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अनुदेश

प्रकाशन के लिए सामग्री डबल स्पेस में स्वच्छ टाइप की हुई तीन प्रतियों में होनी चाहिए। समारोह, घटना आदि के सम्पन्न होने के पश्चात रिपोर्ट तुरन्त ही भेज देनी चाहिए। आलेख / रिपोर्ट के साथ यथासंभव फोटोग्राफ भी भेजे जाने चाहिए, जिनमें चित्र को पत्र के साथ जैमक्लिप लगाकर भेजना चाहिए। फोटोग्राफ में अधिक ध्यान घटना या उत्पाद विशेष आदि पर दिया जाना चाहिए न कि व्यक्ति विशेष पर।

सूचनाओं के सही और विश्वसनीय प्रकाशन में यथासंभव सावधानी बरती गई है। फिर भी किसी भूल, गलती, त्रुटि या विलोपन के लिए लघु उद्योग समाचार पत्रिका का कोई उत्तरदायित्व नहीं है। लघु उद्योग समाचार जर्नल में प्रकाशित समाचारों, तस्वीरों तथा दृष्टिकोणों से सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय तथा सरकार की सहमति होना आवश्यक नहीं है।

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The material for publication should be sent, in triplicate, neatly typed in double space. The reports on functions or events should be sent immediately after its conclusion. Articles/Reports should be accompanied by photographs with captions pasted upon reverse. The photographs should be placed in between the thick paper, gem clipped and attached to the forwarding letter. Photographs should be focussed more on the events or products than personalities.

All efforts have been made to ensure that the information published is correct and reliable. However the *Laghu Udyog Samachar* journal holds no responsibility for any inadvertent error, commission or omission. Opinions, photographs and views published in *Laghu Udyog Samachar* journal do not necessarily reflect the views of *Ministry of Micro, Small & Medium Enterprises* or *Government*.

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लघु उद्योग समाचार

मासिक पत्रिका 'लघु उद्योग समाचार' के सामान्य अंक की एक प्रति का मूल्य 15 रुपए और इस विशिष्ट अंक का मूल्य 20 रुपए है, जबिक वार्षिक मूल्य 200 रुपए है। वार्षिक शुल्क बैंक ड्राफ्ट के रूप में सीधे प्रकाशन नियंत्रक, मारत सरकार, प्रकाशन विभाग, सिविल लाइंस, नई दिल्ली-110054 को भेजा जा सकता है। पत्रिका नकद भुगतान पर प्रकाशन नियंत्रक कार्यालय के विभिन्न बिक्री केंद्रों से भी खरीदी जा सकती है।

पाठकों-लेखकों से अनुरोध है कि इस मासिक को सफल बनाने में सक्रिय रूप से भागीदारी निभाएं और इसे लक्षित समूह के लिए अधिक से अधिक उपयोगी बनाने के लिए अपने बहुमूल्य सुझाव इस पते पर भेजें :-

हरीश आनन्द, वरिष्ठ संपादक / हरेन्द्र प्रताप, संपादक

लघु उद्योग समाचार

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Publisher's Note ...

The Commonwealth Games 2010 is one of the most important International Sports event being held in India after the Asian Games 1982. And this may be the right time to focus on the sports goods industry of India.

This issue of Laghu Udyog Samachar covers the sports goods industry of India, its strength, weaknesses and scope for its development as a global player.

India has the 2nd largest youth population in the world but it cannot be called a sporting nation as very few of our youth pursue sports as a regular or professional activity. So, it is not surprising that even after its 100 years of existence, the sports goods industry of India is small and operates almost at the level of handicrafts activities.

The sports goods industry has the widest range of products. According to some estimates, they number more than 1000, and use almost all manufacturing processes from machining to plastic injections to electro farming and polishing. Starting from the ordinary wood and rubber, the global sports goods industry uses exotic materials like carbon composites and super alloys to provide strength and reliability to the sports goods.

The sports and leisure goods retail market in India is valued at USD 17 billion. A large share of it goes to the global brands. The share of Indian MSMEs can be considerably enhanced by diversifying the range of products produced, technology improvements and economies of scale. Such developments are already being seen in items like football and cricket equipment, where the manufacturing skill of the Indian workers has taken Indian sports goods all over the world and also created a niche market for the Indian industry.

The Indian exports in the sports goods is expected to be Rs.540 crores during the current year. When

compared even with our neighbouring countries, this is guite modest. The challenge before the sports goods industry today is to upscale production using state of the art materials like light metals, engineering plastics, composites etc. To achieve the same, cluster level synergy in activities and specialization of production is essential which will open the scope for use of modern manufacturing techniques. With a larger production base and sufficient marketing muscle, the Indian industry is capable of reaching a position where it can stand on its own with the large global suppliers and brands.

To facilitate the upgradation of the Indian sports goods industry, the Government of India has already taken a number of policy initiatives. Under the MSE-Cluster Development Programme, the office of the DC (MSME) assists the sports goods clusters to take up common initiatives in upscaling of technology, training, marketing and credit. The financed support is upto the 90% of the project cost for starting common facility centres in clusters comprising primarily of micro enterprises. national The manufacturing competitiveness programme also offers 10 schemes covering almost the entire value chain of the manufacturing sector starting from productivity enhancement to upscaling of the marketing activities. We invite sports goods industry to avail the benefits under these programmes.

For the MSMEs in the sports goods sector, our Process-cum-Product Development Centre (MSME-TDC) at Meerut can provide expert advice on process and product upgradation services. The Centre also provides training and testing facilities to the sports goods industry.

This issue of the Laghu Udyog Samachar highlights the important achievements of the sports goods industry and its vision for the future growth. We hope that CWG 2010 will give a boost not only to the Indian sports but also to the sports industry of the country.

New Delhi



(Madhav Lal)

From the Desk of Editor-in-Chief



Come Out and Participate!

Come out and play! This is the motto of Delhi Commonwealth Games, 2010. Similarly, on this occasion, the slogan for Indian MSMEs especially Sports Goods Entrepreneurs may be prescribed as come out and participate! Since Sports Goods Sector is directly associated with the Commonwealth Games, the event also provides exposure to many MSMEs in a number of trades including service sector.

Building the sports infrastructure, major repairs and maintenance, spending on security, volunteers, broadcasting, telecom links, publicity, entertainment, catering, accommodation, training of sportspersons, sports equipment and stadium furnishing as well as all kinds of event related tourism and other activities, these all unite to provide a global business platform to the Small and Medium Entrepreneurs of the host country.

The Indian Sports Goods business has expanded from Chennai to Mumbai and from Kolkata to Kashmir apart from huge concentration of clusters in Uttar Pradesh and Punjab. A good number of units have upgraded their capacity

not only in terms of quantity but also in quality. That is why, most of the Indian companies are getting success to export their products to Europe, U.S.A. and Australia. Indian SMEs are exporting a number of items like inflatable balls, hommocks, cricket bats, boxing equipment, general exercise equipment, cricket equipment, golf balls, toys and games, nets, carrom board and chess, cricket and hockey balls, table tennis equipment, football, bladders, fishing equipment, protective equipment for hockey, hockey sticks, sports badges and insignias, racquets and many other sports goods.

Therefore, the important role of sports goods sector in organising the mega event like Commonwealth Games and its contribution in employment generation encouraged our Editorial Board to bring out a special issue of Laghu Udyog Samachar just before the commencement of Delhi Commonwealth Games, 2010.

Our team visited extensively in Meerut, Ludhiana and Jalandhar to get first hand information about the activities happening in sports goods clusters. I hope that the outcome of the visit of our team and technical presentation of a set of sports goods profiles in the issue will give value addition to the publication.

The issues discussed in this special edition of the monthly may be useful as a reference material for both the existing and new entrepreneurs of the country as well as for all the readers in general.

New Delhi August 26, 2010

(M.P. Singh)







वरिष्ठ संपादक की ओर से...

खेल-संस्कृति का द्वार-कॉमनवेल्थ गेम्स 2010



खेल किसी भी देश की सामाजिक एवं सांस्कृतिक छवि का एक अहम<mark>् द्वार है। जिसमें मानवीय व्यक्तित्व का विकास, खेल-</mark> शिक्षा और उसकी जीवनशैली का परिचय झलकता है जो जीवंत परम्परा <mark>को बनाए रखता है।</mark>

आज हमारे देश में बच्चों, किशोरों और युवाओं की आबादी लगभग 77 करोड़ है और इसमें से केवल 5 करोड़ की पहुंच ही संगठित खेल सुविधाओं तक है और वह भी शहरी क्षेत्रों की। हमारे ग्रामीण क्षेत्रों में 75 प्रतिशत के लगभग आबादी है जो खेल की मूलभूत सुविधाओं से वंचित है। वहां खेलों के बुनियादी ढांचे का अभाव और प्रशिक्षण सुविधाओं का न के बराबर होना देश में खेल-संस्कृति के विकास में बाधक बनता है। ऐसे में देश की राजधानी में उन्नीसवें कॉमनवेल्थ गेम्स का होना खेल संस्कृति को बढ़ावा देने में एक महत्वपूर्ण उपक्रम है। इन खेलों से खेल सामग्री के निर्माता/विनिर्माता, निर्यातक, खिलाड़ी, खेलों के परिसंघ आदि जब एक स्थान पर इनके प्रत्यक्ष साक्षी बनेंगे तो निश्चित ही वे ऐतिहासिक पल होंगे।

कॉमनवेल्थ गेम्स की अनुगूंज को महसूस करने के लिए 'लघु उद्योग समाचार पत्रिका' ने एक औद्योगिक यात्रा की आयोजना के तहत, प्रस्तुत अंक में एकत्रित उन तमाम जानकारियों/सूचनाओं को अनुसंधानात्मक रूप में एक सूत्र में पिरोने का विनम्र प्रयास किया है। साथ ही खेल सामग्री उद्योग के उन अनछुए परिदृश्यों को भी रूपांकित किया है जिनमें सफलता की कहानी, कॉमनवेल्थ गेम्स से घरेलू खेल सामग्री पर विनिर्माताओं/परिसंघों के परिसंवाद और उनके सहसंबंध, विस्तृत प्रोजेक्ट रिपोर्ट आदि के दस्तावेजी स्वरूप प्रमुख हैं।

कॉमनवेल्थ गेम्स अपने प्रभाव, अनूठे सांसारिक रूप से अद्भुत और बहुआयामी खेलों का परिचायक है। यह समारोह चार वर्षों में एक बार होता है। सबसे पहले यह समारोह 1930 में हुआ तब उसे ब्रिटिश एम्पेरर गेम्स के नाम से जाना जाता था। कॉमनवेल्थ गेम्स दोस्ताना खेलों के नाम से भी जाने जाते हैं क्योंकि यह कॉमनवेल्थ देशों के उन परिवारों के बीच खेला जाता है जिनका समान इतिहास और भाषिक चेतना होती है। रानी ऐलिजाबेथ (द्वितीय) इसकी अध्यक्ष हैं और कॉमनवेल्थ गेम्स फेडरेशन (सीजीएफ) की पैट्रन भी। कॉमनवेल्थ गेम्स फेडरेशन के 71 राष्ट्र सदस्य हैं जिन्हें कॉमनवेल्थ गेम्स एसोसिएशन (जीजीएस) के नाम से जाना जाता है।

भारतीय ओलम्पिक संघ (आईओ<mark>ए) तथा कॉमनवेल्थ गेम्स एसोसिए</mark>शन, भारत ने मई 2003 को कॉमनवेल्थ गेम्स फेडरेशन लंदन में, भारत में वर्ष 2010 में कॉमनवेल्थ गेम्स करवाने के लिए अपना प्रस्ताव दिया था। कॉमनवेल्थ गेम्स फेडरेशन की जनरल एसेम्बली ने मोंनटेगो, जेमिका में नवम्बर 2003 में एक बैठक में दिल्ली में इसे करवाने की अनुशंसा प्रदान की।

वर्ष 2014 में ग्लासगो शहर <mark>में अग</mark>ले कॉमनवेल्थ गेम्स होंगे। इसकी एक छवि कॉमनवेल्थ गेम्स के अवसर पर 8 मिनट की एक भव्य सांस्कृतिक झलक में मिलेगी जिसे 420 स्कॉटिस कलाकार प्रस्तुत करेंगे और मुख्य आकर्षण में 71 कॉमनवेल्थ राष्ट्रों का मार्चपास्ट होगा।

उन्नीसवें कॉमनवेल्थ गेम्स के लोगों का चक्र गुंजायमान नए भारत की छवि को आधुनिक मुहावरे के आलोक में प्रस्तुत करता है। चक्र प्रतीक है समय <mark>के प</mark>हिए का और जीवन के घेरे का, इसी में, राष्ट्र चिन्ह प्रतिबिम्बित करता है देश की आजादी, एकता और शिक्त का...यह एक ऐसा महागीत है जो देश की गौरवशाली परम्परा के तले हो रहे खेलों के महाकुम्भ में जहां लाखों की संख्या में खिलाड़ी इकट्ठा होंगे, जहां उनके सही भाग्य की इच्छा पूर्ण होगी, लक्ष्य हासिल करेगा खेल भावना का।

शेर को मां देवी दुर्गा के साथ, हमारी पौराणिक कथाओं के अनुसार जोड़कर देखा जाता है जो प्रतीक है शिक्त का और साथ ही स्त्री शिक्त का भी, और बुरी शिक्तयों का संहारक रूप भी, इसीलिए शेरा के प्रतीक चिन्ह को कॉमनवेल्थ गेम्स ब्राण्ड के रूप में चुना गया है जिससे हमारी सांस्कृतिक विरासत की झलक भी मिलती है। संतुलित पर्यावरण के लिए इस कॉमनवेल्थ गेम्स को ग्रीन गेम्स के रूप में प्रचारित करने के लिए यूएनईसी के साथ एक समझौता ज्ञापन पर हस्ताक्षर किया गया है।

प्रस्तुत <mark>पत्रिका का यह विशेषां</mark>क जहां कॉमनवेल्थ गेम्स को समर्पित है ठीक वहीं भारत के खेल सामाग्री उद्योग की दशा और दिशा क<mark>ी ग</mark>हन पड़ताल भी करता है और पुनर्खोज भी कि कौन-कौन सी सामग्री कॉमनवेल्थ गेम्स के लिए बन रही है...

नई दिल्ली

27 अगस्त, 2010







संपादक की ओर से...

अवसर एक, उद्यम अनेक!

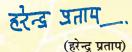
उन्नीसवें राष्ट्रमंडल या राष्ट्रकुल खेल (कॉमनवेल्थ गेम्स) विश्व के 70 से अधिक देशों के करोड़ों लोगों के लिए एक अवसर है, जिसके अर्थ अलग-अलग हैं यानि मौका एक है और मायने अनेक यानि आयोजन एक, उद्यम अनेक! मेजबान देश भारत या मेजबान शहर दिल्ली को ही लीजिये! लाखों मजदूरों के लिए यह रोजी-रोटी कमाने का जिरया बना है। लाखों शहरी के लिए इससे सुविधाओं का जाल बिछा है। भिन्न-भिन्न व्यवसायी को भिन्न-भिन्न रोज़गार मिला है। सानिया मिर्ज़, सायना नेहवाल, तेजिस्वनी सावंत, मोनिका देवी, एस. कौर, रीतू रानी, डोला बनर्जी, एल.बी. देवी, गगन नारंग, समरेश जंग, मानवजीत संधू, विजेंदर सिंह, लियेंडर पेस, महेश भूपित, ओम प्रकाश सिंह, संदीप सिंह, राजपाल सिंह, अर्जुन हलप्पा, सुशील कुमार, चेतन आनंद, रिव कुमार जैसे विश्व खेल मंच के सुस्थापित भारतीय सितारों के लिए अपने घर में करोड़ों खेल प्रेमियों से सम्मान पाने का यह अविस्मरणीय अवसर है। एन.एस.आई.टी. के तृतीय वर्ष के इंजीनियरिंग छात्र 19 वर्षीय मनचीत के लिए यह 'यूनिफॉर्म असिस्टेंट' बनने का सुअवसर है। 'एमिटी' से प्रशिक्षित मनचीत जैसे हजारों छात्रों को 'वालेंटियर' या 'अशर' के रूप में पार्ट टाइम जॉब मिला है, जो कैरियर, आत्मविश्वास और 'पर्सनल्टी' के विकास के लिए महत्वपूर्ण अवसर है। भावी खिलाड़ियों और भावी उद्यमियों के लिए इसमें सीखने-समझने का असीम अवसर है।

दरअसल, हर खेल आज एक उद्यम है और कॉमनवेल्थ गेम्स जैसा हर बड़ा खेल आयोजन एक वैश्विक कारोबारी प्रदर्शनी है, जिसमें खिलाड़ी एक 'साफ्टवेयर उत्पाद' तथा उससे एवं उसके खेल से जुड़ा हर साजो-सामान 'हार्डवेयर उत्पाद' है। यही वजह है कि आज एक भारतीय उद्यमी इंग्लिश प्रीमियर लीग (ई.पी.एल.) के एक क्लब के लिए 300 मिलियन पाँड तक खर्च करने के लिए तैयार है तथा दिल्ली, मेरठ, लुधियाना, जालंधर और हिमाचल प्रदेश के छोटे-बड़े उद्यमी 'ब्रांडेड' कम्पनियों के सहारे दिल्ली कॉमनवेल्थ गेम्स में खेल सामग्री या खेल से जुड़ी सामग्री का कारोबार कर रहे हैं या कारोबार की राह ढूंढ रहे हैं। आई.पी.एल. के 'क्रिकेट कारोबार' से हर कोई वाकिफ है। फिलवक्त, यदि हम सिर्फ 'स्पोर्ट्स गुड्स' की ही बात करें तो आभास मिलता है कि विश्व बाजार में यह कारोबार 80 बिलियन डॉलर से अधिक का है, जिसमें खेल परिधान व जूते लगभग 70 प्रतिशत, खेल उपस्कर या उपकरण 25 प्रतिशत तथा अन्य सामान तकरीबन 5 प्रतिशत की हिस्सेदारी कर रहे हैं। सन् 2002 से 2009 तक इस कारोबार का दायरा लगातार बढ़ता गया है। मेरठ की एस.जी., ए.टी.ई., लुधियाना की अंकिता, जालंधर की रेंसन तथा आर.के. इंटरनेशनल जैसी कम्पनियों ने पिछले दिनों क्रिकेट, एथलेटिक्स, हॉकी जैसी खेल स्पर्धाओं की अनेक बड़ी चैम्प्यिनशिप में अच्छा खेल कारोबार किया है। दक्षिण अफ्रीका में हाल ही में सम्पन्न विश्व कप फुटबाल का पूरे जालंधर ने लाभ उठाया है! यूरोप, अमेरिका और आस्ट्रेलिया के खेल बाज़ार में दबदबा कायम करने वाली भारतीय खेल कम्पनी अपने ही देश में आयोजित हो रहे 'कॉमनवेल्थ गेम्स' में अपना रुतबा क्यों नहीं कायम कर पा रही है, इसे जानने-परखने का भी यह एक विशेष अवसर है।

कॉमनवेल्थ गेम्स का शुभंकर (मैसकट) 'शेरा' भी एक ब्रांड बन चुका है, जिसके नाम से अनेक उत्पाद बाजार में बिक रहे हैं। देश में इस बार 24 अगस्त को 'रक्षा बंधन' त्योहार के अवसर पर 'शेरा राखी' ने रिकार्ड बिक्री की। कल्पना की जा सकती है कि 'माँ शेरा वाली' के महत्त्वपूर्ण पर्व दुर्गा पूजा के अवसर पर 'शेरा' ब्रांड भारतीय बाजार की भावना को किस कदर प्रभावित करने वाला है! नि:संदेह, राष्ट्रमंडल खेल किसी भी राष्ट्र के सेवा क्षेत्र, निर्माण क्षेत्र और उत्पादन क्षेत्र में उद्यम के दायरे को प्रत्यक्ष-अप्रत्यक्ष तौर पर बढ़ाने में सक्षम है। जरूरत है इस तरह के आयोजन और इससे जुड़े विभिन्न उद्यमों को सुनियोजित करने और 'बहुजन हिताय' बनाने की!

सन् 1982 के एशियाड के लम्बे अंतराल के बाद अक्टूबर, 2010 में कॉमनवेल्थ गेम्स के आगमन से भारत में बड़े खेल आयोजनों का द्वार खुलने जा रहा है। सफल आयोजन भारतीय कारोबारी सफलता के द्वार को नियमित रूप से खोल सकता है, यह हर कोई जानता है। अत: आवश्यक है कि इस बड़े आयोजन को और इससे जुड़े हर प्रयोजन को हर स्तर से सफल बनाया जाए तथा एम.एस.एम.ई. की दृष्टि से कॉमनवेल्थ गेम्स में खेल मनोरंजन का स्वाद चखने के बहाने इस 'विश्व स्तरीय खेल उत्पाद प्रदर्शनी' में उद्यम के नये क्षेत्र को भी ढूंढा जाए और अपनी क्षमताओं को संवारा जाए! मत भूलिये, करोड़ों–अरबों लोग खेल को, खेल उत्पाद को, क्षमताओं को देख रहे हैं और आपकी प्रतीक्षा कर रहे हैं! आप हैं तो ठीक है, आप नहीं तो कोई और सही! खेल जारी है...

नई दि<mark>ल्ली</mark> 28 <mark>अगस्त,</mark> 2010









Sports Goods Industry in India

S.K. Basu

The sports goods industry in India occupies a place of prominence in the Indian Economy in view of its large potential for employment, growth and export. There has been an increasing emphasis on its planned development, improvement of product design and technology and building up of competitiveness.

The sports goods industry in India is concentrated in select geographical locations all over the country. The major manufacturing clusters are in and around Jalandhar, Meerut, Delhi (including Gurgaon), Mumbai, Kolkata, Chennai. However, India's sports goods industry is largely concentrated in Meerut and Jalandhar where the production system is highly fragmented in tiny units using almost handicraft type of production.

These weaknesses have made Indian Sports Goods Industry a very tiny player in the international market as it can neither supply bulk orders nor assure high-quality of products. Both these cities together account for around 75% to 80% of the total domestic production with more than 3000 manufacturing units including around 200 exporters.

Around one lakh people are engaged directly or indirectly largely involving weaker sections of the society and women.

Based on the key raw-material used for manufacturing sports goods,

these can be categorized into the following::

Raw Material	Product
Wood	Hockey sticks, Cricket Bats & Wickets, Carrom Boards, Chess Board, Base Bats.
Synthetic Fabric	Volley Ball, Foot Ball, Rugby Ball Covers, all types of protective equipments, Sports Shoes.
Leather	Cricket & Hockey Balls, Boxing Gloves & other Soft Leather Goods, Sports Shoes.
Rubber	Bladders & Tennis Balls, Basket Balls and other Inflated Covers.
Metal	Badminton and Tennis Rackets, Fitness Equipments, Weight Lifting Equipments, Trophies, Medals.
Cotton	Sports Nets, Sports Hosiery and other Sports Wear.
Feather/Cork	Shuttle Cocks.

Market for sports goods is distinctly divided into two segments: Domestic Market and Export Market. Cricket bats, balls and protective equipment for cricket account for almost 70% of the domestic market followed by football and hockey equipments.









The export share of sports goods from India in the last five years are as under: -

(Rs. In crore)							
2005-06	2006-07	2007-08	2008-09	2009-10			
456.97	509.04	519.26	586.89	531.00			
(approx)	(approx)	(approx)	(approx)	(approx)			

Despite India's notable growth in exports from this sector, India's contribution to the total world import of sports items is less than 1%. On the other hand, India's import of articles and equipments for sports is an alarming factor for Indian Sports Goods Industry. The import from China and Taiwan are increasing at a rapid pace. At present, China and Taiwan are the leading exporters of sports equipments to India followed by USA and other EU countries. The threat for the industry in the international market is from Pakistan who is the major supplier of quality products. China and Taiwan are also the major competitors of India in

almost all the major categories of sports goods items. The primary source of their competitiveness is the cost advantage with acceptable quality. With the pre-dominance of traditional material like wood and absence of mechanization, the product of the Indian Industry do not match sports goods made from exotic material like composites and titanium which are available in the global market. In addition, the Indian Industry produce the so called traditional 'field' sports goods, whereas, the growth in developing countries are happening in the areas of vacation sporting like camping, boating and adventure sporting like scuba diving.

Industry SWOT

Strengths

- Cluster based
- High employment in comparison to investment
- Contributes to foreign exchange earning
- Skilled and productive labour

- Workmanship high in traditional areas

Weakness

- Low technology input
- Lack of product diversification
- Lack of product development and proactive marketing
- Dependence on import of quality raw material

Opportunity

- Global competition opens global markets
- Healthy competition will improve overall quality to ensure high export earning.

Threat

- Entry of MNCs in sports goods sector
- Increasing the share in world export market
- Quality upgradation

Problems to be addressed

The critical issues hindering up-scaling of the industry are:-

- Inability to supply bulk orders due to fragmented capacities in micro enterprises.
- ii) Poor product quality due to weak value chain.
- iii) Inability to develop new high growth products due to non-availability of technology.
- iv) Inefficient manufacturing processes caused by non-mechanised skill based operations.
- v) Inability to develop a niche market due to poor market intelligence.
- vi) Poor competitiveness both in product and price mainly caused by a weak supply chain.
- vii) Low labour productivity due to obsolete skill and manufacturing process.
- viii)Unavailability of the critical mass needed for setting up world-class plants.
- ix) Fixed mindset of the industry to 'low' path of growth, i.e. low price for lower product.
- x) Poor trust between the entrepreneurs about common marketing, procurement, etc.
- xi) Insensitivity of the policy makers about the growth potential of the industry.
- xii) Lack of testing, research and development and training facilities.



MSME-TDC (PPDC), Meerut: Government of India has set up a Process cum Product Development Centre for Sports Goods & Leisure Time Equipments at Meerut with the assistance of UNDP and Government of U.P. for the benefit of Sports Goods Industries. The Centre has five workshops, namely, (1) Leather Workshop & Leather Equipment Stitching, (2) Wood Working Workshop, (3) Rubber & Plastic Workshop, (4) Mechanical & Engg. Workshop and (5) Testing Laboratory. The Centre conducts both short term and long term training programmes in sports goods manufacturing for the benefit of the industry. With a view to upgrade the quality of sports goods, the Centre undertakes R&D activities and on getting success, the same is made available to the user industry. The Centre provides common facility services to the sports goods industry through its workshops, besides providing quality control and testing facilities through its laboratory accredited by NABL.

Jammu & Kashmir: A Wood Seasoning Plant for Common Facility Centre at Sethar for Cricket Bat Cluster of Distt. Anantnag (J&K) is under process of implementation by the Centre on turn-key basis under Small Industry Cluster Development Programme.

Extension Centres: PPDC has extended its service facilities to Jalandhar and Jammu also by setting up extension centres there with a view to provide the services to the sports goods industry located in Punjab and Jammu & Kashmir.

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Role of MSME-TDC (PPDC, Meerut) in the Development of Sports Goods Sector

C.P. Bansal



The MSME-Technology Development Centre(MSME-TDC) (Process-Cum-Product Development Centre (Sports Goods & Leisure Time Equipment) (PPDC), Meerut was initially established as a Department of Govt. of India, by the then Ministry of Industry (now Ministry of MSME) under Small Industries Development Organisation (SIDO) and later on was registered as Govt. of India Society under Societies Registration Act 1860 from 24-3-86.

The basic objective of the Centre is upliftment of indigenous Sports Goods Industry by making available adequate and appropriate technology, trained manpower for improving the quality of products and diversification of items as also to provide modern Research & Development facilities for quality

upgradation, manufacturing processes & new improved products in the field of Sports Goods and Leisure time Equipment so as to augment the export of sports goods from India.

The main objectives are as under:

- (A) To develop new technologies and upgrade the existing level of technology of sports goods and leisure time equipment.
- (B) To develop new products/design of sports goods and leisure time equipment.
- (C) To identify export-worthy sports goods product and leisure time equipment, develop and establish technologies for their manufacture.
- (D) To improve the quality of these products through quality control and standardisation to meet the National and International Standards and also make this industry competitive.
- (E) To impart training to craftsmen and supervisors from the industry in the field of manufacture and development of sports goods.





SI. No.	Equipment	Make/Model	Test
1.	Universal Testing Machine	Instron 4301	Tensile Strength/Elongation
2.	Rheometer	Monsanto R 100 S	Rheometry of Rubber Compound
3.	Flex Tester (Ross Type)	Prolific	Flexing Endurance of Rubber
4.	DIN Abrasion Tester	Prolific	Abrasion Resistance of Rubber
5.	MFI Tester	PSI Sales	Melt Flow Index of Plastic Granules
6.	Football Water Absorption Tester	RenuKa	Water Absorption Test of Football
7.	Heat Stability Tester	Modern Scientific	Heat Stability of PVC
8.	Muffle Furnace	SASCO	Ash Content test
9.	De-Mattia Flex Tester	Prolific	Flexing Endurance of Rubber at elevated temperature
10.	Humidity Chamber	NISCO	Humidity Conditioning of samples
11.	Micro Hardness Tester	Shore	Hardness of Rubber
12.	Digital pH meter	KNICK	Measuring pH value of liquids
13.	Electronic Balance	Mettler	Weighing of samples
14.	Single Pan Balance	Dhona	Weighing of samples
15.	Leather Abrasion Tester	SATRA	Abrasion resistance of leather, synthetic sheets
16.	Viscometer	Brookefield	Measuring viscosity of liquids
17.	Miniflexometer	Bally	Flexing Endurance of Leather, synthetic sheets
18.	Water Penetrometer	Bally	Testing water penetration in leather, synthetic sheets
19.	Resiliency Tester	Prolific	Resiliency rebound in rubber
20.	Colour fastness tester	KUENY	Colour fastness to rubbing in leather
21.	Kubelka apparatus	Kubelka	Water absorption in leather
22.	Hot air oven	Ambassador	Accelerated ageing of samples
23.	Thermogravimetric Analyser	Mettler	Thermal analysis of materials
24.	FTIR	Shimadzu	Material analysis by infra-red rays
25.	Shoe Flex Tester	Metrex	Flexing resistance of full shoe
26.	Air Permeability Tester	Prolofic	Air permeability of fabrics

- (F) To collect, collate and disseminate technical information and know how to the user industry by providing documentation services and coordinate with research and development institutions.
- (G) To render technical support services through the Centre's common facility workshops/laboratory in the above areas.
- (H) To conduct market research and identify products for domestic and export markets.

INFRASTRUCTURAL FACILITIES AVAILABLE WITH DIFFERENT ACTIVITY MODULES

(A) TESTING AND QUALITY CONTROL DIVISION

To motivate the industry for quality control and testing is one of the important functions of the PPDC. The Centre has a modern testing and quality control lab equipped with sophisticated equipments for testing of substrate material like leather, rubber, plastics, fabrics and the performance evaluation of various sports goods items. Besides testing of the

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sports goods and substrate materials the Centre provides consultancy services to the units for upgrading their quality and improving performance. Brief details of available major testing facilities are as under:

(B) LEATHER PROCESSING & FINISHING WORKSHOP

This section is providing facilities for finishing Sports Goods Leather, Garment Leather, Soft Leather and other variety of leather used in sports goods & allied industry.

Major Machinery available

- (a) Tanning Drum (Wooden)
- (b) Test Tanning Drum (Imported)
- (c) Hydraulic Leather Shaving Machine
- (d) Dry Leather Splitting Machine
- (e) Leather Splitting Machine
- (f) Hydraulic Press
- (g) Leather Measuring Machine (Electronic)
- (h) Buffing Machine
- (i) Stretching Machine
- (j) Leather finishing equipment
- (k) Core Drying Machine
- (l) Angular Panel Cutting Machine
- (m) Hydraulic Half Cup Pressing Machine

(C) MECHANICAL WORKSHOP

This section is providing modern machining facilities to the industry for fabrication of various dies & moulds, cutting & bending dies for sheet metal. The Section is also mechanizing the traditional manufacturing process for quality upgradation, cost reduction and consistency.

Major Machinery available

(a) Electric Discharge Machine

- (b) Milling Machine
- (c) Lathe Machine
- (d) Shaper
- (e) Die Manufacturing Equipment
- (f) Surface Grinder
- (g) CNC Wire cut Machine
- (h) CNC Lathe
- (i) CNC Milling machine

(D) RUBBER/PLASTIC WORKSHOP

This section is providing facilities for Development of Rubber Compounds/Products along with the Consultancy and training facilities.

Major Machinery available

- (a) Lab Mixing Mill
- (b) Hydraulic Compression Moulding Press
- (c) Plastic Injection Moulding Machine
- (d) Plastic Extruder

(E) WOOD WORKSHOP

This section is providing Common Facility Services to the industry engaged in production of wood based sports goods and development work along with training facilities.

Major Machinery available

- (a) Bend Saw Wood Cutting Machine
- (b) Thicknesser & Surface plainer
- (c) Cricket Bat Pressing Machine
- (d) Copying Lathe
- (e) Circular Saw

(F) TRAINING

The PPDC, Meerut has facilities to organise Training Courses as per following details. These training courses are beneficial for Craftsmen,



Supervisors, Prospective Entrepreneurs and Unemployed youths:

- Modular Diploma Course in Sports Goods Manufacturing & Technology (Cricket Equipments)
- 2. Diploma Course in Polymer Technology (with specialization in sports goods)
- 3. Diploma Course in Leather Goods Technology (with specialization in sports goods)
- 4. Cricket Ball Manufacturing
- 5. Leg-guards Manufacturing
- 6. Gloves Manufacturing
- 7. Shuttle-Cock Manufacturing
- 8. Football manufacturing
- 9. Quality Control and Testing of Rubber Products
- 10. Diploma in Computer Application (DCA)
- 11. Training in Computer Application (TCA)
- 12. Linux and C++
- 13. Training in Computer Accounting System (TCAS)
- 14. Training in Computer Technology (TCT)
- 15. Web Designing & Multimedia
- 16. Tally
- 17. Diploma in Computer Hardware & Net working with CCNA (DCHN)

- 18. Training in Computer Hardware & Net working (TCHN)
- 19. Courses on C/C++/Java/Oracle-9i/.Net-(Intro)/
 MS Office
- 20. Advance Machining
- 21. Post Diploma in CAD/CAM
- 22. Integrated CAD/CAM
- 23. CAD/CAM Course
- 24. CATIA V-5
- 25. Unigraphics
- 26. Programming & Operation of CNC wire cut EDM
- 27. CNC Technology
- 28. Programming & Operation of CNC Turning
- 29. Programming & Operation of CNC Milling
- 30. Auto CAD
- 31. Pro-E

(3) OTHER SERVICES

(A) Seminars/workshops/conference/ orientation programmes/business meets/ open house discussions/get to gether programmes/presentation etc.

The Centre is working for generating awareness and quality consciousness





amongst the user industry by conducting regular Seminars/ Workshops/ Conference/ Orientation Programmes/ Business Meets/ Open House Discussions/ Get to gether Programmes/ Presentation etc. on various subjects related to testing/quality control, technological issues, ISO-9000 & TQM, Export Procedures and Documentation.

(B) Researh & Development

The Centre undertakes Research & Development works in the field of sports goods. The following R&D activities for development of various sports goods products and upgradation of technology have been undertaken by the Centre:

Sl.No. Name of R&D Activities

- Leather for Hand Ball/Full Chrome Foot Ball/ Cricket Ball Dyeing
- 2. Boxing Glove Leather
- 3. Development of special clicking dies for manufacturing Football & Volley Ball
- 4. Development of Base Ball Glove & Golf Gloves
- 5. Moulding Dies for Rubber/Plastic Sports
 Goods items
- 6. Development of Fluorescent Sports Gloving Leather
- 7. Special Clicking Dies for manufacturing Shooting Ball & Foot Ball
- 8. Ideal Calf Leather for Sporting Gloves
- 9. White Leather Sporting Gloves
- 10. Developed a process of controlled quick drying method for drying of 'Core of Cricket Ball'

- 11. Developed a special process of Clicking Die for Thigh Pad
- 12. Developed special grip leather for racket
- 13. Developed special anilling purple wicket keeping glove leather
- 14. Developed a special angled zig for boring shuttle cocks with a view to control the flight of shuttle cock
- 15. To obtain smooth rotational movement of the hammer for generating the desired momentum for executing a prefect throw, a chain lock & bearing system for hammer throw was developed
- 16. Shuttle Cock Leather hand press & cutting die
- 17. Shuttle cock bottom cork hand boring machine with boring jig
- 18. Carrom Sticker's mould
- 19. Carrom Men's mould under process
- 20. Redyeing & refinishing technique on rejection shoe upper leather for conversion into wicket keeping glove leather
- 21. Development of sports garment leather (Heavy) from wet blue calf
- 22. Table Tennis Table Net Post Cutting & Bending dies
- 23. Developed tool for shaping of synthetic material to be used as Shuttle Cock Bottom
- 24. Developed tools and fixtures for 'V' shape cutting in Cricket Bats
- 25. Developed fixture for T.T. Bat ply cutting
- 26. Developed Cricket Ball panel angular profile cutting machine
- 27. Developed Cricket ball half cup sizing and pressing hydraulic machine
- 28. Developed Foot Ball panel cutting fixtures
- 29. Decorative Stitching Machine for Cricket Ball
- 30. Foot Ball Stitching Machine

(C) Consultancy Services

The Centre provides technical consultancy services to the user industry during their day-to-day technical problems in manufacturing of sports goods.

(D) Technology Transfer Services

The Centre is engaged in developing new technologies and techniques into the process of manufacturing and products. These technologies are then transferred to the sports goods industry against reasonable charges.

(E) Surveys and Technical/Cluster Study

The centre also conducts surveys to keep in touch with the user industry and to have a feel of new entrepreneurs emerging, advancements in the industry, various problems and requirements of the sports goods industry and to provide solution there upon on the basis of survey.

The centre conducts study in the field of sports goods industry for agencies who need to know about this industry. These studies become the base for various policy formations for the betterment of sports goods industry.

(F) Library

The Centre has a well stocked library covering different subject like Polymer Technology, Computer Science, Material Science, Mechanical Engineering, Wood Engineering, Management etc. Besides, the Library has also more than 250 Specifications on Sports Goods and material of Bureau of Indian Standards, DIN, ISO etc.

(G) Benefit to the Sports Goods Industry

The above services provided by this centre have been of considerable benefit to the sports goods industry in Meerut and Jalandhar. These benefits





may be segmented as:

- 1. Quality Upgradation
- 2. Increase in Exports
- 3. Increased Awareness
- 4. Technology Upgradation

The industrial units which have utilized the facilities of this centre have been able to upgrade the quality standard of their products through testing and better quality control. Better quality and information to their buyers that the products have been tested in Lab of this centre has given the manufacturers an edge over others and helps in increased domestic and export sales. Technical Seminars/ Workshops have been instrumental in increasing the awareness level of the manufacturers. The workshop facilities and technical staff of this centre have provided essential inputs for technology upgradation to the sports goods industry.

MOTTO: To provide accurate and prompt service at reasonable price.

For further details please contact:

DIRECTOR,

MSME – Technology Development Centre
Process-cum-Product Development Centre (PPDC)
(Sports Goods & Leisure Time Equipment)
An autonomous organisation under Ministry of
Micro, Small & Medium Enterprise Govt. of India,
Sports Goods Complex, Delhi Road
Meerut-250 002. (U.P.), INDIA.

Telephone: (0121) 2511779 Telefax: (0121) 2404991

E-mail: ppdcmeerut@yahoo.co.in,

ppdcmrt@yahoo.com Website: ppdcmeerut.com

Commonwealth Games 2010



V.K. Singh

As a Sports Goods Entrepreneur, you may like to visit the events of Commonwealth Games 2010 during the month of October, 2010 in New Delhi. While planning your visit, you may use the information mentioned in this feature.

1000	Host city
19	Motto
	Nations particip
	Events
	Opening cerem
יונבר	Closing ceremo
DELHI 2010	Queen's Baton
XIX COMMONWEALTH GAMES	Main Stadium
	Website

Host city	New Delhi
Motto	Come out and play
Nations participating	71
Events	260 events in 17 disciplines
Opening ceremony	3 October, 2010
Closing ceremony	14 October, 2010
Queen's Baton Final Runner	29 June, 2010
Main Stadium	Jawaharlal Nehru Stadium
Website	http://www.cwgdelhi2010.org
	Motto Nations participating Events Opening ceremony Closing ceremony Queen's Baton Final Runner Main Stadium

The 2010 Commonwealth Games are the nineteenth Commonwealth Games, and the ninth to be held under that name. The Games are scheduled to be held in Delhi, India between 3 October and 14 October 2010. The games will be the largest multi-sport event conducted to date in Delhi and India generally, which has previously hosted the Asian Games in 1951 and 1982. The opening ceremony is scheduled to take place at the Jawaharlal Nehru Stadium in Delhi. It will also be the first time the Commonwealth Games will be held in India and the second time the event has been held in Asia (after 1998 in Kuala Lumpur, Malaysia).

The 2010 commonwealth games are going to be held in Delhi, India with population over 15 million,

compared to (2006 games hosts) Melbourne's 3.5 million and Greater Manchester's 2.5 million population at 2002 games.

The commonwealth games is a multi sport event held every 4 years involving the elite athletes of the Commonwealth of Nations, the first such event, then known as the British Empire Games was held in 1930, the name changed to British Empire and Commonwealth Games in 1954, to British Commonwealth Games in 1978, and assumes the current name of Commonwealth Games in 1978.

Competition venues

Existing and new stadiums in Delhi will be used to house the sports during the Games:

The opening and closing ceremonies will take place at the Jawaharlal Nehru Stadium, Delhi.

- Jawaharlal Nehru Stadium Athletics, lawn bowls, weightlifting
- Dhyan Chand National Stadium Hockey
- Indira Gandhi Arena Archery, cycling, gymnastics, wrestling







- Delhi University Sports Complex Rugby sevens
- Thyagaraj Stadium Netball
- Siri Fort Sports Complex Badminton, Squash
- Dr. Karni Singh Shooting Range Shooting
- Talkatora Stadium Boxing
- SPM Swimming Pool Complex Aquatics
- RK Khanna Tennis Complex Tennis
- Yamuna Sports Complex Table tennis

The opening and closing ceremonies, athletics, lawn bowls, and weightlifting will take place at the Jawaharlal Nehru Stadium, Delhi, which will have a capacity of 75,000 spectators after renovation for the games.

Archery, cycling, gymnastics, and wrestling will take place at the Indira Gandhi Arena, the largest indoor sports arena in India and the second-largest in Asia, which seats 25,000 people. Located at the Indraprastha Estate in the eastern region of New Delhi, the arena will be connected to other venues via dedicated bus lanes and mass transportation. The arena will be renovated for the Games.

There are 26 new stadiums which will be utilized for the Commonwealth Games. Some older ones will be upgraded and some new will be constructed.

Non-competition venues:

- OC CWG Delhi 2010 Headquarters
- Main Media Centre

Green Games



Logo for the Delhi 2010 Commonwealth Games being recognized as the first ever "Green Commonwealth Games"

The organizers signed a Memorandum of Understanding (MoU) with the United Nations



Environment Programme to show the intention to host a "sustainable games" and to take the environment into consideration when constructing and renovating venues. Thyagaraj Stadium is intended to be a key example of environmentally-considered construction.

The Queen's Baton relay began when the baton, which contains Queen Elizabeth II's message to the athletes, left Buckingham Palace on 29 October 2009. The baton will arrive at the 2010 Games opening ceremony on 3 October 2010, after visiting the other 70 nations of the Commonwealth and traveling throughout India, reaching millions of people to join in the celebrations for the Games. Baton Reached India date 25th June 2010 through Wagah Border from Pakistan.

The baton was designed by Michael Foley, a graduate of the National Institute of Design. It is a triangular section of aluminum twisted into a helix shape and then coated with coloured soils collected from all regions of India. The coloured soils are a first for the styling of a Queen's Baton. A jewel-encrusted box was used to house the Queen's message, which was laser-engraved onto a miniature 18 carat gold leaf – representative of the ancient Indian 'patras. The Queen's baton is ergonomically contoured for ease of use. It is 664 millimeters high, 34 millimeters wide at the base, and 86 millimeters wide at the top and weighs 1,900 grams.

The official calendar for the 2010 Commonwealth Games is as follows:

Opening of	cerei	nony	•	E	vent	com	petiti	ions	• (Closin	g cere	emony	
October	3	4	5	6	7	8	9	10	11	12	13	14	Venue
Ceremonies	•											•	Jawaharlal Nehru Stadium
Aquatics		•	•	•	•	•	•	•	•	•	•		SPM Swimming Pool Complex
Archery		•	•	•	•	•	•	•					Yamuna Sports Complex, India Gate
Athletics				•	•	•	•	•	•	•		•	Jawaharlal Nehru Stadium & India Gate
Badminton		•	•	•	•	•	•	•	•			•	Siri Fort Sports Complex
Boxing			•	•	•	•	•	•	•		•		Talkatora Stadium
Cycling			•	•	•	•		•			•		I. G. Indoor Stadium Complex, India Gate
Gymnastics		•	•	•	•	•				•	•	•	I. G. Indoor Stadium Complex
Hockey		•	•	•	•	•	•	•	•	•	•	•	Maj. Dhyan Chand National Stadium
Lawn Bowls		•	•	•	•	•	•	•	•	•	•		Jawaharlal Nehru Stadium
Netball		•	•	•	•	•	•	•	•	•		•	Thyagaraj Sports Complex
Rugby sevens									•	•			Delhi University
Shooting			•	•	•	•	•	•	•	•	•		Dr. Karni Singh Shooting Range
Squash			•	•	•	•	*	201	•	•	• 8		Siri Fort Sports Complex
Table Tennis		•	•	•	•	•	•	•	•		•	•	Yamuna Sports Complex
Tennis		•	•	•	•	•	•	•					R K Khanna Tennis Complex
Weightlifting		•	•	•	•	•	•	•	•	•			Jawaharlal Nehru Stadium
Wrestling			•	•	•	•	•	•					I. G. Indoor Stadium Complex
October	3	4	5	6	7	8	9	10	11	12	13	14	Venue

The Queen's baton has number of technological feature including

- The ability to capture image and sound.
- Global positioning system (GPS) technology so the baton's location can tracked.
- Embedded light emitting diodes (LEDs) which

will change into the colours of a country's flag whilst in that country

 A text messaging capability so that people can send messages of congratulations and encouragement to the Baton bearers throughout relay.

Sports

There are 17 disciplines planned for the 2010 Commonwealth Games. These are:

- Aquatics: Diving, Swimming and Synchronised swimming
- Cycling: Road amd Track
- **Gymnastics:** Artistic and Rhythmic
- Archery
- Athletics
- Badminton
- Boxing
- Hockey
- Lawn bowls
- Netball
- Rugby sevens
- Shooting
- Squash
- Table tennis
- Tennis
- Weightlifting
- Wrestling

Kabaddi will also be a demonstration sport at the 2010 Games.

The triathlon appears likely to be excluded from these games as there is no suitable location for the swimming stage. The organisers have also proposed removing basketball, but want to include archery, tennis, and billiards and snooker for men. Cricket, although in strong demand, may not make a comeback as the Board of Control for Cricket in India were



not keen on a Twenty20 tournament, and the organisers did not want a one day tournament.

Participating Nations

There are currently 85 nations planning to field teams at the 2010 Commonwealth Games. This figure is the highest considering the past Commonwealth Games. This phenomenal increase in the number of participating nations has made this events the second biggest sporting event after Olympic Games. As we look back Commonwealth Games has started with participation of mere 11 nations and 400 athletes in 1930. In the last Commonwealth Games a total of 71 countries participated. Delhi is going to witness 8500 athletes from 85 countries. The list of countries is given below in alphabetical order:

Afghanistan, Algeria, Anguilla, Antigua and Barbuda, Australia Baham as Bahrain, Bhutan, Bangladesh, Barbados, Belize, Bermuda, Botswana, British, Virgin Islands, Brunei, Cameroon, Canada, Cayman, Islands, Christmas, Island, Cook Islands, Cyprus, Dominica, England, Eritrea, Falkland, Islands, Fiji, Gambia, Ghana, Gibraltar, Grenada, Guernsey, Guyana, India, IsraelIsle of Man, Jamaica, Jersey, Kenya, Kiribati, Lesotho, Malawi, Malaysia, Maldives, Madagascar, Malta, Mauritius, Montserrat, Mozambique, Namibia, Nauru, New Zealand, Nigeria, Niue, Norfolk, Island, Northern, Ireland, Palestine, Pakistan, Papua, New Guinea, Rodrigues, Rwanda, Saint, Helena, Saint Kitts and Nevis Saint, Lucia Saint, Vincent and the Grenadines, Samoa Scotl and Seychelles, Sierra Leone, Singapore, Solomon, Islands, South Africa, Sri Lanka, Sudan, Swazil and Tanzania, Tokelau, Tonga, Trinidad and Tobago, Turks, and Caicos, Islands, Tuvalu, Uganda, Vanuatu, Wales, Yemen, Zambia.

- V.K.Singh is the Technical Officer (R/P) in PPDC, Meerut

Prominence of Sports Goods Industry in Indian Economy



Vipan Mahajan

BRIEF HISTORY

Sports Goods Manufacturing Industry in India originated on 13th April, 1883 at Sialkot (Now in Pakistan). Sardar Ganda Singh Oberoi found a vision to start this industry who founded Oberoi Limited in Sialkot and made first export of sports goods to England in May 1884.

When India was partitioned in 1947, many of Sialkot's skilled Hindu craftsmen migrated across the border into Punjab, settling in Jalandhar and Meerut, where the Indian sports goods industry is now based. Since the craftsmen were settled in these areas, the entrepreneurs started pouring in Jalandhar and Meerut and thus started the pre-Indian Sports Goods Industry in 1948 precisely.

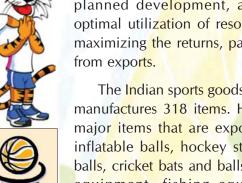
The sports goods industry in India has witnessed a phenomenal growth over the past six decades and now occupies a place of prominence in the Indian economy in view of its massive potential for employment, growth and export. There has been an increasing emphasis on its planned development, aimed at optimal utilization of resources for maximizing the returns, particularly from exports.

The Indian sports goods industry manufactures 318 items. However, major items that are exported are inflatable balls, hockey sticks and balls, cricket bats and balls, boxing equipment, fishing equipment, indoor games like carrom and chess

boards and different kinds of protective equipment. The Indian sports goods industry is a highly labour intensive industry which provides employment to the weaker sections of society and also employs a large number of women.

JALANDHAR AND MEERUT SPORTS GOODS **CLUSTERS - AN OVERVIEW**

Indian sports goods industry is in its nascent stage, though over 100 years old and some of the manufacturing centers over the years have established in and around Jalandhar, Meerut, Delhi, Mumbai, Agra, Moradabad, Chennai, Jammu and Calcutta. Of these, Jalandhar and Meerut together claim around 75% to 80% of the total production. The evolution of these two clusters was a result of partition of India in 1947 when the people of Sialkot, Pakistan (major production centre of sports goods then and now also) migrated to Jalandhar and Meerut Inflatable balls and other type of balls constitute the bulk of the sports items exported. Others include cricket bats and related equipment, hockey sticks, gymnasium and athletic equipment and other sports equipment. The major export countries are US, UK, Germany and France. It is believed that domestic market is equivalent to the export market in money value, with prominence of items such as board games and the like. The future of sports industry looks promising with the rising popularity of sports and









increasing demand both, in domestic as well as in the international markets.

With what started as a struggle of few entrepreneurs and their workers transplanting their roots to a new place, Jalandhar and Meerut sports goods cluster has emerged as a major manufacturing center with forward and backward linkages along with local associations and institutional support. There are about 250 exporting units, around 1000 manufacturing units for domestic markets, and some 4000 micro enterprises. In addition, there are around 20,000 household units located in and around both the city. Together these MSMEs employ around 1 lakh workers directly or indirectly. The turnover of this cluster is approximately Rs 2000 crores (unofficial figure) catering to domestic and export markets.

This cluster represents an interesting scenario wherein labour intensive industry using age-old technology is exporting sporting goods to over 130

countries. Problems of low productivity, diminishing profit margins and absence of niche markets, all together plague the industry as a whole. Coming to finer classification, this cluster has prominent features of an "incipient cluster" in terms of technology being used as defined by Schmitz and Nadvi (1999), with market reach of that of a "mature cluster". The major products of this cluster are inflatable balls which include football, rugby ball, basket ball, etc; wood based equipments comprising of cricket bat, hockey stick, carom board, chess board, etc; protective equipment for cricket, hockey, rugby such as gloves, shin guards, chest guards, etc; racquets, shuttle cocks among the 200 odd items this cluster manufactures. Each product category of the sporting goods is operating in its own national and local context and thus being affected by different market and operational forces.

Even years after its establishment, not many improvements have been seen in its operational and other business related activities. The cluster is

afflicted with problems of outdated techniques, near absence of standards and quality of the products as well the processes; acute shortage of some of the raw materials; unavailability of skilled labour; The demand for sports goods is increasing in international as well as in the domestic markets and this cluster holds the potential but lacks the technical know how. The cluster faces immediate threats from countries like China, Taiwan and closer home, Sialkot in Pakistan.

In Jalandhar and Meerut, three kinds of establishments are usually found:

- i. Big establishments: These are generally geared to exports besides catering to the domestic market.
- ii. Small establishments: These usually manufacture sports goods for the domestic market. Both the big establishments as well as the small establishments are registered either under the Factories Act, 1948, or under the Shops and Establishment Act of the state.
- iii. The unregistered units: These are found particularly in the urban pockets of Jalandhar and Meerut. These units are mostly small home-based units which are usually run by the family members, but at times with the help of a couple of hired employees. These units do not have a direct access to market. It has been seen that many a times when the big establishments especially exporters are not able to cope with large orders from their foreign clients, distribute a share of the production to these small unregistered, home-based units.

Apart from Meerut and Jalandhar, Jammu has also come in the map of manufacturing sports goods mainly Cricket Bats and the makers there have grabbed a major chunk of domestic market from Jalandhar and Meerut manufacturers.

PRESENT SCENERIO

This sports goods cluster with over 120 years of existence, has crafted a place for itself in the global sporting goods market. It has emerged as a reliable



supplier of sports goods to the international markets, catering to some of the top brands. With about 200 exporting enterprises, the cluster significantly contributes to the sports goods exports from India. In the year 2000-2001 the exports measured 320 crores, which increased to 585 crores in the year 2008-09. (The figure excludes sports shoes, sports apparel and fitness equipment). There are another 400 odd enterprises that cater to merchant exports as well as the domestic Indian market. Significant number of industry networks and support institutions exist in the cluster. The main ones being:

- 1. The Sports Good Manufacturers and Exporters Association (SGMEA), Jalandhar (Dealing with manufacturer's problems of domestic and export nature). It the nodal body representing major chunk of sports goods industry and has been instrumental in helping the up gradation of the industry by holding various awareness seminars on ISO Standards, CE and REACH Certifications, Credit Rating, Bar Coding, Buyer-Seller Meets, latest Export Techniques through Internet etc.
- Sports Goods Export Promotion Council (SGEPC), (Dealing with exports only)
- 3. Sports goods Foundation of India (SGFI), (Dealing with Child Labour problem only)

UNIDO has worked with the Jalandhar Sports Goods Cluster through SGMEA between the years 2002 and 2005 under its Cluster Development Programme and from May 2005 to Dec.2008 under in its new global research project of 'Cluster Development Programme and Corporate Social Responsibility (CSR).

The industry can be described as a traditional skill based one, as it is highly labour intensive and requires very specific skills and manual techniques, whether it is in the stitching of footballs or in crafting of a cricket bat. A large number of home based manufacturers are also involved in the value chain. Most of the enterprises in the cluster are small and cottage scale. The exact number of firms in the Jalandhar and Meerut sports goods cluster is difficult to enumerate, as is the case with of most of these traditional clusters. But the estimate is of over 2000 firms employing around 5 lakh workers directly or indirectly. The main products of the cluster are inflatable balls, cricket, hockey, protective equipments, boxing, tennis, badminton, chess, field and track equipment, golf balls, hammocks etc. The cluster caters to the demands of the global as well as regional and local markets and provides employment

to the vulnerable members of the society including a large number of women workers.

SUMMARY

- The sports goods industry in India is nearly a century old and has flourished due to the skills of its workforce.
- A robust growth rate of 14.7 per cent in exports indicates a sizeable opportunity for India in this sector.
- Being labour-intensive in nature, the Indian sports goods industry provides employment to more than 5,00,000 people.
- The sports and leisure goods retail market in India was valued at US\$ 17.7 billion for 2007-2008. The market grew at the rate of 18 per cent over 2006-2007 in value terms, primarily due to outlet expansions by industry players.
- The nucleus of the industry in India is in and around the states of Punjab and Uttar Pradesh;



Jalandhar (Punjab) and Meerut (Uttar Pradesh) together account for nearly 81.8 per cent of total domestic production with more than 3,000 manufacturing units and 130 exporters present in these two towns.

 About 60 per cent of the sports goods manufactured in Jalandhar are different kinds of inflatable balls and provide direct employment to more than thousands of workers.

The industry also has a presence in Jammu, Mumbai, Kolkata and Chennai, albeit at a lower scale.



EXPORT SCENERIO

· Industry exports were valued at approximately Rupees 585 crores in 2008-2009, growing from 320 crores in 2003-2004 at a rate of 14.7 per cent. The export figures for the last three years are as under:

S.No.	Year of Export	f Export Exports (Rupees in Crores)	
1.	2007-08	519 crores	
2.	2008-09	585 crores	
3.	2009-10	540 crores	

(Provisional)

Source: SGEPC

- India's share of the global sports goods exports market is expected to grow manifold, with the country establishing the credibility of its goods in the global market
- In recent years, India has emerged as the leading international sourcing destination for inflatable balls and other sports goods for international brands such as Mitre, Lotto, Umbro and Wilson
- Today, Indian sports goods manufacturers are exporting products under their own brand names,

in addition to being original equipment manufacturers (OEM) suppliers for international sports brands

- For the period 2003-2004 to 2007-2008, general exercise equipment emerged the category leader in the export products segment, witnessing the highest growth rate of 27.3 per cent. Hammocks have emerged as one of the leading export products, growing at a rate of 24.1, with India home to the leading hammock manufacturers in Asia. Inflatable balls' exports grew at a rate of 10.6 per cent
- The EU, America and Australia are some of the key global export markets for Indian sports goods. The UK is India's largest export market -India exported US\$ 38.4 million worth of sports and toy products to the UK between 2006 and 2008, exhibiting a growth of 15.3 per cent
- In recent years, Indian products have been exported for global sports events such as the football World Cup 2002, where Indiamanufactured bladders were used. Athletic Boxing equipment made in India was also used at the Atlanta Olympics (1996) and Beijing Olympics (2008).

Key Players International and domestic sports brands have become immensely popular among the youth in India as a result of an increasing awareness about fitness and healthier lifestyles. Some of the key global players are:

- Reebok India Pvt. Ltd. (520 outlets)
- Adidas India Marketing Pvt. Ltd. (220 outlets)
- Nike India (150 outlets)
- Royal Sporting House (60 outlets)
- Planet Retail Holdings Pvt. Ltd. (36 outlets)

IMPACT OF COMMONWEALTH GAMES

There is upcoming mega Sports event in India in the shape of Commonwealth Games being held in October at New Delhi. Normally this should have given a great boost to the Sports Goods Industry, but the bare fact is that so far not even a fraction has moved to uplift the industry.

The indifference shown by the Industry lays in the fact that majority of Sports Goods being used in this mega event is monopolized by International Brands. Industry is totally reluctant to participate as exhibitor in these games as most of the manufacturers have not got their goods approved by International Bodies which is mandatory for all the games. The cost of approval is enormous, which MSMEs are unable to bear, wherever the multinational like Adidas, Puma etc.can afford to spend huge amounts as certification fee.

The Football World Cup held recently in South Africa brought great Promotional orders for the industry-a minimum six months before the start of World Cup. Such was the quantatum of orders that the manufacturers were unable to supply full orders not only in the exports but in the domestic market as well. However the situation with Commonwealth Games is entirely on the opposite side. Thus the impact of Commonwealth Games in the domestic market is almost negligible so far as Sports Goods Industry is concerned.



MSME SCHEMES AND INDUSTRY

MSME re-imbursement scheme for certification scheme provides one time re-imbursement of Rs. 1.50 lakh for International Certification.

MSME-DC has many attractive schemes but a few need to be practical oriented. For example, capacity building scheme of the Associations of MSMEs, envisages that to take advantage of this scheme, the Association at national level should have minimum 300 members. The conditionality of having minimum number of members of that maginitude is not practical, especially with reference to Sports Goods Associations as these kind of Associations should not be judged by numbers rather by the performance of its members. Hence MSME-DC should be more flexible and this scheme along with other schemes be amended accordingly.

MSME-DC has opened a Process cum Product Development Centre (PPDC) at Meerut with a small office at Jalandhar. However the capacity of this office is small to fulfil the demand of Sports Goods Clusters in Jalandhar.

A lot of encouragement is required by MSME-DC to the Sports Goods Industry which in turn could match with China and other European Countries.

Vipan Mahajan is the Secretary General of the Sports Manufacturers and Exporters' Association, Jalandhar. Coming from a family of sports goods business, he is a versatile writer and has done tremendous job for the Sports Goods Induatry. Frequent write ups and lectures (with a touch of satire) on Business, Spirituality and Occult Sciences are his hall mark.



Jalandhar: Emergence of Ranson



Raghunath Singh Rana

There was a new program introduced by the then SISI, Ludhianaa (Extension Centre in Jalandhar), the then Ministry of Industrial Development, Government of India for Entrepreneur Development. I completed this course along with my Graduation in 1975.

Journey started when it was my time to choose my career. My family was one of such families in our residential area famous for sending their sons to the Indian Army for serving our nation. We were three brothers and my elder was already in the Indian Army. My family left this decision on me. I preferred to complete my study.

I did my Graduation in 1975 in Arts and tried to get entry through the direct Commission in Indian Army which went in vain. At the same time there was a new program introduced by the then SISI, Ludhiana (Extension Centre, Jalandhar) under the then Ministry of Industrial Development, Government of India for Entrepreneur Development. I completed this course along with my Graduation in 1975.

Then, I joined one of the export oriented sports goods manufacturing company and also started doing the Company Secretary study but before I could appear for its first exam, I started my business.

In year 1982, I started my own unit for manufacturing cricket balls as RANSON SPORTS INDUSTRY. During first couple of years, we confined our production and supply to one market/source. We started catering whole Indian domestic

market in 1984 and added the production and supply complete range of cricket equipment including bats, legguards, gloves and accessories.

Since it was only I who entered and started the business in our family, so no one was able to give advice on how to move ahead in this venture. The domestic market of sports goods at that time was very unorganized and their payment system was very poor which was not favourable to a new

GOVERNMENT OF INDIA MINISTRY OF INDUSTRIAL DEVELOPMENT
Small Scale Industries Development Organisation
Note on
CERTIFICATE OF TRAINING
This is to certify that
of Distr. Jail, Jullundur. has
undergone a course of training in
Badminton racketsconducted
by the Small Industries Service Institute, Ludhiana at
of June 1975 to 30th day of
197 5 , during which period his
conduct and progress had been satisfactory.
Place. Ludht ana (N.f. A. 8A0) Director Director



manufacturing company like ours. So I took risk and went to England in 1987 for the first time with few cricket items and lots of dreams and courage. Everybody whom I met for business was delighted to see my product range and quality. Next thing we know, our company was doing exports.

As a company, since that first order from England till date, we are on the climb of an Everest of business, always moving up and up. We have been a part of many projects of world repute. We have had the opportunity to work with world famous companies and athletes and brands.

We have always been on the lookout for new methods and technology of production to maintain a consistent quality. Other than that we have always welcomed any new product development that our customer has asked us to do.

Whether just a design part for graphics on our current product range for our respective customers or even designing a totally new product altogether.





And within 4-5 years we were recognized and known as Quality manufacturers and trend setters in the International as well as Local Indian market of sports goods.

This achievement gave us a strong reason and chance to successfully launch three world known sports brands: **Ranson** (in Cricket Equipment), **EastSide Boxing** (Boxing and Martial Arts), **Aresson** (Rounders Equipment).

The goodwill in the colleagues and the industry that we have got has taken us places that not many people reach in so early in their career. I, today represent our industry at various platforms as:

- Chairman of The Sports Goods Manufacturer and Exporters Association, Jalandhar (SGMEA)
- 2. **Regional Director** for Sports Goods Export Promotion Council, New Delhi (SGEPC) stationed at Jalandhar
- Nominated as member in General Governing Body of Sports Authority of India (SAI).

Meerut: Role of ATE



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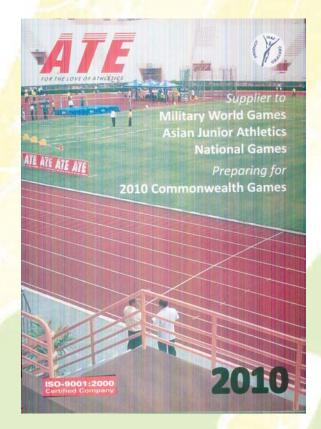
Commonwealth Games will give impetus to local industry-sports goods industry in particulars, tourism and aviation. More international events like OLYMPIC GAMES, ASIAN GAMES and FOOTBALL WORLD CUP, ASIAN GAMES – WORLD CHAMPIONSHIP in ATHLETICS should be held in INDIA. This will generate lots of interest in various sports among the youth of INDIA inculcating discipline.

It is a privilege to hold the Commonwealth Games in India in 2010. Such Games provide an opportunity to develop the cities and sports infrastructure in the country.

Our sportsman will have an opportunity to compete against foreign players on home ground. Competing at home ground is not only a big advantage but will also boost the confidence of our Athletes if they are able to score over them. It is seldom that Athletes get the advantage of home ground. Most of the time they have to compete abroad in adverse conditions.

Commonwealth Games will give impetus to local industry-sports goods industry in particulars, tourism and aviation. More international events like OLYMPIC GAMES, ASIAN GAMES and Football World cup, ASIAN GAMES — WORLD CHAMPIONSHIP in ATHLETICS should be held in INDIA. This will generate lots of interest in various sports among the youth of INDIA inculcating discipline.

It is very important that the games should be well organized. Recently Australia and China in particular have shown how the OLYMPIC were efficiently managed. Both 2000 and



2008 OLYMPIC Organization is an example of efficiency. There is no reason why India can not do it.

Adarsh Anand, Mg. Director ATE, Anand Track & Field Equipment Pvt. Ltd., A-29, Mohkampur Phase II, Delhi Road, Meerut 250002, India, Phone: 0091 121 2402424, 2401118 Fax: 0091 121 2401165, Email: info@anandathletics.com Website: www.anandathletics.com

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AFI Throwing Academy & Athletic Federation of India





Esha International



Ramesh Chandra

I(Shri Ramesh Chandra) was an employee in Mechanical Section in PPDC, Meerut (a society of Government of India). PPDC is a facility Centre for goods sports manufacturing units. An idea came in my mind to start my own manufacturing sports goods especially of exercise goods. I resigned from PPDC to start my own venture. In 2000, I started my

business in the above name & style from my residence. I continued manufacturing goods from my own residence. I manufacture the health equipments of all type related to sports. After two or three years when



my business expended, I shifted it from 50 yards to 1000 yards.

Significant

In few years my production of goods increased 10 times. I have all kinds of machines related to manufacturing of exercise goods. I always keep in

> touch with the PPDC. I produce the sports goods and export them through the exporters. My son Mr. Ashish is also trained for the work. He may design new work. My son also took training from the PPDC, Meerut. I thank all the staff of PPDC. PPDC changed my life and gave me a way of progress. I am at present an honourable businessman in Meerut. My production is recognised by all exporters of Meerut and out side.



Ramesh Chandra

Prop. of Esha International



Contribution of PPDC



Karan Malhotra had the distinction of holding first rank in Diploma in Polymer Technology in 2005-06 batch conducted by PPDC, Meerut. He is also a Post Graduate Diploma holder in Rubber Technology from Rubber Technology Centre, Indian Institute of Technology, Kharagpur.

Karan Malhotra holds Diploma in Polymer Technology (comprising Science and Technology of Rubber, Rubber Chemicals and Rubber Products) and has done training program in CNC Advance Machining (comprising Computer Aided Designing and Computer Aided Manufacturing of Components and Moulds) from PPDC Meerut. He had the distinction of holding first rank in Diploma in Polymer Technology in 2005-06 batch conducted by PPDC, Meerut. He is also a Post Graduate Diploma holder in Rubber Technology from Rubber Technology Centre, Indian Institute of Technology, Kharagpur.

After gaining knowledge of Rubber Technology and CNC Advance Machining Shri Karan Malhotra joined his father's business and have been instrumental in the success of G.K. Industries since then. Shri Karan Malhotra also made full use of his experience as a National level T.T. Player of Table Tennis in developing the T.T. Rubbers for his unit.

He looks after the complete production and quality control of the unit which now manufactures Table Tennis Rubbers approved by International Table Tennis Federation.

Today the unit has the distinction of becoming the first co. in South Asia

to manufacture Nano Technology Rubbers and the only manufacturer in India who manufactures T.T. Rubbers approved by International Table Tennis Federation in his own facility.

The unit has also achieved ISO 9001-2000 certification.

The unit has been growing its sales by more than 25% every year since the joining of Shri Karan Malhotra

The unit provides employment to a no. of skilled and semi-skilled labour and has very ambitious growth plans to take its products to various parts of the world under dynamic leadership of Shri Karan Malhotra.





Ludhiana: Impact of Ankita Impex

Arun Dhand

We are located in Ludhiana India, which is also known as 'The Manchester of East', for the quality of its cotton production. At Ankita impex, over the years, wer have attained an expertise in the manufacture of quality knitted adn woven sportswear and active wear..

It is due to our concerted focus on the manufacture of quality Knitted garments for sportswear; we have our modern garments-manuafacturing unit, today wer wre working with the leading brands like Reebok, Pantaloon, Rockport, Speedo, Converse, and have an inhouse capacity to produce 5000 units per day and that too at prices, which are hard to find elsewhere. We have also clothed the cricketing fans all around the glove by manufacturing for some leading IPL teams.

We are a professionally managed company engaged in the field of manufacturing of high quality sportwear in India by deploying the latest technology and systems in all our processes so that we can make the best product at the most cost effective price. We combine design expertise, creative imagination, strong infrastructure, focused product profile to deliver to our customers a highly refined, quality product that reflects the strong commitment of our companny to our clients all across the globe. That has been our secret for success in all these years.

Our strength is its prompt and efficient service. We will walk that extra distance to ensure that its

customers get the best possible outcome at every step.

Our product profile for sportswear and active wear is based on customer needs and designs. It includes the following styles that we specialize in T-shirts (round, polo, flat collar, V-neck), Tracsuits, Jackests, Variety of Woven fabrics for sportswear. The variety of fabrics used for sportswear. The variety of fabrics used for these styles include: Interlock, Single jersey, Terry, Velour, Fleece, Various types of ribs, Pique Popcorn and Waffle etc. In all kind of Cotton modal and Polyester blends.

Our Facilities: Our vertically integrated unit (starting from the knitting of the yarn to the final finished garment) not only includes machinery, which is at the cutting edge of technology, but also has been laid out and designed by a leading professional agency, in order to ensure smooth functioning and canalized movement of the material. Thereby ensuring ideals result in the least amount of time and enabling us to achieve virtually every international quality standard.

Quality Assurance: At Ankita Impex our endeavor always remains to satisfy each and every valuable customer. We are a socially responsible and a compliant verified and approved from time to time.

We have an independent Quality Assurance Team that ensures quality and system at all manufacturing stages. A strong independent quality assurance team is an independent entity only to ensure that the decisions it takes are the final decisions and since it is fully independent so it ensures the highest levels of quality. We believe more in Quality Assurance than Quality Control. We follow Quality Circles and Training of all the supervisors and all the worker force on a regular basis. All aiming at only one thing "building a team hence bringing delight to the customers through right cost, right time and right quality.

Anuj Dhand - Managing Director, Mob: 09878770011; **Ajay Sudhera** - General Manager; Mob: 09779134349; Ankita Impex-C-259, Phase 8, Focal Point, Ludhiana-141007





Knitwear Club: Working Together is Success!

Vinod K. Thapar



Paradoxical though it may sound, coming together to compete was the objective and the spirit behind the conception of Knitwear Club way back in 1984. Starting from a scratch with only a handful of members, it (Knitwear Club) can now boast of enjoying the patronage of six hundred direct members. Its competent and professional secretariat is equipped with modern communication facilities. The vision for mutual progress and the urge for broadening the base of textile related industry brought together the Knitwear and allied industry on a common platform.

A non-profit making body, the Knitwear Club has been functioning selflessly with a missionary zeal. With an unflinching devotion and exemplary dedication, we took up various issues and difficulties faced by the industry from time to time, with respective Government agencies. In most of the cases we have been successful in bringing round the authorities to our views through sheer reasoning and persuasion. At the same time the club has not hesitated to strike a discordant note or to raise a voice of dissent and protest against any high handedness from any quarter.

At a time when economic growth has slowed down, people are feeling the pinch of inflation, poor are longing for a roof to live under, entrepreneurs are finding the going tough for want of proper infrastructure, lack of resources and credit crunch, the need of the hour is to make joint, concerted and untiring efforts to face this all-

round onslaught.

The shortage of skilled and unskilled workers is the burning problem which Knitwear/Textile industry is facing. For this purpose, we are in touch with the Ministry of Rural Development, New Delhi and the Department of Employment Generation and Training. Punjab, Chandigarh. We have been assured full support under "Skill Development Initiative Scheme" of Government of India which provides for imparting vocational training/testing of competencies of work force. The implementation of the scheme is sure to revolutionize the fortunes of the unemployed youth particularly those belonging to the below poverty line category. It will, in turn, have a salubrious effect on the Knitwear/Textile industry as a whole.

Going in retrospect, we observe that the path has never been smooth. The industry had to pass through many a vicissitude, obstacles, prevarications, red-tapism and evasiveness. But there was a rosy side to this scenario also. We had the privilege of getting whole hearted co-operation and guidance from some highly competent, knowledgeable, firm and determined officers who have always been sympathetic to the cause of the knitwear/textile industry.

The functioning of Knitwear Club strengthens our belief in homogeneity of thoughts and actions and reminds us of Mr. Henry Ford who said "Coming together is beginning, keeping together is progress and working together is success"







Ludhiana Direct Factory Outlet – A Visionary Platform on the cluster format

This cumulative concept behind LDFO works on a single aim of providing a WIN -WIN situation for all. Operating under the idea of minimum liability, LDFO operates by pooling in the resources and sharing the rewards in a fair and transparent mechanism.

Cut throat competition keeps business entrepreneurs on their toes and each tries to make inroads into a competitor's business.

Ludhiana's Hosiery and Knitwear industry is more than hundred years old but it primarily consists of small to medium family owned enterprises who have delivered world class quality at competitive prices but when it comes to establishing their brand's presence in true strength, only a few have delivered. Most of the brands strive to be in touch with the final consumer directly managing retail outlets have proven to be beyond an average manufacturer.

Ludhiana enterprises have not been able to bear the round the year liabilities of running independent exclusive retail outlets. Many opened with much fanfare but soon had to down shutters at most places. Insiders confide that those which are still operating are reeling under the continuing recessionary trends. A detailed study was made by a core group into the successes and failures of various such experiments. A new trend is emerging at many places in the World as well where visionary brands are floating joint efforts to tap the markets.

Therefore, began the concept of LDFO – LUDHIANA DIRECT

FACTORY OUTLET – it is a conscious and planned platform where a number of brands and business converge. The objective was very clear – to promote the Ludhiana industry and tap true potential of the retail merchandising for our brands.

The management of LDFO received good support from the Knitwear Club. The next step was bringing together the companies who shared the vision. Meetings and discussions were held to impart knowledge of such a mechanism. And in the New Year 2010, Ludhiana Direct Factory Outlets (LDFO) opened in Ludhiana's Gold Souk Grande. This is a lavish retail outlet conforming to world class décor and infrastructure. But what sets it apart is that it is a joint platform where more than 42 brands have come together under the motto of giving a 'one stop fashion shopping destination to the fashion conscious community'.

This cumulative concept behind LDFO works on a single aim of providing a WIN –WIN situation for all. Operating under the idea of minimum liability, LDFO operates by pooling in the resources and sharing the rewards in a fair and transparent mechanism.

Ludhiana Direct Factory Outlets encompasses different product categories namely Menswear, Ladies wear, Kids wear, Jackets, Shawls, Home Furnishings, Accessories etc. And a few leading brands in each category have been brought together. Ludhiana Direct Factory Outlets has established itself as an ideal platform for Ludhiana's industry to tap the retail market at its full glory. And since the brands are directly managing their retail, the customer gets real value prices at an extensive, multi brand range. The brands are also able to judge the client's



preferences first hand.

We received great recognition when The Economic Times lauded the LDFO management's efforts and called LDFO a visionary recession baby "LUDHIANA KNITWEAR INDUSTRY GIVEN A BIRTH TO A CHILD IN THE RECESSION THAT'S CALLED LDFO". Thereafter many other publications have carried the success story on their pages. LDFO also organizes special carnivals and festivals and also lends its sponsorship to other events.

This success is slated to be repeated and LDFO branches are to open at many other locations in India. The Delhi and Amritsar stores are already under process. The LDFO team appreciates the support and confidence it has been receiving from its Brand partners.

CHARANJIV SINGH and PARMINDER SINGH

Statistical Data of Industries at Jalandhar District of Punjab (2007-08)

No. of Unit	Fixed Capital in Rs. (Crore)	Emplolyment Number	Production in R. (Cro re)	
25,782	59008	159736	303263	

Production and Employment in respect of Sports Goods Industries in Punjab

Year	Production in lakh (Rs.)	Employment
1980-81	3,447.40	4242
1990-91	6,282.40	8716
2000-01	21,239.38	6553
2001-02	25,437.06	8782
2002-03	26,086.77	9929
2003-04	26,766.56	10003
2004-05	27,283.38	10078
2005-06	31,174.54	10089
2006-07	34,174.52	10089
2007-08	40,088.00s	10053

Compiled by

Brajendra Kumar Assistant Diretor (Chem), MSME-DI, Ludhiana (Pb)

Note: Source of information statistical Abstract 2009 Govt. of Pb. SCO-35-36, Sector 17-E, Chandigarh.



HOCKEY STICK

Hockey is the national sport of India. We have a glorious past in the game of hockey. Starting from those ancient days where Lord Krishna has been shown playing 'Kanduk' (Ball) with a wooden stick to the Imperial days when the indian team under British Rule won the world cup to Olympic win of 1984. We have had those big names like Major Dhyan Chand and K.P.Singh 'Babu' in Indian hockey, who were envied world over.

Hockey is played with two main equipments namely Hockey Stick and Ball. Hockey Stick is a specially designed stick used to control and hit the ball. Hockey Stick is a 'J' shaped stick normally made with mulberry wood. The stick consists of two parts i.e. Handle and Blade. Handle is used

to hold and maneuver the stick and the blade to dribble and hit the ball. Recently hockey sticks are made with synthetic material more specifically called 'composite material'. This is polymeric material composition involving polymeric resin, carbon/graphite fibers etc.

Jalandhar and Meerut are the two main clusters in India for production of Hockey Sticks. Jalandhar is the bigger centre of production compared with Meerut.

In line with demand the number of manufacturers is also less. Domestic demand though increasing is less and main buyers are schools, colleges and sports organizations. Export of hockey sticks is also feable compared with football or cricketing equipments. One more reason for lesser production is its tedious manufacturing process.

The sport of Hockey is controlled by International Hockey Federation (FIH) world over for international





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matches. In India the sport is governed by Indian Hockey Federation.

HISTORY

Games played with curved sticks and a ball, has been found throughout history and the world. There are 4000-year-old drawings from Egypt. Hurling dates to before 1272BC and there is a depiction from 500BC in Ancient Greece when the game was called "@ABCDEFAGH" (pronounced "kerytezin") because it was played with a horn ("IJBKL" in Greek) and a ball-like object. There were hockey-like games throughout Europe during the Middle Ages and the word 'hockey' was recorded in the Galway Statutes of 1527.

The modern game grew from English public schools in the early 19th century. The first club was in 1849 at Blackheath in south-east London, but the modern rules grew out of a version played by Middlesex cricket clubs for winter sport. Teddington Hockey Club formed the modern game by introducing the striking circle and changing the ball to a sphere from a rubber cube. The Hockey Association was founded in 1886. The first international took place in 1895 (Ireland 3, Wales 0) and the International Rules Board was founded in 1900. Hockey was played at the Summer Olympics in 1908 and 1920. It was dropped in 1924, leading to the foundation of the Fédération Internationale de Hockey sur Gazon (FIH) as an international governing body by seven continental European nations, and hockey was reinstated in 1928. Men's hockey united under the FIH in 1970.

The two oldest trophies are the Irish Senior Cup, which 1st XI teams compete for, and the Irish Junior Cup.

The game had been taken to India by British servicemen and the first clubs formed in Calcutta in 1885. The Beighton Cup and the Aga Khan tournament commenced within ten years. Entering the Olympics in 1928, India won all five games without conceding a goal and won from 1932 until 1956 and then in 1964 and 1980. Pakistan won in 1960, 1968 and 1984.



Women's field hockey, played on grass. Though grass hockey fields were universal until the 1970s, playing on grass is now quite rare for competitive hockey in many countries

In the early 1970s artificial turf began to be used. Synthetic pitches changed most aspects of hockey, gaining speed. New tactics and techniques such as the Indian dribble developed, followed by new rules to take account. The switch to synthetic surfaces ended Indian and Pakistani domination because artificial turf was too expensive—in comparison to the wealthier European countries—and since the 1970s Australia, The Netherlands and Germany have dominated at the Olympics.

Women's hockey was first played at British universities and schools, and the first club, Molesey Ladies, was founded in 1887. The first national association was the Irish Ladies Hockey Union in 1894, and though rebuffed by the Hockey Association, women's hockey grew rapidly around the world. This led to the International Federation of Women's Hockey Associations (IFWHA) in 1927, though this did not include many continental European countries where women played as sections of men's associations and were affiliated to the FIH. The IFWHA held conferences every three years, and tournaments associated with these were the primary IFWHA competitions. These tournaments were noncompetitive until 1975.

By the early 1970s there were 22 associations with women's sections in the FIH and 36 associations in the IFWHA. Discussions started about a common rule book. The FIH introduced competitive

tournaments in 1974, forcing the acceptance of the principle of competitive hockey by the IFWHA in 1973. It took until 1982 for the two bodies to merge, but this allowed the introduction of women's hockey to the Olympic games from 1980 where, as in the men's game, The Netherlands, Germany, and Australia have been consistently strong. Argentina has emerged as a team to be reckoned with since 2000, winning medals at the last two Olympics, and the world championship in 2002.

MANUFACTURING PROCESS (Material Input, Design, Dimensions and Process)

Hockey stick consisting of two parts; Blade and Handle normally having a little over 90 cm (3 ft) length and traditionally made of wood. The blade of hockey stick is made from mulberry, tut, brimji or ash wood whereas handle is made from cane wood. Hockey stick is now also made with fiberglass, Kevlar and carbon fiber composites, with a rounded handle flattened on the left side and with a hook at the bottom. Metal may not be used in hockey sticks.

There was traditionally a slight curve (called the bow, or rake) from the top to bottom of the face side of the stick and another on the 'heel' edge to the top of the handle (usually made according to the angle at which the handle part was inserted into the splice of the head part of the stick), which assisted in the positioning of the stick head in relation to the ball and made striking the ball easier and more accurate.

The hook at the bottom of the stick was only recently the tight curve that we have nowadays, the older 'English' sticks had a longer bend, making it very hard to use the stick on the reverse. For this reason players now use the tight curved sticks.

It was recently discovered that increasing the depth of the face bow made it easier to get high speeds from the dragflick and made the stroke easier to execute. At first, after this feature was introduced, the Hockey Rules Board placed a limit of 50 mm on the maximum depth of bow over the length of the stick but experience quickly demonstrated this to be excessive. New rules (2006) now limit this curve to under 25 mm so as to limit the power with which the ball can be flicked.

By Rule a hockey stick comprises two parts (even if all one piece) A 'Head' and a 'Handle'. Historically the stick was made in two separate parts and the Head was spliced to the Handle, in much the same way as the handle of a cricket bat is spliced to the blade.

Today many hockey sticks are manufactured from man-made materials (so called 'composite sticks') in moulds and in one operation, so do not have a separate joined head and handle. By Rule the 'head' part was from the bottom end of the splice with the stick-handle to the base of the curve of the stickhead and the handle was from the bottom of the splice with stickhead to the top of the stick (where it was gripped in play). The need to inspect that a stick complied with new regulations, concerning materials used (Rules 1992), and with new regulations, concerning the permitted shape of the 'head' and handle (Rules 1990) (without rendering the stick thereafter unusable) led to a change in the description of the 'head' and handle parts (Rules 2004). This article will examine the transition from the shape of sticks in the era before the First World War to the Hockey World Cup in Willesden England in 1986 and from there, to the modern designs. Many of these changes have come about because of the availability of new materials and changes to playing surfaces but this article will be focused more on the reasons for stick shapes and the differences between them, rather than on an exploration of construction materials and reinforcements or 'artificial' playing surfaces.

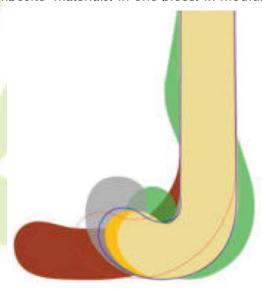
Hockey stick head parts were commonly made from large timbers, 4¼" x 4¼" in section and more than 4' in length, which were bent in presses after steam treatment, dried and then cut into four 'bats' for later shaping with saw and adze.



Bending press

TECHNICAL PROFILE

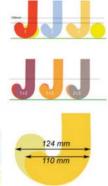
This type of manufacture is still in use today, although significant numbers of stickheads are now of laminated timber manufacture and more and more hockey sticks are now being made entirely from 'composite' materials, in one piece, in moulds.



Different types of Hockey Stick heads



'Hook' manufactured by Grays circa. 1986



Comparison of original hook shapes with modern designs.

STATUS OF INDIAN INDUSTRY

As per information collected from the industry, there are approximately 40 Hockey sticks makers in Jalandhar and adjoining area and approximately 10 makers in Meerut area. These numbers include the tiny / cottage units which comprise of one to five persons working in it including the family members.

Production of Hockey stick for domestic consumption is approx. Rs.8.00 Crore.

Hockey Sticks worth Rupees 4.18 crore were exported from India in the year 2007-08.

STANDARDISATION

Standardisation in Hockey has come after the game was started to be played in an organized manner and rules of game were formed. With some set of rules in place, need of standard Hockey equipment including Stick, was also felt to have comprable similarity in the game. Hence standards for Hockey Stick were also formed. Earlier days saw the standards emphasizing more on shape, dimension and material of manufacture (sticks are mainly made of mulberry wood in India however internationally sticks used and made are of polymeric composite material).

Game rules and equipment standards are mainly formulated and maintained by the official global governing bodies of the game and are followed by various national governing bodies in different countries. International governing body for Hockey is FIH. Besides these bodies various national standard keeping bodies also make and publish standards based on different parameters including technical, performance, sampling and testing & conforming.

The international standard specifications for hockey stick are as follows:

International Standard

All measurements are made and other specifications assessed with any coverings or additional fixings attached to the stick (that is, with the stick in the form in which it is used on the field).



The stick:

- a) the stick has a traditional shape which will be retained
- b) no particular handle or head shape or design has been approved, but the introduction of extreme shapes or designs outside the specified parameters will not be permitted.

Materials

The stick and possible additions may be made of or contain any material other than metal or metallic components, provided it is fit for the purpose of playing hockey and is not hazardous. The application of tapes and resins is permitted provided that the stick surface remains smooth and that it conforms to the stick specifications.

The FIH reserves the right to prohibit any stick which, in the opinion of the Hockey Rules Board, is unsafe or likely to have a detrimental impact on playing the game. The total weight of the stick must not exceed 737 grams.

Shape and dimensions of the stick:

a) The entire stick must be smooth and must not have any rough or sharp parts.

- b) The handle and head must be of one smooth continuous crosssection.
- c) The head must be a 'J' or 'U' shape the upturned or open end.
- d) The head is not limited along the X-axis.
- e) The head must be flat on the left hand side only (the side which is to the player's left when the stick is held with the open end of the head pointing directly away from the player's front, i.e. the side shown in the diagrams).
- f) The flat playing side of the head of the stick and any continuation of it along the handle must be smooth and in a single plane with any convex or concave deviation across that plane being no more than 4 mm in any direction. Deviation across the playing side of the head of the stick is tested by placing a Straight edge across this side at any point along the head and using a standard pointed depth gauge. The depth of concave curvature below the straight edge must not exceed 4 mm; the sum of depths below the straight edge at the edges of the stick must not exceed 8 mm.
- g) Inclusive of any additional coverings used, the stick must be able to pass through a ring with an

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interior diameter of 51 mm Shape and dimensions of the stick.

- h) Any curvature along the length of the stick (the rake or bow) must have a continuous smooth profile along the whole length, must occur along the face side or the back of the stick but not both and is limited to a depth of 25 mm.
- The rake or bow is tested using a pointed wedge the point of which is 25 mm from the flat base or using a round cylinder with a diameter of 25 mm. The stick is laid playing side downwards on a flat surface in its natural resting position. The wedge is placed with its base on the surface or the cylinder is laid lengthwise on the surface. The wedge or the cylinder must not pass completely under the stick at any place along its length.

Indian Standards for Hockey Sticks are published by Bureau of Indian Standards. Following are Indian standard specifications for hockey stick:

Indian Standard: IS:829-1978 (Reaffirmed 2002)

Material- Blade – Mulberry, brimji or ash woo<mark>d</mark>

Handle – Sections of good quality suitable cane seasoned to 12 percent moisture content.

Elastic Tape – Silken elastic tape/braided tape

Weight - Light - 340-535 gram

Medium – 536-595 gram

Heavy - 596-650 gram

Extra Heavy - 651-790 gram

Dimension – Length – 865-965 mm

Width of blade – pass through 51 mm ring and not pass through 49 m ring.

Comparison between Indian and International Standards on Hockey Stick:

There are many important differences between Indian and International standard specifications. The major differences are-

 Indian standard specifies material of construction as Mulberry, brimji or ash wood and handle be made of sections of good quality suitable cane

- seasoned to 12 percent moisture content whereas International standard specifies any suitable material other than metals..
- 2. The international standard does not specify any type of tape on the stick whereas Indian standard prescribes silken elastic tape/braided tape.
- 3. The international standard specifies maximum weight of stick as 735 grams whereas Indian standard has categorized the stick in four categories on the basis of weight as light weight (340-535 gram), Medium weight (536-595 gram), Heavy weight (596-650 gram) and Extra Heavy weight (651-790 gram).
- 4. The international standard specifies that inclusive of any additional coverings used, the stick must be able to pass through a ring with an interior diameter of 51 mm Shape and dimensions of the stick whereas Indian standard says that the stick must be able to pass through 51 mm ring and not pass through 49 m ring.

MAJOR HOCKEY STICK MANUFACTURERS

Following is the list of major Hockey Stick manufacturers and exporters in the country:

- M/s Beat All Sports, Jalandhar
- M/s Avran Exports, Jalandhar
- M/s Balwant Brothers Pvt. Ltd., Jalandhar
- M/s SDM International., Jalandhar
- M/s Hansraj Mahajan & Sons, Jalandhar
- M/s Sports Specialist, Jalandhar
- M/s Universal Sports Industries, Jalandhar
- M/s R.K. International, Jalandhar
- M/s Hans Exports, Meerut
- M/s Gujral Industries, Meerut
- M/s Pt. Sohan Lal & Sons
- M/s F.C.Sondhi & Co. (India) Pvt. Ltd., Jalandhar
- M/s Pt. Nand Lal & Sons, Meerut
- M/s Konika Exports, Jalandhar
- M/s R.K.Mahajan Exports, Jalandhar

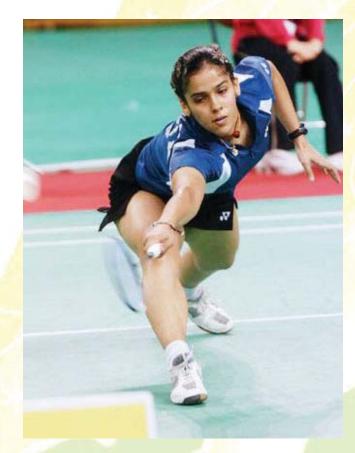


BADMINTON RACQUET

Badminton is a racquet sport played by either two opposing players (singles) or two opposing pairs (doubles), who take positions on opposite halves of a rectangular court that is divided by a net. Players score points by striking a shuttlecock with their racquet so that it passes over the net and lands in their opponents' half of the court. A rally ends once the shuttlecock has struck the ground, and each side may only strike the shuttlecock once before it passes over the net.

The shuttlecock (or shuttle) is a feathered projectile whose unique aerodynamic properties cause it to fly differently from the balls used in most racquet sports; in particular, the feathers create much higher drag, causing the shuttlecock to decelerate more rapidly than a ball. Shuttlecocks have a much higher top speed, when compared to other racquet sports. Because shuttlecock flight is affected by wind, competitive badminton is best played indoo<mark>rs. Badminton is</mark> also played outdoors as a casual recreational activity, often as a garden or beac<mark>h game.</mark>

Since 1992, badminton has been an Olympic sport with five events: men's and women's singles, men's and women's doubles, and mixed doubles, in which each pair is a man and a woman. At high levels of play, the sport demands excellent fitness, players require aerobic stamina, agility, strength, speed and precision. It is also a technical sport, requiring



good motor coordination and the development of sophisticated racquet movements.

HISTORY

The modern history of badminton began in India with a game known as Poona. Poona was a competitive sport that British Army officers learned and brought back to England, but more about that part of badminton's history in a moment. First, we must answer the question, "So just where the game of Poona came from?"

Poona developed from children's game called battledore and shuttlecock. The object of this game was to see how long a group could volley the shuttlecock by hitting it with the battledore, or paddle. This cooperative, non-competitive game was originally played without a net. The shuttlecock is





TECHNICAL PROFILE

often called a bird because it's made out feathers. Today, some models are made of plastic, but competition shuttlecocks consist of 16 real feathers. Experts claim the very best shuttles are made from feathers taken from the left wing of a goose. Who knew?

Even before battledore and shuttlecock evolved, there were similar sports being played throughout the world. In fifth century China, ti jian zi was played by kicking a shuttle into the air. By the 1600s, people in Europe were playing jeu de volant, a game that used a racket rather than feet to volley the shuttle.

By the time British officers stationed in India encountered Poona the game was a fast-paced competitive sport. These officers took the equipment for Poona back to England in the early 1870s.

A Party at Badminton

It was the Duke of Beaufort who officially introduced the game to England. In 1873, guests at a lawn party on his country estate, Badminton, played a game of Poona. The game was a hit and soon became popular among the British elite. People began calling the new party sport "the Badminton game."

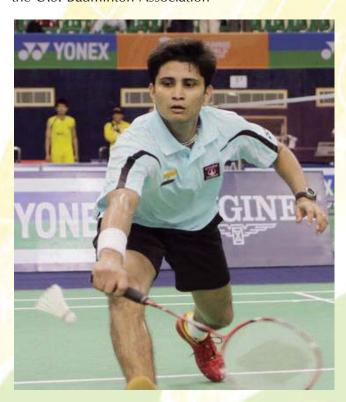
The game was played both indoors and outdoors on a court with an hourglass shape. It has been suggested that this unusual shape developed so the game could be played in Victorian salons, large rooms with doors that opened inward on both sides. In 1901, the official badminton court became rectangular.

Badminton clubs were started throughout England. By 1893, badminton had grown to the point where 14 clubs joined to form the Badminton Association. (Later, when more countries started their own federations, the name was changed to the Badminton Association of England.) This group was instrumental in standardizing the laws of the sport and in starting the earliest and most prestigious badminton tournament, the All-England Badminton Championships.

As badminton spread to more countries, the need for an international governing board became

apparent. The International Badminton Federation was created in 1934 and today has its headquarters in Kent, England. Nine countries were the original members of the IBF.

Today, the IBF has more than 150 member nations. The American Badminton Association was formed in the United States in 1936 and joined the IBF in 1938. In 1978 the ABA changed its name to the U.S. Badminton Association



From Party Game to Serious Sport

Nearly anyone can pick up a lightweight badminton racket and hit the shuttlecock over the net. Because it's an easy game for beginners, badminton remains popular at picnics and parties. But badminton is deceptive. It is the fastest of all the racket sports. A powerfully hit shuttle can travel as fast as 200 miles per hour. At the elite levels, the game requires amazing speed, strategy, leaping ability, power and quickness. A player can run as much as a mile during a match.

As the best players moved from the lawns and salons to competitive courts, they naturally wanted to compete against other top athletes. The All-England Championships gave them this opportunity.

By 1938, players from other countries began to compete in this tournament. An American woman, Judy Hashman, won 17 all All-England titles—the most of any player in history.

More tournaments and competitions became available as the sport continued to attract more competitive players. In 1939, Sir George Thomas donated the Thomas Cup, a trophy to be awarded at the International Badminton Championship for the top men's singles players. (Badminton can be played by men or women in singles and doubles competition, and by teams of mixed doubles.) Thomas was a British lawn tennis champion who switched to badminton and won 90 tournament titles over 24 years. Thomas was also the first president of the IBF.

In 1949, the Thomas Cup became a men's world team championship competition much like the Davis Cup in tennis. In 1956, the Uber Cup competition was created for women. Betty Uber of England, one of badminton's top doubles players, donated the trophy. Initially, the Davis and Uber Cup Competitions were played every three years. Since 1982, international team championships have been every two years—in even-numbered years. In odd-numbered years, individuals compete for international honors.

Today, the world's very best badminton players compete professionally for prize money. Television contracts and sponsorships have dramatically increased the winnings available on the probadminton circuit.

Asia Dominates the Sport

Though England birthed the sport of badminton, it has been Asia that adopted it as its own. China and Indonesia are the two dominant nations in international badminton competition. Matches in these nations draw crowds of more than 15,000. These two countries together have won an astonishing 70 percent of all IBF events. Asian countries have claimed all 23 Thomas Cups that have been awarded. In Uber Cup competition, Asian nations have won the last 15 titles.

The Olympics have been another showcase for Asian badminton prowess. Badminton was played

as a demonstration sport at both the 1972 and 1988 Olympic Games. In 1992, medal competition began in men's and women's singles and doubles. Mixed doubles was added in 1996. Of the 61 medals awarded in Olympic badminton, Asian countries have won all but seven.

Outside of Asia, the Scandinavian countries have the strongest badminton programs. Six times, Denmark has finished second in Thomas cup competition. Interest in badminton, primarily in these two parts of the world, make it the world's second most popular sport behind soccer.

MANUFACTURING PROCESS (Material Input, Design, Dimensions and Process)

Racquets

Badminton racquets are light, with top quality racquets weighing between 79 and 91 grams including the strings. They are composed of many different materials ranging from carbon fibre composite (graphite reinforced plastic) to solid steel, which may be augmented by a variety of materials. Carbon fibre has an excellent strength to weight ratio, is stiff, and gives excellent kinetic energy transfer. Before the adoption of carbon fibre composite, racquets were made of light metals such as aluminium. Earlier still, racquets were made of wood. Cheap racquets are still often made of metals such as steel, but wooden racquets are no longer manufactured for the ordinary market, due to their excessive mass and cost.



There is a wide variety of racquet designs, although the Laws limit the racquet size and shape. Different racquets have playing characteristics that appeal to different players. The traditional oval head shape is still available, but an isometric head shape is increasingly common in new racquets.

Strings

Badminton strings are thin, high performing strings in the range of about 0.65 to 0.73 mm thickness. Thicker strings are more durable, but many players prefer the feel of thinner strings. String tension is normally in the range of 80 to 130 N (18 to 36 lbf). Recreational players generally string at lower tensions than professionals, typically between 18 and 25 lbf (110 N). Professionals string between about 25 and 36 lbf (160 N).

It is often argued that high string tensions improve control, whereas low string tensions increase power. The arguments for this generally rely on crude mechanical reasoning, such as claiming that a lower tension string bed is more bouncy and therefore provides more power. This is in fact incorrect, for a higher string tension can cause the shuttle to slide off the racquet and hence make it harder to hit a shot accurately. An alternative view suggests that the optimum tension for power depends on the player: the faster and more accurately a player can swing their racquet, the higher the tension for maximum power.

Neither view has been subjected to a rigorous mechanical analysis, nor is there clear evidence in favour of one or the other. The most effective way for a player to find a good string tension is to experiment.

Grip

The choice of grip allows a player to increase the thickness of his racquet handle and choose a comfortable surface to hold. A player may build up the handle with one or several grips before applying the final layer.

Players may choose between a variety of grip materials. The most common choices are PU synthetic grips or toweling grips. Grip choice is a matter of personal preference. Players often find that sweat becomes a problem; in this case, a drying agent may be applied to the grip or hands, sweatbands may be used, the player may choose another grip material or change his grip more frequently.

There are two main types of grip: replacement grips and overgrips. Replacement grips are thicker,

and are often used to increase the size of the handle. Overgrips are thinner (less than 1 mm), and are often used as the final layer. Many players, however, prefer to use replacement grips as the final layer. Toweling grips are always replacement grips. Replacement grips have an adhesive backing, whereas overgrips have only a small patch of adhesive at the start of the tape and must be applied under tension; overgrips are more convenient for players who change grips frequently, because they may be removed more rapidly without damaging the underlying material.



Racquets

STATUS OF INDIAN INDUSTRY

As per information collected from the industry, there are approximately 35 Badminton Racquets makers mainly in Jalandhar (Punjab), Meerut (U.P) and Delhi. These numbers include the tiny / cottage units which comprise of one to five persons working in it including the family members.

Production of Badminton Racquets for domestic consumption is approx. Rupees 30 Lacs.

Badminton Racquets worth Rupees 5.41 Lacs were exported from India in the year 2007-08.

STANDARDISATION

Indian Standards: IS: 831-1979 (reaffirmed 2002)

Material - Wood timber

Grade 1 – Minimum Five ply, laminated frame (3 ply ash & 2 ply beech)

Grade 2 - Minimum Five ply, laminated frame (2 ply ash & 3 ply beech)

Different materials specified for Bends, Handle, Wedge and Stem.

Dimensions-

Length- 660 ± 3 mm full frame,

140 - 152 grip length

Holes for stringing - Between 66 & 72

Weight - 120 – 156 gram

Indian Standards: Metallic frame IS: 11974-1987 (reaffirmed 2002)

Material -

Stem - Aluminum alloy, Graphite alloy (Carbon alloy), Boron alloy or Stainless steel

Tee – Non ferrous alloy

Eyelets – Nylon or Polypropylene

Dimensions-

Length- 660 ± 8 mm full frame,

 146 ± 6 grip length

Holes for stringing - 74

Weight - 85-120 gram (Depending on the material)

International Specification

- The Racquets shall be a frame not exceeding 680 mm in overall length and 230 mm in overall width consisting of the main parts.
- The handle is the part of the racket intended to be gripped by a player.
- The stringed area is the part of the racket with which it is intended that a player hits the shuttle.
- The head bounds the stringed area.
- The throat (if present) connects the shaft to the head.
- The stringed area shall be flat and consist of a pattern of crossed strings either alternately interlaced or bonded where they cross. The stringing pattern shall be generally uniform and, in particular, not less dense in the centre than in any other area.

- Shall not exceed 280 mm in overall length and 220 mm in overall width. However, the strings may extend into an area which otherwise would be the throat, provided that the width of the extended stringed area does not exceed 35 mm and the overall length of the stringed area does not then exceed 330 mm.
- The Racquets shall be free of attached objects and protrusions, other than those used solely and specifically to limit or prevent wear and tear, or vibration, or to distribute weight, or to secure the handle by cord to the player's hand, and which are reasonable in size and placement for such purposes and shall be free of any device that makes it possible for a player to change materially the shape of the Racquets.

MAJOR BADMINTON RACQUET MANUFACTURERS

- M/s Enkay (India) Rubber Co. Pvt. Ltd., Delhi
- M/s Dattason, Meerut
- M/s Indo Rubber & Plastics Works, Meerut
- M/s Hans Exports, Meerut
- M/s Hans Rubber & Sports Ltd, Meerut
- M/s Bhalla Sports Pvt. Ltd, Meerut
- M/s Madan Sports, Meerut
- M/s M.R.Manufacturers, Meerut
- M/s Karan Sports, Meerut
- M/s Pelma industries, Meerut
- M/s Silver Sports, Jalandhar
- M/s Bruce & Co., Jalandhar
- M/s Deluxe Sports Company, Jalandhar
- M/s Bipen Sports, Jalandhar
- M/s Beat All Sports, Jalandhar
- M/s Pioneer Sports Works Pvt. Ltd., Jalandhar
- M/s Anand Shuttle Cock House, Jalandhar
- M/s Deluxe Sports Company, Batala

FOOTBALL

Football is one of the most popular sports in the world. It has gained wide popularity in India as well. This is also one of the most produced and exported sports Goods item in India.

Jalandhar and Meerut are the two main clusters in India for production of Football besides other places like Kolkata, Delhi, Jalandhar are the biggest centres of Football production followed by Meerut.

There are approximately 300 football makers in Jalandhar and approximately 100 makers in Meerut area. These numbers include the very tiny cottage units which comprise of one to five persons working in it including the family members.

Football is made in various sizes viz. 1 to 5 (increasing sizes). Size five is the standard size for the game. The other sizes are for children as per their playability. FIFA, the controlling body for the sport of Football in world has prescribed certain rules for the game and the equipment i.e. Football.

HISTORY

While it is widely believed that the word "football" (or "foot ball") originated with reference to the action of a foot kicking a ball, there is a rival explanation, which has it that football originally referred to a variety of games in medieval Europe, which were played on foot. These games were usually played by peasants, as opposed to the horse-riding sports often played by aristocrats. While there is no conclusive evidence for

this explanation, the word football has always implied a variety of games played on foot, not just those that involved kicking a ball. In some cases, the word football has even been applied to games which have specifically outlawed kicking the ball.

Documented evidence of what is possibly the oldest activity resembling football can be found in a Chinese military manual written during the Warring States Period in about the 476 BC-221 BC. It describes a practice known as cuju (literally "kick ball"), which originally involved kicking a leather ball through a hole in a piece of silk cloth strung between two 30-foot (9.1 m) poles. During the Han Dynasty (206 BC–220 AD), cuju games were standardized and rules were established. Variations of this game later spread to Japan and Korea, known as kemari and chuk-guk respectively. By the Chinese Tang Dynasty (618–907), the feather-stuffed ball was replaced by an air-filled ball and cuju games had become professionalized, with many players making a living playing cuju. Also, two different types of goal posts emerged: One was made by setting up posts with a net between them and the other consisted of just one goal post in the middle of the field.

The Japanese version of cuju is kemari, and was adopted during the Asuka period from the Chinese. This is known to have been played within the Japanese imperial court in Kyoto from about 600 AD. In kemari several people stand in a circle and kick a ball to each other, trying not to let the ball drop to the ground (much like keepie uppie). The game appears to have died out sometime before the mid-19th century. It was revived in 1903 and is now played at a number of festivals.

The Ancient Greeks and Romans are known to have played many ball games some of which involved the use of the feet. The Roman writer Cicero describes the case of a man who was killed whilst having a shave when a ball was kicked into a barber's shop. The Roman game harpastum is believed to have been adapted from a team game known as









"BCDEFGHIJ" (episkyros) or phaininda that is mentioned by Greek playwright, Antiphanes (388–311 BC) and later referred to by Clement of Alexandria. These games appears to have resembled rugby.

There are a number of references to traditional, ancient, and/or prehistoric ball games, played by indigenous peoples in many different parts of the world. For example, in 1586, men from a ship commanded by an English explorer named John Davis, went ashore to play a form of football with Inuit (Eskimo) people in Greenland.[3] There are later accounts of an Inuit game played on ice, called Agsagtuk. Each match began with two teams facing each other in parallel lines, before attempting to kick the ball through each other team's line and then at a goal. In 1610, William Strachey of the Jamestown settlement, Virginia recorded a game played by Native Americans, called Pahsaheman. In Victoria, Australia, indigenous people played a game called Marn Grook ("ball game"). An 1878 book by Robert Brough-Smyth, The Aborigines of Victoria, quotes a

man called Richard Thomas as saying, in about 1841, that he had witnessed Aboriginal people playing the game: "Mr Thomas describes how the foremost player will drop kick a ball made from the skin of a possum and how other players leap into the air in order to catch it." It is widely believed that Marn Grook had an influence on the development of Australian rules football (see below).

Games played in Central America with rubber balls by indigenous peoples are also well-documented as existing since before this time, but these had more similarities to basketball or volleyball, and since their influence on modern football games is minimal, most do not class them as football.

These games and others may well go far back into antiquity and may have influenced later football games. However, the main sources of modern football codes appear to lie in western Europe, especially England.

The modern game was codified in England

following the formation of The Football Association, whose 1863 Laws of the Game created the foundations for the way the sport is played today. Football is governed internationally by the Fédération Internationale de Football Association (International Federation of Association Football), commonly known by the acronym FIFA. The most prestigious international football competition is the FIFA World Cup, held every four years. This event, the most widely viewed in the world, boasts an audience twice that of the Summer Olympic Games.

MANUFACTURING PROCESS (Material Input, Design, Dimensions and Process)

A football is combination of an outer shell called cover and inner inflatable shell called bladder. This combination is spherical in shape. The cover of football is not a single piece cover but a set or combination of many pieces called panels. Most seen and used balls are made with 32 panels. These include 20 hexagonal and 12 pentagonal pieces.

Football cover may be made up of stitched leather, stitched synthetic material or moulded synthetic material. The synthetic materials may be rubber, polyvinyl chloride, polyurethane etc. The bladder may be made up of natural rubber latex or butyl rubber.

Most modern footballs are stitched from 32 panels of waterproofed leather or plastic: 12 regular pentagons and 20 regular hexagons. The 32-panel configuration is the spherical polyhedron corresponding to the truncated icosahedron; it is spherical because the faces bulge due to the pressure of the air inside. The first 32-panel ball was marketed by Select in the 1950s in Denmark. This configuration became common throughout Continental Europe in the 1960s, and was publicised worldwide by the Adidas Telstar, the official ball of the 1970 World Cup.

Older balls were usually stitched from 18 oblong non-waterproof leather panels, similar to the design of modern volleyballs and Gaelic footballs, and laced to allow access to the internal air bladder. This configuration is still common.

The official FIFA World Cup football for Germany

2006 matches was the 14-panel Adidas + Teamgeist. It was made in Thailand by Adidas, who have provided the official match balls for the tournament since 1970, and is a "thermally bonded" machine-pressed ball, rather than a traditionally stitched one. For future world cups, FIFA is hoping to alternate between Nike and Adidas for match balls.

Another ball with an innovative pattern is the 26-panel Mitre PRO 100T. There are also indoor footballs, which are made of one or two pieces of plastic. Often these have designs printed on them to resemble a stitched leather ball.

STATUS OF INDIAN INDUSTRY

As per information collected from the industry, there are approximately 250 Football makers in Jalandhar and approximately 75 makers in Meerut area. These numbers include the tiny / cottage units which comprise of one to five persons working in it including the family members. Production of Football for domestic consumption is approx. Rs.55.00 Crore. Inflatable balls including Football worth Rupees 169.64 crore were exported from India in the year 2007-08.Football constitute major part in Inflatable balls.

STANDARDISATION

Standardisation in Football has come after the game was started to be played in an organized manner and rules of game were formed. With some set of rules in place, need of standard football was also felt to have comparable similarity in the game. Hence standards for Football (the equipment) were also formed. Earlier days saw the standards emphasizing more on shape, dimension and material of



manufacture (balls were mainly made of leather then). Game rules and equipment standards are mainly formulated and maintained by the official global governing bodies of the game and are followed by various national governing in different countries. International governing body for football is FIFA. Besides these bodies various national standard keeping bodies also make and publish standards based on different parameters including technical, performance, sampling and testing & conforming.

Standard making body of our country (Bureau of Indian Standards) has also published a national standard on Football. Indian standard specification for football is IS 417 (Part 1): 2003

Salient points of Indian standard on Football are as follows:

Indian Standard: for grade 1 IS 417(Part1):2003

Material- Stitched leather, stitched synthetic material or moulded synthetic material

Finish – Shall have smooth surface finish.

Weight – 420-445 gram

Circumference – 68.5-69.5 cm

Sphericity (max.) - 1.5 percent

Loss of pressure (max.) - 20 percent

Water absorption (max.) - 10 percent avg. and 15 percent individual ball

Rebound – 120-165 cm. at 20°c and 120 cm. min. at 5°c

Max. difference – 10 cm. between lowest and highest rebound per ball

Shape and size retention -

Increase in circumference (max.) – 1.5 percent

Deviation on Sphericity (max.) – 1.5 percent Change of pressure (max.) – 0.1 bar

Change of pressure (max.) – 0.1 bar Indian Standard: for grade 2 IS 417(Part1):2003

Material- Stitched leather, stitched synthetic material or moulded synthetic material

Finish – Shall have smooth surface finish.

Weight – 410-450 gram

Circumference – 68.0-70.0cm

Sphericity (max.) - 2.0 percent

Loss of pressure (max.) - 25 percent

Water absorption (max.) - 15 percent avg. and 20 percent individual ball

Rebound – 115-165 cm. at 20°c and 110 cm. min. at 5°c

Max. difference – 10 cm. between lowest and highest rebound per ball

Shape and size retention – Not applicable

Now let us have a look on main features of International standard published by FIFA.

FIFA Specifications

Approved category

Material – Stitched leather, stitched synthetic material or moulded synthetic material

Finish – Shall have smooth surface finish.

Weight – 420-445 gram

Circumference - 68.5-69.5 cm

Sphericity (max.) - 1.5 percent

Loss of pressure (max.) - 20 percent

Water absorption (max.) - 10 percent avg. and 15 percent individual ball

Rebound – 135-155 cm. at 20°c and 125 cm. min. at 5°c

Max. difference – 10 cm. between lowest and highest rebound per ball

Shape and size retention – Increase in circumference (max.) – 1.5 percent

Deviation on Sphericity (max.) – 1.5 percent

Change of pressure (max.) – 0.1 bar

Inspected category

Material - Stitched leather, stitched synthetic material or moulded synthetic material

Finish – Shall have smooth surface finish.

Weight - 410-450 gram

Circumference – 68.0-70.0cm

Sphericity (max.) - 2.0 percent

Loss of pressure (max.) - 25 percent



Water absorption (max.) - 15 percent avg. and 20 percent individual ball

Rebound – 125-155 cm. at 20°c and 115 cm. min. at 5°c

Max. difference – 10 cm. between lowest and highest rebound per ball

Shape and size retention – Not applicable

Comparison between Indian and International Standards on Football:

On comparing the football standard specification published by Bureau of Indian Standards and FIFA we find that Indian standard also has been made on the pattern and lines of FIFA standard. However there are a few minor differences. These are:

Difference between Indian grade 1 and FIFA approved category is in rebound parameter. FIFA prescribes rebound between 135-155 cm and minimum rebound 125 cm at 5°c, whereas in Indian standard rebound has been prescribed between 120-165 cm and minimum rebound 120 cm at 5°c.

We may therefore say that Indian standard for football is comparable with international standard. It is worth mentioning that PPDC Meerut is establishing the facility of football testing as per international standards.

Most of the facilities like – Weight Test, Dimension Tests, Water Absorption Test and Shooting Test.

have been installed in the centre and multitesting equipment for rebound and pressure testing is expected to be installed very soon. By having these facilities at PPDC, the centre will be in a position to conduct all the tests as required by international standards and will be the first and only such facility in India. This will enable the football manufacturers and exporters to test their product at PPDC Lab before sending it to FIFA lab for confirmatory testing, which is very expensive (more than one lac Rupees). High FIFA testing cost and fear of rejection stops most manufacturers from sending their product for testing at FIFA lab. PPDC lab may provide them an opportunity to test their product at PPDC, Lab for nominal charges and then after getting sure of their quality they may choose to improve or if at par then send to FIFA lab without fear of failing.

MAJOR FOOTBALL MANUFACTURERS

Following is the list of major football manufacturers and exporters in the country-

- M/s Cosco (India) Ltd., Delhi
- M/s Mayor & Co., Jalandhar
- M/s Soccer International, Jalandhar
- M/s Freewill Sports Pvt. Ltd., Jalandhar
- M/s Sakay Traders, Jalandhar
- M/s Sarve Prakash & Co., Jalandhar
- M/s Savi International, Jalandhar
- M/s Sharma Exports, Jalandhar
- M/s Wasan Exports, Jalandhar
- M/s Sparton Sports Industries, Jalandhar
- M/s Akay International, Jalandhar
- M/s Bruce & Co., Jalandhar
- M/s Hans Exports, Meerut
- M/s Hind Sports, Meerut
- M/s Khanna Sports Pvt. Ltd., Meerut
- M/s Beat All Sports, Jalandhar
- M/s F.C.Sondhi & Co. (India) Pvt. Ltd., Jalandhar
- M/s Indo Rubber & Plastic Works, Meerut
- M/s Ishar Dass Mahajan & Sons, Jalandhar
- M/s Kamal Brothers, Jalandhar
- M/s R.K.Mahajan Exports, Jalandhar

CRICKET BAT

Cricket, traditionally an outdoor sport, has a history of more than 400 years, is played between two teams. Each team consists of 11 players and the sport is all about the contest between a ball made up of leather to a player standing in front of stumps with specially designed wooden structure called Bat. In order to save the ball hitting the player or the stumps, the cricket bat is used to hit the ball on the centre of a ground which is called as the 'pitch'. The actual action is a one-on-one contest at a time that is between a batsman and a bowler. The bowler's job is to release the ball (running in from a distance and hurling the ball without bending his bowling arm) with an objective of either restricting the batsman from hitting it efficiently or getting him 'out'. At a time, there are two batsmen in the centre with each other changing strike after every odd run (a run around the pitch) scored or after the end of every over (which consists of a specific number of balls).

Apart from the bowler, there are 10 more players called as the 'fielders' on the ground that belong to the bowling side. These 10 players look out to stop the ball from getting past them (within the boundaries of the ground) and to limit the scoring as much as possible. The fielders also attempt to take 'catches' which are to catch the ball with their hands. For this the ball should travel full into their hands without landing on the ground. This accounts for a dismissal



of the batsman. There are also other forms of 'dismissals' that the fielders can affect.

By the end of the match, each team gets a fair opportunity to have their share of batting and bowling against each other. And its all about which team scores more runs to decide the winner of the contest or a match. They are of course specific rules for each match which may last from one day to five days.

Basically, a batting team will be having only two batsmen in the middle at a time. Once a batsman gets dismissed, he gets replaced with another one and so on till 10 such events have happened or in case the team has run out of their limited overs. A dismissal of a batsman from the middle is termed as a 'wicket'. So although there are 11 players who can bat for a team in a match, the number of wickets that they have is 10. This means that at no time, there will be a single batsman playing all alone.

The event of a batting side playing out till its 10th wicket has fallen or till they have run out of the overs is called as an 'innings'. A Cricket Match can consist of one innings per a team or two innings per a team. In a match consisting of two innings per each





team, the end result could be a win, loss or even a draw for either team. While the win and loss are straight forward to understand, a 'draw' in Cricket means that both sides fell short of time in forcing a win in the match.

Cricket is one of the popular sports among the United Nations. The cricket matches are regularly played amongst the United Kingdom, Australia, India, Pakistan, Sri Lanka, Newzland, South Africa and West Indies, Bangladesh etc.

HISTORY

The game of cricket has a known history spanning from the 16th century to the present day, with international matches played since 1844, although the official history of international Test cricket began in 1877. During this time, the game developed from its origins in England into a game which is now played professionally in most of the Commonwealth of Nations.

Cricket was introduced to North America via the English colonies in the 17th century, probably before it had even reached the north of England. In the 18th century it arrived in other parts of the globe. It was introduced to the West Indies by colonists and to India by British East India Company mariners in the first half of the century. It arrived in Australia almost as soon as colonization began in 1788. New Zealand and South Africa followed in the early years of the 19th century.

In 1744, the Laws of Cricket were codified for the first time and then amended in 1774, when innovations such as Ibw, middle stump and maximum bat width were added. These laws stated that the principals shall choose from amongst the gentlemen present two umpires who shall absolutely decide all disputes. The codes were drawn up by the so-called "Star and Garter Club" whose members ultimately founded MCC at Lord's in 1787. MCC immediately became the custodian of the Laws and has made periodic revisions and recodifications subsequently.

The first ever international cricket game was between the USA and Canada in 1844. The match was played at the grounds of the St George's Cricket



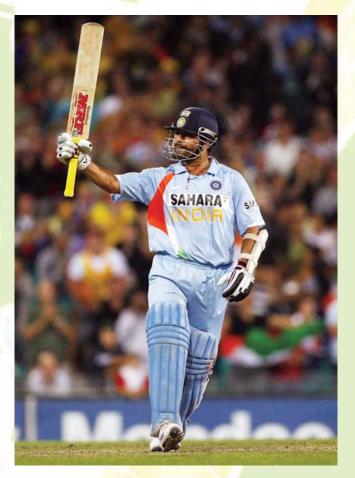
Club in New York.

In 1889 the immemorial four ball over was replaced by a five ball over and then this was changed to the current six balls an over in 1900. Subsequently, some countries experimented with eight balls an over. In 1922, the number of balls per over was changed from six to eight in Australia only. In 1924 the eight ball over was extended to New Zealand and in 1937 to South Africa. In England, the eight ball over was adopted experimentally for the 1939 season; the intention was to continue the experiment in 1940, but first-class cricket was suspended for the Second World War and when it resumed, English cricket reverted to the six ball over. The 1947 Laws of Cricket allowed six or eight balls

depending on the conditions of play. Since the 1979/80 Australian and New Zealand seasons, the six ball over has been used worldwide and the most recent version of the Laws in 2000 only permits six ball overs.

When the Imperial Cricket Conference (as it was originally called) was founded in 1909, only England, Australia and South Africa were members. India, West Indies and New Zealand became Test nations before the Second World War and Pakistan soon afterwards. The international game grew with several "affiliate nations" getting involved and, in the closing years of the 20th century, three of those became Test nations also: Sri Lanka, Zimbabwe and Bangladesh.

The ICC has expanded its Development Program with the goal of producing more national teams capable of competing at Test level. Development efforts are focused on African and Asian nations; and on the United States. In 2004, the ICC Intercontinental Cup brought first-class cricket to 12 nations, mostly for the first time.



In June 2001, the ICC introduced a "Test Championship Table" and, in October 2002 a "One-day International Championship Table". Australia has consistently topped both these tables in the 2000s.

Cricket's newest innovation is Twenty20, essentially an evening entertainment. It has so far enjoyed enormous popularity and has attracted large attendances at matches as well as good TV audience ratings. The inaugural ICC Twenty20 World Cup tournament was held in 2007. The formation of Twenty20 leagues in India - the unofficial Indian Cricket League, which started in 2007, and the official Indian Premier League, starting in 2008 - raised much speculation in the cricketing press about their effect on the future of cricket.

1624 - This is the first time that we have any mention of a cricket bat. An inquest was carried out after a fielder was killed. The batsman had tried to prevent him from catching the ball, and had presumably whacked him on the head in the process! Originally bowlers used to bowl the ball underarm. The bat was therefore shaped very much like a hockey stick.

1770's - The laws were changed to allow "length bowling", which was still performed underarm. The bat became roughly parallel with a maximum width of 4.25". This is still the same today. They were extremely heavy, with the "swell" at the bottom.

1820's - Round arm bowling was allowed, instigating more bounce so the bat became lighter with a higher "swell".

1830's - Until this period all bats were one piece willow. However, because of increased breakages and shock as the ball travelled faster, bat makers started to "splice" handles into bats. Handles were either solid willow or ash.

1835 - The length of a bat was restricted to 38", which is still the same today.

1840 - The first recorded use of a "spring" being inserted into the handles. These were initially whalebone (as used in ladies corsets) and some years later India rubber.

TECHNICAL PROFILE

1853 - Thomas Nixon, a Notts cricketer, introduced the use of cane in handle making.

1864 - The laws were altered to allow over- arm bowling so there was a further lightening and more refined shaping of the blade.

Handles became intricate constructions and were nearly all made of cane with Indian rubber grips.

1870's - The shape of today's bat evolves.



An artwork depicting the history of the cricket bat

It would be wonder if those cricketers of the 1600's would recognise cricket as the same game that they played. They certainly might look a bit mystified at today's helmets!

MANUFACTURING PROCESS (Material Input, Design, Dimensions and Process)

How to make a Cricket Bat

The cricket bat is consisting of two parts i.e. the Cleft and the Handle. The cleft part is used to hit the ball whereas handle is used to hold the bat. Wood is used to make cleft part whereas cane is used to make handle. Clefts can be made from Kashmir willow, English willow or popular wood. The cleft of cricket bat is manufactured with Kashmiri willow, English willow or Popular wood. Kashmir willow is grown in Kashmir whereas English willow is imported from United Kingdom. Cane is brought from Assam, Karnataka, Goa and Andman & Nikobar Islands. Cane is also imported from Malaysia.

Cricket Bat Willow

Kashmir willow and English willow are mainly used with leather ball because of its strength and

lightness. Popular wood based bats are used to play with rubber / plastic / tennis balls because of having lower strength.

Cricket Bat willow trees are grown in Kashmir and generally minimum 15 years old tree having a girth of more than 34 inches are used for the clefts. The trees are cut and sawn into rounds of 30 inches length and split into clefts before they are seasoned naturally or by seasoning kiln.



By the time a cleft is ready for use, it is around 1.80 – 2.00 Kg. in weight and down to 10 -12% moisture contents. Any less moisture makes the cleft lighter, but extremely brittle. Clefts are graded on their straightness of grains, number of grains, colouration and any blemishes such as knots and strains.

The best clefts have straight even grains with no blemishes and no colouration. The optimum piece of wood will have 8-10 grain. Generally a narrow grained bat is from an older tree and is softer. Many people like narrow grains, but because of its age and brittleness, it does not last very long.



Cricket Bat Cane

Sarawak cane is sourced from Malaysia and is imported to India in 2 basic thicknesses, thick and thin. The thick can make 1 piece handle with traditionally 1 rubber spring insert and the thin pieces are laminated together to make 9 or 12 pieces handles with 2 or 3 rubber spring inserts.

Sarawak is graded by straightness and evenness of the stranding. The best pieces of cane are straight with even strands. Cane is used in handle for its stiffness, lightness and natural strength and impact bearing capacity. All these characteristics are needed when sticking the ball at over 100 mph. Cane is delivered in the pole length 1.5 meters (60 inches) in length. Cane is also sourced from Andman & Nikobar Islands.

Grading

Grading is done as soon as the blades are sawn.

1st Grade is the best looking blade having straight grains, made of soft wood and is knot free. 2nd and 3rd Grade has softwood / red wood and has few / more knots.

Seasoning

Seasoned timber has an average moisture content of around 12% or less. (It is permissible to have occasional moisture readings as high as 15%, but the bulk of any package of seasoned timber will have a moisture content of less than 12%. Most appearance products are seasoned and may have special requirements for moisture contents significantly less than 15%. Many structural products are now specified as seasoned.

Seasoned timber tends to have superior dimensional stability than unseasoned timber and is much less prone to warping and splitting in service. In higher grades of timber, particularly hardwoods, the process of seasoning can enhance the basic characteristic properties of timber, increasing stiffness, bending strength and compression strength.

Seasoning is the process of drying timber to remove the bound moisture contained in the walls of the wood cells to produce seasoned timber. Seasoning can be achieved in a number of ways,

but the aim is to remove water at a uniform rate through the cleft to prevent damage to the wood during drying (seasoning degrade).

MANUFACTURING

Cleft Preparation

The clefts of willow arrive at the factory roughly sawn and waxed at each end, which is done to prevent splitting when drying. The first job is to saw the cleft to length removing the waxed ends. The second job is to plane the face to reveal a clean workable surface. Shaping in modern time, can also be done on large copying lathes or CNC computerized cutting machine. At this stage the blade is ready for the key process in making any cricket bat, pressing.



Pressing Process

During the pressing process the face of the blade is subject to immense pressure with the top fibers of the face being compacted by the rollers. The amount of pressure applied is critical and as no two pieces of wood are alike, even from the same tree, each cleft will need to be pressed to its own characteristics. Too little pressing will cause the blade to under perform and crack easily and too much pressure will make the bat too hard and unable to spring when striking the ball. The pressing process gives the face of the cleft a case hardening to withstand the force of striking a ball. The basic philosophy of pressing is that the compacted fibres on the face spring with the soft open fibres in the back of the cleft. The term

TECHNICAL PROFILE

'plays like the plank' is commonly used for bats that are not pressed enough.



Knocking in Process

The knocking in process is essential before play as this eases the initial compactness of the pressing. The more knocking in done eases this compactness and allows the bat to perform and spring better when striking the ball. This is why a bat gets better with age. Unless blades are pressed correctly, bats do not perform.

Cleft Back Preparation

Once the cleft is pressed the back is roughly planed to give the basic shape of a cricket bat blade shaping will vary dependent of the final model shape to be made. At this point the cleft is ready for a cane handle.



Handle Construction

Single Spring Handle

The Sarawak poles are cut to length 30 centimeters (12 inches) and then sawn the centre to approximately two thirds of the length of cane. Rubber, cork or a mixture of both are then inserted into the sawn centre and glued with woodwork PVA glue. The handle is left for 24 hours for the glue to set and then is ready for turning. The cane piece is then put into a lathe and turned to the basic handle shape either be round, tapered or oval shaped.

3 Spring Handles

3 spring handles can be made in many combinations with the most common made with 9 or 12 pieces. To make a 9 piece handle thin pieces of Sawark cane are used. The cane is cut to 30 centimeters lengths (12 inches) and then the bark is taken off 2 opposite side. 3 pieces are taken laminated together on the striped sides to create a slip. Each slip is left for 24 hours before further processes. Once set the remaining bark is striped from the outside of the slip so that the slips have straight clean faces. 3 slips are then taken and one sawn down the centre to approximately two thirds of its length. A rubber insert is then glued into the centre of the sawn of the slip. 2 further pieces of rubber are glued to the outside of the rubber insert slip and the remaining 2 unsown slips are glued to each outside making a square sandwich effect. The square block is then clamped and left to set for a further 24 hours. Once set the block of nine pieces of cane is ready to be turned in a lathe to a basic cricket bat handle. Once the handles are turned they are ready to be fitted to the willow cleft.



Splicing

Splicing is where the handle and cleft are married together in a joint. The joints will be cut usually to perfectly complement each other and joint should be that if fitted without adhesive it is impossible to remove by hand. Once the joint is ready the handle joint is glued and fixed and set into the cleft and left for 24 hours to set. This point in known as the splice.



Shoulders & Toes

Once the splice has set the toes are shaped and shoulders cut out. These are cut by spindle cutter to give the basic shape for the bat makers to work from.



Hand Shaping

From this point, all bats are hand shaped and crafted to each piece of wood' characteristics. The bat makers lovingly shape the willow by manual planners & spoke shaves to maximize each cleft of wood' optimum balance. Once the initial shape has been done by hand the bat is then sanded and polished to a perfect finish. Shaping in modern times can also be done on large copying lathes or CNC computerizing cutting machine. This takes the skill and art out of bat making as although every bat comes off the same it will not optimize a bat's balance as each piece of wood is uniquely different and will need different care and attention. After all bat making is not engineering it is skilled craft.

Binding

The bat handle is now bound with string. This adds strength to the handle and helps when fitting the rubber grip. The string is bound onto the handle whilst the bat is held in the lathe (this is why there is a hole in the toe of the bat) and glued with normal wood working PVA glue.



Finishing

The bat is now ready for finishing where the rubber grip is applied by cone or blown on and glued. Decals are applied for the appropriate model and specialized tapes are applied for the right finish. Finally the toe guard is applied for the finishing touch and the bat is ready for sale.



STATUS OF INDIAN INDUSTRY

As per information collected from the industry, there are approximately 150 Cricket Bat makers in Meerut area, approximately 120 makers in Jalandhar area and approximately 100 makers in J & K. These numbers include the tiny / cottage units which comprise of one to five persons working in it including the family members.

Production of Cricket Bat for domestic consumption is approx. Rs.100.00 Crore.

Cricket Bat worth Rupees 48.95 Crore was exported from India in the year 2007-08.

STANDARDISATION

QUALITY CONTROL AND STANDARD

The make quality cricket bat following requirements has been given in Indian Standard IS: 828 - 1979:

Grades

Cricket bats shall be of following two grades:

Grade I – The willow used shall be well seasoned, of straight and uniform grains and free from knots, splits, cracks or other defects. The handle shall be made up of not less than nine sections of cane and three rubber insertions. The middle insertion shall be of minimum 200 mm length and twoinsertions on sides shall be of

minimum 250 mm length each.

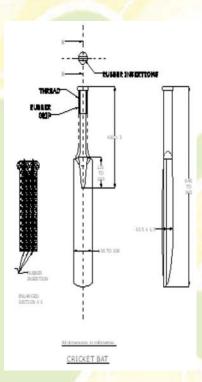
Grade II -The willow used shall be well seasoned, of straight and reasonable uniform grains and free from knots, splits, cracks or other defects. The handle shall be made up of not less than six sections of cane and three rubber insertions. The middle insertion shall be of minimum 200 mm length and two insertions on sides shall be of minimum 250 mm length each.

2. Material

Blade – The blade shall be made up of closebark willow (Salix spp.). The timber shall be of uniform straight grains, fully seasoned and free from defects.

Handle – The handle shall be made from sections of good quality suitable cane seasoned to 12 percent moisture content. The cane used for the purpose shall be free from defects, such as hollowness, borer holes and insect crack.

3. Dimensions



Length - Overall length of the bat shall be between 845 and 965 mm.

Width of Blade - Width of the blade shall be

between 106 and 108 mm.

Dimensions of Handle – Normally, the length of the handle, including the joint, shall be 430 + 3 mm. However, the length for short handles shall be 420 + 3 mm and for extra long handles, 445 + 3 mm. The circumference of the handle shall be 105 to 130 mm.

Weight – The bat for general play shall weigh between 965 and 1080 gram.

Construction – The handle shall be fitted securely and firmly into the blade with a joint of 125 to 180 mm. The joint shall be securely glued with cold setting, synthetic resin adhesive. The handle shall be provided with rubber insertions along the length so as to give resilience to the bat. The handle shall be bound by thread and covered with rubber grip. The face and the edges of the blade shall be well rounded and compressed by machine. The edges of the blade shall be well rounded and its face and the back shall be fine sand papered.

International Rules



Marylebone Cricket Club (MCC) is the world's oldest and most famous cricket club. Founded in 1787, it is a private members' club. It owns, and is based at, Lord's Cricket Ground near St John's

Wood in north London. MCC was formerly the governing body of cricket in England and across the world. Most of its global functions were passed on to the International Cricket Council (ICC) in 1993 and its English governance was passed to the England and Wales Cricket Board at the same time.

The MCC laid down the laws of the game in 1788, and remains the copyright holder of the Laws of Cricket. Rules for cricket bat are as under:

Law 6 (The bat)

1. The bat

The bat consists of two parts, a handle and a blade.

2. Measurements

All provisions in sections 3 to 6 below are subject to the measurements and restrictions stated in Appendix E.

3. The handle

(a) One end of the handle is inserted into a recess in the blade as a means of joining the handle and the blade. The part of the handle that is then wholly outside the blade is defined to be the upper portion of the handle. It is a straight shaft for holding the bat. The remainder of the handle is its lower portion used purely for joining the blade and the handle together. It is not part of the blade but, solely in interpreting 5 and 6 below, references to the blade shall be considered to extend also to the lower portion of the handle where relevant.

- (b) The handle is to be made principally of cane and/or wood, glued where necessary and bound with twine along the upper portion.
- (c) Providing 7 below is not contravened, the upper portion may be covered with materials solely to provide a surface suitable for gripping. Such covering is an addition and is not part of the bat. Note, however, 8 below.
- (d) Notwithstanding 4(c) and 5 below, both the twine binding and the covering grip may

extend beyond the junction of the upper and lower portions, to cover part of the shoulders as defined in Appendix E.

4. The blade

- (a) The blade comprises the whole of the bat apart from the handle as defined above. The blade has a face, a back, a toe, sides and shoulders. See Appendix E.
- (b) The blade shall consist solely of wood.
- (c) No material may be placed on or inserted into either the blade or the lower portion of the handle other than as permitted in 3(d) above and 5 and 6 below, together with the minimal adhesives or adhesive tape used solely for fixing these items, or for fixing the handle to the blade.

5. Covering the blade

All bats may have commercial identifications on the blade.

Grade A and Grade B bats may have no other covering on the blade except as permitted in 6 below. Grade C bats may have a cloth covering on the blade. This may be treated as specified in 6(d) below. Such covering is additional to the blade and is not part of the bat. Note, however, 8 below.

6. Protection and repair

Providing neither 4 above nor 7 below is contravened,

- (a) solely for the purposes of either
 - (i) protection from surface damage to the face, sides and shoulders of theblade or
 - (ii) repair to the blade after damage material that is not rigid, either at the time of its application to the blade or subsequently, may be placed on these surfaces.

Any such material shall not extend over any part of the back of the blade except in the case of (ii) above and then only when it is

- applied as a continuous wrapping covering the damaged area.
- (b) solid material may be inserted into the blade for repair after damage other than surface damage. Additionally, for protection from damage for Grades B and C, material may be inserted at the toe and/or along the sides, parallel to the face of the blade.

The only material permitted for any insertion is wood with minimal essential adhesives.

- (c) to prevent damage to the toe, material may be placed on that part of the blade but shall not extend over any part of the face, back or sides of the blade.
- (d) the surface of the blade may be treated with non-solid materials to improve resistance to moisture penetration and/or mask natural blemishes in the appearance of the wood. Save for the purpose of giving a homogenous appearance by masking natural blemishes, such treatment must not materially alter the colour of the blade.

Any materials referred to in (a), (b), (c) or (d) are additional to the blade and not part of the bat. Note, however, 8 below.

7. Damage to the ball

- (a) For any part of the bat, covered or uncovered, the hardness of the constituent materials and the surface texture thereof shall not be such that either or both could cause unacceptable damage to the ball.
- (b) Any material placed on any part of the bat, for whatever purpose, shall similarly not be such that it could cause unacceptable damage to the ball.
- (c) For the purposes of this Law, unacceptable damage is deterioration greater than normal wear and tear caused by the ball striking the uncovered wooden surface of the blade.

8. Contact with the ball

In these Laws,

- (a) Reference to the bat shall imply that the bat is held in the batsman's hand or a glove worn on his hand, unless stated otherwise.
- (b) Contact between the ball and either
 - (i) the bat itself or
 - (ii) the batsman's hand holding the bat or
 - (iii) any part of a glove worn on the batsman's hand holding the bat or
 - (iv) any additional materials permitted under 3, 5 or 6 shall be regarded as the ball striking or touching the bat, or being struck by the bat.

BAT CARE & MAINTENANCE

Your cricket bat is a 'tool of the trade'; its raw materials are grown and not manufactured. It is to be expected that the condition of the bat will deteriorate during its usage but the performance of the bat should be unaffected. The manufacturers have put together the following notes to assist the explanation of situations which may occur within the lifespan of any cricket bat. Each bat purchased is hand selected and weighed to suit our customers' requirements. The playing life of your bat relates directly to the preparation, maintenance and care of the bat throughout its life.

PREPARATION FOR PLAY

The CRICKET BAT MANUFACTURERS recommend the following principles for the preparation and maintenance of cricket bats:

Oiling

All natural faced bats MUST be treated using raw linseed or a specialist cricket bat oil. The main purpose of oiling is to maintain moisture levels within the blade, and hence reduce the chances of cracking and splitting. The best way of applying oil to the bat is using a paint brush and lightly coat to the face of the bat, edge & toe of the blade taking care to avoid

the logos and splice area. Generally three or four coats should be sufficient initially and one every 3-4 weeks thereafter. Each coat should be allowed to dry into a blade in a horizontal position before the next is applied.

Extratec is a clear self-adhesive film which can be adhered to the face of the bat. Extratec is without doubt the best protection to the face & edges of cricket bats. It transforms the face of the bat into a sealed unit, negating the need for oiling except for the toe of the bat.

It provides the best possible protection against surface cracking for all bats.

MAJOR CRICKET BAT MANUFACTURERS

Following is the list of major cricket bat manufacturers and exporters in the country:

- M/s Sanspareils Greenlands Pvt. Ltd., Meerut
- M/s B.D.Mahajan & Sons Pvt. Ltd., Meerut
- M/s Sareen Sports Industries, Meerut
- M/s Greenlands Enterprises, Meerut
- M/s Stanford Cricket Industries, Meerut
- M/s Hans Rubber & Sports Ltd., Meerut
- M/s Premier Enterprises, Meerut
- M/s Olympic Sports, Meerut
- M/s F.C.Sondhi & Co. (India) Pvt. Ltd., Jalandhar
- M/s Beat All Sports, Jalandhar
- M/s Crimson International, Jalandhar
- M/s R.N. Sports, Jalandhar
- M/s Robinson Sports, Jalandhar
- M/s Spartan Sports Industries, Jalandhar
- M/s Ranson Sports Industry, Jalandhar
- M/s Worldwide Cricket Company Pvt. Ltd., Jalandhar
- M/s IDM Sporting Goods, Jammu
- M/s Bee Tee Sports Co., Jammu
- M/s Salroo Sons, Anantnag

CRICKET BALL

A cricket ball is made of two cork halves bound together with a string. It is then skinned with leather and stitched through it's half. These stitches are called 'seams' and are slightly raised. Modern balls have four seams. Even the early cricket ball was covered with leather, just like today. The first cricket ball was manufactured in 1658 in England. In 1775 the first six seamed ball was made by an English company, Dukes in Kent, England.

MANUFACTURING PROCESS (Material Input, Design, Dimensions and Process)

A cricket ball is a hard, solid ball used to play cricket and is made from a core of cork [Cork material is a subset of generic cork tissue, harvested for commercial use primarily from the Cork Oak tree], which is layered with tightly wound string, and covered by a leather case with a slightly raised sewn seam. The covering is constructed of four pieces of leather shaped similar to the peel of a quartered orange, but one hemisphere is rotated by 90 degrees with respect to the other. The "equator" of the ball is stitched with string to form the seam, with a total of six rows of stitches. The remaining two joins between the leather pieces are left unstitched.

For men's cricket, the ball must weigh between 5.5 and 5.75 ounces (155.9 and 163.0 g) and measure between 8 13/16 and 9 in (224 and 229 mm) in circumference. Balls used in women's and youth matches are slightly smaller.



Cricket balls are traditionally dyed red, and red balls are used in Test cricket and First-class cricket. White balls were introduced when oneday matches began being played at night under floodlights, as they are more visible at night. Many one-day matches are now played with white balls. Other colours have occasionally been experimented with, such as yellow and orange for improved night visibility, but the colouring process has so far rendered such balls unsuitable for professional play because they wear differently to standard balls. The white ball has been found to swing a lot more during the first half of the innings than the red ball. It also deteriorates faster than the red ball.

STATUS OF INDIAN INDUSTRY

As per information collected from the industry, there are approximately 100 Cricket Ball makers in Meerut area, approximately 50 makers in Jalandhar area. These numbers include the tiny / cottage units which comprise of one to five persons working in it including the family members.

Production of Cricket Ball for domestic consumption is approx. Rs.25.00 Crore. Cricket Ball and Hockey Ball worth Rupees 11.63 Crore were exported from India in the year 2007-08 with approximately 80 percent contribution of Cricket Ball.

STANDARDISATION

QUALITY CONTROL AND STANDARD

To make quality cricket ball following requirements has been given in Indian Standard IS:





10800- 1983:

1. Grades

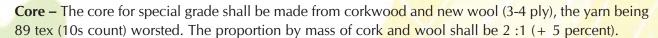
Cricket balls shall be of following three grades:

Special Grade

Grade 1

Grade 2

2. Materials



The core for grade 1 and grade 2 shall be made from corkwood and new wool (3-4 ply), the yarn being 89 tex (10s count) worsted. The proportion by mass of cork and wool shall be 5 :4 (+ 5 percent) alongwith ready made centre of cork weighing 28 + 3 grams.

Cover – The cover of the ball shall be made up of leather.

Height of Seam and of External Stitching – The height of the seam and of external stitching of special grade of cricket balls shall be 0.5 to 0.9 mm. The height of the seam and of external stitching of grade 1 and 2 cricket balls are not specified.

3. Dimensions

Circumference -

	Grade	М	en's	W	omen's	Jι	unior
١		Min.	Max.	Min.	Max.	Min.	Max.
		mm	mm	mm	mm	mm	mm
	Special Grade	224	229	210	225	205	220
	Grade 1 and 2	224	229	210	225	205	220

Width of Seam -

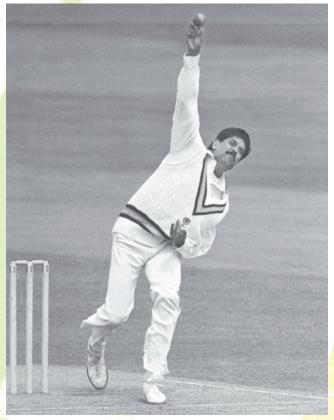
Grade	Seam Width		Deviation from Mean	
	Min.	Max.	Max.	
	(mm)	(mm)	(mm)	
Special Grade and				
Grade 1	19.5	21.0	<u>+</u> 0.5	
Grade 2	19.5	21.0	+ 1.0	

4. Requirements

General – Each cricket ball shall comprise a cover made from four pieces of leather stitched together around a core in such a way that the two closing or quarter seams shall be positioned diametrically opposite each other.

Cover – The covers of all grades shall be made in two halves. Each half shall comprise two pieces of leather joined together by a closing or quarter seam which is stitched internally. The seam shall be sewn





with waxed hemp thread of 1.5 mm nominal diameter and there shall be not less than 18 stitches.

Internal Stitching – The thread used for inner stitching shall be flax / cotton or equivalent quality of thread having a minimum breaking strength of 168 N (16.8 kgf). The thread for mouth and outer seam stitching shall have minimum breaking strength of 100 N (10 kgf)

contributes to the strength of the seam. The two outer double rows shall be stitched with a thread of 1 mm nominal diameter linen flex / cotton. There shall be not less than 80 stitches and not more than 85 stitches in each row.

Grade 1 – The two halves of the cover shall be joined together around a core by three double rows of double stitching, the stitching being carried out in such a way that each of the rows contributes to the strength of the seam. The two outer double rows shall be stitched with a thread of 0.7 mm to 1 mm nominal diameter linen flex / cotton. There shall be not less than 75 stitches in each row.

Grade 2 – The two halves of the cover shall be joined together around a core by one double row of double stitching, the stitching being carried out in such a way that each of the rows contributes to the strength of the seam. In addition, there shall be four outer single rows of double stitching. The stitching shall be with a thread of 0.7 mm nominal diameter. There shall be not less than 65 stitches in each row.

Finish – The finished ball shall be round and shall be polished or given a shine.

Colour – The colour of the cover of the cricket ball shall be red, the shade being agreed between manufacturer and purchaser.

5. Mass – The mass of a cricket ball immediately

Grade	Men's		Women's		Junior	
	Min.	Max.	Min.	Max.	Min.	Max.
	g	g	g	g	g	g
Special Grade	156	163	140	150	133	143
Grade 1 and 2	156	163	140	150	133	143

for special grade and 60 N (6.0 kgf) for grade 1 and 2.

External Stitching -

Special Grade – The two halves of the cover shall be joined together around a core by three double rows of double stitching, the stitching being carried out in such a way that each of the rows

after it has been conditioned for 24 hours in an atmosphere of temperature 270C + 20C and of relative humidity 65 + 5 shall be as follows:

6. Test Requirements

Sequence of Testing – The sequence of tests shall be carried out with a new ball for each of the

following groups:

Group A

- a) Shape
- b) Height of bounce
- c) Hardness
- d) Shape

Group B

- a) Shape
- b) Impact resistance
- c) Hardness
- d) Shape

Group C

- a) Shape
- b) Wear resistance
- c) Hardness
- d) Shape

Shape – Permitted chane in shape of cricket ball shall be as follows:

Group	Special Grade and Grade 2	Grade 1
	(mm)	(mm)
Α	2	4
В	2	4
С	0	2

Height of bounce – Mean of height of bounce (expressed as a percentage) shall be as follows:

Grade	Mean height of bounce (%)		
	Min.	Max.	
Special Grade	32	38	
Grade 1 and Grade 2	30	39	

Hardness - Hardness shall be as follows:

Grade	Group	A and B	Group	С
	Min.	Max.	Min.	Max
Special Grade and Grade 1	155	180	150	190
Grade 2	150	185	145	195

Impact resistance – After test, the cricket ball shall comply with the appropriate requirements.

Wear resistance – There shall be no sign of ant internal stitching, the cricket ball shall be evenly worn, and no opening of the seam or splitting cover shall be evident.

International Rules



Marylebone Cricket Club (MCC) is the world's oldest and most famous cricket club. Founded in 1787, it is a private members' club. It owns, and is based at, Lord's Cricket Ground near St John's Wood in north London. MCC was formerly the governing body of cricket in England and across the world. Most of its global functions were passed on to the International Cricket Council (ICC) in 1993 and its English governance was passed to the England and Wales Cricket Board at the same time.

The MCC laid down the laws of the game in 1788, and remains the copyright holder of the Laws of Cricket. Rules for cricket ball are as under:



TECHNICAL PROFILE

Law 5 (The ball)

1. Weight and size

The ball, when new, shall weigh not less than 5 1/2 ounces/155.9g, nor more than 5 3/4 ounces/ 163g, and shall measure not less than 8 13/16 in/22.4cm, nor more than 9 in/22.9cm in circumference.

2. Approval and control of balls

- (a) All balls to be used in the match, having been approved by the umpires and captains, shall be in the possession of the umpires before the toss and shall remain under their control throughout the match.
- (b) The umpire shall take possession of the ball in use at the fall of each wicket, at the start of any interval and at any interruption of play.

3. New ball

Unless an agreement to the contrary has been made before the match, either captain may demand a new ball at the start of each innings.

4. New ball in match of more than one day's duration

In a match of more than one day's duration, the captain of the fielding side may demand a new ball after the prescribed number of overs has been bowled with the old one. The Governing Body for cricket in the country concerned shall decide the number of overs applicable in that country, which shall not be less than 75 overs.

The umpires shall indicate to the batsmen and the scorers whenever a new ball is taken into play.

5. Ball lost or becoming unfit for play

If, during play, the ball cannot be found or recovered or the umpires agree that it has become unfit for play through normal use, the umpires shall replace it with a ball which has had wear comparable with that which the previous ball had received before the need for its replacement. When the ball is replaced the umpires shall inform the batsmen and the

fielding captain.

6. Specifications

The specifications as described in 1 above shall apply to men's cricket only. The following specifications will apply to

(i) Women's cricket

Weight: from 4 15/16 ounces/140g to 5 5/16 ounces /151g

Circumference: from 8 1/4 in/21.0cm to 8 7/8 in/22.5cm

(ii) Junior cricket: under-13

Weight: from 4 11/16 ounces/133g to 5 1/16 ounces/144g

Circumference: from 8 1/16 in/20.5cm to 8 11/16 in/22.0cm

MAJOR CRICKET BALL MANUFACTURERS

Following is the list of major cricket ball manufacturers and exporters in the country-

- M/s Sanspareils Greenlands Pvt. Ltd., Meerut
- M/s B.D.Mahajan & Sons Pvt. Ltd., Meerut
- M/s Sareen Sports Industries, Meerut
- M/s Greenlands Enterprises, Meerut
- M/s Sports & Past Time, Meerut
- M/s Stanford Cricket Industries, Meerut
- M/s Hans Rubber & Sports Ltd., Meerut
- M/s Premier Enterprises, Meerut
- M/s Olympic Sports, Meerut
- M/s F.C.Sondhi & Co. (India) Pvt. Ltd., Jalandhar
- M/s Beat All Sports, Jalandhar
- M/s Crimson International, Jalandhar
- M/s R.N. Sports, Jalandhar
- M/s Robinson Sports, Jalandhar
- M/s Spartan Sports Industries, Jalandhar
- M/s Ranson Sports Industry, Jalandhar
- M/s Worldwide Cricket Company Pvt. Ltd., Jalandhar
- M/s IDM Sporting Goods, Jammu
- M/s Bee Tee Sports Co., Jammu
- M/s Salroo Sons, Anantnag

Prime Minister Inaugurates MSME Udyami Helpline

Udyami Helpline, the Call Centre of Ministry of Micro, Small and Medium Enterprises (MSME), was inaugurated by the Prime Minister Dr. Manmohan Singh, at a function held at New Delhi on 21st August, 2010. Present on the occasion were Minister of State (Independent charge) for Micro, Small and Medium Enterprises Shri Dinsha Patel, Secretary (MSME) Shri Dinesh Rai, Additional Secretary and Development Commissioner (MSME) Shri Madhav Lal & other senior officers of the Ministry and related organisations and representatives of MSME Associations. The Call Centre will satisfy the long felt need of a single point facility for MSMEs for a wide spectrum information and accessibility of Banks and other MSME-related organisations.

While inaugurating the helpline, the Prime Minister emphasized that the MSMEs had a vital role in the dispersal of industries and generation of employment opportunities. He mentioned that first generation entrepreneurs faced hurdles in credit availability, technology and marketing. Government support in these areas can ameliorate their viability problems to a large extent. He congratulated the Ministry of MSME on launching the Udyami Helpline and felt that this initiative would facilitate in expanding the outreach of support provided under the various schemes and programmes of the Government.

The Udyami Helpline 1800-180-6763 – a toll-free number, will provide information on a wide range of subjects including guidance on how to set up an enterprise, access loans from banks, project profiles and the various schemes being implemented



The Prime Minister, Dr. Manmohan Singh launched the MSME Udyami Helpline by making an inaugural call, in New Delhi on August 21, 2010. The Minister of State (Independent Charge) for Micro, Small and Medium Enterprises, Shri Dinsha J. Patel and the Secretary, Ministry of Micro, Small and Medium Enterprises, Shri Dinesh Rai are also seen.

by the Government for the promotion of MSMEs. The Helpline will also facilitate lodging of complaints with various agencies of Central and State Governments dealing with MSMEs, including banks. This facility will be available both in Hindi and English between 6:00 A.M. to 10:00 P.M. on all 365 days including Sundays and holidays.

The Udyami Helpline will improve public access to the Government, particularly from the rural and remote areas of the country, and make the Government more responsive to the public needs. The feedback received from the Udyami Helpline will also facilitate in creation of an effective data base and better understanding of the needs of the sector. This will enable a wider outreach and more effective implementation of Government schemes.

Implementation of Recommendations of the task Force

The Task Force constituted to address the issues of the micro, small and medium enterprises (MSME) sector in its report has made various recommendations in the areas of credit, taxation, labour issues, infrastructure/technology/skill development, marketing, etc., for providing an impetus to the growth of the sector. The report has been circulated to the departments/agencies concerned for time-bound action as laid down in the report. A Steering Group under the chairmanship

of Principal Secretary to the Prime Minister has been constituted for ensuring timely/speedy implementation of the recommendations of the Task Force.

This information was given by the Minister of State (Independent Charge) for Micro, Small and Medium Enterprises, Shri Dinsha Patel in a written reply to a question in the Rajya Sabha on 30th July, 2010.

CGTMSE Celebrates 10th Foundation Day

Shri Dinsha J. Patel, Minister of State (Independent Charge) for Micro, Small and Medium Enterprises commended the 10 years of successful operations of Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) at a function held in New Delhi on 27 July, 2010.

The Minister in his address mentioning that the MSME Sector is the pillar of the Indian economy. Highlight the Government efforts towards promoting this vibrant sector, he said various measures of the Government including setting up of Prime Minister's task force on MSMEs, implementation of the National Manufacturing Competitiveness Programme (NMCP), assures the Government's commitment to the development of this sector so as to make it more competitive to meet the emerging challenges both nationally and Internationally. He further added that this sector comprising more than 26 million enterprises as per the 4th census of MSMEs, is the second largest employment generator in the country, producing more than 40% of industrial output and nearly one-third of country's exports.

Shri Patel said the Credit Guarantee Scheme is an important instrument in achievement of the national goal of inclusive growth. The scheme lays special emphasis on under developed and underserved regions like the North East Region, J&K, etc. He complemented the CGTMSE team for working diligently to make MSEs strong and vibrant. The Minister also announced the trial opening of MSME call centre with a Toll free no. 1800 180 6763.

Shri Dinesh Rai, Secretary, Ministry of MSME also congratulated CGTMSE for the remarkable progress in guarantee covers provided by it, and said that the credit guarantee scheme was launched as an effective alternative to collaterals and the Government attaches a lot of importance to this initiative. He further added that Banks/Financial Institutions now have greater faith and trust in CGTMSE's claims payment process.

Shri Madhav Lal, (AS &DC) MSME speaking on the occasion outlined the importance of the MSME



The Minister of State (Independent Charge) for Micro, Small and Medium Enterprises, Shri Dinsha J. Patel addressing at the Credit Guarantee Fund Trust for Micro and Small Enterprise's 10th Foundation Day, in New Delhi on July 27, 2010.

sector in the national economy. He said the Credit Guarantee Scheme plays a very crucial role in the dispensation of credit to the MSME sector and ensures the growth and development of the sector where CGTMSE is reaching out to entrepreneurs in the interior regions of the country. Shri Rakesh Rewari, DMD, SIDBI presented CGTMSE impressive journey of 10 years towards the empowerment of the MSME sector.

CGTMSE was set up on July 27, 2000 by the Government and Small Industries Development Bank of India to provide collateral/third party guarantee free credit facility (both fund as well as non fund based) extended by Banks/FIs, to new as well as existing Micro and Small Enterprises, with a maximum credit cap of Rs. 100 lakh (Rupees Hundred lakh only) under its Credit Guarantee Scheme (CGS). As on June 30, 2010, CGTMSE is catering to 115 Banks/FIs comprising of 27 Public Sector Banks, 17 Private Sector Banks, 61 Regional Rural Banks, 8 Financial Institutions and two Foreign Banks for availing credit guarantee from the Trust.

The setting up of CGTMSE has brought out a resolution in the banking world as more and more Banks/FIs have started providing credit to Micro and Small Enterprises. Many of these small enterprises would not have seen the light of the day but for the guarantee support of CGTMSE. As at June 30, 2010, cumulatively, 3,72,403 accounts have been accorded guarantee approval for Rs. 14,801.46 crore,

which is estimated to produce turnover of Rs. 70,100 crore, exports of Rs. 3,005 crore and provide employment to 19.07 lakh persons.

The highlight of the function was the release of two books one tracing the trowth and achievements of CGTMSE over the last ten years and the other, 'SIDBI book on MSME Database 2010'.

The top three banks and two regional rural banks having highest coverage under the Credit Guarantee Scheme were felicitated. State Bank of India, Punjab National Bank, Canara Bank, Purvanchal Grameen Bank and Karantaka

Vikas Grameen Bank were the recipients of the awards. The function was also attended by Smt. Ravneet Kaur, Joint Secretary, Department of Financial Services, Ministry of Finance, Deputy Managing Director, SIDBI and Shri O.S. Vinod, Chief Executive Officer, CGTMSE, and senior officials from various Ministries, Chairmen and Executive Directors of various banks, State Financial Corporations, Micro Finance Institutions, senior functionaries of several corporates, MSMEs, representatives of industry associations, functionaries from multilateral institutions, international experts in the field of MSME and SIDBI Board members.

Share of MSME in Manufacturing Sector

The share of Micro and Small Enterprises in the manufacturing sector of the country is 45.24% for the year 2007-08 (latest available).

As per the 'Quick Results: Fourth All India Census of Micro, Small & Medium Enterprises 2006-2007', the average value of fixed investment in Micro, Small and Medium Enterprises (MSMEs) for Registered sector is Rs 32.26 lakh per unit.

With regards to the technological capabilities the MSMEs are heterogeneous in respect of size and state of technology with relatively advanced technology being adopted by many Medium enterprises. There is substantial scope for technology upgradation of MSMEs.

The Ministry of MSME has put in place several measures to help MSMEs for technological upgradation and to increase their share in manufacturing output. The technological upgradation efforts include implementation of Design Clinic Scheme; Scheme for Promotion of Information and Communication Tools; Scheme for Marketing Assistance & Technology Upgradation and Scheme for Mini Tool Rooms under PPP mode, launched under the National Manufacturing Competitive Programme (NMCP) of the Government initiated in 2007-08. Further, the Credit Linked Capital Subsidy Scheme (CLCSS), launched in 2005, aims at facilitating technology upgradation by providing 15% upfront capital subsidy to manufacturing Micro and Small Enterprises on institutional finance (subject to a maximum limit of Rs. 15 lakh) for induction of wellestablished and improved technologies in the specified sub-sectors/products approved under the scheme.

The Government implements several other schemes/ programmes to help MSMEs increase their share in the manufacturing output with focus on infrastructure assistance through cluster approach, timely availability of credit, entrepreneurship and skill development, capacity building, marketing assistance etc. The Government has also enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 and announced a 'Package for Promotion of Micro and Small Enterprises ' in 2007 to facilitate promotion and development of MSMEs and enhancing their competitiveness. Further, a Task Force was constituted under the Chairmanship of Principal Secretary to the Prime Minister in 2009 to address the issues concerning the MSME sector. The Task Force submitted its report and made several recommendations in the areas of technology upgradation, credit, marketing, infrastructure development, skill development etc. for providing an impetus to the growth of the sector. The report has been circulated to the departments/agencies concerned for time-bound action as laid down in the report.

This information was given by the Minister of State (Independent Charge) for Micro, Small and Medium Enterprises, Shri Dinsha Patel in a written reply to a question in the Lok Sabha on 10 August, 2010.

Khadi and Village Industries

The Ministry of Micro, Small and Medium Enterprises has been implementing the 'Scheme for enhancing productivity & competitiveness of Khadi Industries and Artisans' to assist 200 khadi institutions to make khadi industry competitive with more market driven and profitable production by replacement of obsolete and old machinery and equipment, from 2008-09.

The year-wise number of projects sanctioned to khadi institutions under the above-mentioned scheme during the last two years and the target fixed for 2010-11 is

Year	Number of Projects
2008-09	21
2009-10	20
2010-11(Target)	60

Agency implementing the project has to have at least 300 artisans associated with it (which is 150 artisans for North-Eastern States). Under the project, financial assistance is available for charkha replacement, warp unit, product designing, market promotion, capacity building, techno-managerial

support, reporting, documentation studies, etc., with each project costing upto a total of around Rs. 42 lakh.

The year-wise details of funds granted by the Government to KVIC under the above-mentioned scheme during the last two years, and release of funds during 2010-11 out of Rs.21 crore provisioned as per BE 2010-11 is

Year	Amount (Rs. crore)		
20 <mark>08-09</mark>	10.00		
2 <mark>009-10</mark>	3.44		
2010-11	/- /- I		

The provision of funds under the 'Scheme for enhancing productivity & competitiveness of Khadi Industries and Artisans' has been substantially enhanced to Rs.21 crore under the BE 2010-11 to assist 60 institutions.

This information was given by the Minister of State (Independent Charge) for Micro, Small and Medium Enterprises, Shri Dinsha Patel in a written reply to a question in the Lok Sabha on 10 August, 2010.

Export Incentives to Coir Sector

An inter-ministerial meeting under the Chairmanship of Secretary, Ministry of Micro, Small & Medium Enterprises, Shri Dinesh Rai was held in New Delhi recently to sort out the issues involving export incentives to coir sector.

In the Meeting, issues relating to extension of benefits to coir products to make them at par with jute products under schemes like Duty Drawback and Duty Entitlement Passbook and the difficulties faced by exporters in export of coir mats (which is the major coir export product) were discussed with

a view to removing the same by the concerned Departments and Representatives of DGFT.

The Meeting was attended by Representatives of Department of Revenue (Central Board of Excise & Customs), Department of Financial Services, Directorate General of Foreign Trade, Chairman, Coir Board and Representatives of Federation of Indian Coir Exporters Association (FICEA) alongwith the Senior Officers of the Ministry of MSME. The Representatives of FICEA expressed satisfaction over the outcome of the Meeting.

Development of Cottage Industry

The Ministry of Micro, Small and Medium Enterprises (MSME) during 2008-09 and 2009-10 has approved the following six new schemes for development and promotion of the khadi and village industries sector through the Khadi and Village Industries Commission (KVIC) for implementation:-

- (i) "Prime Minister's Employment Generation Programme (PMEGP)" for creation of additional employment opportunities through establishment of micro enterprises.
 - The Scheme is being implemented through the KVIC as the single nodal agency at the national level. At the State/Union Territories level, the scheme is implemented through field offices of KVIC, State/Union Territory Khadi and Village Industries Boards (KVIBs) and District Industries Centres (DICs) with the involvement of Banks. Under this Programme, entrepreneurs can establish village industries, by availing margin money assistance from the KVIC/KVIBs of States & Union Territories/ DICs and loans from implementing public sector scheduled commercial Banks, selected regional rural Banks and co-operative Banks, etc., for projects with a maximum cost of Rs. 10 lakh each in the service/business sector and up to Rs.25 lakh each in the manufacturing sector.
- (ii) Scheme for "Enhancing Productivity and Competitiveness of Khadi Industry and Artisans" with the objective, inter alia, to make khadi industry more competitive with more market-driven, profitable production and sustained employment for khadi artisans and related service providers by replacement of obsolete and old machinery and equipment and repairs to/renovation of existing/operational machinery and equipment, extend an evenly balanced and need-based support in all areas of Khadi activities viz.

- production, distribution, promotion and capacity building.
- (iii) Workshed Scheme for Khadi Artisans to provide financial assistance exclusively to khadi spinners and weavers belonging to below poverty line (BPL) category for construction of worksheds.
- (iv) Scheme for Strengthening of Infrastructure of Existing weak Khadi Institutions and Assistance for Marketing Infrastructure' to assist identified weak khadi institutions so as to enable those institutions regain their status and revive their potential for reemployment, and improving marketing of khadi products through development of marketing infrastructure, including renovation of selected sales outlets of khadi institutions, on a limited basis.
- (v) Market Development Assistance (MDA) Scheme on production of khadi for implementation with effect from 01.04.2010 by KVIC during 2010-11 and 2011-12, which envisages financial assistance @ 20% of production value on khadi and polyvastra which will be shared among artisans, producing institutions and selling institutions in the ratio 25:30:45. Under the new system of MDA, sales are expected to be evenly spread throughout the year, the institutions will have the flexibility to use the assistance in improving the outlets, products, giving incentive to customers, etc.
- (vi) Khadi Reforms and Development Programme funded by the Asian DeveloBank with provision for setting up of a marketing organization through private participation, including market development like market survey, design inputs, brand building, khadi mark, promotion, etc., opening of 20 new sales outlets in metropolitan cities and State Capitals and renovation and modernization of around 1200 sales outlets.

The details of targets set by KVIC for these six schemes for year 2010-11, are :-

Name of the Scheme	Budget Allocation	Target
PMEGP	Rs.906 crore	Generation of additional employment opportunities for 5.97 lakh persons
Workshed Scheme for Khadi Artisans	Rs.20 crore	8000 artisans would be covered during 2010-11.
Scheme for Enhancing Productivity and Competitiveness of Khadi Industry and Artisans.	Rs.21 crore	60 projects are proposed for 2010-11.
Scheme for Strengthening of Infrastructure of Existing weak Khadi Institutions and Assistance for Marketing Infrastructure	Rs.5 crore	Assisting around 30 identified weak khadi institutions and development of marketing infrastructure, including renovation of 10 selected sales outlets.
MDA Scheme on Production of and Polyvastra	Rs.159 crore	All the eligible institutions engaged in Khadi production and marketing of khadi are proposed to extended MDA assistance.
Khadi Reforms and Development Programme	Rs.192 crore	50 selected khadi institutions are proposed to be extended assistance so as to become self reliant.

This information was given by the Minister of State (I/C) for Micro, Small and Medium Enterprises, Shri Dinsha Patel in a written reply to a question in the Rajya Sabha on 6 August, 2010.

Contribution of Small Industries

Based on the data received from Export Promotion Councils (EPCs) the share of Micro and Small Enterprises(MSEs) (including small industries) in the total exports of the country during 2007-08 (latest available) was 30.80 %.

As per the 'Quick Results: Fourth All India Census of Micro, Small & Medium Enterprises 2006-2007', a total of 594.61 lakh persons were employed during 2006-07 in the MSME Sector (latest available) and the total production from the MSME Sector(Registered) for 2006-07 was Rs 7.1 lakh crores.

The Central Government implements several schemes/programmes for promotion and development of MSMEs with focus on enterprise development, skill development, marketing

assistance, technology upgradation, capacity building and infrastructure development through cluster approach, timely availability of credit etc,. The Government has enacted the Micro, Small and Medium Enterprises Development Act, 2006, which has come into force from 2nd October, 2006. The Government also announced in February 2007, a 'Package for Promotion of Micro and Small Enterprises' with an objective to provide support in areas of credit, technology upgradation, marketing, infrastructure etc,.

This information was given by the Minister of State (Independent Charge) for Micro, Small and Medium Enterprises, Shri Dinsha Patel in a written reply to a question in the Lok Sabha on 27 July, 2010.

National Workshop on Prime Minister's Employment Generation Programme

A National Workshop on Prime Minister's Employment Generation Programme (PMEGP) was held in New Delhi on 4 August, 2010 to review the critical areas of the flagship scheme of KVIC and improve its implementation.

Speaking on the occasion, Shri Dinsha J. Patel, Minister of State (Independent Charge) for Micro, Small and Medium Enterprises said that Mahatma Gandhi, the Father of the Nation once said that "Village economics is different from industrial economics". Over the last 5 decades, the Khadi and Village Industries Commission (KVIC) has been striving for the noble cause at the grass root level by providing sustainable employment opportunities to millions of traditional artisans, entrepreneurs, unemployed youth etc. in the rural areas of the country.

He further added that he was happy to know that employment opportunities have been provided to about 108.50 lakh persons for the on-going schemes of Khadi and Village Industries including the recently launched Prime Minister's Employment Generation Programme (PMEGP) upto 31.3.2010.

Realizing the need for a comprehensive integrated scheme for employment generation, which could cater to the needs of unemployed, both in rural and urban areas, The scheme has been specifically tailored to meet the needs of unemployed youth both men and women, with special focus on weaker sections of the society viz. SC, ST, OBC, Minority, Women, Ex-servicemen, Physically handicapped and people from North East Region & Hilly region of the country, who have to contribute only 5% of the project cost as own contribution, with 25% subsidy in urban areas and 35% subsidy in rural areas. The general category beneficiaries have to bring in 10% of the project cost as own contribution and will be eligible for 15% subsidy in urban areas and 25% subsidy in rural areas. Projects upto Rs. 25.00 lakhs could be set up under 'manufacturing sector' and upto Rs. 10.00 lakhs under 'service sector'.

Shri Patel said that he was content to note that the scheme has been well received by banks. During the last two years about one lakh projects have been sanctioned by creating employment opportunities to about 10 lakh persons in the country.

The Minister further said that scheme would provide continuous and sustainable employment opportunities in the country, through this powerful tool for industrialization. During the year 2009-10, against the Margin Money target of Rs. 559.70 crore, the utilization of M.M. is Rs. 742.76 crore, which is 133% achievement over the said target. Through the continuous persuasion at various levels by the Ministry of MSME, Reserve Bank of India has issued 'Notification' for collateral free loans upto Rs. 10.00 lakh, which was earlier upto Rs. 5.00 lakh only. Hence, any beneficiary who wants to set up PMEGP project upto Rs. 10.00 lakh, need not provide collateral security to the bank for the loan. Further, loans above Rs. 10.00 lakh are also eligible to be covered under 'Credit Guarantee Scheme', which provides insurance for the loans to the bank and encourages the banker to provide loan without any risk and hesitation. The Minister appealed to all the bankers to implement this 'Credit Guarantee Scheme' with letter and spirit by giving wide publicity for the benefit of the beneficiaries under the scheme.

The Minister was pleased to inform all present, that the target fixed for the current year i.e. 2010-11 is 59,714 projects with Margin Money assistance of Rs. 836.00 crore to create employment opportunities to 5.97 lakh persons.

The Secretary (MSME), Shri Dinesh Rai prasing the PMEGP Scheme also said that it is a very efficient tool for creating a strong entrepreneurial base in the country. During the last two years, Khadi and Village Industries Commission (KVIC) along with other implementing agencies of the programme i.e. State Khadi and Village Industries Boards (KVIBs) and

District Industries Centres (DICs) has been able to provide assistance for setting up about 65000 micro enterprises. Thereby providing employment opportunities to around 6.5 lakh persons in the country. Enhanced disbursal of Credit during 2009-10 as compared to the previous year is indicative of growing popularity and involvement of agencies and banks in the programme.

Dwelling on the E-Tracking system he said that it is a useful tool as the applicant would be in a position to know the status of his application and the authority reviewing the scheme should be in a position to know state-wise, category-wise as well as bank-wise details of applications sanctioned, disbursed and actually set-up units. Shri Dinesh Rai emphasized on the need for physical verification of the actual establishment and working status of each of the units set up under PMEGP which should cover certain minimum items of information such as address and photograph of the entrepreneur, items manufactured, financing bank, amount of finance, social category, amount of subsidy availed, etc., The basic purpose he said, "is to ascertain the pace of

actual setting up of units and transparency in selection of beneficiaries".

A MoU was also signed on the occasion between KVIC and Union Bank of India followed by the release of EDP booklet on PMEGP–Empowering the First Generation Entrepreneurs and the launch of PMEGP E-tracking system software.

Shri J. S. Mishra, CEO, KVIC said that Indian economy is gradually moving towards the rural sector and KVIC is one of the important major players in the rural industrialization, based on production by masses. Rural Employment Generation Programme of KVIC has opened an entirely new chapter in the history of development of Village Industries under KVI Sector.

CMD's of Nationalized Banks, Industry Secretaries, Chief Executive Officers of State KVI Boards, General Managers of District Industry Centres across the country, State/Divisional Directors and Senior Officials of the Ministry of MSME participated in the Workshop.

Capital investment in MSME

The investment in fixed capital increased from Rs.91792.07 Crore in the registered Small Scale Industries as per the third All India Census of SSI (2001-02) to Rs 500758.36 Crore in Registered Micro, Small and Medium Enterprises (MSME) as per the quick results of fourth All India Census of MSME (2006-07), showing a growth rate of 40.40 per cent.

As per the existing policy, 100 per cent FDI is permitted in the MSME sector subject to sectoral caps. To ensure adequate capital for the micro, small and medium enterprises (MSMEs) the Government has announced a 'Policy Package for Stepping up Credit to Small and Medium Enterprises (SMEs)' on 10th August 2005 which envisages achievement of a minimum 20 per cent year-on-year growth in credit by public sector banks to the MSME sector. The Government has also announced in February, 2007 a 'Package for Promotion of Micro and Small Enterprises' with an objective to provide support in

areas of credit, technology upgradation, marketing, infrastructure, etc. The Prime Minister's Task Force on MSMEs has made various recommendations in the areas of credit, taxation, labour issues, infrastructure/technology/skill development, marketing, etc., for providing an impetus to the growth of the sector. Based on the recommendations of the Task Force, the Reserve Bank of India (RBI) has advised the banks to achieve a 20 per cent year-on-year growth in credit to micro and small enterprises and a 10 per cent annual growth in the number of micro enterprise accounts in order to ensure that sufficient credit is available to micro enterprises within the MSE sector.

This information was given by the Minister of State (Independent Charge) for Micro, Small and Medium Enterprises, Shri Dinsha Patel in a written reply to a question in the Lok Sabha on 3 August, 2010.

Himachal Pradesh to spread fragrance in Commonwealth Games

Shimla: Flowers from Himachal Pradesh will spread its fragrance during the Commonwealth Games in New Delhi as the state has got bulk orders to supply flowers, namelt roses, carnations and marigolds, during the event.

Central PWD, Delhi has already placed orders worth Rs.30 crore with the state for supplying flowers during the Games. Himachal is known for growing marigolds, carnations, tulips, lilies, gladioli, chrysanthemums and roses. Approximately 681 hectares of land is under flower cultivation and 2,800 farmers are involved in floriculture. In 2009-10 the state conducted business worth Rs.41.8 crore in flowers.

Many pockets in Solan, Shimla, Sirmaur, Mandi, Kullu, Bilaspur and Chamba districts have made a name for themselves in the flower business. The Churah valley in Chamba district has made its name in the cultivation of carnations of various colours. The carnation grown in this area is always in high demand in the country. Horticulture department director Gurdev Singh said most of the farmers are



cultivating exotic rose varieties as their demand would be high during the mega event.

"The farmers are also getting orders to provide flowerpots and loose flowers, mainly marigold, for decorations at various stadiums and other venues," he was quoted in the media.

Rose and marigold grown in the state are giving a tough competition to those grown in Jammu & Kashmir and Uttarakhand.

MSME Minister Inaugurates Monoblock Pump Testing Laboratory

The Minister of State of MSME (Independent Charge), Shri Dinsha Patel inaugurated the Monoblock Pump Testing Laboratory, commissioned by the Institute for Design of Electrical Measuring Instruments, Mumbai (IDEMI) in Mumbai on 8 July, 2010. On the occasion the Minister, Shri Dinsha Patel congratulated IDEMI for its initiative and said that the Monoblock Pump Testing Laboratory facility will be of great help to the MSMEs of the Maharashtra State. The Minister also distributed Certificates to the students of IDEMI who had completed the Skill Development Training in the field of IT, CAD/CAM & Industrial Automation. Congratulating the students he encouraged them to use their skill for getting better placement. The Monoblock Pump Testing Laboratory has been accredited by NABL.

Institute for Design of Electrical Measuring Instruments, Mumbai (IDEMI) is a Government Society working under the Ministry of Micro, Small & Medium Enterprises (MSME) since 1969 and providing services to various industries in the area of - Tool Design and Manufacturing; Design & Development of Electrical and Electromechanical instruments; Calibration and Testing of Electrical and Non-Electrical Instruments; Skilled Development training to the practicing professionals and students in the field of I.T., Tool Design, Instrumentation, Industrial Automation etc. Present on the occasion were Joint Development Commissioner, MSME, Shri Abhay Bakre, Governing Council Members of the IDEMI and representatives of All India Electrical Motor Manufacturing Association.

HEADING FOR HIGH-STAKE GAME

The sports goods industry adapts o changes, aiming to make India a premier production centre

drawing to a close, it's heartening to note that major tournaments across the cobe have an India connection, chanks to India's long tradition as a supplier of sports goods and ac-cessories. The sports goods in-ustry, more than 100 years old, is mong the largest producers of footballs and other inflatable balls. In fact, bladder inside the Adias Jabulani ball in the ongoing orld Cup is produced by an In-

Though the sports goods inlustry produces more than 300 tems, major items of exports, bees inflatable ball, are hockey sticks and balls, cricket bats and balls, boxing equipment, fishg equipment, indoor games like carrom and chess boards and protective pipment, India's sports ods are exported to nore than 130 countries, key destinations being he UK, the US, Australia.

th Africa, Germany The industry finds its roots Sialkot, Pakistan. During par-on, many Hindu articon



According study, while a f units employ m ers per unit, s units operate workers. Broa the workford import cont creasing over from 10.21% 004-05 and 20 According t

'Indian sport tains global s compete in all However du ernment supp exemptions, eff infrastructure terial availab US, the UK, Ca are declining. I consideration have started u products like Indian sports i ily available

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But the in challenges. high-tech and friendly mate ing abroad a ernment suppromotion of iting its grow tional marke ket, the ri dian consun cedures and of internat

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Kotdwar growth centre gets a facelift

SHISHIR PRASHANT Dehradun

The growth centre for I SMEs at Siggadi in the Kotdwar area of Pauri district in Uttarakhand nas got a facelift, with the government strengthening infrastructure facilities in the centre.

"We have removed most of the obstacles that were coming in the way of the growth centre," said a government official. The growth centre has been provided new bridges, roads and water facilities.

Poor road connectivity and frequent power breakdowns have been the bane of the growth centre, which is being developed by the State Industrial and Infrastructure Development Corporation of Uttarakhand Limited (SIDCUL), a state government enterprise.

The government has also set up a 33 KW tation

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Where is the PR?

Unlike the Olympics and the FIFA World Cup, CWG is not a great product. But still, and notwithstanding the taint, it could have been sold better





like South Korea in 1988, China in 2008 and South Africa earlier this year. With the British Empire long one, many rightly question the whole point of the games, but then the question is seven years

Polit, Lleyton Hewitt, Shelly-Ann
Praser and Chris Hoy.
Every mega sporting event,
starting from the PTPA, World.
Cup in South Africa down to the
first Commonwealth Games in
Canada in 1940, has been used to
signal the host country or city's
slobal ambittons—political, cittural, economic, whatever, if
there is one for CWO Delhi 2010, it
is being held back almost as a
state secret Does anyone know
what India is showcasing at the
forthcoming games? as the
forthcoming games? as the
country's emergence as a global
economic power, its oft power as
in yoga, its unbridded tourism potential, sporting provess, a capital city that can hold its own
amongst past hosts like Melbourne, London, Ruals Lumpur,
pray just what?

Int'! It strange that as people
who develop stake even in most
senator labelling our IT loon Inforcys as 'chop shop' for taking
away local jobs, as 'chop shop' for taking
and as best indiance for exclassed
with a complete citizen bostility,
and as best indiance for media-led
witch-buntling around fugo.

Make no mistake, every mega sports event host starts with its fair share of powerful group opinion makers who are dead against such early a sport of the sport of 3. At ave are ed ot

duce citizen dissonance and build a broader ownership for their events.

There are many positives that are highlighted—from urban renewal, new sports infrastructure creation, new social spaces springing within the city—esentially highlighting future benefits, tangible and intangible, of current costs. No such effort is visible with CWO Delhi 200 even now, with just 52 days to the event in the absence of any communication from the OC, or sense of bigger ownership at the government level, is it any wonder that all one hears is about collapsing roofs, far from complete stadia, and yes, Rs 3,750 tollet-paper rolls!



scrute delays nit volunteer training prog

Training to help youth start their own ventures

HT Live Correspondent ludlivedesk@hindustantimes.com

LUDHIANA: City-based Shree Gyan Sthal Mandir Sabha has decided to get arrange special training programmes for young boys and girls, to enable them to start their own avocations and he also spoke on the occasion

The MSME-DI, Ludhians Assistant Directors B. S. Nag

ing programmes. The Sabhaas scheduled for to unavailability

and Kundan Lal informed the and Kundan Lal informed the gathering about various train-

The training, which has been divided into general (one day role specific (half day) and ve role specific (half day) session ue specific (half day) session will be imparted to 30,000 vo unteers. Of the those selected 22,000 will be actually deployed Around 4,000 are from the ger eral public comprising house eral public, comprising hous wives, retired officials, senior citizens. The others are from Delhi University, ministry tourism, NCC, NSS and the Dea hi government. Amity along with consortium partners EKS of Australia have structured the training methodologingly when

Tames cost shoots up 17.5 es from original estimate rende need appr the N Ente

Institu and a ing pr BS REPORTER

in the New Delhi, 29 July

he cost of organising the

Ahsan Ali Syed has offered £300 million for the EPL club, Blackburn Rovers



Blackburn Rovers' manager Allardyce at the club's Ewood Park stadium in Blackburn. Syed has offered him £100 million to spend on players if his £300-million offer for the club was

SPOT THE DIFFERENCE AT THE TIME OF BIDDING

- THE TIME OF	O 1 E	Perce
ESTIMATES AT THE TIME OF	nount (Rs cr)	Pur
DUMBOSA	1238.65	Sta
projected expenditure	976.07	Sp
	107.9	sta
Major repairs & Illame	154.68	C
Other incidental	1238.12	R
Means of finance	534.5	- K
e - nhr	492.37	
· ibol IIdis		
Sale of residential floor Surplus from operating the g	ames 211	
and document	A CONTRACTOR OF THE PARTY OF TH	
IOA'S REVISED ESTIMATE	S	-
IOA'S REVISED EST	11,494	-
Total organising cost	239	
Cost for conduct of game	1,70	8_
	s Sports	
Revenue from games	X OP -	

MINISTRY HAS S	PENT
THAT THE SPORTS MINISTRY HAS S Amount (Rs
urpose	2461
tadium	
	14.
	350.
sision/training voice	65.F
Ly whanna tellilla accomp	6
Kadarpur Shooting Range	6
Preparation of teams	
Conduct of the games	
	10
Overlays for venues	1
Overlays for venues Timing, scoring & games equipment	
Timing, scoring & games , Dedicated communication network	5 2
Dedicated communicate Integrated security system at venue	63
	7-1
Total Source: Ministry of Youth Affairs & Sports	
Junice	1000

Relay and organising the Commonwealth Youth Games.

The bid document had projected the cost of conducting the games as being more than covered through government grants (of Rs 535 crore) and revenue from the sale of flats (Rs 500 crore) and revenue from conducting the Games (Rs 840 crore). The fresh estimates put evenue from the games at

of organising the games was separate.

In the fresh estimates, expenses other than the cost of organising the games - add up to Rs 9,100 crore. If you deduct the Rs 182 crore, which Gill said in a separate statement was being spent by Mahanagar Telephone Nigam Ltd on creating dedicated telecom-

more than what w ed in the bid.

Gill did not provid timate of how me hi government and cies had spent on sp city ahead of the

With Gill's f gressmen Mani S yar and Kalmar Chairman of the Committee, tra. the sports minis against giving out cit number ure to be in.

वदशा तन पर समाइए देसी साडियां रीद के हेके

बेलों के दौरान विदेशी पर्यटकों के लिए साड़ी बेचने को बना सकते हैं कमाई का साधननविल्य गेम्स के लिए खे



ड़ी पूरी दुनिया में भारतीय महिलाओं की एक खास पहचान है। यहां आने वाली लगभग हर विदेशी महिला एक बार खुद में जरूर आजमाना चाहती है। ऐसे में अगर त्य खेलों के हिसाब से कारोबारी अवसरों के करें तो उस एक पखवाड़े के दौरान आने मेहमानों को साड़ियां बिक्री करने का वसर होगा। इसके अलावा कॉमनवेल्थ के तीय या राष्ट्रमंडल की थीम पर आधारित देसी-विदेशी, दोनों तरह के पर्यटकों के लोकप्रिय रहेंगे।

चांदनी चौक बाजार में साड़ियों के काफी । हैं। जो लोग राष्ट्रमंडल खेलों के दौरान । पारंपरिक और भारतीय पहचान से जुड़े कारोबार शुरू करना चाहते हैं, वे चांदनी बड़ी विक्रेताओं से संपर्क कर सकते हैं। ड़यों की खरीद करने से उन्हें यह वाजिब व्य हो जाएगा। इसके अलावा कुछ फैशन खास कॉमनवेल्थ के लिए अपने नया करने की तैयारी में हैं। अगर आप

कम ऑन दल्श

कम लागत से अच्छा मुनाफा कमाया जा सकता है। इस बारे में चांदनी चौक के आदर्श साड़ी भंडार के मालिक अशोक गर्ग ने बताया, 'पर्यटकों के बीच नेट, शिमर, शिफॉन की साड़ियां काफी लोकप्रिय हैं जो पर्यटकों को काफी पसंद आएंगी। राष्ट्रमंडल के दौरान हमारे यहां वो सभी फैब्रिक उपलब्ध होंगे, जो पर्यटकों को काफी पसंद आते हैं। हमारे यहां की साड़ियों की

कीमत 500 रुपए से शुरू होती है और 5,000 रुपए तक जाती है। फुटकर विक्रता इसमें दोगुना मुनाफा कमा सकते हैं।' गर्ग ने बताया कि वे यूरोप और अमेरिका के कई रीटेलरों को साड़ियां निर्यात करते हैं। ऐसे में राष्ट्रमंडल खेलों के दौरान उनके यहां निर्यात की वेराइटी वाली साड़ियां भी उपलब्ध रहेंगी। गर्ग के मुताबिक जो पुटकर विक्रेता उनके यहां से साड़ियां खरीदना चाहते हैं वो 15 दिन पहले अपना आर्ट ने क्या क्ष

पास आएंगे। इस बारे में इंस्टैंट कैब्स के मालिक रोहित गुप्ता ने कहा, 'पर्यटकों को हम राजधानी की ऐसी जानीमानी दुकानों की जानकारी देते हैं, जिनका हमसे कारोबारी समझौता है। इसके लिए कारोबारी हमें विक्री का 5 फीसदी तक कमीशन के रूप में चुकाते हैं।

होटल पार्कलैंड के प्रबंधक पारितोष शाह वे मुताबिक, 'हमारा राजधानी के कई कारोबारियों के साथ पहले से टाई-अप है। कॉमनवेल्थ के लिहाज से जो कारोबारी हमसे समझौता करना चाहते हैं वे सितंबर से पहले हमें अपना प्रस्ताव दे सकते हैं। अगर हमें उनका प्रस्ताव पसंद आया तो खेलों के दौरान उनसे संपर्क किया जाएगा।

फैशन डिजाइनर अशीष सोनी के मुताबिक कॉमनवेल्थ के दौरान वे भी अपना खास कलेक्शन उतारने की तैयारी में है। उन्होंने कहा, 'हमारे कॉमनवेल्थ कलेक्शन में भारतीय और पश्चिमी परिधानों का समावेश होगा। इसमें शॉर्ट शेरवानी, नैरो जैकट जैसे उत्पाद शामिल होंगे। ये उत्पाद उच्च वर्ग को ध्यान में रखते हुए उतारे जाएंगे। यही वजह है कि इनकी कीमत 30,000 रुपए और इससे ऊपर ही रहेगी। ऐसे में जो कारोबारी इस कलेक्शन के उत्पादों को खरीदना चाहते

अक्टूबर में होने वाले राष्ट्रमंडल खेलों में काफी विदेशी पर्यटकों के आने की संभावना है जिनमें साई स गुड्स एक्सपोर्ट प्रोमोश या पारंपरिक भारतीय परिधान का बहुत क्रेज होता है। ऐसे में खेलों के दौरान पर्यटकों के लिए साड़ी बेचने के मौके पर दिल्ली के दौरान पुरस्कार लेने आए साड़ी बेचने के मौके पर दिल्ली के के दारान पुरस्कार कि जर्म उद्यमी कारोबारी योजना बना सकते हैं।थोक बाजार से साड़ी उठाकर पर्यटकों को बेचना

विदेशी मेहमानों के लिए खाड़ी



राष्ट्रमंडल खेलों के लिए कारोबारी अवसरों के दौरान आने वाले

मेहमानों को साड़ियां बिक्री करने का बेहतरीन अवसर होगा

अच्छा कारोबारी अवसर

मुनाफे का सौदा है



जो लोग राष्ट्रमंडल खेलों के दौरान साड़ी जैसे पारंपरिक और भारतीय पहचान से जुड़े परिधानों

का कारोबार शुरू करना चाहते हैं, वे चांदनी चौक के थोक साड़ी विक्रेताओं से संपर्क कर सकते हैं

होटल-टेक्सी एजेंकियों ने

ोद की ठेकेदारी में कार हुई है। पर्दे के पीछे पैसे व का ही नतीजा है कि को तवज्जो देने की बात तो ५

न की ओर से बुधवार लि टूर्नामेंट में हमारे यहां वे ग्रामान जाते हैं। कोरिया में हुए म्पक में भारतीय खेल सामान पयोग किया गया। दुनिया सामान निर्यात होने से ही है कि हमारे सामान की गु या भर में बेहतर है। इसके क ली में ही होने वाले कॉमन स में भारतीय खेल सामान हिसाब से एक पखवाड़े के नार कर दिया गया। टेबल स्सेसरीज बनाने वाली मेरठ की ट्रग इंटरनेशनल के सीईओ गेहली ने बताया कि हमने कॉ ाम्स ऑर्गनाइजिंग कमेटी के पुरेश कलमाडी और प्रधानमं मनमोहन सिंह को पत्र भी जिसमें इंडियन ब्रांड के इस्तेमा का विनय किया गया था पर मदद नहीं मिली। काउंसिल

खेल का आयाजन करना

कॉमनवेल्थ खेल भले ही विवाद और अनिश्चय में से हों पर एशियाई खेल का काम पूरा हो गया है।

> 😈 क तरफ भारत में कॉमनवेल्थ खेल को लेकर नित नए घोयलों का पर्दाफाश हो रहा है तो चीन ओलंपिक खेलों की सफलता के बाद एक और शानदार इबारत लिखने को तैयार है। उसके पास न केवल ओलंपिक का अच्छा अनुभव है बल्कि दुनिया के सामने अपनी अलग छवि पेश करने की प्रतिबद्धता भी है। इसके लिए वह कोई कसर भी नहीं छोड़ रहा, ताजा उदाहरण अगस्त के पहले सप्ताह में शुरू हुई एशियाई खेलों के सौ दिन की उलटी गिनती है। वह नवंबर में होने वाले खेलों के लिए सभी तैयारियां पूरी कर चुका है। दावा यह भी है कि उद्घाटन समारोह अब तक हुए सभी एशियन गेम्स से अलग व अद्भुत होगा, जिसकी किसी ने कल्पना तक नहीं की होगी।

एक करोड़ की आबादी वाले दक्षिण चीन के क्वांगचो महानगर का नक्शा बदल चुका है, भले ही दिल्ली के लिए यमुना नदी को साफ कर पाना दूर की कौड़ी हो मगर क्वांगचो सरकार ने चू-च्यांग नदी की

2 लाख 68 हजार सीसीटीवी कैमरे अभी से पहरे में लग गए हैं। सुरक्षाकर्मी आए-दिन मॉक ड्रिल करते हुए मजर आ रहे हैं। चीन एक बार फिर दुनिया को बताना चाहता है कि वह भविष्य में और भी बड़े खेल

आयोजनों की मेजबानी का दम रखता है। 2026 के फुटबाल विश्वकप के लिए दावेदारी की कोशिश में वह जुट गया है। चाहे वर्तमान में चीनी फुटबाल टीम गर्त में हो मगर पूंजीवाद की ओर तेजी से कदम बढ़ा रहे ड्रैगन की नजर बाजार व भविष्य पर है। हाल में दक्षिण अफ्रीका में हुए विश्व कप में भी इसका जायजा लेने अपना एक दल भेजा था।

एशियन गेम्स में किसी भी तरह की गड़बड़ी पर बारीक नजर रखने के लिए एक विशेष समिति बनाई गई है, जिसमें सुपरवाइजरी व आडिट अधिकारियों के साथ-साथ निर्माण क्षेत्र से जुड़े विशेषज्ञ शामिल हैं। अगर कोई भी आयोजक व कंपनी से जुड़े आला अफसर इसमें लिप्त पाया जाता है तो उसे कड़ा दंड दिया जाएगा। इसके मुकाबले कॉमनवेल्थ खेल की तैयारियों के लिए जो हो रहा है, उसे हम देख ही रहे

की फजीहत हो रही है, जबकि चीन में ऐसा कुछ भी सामने नहीं आया है।

चीन ने जिस तरह से ओलंपिक खेलों का आयोजन किया था, उसके मुकाबले तो एशियाई खेल

तो शायद छोटी ही चीज हैं। दुनिया के सबसे बड़े खेल समारोह को लेकर चीन की गंभीरता व तैयारी देखने लायक थी, सात साल पहले से ही तैयारियां शुरू हो गयी थी। देश में आए जबरदस्त भूकंप व आर्थिक मंदी के बावजूद काम में कोई दील नहीं बरती गयी। राष्ट्रपति हू चिन थाओ ने स्पष्ट निर्देश दिए थे कि खेलों की

के लिए हरसंभव प्रयास किए जाएं। इसका असर 2004 में ही दिखाई देने लगा, जब तमाम निर्माण कार्य होने लगे, इसमें मेट्रो ट्रेन के विस्तार के साथ-साथ पुराने भवनों के स्थान पर बहुमंजिली डमारतों व स्टेडियमों का निर्माण शामिल था। मीडिया रिपोर्टी से भी जाहिर होता है कि ओलंपिक की सभी तैयारियों में चीन निर्धारित समय सीमा से पहले चल रहा था। उसने एथेंस व पहले के ओलंपिकों की खामियों का पूरी तरह अध्ययन कर सबक लिया,

आलोचना के बीच यह जानना जरूरी है कि बीजिंग में 37 खेल व 45 ट्रेनिंग वैन्यू तो 2007 में ही तैयार हो गए थे. सिर्फ राष्ट्रीय स्टेडियम 2008 में बना यानी सभी चीजें निर्घारित समय व मापदंडों के मुताबिक रहीं, प्रायोजकों का साथ भी चीन को काफी पहले मिल गया था, इसके अलावा सुरक्षा समेत अन्य मामलों भी बीजिंग का कोई जवाब नहीं था। चीन इस तरह की बड़ी प्रतियोगिताओं को देश की प्रतिष्ठ के साथ जोड़कर देखता है। आयोजन समिति, सस्कार व अन्त संस्थाओं के बीच बेहतरीन तालमेल रहता है।

सच तो यह है कि चीन ने जिस तरह से ओलंपिक खेलों का आयोजन किया, भारत को उसी से सबक ले लेना चाहिए था। ओलंपिक के बाद बीजिंग तस्वीर वाकई बदल गई है, एयरपोर्ट से लेकर सड़के व अन्य आधारभूत सुविधाएं बेहतरीन हो गई हैं। पर दिल्ली के लिए सवाल यह है कि करोड़ों रुपए खच होने के बाद इसका लाभ आम आदमी को मिलेगा या फिर सरकारी खजाने में कमी के बहाने महंगाई व बोझ पड़ेगा। देखना यह भी है कि भारत किस तरः घोटालों के दाग घोकर एशियन गेम्स के सामने टिक

नेल आजाद पाण्ड





शिक्षित बेरोजगारों को सम्बोधित करते प्रधान जगदीश बजाज व संस्थान के अधिकारी।

एम.एस.एम.ई. ने दी युवाओ को स्वरोजगार की प्रेरणा

लुधियाना, 20 जुलाई (रिंकू): भारत सरकार की एम.एस.एम.ई. विकास संस्थान द्वारा ज्ञान स्थल मंदिर सुभानी बिल्डिंग में शिक्षित बेरोजगार लडके-लड़िकयों के लिए औद्योगिक अभिप्रेरणा अभियान का आयोजन किया गया। कार्यक्रम का मुख्य उद्देश्य शिक्षित लड़के-लड़िकयों को स्वरोजगार अपनाने के लिए प्रेरित करना था।

संस्थान के सहायक निदेशक एस.एस. बेदी संस्थान द्वारा स्वरोजगार स्थापित करने में दी जाने वाली हरसंभव सहायता का आश्वासन दिया। बेदी ने कहा कि बेरोजगारी की समस्या को

सकता है। कार्यक्रम में जिला उद्यो केन्द्र के अधिकारी एस.एस. रेखी पंजाब एंड सिंध बैंक के मैनेजर के एर ग्रेवाल ने भी अपने विभागों द्व स्वरोजगार स्थापित करने हेत् दी ज वाली सुविधाओं बारे जानकारी दी।मी सभा के प्रधान जगदीश बजाज ने संस्थ के निदेशक से बेरोजगार लडवे लड़कियों के लिए प्रशिक्षण कैम्प लग का आग्रह किया। इस अवसर पर मी सभा के रमेश गुम्बर, अनिल नैयर, श लाल कपूर, दीनानाथ बजाज, अमरज सोन्, नरेश गोयल, राज् वोहरा, विव

विदेशो मेहमानों को लुभाएंगे खादी और तिहाड़ के उत्पाद

🎒 भरत पांडेय

नई दिल्ली। खादी जंग-ए-आजादी की पोशाक है और यह कॉमनवेल्थ गेम्स में आनेवाले विदेशी मेहमानों को अपनी ओर लुभाएगी। इस दौरान गांधी और जवाहर टोपी को भी बखूबी पेश किया जाएगा। दरअसल कॉमनवेल्थ गेम्स को ध्यान में रख दिल्ली सरकार के खादी ग्रामोद्योग बोर्ड और तिहाड़ जेल की ओर से खादी के वस्त्र और कई डिजाइनर कपड़ों का आउटलेट खेलगांव में खोला जाना है।

दिल्ली खादी ग्रामोद्योग बोर्ड और तिहाड़ जेल प्रशासन के बीच हए



गेम्स को लेकर खेल गांव में खोले जाएंगे आउटलेट

आजादी की पोशाक खादी बनेगी आकर्षण का केंद्र

सिखाने के बाद जल्द

नरपाई करने के लिए इनकी

आयोजन समिति का १३ देशों के साथ अन्तर्राष्ट्रीय ब्राडकारिंटग सम

की कि तीन से 14 अक्तूबर तक होने तीन करोड़ 42 लाख 24 हजार डालर वाले इन खेलों के लिए उसने छह वसूल कर चुकी है। अमरीका, कनाडा महाद्वीपों में 13 देशों के साथ और तंजानिया पहली बार राष्ट्रमंडल अन्तर्राष्ट्रीय ब्राडकास्टिंग समझौता खेलों के प्रसारण के लिए भुगतान कर किया है। प्रसार भारती इन खेलों के रहे हैं। आयोजन समिति ने आस्ट्रेलिया, लिए मेजबान ब्राडकास्टिंग मेजबान न्यूजीलैंड और दक्षिण अफ्रीका के ब्राडकास्टिंग पार्टनर है। आयोजन ब्राडकास्टरों के साथ 36 लाख डालर भिमिति ने यह जानकारी देते हुए बताया का वेल्यू इन काइंडवीआर के समझौता कि अन्तर्राष्ट्रीय ब्राडकास्टिंग समझौते किया है। वीआईके में उपलब्ध तक पहुं चेगी। 13 अन्तर्राष्ट्रीय उद्घाटन तथा समापन समारोहों को

ने पिछले सभी रिकार्ड तोड़ दिए हैं। एयरटाइम को भारतीय रेलवे और इन खेलों को आस्ट्रेलिया, न्यूजीलैंड, पर्यटन मंत्रालय के साथ बांटा जाएगा अफ्रीका, एशिया कनाडा, यूरोप, तांकि भारत में और राष्ट्रमंडल खेल कैरेबियाई द्वीप समृह और अमरीका दिल्ली में पर्यटन को बढ़ोवा दिया जा में देखा जाएगा। इसके अतिरिक्त सके । राष्ट्रमंडल खेलों के इतिहास में रोजाना की न्यूज कवरेज 160 देशों पहली बार सभी 17 खेलों और न डिटिल फोमेंट,

नई दिल्ली, (न.प्र.): राष्ट्रमंडल चार करोड़ 63 लाख 42 हजार 601 एचडीटीवी में कवर किया जाएगा। खेलों की आयोजन समिति ने घोषणा डालर है जिनमें से आयोजन समिति राष्ट्रीय ब्राडकास्ट अधिकार धारक दुरदर्शन उद्घाटन एवं समापन समारोह । हुए समझौते के तहत शोरूम से के अलावा सभी खेल स्पर्धाओं का 24 ड़ के उत्पादों की बिक्री की घंटे प्रसारण करेगा। दूरदर्शन अपने गी। तिहाड़ जेल के प्रवक्ता सभी 16 क्षेत्रीय चैनलों पर उद्घाटन न गुप्ता के मुताबिक तिहाड़ के एवं समापन समारोह के अलावा बड़ी हैं की कॉमनवेल्थ गेम्स के मौके खेल स्पर्धाओं को दिखाएग। आयोजन म रहेगी। समिति ने जिन 133 देशों के साथ कि होगी ट्रेनिंग : तिहाड़ अन्तर्राष्ट्रीय प्रसारण समझौता किया है में लगभग सी नव नियुक्त उनमें आस्ट्रेलिया, न्यूजीलैंड ब्रिटेन, और मेटरन को श्री श्री दक्षिण अफ्रीका और अफ्रीका, र जी की संस्था आर्ट ऑफ एशिया, नाइजीरिया, कनाडा, साइप्रस, की ओर से व्यक्तित्व विकास नामीबिया, सेशेल्स, के रेबियाई, अमरीका और तंजानिया शामिल हैं। टेयाला में ट्रेनिंग के लिए प्रसार भारती ने प्रोडक्शन और कवरेज एगा। वहां ट्रेनिंग करने के सेवाओं के लिए ब्रिटेन की सैटेलाइट हाड़ जेल में अपना योगदान इनफार्मेशन सर्विसिस (एसआईएस) ड जेल में कर्मचारियों की लाइव को नियुक्त किया है।



खेल कारोबार के खिलाई मेरठ, लुधियाना, जालंधर से हरीश आनन्द और हरेन्द्र प्रताप

मनवेल्थ गेम्स के बहाने स्पोर्ट्स गुड्स कारोबार का जायजा लेने दिल्ली से हम सबसे पहले मेरठ (उत्तर प्रदेश) पहुंचे। मेरठ में हमारे मुख्य मेजबान थे-पुराने पी.पी.डी.सी. और नये एम. एस.एम.ई.-टी.डी.सी. के निदेशक सी.पी. बंसल। सबसे पहले पी.पी.डी.सी. कार्यालय में हमने मेरठ की अपनी एकदिवसीय औद्योगिक यात्रा की रूपरेखा तैयार की और प्रतापपुर स्थित औद्योगिक इकाई सैंसपेरिल्स ग्रीनलैंड्स यानि एस.जी. प्राइवेट लिमिटेड की ओर रूख किया।

एस.जी. के निदेशक त्रिलोक एन. आनंद ने गर्मजोशी से हमारा स्वागत किया तथा बडी आत्मीयता से अपनी औद्योगिक इकाई में चल रही सम्पूर्ण उत्पादन प्रक्रिया का बारीक अवलोकन कराया। क्रिकेट के बल्ले. गेंद, पैड, दस्ताने से लेकर सभी खेल सामग्री की निर्माण प्रक्रिया का हमने आनंद लिया। हस्तकला से लेकर मशीनकला तक सैकड़ों कारीगरों के श्रम-सुर आपस में मिलकर भारतीय तकनीक का एक ऐसा सरगम तैयार कर रहे थे जो विश्व स्तरीय तान बनकर सुदूर-सुदीर्घ तक गूंज रहा था। हम अचंभित-प्रफुल्लित थे। दिल्ली से बाहर निकलकर मेरठ पहुंचकर एस.जी. को देख कर हमें लगा कि भारत विकसित हो रहा है-खेल सामग्री के उत्पादन के क्षेत्र में!

हालांकि क्रिकेट का खेल कॉमनवेल्थ यानि राष्ट्रमंडल खेलों का हिस्सा बनते-बनते रह गया। हां, बीसवें राष्ट्रमंडल खेलों में यह शामिल हो जाएगा, ऐसी उम्मीद है। साथ ही, कॉमनवेल्थ गेम्स के बाद भारत अगले साल विश्व कप

क्रिकेट की मेजबानी करने जा रहा है। इसलिए क्रिकेट-उद्योग से हमारा साक्षात्कार होना उतना ही महत्वपूर्ण है, जितना अन्य खेलों से।

लम्बी-चौड़ी क्रिकेट फैक्ट्री का मुआयना करते-करते हम थक गये। इसके बाद फैक्ट्री के मुख्य अभिभावक त्रिलोक एन आनंद से बातचीत का दौर शुरू हुआ। उन्होंने अपनी

> सफलता की गाथा पर प्रकाश डाला। फिर, महान क्रिकेटर सुनील गावस्कर के एस जी. से जुड़े रोचक प्रसंग, क्रिकेट की औद्योगिक उत्पादन तकनीक में पारंपरिक हस्तकला और अत्याधृनिक मशीनकला के बेजोड सम्मिश्रण, क्षेत्र में बड़े पैमाने मेरठ में स्पोर्ट्स गुड्स पर रोजगार के 🖊 🛮 अवसर, संगठित

> > और असंगठित 🥒 क्षेत्र, कम्पनी द्वारा तैयार अनेक नवउद्यमी, नई पीढ़ी के उद्यमी, खेल कारोबार

में रोजगार-अवसर तथा कॉमनवेल्थ गेम्स का भारतीय खेल कारोबार पर प्रभाव जैसे मुदुदों पर बड़ी बेबाकी से उन्होंने अपनी राय जाहिर की।

कॉमनवेल्थ गेम्स के अक्टूबर, 2010 में भारत में आयोजन पर उन्होंने कहा-"इसका फायदा हर क्षेत्र को मिलेगा। देश की इमेज बनेगी। भारतीय स्पोर्ट्स गुड्स सेक्टर को अपनी कमजोरी का भी पता चलेगा।

हां, इतना जरूर होना चाहिए था कि इन खेलों के लिए कितना माल देश से लेना है. कितना विदेश से, यह निर्धारित कर लेना चाहिए था।"



एस.जी. से विदा होकर हम ए.टी.ई. पहुंचे। मेरठ की एक और दिलचस्प दुनिया! ए. टी.ई. यानि आनंद ट्रैक एंड फील्ड इक्विपमेंट प्राइवेट लिमिटेड के मोहकमपुर इंडस्ट्रियल एरिया (फेज-II) स्थित कार्यालय और दिल्ली रोड पर उद्योगपुरम् स्थित कार्यशाला में ट्रैक एंड फील्ड की दुनिया में हम खो गए! कम्पनी के प्रबंध निदेशक आदर्श के. आनंद ने एशियाड-82, बीसवीं सदी के महान एथलीट कार्ल लुइस तथा

गीता जुत्शी से लेकर पी.टी. उषा तक की यादें ताज़ा कर दीं। वे कॉमनवेल्थ गेम्स की तैयारी में मग्न थे। इसके बावजूद उन्होंने मिलिट्री वर्ल्ड गेम्स, एशियन जूनियर एथलेटिक्स, नेशनल गेम्स में अपनी कम्पनी की सफलताओं तथा कॉमनवेल्थ गेम्स की

तैयारी पर प्रकाश डाला। उन्हें इस बात पर फख़ है कि ए.टी.ई. के विभिन्न उत्पादों से कई रिकॉर्ड टूटे हैं और कई बने हैं। उन्होंने पोल वॉल्ट लैंडिंग एरिया, हाई जम्प लैंडिंग एरिया, पोल वॉल्ट स्टैंडड्र्स, हाई जम्प स्टैंडर्ड्स, क्रॉस बार्स, सर्किल एंड टो बोर्ड्स, डिस्कस, हैमर्स, शॉट पुट, नॉर्डिक जेवलिन, जेवलिन, हर्डल्स, नॉर्डिक पोल वॉल्ट्स, स्टार्टिंग ब्लॉक, स्टैंड एंड कार्ट्स,





शृज, केजेज, मेडिसिन बॉल्स, रिले बेटंस एंड मार्कर, बास्केट बॉल बोर्ड एंड रिंग्स, वेटलिफ्टिंग एंड पावरलिफ्टिंग सामग्री, उएस्का वेटलिफ्टिंग, एजिलिटी इक्विपमें ट्स, सीट स्टिक, जिम्नास्टिक इक्विपर्में ट. फिटनेस इक्विपमेंट, टेंशन ग्रिप, स्किपिंग रोप्स, व्हिस्ल एंड माऊथगार्ड, टेबल टेनिस के टेबल और विभिन्न नॉर्डिक इक्विपमेंट्स जैसे विभिन्न खेल उत्पादों में मेरठ के ए.टी.ई. के विश्व स्तरीय तथा राष्ट्र

स्तरीय योगदान की चर्चा की। उन्होंने आई.ए.ए.एफ. सर्टिफिकेशन सिस्टम की अहमियत को बताया तथा अपनी कम्पनी की ओर से प्रकाशित खेल सामग्री के प्रकाशन दिखाये।

उनके सुपुत्र तथा कम्पनी के प्रमुख संचालक हिमांशु आनंद

ने हमें उद्योगपुरम् स्थित फैक्ट्री में बन रहे विभिन्न उत्पादों का अवलोकन कराया। हिमांशु ने बताया कि ए.टी.ई. के उत्पाद सन् 2008 के ओलिम्पिक गेम्स, सन् 2009 की विश्व एथलेटिक चैम्पियनशिप, सन् 2009 के ही वर्ल्ड यूथ गेम्स जैसे प्रमुख खेल आयोजनों में नाम कमा चुके हैं।

संक्षिप्त बातचीत में कम्पनी के प्रबंध निदेशक आदर्श के. आनंद ने खेल



सामग्री निर्यात में अपनी कम्पनी के योगदान का जिक्र करते समय यह इशारा भी किया कि भारत में सरकारी कागृज़ी औपचारिकताओं में अनेक अड़चनों का सामना करना खेल कारोबार का सबसे कठिन पहलू है। उन्होंने निविदा और ऑर्डर संबंधी सरकारी प्रक्रिया की ओर

सिरकारा प्राक्रिया का आर विशेष रूप से संकेत किया। वैसे, कॉमनवेल्थ गेम्स के भारत में आयोजन से वे प्रफुल्लित दिखे। उन्होंने माना कि भारतीय खेल बाज़ार को कॉमनवेल्थ गेम्स के भारत में आयोजन का जितना लाभ मिलना चाहिए था, वह कमजोर नीतियों की वजह से नहीं मिल पा रहा है।

ए.टी.ई. के बाद हम जिला उद्योग केंद्र पहुंचे। लेकिन वहां कॉमनवेल्थ गेम्स का उत्साह नहीं दिखा। मेरठ का स्पोर्ट्स कॉम्प्लेक्स उत्साहित था। थोक व खुदरा खेल कारोबारी आशान्वित हैं। ऑल इंडिया स्पोर्ट्स गुड्स मैन्यूफैक्चरर्स फेडरेशन के महासचिव सुनील शर्मा ने हमें कारोबार की दिक्कतों के बारे में बताया। उन्होंने मुख्य रूप से जम्मू और कश्मीर से कच्चे माल की आपूर्ति में हो रही कठिनाई का जिक्र किया।

बहरहाल, दिनांक 8 जुलाई, 2010 को मेरठ में सुबह साढ़े नौ बजे आरंभ हुई हमारी एकदिवसीय यात्रा अंतिम चरण में पहुंच चुकी थी। अंत में ईशा इंटरनेशनल के मालिक रमेश चन्दर से हमारी मुलाकात भी महत्वपूर्ण रही। श्री चन्दर स्पोर्ट्स गुड्स में एम.एस.एम.ई. के लिए एक मिसाल हैं। जागृति विहार स्थित



अपने कार्यालय में वे भारतीय स्पोर्ट्स गुड्स में स्व-रोज़गार की नई कार्यनीति बनाने में जुटे हुए हैं। मल्टीजिम की नई संस्कृति उन्हें भी नये रास्ते दिखा रही है। उन्होंने अपनी कम्पनी के विभिन्न उत्पादों विशेषकर विभिन्न प्रकार के पोल्स, जिम्नास्टिक इक्विपमेंट तथा फिटनेस

इक्विपमेंट के बारे में बताया। उन्हें शुभकामनाएं देते हुए पी.पी.डी.सी. मेरठ से हम सायं छह बजे दिल्ली के लिए रवाना हो गए। इस तरह स्पोर्ट्स गुड्स सेक्टर में हमारी औद्योगिक यात्रा का प्रथम चरण पूरा हो गया।

हमारी इस औद्योगिक यात्रा का दूसरा चरण दिनांक 21 जुलाई, 2010 को दिल्ली से लुधियाना और जालंधर के लिए आरंभ हुआ तथा दिनांक 24 जुलाई, 2010 को दिल्ली वापसी के साथ ही सम्पन्न हो गया। लुधियाना में एम.एस.एम.ई-डी.आई., निटवियर क्लब, स्पोर्ट्सवियर फैक्ट्री, विभिन्न एसोसिएशन के कार्यालय जहां हमारी यात्रा के प्रमुख गंतव्य थे, वहीं जालंधर में केन्द्रीय हस्त औज़ार संस्थान स्थित स्पोर्ट्स गुड्स टेस्टिंग लैब, औद्योगिक क्षेत्र स्थित आर.के. इंटरनेशनल

> और रेंसन जैसी प्रमुख औद्योगिक इकाई, जिला उद्योग केन्द्र तथा शिक्तनगर स्थित स्पोर्ट्स गुड्स मैन्यूफैक्चरर्स एंड एक्सपोर्ट्स एसोसिएशन कार्यालय और विशेष रूप से फुटबाल चौक हमारी बरसाती यात्रा के गवाह बने।

> यहां यह बताने की आवश्यकता नहीं है कि जहां प्रथम चरण में डी.सी.-एम.एस.एम.ई. संगठन के एक



प्रमुख सूचना-उत्पाद 'लघु उद्योग समाचार' के बदले तेवर और में रखकर सम्पूर्ण लुधियाने की 'ब्रांड इमेज' बनाने तथा नये कलेवर की एस.जी., ए.टी.ई. सहित सभी ने एक 'ज्योग्रिफिकल इंडिकेशन' के लिए साझा पहल

स्वर से प्रशंसा की, वहीं दूसरे चरण में आरंभ

से अंत तक 'लघु उद्योग समाचार' को सराहना मिलती रही। दोनों चरणों में

इस मासिक पत्रिका के कुछ 'सैंपल्स' हम साथ लेकर गए थे। अनेक उद्यमी इसे पहली बार देख रहे थे!

लुधियाना रेलवे स्टेशन पर
एम.एस.एम.ई.-डी.आई. के
सहायक निदेशक ब्रजेन्द्र कुमार और
शहर स्थित संस्थान के नये निदेशक तथा
पंजाब में हमारी यात्रा के मुख्य मेज़बान
एस.एस. ढिल्लों ने तहेदिल से हमारे अभियान
का स्वागत किया। निटवियर क्लब और अंकिता इम्पेक्स
का दौरा हमने 21 जुलाई को ही पूरा कर लिया।

निटवियर क्लब के पदाधिकारी बेसब्री से हमारी प्रतीक्षा कर रहे थे। क्लब के अध्यक्ष विनोद के. थापर और अन्य पदाधिकारियों के साथ हमारी चर्चा आरंभ हुई। स्पोर्ट्सवियर और कॉमनवेल्थ गेम्स के बीच के दृश्य-अदृश्य धागे ढूंढने की

कोशिश हुई। श्री थापर ने बताया कि लुधियाना को भी कॉमनवेल्थ गेम्स, 2010 के आयोजन से लाभ हुआ है। उनका मानना है कि लाभ के आकार का दायरा विस्तृत और सुनियोजित किया जा सकता था। उन्होंने निटवियर क्लब की भूमिका तथा एल.डी.एफ.ओ. के बारे में विस्तार से बताया। बातचीत के दौरान हमने लुधियाना के उत्पाद-विशेष और क्षेत्र-विशेष को ध्यान 'ज्योग्रिफिकल इंडिकेशन' के लिए साझा पहल करने की सलाह दी। एम.एस.एम.ई.-

डी.आई., लुधियाना के सहायक

कुमार ने इस दौरान क्लब को यथोचित मार्गदर्शन देने का आश्वासन दिया।

क्लब के बाद हम मोतीनगर स्थित 'अंकिता इम्पेक्स' की फैक्ट्री में पहुंचे। वहां निदेशक अरुण धंद ने हमें पूरी फैक्ट्री में उत्पादन प्रक्रिया का अवलोकन कराया। इसी दौरान कॉमनवेल्थ गेम्स के लिए तैयार हो रहे स्पोट्सीवियर के

'सैंपल्स' उन्होंने दिखाये। अरुण वास्तव में खेल जगत में दोहरी सफलता की मिसाल हैं। एक ओर जहां वह बैडिमंटन खेल के राष्ट्रीय चैम्पियन रह चुके हैं, वहीं सन् 2000 में 10 लोगों के सहयोग से खड़ी की गई उनकी फैक्ट्री 'अंकिता इम्पेक्स' आज 700 से भी अधिक लोगों को रोज़गार दे रही है। विश्व के नामी ब्रांड रीबॉक, पंटलून, रॉकपॉर्ट, स्पीडो, कंवर्स इत्यादि को 'अंकिता' अपने उत्पाद बेच रही है। आई.पी.एल. की क्रिकेट

टीमों ने उसके स्पोर्ट्सवियर का उपयोग किया है।

अनेक अंतर्राष्ट्रीय प्रतियोगिता में भाग ले चुके अरुण ने बताया—"इस समय टी-शर्ट, शार्ट्स और ट्रैक शूट्स की तैयारी में हम लगे हैं। लेकिन जब में खिलाड़ी था तो मेरे मन में एक बात हमेशा चुभती थी कि विदेशी खिलाड़ी के स्पोर्ट्सवियर भी हमसे अच्छे होते थे। उनकी किट्स कहीं



बेहतर होती थी। आज मुझे यह देखकर खुशी होती है कि हमारे खिलाड़ियों के रूप में भी निखार आ गया है। बांडेड भी स्पोर्ट्सवियर पहन रहे हैं। हमारी कम्पनी स्वयं उच्च गुणवत्तायुक्त स्पोर्ट्सवियर तैयार कर रही है। विक्रम सिंह और मधुमिता बिष्ट जैसे खिलाड़ियों ने मुझे इस पेशे में आने के लिए प्रेरित किया।"

केन्द्र सरकार में कस्टम अधिकारी रह चुके अरुण ने बताया—"अच्छे स्पोर्ट्स वियर का मनोवैज्ञानिक असर खिलाड़ियों के प्रदर्शन पर पड़ता है। उसका आत्मविश्वास बढ़ता है। मेरा मानना है

कि भारत में स्कूल और कॉलेज स्तरों पर भी खिलाड़ियों को अच्छे स्पोर्ट्स किट्स उपलब्ध कराये जाने चाहिए।"

उन्होंने कहा कि 'कॉमनवेल्थ गेम्स 2010' से कुछेक उद्योगों को फायदा हुआ है। लेकिन सबसे बड़ी कमी है—प्रचार की! पूरे देश में इन खेलों का जितना प्रचार-प्रसार होना चाहिए था, वह नहीं हुआ है!

निस्संदेह हमारे लिए अरुण जैसे पूर्व सफल खिलाड़ी और स्पोर्ट्सिवयर के वर्तमान सफल व्यवसायी से मिलना यादगार रहा। जिस स्पोर्ट्सिवयर को पहनकर अरुण कभी बैडमिंटन के राष्ट्रीय चैम्पियन बनते थे, आज उसे वे स्वयं तैयार कर अपने



उत्पाद को राष्ट्रीय-अंतर्राष्ट्रीय स्तरों पर 'चैम्पियन' बनाने में जुटे हैं। अरुण का मानना है कि प्रकाश पादुकोण की वजह से देश में बैडमिंटन को जो लोकप्रियता मिली, वह किसी और खेल को अकेले किसी खिलाड़ी की वजह से नहीं मिली। उन्होंने बताया कि क्रिकेट के किसी खिलाड़ी की व्यक्तिगत उपलब्धि से भी कहीं अधिक महत्वपूर्ण है भारतीय खेल जगत में प्रकाश पादुकोण की सम्पूर्ण उपलब्धि!

अरुण से मिलने के बाद हम सायं में जे.के. नारंग हो ज़ियरी के मोहिंदर पाल नारंग से मिले। बाजवा नगर

होज़ियरी एसोसिएशन, लुधियाना के विरष्ठ उपाध्यक्ष श्री नारंग ने स्पोर्ट्सिवियर के उत्पादन में लुधियाना के दबदबे का गुणगान किया। आई.पी.एल. क्रिकेट मैचों में स्पोर्ट्सिवियर की सफलता से वे उत्साहित थे और कॉमनवेल्थ गेम्स के आयोजन से स्पोर्ट्सिवियर कारोबार बढ़ने की उम्मीद जता रहे थे।

श्री नारंग ने बताया कि लुधियाना में कुछेक कम्पनी को कॉमनवेल्थ गेम्स 2010 के लिए भी स्पोर्ट्सवियर की आपूर्ति का ऑर्डर मिला है, लेकिन वह किसी बड़े ब्रांड के नाम से मिला है, इसलिए प्रत्यक्ष रूप से वे व्यवसायी अपना नाम सामने नहीं ला रहे हैं। वैसे, जानकारी यह भी मिली कि वालेंटियर्स के

कपड़ों की आपूर्ति के लिए भी लुधियाना को बड़े ऑर्डर मिले हैं।

लुधियाना को साइक्लिंग में भी लाभ दिल्ली कॉमनवेल्थ गेम्स के बहाने मिल सकता था। लेकिन सिंगल ट्रेड में एशिया के सबसे बड़े संगठन—यूनाइटेड साइकिल एंड पार्ट्स मैन्यूफैक्चरर्स एसोसिएशन के महासचिव राजीव जैन और सचिव जगतवीर सिंह ने बताया कि उस स्तर की स्पोर्ट्स साइकिल भारतीय बाजार में उपलब्ध नहीं है।

उन्होंने यह स्वीकार किया कि बड़े शहरों में जिम-संस्कृति के पनपने से 'फिटनेस साइकिल' के बाजार पर सकारात्मक प्रभाव पड़ रहा है।

लुधियाना के ही परमजीत, हरीश कैरपाल, चरणजीत सिंह जैसे अन्य अनेक सफल उद्यमियों से मिलते हुए हम दिनांक 22 जुलाई, 2010 को जालंधर के लिए रवाना हुए।

रास्ते में हम दोनों ने पंजाब के स्पोर्ट्स गुड्स सेक्टर के वर्तमान और भविष्य पर विचार-विमर्श किया। हमने देखा कि पंजाब पहली बार बौद्धिक संपदा अधिकारों (आई.पी.आर.) के लिए सजग हुआ है। लुधियाना में होज़ियरी, इलेक्ट्रोप्लेटिंग, डाइंग, मशीन टूल्स; जालंधर में पाइप फिटिंग्स, हैंड टूल्स, स्पोर्ट्स गुड्स, बॉल बियरिंग्स एंड ऑटो पार्ट्स, लेदर बैग्स एंड

लेदर टैनिंग; अमृतसर में होज़ियरी, टैक्सटाइल्स और ड्रग एंड फार्मा, फगवाड़ा में स्विचबोर्ड; बटाला में मशीन टूल्स और फाउंड्रीज; मोगा में कृषि यंत्र एवं मशीन निर्माण; मोहाली में बाथरूम एंड सेनिटरी फिटिंग्स, ऑटोमोबाइल पार्ट्स एंड इंडस्ट्रियल कम्पोनेंट्स, ट्रैक्टर एंसिलरी इकाई; चंडीगढ़ में ट्रैक्टर एंसिलरी इकाई और होशियारपुर में वूडेन इंले हैंडीक्राफ्ट्स के क्लस्टरों में आई.पी.आर. के लिए विशेष रूप से सजगता अभियान चलाया जा रहा है। जाहिर है इससे विश्व औद्योगिक मानचित्र पर पंजाब की पहचान और अमिट होगी, जिसका लाभ एम.एस.एम.ई. को विशेष रूप से मिलेगा।

पेटेंट, डिजाइन, ट्रेडमार्क्स, कॉपीराइट्स और ब्रांड इमेज जैसे क्षेत्रों में पंजाब सहित पूरे देश के औद्योगिक क्लस्टरों में सघन जागरुकता अभियान तथा तकनीकी मार्गदर्शन अभियान चलाये जाने की आवश्यकता है। स्पोर्ट्स गुड्स के क्लस्टर्स को तो गंभीर प्रयास से इन विषयों में 'हाई जम्प' और 'लांग जम्प' लगाने की जरूरत है, तभी विश्व स्तर पर स्पोर्ट्स बाजार के विभिन्न 'हर्डल्स' को भारतीय खेल उद्यमी सफलता से पार कर पाएंगे तथा देश में कॉमनवेल्थ गेम्स, विश्व कप क्रिकेट जैसे बड़े खेल आयोजनों का अधिक से अधिक कारोबारी फायदा उठाने का भी सलीका सीख सकेंगे।

यही सब सोचते-विचारते हम जालंधर के अपने मुख्य मेजबान केन्द्रीय हस्त औजार संस्थान पहुंच गए। सबसे पहले वहां हमने एम.एस.एम.ई. मंत्रालय, भारत सरकार के अधीन संचालित पी.पी.डी.सी के विस्तारित स्पोर्ट्स गुड्स परीक्षण प्रयोगशाला का अवलोकन किया। इसमें फुटबाल और रबर से

> बने उत्पादों के परीक्षण की सुविधा उपलब्ध है। इस उपकेन्द्र को केन्द्रीय हस्त औजार संस्थान के परिसर में 24 अगस्त, 2006 से आरंभ किया गया है।

इसके बाद हम सीधे जिला उद्योग केन्द्र पहुंचे, जहां महाप्रबंधक बी.एस. बरार से मिले। उनके कार्यालय में कॉमनवेल्थ



गेम्स, 2010 का कोई सकारात्मक प्रभाव नहीं दिखा। इसके बाद हम विक्टर टूल्स प्राइवेट लिमिटेड होते हुए आर.के. इंटरनेशनल पहुंचे, जहां प्रबंधन पार्टनर राजन कोहली ने बड़ी साफगोई से कह डाला,— "सरकारी अधिकारी तो सिर्फ टी.ए., डी.ए. बनाने के लिए ट्रर पर निकल पड़ते हैं, लेकिन आप लोग तो सीरियस दिखाई दे रहे हैं।" आर.के. इंटरनेशनल टी.के. हॉकी स्टिक बनाने के लिए मशहूर हैं। निर्यात के क्षेत्र में स्पोर्ट्स के अनेक गुड्स में इस भारतीय कम्पनी कामयाबी के परचम लहराये हैं। श्री कोहली सहजता- सरलता से बताया – "हम कॉमनवेल्थ गेम्स की चिंता नहीं करते हैं। हमारे पास वक्त ही नहीं है उधर ध्यान देने की। हम सिर्फ अपने एक्सपोर्ट ऑर्डर की गुणवत्ता तथा समय की पाबंदी को पूरा करने में व्यस्त हैं। इधर-उधर झांकने की हमें फुर्सत ही नहीं है।"

फाइबर हॉकी स्टिक सिंहत आर.के. इंटरनेशनल के अनेक प्रोडक्ट देखने तथा विश्व कप हॉकी के आयोजन में उसकी सफलता के किस्से सुनने तथा लंच करने के बाद हम पहुंच गए रैंसन स्पोर्ट्स इंडस्ट्री के कार्यालय में। संयोगवश अति व्यस्त उद्यमी और स्पोर्ट्स गुड्स मैन्यूफैक्चरर्स एंड एक्सपोर्ट्स एसोसिएशन (एस.जी.एम.ई.ए.) के अध्यक्ष रघुनाथ सिंह राणा से मुलाकात हो गई। उन्होंने कॉमनवेल्थ गेम्स के खेल कारोबार पर पड़ने वाले अनेक प्रत्यक्ष-अप्रत्यक्ष लाभ बताये। बातों-बातों

में ही उन्होंने यह रहस्योद्घाटन किया—"1975 में स्नातक करने के दौरान मैंने जालंधर स्थित तत्कालीन ब्रांच एस.आई.एस. आई. (तत्कालीन एस.आई.एस.आई., लुधियाना का विस्तारित केन्द्र) से स्व-उद्यमशीलता का छह महीने का कोर्स किया था। होशियारपुर से मैं वहां पहुंचा था। हमारे बैच में 10-15 नवयुवक थे। तब जालंधर में बैडमिंटन रैकेट का उत्पादन शिखर पर था। इसके बाद मैंने फुटबाल, क्रिकेट की सामग्री बनाने की एक फैक्ट्री में 1975 से 1982 तक काम किया। यह सही है कि एस.आई.एस.आई. के उस सर्टिफिकेट कोर्स से मेरा प्रथम परिचय तकनीकी जगत से हुआ और पहला अनुभव उस फैक्ट्री मिला। फिर

शुरू किया। सन् 1982 से सन् 1988 तक घरेलू बाज़ार में गंभीर झटके खाने के बाद मैंने निर्यात की दुनिया में कदम रखा और फिर पीछे मुड़कर कभी नहीं देखा। हमने क्रिकेट और बॉक्सिंग के अपने प्रोडक्ट्स में क्वालिटी से कभी समझौता नहीं किया, इसलिए हम अपने प्रोडक्ट के ब्रांड को स्थापित करने में कामयाब हो गए।"

श्री राणा की उपलिब्धियों को सुनने के बाद हम शिक्तनगर स्थित एस.जी.एम.ई.ए. के कार्यालय पहुंचे। महासचिव विपन महाजन से वहां स्पोर्ट्स गुड्स कारोबार की स्थिति तथा एम.एस.एम.ई. के लिए केन्द्र सरकार की विभिन्न योजनाओं पर चर्चा हुई। श्री महाजन ने कुछेक सरकारी योजनाओं की व्यावहारिक खामियों की ओर हमारा ध्यान आकर्षित किया।

क्या था, सन्

1982 से मैंने अपना उद्यम

कॉमनवेल्थ गेम्स के आयोजन के प्रभाव से वे उत्साहित नहीं दिखे। उन्होंने स्पोर्ट्स गुड्स कारोबार के अनुरूप सरकारी योजनाओं तथा नीतियों के निर्माण तथा सफल अमलीकरण की जरूरत पर जोर दिया।

महासचिव ने अपने संगठन का मुखपत्र 'वॉयस' दिखाया तथा उसकी कुछ प्रतियां हमें भेंट की। श्री महाजन की बेबाकी और पित्रका 'वॉयस' पंजाब में हमारी इस औद्योगिक यात्रा का सबसे कीमती उपहार साबित हुआ। क्योंकि इन दोनों से हमें भारतीय स्पोर्ट्स गुड्स कारोबार तथा भारत में कॉमनवेल्थ गेम्स के आयोजन के सूत्रात्मक संबंध और उसके स्तर का पता चल गया।

जालंधर प्रेस क्लब, समाचार पत्रों के कार्यालय तथा अमृतसर के कुछेक क्षेत्रों को भी देखने-परखने और जालंधर के फुटबाल चौक पर कुछ पल बिताने के बाद हम पुन: 23 जुलाई, 2010 को लुधियाना पहुंच गए।

पंजाब सरकार के एक आंकड़े से पता चला कि राज्य में स्पोर्ट्स गुड़स सेक्टर में रोजगार का दायरा लगातार बढ़ रहा है।

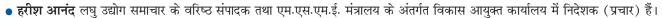
इस दौरान लुधियाना में अनेक एसोसिएशन के साथ हमारी बैठक देर रात तक चली। हम दोनों ने यथासंभव उन्हें देश में कॉमनवेल्थ गेम्स जैसे बड़े खेल आयोजनों से कारोबारी फायदा उठाने के लिए सजग होने-पहल करने के लिए स्व-प्रयास के तौर- तरीके बताये।

अगली सुबह हम स्वर्ण शताब्दी ट्रेन से दिल्ली लौटते समय देश

के स्पोर्ट्स गुड्स कारोबार पर विचार कर रहे थे—जालंधर में सॉकर, रग्बी, वॉलीबाल, नेटबाल, हैंडबाल, बास्केटबाल, मुक्केबाजी, क्रिकेट, स्पोर्ट्सवियर, ट्रैक एंड फील्ड इक्विपमेंट, प्रशिक्षण उपस्कर, हॉकी सामग्री का कारोबार; मेरठ में वेटलिफ्टिंग, क्रिकेट, एथलेटिक्स, बॉक्सिंग, टेबल टेनिस, बैडमिंटन, कैरम बोर्ड, फिटनेस इक्विपमेंट, खेल परिधान का कारोबार; जम्मू और कश्मीर में क्रिकेट के बल्ले का कारोबार; दिल्ली में फुटबाल, कैरम बोर्ड, शतरंज, क्रिकेट उपस्कर, बिलियर्ड्स, स्नुकर, पूल टेबल, फुटबाल ब्लैडर्स, मुक्केबाजी सामग्री, स्पोर्ट्स हेल्मेट्स कारोबार; गुड़गांव में गोल्फ इक्विपमेंट और बोर्ड गेम्स कारोबार; मुंबई में वाटर पार्क स्लाइड्स, कैरम बोर्ड, प्लेग्राउंड, फिटनेस इक्विपमेंट, स्पोर्ट्स नेट्स, हेल्मेट्स कारोबार; कोलकाता में स्किपिंग रोप, कैरम बोर्ड, मैजिक उपस्कर कारोबार; चेन्नै में टेनिस बॉल, स्पोर्ट्स शूज्, खेल परिधान कारोबार तथा बंगलुरू में बॉलिंग इक्विपमेंट, स्पोर्ट्स मेडल व ट्रॉफी, जिम व हेल्थ इक्विपमेंट का कारोबार-फिर, गुवाहाटी, पटना, कानपुर, आगरा से लेकर पुणे और विजयवाड़ा तक देश के भिन्न-भिन्न शहरों और सुद्र ग्रामीण अंचलों में फैला खेल का उप-व्यापार रोज़गार की अपार-असीम संभावनाओं से लैस है।

> जरूरत है सिर्फ देशी कारोबार में 'व्यापारिक सुरों' को सुचारु करने तथा विदेशी कारोबार में 'सब-कांट्रेक्टिंग' की जगह 'कांट्रेक्टिंग' की अपनी स्थाई राह बनाने की। कॉमनवेल्थ गेम्स जैसे बड़े खेल आयोजन तभी देशी स्पोर्ट्स गुड्स को वास्तविक लाभ और कारोबारी हक दिला पाएंगे अन्यथा हर बार विदेशी खिलाड़ियों की ही तरह

विदेशी कारोबारी भी बाज़ी मार ले जाएंगे और, हम विभिन्न खेलों की तरह कारोबारी खेल में भी हाथ मलते रह जाएंगे!



[•] हरेन्द्र प्रताप लघु उद्योग समाचार के संपादक तथा सन् 1982 में एशियाड से जुड़ने के बाद सोल ओलिम्पिक से लेकर अटलांटा ओलिम्पिक तक देश के वरिष्ठ खेल पत्रकार और नवभारत टाइम्स के खेल संपादक रह चुके हैं।

मेरठ: सूक्ष्म एवं लघु उद्योगों के लिए संचालित सुविधाएं

एकल मेज व्यवस्था के अंतर्गत सुविधाएं

सूक्ष्म लघु एवं मध्यम उद्यम विकास अधिनियम-2006 के अधीन प्राप्त किए गए मेमोरण्डम वाले सभी उद्यमों को एकल मेज व्यवस्था का लाभ अनुमन्य होगा अर्थात् एकल मेज व्यवस्था के अंतर्गत सभी प्रकार की वांछित अनुमोदन/स्वीकृतियों को जारी करने का लाभ मिल सकेगा।

लघु उद्यमियों के लिए विपणन एवं परिवहन सहायता योजना

विपणन परिवहन सहायता योजना उस प्रदेश की ऐसी सभी उत्पादक इकाइयों को उपलब्ध होगी जो लघु उद्योग, माइक्रो सेक्टर एवं हस्तशिल्प के अंतर्गत उत्पादन कार्य में कर रही हों।

विपणन एवं परिवहन सहायता योजना निम्नलिखित कार्यों के लिए उपलब्ध होगी:

इस योजना में प्रदेश में उपर्युक्त श्रेणी की इकाइयां लाभान्वित हो सकती हैं।

प्रदेश के बाहर एवं देश के अन्य राज्यों में आयोजित होने वाले मेलों एवं प्रदर्शनियों में भाग लेने वाली इकाइयों को वित्तीय वर्ष में एक बार ही योजना का लाभ प्राप्त होगा।

प्रदेश की पात्र इकाइयों को देश के अन्य राज्यों में आयोजित होने वाले मेले/प्रदर्शनी में भाग लेने हेतु अपने उत्पादों को कार्यशाला से प्रदर्शनी स्थल तक ले जाने में व्यय की गई धनराशि का (50 प्रतिशत अथवा अधिकतम रु. 5000/-) वित्तीय वर्ष में एक बार तक प्रतिपूर्ति की जाएगी।

पात्र इकाइयों द्वारा यह प्रमाणित किया जाएगा कि सम्बंधित पात्र इकाई सहायता हेतु पात्र हैं। इकाई को मेले के आयोजनकर्ता का प्रमाण-पत्र देना होगा कि उसके द्वारा प्रश्नगत मेले में उसकी संस्तुति से किस से किस तिथि तक भाग लिया गया।

आयोजक का इकाई पर कोई देय बकाया नहीं है। इस प्रकार की सहायता और इस कार्य हेतु सहायता किसी अन्य सरकारी संस्था/योजना/ काउन्सिल से प्राप्त नहीं की गई है।

स्टाम्प शुल्क में छूट

नई औद्योगिक निवेश नीति-2004 के अन्तर्गत औद्योगिक इकाइयों द्वारा उद्योग स्थापना हेतु प्रथम बार क्रय किए जाने वाले भूखण्ड पर लगने वाले स्टाम्प शुल्क में 50 प्रतिशत तक की छूट की सुविधा दिए जाने का प्रावधान किया गया है।

तकनीकी उन्नयन योजना के अन्तर्गत आर्थिक सहायता सुविधा

3.प्र. सूक्ष्म एवं लघु उद्योग तकनीकी उन्नयन (टेक्नोलॉजी अपग्रेडशन) योजना के अन्तर्गत ऐसे सूक्ष्म एवं लघु उद्योग जो एम.एस.ई.-2006 के अन्तर्गत मेमोरेण्डम प्राप्त किए हैं, को निम्न सुविधाएं प्रदान की जाएंगी:

योजना	दर	प्रतिबंध
सम्पूर्ण देश एवं प्रदेश में आयोजित होने	स्थल किराए का 50 प्रतिशत	रु. 15000/- अधिकतम सीमा
वाले मेले/प्रदर्शनी में भाग लेने		प्रति पात्र इकाई, प्रति वर्ष तक।
हेतु।		
रेल/सड़क मार्ग से	उत्पादक इकाई की कार्यशाला से	अधिकतम रु. 5000/- तक प्रति
माल भाड़ा	प्रदर्शनी स्थल तक परिवहन किए	पात्र इकाई, प्रतिवर्ष
	गए उत्पादों को लाने के वास्तविक	
	व्यय के वाउचर की धनराशि का	THE RESERVE AND PERSONS ASSESSED.
2101	50 प्रतिशत	



- (क) सूक्ष्म एवं लघु औद्योगिक इकाइयों के तकनीक की खरीद और अर्थात् जिसके द्वारा गुणवत्ता में सुधार होगा और उत्पादन में वृद्धि होगी, को मान्यता प्राप्त/सक्षम संस्थानों, सरकारी संस्थाओं और शोध केन्द्रों से प्राप्त करने में व्यय की गई धनराशि का 50 प्रतिशत अनुदान देय होगा जिसकी अधिकतम सीमा रु. 2.50 लाख होगी।
- (ख) सूक्ष्म एवं लघु औद्योगिक इकाइयों को इस प्रकार उत्पादन में वृद्धि और गुणवत्ता में सुधार होगा और उत्पादन में वृद्धि होगी।
- (ग) उपर्यक्त (प्रस्तर-ख में अंकित) क्रय की गई मशीनों और उपकरणों पर वित्तीय निगम या बैंकों से ऋण लिए जाने की दशा में वित्तीय संस्थाओं को देय ब्याज की आंशिक प्रतिपूर्ति करते हुए उपादन देय होगा।
- (घ) आईएसआई या आईएसओ श्रेणी के मानकीकरण प्राप्त किए जाने की दशा में आने वाले व्यय का 50 प्रतिशत उपादान के रूप में देय होगा जिसकी अधिकतम सीमा रु. 2.00 लाख होगी।
- (ङ) उत्पादकता कौशल/बाजार तथा तकनीकी के अध्ययन और मान्यता प्राप्त संस्थाओं से परामर्श प्राप्त किए जाने

पर सूक्ष्म एवं लघु उद्योगों को इस व्यय की 90 प्रतिशत राशि अधिकतम सीमा रु. 50,000/- तक अनुदान देय होगा।

माइक्रो एण्ड स्माल इण्टर प्राइजेज फेसिलिटेशन काउन्सिल की स्थापना

प्रमुख सचिव, लघु उद्योग उ.प्र. शासन द्वारा अवगत कराया गया कि उ.प्र. में कुल प्रस्तावित काउन्सिल में एक काउन्सिल की स्थापना मेरठ में की जाएगी। इस काउन्सिल के माध्यम से माइक्रो एवं लघु उद्योगों के क्रेताओं द्वारा लिम्बत भुगतान सम्बंधी वाद का निस्तारण किए जाने का कानूनी अधिभार दिया गया है।

- एमएसई एक्ट के अन्तर्गत माइक्रो एवं लघु उद्योगों द्वारा विक्रय किए जाने वाले सामानों की उधारी की अविध को घटाकर 45 दिन कर दिया गया है। यदि भुगतान समय से नहीं होता है तो उद्यम के पक्ष में भारतीय रिजर्व बैंक के ब्याज की दर की तीन गुनी दर से ब्याज सिहत देय धनराशि दिए जाने का प्रावधान किया गया है।
- माइक्रो एवं स्माल उद्यमों को विभिन्न वित्तीय संस्थाओं से
 ऋणों को प्राथमिकता के आधार पर उपलब्ध कराए जाने
 का प्रावधान है। (म्रोत: जिला उद्योग केन्द्र, मेरठ)

कुटीर उद्योग का विकास

सूक्ष्म, लघु और मध्यम उद्यम राज्य मंत्री (स्वतंत्र प्रभार) श्री दिनशा पटेल ने 6 अगस्त, 2010 को राज्य सभा में एक प्रश्न के लिखित उत्तर में बताया कि सरकार (सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय) ने 2008-09 और 2009-10 के दौरान खादी एवं ग्रामोद्योग आयोग (केवीआईसी) के माध्यम से खादी एवं ग्रामोद्योग क्षेत्र के विकास और संवर्धन के लिए निम्नोक्त छह नई योजनाओं को कार्यान्वयन हेतु अनुमोदित किया है:

- 1. सूक्ष्म उद्यमों की स्थापना के माध्यम से अतिरिक्त रोजगार अवसर उत्पन्न करने के लिए 'प्रधानमंत्री रोजगार सृजन कार्यक्रम (पीएमईजीपी)'। यह योजना राष्ट्रीय स्तर पर एकल नोडल एजेंसी के रूप में केवीआईसी के माध्यम से कार्यान्वित की जा रही है। राज्य/संघ राज्य क्षेत्र स्तर पर योजना का कार्यान्वयन केवीआईसी के क्षेत्रीय कार्यालयों, राजय/संघ राज्य क्षेत्र खादी एवं ग्रामोद्योग बोर्डों (केवीआईबी) और जिला उद्योग केन्द्रों (डीआईसी) के माध्यम से बैंकों की सहभागता से किया जाता है।
- खादी उद्योग को अधिक प्रतिस्पर्धी बनाने के उद्देश्य से "खादी उद्योग तथा कारीगरों की उत्पादकता एवं प्रतिस्पर्धात्मकता बढ़ाने" हेतु योजना।
- 3. वर्कशेड के निर्माण के लिए खादी कारीगरों विशेष रूप से गरीबी रेखा से नीचे (बीपीएल) तबके के खादी कताईकारों और बुनकरों को वित्तीय सहायता उपलब्ध कराने के लिए वर्कशेड योजना।
- 4. मौजूदा कमजोर संस्थानों की आधारभूत संरचना का सुदृढ़ीकरण तथा विपणन आधारभूत संरचना हेतु सहायता की योजना।
- 5. खादी के उत्पादन संबंधी विपणन विकास सहायता योजना जो 2010-11 और 2011-12 के दौरान केवीआईसी द्वारा कार्यान्वयन के लिए 01.04.2010 से प्रभाव में आई है, जिसमें खादी और पॉलिवस्त्र पर उत्पादन मूल्य के 20

- प्रतिशत की दर से वित्तीय सहायता, जिसे कारीगरों, उत्पादक संस्थानों और विक्रय संस्थानों के बीच 25:30:45 के अनुपात में बांटा जाएगा, की परिकल्पना की गई है।
- 6. निजी भागीदारी जिसमें विपणन विकास, जैसे कि विपणन सर्वेक्षण, डिजाइन इन्पुट, ब्रांड बिल्डिंग, खादी मार्क, संवर्धन आदि शामिल हैं, के माध्यम से विपणन संगठन स्थापित करने, मेट्रोपॉलिटन शहरों और राज्यों की राजधानियों में 20 नए विक्रय निर्गम खोलने और लगभग 1200 विक्रय निर्गमों के रिनोवेशन और आधुनिकीकरण के प्रावधान के साथ एशियन डेवलपमेंट बैंक द्वारा निधिपोषित खादी सुधार एवं विकास कार्यक्रम।

खादी और ग्रामोद्योग आयोग

सूक्ष्म, लघु और मध्यम उद्यम राज्य मंत्री (स्वतंत्र प्रभार) श्री दिनशा पटेल ने 10 अगस्त, 2010 को राज्य सभा में एक लिखित प्रश्न के उत्तर में बताया कि सरकार (सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय में) 2008-09 से अप्रचलित तथा पुरानी मशीनरी और उपस्करों को बदलते हुए अधिक बाजार प्रेरित और लाभदायक उत्पादन के साथ खादी उद्योग को प्रतिस्पर्धी बनाने के लिए 200 खादी संस्थानों की सहायता हेतु 'खादी उद्योगों व कारीगरों की उत्पादकता और प्रतिस्पर्धात्मकता बढ़ाने की योजना' का कार्यान्वयन कर रही है।

पिछले दो वर्षों के दौरान उपर्युक्त उल्लिखित योजना के तहत खादी संस्थानों को संस्वीकृत परियोजनाओं की वर्ष-वार संख्या और 2010-11 के लिए निर्धारित लक्ष्य निम्नलिखित हैं:

वर्ष	परियोजनाओं की संख्या		
2008-09	21		
2009-10	20		
2010-11 (लक्ष्य)	60		

परियोजना कार्यान्वित करने वाली एजेंसी के पास कम से कम 300 कारीगर होने चाहिए (जो पूर्वोत्तर राज्यों के लिए 150 कारीगर हैं)। इस परियोजना के तहत, चरखा बदलने, वार्प इकाई, उत्पाद डिजाइनिंग, बाजार संवर्धन, क्षमता निर्माण, प्रौद्योगिकी-प्रबंधकीय सहयोग, रिपोर्टिंग, प्रलेखन अध्ययन आदि के लिए वित्तीय सहायता उपलब्ध है, जिसमें प्रत्येक परियोजना की लागत कुल मिलाकर लगभग 42 लाख रुपए तक हैं।

पिछले दो वर्षों के दौरान उपर्युक्त उल्लिखित योजना के तहत केवीआईसी को सरकार द्वारा प्रदान की गई निधियों का वर्ष वार ब्यौरा और बजट अनुमान 2010-11 के अनुसार निर्धारित 21 करोड़ रुपए में से 2010-11 के दौरान जारी निधियां निम्नलिखित हैं:

वर्ष	राशि (करोड़ रुपए में)		
2008-09	10.00		
2009-10	3.44		
2010-11 (लक्ष्य)			

'खादी उद्योगों व कारीगरों की उत्पादकता और प्रतिस्पर्धात्मकता बढ़ाने की योजना' के तहत निधियों का प्रावधान 60 संस्थानों की सहायता के लिए बजट अनुमान 2010-11 के तहत 21 करोड़ रुपए तक बढ़ा दिया गया है।

प्रधानमंत्री रोजगार सृजन कार्यक्रम (पीएमईजीपी) के अंतर्गत ऋण

सूक्ष्म, लघु और मध्यम उद्यम राज्य मंत्री (स्वतंत्र प्रभार) श्री दिनशा पटेल ने 17 अगस्त, 2010 को लोक सभा में एक लिखित प्रश्न के उत्तर में बताया कि पीएमईजीपी के तहत, परियोजना लागत तथा लाभार्थी की अवस्थिति/श्रेणी के आधार पर बैंकों द्वारा उल्लेखनीय ऋण के साथ विनिर्माण या सेवा क्षेत्र में नए सूक्ष्म उद्यमों की स्थापना के लिए इच्छुक लोगों को मार्जिन मनी सहायता प्रदान की जाती है। पीएमईजीपी के तहत उपलब्ध कराई जाने वाली स्वीकृत मार्जिन मनी सब्सिडी सहायता इस प्रकार से है:

पीएमईजीपी के तहत लाभार्थियों की श्रेणियां	लाभार्थी का अंशदान (परियोजना लागत का %)	मार्जिन सब्सिडी (परियो लागत व	की दर जिना
क्षेत्रीय (परियोजना/ ईकाई का स्थल		शहरी	ग्रामीण
सामान्य	10%	15%	25%
विशेष श्रेणी (अनु. जाति/ अनु. जनजाति/अन्य पिछड़े वर्ग/अल्पसंख्यकों/महिला/ भूतपूर्व सैनिकों/शारीरिक रूप से विकलांग, पूर्वोत्तर क्षेत्र, पहाड़ी और सीमावर्ती क्षेत्र इत्यादि सहित)	05%	25%	35%

पीएमईजीपी के तहत लाभार्थियों की पात्रता हेतु मानदंडों में निम्नोक्त शामिल हैं:

- 1. लाभार्थी की आयु 18 वर्ष अथवा इससे अधिक होनी चाहिए।
- 2. एक परिवार से केवल एक व्यक्ति ही पात्र है।
- फिक्स्ड पूंजी निवेश पहाड़ी क्षेत्रों से अलग क्षेत्रों में नियोजित
 लाख रुपए प्रति कामगार से अधिक नहीं होना चाहिए (पहाड़ी क्षेत्रों में 1.5 लाख रुपए)।
- 4. विनिर्माण क्षेत्र में 10 लाख रुपए से अधिक लागत वाली परियोजनाओं तथा व्यवसाय/सेवा क्षेत्र में 5 लाख रुपए से अधिक लागत वाली परियोजनाओं की स्थापना करने के लिए लाभार्थी की शैक्षणिक योग्यता कम से कम आठवीं पास होनी चाहिए।
- 5. योजना के तहत सहायता विशिष्ट तौर पर पीएमईजीपी के तहत स्वीकृत केवल दो परियोजनाओं के लिए ही उपलब्ध है।
- 6. लाभार्थी निजी अंशदान के रूप में पिरयोजना में 10 प्रतिशत का योगदान करेगा (कुछ कमजोर वर्गों, जैसे अनुसूचित जातियों, अनुसूचित जनजातियों, महिलाओं, भूतपूर्व सैनिकों आदि के लिए 5 प्रतिशत)।

बायो-डीजल उत्पादन इकाइयों की धनराशि

सूक्ष्म, लघु और मध्यम उद्यम राज्य मंत्री (स्वतंत्र प्रभार) श्री दिनशा पटेल ने 17 अगस्त, 2010 को लोक सभा में एक लिखित प्रश्न के उत्तर में बताया कि सरकार (सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय में) बैंकों की भागीदारी के साथ राष्ट्रीय स्तर पर नोडल एजेंसी के रूप में खादी व ग्रामोद्योग आयोग (केवीआईसी) और राज्य/संघ राज्य क्षेत्र स्तर पर केवीआईसी के क्षेत्रीय कार्यालयों, राज्य/संघ राज्य क्षेत्र खादी व ग्रामोद्योग बोर्डों व जिला उद्योग केन्द्रों के माध्यम से 'सूक्ष्म उद्यमों' की स्थापना के द्वारा रोजगार के सृजन हेतु 2008-09 से प्रधानमंत्री रोजगार सृजन कार्यक्रम (पीएमईजीपी) का कार्यान्वयन कर रही है। पीएमईजीपी के तहत, पात्र उद्यमी केवीआईसी से मार्जिन मनी सहायता और सार्वजनिक क्षेत्र के अनुसूचित वाणिज्यिक बैंकों से ऋण प्राप्त करते हुए बायो-डीजल उत्पादन इकाइयों सिहत नए 'सूक्ष्म उद्यमों' की स्थापना कर सकते हैं।

पीएमईजीपी के तहत नई बायो-डीजल परियोजनाओं की सहायता के लिए यह जरूरी है कि लाभार्थियों द्वारा जीवनक्षम इकाइयों को प्रस्तावित किया जाए ताकि बैंक भी पीएमईजीपी के तहत उनहें वित्तपोषित करने



के लिए आगे आएं। केवीआईसी पीएमईजीपी के तहत एक उद्यम के रूप में बायो-डीजल उत्पादन को प्रचारित करने के लिए प्रयास कर रहा है।

पारंपरिक उद्योगों की स्थिति

सूक्ष्म, लघु और मध्यम उद्यम राज्य मंत्री (स्वतंत्र प्रभार) श्री दिनशा पटेल ने 5 अगस्त, 2010 को लोक सभा में एक प्रश्न के लिखित उत्तर में बताया कि सरकार (सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय में), देशभर में क्रेडिट, आधारभूत संरचना विकास, प्रौद्योगिकी उन्नयन, विपणन, उद्यमिता विकास आदि से संबंधित विभिन्न योजनाओं/कार्यक्रमों के माध्यम से खादी, ग्राम, कॅयर और कुटीर उद्योगों सिहत सूक्ष्म, लघु एवं मध्यम उद्यमों के विकास और संवर्धन के लिए राज्यों/संघ राज्य क्षेत्रों के प्रयासों का अनुपूरण करती है। देश में खादी के उत्पादन का मूल्य गत 5 वर्षों के दौरान बढ़ोत्तरी का रुख दर्शा रहा है। ग्राम और कुटीर उद्योगों के उत्पादन का अनुमानित मूल्य भी निरन्तर बढ़ोत्तरी का रुख दर्शा रहा है।

उन्होंने सदन को यह भी सूचित किया कि कुछ 'सूक्ष्म उद्यम' ग्राम उद्योग इकाइयां, स्व-रोजगार उद्यमों को हानि हुई है और बंद हुए हैं। इस प्रकार की हानियों के पीछे अप्रचलित प्रौद्योगिकी, उत्पादों की अस्थायी गुणवत्ता, उतपादन डिजाइन का बाजार की मांग के अनुकूल न होना, उद्यमिता और प्रबंधकीय कौशल की कमी आदि कारण शामिल हैं।

उन्होंने जानकारी दी कि सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय 2005-06 से खादी एवं ग्रामोद्योग आयोग (केवीआईसी) और क्यर बोर्ड के माध्यम से स्फूर्ति (पारम्परिक उद्योगों के पुनरुद्धार के लिए निधि की योजना) नामक एक क्लस्टर आधारित योजना का कार्यान्वयन कर रहा है, जिसके तहत 29 खादी, 50 ग्रामोद्योग और 26 क्यर क्लस्टर, जहां प्रत्येक के 500 से अधिक पारंपरिक कारीगर हैं, को लक्ष्य बनाया गया है और उन्हें सुधरे हुए उपकरण, व्यवसाय विकास सेवाएं, प्रशिक्षण, क्षमता निर्माण और प्रदर्शन दौरे, डिजाइन एवं विपणन सहयोग, सामान्य सुविधा केन्द्र आदि उपलब्ध कराए गए हैं, तािक ये कार्यकलाप प्रतिस्पर्धी बने रहे और स्थायी बन सकें।

कड़ी-16 : कैसे लगायें अपना उद्योग?

युवा पीढ़ी रोजगार के अवसर तलाशने के स्थान पर यदि अपना उद्योग लगाने के लिए अपने समय का निवेश करें तो वह औरों को भी रोज़गार मुहैया करा सकती है।

भावी उद्यमी के लिए सूचना एक शक्ति का काम करती है जिसके पीछे सफलता छुपी हुई होती है। लघु उद्योग समाचार पत्रिका के 'अपना हाथ जगन्नाथ' कॉलम के ज़िरए हम भावी उद्यमियों के लिए 'कैसे लगायें अपना उद्योग'-जैसे ज्वलंत विषय पर इस धारावाहिक शृंखला का शुभारंभ इस आशय के साथ कर चुके हैं कि उद्यमी इन सूचनाओं का लाभ उठाते हुए अपना उद्योग स्थापित करने का उद्यम स्वयं करेंगे। हमारी कोशिश है कि उद्योग स्थापित करने के बारे में आपके प्रश्नों का समाधान यथासंभव इस कॉलम में नियमित रूप से किया जाए। अतः इस कॉलम पर अपनी प्रतिक्रिया तथा संबंधित प्रश्न हमें अवश्य भेजें। साथ ही, आगे पढ़ें

उत्पादन प्रबन्धन

किसी भी व्यावसायिक इकाई को एक व्यावसायिक अस्तित्व के रूप में कार्य करना होता है, भले ही विपणन, वित्त, उत्पादन आदि से जुड़े विभिन्न कार्यों के लिए अपेक्षित कौशल अलग-अलग होता है। एक लघु उद्योग में किसी उद्यमी के लिए किसी खास क्षेत्र में विशेषज्ञता रखना संभव नहीं होता। उलटे उसे वित्तीय लाभ प्राप्त करने के उद्देश्य से इन सभी कार्यों के बीच समन्वय के प्रति सदैव चौकस रहना होता है। इस प्रकार उत्पादन प्रबंधन में न केवल सामान के उत्पादन से जुड़ा कार्य होता है बल्कि उत्पादन शुरू होने से पूर्व भी सभी पहलुओं की आयोजना और समीक्षा पर गौर किया जाता है। किसी नए उद्यमी के लिए दीर्घावधि उत्पादन योजना और प्रबंधन बहुत कठिन हो जाता है क्योंकि उसके पास बहुत सीमित संसाधन होते हैं।

उत्पादन प्रबंधन में आने वाले विभिन्न पहलुओं में सामान्यत: निम्न बातें शामिल रहती हैं:-

- (1) उत्पादन संशोधन और डिजाइन।
- (2) उत्पादन के लिए आवश्यक उपकरण।
- (3) उपलब्ध सुविधाएं और उपलब्ध सुविधाओं का प्रयोग।
- (4) उत्पाद की प्रयोग-अपेक्षित गुणवत्ता का नियंत्रण और अनुप्रेक्षण।

- (5) कच्चे माल का भण्डारण, रखरखाव और प्रयोग।
- (6) आवश्यक वस्तु सूची।
- (7) संभव उत्पादन और डिलीवरी कार्यक्रम।
- (8) उत्पादन लागत।
- (१) उत्पाद सेवा और अनुरक्षण
- (10) उत्पादन नियंत्रण और उत्पादकता बढ़ाना।
- (11) उत्पाद या प्रक्रिया सुधार।

किसी उद्यमी को उत्पादन प्रबंधन के लिए निम्नलिखित कार्यों का नियोजन/कार्रवाई करनी होगी:

- (1) आवश्यकताओं का पता लगाना : तकनीकी, मानवशक्ति एवं वित्तीय।
- (2) कुल उत्पादन सुविधाओं की डिजाइनिंग।
- (3) आउटपुट स्तर का नियोजन और स्थापना।
- (4) अपेक्षित इन्वेंटरी स्तर का नियोजन और रखरखाव।
- (5) कार्य इनपुट और आउटपुट की मानिटरिंग तथा नियंत्रण।
- (6) कार्य-प्रदर्शन का मूल्यांकन और फीडबैक।
- (7) जब जरूरी हुआ संशोधन और पुनर्नियोजन। उत्पादन शुरू करने से पूर्व किन बातों का ख्याल रखना चाहिए?

जैसा कि पहले वर्णन किया जा चुका है कि

प्रस्तुति
हरीश आनंद
विरिष्ठ संपादक
हरेन्द्र प्रताप
संपादक

किसी उद्यमी को आशातीत आउटपुट स्तर अर्थात् उत्पादन का ध्यानपूर्वक नियोजन कर लेना चाहिए। सर्वप्रथम यह निर्णय उत्पादन टेक्नोलॉजी के बारे में करना होगा। किसी खास विनिर्माण तकनीक का चयन करने या कुछेक औजारों का चयन करना एक दीर्घावधि निर्णय है जो कि लंबे समय तक के लिए होता है।

प्रौद्योगिकी का चयन उद्यमी द्वारा अपनाए जाने वाले 'प्रोडक्ट मिक्स' पर निर्भर नहीं करेगा। कई मामलों में एकल उत्पाद के उत्पादन के लिए बहुत विशिष्ट प्रकार की प्रौद्योगिकी का चयन सही नहीं होगा क्योंकि एक उचित प्रोडक्ट मिक्स को अपनाए जाने की संभाव्यता ज्यादा कारगर होगी। प्रौद्योगिकियों का चयन करते वक्त उद्यमी को विभिन्न दरों, विभिन्न बाजारों और मूल्य दायरे वाली विभिन्न मशीनों और उपकरणों के चयन में बहुत कठिनाई हो सकती है। इस चरण में किसी खास किस्म के उपकरण के बारे में कोई भी खरीद का फैसला करने से पूर्व पूरा विश्लेषण किया जाना चाहिए। सामान्यत: मशीन भले ही उत्पादों को एक रेंज, आकार या सेट के अनुसार तकनीकी रूप से तैयार करने में सक्षम होती है, उन्हें एक उत्पाद के लिए डिजाइन किया जाता है और जब उस उत्पाद के लिए इसका प्रयोग किया जाता है तो यह बहुत अच्छी तरह काम भी करती है। लेकिन जब उत्पाद स्पैक्ट्रम में अन्य प्रयास किए जाते हैं तो उसकी दक्षता कम हो जाती है। उपयुक्त इस्तेमाल (कम प्रयोग से बचने और साथ ही ओवरलोडिंग से बचाव करने) के लिए बाजार क्षमताओं और परिवर्तनों के अनुरूप व्यवस्था को ध्यान में रखना होगा। प्रौद्योगिकी का चयन करने से पूर्व बाजार में उतर रही नई प्रौद्योगिकी विशेष के चयन से प्राप्त उत्पादों के बारे में पूरा अध्ययन करके ही इनका चयन करना चाहिए।

उपकरण विशेष का चयन समस्या को और गहरा देता है, एक ही उत्पाद के उत्पादन हेतु जरूरी एक से अधिक बहुत सी मशीनें हैं। विभिन्न प्रक्रियाओं के प्रयोग से विभिन्न मशीनों की उत्पादन क्षमता में भी अंतर हो सकता है। ऐसी स्थिति में एक उद्यमी को विभिन्न चरणों में विभिन्न मशीनों के उत्पादन के बीच तालमेल बनाकर रखना चाहिए ताकि अपेक्षित मात्रा में तैयार माल उपलब्ध हो सके।

उदाहरण

किसी ड्रिलिंग मशीन की उत्पादन क्षमता 100 यूनिट प्रति

माह है जबिक किसी शेपिंग मशीन की उत्पादन क्षमता मात्र 70 यूनिट प्रति माह है। उद्यमियों को परामर्श दिया जाता है कि वे उत्साह में आकर 100 यूनिट की क्षमता वाली शेपिंग मशीन और प्रोडक्ट मिक्स तथा क्षमता की दृष्टि से प्रत्येक मशीन के कार्यों का विश्लेषण करना चाहिए जिसे बाजार और मूल्य सूचना से भी जोडकर देखा जा सकता है।

उत्पादन आयोजना और उत्पादकता क्या है?

उत्पादन आयोजना का संबंध उपलब्ध संसाधनों को मिलाए बगैर या उन्हें मिलाकर उत्पादन आयोजना से होता है। लेकिन उत्पादकता का अर्थ है उन्हीं उपलब्ध संसाधनों से अच्छा प्रदर्शन (आउटपुट) हासिल करना। नए उद्यमियों के लिए, प्रचालन स्तर पर, उत्पादकता का बहुत महत्व है। लेकिन इसका यह भी मतलब नहीं है कि जरूरी औजारों की खरीद न की जाए। उत्पादकता का संबंध कंपनी की स्थाई संपत्तियों का पूरी क्षमता और समयबद्ध कार्यक्रम के तहत पूर्व उपयोग करने से है। इसका संबंध इनपुट-आउटपुट संबद्धता, प्रोसेस में चल रहे कच्चे माल, ऊर्जा और सेवाओं के प्रयोग से भी है। समय अनुसार आउटपुट में सुधार हो सकता है। लेकिन इनपुट के मामले में या गुणवत्ता के मामले में इसमें कमी हो सकती है। अत: सभी <mark>प्रमुख क्षेत्रों को मानिटर करना औ</mark>र एक या अन्य का गहराई से <mark>अध्ययन करना तथा उनमें सुधार लाना बहुत आवश्यक है।</mark> अधिकतम स्तर पर पहुंचने के बाद सामान्यत: और सुधार की गुंजाइश नहीं रहती।

किसी भी उद्यमी के लिए यह आवश्यक है कि वह कंपनी में उचित सांगठनिक माहौल बनाए जो कि सामूहिक उत्पादन भावना उत्पन्न करने हेतु अनिवार्य शर्त है।

डिलीवरी कार्यक्रम तय करना

नए उद्यमियों को उत्पादन नियोजन कार्यक्रम तैयार करने का परामर्श दिया जाता है ताकि एक डिलीवरी कार्यक्रम बनाया जा सके। जब तक कि संपूर्ण प्रक्रिया की उत्पादन क्षमता को एक महत्वपूर्ण आउटपुट के रूप में नहीं देखा जाता, किसी विशेष डिलीवरी कार्यक्रम में सहमत होना या उसे मानना बहुत मुश्किल होता है।

उत्पादन नियोजन कार्यक्रम विनिर्माण और कंपनी के कामकाज की प्रक्रिया के आधार पर सप्ताह या दिन/शिफ्ट के

जब बुद्धिमान नाराज होते हैं तो वे अपनी समझदारी का परिचय देते हैं



हिसाब से तय किया जा सकता है। विस्तृत कार्यक्रम और उत्पादन आउटपुट से कच्चे माल और प्रोसेस मैटीरियल्स की जरूरत को तय करने में मदद मिलती है। दरअसल न केवल उत्पादन बल्कि वित्त, विपणन आदि जैसे प्रबंधन के अन्य क्षेत्रों का भी ब्ल्यू प्रिंट तैयार होना चाहिए।

उत्पादकता में कमी ला<mark>ने वाले</mark> कारक

उत्पाद के डिजाइन या विशेषताओं में कमी

- (क) उत्पाद के ख<mark>राब डि</mark>जाइन अत्यधिक आर्थिक प्रक्रिया के प्रयोग में <mark>बाधक</mark> होते हैं।
- (ख) मानकीकरण की कमी उच्च उत्पादन प्रक्रिया के प्रयोग में बाधक रहती है।
- (ग) गलत गुणवत्ता मानकों से अनावश्यक काम बढ़ता है।

गुणवत्ता को कैसे नियंत्रित करें?

नए उद्यमियों को सामान्यत: गुणवत्ता के बारे में भ्रांति रहती है। व्यवसाय में उत्कृष्ट गुणवत्ता की हमेशा जीत होती है लेकिन स्वीकार्य गुणवत्ता से ग्राहकों की संतुष्टि के साथ व्यवसायी <mark>पर्याप्त लाभ भी अ</mark>र्जित करता है। बाजार आवश्यकताओं, मूल्य, लाभ और लागत के साथ-साथ गुणवत्ता को बरकरार रखा जाना भी महत्वपूर्ण है। गुणवत्ता उत्पादन प्रणाली से आती है। विशिष्टताएं सीमाओं की सकारात्मक और नकारात्मक रेंज के साथ परिभाषित होनी चाहिए ताकि गुणवत्ता को सैद्धांतिक मान्यताओं के दायरे की अपेक्षा उपाय के तौर पर देखा जा सके। गुणवत्ता नियंत्रण का अर्थ प्रत्येक स्तर पर गुणवत्ता मानदंडों के अनुरूप अंतिम उत्पाद की जांच करना नहीं है। इसके अंतर्गत विभिन्न स्तरों पर <mark>अर्थात्</mark> कच्चे माल की जांच से लेकर डिस्पैच तक एक सिस्टम को डिजाइन करना है। गुणवत्ता न केवल उपकरणों का परिणाम है बल्कि यह इसमें शामिल लोगों के व्यवहार, रवैये और वचनबद्धता के साथ-साथ नियंत्रण प्रणाली पर निर्भर करता है।

उत्पादन को कैस<mark>े नियोजित और नियंत्रित किया जाए</mark>?

जब एक बार उपकरणों, प्रक्रिया और प्रमुख प्रचालन ढांचे को चिन्हित कर लिया जाता है तो महत्वपूर्ण और मुख्य मुद्दा बाहर अपेक्षाएं अर्थात् आपके ग्राहक होते हैं।

विनिर्माण के अकुशल तरीके

- (क) गल<mark>त मशी</mark>न का प्रयोग करना।
- (ख) प्रक्रि<mark>या का</mark> ठीक से प्रचालन नहीं करना।
- (ग) गलत <mark>औजारों</mark> का प्रयोग।
- (घ) गलत <mark>लेआउट</mark> से व्यर्थ का काम।
- (ङ) आपरेटर <mark>के ग</mark>लत तरीके अपनाना।

अप्रभावी नियोजन

- (क) अत्यधिक <mark>उत्पाद</mark> वैविध्य।
- (ख) बहुत अधि<mark>क परिव</mark>र्तित डिजाइन।
- (ग) कच्चे माल <mark>की क</mark>मी।
- (घ) संयंत्र ठप्प <mark>पडना।</mark>
- (ङ) औजारों की अनुपलब्धता।

कामगारों की वजह से अप्रभावी समय-प्रबंधन

- (क) अनुपस्थिति।
- (ख) देर से आना।
- (ग) बेकारी।
- (घ) लापरवाही भरी कार्य-संस्कृति।

उत्पादकता को कैसे बढ़ाएं?

उत्पादकता की परिभाषा आउटपुट/इनपुट का अनुपात है। इससे उत्पादकता बढ़ाने के वैकल्पिक उपायों का भी पता चलता है। मूल्य के अनुपात में किसी भी तरह की वृद्धि से उत्पादकता में वृद्धि इंगित होती है। हम डिनोमिनेटर में कोई भी परिवर्तन किए बिना न्यूमिरेटर बढ़ा सकते हैं, हम न्यूमिरेटर को बगैर छुए डिनोमिनेटर कम कर सकते हैं या डिनोमिनेटर में मामूली सी वृद्धि इसके समानुपात में न्यूमिरेटर में उच्चतर वृद्धि से अनुपात बढ़ा सकते हैं।

उत्पादकता बढ़ाने के लिए निम्नलिखित कदम उठाए जा सकते हैं:

- उचित तरीके अपनाएं।
- अपनी मशीनों का उचित रखरखाव करें।
- अपने लिए अग्रिम रूप में सामान की योजना बनाएं।
- अपने औजारों के लिए योजना बनाएं।
- अपने कर्मचारियों को प्रेरित करें।

यदि आपको बोलना नहीं आता है तो बेहतर होगा कि आप शांत रहना सीखें

उत्पादन, नियोजन और नियंत्रण

- उत्पादन, नियोजन और नियंत्रण में अनिवार्यत: आपके संयंत्र
 में अग्रिम रूप से वास्तिवक कामकाज का उत्पादन नियोजन शामिल रहता है।
- इससे प्रत्येक आइटम, भाग या असेम्बली से संबंधित क्रियाकलापों के सही क्रम की स्थापना में मदद मिलती है।
- इससे प्रत्येक महत्वपूर्ण आइटम, असेम्बली और तैयार उत्पाद की आरंभिक तथा तैयार होने की तिथियां तय होती हैं।
- इसके तहत उत्पादन के लिए आवश्यक ऑर्डर जारी करने की प्रक्रिया और उनके फालो-अप की बातें आती हैं ताकि यह देखा जा सके कि संपूर्ण प्रक्रिया न्यूनतम समायोजन के साथ समय पर पूरी होती है या नहीं।

इस बारे में निम्नलिखित कदम उठाए जा सकते हैं:

ऑर्डर लेने के लिए अपनी क्षमता का निर्धारण करें

कोई भी ऑर्डर स्वीकार करने से पूर्व इस बात का स्पष्ट विचार होना चाहिए कि आपके संयंत्र की उत्पादन क्षमता क्या है। सामान्यत: संयंत्र की क्षमता को प्रति घंटा, प्रति शिफ्ट या प्रतिदिन की उत्पादन इकाइयों के रूप में देखा जाता है। ये यूनिटें विभिन्न उद्योगों में भिन्न-भिन्न होती हैं। कपड़ा उद्योग में इसे टनों में धागे या मीटरों में फैब्रिक के रूप में व्यक्त किया जाता है। फाउण्ड्री में इसे सामान्यत: टनों में व्यक्त किया जाता है। छोटी-मोटी वस्तुओं जैसे कि एस्ट्रे या स्टैप्लरों को संख्या में व्यक्त किया जाता है।

मशीनरी की दुकानों और जनरल इंजीनियरिंग वर्कशॉपों के मामले में भिन्न तरह के उत्पाद और भिन्न-भिन्न आकार के होते हैं। इस प्रकार उत्पादन क्षमता का निर्धारण बहुत कठिन है। वास्तविक उत्पादन दर तय करने से पूर्व आवाजाही, पदार्थ, औजारों, फिक्सचर्स आदि में उतार-चढ़ाव को ध्यान में रखा जाना चाहिए। इसलिए मशीन टूल्स की क्षमता को उत्पाद इकाइयों के रूप में सामान्यत: एकदम सही करके नहीं आंका जा सकता। यह केवल उन्हीं मामलों में आसान होता है जहां बड़ी संख्या में एक ही प्रकार के उत्पादों को संख्या, दर्जन या सैकड़ा प्रति घंटा की दर से दर्शाया जाता है।

इस कठिनाई की वजह से मशीन टूल उद्योग और ऐसे अन्य उद्योगों में जो कि बड़ी संख्या में कई प्रकार की और विभिन्न आकारों में जैसे कि प्रिंटिंग प्रेस में कार्य होता है, यह ज्यादा उचित होगा यदि उत्पादन क्षमता को उत्पादन इकाइयों की बजाए "समय" (घंटों में) के आधार पर दर्शाया जाए। ऐसे उद्योगों में जहां वैज्ञानिक अध्ययनों के जिए अर्थात् समय अध्ययन के जिरए उत्पादन हेतु अपेक्षित समय का सही निर्धारण किया गया है, शैड्यूलिंग, उत्पादन और वेतन भुगतान से संबंधित संपूर्ण गणना 'मानक घंटों' में तय की जा सकती है। उत्पादन क्षमता को भी मानक घंटों में देखा जा सकता है।

प्रदर्शन की वजह से क्षमताओं में भिन्नता

कार्यक्षमता के माप या उत्पादन की उत्कृष्ट दर के विश्लेषण से यदि उत्पादन की दर निर्धारित की जाती है तो यह भारतीय उद्योगों में सामान्यत: प्राप्त की जाने वाली दर से अधिक पाई जाती है। इसमें विविधता गलत पर्यवेक्षण, कामगारों की ट्रेनिंग का घटिया स्तर, विविध जलवायु और प्रेरकता की कमी के कारण होती है। उत्पादित मात्रा और अपेक्षित मात्रा के बीच अनुपात को "प्रदर्शन" के रूप में देखा जाता है। कामगारों की कार्यक्षमता को उपयुक्त प्रशिक्षण और उनमें प्रोत्साहन के जिए प्रेरणा भरकर बढ़ाई जा सकती है। इसमें उचित और नियोजित पर्यवेक्षण के जिए प्रदर्शन का उच्च स्तर बहुत महत्वपूर्ण होता है।

इससे उसकी लाभप्रदता और प्रतियोगिता क्षमता में वृद्धि होती है। उन्नत उद्योगों में अपने श्रमिकों का कार्य प्रदर्शन बढ़ाने के लिए खुद के कार्यक्रम होते हैं। श्रमिकों की कार्यक्षमता धीरे-धीरे बढ़ती रहती है। आने वाले महीनों में अपेक्षित प्रदर्शन की संभावनाओं का पूर्ण विश्वास के साथ अंदाजा लगाया जा सकता है।

अनुपस्थिति की वजह से क्षमता में विविधता होना

प्रदर्शन के अलावा अनुपस्थिति की दर भी उत्पादन क्षमता को प्रभावित करती है। इससे कोई फर्क नहीं पड़ता कि श्रमिक अधिकृत तौर पर या अनिधकृत रूप से अनुपस्थित है, श्रमिक काम के लिए तो उपलब्ध नहीं होता। भारत में कामगारों की पारिवारिक पृष्ठभूमि के अनुरूप माह दर माह मौसमी उतार-चढ़ाव होता है। इस प्रकार जिन महीनों में अनुपस्थिति अधिक होती है तो विभागों की उत्पादन क्षमता घट जाती है। इस कारण पर ज्यादा ध्यान नहीं दिया जाता है।

प्रदर्शन और अनुपस्थिति की जानकारी के साथ उत्पादन क्षमता का अनुमान लगाया जा सकता है। नीचे दिए उदाहरण से स्थिति स्पष्ट हो जाएगी। माना कि किसी अनुभाग में 10 फिटर हैं, प्रत्येक स्वतंत्र रूप से कार्य करता है। हम मार्च और मई माह के बारे में अनुमान तैयार कर रहे हैं। मई में इस फिटर समूह का प्रदर्शन 75 प्रतिशत रहने और अनुपस्थिति 20 प्रतिशत रहने का अनुमान है। हम प्रति सप्ताह प्रति फिटर के 48 घंटे कार्य करने के आधार पर उत्पादन क्षमता की गणना कर सकते हैं।

प्रति सप्ताह कुल समय = 10 × 48 = 480 घंटे अनुपस्थिति की वजह से कुल नष्ट हुआ समय = 20 प्रतिशत = 96 घंटे

मानकों के अनुरूप उपलब्ध समय = 384 घंटे का 75 प्रतिशत = 288 मानक घंटे

इस प्रकार मई के प्रत्येक सप्ताह में समूह से 288 मानक घंटों के समकक्ष कार्य किए जाने की आशा की जा सकती है। यह केवल 60 प्रतिशत बनेगा। सामान्यत: जिसकी आशा की जाती है। इस पहलू की परवाह न किए जाने और अधिक मात्रा में काम की आशा रखने से गलत नियोजन और शेड्यूल को जन्म मिलता है।

2. अपेक्षित ऑर्डरो<mark>ं को</mark> हाथों हाथ संकलित करें

ग्राहक आपसे फो<mark>न या पुत्रों</mark> या ई-मेल के जरिए अथवा <mark>व्यक्ति</mark>गत तौर पर संपर्क करके पूछताछ करते हैं।

इस पूछताछ के आधार पर आप अपनी कोटेशन्स देते हैं। कुछेक कोटशनों को स्वीकार कर लिया होता है और कुछेक के बारे में उत्तर का इंतजार रहता है। अब, यदि आप अपने कार्य को नियाजित करना चाहते हैं, तो आपको लंबित ऑर्डरों के बारे में बस जानकारी होनी चाहिए। छोटे से संयंत्र के बारे में आप सब कुछ याद रख सकते हैं और अपने दिमाग से नियोजित कर सकते हैं। लेकिन यदि आपके सहयोगियों को आपके विचारों पर कार्रवाई करनी है तो यह ज्यादा अच्छा रहेगा कि सूचना किसी कागज के टुकड़े पर उपलब्ध हो। यदि आप भूल जाते हैं तो भी यह मददगार हो सकता है। हम आपको निम्नलिखित सूचनाओं का रिकॉर्ड रखने की सलाह देंगे:-

- (क) ग्राह<mark>क का नाम और पता</mark>
- (ख) पूछताछ की तिथि
- (ग) ग्राहक की संदर्भ संख्या
- (घ) किये जाने वाले कार्य का विवरण
- (ङ) को<mark>टे</mark>शन संख्या
- (च) <mark>कोटेशन भेजने की</mark> तिथि
- (छ) ऑर्डर प्राप्त होने की तिथि
- (ज) ऑर्डर किसके द्वारा प्राप्त किए जाने हैं
- (झ) पदार्थीं, औजारों, पैकेजिंग, परिवहन, ओवरहेडों आदि की कीमत
- (न) आशातीत लाभ

चार्ट-1 में दर्शाया गया प्रपत्र आपकी मदद कर सकता है

पूछताछ फार्म

क.ख.ग. एंड <mark>क</mark> ं.	कोटेशन सं.	तिथि
ग्राहक का नाम और पता	ऑर्डर प्राप्त करने की तिथि संभावित मूल्य रुपए पैसे पदार्थ	कब तक संभावित है
संदर्भ सं.	श्रम	
टेलीफोन सं.	अन्य	
ई-मेल	ओवरहेड	3
ड्राइंग नं., यदि कोई है	प्रक्षेपित लाभ	
	अभ्युक्तियां	

चार्ट-2

क.ख.ग. एंड कं.	जॉब कार्ड		
ऑर्डर नं.	तिथि		
पार्ट			
कार्यक्रम सं. कार्य प्रकार	मात्रा	अनुमानित समय	मात्रा
	कार्य प्रणाली	स्वीकृत	अस्वीकृत
आरंभ होने वाला समय	कामगार क <mark>ा नाम</mark>		
समाप्त होने का समय	मात्रा अनुमो <mark>दित करने वाला</mark>		
लिया गया समय	पर्यवेक्षक के हस्ताक्षर		

इस संदर्भ में हम आपको सुझाव देंगे कि आप वह तरीका अपनाएं जो 'गैर चार्ट' के नाम से जाना जाता है।

गैर चार्ट में शामिल सिद्धांत बहुत सुविधाजनक है, और प्रभावी भी। गैर चार्ट में शेड्यूलिंग, डिस्पैचिंग और कंट्रोल में निम्नलिखित मौलिक कारक प्रयोग में लाए जाते हैं:

- (i) सुविधाएं अर्थात् कामगार, मशीन या संयंत्र, जो कि उत्पादन करते हैं, और
- (ii) उत्पादन में लगने वाला समय। उस समय में किए जाने वाले कार्य की मात्रा।

बाईं ओर के कॉलम में सुविधाओं की सूची रखने की परंपरा है तथा बाकी शीट का प्रयोग समय के लिए किया जाता हैं। रूलिंग चार्ट प्रयोगकर्ता द्वारा ग्राफ पर रेखांकित किया जा सकता है और समय के प्रत्येक भाग को कुछ पैमाना दिया जा सकता है।

गैर चार्ट विशिष्ट मदों के उत्पादन या ऑर्डरों को समय प्रगति दर्ज करने और नियोजन हेतु प्रयोग किए जाते हैं। ऐसे चार्टों में सुविधा के लिए आइटमों की प्रकृति या इसके मैन्युफैक्चरिंग आर्डर नम्बर के हिसाब से परिवर्तित होता रहता है। गैर चार्ट की कीमत विभिन्न कारकों के मध्य संबंध को साफ-साफ और तेजी के साथ दर्शाने की इसकी सक्षमता पर निर्भर करती है। इन चार्टों में प्रस्तुत चित्र द्वारा उन स्थितियों पर ध्यान केंद्रित किया जाता है जिनकी ओर ध्यान दिए जाने की आवश्यकता है। हालांकि गैर चार्ट तैयार करने और उसके रखरखाव के लिए काफी लिपिकीय प्रयास करने की जरूरत रहती है, प्रबंधन के लिए यह एक महत्वपूर्ण स्रोत है।

कार्यक्रम के अनुरूप कार्य आबंटन करें

अपने वायदों को पूरा करने के लिए अब आपको आगे कदम बढ़ाते हुए अपने द्वारा तैयार कार्यक्रम के मुताबिक कार्य का आबंटन शुरू करना होगा। अपने भंडारों की जांच करें कि सभी तरह का सामान पहुंच गया है या नहीं। इसकी जांच करें कि औजार और सहायक उपकरण तैयार हैं या नहीं।

पर्यवेक्षण और समन्वय

आबंटित कार्य: यह आपके काम की महत्वपूर्ण कड़ी है। यह एक तरह से योजना तैयार करने और सुंदर लाइनों तथा चार्ट के साथ एक बढ़िया शीट तैयार करना है और दूसरा प्रयास अपनी योजना को क्रियान्वित करना है। इसमें आपके प्रयासों की जरूरत है। लगातार जांच करने और आपके सहयोगियों को आबंटित कार्य का पर्यवेक्षण करने के लिए आपको एक जॉब कार्ड का रखरखाव करना चाहिए जिसमें निम्नलिखित विवरण दर्ज किया जा सकता है:

- 1. कामगारों की संख्या
- 2. कार्य आरंभ करने/पूरा करने की तिथि

- 3. कार्यों की संख्या
- 4. उन भागों का <mark>ब्यौरा जि</mark>नसे संबंधित कार्य किया जाना है
- 5. अनुमानित स<mark>मय, जो</mark> लगेगा
- 6. वास्तविक समय जो लिया गया
- 7. अस्वीकृत, य<mark>दि कोई</mark> है
- 8. अस्वीकृति के कारण
- 9. अभ्युक्तियां

चार्ट में प्रदर्शित प्रपत्र से आपको मदद मिल सकती है।

कुछ और प्रमुख बातें

तेजी के साथ अचानक प्राप्त ऑर्डरों की पूर्ति :

अचानक तीव्रता के साथ निपटान वाले ऑर्डर आपको सिरदर्द देते हैं। इस तरह के ऑर्डरों से आपकी नियोजन प्रक्रिया बिगड़ सकती है। इसलिए आपको इन चुनौतियों का मुकाबला करने के लिए तैयार रहना चाहिए। अपने उत्पादित माल का कुछ हिस्सा इस तरह के ऑर्डरों की पूर्ति के लिए अलग करके रखने का प्रयास करें। इस क्षमता के लिए कोई कार्य निर्धारित न करें। एक-दो महीने के प्रचालन के उपरांत आपको इस तरह के ऑर्डरों के बारे में जानकारी मिल जाएगी। इससे आपको यह समझ आ जाएगी कि आप अपने संयंत्र की कितनी क्षमता को अनियोजित रखा सकते है।

असामान्य अस्वीकृति से निपटना

मान लीजिए कि किसी खास ऑर्डर की पूर्ति के लिए आप 100 आइटमों का उत्पादन करते हैं। आपको मालूम है कि संभावित अस्वीकृति करीब 10 प्रतिशत तो रहेगी ही। इसलिए आप 110 के लिए नियोजन करेंगे। लेकिन अचानक आपको असामान्य रूप से अनुमानित 10 प्रतिशत के मुकाबले 30 प्रतिशत की अस्वीकृति की स्थिति का सामना करना पड़ सकता है। इस तरह की स्थिति से निपटने के लिए अच्छा रहेगा कि आप कुछ अनियोजित अतिरिक्त माल तैयार कर लें।

समीक्षा करना फायदेमंद

कुछेक माह अपना संयंत्र चलाने के उपरांत, आपको लग

सकता है कि आपके उपकरणों और मशीनरी का समुचित उपयोग नहीं हो पा रहा है। आपके लोग पूरी तरह काम में नहीं लगे हैं और उनका कार्य प्रदर्शन बहुत कम है। जांच करिए ऐसा क्यों है?

- (क) काम की कमी
- (ख) बिजली आपू<mark>र्ति की</mark> अनुपलब्धता
- (ग) बिजली आपूर्त<mark>ि में बा</mark>र-बार बाधा
- (घ) बार-बार मशीन <mark>ब्रेकडा</mark>उन
- (ङ) अपेक्षित कार्यों में बार-बार परिवर्तन जिससे बहुत अधिक स्थापना कार्य करना पड़े
- (च) अतिरिक्त अनुत्पादक कार्य के लिए जरूरी उचित मार्गदर्शन का अभाव।

वास्तविक कारणों का पता लगाएं और सुधारात्मक उपाय करें। आपके कामगारों के घटिया प्रदर्शन के विभिन्न कारणों में निम्नलिखित शामिल हैं:

- (क) कार्य से जुड़े प्रशिक्षण का अभाव
- (ख) प्रभावी पर्यवेक्षण का अभाव
- (ग) प्रेरणा का अभाव
- (घ) अनुचित निर्देश

कामगारों के उपयोग में सुधार ऊपर वर्णित किसी भी कारण की वजह से खर्च हुए समय को कम करके किया जा सकता है।

नियोजन उत्पादन : एक अभ्यास

मान लीजिए कि आप एक ऐसे लघु उद्यमी हैं जो किसी बड़े निर्माता हेतु हिस्से-पुर्जों का निर्माण करता है। आपको नियमित ऑर्डर प्राप्त होते हैं। आपको लैथ, ड्रिल और मिलिंग मशीनों पर काम करना होगा।

आपकी कंपनी के पास 6 लैथ, 4 ड्रिलिंग मशीन और 3 मिलिंग मशीनें हैं। आपके हाथ में ऑर्डर इस प्रकार से है। प्रत्येक ऑर्डर के लिए विभिन्न प्रचालन कार्यों हेतु अनुमानित समय भी नीचे दिया गया है कि एक दिन को 8 घंटे की शिफ्ट के लिए प्रभावी कार्य समय 6 घंटे है।

उत्पादन हेतु एक विस्तृत योजना तैयार करें:

तिथि	ऑर्डर नं.	लैथ समय घंटों में	ड्रिलिंग समय घंटों में	मिलिंग समय घंटों में
12.7.2010	2413	117	65	40
12.7.2010	2474	80	39	22.5
30.7.2010	2479	52	26	58
3.8.2010	2483	39	52	42
5.8.2010	2491	39	55	17
7.8.2010	2500	47	58	73

अपने कर्मचारियों को निर्देश जारी करके अपना उत्पादन आरंभ करने से पूर्व इस बात की जांच कर लें कि क्या आपके पास निम्नलिखित है:

- 1. संपूर्ण इंजीनियरिंग ड्राइंग
- 2. विशेष विवरण के साथ संपूर्ण हिस्से-पुर्जों की सूची
- 3. संपूर्ण प्रोसेसिंग सूचना
- 4. मैटीरियल, <mark>टूल्स और पार्ट्स इन्वेन्टरीज</mark>

- 5. समूह के पास उपलब्ध मशीन घंटे और आकार
- 6. कार्य वर्गीकरण से उपलब्ध मानव घंटे
- 7. स्पीड, फीड आदि से संबंधित उपकरणों की स्थिति
- 8. उत्पादन और ऑर्डर और प्रोसेसिंग
- 9. उत्पादन फालो-अप प्रक्रिया
- 10. कार्य की रिकार्डिंग स्थिति

क्रमशः अगले अंक में.....



छलांग लगाने से पहले बार-बार सोचें



पंजी. सं. आर. एन. **28812/76** Regd. Number RN 28812/76 पंजी. सं. डी (डी) 580 Regd. Number D(D) 579 PDCSI.57.08.2010 (Bilingual)



मासिक लघु उद्योग समाचार द्विभाषी

देश के सभी सूक्ष्म, लघु एवं मध्यम उद्यम - विकास संस्थानों में भी उपलब्ध

सम्पादकीय सूचना के लिए सम्पर्क करें विज्ञापन व प्रचार प्रभाग विकास आयुक्त (एमएसएमई) निर्माण भवन, नई दिल्ली-110108 वार्षिक सदस्यता के लिए सम्पर्क करें प्रकाशन नियंत्रक प्रकाशन विभाग सिविल लाइंस, दिल्ली-110054