## **Seminar Report**

## One Day HRD Seminar Covering BIS Standards for Jute and Textiles and HRD Need for Jute Industry

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The inaugural session of the "One Day HRD seminar covering BIS standards for jute and textiles and HRD needs of jute industry" was organized at Kennedy Hall, Department of Jute and Fibre Technology, Institute of Jute Technology, University of Calcutta on 17th February 2015 at 10.00 AM with the whole-hearted introduction by Prof. S K Ghosh, Institute of Jute Technology (IJT), followed by the welcome address by Prof. A K Samanta, IJT, the emphatically welcoming Hon'ble Jute Commissioner, Government of India; BIS scientists; researchers and experts; and jute technologists from different research organizations; senior management and representatives of Jute Industry; personnel of National Jute Board; and graduate and post graduate students of the different government textile engineering colleges.

This was followed by a very significant speech of Shri J K Gupta, Senior Scientist, Bureau of Indian Standards (BIS) addressing the crucial role of the bureau in standardizing different products including jute and textiles since 1947. He lucidly elaborated the role of BIS in emphasizing regular review of the standards to keep them in-line with modern technological developments and also to harmonize them with international standards or their equivalents. He portrayed a well-orchestrated plan for improved adoption of Indian standards by industry, large scale purchasing organizations, statutory bodies and academic organizations.

Shri Gupta's speech was prolifically extended by Shri S K Chanda, Chairman of Technical Committee,

products, giving special stress on the role of BIS in drafting standards to register the utility of cost effective, light weight jute grain bags, like 10-30 kg. The Bureau have already taken initiative in widely circulating these draft standards for greater interaction with public and private sector undertakings. Shri Chandra also expressed his sincere gratitude to Dr. S Gupta, IAS, for his instrumental role as an active Chairman of TX-03 Committee of BIS in concretizing a tangible status for jute and jute related products in BIS.

IJMA who pointed out the effective implementation

of BIS standards for jute and several jute related

Shri A Todi of M/s. Ludlow Jute and Specialities Ltd. very passionately pointed out the urgent need for a jute icon as a mark of identification along with the requirement of standards, explaining its eco-friendliness and clearly demarcating it from the synthetic fibres. He expressed his firm belief that the jute will regain its national pride in future.

Dr. S Gupta, the Hon'ble Jute Commissioner, Ministry of Textiles, Govt. of India and the present Chairman, TX-03 Committee of BIS deliberated in his inaugural addressed very need of the young jute technologists in rendering their vivacious service to the jute industry on one hand and the significance of standardization of jute and jute related products by a reputed standard formulating and certifying agency like BIS on the other. He expressed his strong desire to identify and analyse the issues that are preventing the young jute technologists of this generation to go to jute industry. He pointed out that the young jute technologists should try to overcome certain prime issues like the service condition and payment terms existing in the present

day jute mill premises coaxed with labour handling issues, and should come forward with full energy to help in reviving its once lost glory and pride. Switching over to the need for standardization of jute and its products, he tried to make the audience feel about the significance of the same for assuring the quality to the customers, irrespective of its identity as a small scale private or corporate or government sector. He stated that the standards of products indulge competition and open newer markets in one hand while restrict accessibility of the same to certain obtrusive exporters on the other hand. He prophesied that in the days to come it would be of utmost importance to standardize a jute product in all respect including its form, design and colour and if a product has to be flourished globally its standardization is extremely substantial in its land of origin.

The inaugural session was concluded by a vote of thanks and best wishes offered by Prof. S K Ghosh. Worthy to mention here that the Geotextile Laboratory of the Department has achieved the prestigious recognition of National Accreditation Board for Testing and Calibration Laboratories (NABL).

The first technical session of the Seminar was marked by a detailed presentation of Shri J K Gupta, Senior Scientist, BIS, New Delhi regarding the standardization of jute and textile products. He depicted quite clearly the contribution of Bureau of Indian Standards. Shri Gupta's presentation reflected textile industry's share of 14 per cent of the total production in the country, associated with 4 per cent of GDP employing about 45 million people across the country. He also mentioned growth of the nation by exporting textile products, earning 39 billion USD in the year 2013-14 as against 34 billion USD in the year 2012-13. According to his census, India produces 70 percent of the world's total jute growing 1527.7 thousand tonnes during 2013-14 as against 1591.3 thousand tonnes in the year 2012-13. His prolific census predicts that India will earn about 100 billion USD by 2017 in domestic textile and apparel sector by producing about 112 million square meters of fabric. Besides putting up the recent statistical census and databank of the Textile Industry's share with respect to its production and GDP, he nicely elucidated the role of BIS in giving utmost thrust for promotion and protection of consumer interest for achieving the objectives of BIS. His presentation was marked with components like interchangeability, variety control, fitness for purpose, compatibility, maximum overall control of economy, human efforts, conservation of resources, etc. as some of the ingredients and parameters to amplify about the benefits of standardization. He gave a vivid description about the hierarchy and entire organizational structure of BIS comprising one Executive Committee, one standard Advisory Committee, Divisional Council, Sectional Committee and Sub-Committee as well panels to look after the promotion of set-up standards, consumer affairs and grievances which eventually takes care of promotion and protection of consumer interest. He elaborated the entire procedure of adopting a product proposed for standardization by BIS based on the wise observations of an expert Technical Committee followed by a wide circulation of the drafted proposal amongst the public and registering their feedbacks. The observations and feedbacks of the general public on the matter under discussion are forwarded to one National Consensus Committee approval which is then forwarded to the Adoption Divisional Council. Shri Gupta specified that presently there are 14 areas of standardization for textiles. He has taken the pride to declare that about 1195 Indian Standards are available in the area of textiles till date. Shri Gupta's second part of the presentation was focussed on the already published BIS standards of jute, namely 14715:2000 (Reaffirmed 2004)-woven jute geotextiles [TXD 30: geotextiles and industrial fabrics], IS 14986:2001-jute geo-grid for rain water erosion control in road and railway embankment and hill slopes [TXD 30: geotextiles and industrial fabrics] and IS 16089:2013-jute agrotextile - sapling bags for growth of seedling/sapling. He also discussed about the prospective of the draft standards of second revision IS 14715 (Part-1) 2013 [DOC: TX 30(1253)] about jute geotextiles Part 1-strengthening of sub-grade in roadsspecification and IS 14715 (Part-2) 2013 [DOC: TX 30(1254)] about treated jute geotextiles Part 2- river bank protection. Side by side he suggested for a revision of IS 14986:2001. He also mentioned about list of standards formulated on jute including 36 licenses for A-twill jute fabric and 5 licenses for B-twill fabrics. Shri J K Gupta concluded his presentation illustrating the importance of standards SEMINAR REPORT 339

formulation for agrotextile, medical textile, geotextile, protective textile using laminated high density polyethylene.

The vivid and lucid presentation of Shri J K Gupta was followed by a lively presentation of Shri A K Bera, Scientist (E), BIS, New Delhi. He prolifically articulated the history of BIS right from its birth in 1947 and taken over of ISI by BIS under BIS Act -1986. He described about the mode of operandum of BIS operating through 5 regional offices, 32 branch offices in 24 locations and 8 independent laboratories across the country with its headquarter located at New Delhi. The audience came to learn from his presented census that out of the 9700 products chosen for standard formulation 912 products are certified by BIS while 90 products are under mandatory certification. He provided ample information about the third party certification scheme followed by BIS maintaining. thereby total transparency impartiality of the system. Mention has also been made about significance of ISI symbol, declaration of conformity (SDC) and foreign manufacturers' certification scheme (FMCS) since 2000. Shri Bera also spoke on the quality management system ISO 9001:2008, environment system ISO 14001:2004. management management ISO 18001, energy management system ISO 50001 and ISO/IEC-17021:2011. He enunciated about BIS auditor resources of India comprising both internal and external auditors and experts. Shri Bera concluded by attributing special emphasis on accreditation procedure followed by Quality Control of India (QCI) and the significance of training programmes set up by NITS in 1995.

The ongoing session then witnessed the deliberation of Shri Subhakriti Majumdar, Director General, IJMA. He deeply regretted the fact that many of the jute mills are still not following the standards of jute and its products and are of the view that the standard specifications may outline the conventional practise. Shri Majumdar is of the view that in order to bring an all-round change in the outlook for export of jute and its product and to assure its quality jute mills are needed to adhere to the standards.

The next speaker of the session was Shri T Sanyal, Chief Consultant, National Jute Board, Ministry of Textiles, Govt. of India. He explained in a very simple and lucid way the need for improving and optimizing the property parameters of fabrics to

obtain a more effective and economic product and standardization for them is indispensable. His speech included words of compliment for the latest accomplishment of Central Road Research Institute (CRRI), New Delhi and National Jute Board (NJB), Ministry of Textiles, Govt. of India in publishing a very informative State-of-the-art Report on "Use of Jute Geotextiles in Road Construction and Prevention of Soil Erosion and Landslides" which has been published by the Indian Roads Congress (IRC)— Special Report 21, 2012. He advocated that more studies and research works are required for administering and establishing the potentiality of prefabricated vertical jute drains (PVJD) which has been already tried for a total length of 40,000 meter in different parts of Australia. He also brought into light bituminized jute paving fabric (BJPF), the latest innovative outcome of JTM R&D Project, narrating its designing, engineering and application viewpoints. He expressed his profound regret regarding the fact that inspite of the techno-economic benefits of BJPF it is not getting a supportive and satisfactory response from the consumers. He emphasized on revision of some of the published standards of jute geotextiles with special mention to replace bitumen and other chemicals used for treating the geotextile with some eco-friendly additives; the research on which has already been initiated by the professors and experts of Indian Institute of Technology, Kharagpur and scientists of IJIRA, Kolkata. His concluding remarks were about the design methodology with respect to products and sites with special consideration to soil, which are in the offing and awaiting standardization.

The first technical session was backed by a short and thought provoking interactive session between the speakers and the audience in the august presence of the respected chairperson Prof. A K Samanta. Dr. A N Roy of NIRJAFT, Kolkata wanted to know about proposal for standards of upholstery fabrics, usage of hank per yard and applicability of nonwoven or composites replacing jute hessian in making nursery pods. His queries were answered by Prof. Samanta who briefly narrated the entire process of acceptance of the proposal of inclusion of a particular product in the BIS standard, its acceptability based on the observations of research organization followed by its validation by the concerned industry. Finally, the valid proposal is assessed by the respective sectional committee of the Bureau.

The post lunch technical session started off with a very lively presentation of Shri S K Chandra, Chairman, Technical Committee, IJMA. In a very vibrant and lucid way he defined the term HRD -Human Resource Development. He explained the need for thrust in certain crucial areas like training to be imparted to every tier of management, developing most superior workforce to accomplish the targeted goals, training for the new entrants and existing workers to learn more about the existing machineries and changes brought in the machineries. To epitomise he expressed his strong desire to motivate jute industry in career development scheme. He firmly believes that the so-called culture prevailing in the jute industry needs to be changed and HRD programme is indispensable in stimulating the change. He discussed in length about the pros and cons of the existing quality maintenance and production systems and opined to give more weightage on imparting practical knowledge to the workers along with the theoretical know-hows. He supplemented that the casual attitude of the workers needs to be reformed and replaced with more sincere approach by taking special care to eradicate certain baseless issues like absenteeism from work on flimsy grounds which may have direct adverse consequences to the production system of the Industry. He repeatedly expressed his holistic views about teaching the jute mill workers on what to be done and what not to be done which will help thereby in the overall development of the jute industry.

Shri Chandra was followed by another highly experienced and renowned jute stalwart Shri A Sinha Roy. He presented his opinions about the need of HRD for the management personnel of the jute industry. He also explained the usefulness of introducing short term courses on HRD in the ongoing academic courses of the Department so that the students, before stepping into the jute mill premises, can cultivate and prepare themselves about the different ways of dealing with the workers in the floor level, thereby maintaining a proper harmony between work and workers.

Shri Chandra's urge to change the culture prevailing in the jute industry by introduction of HRD and Shri Sinha Roy's strong desire to introduce short level courses on HRD in the regular academic courses of the Department were highly acknowledged and supplemented by Prof. Samanta. He autopsied the reasons of not joining the jute industry by the students

of this generation and also made the audience feel about the requirement of separate worker's training institute. He earnestly appealed to all the jute mills and research organizations like NIRJAFT, IJIRA, NJB, WEBCON to come forward with their knowledge on specialized product technology and its appropriate utilization in the upliftment of the workers. He concluded his presentation with a very significant proposal for resuming short term HRD courses for the managerial levels for the all-round development of the jute industry.

Prof. Samanta was followed by Shri S Bhattacharya and Shri D Mukherjee, Project Co-ordinating Officers of the ongoing HRD project on integrated skill development scheme (ISDS) who have jointly presented the objectives of ISDS training courses, the training modules for centralised jute sector, essence of supervisor's training in jute mill sector, details of the centre location and eventually explaining detailed project reports.

The closure of the second technical session was immediately followed by a quick and short interactive session where a volley of queries were asked by some keen and enthusiastic students of the department. Most of their queries were related to the present salary system of the jute industry, introduction of vocational courses on jute technology in the school levels, and preferable places of the female candidates in the jute industry other than the SQC department.

The valedictory session marked a remarkable and comprehensive speech of Dr. D Sur. He clearly pointed out the requirement of changes needed to replace the age-old practised production driven system by the quality driven system. He strongly suggested to change the attitude of looking at supervisors not as pushers to workers but as trained personnel managing the workers very humanly and sensitively. He opined that keen workers coming up with queries should be satisfied and stimulated which is going to prove beneficial to the ultimate goal of the Industry. He admitted and agreed upon with Prof. Samanta's proposal of setting up a separate worker's training institute which should be equipped with technology, trainers and means for the upliftment of the workers and the entire jute sector on the whole.

The one-day seminar called it the day with the vote of thanks by Dr. A Mukherjee, Associate Professor, Department of Jute and Fibre Technology, Institute of Jute Technology, University of Calcutta.