

## TURF 2009 Presentation



***Main Rugby Stadium, CWG Delhi 2010***

### **'Developments in International Sports Turf'**

Over the last 10 to 20 years there have been dramatic advances in turf management throughout the world of sport. Sports surfaces, both natural grass and artificial, have become better; generally higher in playing quality, more reliable and internationally more uniform.

One of the driving forces behind this transformation is the world of satellite TV and lucrative sponsorship deals that go with it. With so much money resting on the reliable transmission of even a mid-range audience or special interest sporting event, the days of rain-stopped play may well be numbered.

The poor or water-logged surface that affects play both in temperate UK and monsoon-season India **can** be successfully tackled with advanced turf drainage methods, technology and maintenance. And the better quality the playing surface, the more chance the skillful player has to show what he or she can do,

by removal of the 'chance factor' brought into play by uneven, patchy pitches and outfields.

Now, there are specially-bred turf varieties are able to give greener grass, more resilient to wear and the rigours born of the requirement for a uniform plant cover grown close to its physical capabilities. Irrigation systems are now automatic and invisible below-ground installations, computer-controlled for efficient and uniform water use and least interference with sports and other events. Good sports grass varieties have even been bred to cope with salty or part-treated water, too.

And, in the colder countries where most the most demanding sport for grass takes place during the winter months when it does not grow, we have a new generation of lighting systems that are wheeled-out overnight to keep the grass growing throughout the year.

There is now a 'battle' going on between real grass and plastic options. Natural turf with reinforcement systems, supplemented by such artificial lighting, where plastic fibres are punched into a grass surface or mixed with the soil material to improve traction and resilience, are pitted against ever more 'realistic' artificial options.

Stadia Architects have been struggling to design ever bigger and higher, whilst compensating for the derogatory effect this may have on the actual focal point; the playing surface. Another design factor to cover is the multi-use requirement of sports stadia. Many, if not most, new major stadia have inbuilt the ability to switch from the primary sport to secondary sport and non-sport events; large concerts, celebrations, gatherings. A \$500 million stadium must be used, if not 24/7, then as much as is feasibly possible to recoup costs and hopefully make a profit. Stadia now have sliding roofs, retractable pitches, interchangeable surfaces, where natural and artificial turf, hard or other finishes can be installed to suit. Several solutions to the same problem.

FIFA, the governing body of soccer, that one big, potentially lucrative multinational sport yet to make a real impact on India, has endorsed the use of the new types of synthetic turf pitch (STP) for international events. These STP's have plastic blades mimicking as closely as possible those of natural grass, with sand and rubber-crumb to give the shock absorbancy and run-of-the ball required. Not quite the real thing, but getting closer.

Maintenance is still required on such synthetic surfaces, but the demands may be less. In conditions where snow and hard winters are a problem, or the availability of water for irrigation, there may be little choice but to go for the artificial option. However, there is still no surface better for actual quality of play than natural grass, which has no limited life-span if properly maintained. It does have a limited number of hours use per week, unlike the STP option, but the

latter also has disadvantages, for example it can get very hot and uncomfortable for ground-contact sport, and is by no means maintenance free in dusty climates.

Like the Chinese sports market of 10 years ago, India may be set for a period of rapid development in sports facility quality, not least because there are two driving forces that may come into play.

One is the desire to improve the nations sporting success rate, with good facilities at the heart of this aim, and the other is the access to international money if facilities and standard of participation are attractive to a wider market.

Soccer is the prime example of the untapped potential. We have designed a set of 8 high-specification pitches for the Commonwealth Games Rugby 7's tournament next October, which are in truth unlikely to be used as a rugby 'centre of excellence' after the Games are finished. However, it would not be beyond a reasonable stretch of imagination to see such international standard pitches become the seeding ground for a higher level of soccer facility and play, with a knock-on effect for the cricket world too.

There are maintenance issues behind this option; the pitches require good maintenance, and a certain amount of money, which would be there if they were used to the full, but not if reverting to University College functions only. The legacy needs planning and support.

After practicing for the Nehru Cup at the incredible Nou Camp Stadium complex in Barcelona earlier this year, the Indian national soccer team came back to play on the Ambekhar Stadium pitch, tramped-upon by 2,000 marching feet days before, flooded during the tournament, and with a surface that favoured the aerial game of the Lebanese on the opening game, lost by the Indian team part due to the poor surface, it was claimed.

Turf condition and construction were perhaps to blame, both relatively easily solved. The golf world in India has over a dozen truly international golf courses presented to international standards, but in fact most others are presented only as well as is possible, given construction limitations. Soccer pitches are invariably lacking in presentation, if not grass. Cricket outfielders are mostly the same, 'good given the limitations'. Surprising that more attention is not paid to the hallowed ground on which this sporting religion is played.

Golf is ahead of cricket and other pitch-based sports in the country, but my prediction is that cricket outfielders and soccer pitches will improve dramatically in coming years. We may soon see Manchester United versus Real Madrid in Delhi; a one-off kick-start to a boom in the sport, if the facilities are available. We may see the end of rained-off matches, and more photogenic turf offering a capacity for a higher standard of play.

The infrastructure supporting sports facilities is going to improve in India, for sure. There is a lack of expertise in forming world-class sports-turf surfaces (cricket squares excluded), exemplified by the special attention required for rugby, an almost unknown sport to the turf management specialists in this country, and requiring certain specific approaches to make a truly top-class pitch.

There is also a lack of specialised equipment and contractors for construction and maintenance. The European, American, even Chinese model is one where good facilities are constructed to proper standards, and then most crucially, managed to these same standards. This requires better training, better equipment, paid for by improved income. A building process for the whole industry.

As a consultancy, we are making inroads on all fronts, looking at equipment import, India-specific research and development projects, and supporting services for those with the desire to have the best in sports surfaces.

The Commonwealth Games are helping boost this desire, and as befits the basis of this summit, the next Olympics in the UK in two years time is also providing impetus to the raising of the Indian sporting flag.

### **David Hemstock**

International Sports Turf Consultant

Senior Member of the European Institute of Golf Course Architects

Associate Consultant, The Sports Turf Research Institute, UK



***Lord's Cricket Ground, London; upgrading the outfield***