

Sports Facilities - Planning and Engineering

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Roy B C, born in 1944, holds a Ph. D in engineering. In a career of over 40 years, Dr. Roy has dealt with many multi-disciplinary projects; experience ranging from concept plan to execution and is known for his innovative designs. He is the Project Director for the Commonwealth Games Stadium and infrastructure projects. He is also the Dy. Project Director for Kolkata East West Metro project. He is the Vice President and a Member of Technical Committee of IABSE.

1. Introduction

India will be hosting the Commonwealth Games in 2010, in New Delhi and there is a grand vision to make the city a „world-class city“ in anticipation. The Games have the ability to transform the city's urban landscape. The challenge is to ensure that the potential of the Games as a catalyst for change is harnessed. It offers an opportunity to fast forward into the future. The city is gearing up to provide the visitors an unforgettable experience, a sports extravaganza. But, in all its efforts the focus is on holistic thinking.

While it is undeniably true that Delhi has a legacy of sports infrastructure (1952 and 1982 Asian Games), it is also true today the situation in technology is imposing a different paradigm. Facilities now are more tuned towards creating even higher levels of comforts for athletes, spectators, both in the stadium and worldwide on TV, security and other requirements. Further, environmental friendliness has become imperative. Attempts are made to make the stadiums and other facilities versatile so that these spaces can be used for the Games and later can be leveraged as legacy facilities for both lower level sports and other non-sports events. This could also ensure a stream of revenue that could be used for maintenance.

Urban renewal or regeneration has been a theme in many such events in the past and appears an important one in the 2010 Games as well. When Beijing, Barcelona and Manchester hosted similar events, they reinvented their cities, turning depressed industrial areas into vibrant cultural centers. The urban landscape in Delhi is set to change dramatically with many infrastructure projects being

pushed through in time for 2010. The Games will buttress city's strengths and address infrastructure shortages to stimulate economic growth and development.

In this paper an attempt is made to discuss planning and engineering aspects of some stadiums and the related infrastructure.

2. Venues

If the city's sporting infrastructure is being upgraded, it is not merely for the Games. The authorities are looking to leveraging the created infrastructure over the design life time of the facilities. Plans include development of an efficient and effective transport network to facilitate access to the venues for athletes and spectators while ensuring safety and security.

Some of the main venues are: the Jawaharlal Nehru Stadium (JNS Complex) for the Opening and Closing Ceremonies and track and field events, Dr. Shyama Prasad Mukherjee Swimming Complex (SPM) for swimming and diving, the Indira Gandhi Indoor Stadium and Complex (IG Stadium Complex) for



Venues for the Commonwealth Games

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