

## Abstract

The study of design and management of public sport complexes aims to explore the architectural design, management, and users' needs for the proposal of sport complex centers in the Bangkok Metropolitan Area. Through cluster and catchment area analysis of Bangkok Metropolitan youth sport complex (Thai-Japan), Vachirabaenyatus sport center and Lumpini Park's youth sport complex, as well as their users were investigated to determine the architectural concept, functions and circulation in relation to the users' characteristics and satisfaction. Data were collected from physical facilities survey of 402 samples of sport complexes' customers by using questionnaires. Descriptive statistics, chi square, one way ANOVA, correlation, and cluster analysis were applied for quantitative analysis.

The results show that: 1) the catchment areas of sport complexes of the three different sizes (large, medium and small) are similar, approximately 4.5 - 6.5 kilometers in radius; 2) users prefer architectural design of modern style and in harmony with nature; 3) sport complexes should provide facilities for both sport and other recreation activities for different groups of customers, reflecting preferable sports and recreation activities. For entertaining and relaxing purposes; 4) users prefer facilities with mixed close and open circulation systems; 5) regarding the satisfaction of sport complexes' services and facility management, customers give high score to the functional areas management and moderate score to maintenance of facilities and the general services; 6) comparing the three sport complexes, the satisfactions of customers regarding the staffs' services and the adequacy of functional areas are statistically different.

The 70 Rai project, located at the site of Thailand Tobacco Monopoly Factory, Khlong Toei District, Bangkok, is planned and designed based on the characteristics of users within 6 kilometers in radius. The results show that it must be a large sport complex center, planned for users of 30,000 person per month. The complex should consist of two main buildings, the first of which is a renovated factory building and the second one is nearly built. Functional areas should consist of sport activities area of

34,703 sq.m., parking area for 570 cars and area for supplementary functions such as internet room, meeting and convention activities, areas for rent, foods center, etc. The total cost of investment is approximately 2,200,000,000 Baht. The investment will be a joint – venture between Bangkok Metropolitan Administration and Thailand Tobacco Monopoly. Then Bangkok Metropolitan Administration and a public company will be commissioned to operate the center. In conclusion, this project should reflect the dynamic social change in the community in order to improve quality of life and enhance the change for sustainability and should be used as a guideline for new facility planning.