopes to play as professionals famous teams in world football, these children and young people do not escape that responding in a 73.3% want to play in Europe by setting an average B / salary. 328.182, being the lowest salary



desired B /. 3,000 and the largest B /. 1 000,000. Europe has been set for the 2015/16 season a minimum wage in the second division of 64,500 euros (Day, 2014).

Meanwhile 20% of the opinions given by these players was aspiring to play in the Panamanian Football League (LPF), with an average wage rate of B /. 12666.67, which may be plausible considering that the league promises to grow and that by the time these players are in the age to play professional football, are paying those amounts.

Finally, only 6.7% selected the Best League Soccer (MLS), with a wage aspiration of B /. 140,000, which the New York Times for the 2010 MLS average salary stood at B /. 138,169 (Thyberg, 2011).

#### 4.1.3. socioeconomic characteristics and costs incurred by the players of the U23

They surveyed 13 established players on teams A and B of the U-23, which expressed their expenses and goals when playing sports your passion, football.

##### 4.1.3.1 Overview of players U23

Respondents expressed a 92.3% reside in the District of Arraijan, of which 58.3% are in the neighborhood that gives the team as a source of the organization. They felt a 84.6% of those living in their own home, understanding still living in his parents' house.

Also in 84.6% have resided for more than 10 years and on average 6.8 people per household live, sobreexcediendo the middle of the district, thereby demonstrating the plight that these players probably spend in their daily actions, seeking in football an opportunity to excel and live better.

When asked about their marital status 69.2% reported being single, 23.1% and 7.7% united married, which still holds the view that most can generate a greater commitment to attend practices and games. The situation before arises, indicates the non-commitment to seek sources of income immediately to feed their children, but not the united and married, who are under pressure to feed in this case 75% of those who felt, your partner and one child, while the remaining 25% has the responsibility to feed three additional members (wife and two children); which forces the player to find work, which can no longer spend 100 to sports.

##### 4.1.3.2 socioeconomic level players U23

92.3% have secondary education and 7.7% have primary education, reason why players need to have options to face life, because there are so many people living in the home should look for opportunities to generate economic resources for the home and this sense 46.2% said up to two people working at home, 23.1% said that three people working, 15.4% only one person working and 15.3% work more than three people at home.

For the issue head home, respondents 61.5% stated that the father does that function, 30.8% the mother exercises this responsibility and 7.7% said they both govern home. This indicator is linked to the condition if player works or not, for which 61.5% does not work, almost dividend those whose head of household the father 50% and 37.5% to the mother, the rest is for where both parents govern . Meanwhile, the remaining 38.5% work, with 40% of the construction sector, another 40% are independent and the remaining 20% perform administrative work.

Those who work is done by 60% on a full-time (which makes it more difficult sport and the other 40% then works part time. These players who work earn between B /. 600 and B /. 700 in a 40%, 20% earn between B /. 500 and B /. 600, another 20% earn between B /. 401 and B /. 500 and finally 20 'remaining% earn above the B /. 700.

#### 4.1.3.3 Costs and expenses incurred by the sub-23 players

##### 4.1.3.3.1 supplies or items to play football

Here respondents state that 76.9% finance their heels or boots to play football, the other states that are sponsored by the organization AD Tigres Real Chorrillito. The average paid for by the players is B /. 71 dollars, well above the costs borne by parents of minor leaguers categories, product that reflected in the data more economical shoe is B /. 30 and the most expensive can cost B /. 125.

##### 4.1.2.3.2 Monthly expenses to attend practices and games

84.6% said finance transportation to practices and games, with an average of B /. 44.18 each month. Meanwhile in water consumption (bottle) only 15.4% of respondents spend an average of B /. 12.50, also a player spends in choppy or is B /. 8 spent on lunch or another is B /. 20 and another breakfast arriving to spend B /. 90.

#### 4.1.3.4 Expectations players to play professional football

In terms of expectations, indisputably the players aspire to play in European leagues with 53.8% of respondents and their average wage aspiration would be hanging around the B /. .1, 453,571.43, clear understanding that they know which is the best footballing market paid out. Then those who aspire to play in MLS that is the football league of the United States, where would expect a B /. 49,333.33 in salary average, followed by a player who aims at winning the South American leagues B /. 5,000, another in the LPF winning B /. 9,600 and one in the Liga Nacional de Ascenso (LNA) gain aspiring B /. 3.600.

## 4.2. economic benefits of football activity

### 4.2.1 Financial resources obtained by the organization

In the interview with architect Jose Inocencio Villarreal Ramos us indicated that approximately 11% of the computer resources only available sponsorships including organizations, players and also the contributions of parents of children to buy the t-shirt Team , transport, plugs, etc.

The other part of the resources are provided by the construction company that owns, with which the remaining 89% is obtained to get these players to develop what they like, play football.

This funding makes the organization is cost B /. 112.59 per player, parents of minor cost you B /. 22.87 and older players costing B / 51.91.

#### 4.2.2 economic and social externalities given for practicing sport

If players of the organization were to be hired by the LPF teams and assuming that pay minimum wages are the economic benefits are estimated at B /. 2.86 for each dollar invested. Which in establishing a social discount rate of 6% both benefits B /. 763.200 costs as B /. 249, 652.98 allow conservative estimate a favorable situation for children, youth and adults of this organization.

Sure medium scenario reflect the expectations of players under categories identified three leagues which aspire to play and therefore obtain B /. 3.96 for each dollar invested. While expectations of older players, considering that they selected four leagues, set the ambitious scenario scenario with a benefit / cost B /. 3.97.

As for the social benefit it is unquantifiable, but a social being integral, productive and healthy, committed and forward, as the sport forges people with goals and objectives would be achieved. By this means, the main formation that makes the sport is to prevent children and adolescents take the wrong way, for which the organization always gives pep talk and advice for this purpose.

According to statistics provided by the National Institute of Statistics and Census (INEC), until 2013 44.4% of detainees in the country were in the province of Panama (INEC, July 2015), which the west belongs, representing 14.2% per thousand inhabitants is, 282.586 detainees. This shows how critical it is to be a child and youth living in neighborhoods where drugs, poverty and conditions of marginalization from the rest of society, promoting a criminal action considering that 54% of the detainees are under 30 years holding the Ministry of Government, that being in the prison system would cost the state B /. 6 281.65 annually (cost per year 2013), or what would be B / .17.21 per day (Government, 2014).

This poverty manifested makes 32% of the crimes are against property, which warrants have public policies towards better distribution of wealth in the country, if not continue to increase the budget of the Ministry of Government (MINGOB) on prison, which was nearly 100 million is, B / .93, 550, 555.

To achieve the integral formation of child support from parents, the organization and the educational system (INEC, Social Indicators, 2009-2013, Table 012-52, 2015) is required, the latter is spent per child until 2013 preschool and primary a B /. 805, while in pre-media and average about B / .1, 250, ending with the college cost is B /. 2,718. In AD Tigers organization is Real Chorrillito supports some players to keep them in their studies, considering the survey results 39.3% of them are at the stage of preschool and primary education, 42.9% in pre-half and

half, only 3.6% is in college and the rest have left school for various reasons, therefore they have great hopes of reaching the professional football.

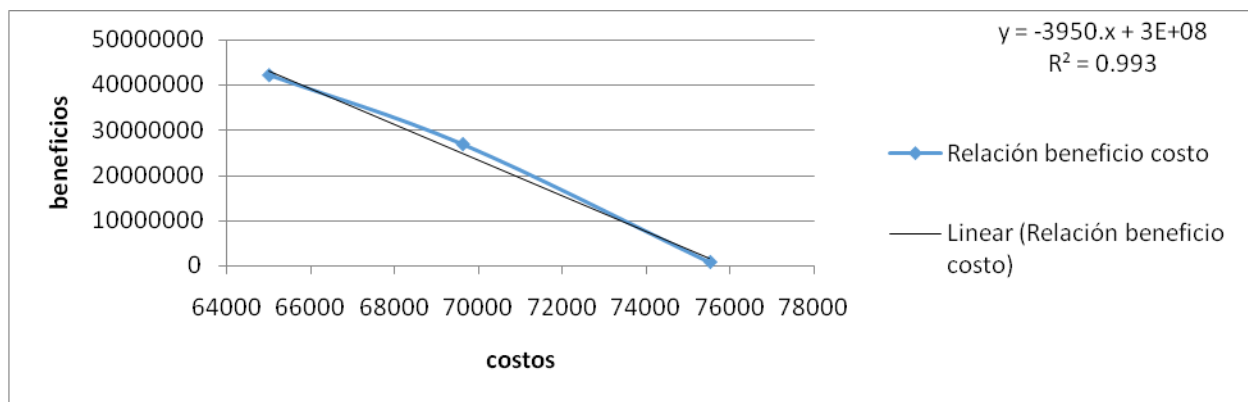
Finally, on page World Bank is reported by Panama that per capita spending is B / .959 until 2014, 330% higher than the per capita year 1995 spending, which has represented a great advance (per capita health expenditure). For the present case, the organization maintains AD Tigres Real Chorrillito through sport to 159 players in excellent health, which ensures that the health institutions in the west do not have to incur more expenses.

By applying the methodology of cost / benefit to establish business name of profit making organization AD Tigres Real Chorrillito, considering costs in health, education and security, using the same social discount rate given above, a benefit of B is obtained /. 3.24 for every dollar invested in this sport. This indicator is very important for the national government to support football, for Fepafut continue tracing goals in the development of sport, and for investors, coaches, trainers and any interested, keep working hard to improve the socioeconomic conditions of the who practice them.

## 5. Discussion

### 5.1 Analysis of the correlation of the variables proposed

By correlating the costs generated by the organization, parents and players under 23 with expectations or benefits a significant relationship to obtain a determination coefficient of 99.37%. As shown in Figure # 1 shows that as long as costs rise, profits are reduced and vice versa, as it reduces costs, increase profits.



**Figure 1.** No cost / benefit ratio in the Organization Tigers AD Real Chorrillito.

**Source:** Prepared by the author based on the data obtained by surveys of parents of younger players and players of the U23.

## 6. Thanks

The Organization Tigers AD Real Chorrillito, parents and players sub.23, as well as the Institute of Statistics and Census of CGR of Panama (INEC), the MINGOB, the Football Federation of Panama, among other institutions .

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