INDIAN TECHNICAL TEXTILE ASSOCIATION

वस्त्र मंत्रालय
MINISTRY OF TEXTILES
सत्यमेव जयते

sasmira
Centre of t-excellence ISO 9001:2015 Certified

NATIONAL CONCLAVE ON AGROTECH -

"ACCELERATING PRODUCTIVITY OF AGRICULTURE & HORTICULTURE PRODUCTS"

6th October 2023 | Venue: India Habitat Centre (IHC), New Delhi

POST EVENT REPORT

Submitted to **NTTM, MoT, GoI**

By

INDIAN TECHNICAL TEXTILE ASSOCIATION (ITTA)

CONTENT

INTRODUCTION

India is emerging as a significant market for Technical Textiles. Agricultural textile is one of the widening technical textile groups that are also known as agrotextiles. Agrotextiles are used in farming, animal husbandry, and horticulture to control the hazardous influences of environmental and climatic factors on crop production and cattle breeding, regulate nutrient level intake of plants, and assist in process and postharvest operations. Use of the different agrotextiles product in agriculture would help farmers for production of quality farm products with higher percentage yield.

With the continuous increase in population worldwide, stress on agricultural crops has increased. So, it is necessary to increase the yield and quality of agro-products. But it is not possible to meet fully with the traditionally adopted ways of using pesticides and herbicides. Today, agriculture and horticulture has realized the need of tomorrow and opting for various technologies to get higher overall yield, quality and attractive agro-products.

Agrotextiles decrease the requirement of fertilizers, water, harmful pesticides and herbicides and render a healthy farming culture and are an eco-friendly technique. They prevent the soil from drying out increase crop yield. Agro textiles for its excellent environmental resistance, mechanical properties, easy process ability and durability characteristics can improve quantity, quality and safety of agricultural products.

Therefore, ITTA jointly with NTTM, MoT, GoI and in partnership with SASMIRA organized this National Conclave on Agrotech to bring together the Manufacturers, Suppliers, Buyers, Users & R&D Institutions from the Agrotextile industry under one roof for providing a B2B & B2G platform and networking opportunities. With the dedicated efforts from the Indian government, rise in population and growing demand for better and high-quality vegetables and fruits is the main growth driver for agrotextiles. Therefore, India is well-positioned to harness the immense potential of the agrotextiles market.

ABOUT ORGANISERS

The Indian Technical Textile Association (ITTA) is the only association of the Technical Textile Industry in India covering all 13 segments, including Composites. The office of the Textile Commissioner, MoT, GoI facilitated the formation of ITTA in January 2010. The objective of ITTA is to promote, support, develop and increase the production, consumption, and export of technical textiles to make India a powerhouse of technical textiles in the days to come. ITTA has nearly 400 members, including members from EU & Japan and representing the entire technical textile value chain from raw material to finished goods producers, machinery manufacturers, consultants, centers of excellence and R&D/Academic institutions. Under NTTM approved R&D Projects, number of ITTA members have become partner to various COEs and Research Institutes.

The Synthetic & Art Silk Mills' Research Association (SASMIRA) is an approved body of Ministry of Textiles, GoI and COE-Agrotech. It was established in the year 1950 by the Textile Industry Pioneers in close association with the Government of India. SASMIRA has set up the Centre of Excellence for Agrotextile under Ministry of Textile, GoI in 2008 with primary focus to become a world class leading research and service driven technical textile association to serve the textile industry in general and Agrotech sector in particular. The focus areas of the COE are product & process development, national standard for Agrotextile products, Incubation facility for entrepreneurs, testing and certification as well as Knowledge dissemination.

ABOUT AGROTECH

Agriculture, forestry, horticulture, floriculture, fishing segments, landscape gardening, animal husbandry, aquaculture and agro-engineering all these sectors combined together are popularly called as Agrotech sector. The Global Agrotextiles Market size was valued at USD 12.1 billion in 2022. It is projected to reach at USD 15.2 billion by 2027 and will grow at a CAGR of 4.7% during the forecast period from 2022-2027. The Indian Agrotextiles Market size was valued at USD 0.1 billion in 2020 and is projected to reach at USD 0.2 billion by 2027, growing at a CAGR of 4.5% during 2020-2027. The increasing demand from the agricultural sector for a better quality of crops, increased productivity and technological advancements are driving the demand for the agro textile market. Agrotextiles are essential tools that bridge the gap between traditional farming and innovative solutions, supporting the needs of modern agriculture, aquaculture, and animal husbandry.

List of Products under the Agrotech segment are –

- ✓ Shade nets
- ✓ Bird Protection nets
- ✓ Anti-Hail nets
- ✓ Anti-Insect nets
- ✓ Plant nets
- ✓ Windshield nets
- ✓ Harvesting nets
- ✓ Fishing nets
- ✓ Fishnet Twines
- ✓ Root Ball nets
- ✓ Gill nets
- ✓ Turf Protection nets
- ✓ Crop covers
- ✓ Crop Support nets
- ✓ Fruit covers
- ✓ Mulch mats
- ✓ Ground cover fabric
- ✓ Vermi Beds
- ✓ Pond liners
- ✓ Fencing nets
- ✓ Pallet nets
- ✓ Jute Soil Savers

Fibers for agrotextiles are selected as per the application area. The most commonly used synthetic fibers in agro-textiles are nylon, polyethylene, polypropylene, polyester, and other high-performance fibers. The natural fibers can be used in some specific arena of Agrotech where characteristics like high moisture retention, wet strength, biodegradability are effectively exploited. Some of the fibers like, jute, coir, wool, sisal, and hemp. Owing to their price, ease of transport and storage, and longer service life, synthetic fibers are preferred more than natural fibers due to their high strength, durability and other suitable properties of agricultural applications.

Several techniques of fabric production can be used to produce Agrotextiles; each method offers specific advantages for particular product. The techniques are Woven, Knitting & Nonwoven. From these techniques different form of fabric is made which are used in Agrotextile - Nets, Sheets, Woven, Nonwoven, Knitted & Coated fabrics.

Essential properties required for agrotextiles are Tensile Strength, Resistance to sunlight, Resistance to solar radiation and ultra violet light, Bio degradability, Abrasion Resistance, High water retention potential, Resistance to microorganism, Lightweight & Resistance to toxic environment.

Today Agrotextile plays a significant role to control environment for crop production, eliminate variations in climate, weather change and generate optimum condition for plant growth. Adopting the hi-tech farming technique, where textile structures are used, could enhance quality and overall yield of agro products. The need of textile goods in the field of agriculture has been stressed and their role in the reduced usage of harmful pesticides and herbicides to render a healthy farming culture underlined. 'Agro textiles' gives multidimensional views and solutions to the problems being faced by agro industry. Textiles prove to be flexible in their suitability for specific geographical locations.

CONFERENCE PROGRAMME

09.00 - 10.00 hrs	Registration of Delegates	
10.00 - 10.45 hrs	INAUGURAL SESSION	
10.00 - 10.05 hrs	Welcome Address	Shri. Amit Agarwal Chairman, Indian Technical Textile Association (ITTA)
10.05 - 10.15 hrs	Context setting	Shri. Rajeev Saxena Joint Secretary, Ministry of Textiles , GoI
10.15 - 10.20 hrs	Keynote Address	Shri. Priya Ranjan Joint Secretary, Department of Agriculture and Farmers Welfare & Mission for Integrated Development of Horticulture (MIDH) , GoI
10.20 - 10.30 hrs	Special Address	Shri. Z. P. Patel Vice Chancellor, Navsari Agriculture University
10.30 - 10.40 hrs	Address by Chief Guest	Smt. Rachna Shah Secretary, Ministry of Textiles , GoI
10.40 - 10.45 hrs	Vote of Thanks	Dr. Ashok Tiwari Senior Director, SASMIRA
	Visit to Exhibition/ Networking Tea	
11.05 - 11.45 hrs	Technical Session -1 (Panel Discussion): Market Promotion, Export Opportunities , Indian Standards and Quality Control Order (QCO) on Agrotextiles This session will deliberate on the following: • Current market trends, Government Procurement & future growth potentials of various Agrotech products. • Quality standards & Certification required for QCO. • Investment Opportunities	
	Moderator	Shri. Amit Agarwal Chairman, CTM Technical Textiles Ltd.
	Panelists	Ms. Bhavna Rathee Assistant Vice President, Invest India
		Shri. Sarabjit Singh Business Head, Garware Technical Fibres Ltd.
		Dr. Naveen Kumar Patle Addl. Horticulture Commissioner, Min. of Agriculture and Farmers Welfare , GoI
		Shri. Ajit B. Chavan Addl. CEO, Government e-Marketplace (GeM), Ministry of Commerce & Industry , GoI
		Dr. K. P. Singh ADG - Farm Engineering, ICAR
		Shri. J. K. Gupta Head, Textiles Department, Bureau of Indian Standards (BIS)

11.45 - 12.30 hrs	Technical Session -2 (Panel Discussion): Climate -Smart Agrotextiles: Harnessing Textile Innovations for Sustainable and Resilient Agriculture This session will cover the following: • Climatic Changes, Assessing the impact of Climatic Shifts on Agriculture/ Horticulture. • Role of Agrotextiles in Climate Change Mitigation, Optimizing Microclimate and Growing Conditions and improving Agricultural/ Horticultural Productivity and Quality.	
	Moderator	Smt. Roop Rashi Textile Commissioner, Ministry of Textiles , GoI
	Panelists	Shri. Ravi Prakash Singh Asst. Director, SASMIRA - COE Agrotech
		Shri. Anand Zambre Executive Director, National Committee on Precision Agriculture & Horticulture (NCPAH)
		Shri. Sameer Mane Senior Manager, Agro Textile Division, Emmbi Industries Ltd.
		Shri. Vijay Ramakrishnan Sr. Vice President - Technical & New Businesses, Garware Technical Fibres Ltd.
12.30 - 13.15 hrs	Technical Session -3 (Panel Discussion): Innovations in the field of Raw Materials and Functional Additives: Enhancing Performance and Sustainability of Agrotextiles This session objective would be: • Role of raw material and functional additive in enhancing the performance and durability of agrotextiles in challenging agricultural conditions. • Innovative materials for Agrotextile Development. • Importance of functional additive in minimizing the environmental footprint throughout the production lifecycle.	
	Moderator	Shri. Ravi Prakash Singh Asst. Director, SASMIRA - COE Agrotech
	Panelists	Dr. P. C. Tripathi Principal Scientist, Indian Agricultural Research Institute (IARI), ICAR
		Prof. Debabrata Maiti Eliteck Industries Pvt. Ltd. (Start -up)
		Shri. Akchaya Kumar Sinha General Manager - Polymer Marketing, Reliance Industries Ltd.
		Ms. Maya Grushka Global Product Manager, Tosaf Compounds Ltd, Israel
13.15 - 14.30 hrs	Networking Lunch	

14.30 - 15.30 hrs	Technical Session -4 (Panel Discussion): Sustainability, Circular Economy including Recycling issues and Global Benchmarks • Significance of reducing carbon footprint, energy consumption, and waste generation in the production and Agrotextile Applications. • Sustainable raw materials and eco-friendly manufacturing processes for agrotextiles. • Challenges and opportunities in recycling agrotextiles. • Innovative recycling technologies and initiatives that promote a circular economy and Global Benchmarks.	
	Moderator	Shri. Moloy Chandan Chakrabortty Jute Commissioner
	Panelists	Shri. Mahadeb Datta Dy. Director, National Jute Board
		Dr. Shanmuga Sundaram Director, RDTE - (I/C), CCRI
		Dr. Asha K K Principal Scientist, Central Institute of Fisheries Technology (CIFT), ICAR
15.30 - 16.30 hrs	Special Interactive Session on Future Growth and Opportunities in Agro Textiles	
		Shri. Rajeev Saxena Joint Secretary, Ministry of Textiles & Mission Coordinator, National Technical Textile Mission , GoI
		Dr. R K Singh ADG(Extension), ICAR
		Shri Sanjay Deshmukh CMD - Me e Shetkaree
		Shri. Amit Agarwal Chairman, ITTA
		Shri. Ashok Tiwari Sr. Director, SASMIRA
16.30 - 17.15 hrs	Technical Session -5 (Panel Discussion): Recent Advances in Agrotech Technology and Digital Transformation in Agriculture/ Horticulture • This session will focus on the Agrotextile Innovation, Digital Transformation in Agriculture and Horticulture, Cutting -Edge Technologies Shaping the Future. • Modern Farming Practices Driving Efficiency and Sustainability in Agriculture/ Horticulture through Digital Solutions.	
	Moderator	Shri. Ravi Prakash Singh Asst. Director, SASMIRA - COE Agrotech
	Panelists	Shri. Rathinasamy K S Director -Technical, Enthu Technology Solutions India Pvt. Ltd. (Start -up)
		Shri. V. K. Gupta Chairman, V. K. Packwell Pvt. Ltd.
		Dr. Naved Sabir Principal Scientist, Centre for protected cultivation Technology, IARI
17.15 - 17.20 hrs	Vote of thanks & Concluding Remarks	Shri . Anil Kumar Vasupillai Additional Executive Director, ITTA
17.20 hrs	Networking Tea	

PROCEEDINGS OF THE CONFERENCE

The Indian Technical Textile Association (ITTA) jointly with the National Technical Textiles Mission (NTTM), Ministry of Textiles, Government of India and in partnership with The Synthetic & Art Silk Mills' Research Association (SASMIRA), COE-Agrotech successfully organised the NATIONAL CONCLAVE ON AGROTECH - "Accelerating Productivity of Agriculture & Horticulture Products" on Friday, 06th October 2023 at the India Habitat Centre, New Delhi.

Smt. Rachna Shah, Secretary, MoT, GoI, was the chief guest of the conclave and addressed the delegates. She highlighted that agriculture plays a significant role in the Indian economy and the life of its citizens. Agriculture is also a major contributor with its share in country's GDP has a long-term trend of around 18-20%. She opined that Agrotextiles can play an important role in addressing the agricultural challenges like climate change, water constraints and high demand of agri-produce with limited arable land available, improving agricultural productivity and quality of Agri-based products by extending the growing cycle of crops. Research and studies have shown that the use of Agro textiles in horticulture leads to increase in farm productivity by 2-5 times, increase in crop intensity, reduction in water consumption by 30-45%, reduction in fertilizer usage by 25-30%, and higher harvest cycle per year. She further stated that a collaborative approach between Certification Agencies, Research Organizations, Industry, Academia and Ministry is imperative to address the cost implications of Agrotextiles and work together in increasing awareness and education amongst farmers for wider adoption by the larger agricultural community for the growth of the sector, she further added.

Smt. Rachna Shah, Secretary Textiles delivering her speech

Shri. Rajeev Saxena, Joint Secretary, MoT, GoI, in his key note address, highlighted that the India holds a tremendous potential in the global Agrotextiles market of ~USD 12 Bn wherein India's share is ~3%. Though India is one of the biggest markets for Fishing Nets, other Agrotextile products like mulch-mats, antibird nets holding significant share in global demand, can also be promoted in the context of Indian domestic market. To ensure superior quality, wider safety, and comprehensive reliability of products in Agrotextiles, he mentioned that MoT has notified QCO for 20 Agrotextile items, which will come in-effect from 1st April 2024.

Further, Ministry has also sanctioned 11 R&D projects in Agrotextiles valuing INR 13.67 Cr. for development of innovative products under NTTM scheme. He also announced that MoT is going to establish a Climate Smart Agrotextile Demonstration Center to Revolutionize Agriculture through Digitized Microclimate Farming in partnership with SASMIRA.

Shri. Rajeev Saxena, Joint Secretary delivering his speech

The welcome address was given by Shri. Amit Agarwal, Chairman, ITTA. He said that the Objective of the Conclave, having Conference & Exhibition, was to create awareness on the latest product innovations & technology developments, acquire knowledge & ideas for new investments & export opportunities on Agrotextiles, enhance knowledge base on requirement of current Agrotech industries & market, to understand product standards & certification process and creating a B2B & B2G platform for Agrotextile industry.

Shri. Amit Agrawal, Chairman, ITTA addressing delegates

Shri. Z. P. Patel, Vice Chancellor, Navsari Agriculture University, in his special address, highlighted that there is an average farming production loss of 10-40% due to climate change, especially in the rain-fed areas. Agrotextiles such as Crop Cover, Mulch mats, Polyhouses, etc. hold the potential to manage and stimulate the microclimate for crops during farming leading to higher productivity for agriculture products, he emphasized. He mentioned that on the back of diverse geographical location-based benefits of Agrotextiles, the segment has proved to be tremendously beneficial for the agricultural sector in India. There is a need for bio-degradable agro-fibre based agrobags which can be automatically degraded in the soil after the mulching process overtime, leading to planting process and sustainability. There is a need of developing innovative Agrotextile products like soil degradable Agro fabrics, artificial soil which are nutrient rich and has water holding capacity, super absorbent polymer fibres to prevent waterlogging in high-rain areas, weather, and micro-organisms resistant fabrics, etc. He further informed that a Agrotextiles demonstration center is being planned in the university to educate the farmers.

Shri. Z. P. Patel, Vice Chancellor delivering his special address

Shri. Priya Ranjan, Joint Secretary, Dept. of Agriculture and Farmers Welfare & Mission for Integrated Development of Horticulture (MIDH) talked that his ministry is focusing activities on effective use of Agrotextiles. He stated that Agrotextiles has a critical role to play in overcoming the unprecedented challenges agriculture sector faces due to climate change, soil degradation, and water scarcity which can threaten the very foundation of our food security. Schemes such as Mission for Integrated Development of Horticulture (MIDH) has incorporated the different agrotextile products for wider usage and penetration. Furthermore, other collaborative segments within Ministry of Agriculture and Farmers' Welfare are being looked into for further inclusion of agrotextile products, he further added. He stated that by adopting the advanced technologies under Agrotextiles, our farmers can not only increase the agriculture yields but also increase functional benefits and reduced input costs. This, in turn, will translate into increasing farmers income and the growth and development of the overall agriculture sector.

Shri. Priya Ranjan, Joint Secretary addressing delegates

Shri Ashok Tiwari, Senior Director, SASMIRA appreciated the support of Ministry of Textiles and appreciated the participation of dignitaries from other organizations.

Shri Ashok Tiwari, Senior Director, SASMIRA delivering vote of thanks

More than 220 participants attended the conclave including officials and representatives from Central Ministries, user Departments of Central and State Governments, Institutes, industry leaders, scientific experts, researchers, and professionals related to Agro textiles.

TECHNICAL SESSION 1

There were Five Technical Sessions in the conference. First Session deliberate on the 'Market Promotion, Export Opportunities, Indian Standards & Quality Control Order (QCO) on Agrotextiles'. Session was moderated by Shri. Amit Agarwal, Chairman, CTM Technical Textiles Ltd. and Eminent panelists were Ms. Bhavna Rathee, Assistant Vice President- Invest India, Shri. Sarabjit Singh, Business Head- Garware Technical Fibres Ltd., Dr. Naveen Kumar Patle, Addl. Horticulture Commissioner- Min. of Agriculture and Farmers Welfare, Shri. Ajit B. Chavan, Addl. CEO, GeM- Ministry of Commerce & Industry, Dr. K P Singh, ADG- Farm Engineering, ICAR, and Shri. J. K. Gupta, Head, Textiles Department- BIS. The expert panel members deliberated various important points. The key areas of discussions and action points are given below -

a. The recent initiative taken by the MOT to implement the quality control orders (QCO) for all technical textile sectors were appreciated by the delegates. On Agrotextiles, 20 products were notified. QCO will help in reducing the use of inferior quality & low -cost materials.

b. Scaffolding nets and Agro-shade nets are having similar IS standards. Scaffolding nets have to considered under Buildtech product and the IS std may be revised.

c. Explore export opportunities for Indian agrotextile products in global markets.

d. To ensure compliance with international quality and safety standards to enhance competitiveness.

e. Industry collaboration with various stakeholders in the agriculture sector, including farmers cooperatives, agricultural universities, R&D centres to disseminate knowledge about the benefits of agrotextiles.

f. Collaborate with government agencies to design policies, schemes, subsidies and incentives that promote the use of agrotextiles in agriculture. Advocate for financial support for farmers to invest in these technologies.

g. Need investments in the scalability of agrotextile products.

h. Actively promote & support the agrotech products under the schemes such as Mission for MIDH, National Mission for sustainable agriculture (NMSA), etc. for enhancing usage of Agrotextiles.

i. To help young entrepreneurs with the investment in R&D projects.

Speakers in Session 1

TECHNICAL SESSION 2

Next session was moderated by Smt. Roop Rashi, Textile Commissioner, MoT, GoI, delt with 'Climate-Smart Agrotextiles: Harnessing Textile Innovations for Sustainable and Resilient Agriculture'. Presentations and discussions by the following panelists were focused on details of the above areas- Shri. Ravi Prakash Singh, Asst. Director, SASMIRA- COE Agrotech, Shri. Anand Zambre, Executive Director- National Committee on Precision Agriculture & Horticulture (NCPAH), Shri. Sameer Mane, Senior Manager, Agro Textile Division- Emmbi Industries Ltd. and Shri. Vijay Ramakrishnan, Sr. Vice President- Technical & New Businesses- Garware Technical Fibres Ltd. Major points discussed:

a. To develop and promote innovative agrotextile solutions for crop protection, microclimate control and yield enhancement. These technologies can help farmers mitigate risks and improv productivity.

b. Climate-smart agriculture can help farmers to increase productivity and incomes in a sustainable way.

c. To customize agrotextile products for specific crops, climatic conditions and farming practices. This ensures that farmers receive solutions that suit their individual seasons.

d. More innovative products should keep on coming in the industry parallelly with the climate change.

e. Explore opportunities to integrate agrotextile solutions with other agrotech innovations, such as precision farming and IoT-based (Internet of Things) monitoring, to create comprehensive and efficient farming systems.

Speakers in Session 2

TECHNICAL SESSION 3

Third session was devoted to 'Innovations in the field of Raw Materials and Functional Additives: Enhancing Performance and Sustainability of Agrotextiles' and moderated by Shri. Ravi Prakash Singh, SASMIRA- COE Agrotech. Panelists were- Dr. P. C. Tripathi, Principal Scientist- Indian Agricultural Research Institute (IARI), ICAR, Prof. Debabrata Maiti, Eliteck Industries Pvt. Ltd. (Start-up), Shri. Akchaya Kumar Sinha, General Manager - Polymer Marketing, Reliance Industries Ltd., and Ms. Maya Grushka, Global Product Manager, Tosaf Compounds Ltd, Israel. Following points were discussed during the conference:

a. To mandate the usage of Agrotextiles products in various areas which will increase the demand of these products.

b. Enhanced the usage of Natural Fibres i.e., jute, coir, etc. in Agrotextiles.

c. To minimized the use of fertilizers & pesticides.

d. In domain of agrochemicals, mostly, these are patented, developed in foreign countries. Need to develop technologies for manufacturing of these agrochemicals in India.

e. To develop the processes by which agrochemicals can be synthesized in shorter route from the readily available starting material & perhaps also used technology which doesn't exist in literature. For example- utilise carbon dioxide to prepare agrochemicals & synthesis of agrochemicals by directly using light.

f. To invest in research and development to create advanced agrotextiles that are more efficient, durable and cost-effective.

g. Collaborate with research institutions and academia to drive innovation.

Speakers in Session 3

TECHNICAL SESSION 4

The fourth session focused on 'Sustainability, Circular Economy including Recycling issues and Global Benchmarks', which was moderated by Shri. Moloy Chandan Chakrabortty, Jute Commissioner. The eminent panelists were- Shri. Mahadeb Datta, Dy. Director- National Jute Board, Dr. Shanmuga Sundaram, Director- RDTE-(I/C), CCRI and Dr. Asha K. K, Principal Scientist, Central Institute of Fisheries Technology (CIFT), ICAR. Key points discussed during conference:

a. To promote more usage of jute instead of polyethylene material for growth of seedling/ sapling.

b. The problem of lost or discarded fishing gear, such as nets, traps, and lines, contributes to detrimental occurrence that is referred to as ghost fishing. This practice results in preventable depletion of marine biodiversity & exacerbates the growing problem of plastic contamination in marine ecosystems. Presence of plastic components in fishing gear worsen the problem of microplastic contamination in marine organisms, and it has recently been found to even enter the bloodstream of humans. In light of this matter, the use of biodegradable fishing equipment emerges as a possibly efficacious solution.

c. Promoting environmentally sustainable strategies to tackle the problem of ghost fishing & alleviate the consequences of plastic pollution in marine ecosystems.

d. Emphasize on the development & utilization of ecologically sustainable fishing gear that possesses the ability to biodegrade spontaneously.

e. Adaptation of Sustainable practices for each stage of manufacturing i.e., raw materials to final products.

f. Promote usage of recycled, organic & sustainable raw materials i.e., jute, coir, etc.

Speakers in Session 4

TECHNICAL SESSION 5

Last session covered 'Recent Advances in Agrotech Technology and Digital Transformation in Agriculture/ Horticulture'. It was moderated by Shri. Ravi Prakash Singh, SASMIRA- COE Agrotech and Eminent speakers were- Shri. Rathinasamy K S, Director-Technical-Enthu Technology Solutions India Pvt. Ltd. (Start-up), Shri. V. K. Gupta, Chairman, V. K. Packwell Pvt. Ltd. and Dr. Naved Sabir, Principal Scientist, Centre for Protected Cultivation Technology, IARI. Key Discussion Points:

a. The introduction of digital technologies makes it possible to collect and track essential agricultural data, which can be used for evaluation of farming conditions, and provides access to needed financing for smallholder farmers.

b. To scale up these tech solutions in emerging markets, the responsible use of data and setting up partnerships between the public and private sector are essential.

c. Improvement of crop yields through the use of data analytics, artificial intelligence, and machine learning.

d. Development of technologies that allow farmers to maximize yields by controlling every variable of crop farming such as moisture levels, pest stress, soil conditions, and micro-climates.

e. Increase in the ability to perform sustainable farming techniques that ultimately help the environment.

Speakers in Session 5

Finally, the conference was concluded by giving Vote of Thanks by Shri. Anil Kumar Vasupillai, Additional Executive Director, ITTA. He specially thanked all the eminent panelists pointing out the important needs and issues of Sportech Industry and for making excellent presentations.

Shri. Anil Kumar Vasupillai, AED, ITTA concluding by vote of thanks

RELEASE OF TWO BOOKS BY SECRETARY TEXTILES

Smt. Rachna Shah along with Shri. Rajeev Saxena, Shri. Z. P. Patel and Shri. Priya Ranjan released Two Books titled "CONCLAVE BOOKLET" prepared by ITTA and "FIBRE TO FIELD: INDIAN AGROTECH INDUSTRY OPPORTUNITY" prepared by Invest India were released during the conference.

CONCLAVE BOOKLET

FIBRE TO FIELD :
INDIAN AGROTECH INDUSTRY OPPORTUNITY

INTERACTIVE SESSION

A Special Interactive Session on Future Growth and Opportunities in Agrotextiles, was organised between the senior Govt. officials and the representatives from Industry, the Farmers' Associations, who actively participated the discussion and presented their issues. The Interactive Session was moderated by Shri. Rajeev Saxena, JS, MoT. Experts in the session were Dr. R. K. Singh, ADG (Extension), ICAR, Shri. Sanjay Deshmukh, CMD- Mee Shetkaree, Shri. Amit Agarwal, Chairman-ITTA and Dr. Ashok Tiwari, Sr. Director, SASMIRA. Shri. Sanjay Deshmukh gave a Technical Presentation during the session. In this special interactive session, Shri. Rajeev Saxena actively discussed and answered the questions raised by the industry representatives and other delegates.

a. To include HDPE woven tarpaulins in Agrotech QCO item list, which is used by farmers.

b. To create demonstration units in different states in India with installation of quality agrotextile products. Farmers will get to know on how to check and confirm the quality of products.

c. Need of Advancements in farming technologies.

d. To increase the UV life of agro shade nets from one year to five years in BIS stds.

e. The guidelines which are issued by different states should be linked with the specification of agro products mentioned in BIS stds.

f. To create infrastructure or increasing the capability of SASMIRA in terms of testing facility. Since there are limited no. of centres for testing the agro products.

g. To create awareness campaigns for the users to familiarize them with the benefits of using agrotextiles products through KVKs, etc.

h. To introduce focused courses on Agrotextiles covering its products, applications & latest technologies. This courses to be included in Graduate & Post-Graduate levels.

i. Conduct joint promotion and training with institutions involved in agricultural products and technologies like Department of Agriculture and Farmers Welfare, Mission for Integrated Development of Horticulture (MIDH), National Committee on Precision Agriculture & Horticulture (NCPAH), Indian Council of Agricultural Research (ICAR), etc.

j. Motivating the youth by promoting awareness and explaining the success stories in Agrotextiles.

k. Promoting awareness by training, adoption & usage of Agrotextiles-products & technologies to the farmers.

Interactive Session with participants

HIGHLIGHTS OF THE EXHIBITION

The exhibition was an integral part of the Conclave to display the latest agrotextiles products and their applications, innovations & technology developments from the leading Agrotech manufacturers and associations. In the Exhibition, the following Agrotech products & technology were displayed - Agro Shade nets, Mulching film, Pond liners, Weed mat, Crop Support net, Insect net, Floriculture net, Irrigation system for agriculture, HDPE Irrigation pipe, digital transformation solutions - EMS Assembly, sensors for checking the life of soil, micro climate monitoring, soil health monitoring, etc. It was a unique opportunity for the Exhibitors who were already the existing manufacturers/ suppliers of these products or the new entrants to this business to display their products and the directly interact with the Buyers. It also added value to the delegates and invitees and given opportunity to do networking with user ministry officials and farmers. Following 10 Exhibitors participated in the exhibition and showcased their Agrotech products.

List of Exhibitors:
AEROTECH ENGG. WORKS PVT. LTD.
AiTTS & TiE - ALLIANCE OF INDIAN TECHNICAL TEXTILE STARTUPS & TEXTILE INDUSTRY ENTREPRENEURS
CTM TECHNICAL TEXTILES LTD.
EMMBI INDUSTRIES LTD.
ENTHU TECHNOLOGY SOLUTIONS INDIA PVT. LTD.
GARWARE TECHNICAL FIBRES LTD.
INDIAN TECHNICAL TEXTILE ASSOCIATION (ITTA)
K. S. RANGASAMY COLLEGE OF TECHNOLOGY - MSME BUSINESS INCUBATOR
THE SYNTHETIC & ART SILK MILLS' RESEARCH ASSOCIATION (SASMIRA)
V. K. PACK WELL PVT. LTD.

GLIMPSES OF EXHIBITION

ROAD MAP AND ACTION PLAN

a. For reaching out to the Farmers, there is a need to create awareness campaign plan to familiarize them with the benefits of using agrotextile products which can be done through KVKs and other similar bodies, e.g., Department of Agriculture and Farmers Welfare, Mission for Integrated Development of Horticulture (MIDH), National Committee on Precision Agriculture & Horticulture (NCPAH), Indian Council of Agricultural Research (ICAR), National Mission for sustainable agriculture (NMSA), etc.

b. To create demonstration units in different states all over India with installation of quality Agrotextile products. Farmers will get to know on how the techniques of using these products for different crops at adverse climatic conditions.

c. To introduce focused courses on Agrotextiles covering its products, applications & latest technologies. Agriculture Universities can introduce the courses in Graduate & Post-Graduate levels.

d. To mandate the usage of Agrotextiles products in various areas of Agriculture & Horticulture, introduce in the Tenders, which will increase the demand of these products.

e. Future scope of R&D - There is a need for bio-degradable agrotextile products which can be automatically degraded in the soil after at least one year or so. Emphasize may be given on the development & utilization of ecologically sustainable fishing gear to save the river or sea beds.

f. Development of technologies that allow farmers to maximize yields by controlling every variable of crop farming such as moisture levels, pest stress, soil conditions, and micro-climates.

g. IS Standards- Scaffolding nets and Agro-shade nets are having similar IS standards. Scaffolding nets have to considered under Buildtech product and the IS std may be revised.

h. The guidelines which are issued by different states should be linked with the specification of agro products mentioned in BIS stds.

i. Explore export opportunities for Indian agrotextile products in global markets.

j. Adaptation of Sustainable practices for each stage of manufacturing i.e., raw materials to final products. Enhanced the usage of Natural Fibres i.e., jute, coir, etc. in Agrotextiles in place of synthetic raw materials wherever feasible, such as-seedling/ sapling, etc.

****

INDIAN TECHNICAL TEXTILE ASSOCIATION
314, 3rd Floor, MIDAS, Sahar Plaza,
Andheri-Kurla Road, J. B. Nagar, Andheri-East, Mumbai - 400059.
Tel: 022-49635711
Email: info@ittaindia.org;
Web: www.ittaindia.org