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REGIONAL DIFFERENCES IN THE ECONOMICAL SUSTAINABILITY OF SPORTS HALLS

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Abstract: *The precondition of a health conscious behaviour in a community is establishing a healthy development of the community, an important part of which is the community's attitude to sports and health. A basic manifestation of this is whether the leadership of a specific settlement is committed to developing sports facilities and, on the other hand, to what extent residents make use of these facilities. The aim of our research was to point out the number of sports facilities currently available for catering everyday physical education introduced in 2012, leisure sports and competitive sport events in two different regions of Hungary. We also examined the resources available for maintaining the facilities and the degree to which existing facilities are exploited. Existing sports halls of the Northern Great Plain and Central Transdanubia were included in the research. We wish to emphasise, in regards to the infrastructural developments of the coming few years, that it is essential to consider the fact, even in the planning phase of facilities, that sport events in themselves do not make the facilities economically sustainable.*

Keywords: *sport, sport subsidies, sport facilities (JEL code: Z20)*

INTRODUCTION

Sports development is fundamental about the supporting participation and the opportunities of participation including its advantages (Shilbury et al. 2008).

Accordingly, three very important components have to be differentiated among others: sports policy, development through sports and sports development. The most general of course is sports policy, which traditionally deals with issues of elite *vs.* grassroots sports, the relationship of political ideologies and sports policy as well as the effects of international effectiveness of athletes (Sam and Jackson 2006).

Development through sport means the role a sport plays in the well-being of a community (Coalter 2007; Harris and Adams 2015). In other words, sport is presumed to be good in itself and to play a role in developing the physical and mental condition of the population. As such, sport is regarded as a tool, which specifies wide social issues and problems, which can originate from industrialisation (Hartmann and Kwauk 2011), at the same time improve areas from crime stats (Houlihan and White 2002), to obesity and general health condition (Edwards and Casper 2012).

However, sports development fundamentally develops

sports for itself, in other words, it takes place by keeping the interest of participants of competitive sports in mind. In this approach, the most commonly accepted system is the pyramid metaphor (Bramham et al. 2001), where low-level athletes can be found at the bottom and elite athletes at the top. The basic aim of sport developers is to create a large athlete base, which is more likely to provide competitors for the higher levels or for the top of the pyramid (Sotiriadou et al. 2008).

Sport can be a tool through its peculiar functions to achieve a number of socio-economic objectives, and it is connected to these areas. Its current situation, therefore, requires analysis not in itself but in the light of domestic and international social and economic objectives.

Article 182 of the Constitutional Treaty for the European Union also includes sports among others. According to this, the Union contributes to the development of European sports, considering the peculiar characteristics of sport, the structural properties based on voluntary participation as well as its role in society and education. Its aim is to develop the European dimensions of sport, fairness and openness, promoting cooperation among organisations responsible for sports and safeguarding the physical and intellectual integrity of athletes, especially that of young athletes.

The EU only spends limited resources along clear, well-defined objectives and principles on sports developments:

Municipalities and local governments are the most significant budgetary supporters of sports activities in the majority of countries.

Nowadays, one of the most important national and European Union objective is to increase the ratio of those in the population who perform sports on a regular basis along with the average amount of time spent doing sports.

It is an aim, therefore, to "make people move" and through this:

- achieve improvement in public health;
- assist the youth in preparing for the challenges of an accelerated world by developing skills in lifestyle management and problem solving;
- contribute to the strengthening of community and family relationships;
- increase the productivity of the employed and the community as a whole.¹

It is thus a fundamental national objective to ensure access to sports facilities for an ever wider public in order to achieve these goals.

Although there has been a significant advance in public health condition in the past hundred years or so (Son et al. 2011), prevention of illnesses and further improvement of health continues to play a fundamental role among policy objectives (WHO 2003). One of the important strategic points of improving public health condition is focusing on communities. According a WHO statement (2012), public health condition in a specific geographical area is similar. Improvement of community health is, therefore, an important part of healthy community development and functioning. This requires development and active involvement in community thinking. An important component of this is commitment to sport and community health in a given municipality (Labonte and Laverack 2001; Edwards 2015), which is partly expressed by developing facilities that provide opportunities for sports in that given area.

In our research, we attempted to determine current availability of sports facilities in different regions of Hungary and to describe what financial or other resources are available for maintaining these as well as the extent to which the sports halls in operation are exploited. In our current research we included existing sports halls of the Northern Great Plain and Transdanubia (*Figure 1*).

MATERIALS AND METHODS

The study was based on a telephone survey, which included factors influencing maintenance beyond the data regarding the facilities.

Our research included altogether 39 institutions (24 in Northern Great Plain and 15 in Central Transdanubia; *Figure 2*).

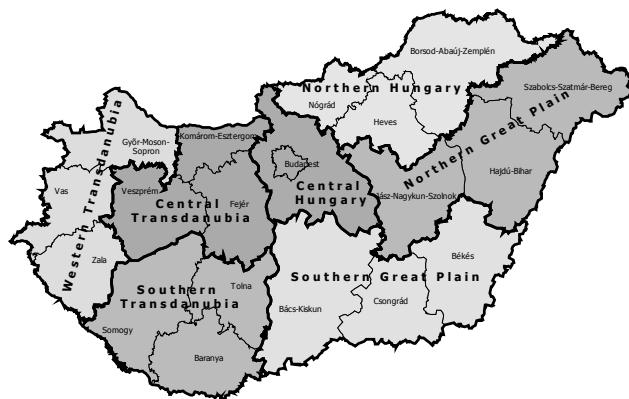
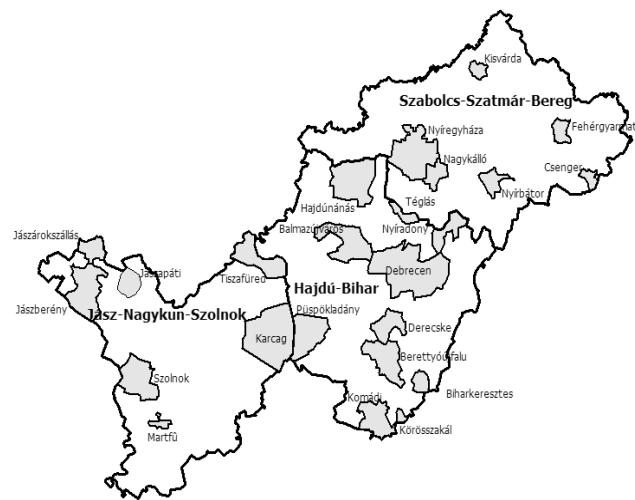
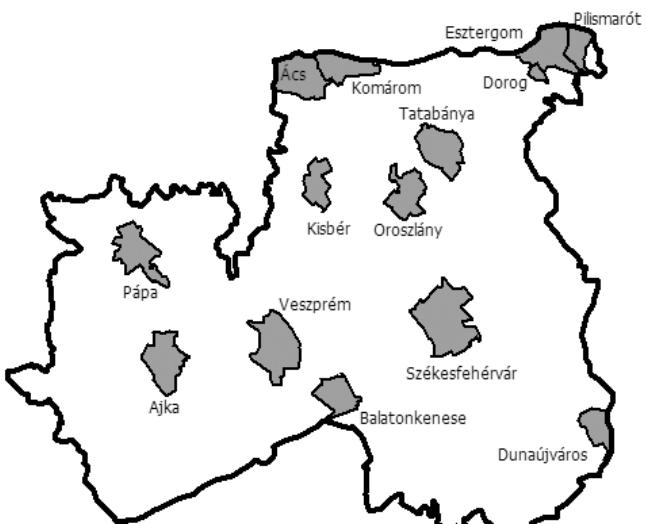


Figure 1 - Regions of Hungary

Source: Own compilation.



Northern Great Plain



Central Transdanubia

Figure 2 - Geographical location of sport institutions involved in the survey within the Northern Great Plain and Central Transdanubia regions.

Source: Own compilation based on our questionnaires.

1 Background material on Sport XXI National Sports strategy

The reason why these two regions were chosen was the aim to introduce an eastern and a western Hungarian region, one from the plains regions and one from Transdanubia. Moreover, we wished to reveal the extent to which the large sports organisations in the Central Transdanubia region influence the exploitation of facilities.

The evaluation was carried out using the EvaSys program (VSL Inc., Hungary; <http://www.vsl.hu>).

Analysis of data for the Northern Great Plain region was based on accessible, primarily HCSO databases and studies related to the topic.

Correlation between the variables in question – population of the given town versus the capacity of the sport infrastructure or the frequency of events held – was assessed by calculating the correlation coefficient (r) and estimating the statistical significance of this correlation using SigmaStat (Systat Software Inc., San Jose, CA, USA). Significance was assumed when $p < 0.05$.

RESULTS AND DISCUSSION

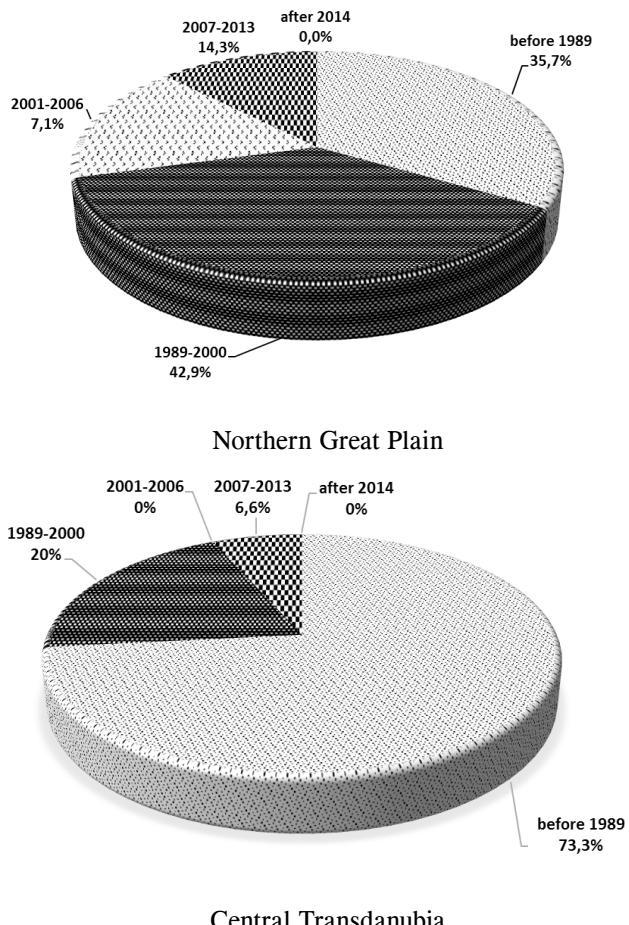


Figure 3 – Dates of facility inaugurations
Source: Own compilation based on our questionnaires.

It is clear when comparing the dates of inaugurations of sports facilities (Figure 3) that while almost all periods are represented in the Northern Great Plain region, they primarily occurred prior to 1989 in Central Transdanubia and only rarely following the change of regime (1989).

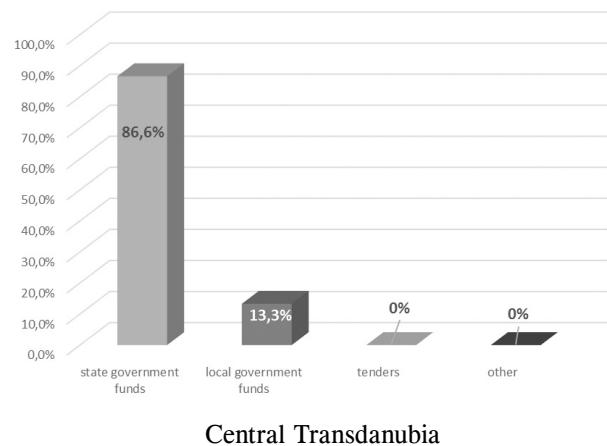
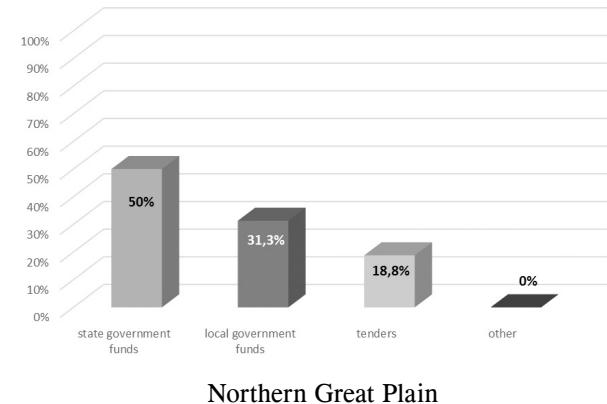
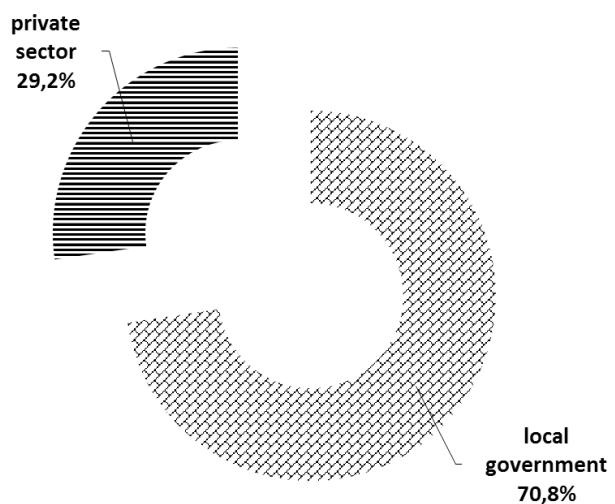
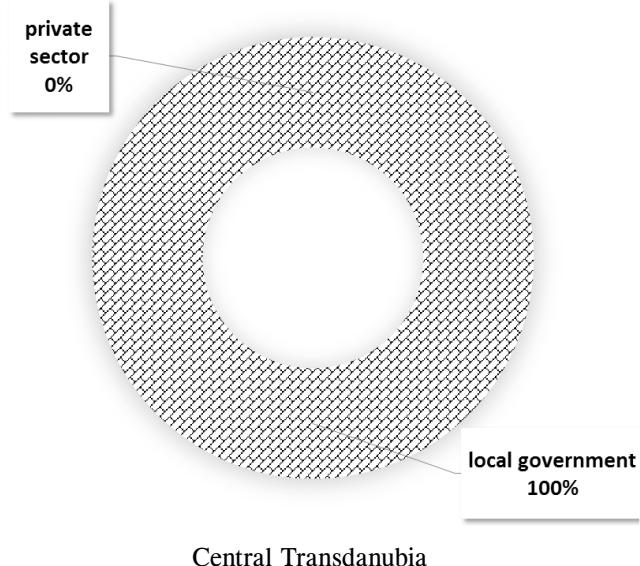


Figure 4 – Resources of sports hall construction
Source: Own compilation based on our questionnaires.

When the resources of constructions are examined (Figure 4) – and this also supports the information presented on the diagrams in Figure 3 – that project financing through tenders is also present in addition to national and local government financing in the Northern Great Plain region, while mostly nationally financed projects are typical in the Central Transdanubian region, as the majority of constructions were completed prior to the change of regime.



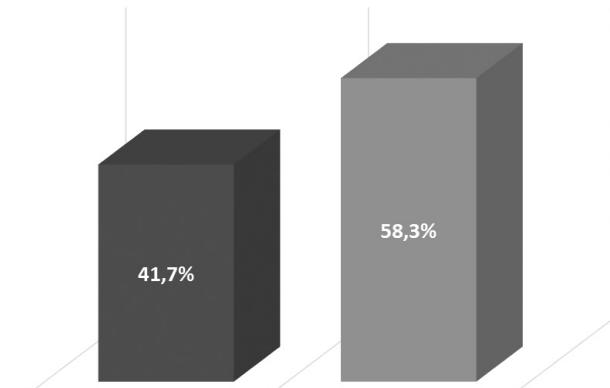
Northern Great Plain



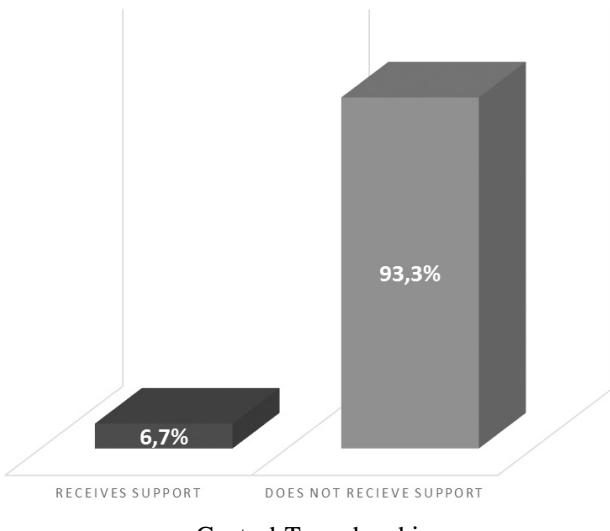
Central Transdanubia

Figure 5 – Facility operators
Source: Own compilation based on our questionnaires.

The two diagrams in *Figure 5* also support the information contained in the above figures (*Figure 3* and *4*), namely that the date of establishment and distribution highly influences who or which legal entity runs the facility. There was no facility operated by the public sector in Central Transdanubia, most likely because the majority of sports halls were constructed prior to the change of regime.



Northern Great Plain

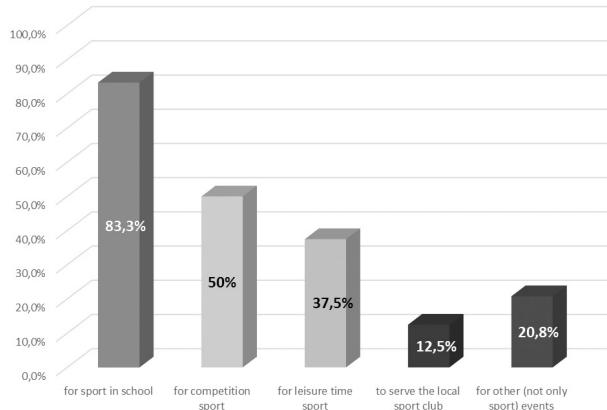


Central Transdanubia

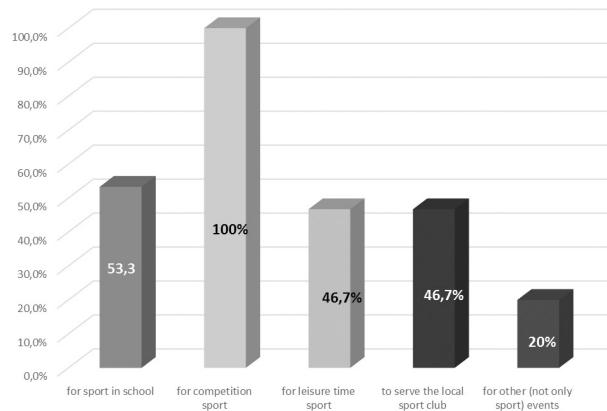
Figure 6 – Does the facility receive any government funds for maintenance?

Source: Own compilation based on our questionnaires.

We obtained even worse results regarding government funding for maintenance in the Central Transdanubian region. Only one facility out of all the sports halls receives government support here while eight facilities receive funds from the state in the Northern Great Plain region (*Figure 6*).



Northern Great Plain

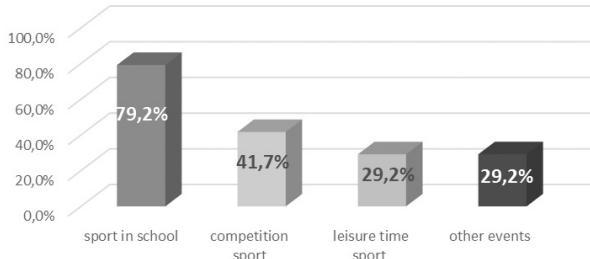


Central Transdanubia

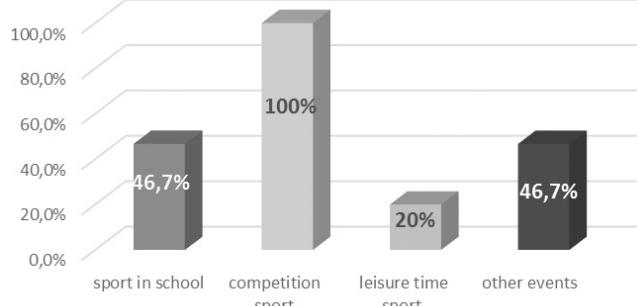
Figure 7 – Aims of establishing sport halls. Note that more than one aim might have been named in the survey.

Source: Own compilation based on our questionnaires.

The aims of establishing sport halls clearly reflects that many large sport clubs exist in the Central Transdanubian region, where locations for practice and playing matches are necessary (Figure 7). On the other hand, the tendency which can be observed following the change of regime is clearly visible in the Northern Great Plain region, namely that the support of physical education in schools began by initiating the constructions of sports halls in smaller settlements which also provide a place for physical education classes.



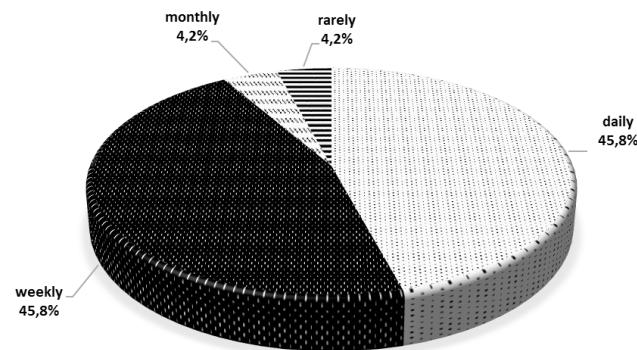
Northern Great Plain



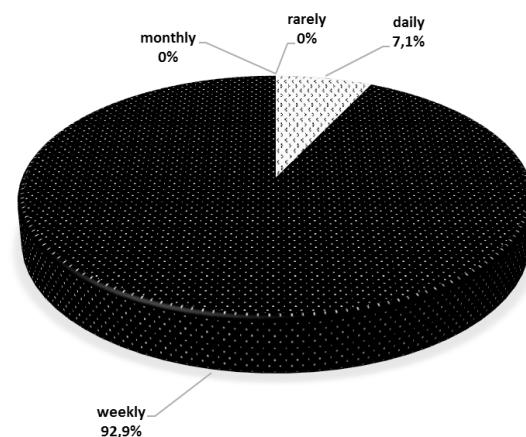
Central Transdanubia

Figure 8 – Types of events organised in sports halls. Note that more than one type might have been named in the survey.
Source: Own compilation based on our questionnaires.

We found it worthy to examine whether the currently most often organised events fit the original purpose or not. It can be clearly seen by looking at the diagrams in Figure 8 that the events most often organised in sports halls in the Northern Great Plain region are linked to school sport, while most events in the Central Transdanubian region are connected to competitive sport.



Northern Great Plain



Central Transdanubia

Figure 9 – Frequency of events organised in sports halls
Source: Own compilation based on our questionnaires.

When examining the most frequently organised events it is also obvious that there is a higher ratio of daily events in the Northern Great Plain region while facility utilisation happens on rather a weekly basis – most likely due to the matches and trainings of sports clubs – in the Central Transdanubian region (Figure 9).

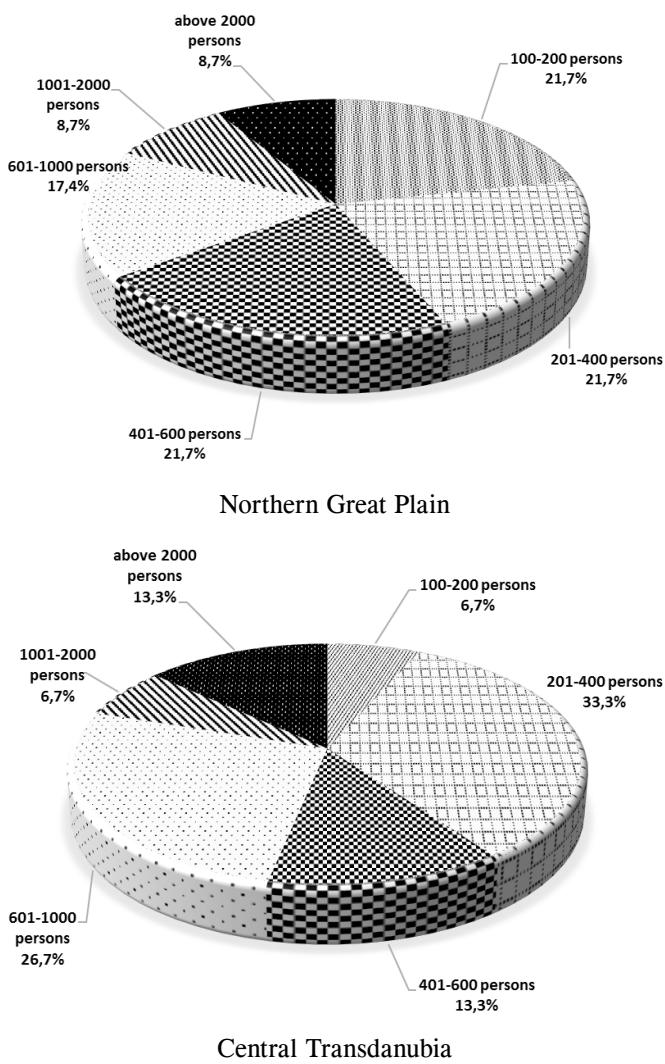


Figure 10 – Capacity of sports facilities

Source: Own compilation based on our questionnaires.

When examining the capacity of facilities it can be stated that there are an approximately equal number of sports halls with a capacity of 201-400, 401-600, and 601-1000 in the two regions (Figure 10).

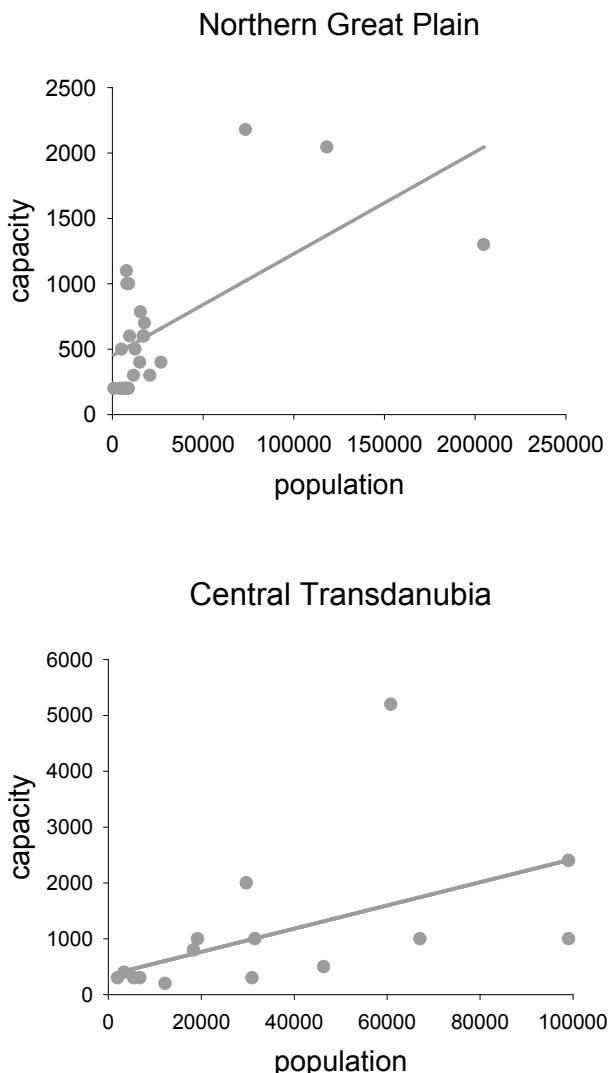


Figure 11 - Relationship between the population of the settlement and the capacity of the sport arena.

Source: Own compilation based on our questionnaires.

Regression lines fitted using the least squares method to the data points in Figure 11 reveal whether or not there is a correlation between the capacity of facilities and the population of the settlements. It can be said that, as it was referred to in our previous study (Kosztin and Balatoni 2015), correlation can only be observed in the Northern Great Plain region between the capacity of sports facilities and the population of the settlement if the county seats are also included. The situation is similar in the Central Transdanubian region as well. Considering the sports halls in the county seats results in a correlation similar to but not as strong as ($r^2 = 0.269$; $p < 0.05$) in the Northern Great Plain. At the same time, if the four sports facilities found in these towns are excluded, the correlation ($r^2 = 0.1771$; $p > 0.19$) ceases.

It can be stated that the capacity of facilities justified by the population of the settlement were disregarded when the funds were used and the sports halls were planned.

CONCLUSIONS

Sport has long been considered as a dominant and practical tool of development worldwide. As Coalter (2010; 2013) also points out, the “sport for development” is a continuously existing topic of community policy in the industrialized and even in some developing countries (Levermore 2008).

This aspect is especially strong in general debates and negotiations on sports and physical education programs recently, referring to the presumed relationship between sports and improved physical and mental health, as well as between the improving ratio of participation in formal training and development of community relationships. In the light of these it is not surprising that certain settlements consider it a priority to develop facilities providing sport opportunities even if no preliminary studies are available regarding their utilisation and sustainability. Our study compared the sports halls of two regions, focusing on the aspects above.

We looked up a total of 39 sports halls in Northern Great Plain and Central Transdanubia, eight of these (7+1) were constructed after 2000.

It was revealed that 100% of the Central Transdanubian facilities are operated by the local governments, while almost half in Northern Great Plain are operated by enterprises owned by the local government.

Funds obtained through tenders were also involved in the construction of new sports halls in the Northern Great Plain region, while this cannot be said in case of the Central Transdanubian facilities.

The primary purpose of sports halls in the Central Transdanubian region is to provide a location for competitive sports, while the Northern Great Plain region concentrates on the trinity of school, competition, and leisure sports.

The state has an important role in operating all areas of sport.

The fact that the sport events in themselves do not make the facilities sustainable has to be considered even in the planning phase regarding the infrastructural developments of the coming years.

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