ABSTRACT:
There are a number of economic concerns as regard to sports in India. The most investigated topic is the participation cost incurred by the athletes. In this paper, we study the cost of participation among the rural and urban athletes of University college students in Karnataka state. This study was determined on 528 athletes, comprising 272 from rural area and 256 from urban area through a structured questionnaire. The sample for the study was selected randomly from the track and field athletes who had participated in at least inter-collegiate level tournaments from different Universities of Karnataka. The study concluded that the cost of participation of the urban athletes was more than the rural athletes. It is also observed that the expenditure on food contributed to 61% of the total expenditure.

KEY WORDS: Cost of participation, Track events, Field events, Athletes, Rural, Urban

INTRODUCTION:
Due to globalisation, the scope of sports is widened. It was observed that the concept of sports participation is a costlier effort. If it were for mere recreation, then there is a chance of not keeping your physical health up to the standards. Since it is a serious affair, students need to look into the nutrition aspects, sports wear and access to the facilities. It is also found that the cost of sports equipment is also increasing which in turn discourages the participants to continue their interest in sports. The schools and colleges were also observed to be helpless in providing required sports facilities and equipment to the students. So, there is a need to find out the cost of participation in sports among rural and urban sports achievers in Karnataka state. The research will open a new vista for the studies in sports economics. The findings of the present study would provide a guideline for the government to estimate the grant-in-aid to the schools and colleges on the basis of average number of participants and average cost of participation per student.

STATEMENT OF THE PROBLEM
The main purpose of present study is to examine the cost of participation in sports among rural and urban athletes of Karnataka state university colleges.

HYPOTHESIS OF THE STUDY:
It is hypothesized that there is no significance difference in cost of participation in sports among the athletes of rural areas and the athletes of urban areas.
METHODOLOGY:

The sample for this study was chosen randomly from different universities of Karnataka who had represented in at least one inter-collegiate level tournament in track and field events. Study was further delimited to athletes of rural and urban area. This study was determined on 528 athletes, comprising 272 from rural area and 256 from urban. The study was limited to personal survey as the questions which were asked in the questionnaire are prepared by research scholar himself with the guidance of experts which is delimited to their knowledge.

SIGNIFICANCE OF THE STUDY:

This study will provide the detailed information on cost of participation in track and field athletes among the rural and urban areas which will be helpful to the coaches, trainers, trainees and others needed to plan their future potential. Study information will also be helpful for different sports organizations such as sports clubs, sports associations, sports hostels, educational institutions etc. for future plan and to prepare annual budget.

STATISTICAL PROCEDURE:

The test of significance or hypothesis testing always demand for some kind of statistical technique to be used. There are different ways and techniques in which data can be treated and analysed statistically. In present study, the measures like arithmetic mean, standard deviation and t-test are used to compare the data.

Not surprisingly, “the target group” studied through questionnaire on the cost of participation had a relatively high level of commitment in sports participation. The cost of participation plays one of the major roles in the sports participation among the youth. To obtain a more accurate picture of the actual cost of participation, we have analysed both the direct expenditure and the indirect expenditure incurred by the athletes on at least one of the listed items during their involvement in sports activity. The direct expenditure includes cost incurred on: a) Sports club/Coaching organization fees which includes joining fees, membership fees and insurance cost, b) Fitness related expenses which includes the fees for theory classes, training camps (in college), extra training (outside colleges), field coaching, body care, c) Expenses for participation which includes fees charged to play in matches, fees charged for hiring specialise equipment and cost incurred to purchase or hire any equipment that is necessary to participate in sports (which is not provided free of cost), d) Expenses on clothing/footwear (purchase or hire). The indirect expenditure comprises of the expenses due to a) Food (meals/snacks), post-match refreshments, drink expenses and extra-nutritive food, b) Transportation, c) Medical expenses including the first-aid kit, sports injury related expenses and other medication, and d) Additional expenses including the expenditure for dormant sport equipment and clothing purchase for active sports participation but not used, purchase of newspaper/books/magazine and media contents.

RESULTS AND DISCUSSIONS:

<table>
<thead>
<tr>
<th>Categories</th>
<th>Area</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Club fees</td>
<td></td>
<td>261300</td>
<td>417900</td>
<td>679200</td>
</tr>
<tr>
<td>Fitness</td>
<td></td>
<td>777200</td>
<td>118400</td>
<td>1961600</td>
</tr>
<tr>
<td>Participation fees</td>
<td></td>
<td>905800</td>
<td>945920</td>
<td>1851720</td>
</tr>
<tr>
<td>Clothing/footwear</td>
<td></td>
<td>2703600</td>
<td>2847400</td>
<td>5551000</td>
</tr>
<tr>
<td>Food</td>
<td></td>
<td>1024760</td>
<td>11608720</td>
<td>21856320</td>
</tr>
<tr>
<td>Transport</td>
<td></td>
<td>260400</td>
<td>290120</td>
<td>550520</td>
</tr>
<tr>
<td>Medical expenses</td>
<td></td>
<td>1261400</td>
<td>1310800</td>
<td>2572200</td>
</tr>
</tbody>
</table>
Table 1: Average cost (in Rs.) incurred by Rural and Urban athletes

<table>
<thead>
<tr>
<th>Category</th>
<th>Rural</th>
<th>Urban</th>
<th>Additional expenses</th>
<th>Total expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>407000</td>
<td>378000</td>
<td>785000</td>
<td>16824300</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>16824300</td>
<td>18983260</td>
<td>35807560</td>
<td></td>
</tr>
</tbody>
</table>

Diagram 1: Bar diagram of expenses on different categories for rural and urban athletes.

The Table 1 shows the detailed expenses under different categories. Within this expenditure, the expenses on food were the largest single item of recurring expenditure, accounting of about 61% of the total expenditure. Physical fitness, a must of the athletes and can be earned through balanced diet and good nutrition. The better the athletes, the faster the competition, the more important is the individual’s nutritive state. The least expenditure was on the travelling expenses which were about 1.5% of the total expenditure. Diagram 1 reveals that the cost incurred on all the different categories were considerably high for athletes of urban area than in rural area. On an average urban athlete spent 6% more than the rural athlete. The pictorial representations for athletes of urban and rural areas are given in charts 1 and 2 respectively. The cost on club fees and fitness related expenses for urban athletes were 23% and 21% more than rural athletes, which was considerably high compared to the other categories. The participation fees, expenses on clothing/footwear, food, transport and medical expenses for urban athletes were respectively 2.2%, 2.6%, 6.2%, 5.4% and 2% more than rural athletes which seem to be slightly less significant.
Statistical Analysis:
Null Hypothesis $H_0$: There is no significant difference in the cost of participation among rural and urban athletes.

The student's $t$-test is employed to test the significant of differences between the two sample means. The summary of ‘$t$’ statistics result is presented in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>61854.04412</td>
<td>74153.35938</td>
</tr>
<tr>
<td>Variance</td>
<td>1530925777</td>
<td>1459626837</td>
</tr>
<tr>
<td>Observations</td>
<td>272</td>
<td>256</td>
</tr>
</tbody>
</table>

Chart 1: Pie chart for cost incurred on different categories for Rural athletes.

Chart 2: Pie chart for cost incurred on different categories for Urban athletes.
Hypothesized Mean Difference | 0
---|---
df | 525

t Stat | -3.653966987

\[ P(T<=t) \text{ one-tail} \] | 0.000142082
\[ t \text{ Critical one-tail} \] | 1.647761204
\[ P(T<=t) \text{ two-tail} \] | 0.000284163
\[ t \text{ Critical two-tail} \] | 1.964492854

**Table 2: t-Test statistics for sample means of rural and urban athletes**

Since the absolute ‘t’ value is greater than 3, we reject the null hypothesis. Hence, it results that there is significant difference in the cost of participation among rural and urban athletes. Comparing the mean costs we conclude that the cost of participation of athletes of urban area is significantly higher than athletes of rural area.

**CONCLUSION:**

Although the figures are average and may hide huge variations in expenses, it seems an acceptable conclusion the cost of participation in urban athletes is significantly higher than in rural athletes. Such figures provide some perspective to the recent emphasis on the economic importance of sports.

**BIBLIOGRAPHY:**