TextileExchange
Creating Material Change

Textile Exchange
Organic Cotton Round Table

TASK FORCE MEETING: SEED STRATEGY FOR ORGANIC COTTON

ISTANBUL, 11TH NOVEMBER 2013: MEETING HIGHLIGHTS

1. Summary

Textile Exchange is leading a Seed Strategy for Organic Cotton. At its recent Organic Cotton Round Table meeting in Istanbul, Turkey, TE convened a highly interactive Seed Task Force meeting which showcased five successful organic seed projects from around the world and examined the issues in seed from a panel of 6 leading thinkers. Delegates developed recommendations for an Action Strategy which will be housed within the newly formed TE Organic Cotton Accelerator.

2. Background

The Seed Task Force was a key outcome of the Organic Cotton Call to Action from Textile Exchange in 2012 and has its origins in the Organic Cotton Round Table held in collaboration with Fairtrade International as a part of the Global Textile Sustainability Conference held in Hong Kong in October 2012. The 2012 meeting identified two major areas for the focus of action: seed security, and the need to improve business models for organic cotton. The 2013 Round Table held individual Task Force meetings for Seed and one for Business Models with the two groups coming together in the last half hour in an Open Forum to share the outcomes and to engage with a third area of emerging importance: Consumer Engagement.

3. Aim

To co-create a platform of interested and concerned stakeholders for the development of a seed strategy which would be global in its identity and outlook, while catering to millions of cotton farmers to ensure their seed security for both organic and non-GMO cotton farming. Despite the fact that seed supply issues are the foundation for a host of other challenges for farmers not wishing to grow GMO cotton, it appears that the problem has not yet got onto the radar of most policy makers, cotton seed companies, scientists and universities and the cotton stakeholders at large. Therefore, the urgent need is to stimulate thought, discussion and action.

4. Objectives

The objectives of the Seed Task Force are to:

- Build a Task Force strategic plan that is global but tailored to address challenges and find solutions at a local level.
- Share experiences, learn from each other and communicate learning to escalate scale and accelerate action.
- Strengthen a network of stakeholders through the work of a dedicated stakeholder group.
- Develop a framework for financial investment and partnerships.
- Share achievements and develop a culture of optimism –building on success.

5. Participation

There were forty participants, representing a broad range of stakeholders from non profits, scientists, consultants, producer groups, mills and policy makers. See Appendix A for list of participants.

6. Sponsorship

We are grateful to Pratibha Syntex, FiBL, and Bayer CropScience for sponsoring the Seed Task Force meeting. These funds helped us to hold a truly representative meeting by enabling us to support some travel costs.

7. Opening and Introductions

The meeting opened with a brief presentation from Prabha Nagarajan, TE Regional Director India, welcoming the participants and drawing attention to the critical nature of the need for the Task Force from the point of view of fundamental rights of freedom and choice of millions of farmers around the world, the rights of liberty, equality, opportunity, and justice, and freedoms against exploitation and discrimination. Seed biodiversity in cotton needs to be preserved as a symbol of individual national wealth, preservation of Nature's capital and a global affirmation of agrarian freedom. Prabha drew attention to the Chipko movement of women peasants in the Himalayas in 1974 which inspired eco-activism globally.

This was followed by TE Farm Engagement Director Liesl Truscott who recalled the first TE Organic Cotton Round Table meeting in Hong Kong in 2012, following the Call to Action in TE's Farm & Fibre report. The report identified barriers to growth of organic including: unclear market signals for organic, a desire for "lower entry" sustainability at no extra cost, and a strong threat of disappearing seed supply for the non-GMO cotton growers. She spoke of the need to co create a new approach and mentioned the three priority areas of concern: Seed Security, Business Models and Consumer Engagement and also told the stakeholders about developments in 2013 including the Collaborative Learning Series, the Multi Stakeholder Initiative approach to better understanding successful business models, and the seed advisory work led by FibL, Agrilife, Louis Bolk Institute, and an Independent Consultant.

8. Welcome from the Chair

We were delighted to have Edith Lammerts van Bueren from the Louis Bolk Institute and Wageningen University, Netherlands chair the proceedings and steer the discussions for the day with her grace, knowledge and experience. She warmly welcomed the group and hoped the day's deliberations would stimulate sharing of knowledge, resources and an action plan for the future.

9. Getting Started - "Speed Posting" of Concerns

Participants were asked to identify the issues that concerned them the most. There was a wide range of concerns but non-GMO seed availability was shared by almost all delegates.

	Non-GMO Seed Availability	Integrity/ Certification	OC Market	Supply Chain Sustainability	Productivity	Research	Freedom
Africa	√				√	√	
China	√	√					
EU	√						
India	√					√	
Kyrgyzstan	√		√				
Tajikistan							√
Turkey	√			√			
USA	√			√			

10. Showcasing Seed Projects

Five seed projects were showcased using a carousel model which allowed for a 7 minute presentation followed by three minutes for group Q&A. The presentations in this format allowed for detailed discussion and offered insights into the efforts, issues faced, and the outcomes of selected seed projects in India, China and Uganda.

Project 1: Agro Ecology Demonstration Plots for Seed Development, China

Project partners: The Mecilla Project, Inditex and Textile Exchange

Tong Yeung showcased the Mecilla project based in Yongji. In 2012, Mecilla started with seed multiplication on small scale farms with 212 varieties of non-GMO cotton seeds. Up to then there was no non-GMO cotton seed in Yongji. In 2013, after studying parameters such as bud rate, yield, pest resistance, and lint percentage rate, six varieties were identified. Beyond 2015, this project will enable 400-500 families in Yongyi to grow non-GMO cotton. Tong was asked how this project supported biodiversity, and he explained that the seed model farms laid great emphasis on efficient water management, crop diversification, and natural pest control. Tong acknowledged the importance of knowledge sharing and Mecilla arranged for farmers to meet regularly and discuss issues in workshop settings.

Project 2: Seed Multiplication For Seed Security, India

Project partners: Pratibha Syntex and Vasudha Organic, EcoFarms, C&A and CottonConnect

This project started in 2011. By 2012 there was a narrowing down of seed varieties to four and in 2013 one variety (NH 615) had been identified as meeting the requirements of Madhya Pradesh in Central India. The presenters Dhawal Mane of Pratibha and Arvind Rewal of CottonConnect spoke of initial challenges such as the difficulty of getting farmers to enrol, insufficient bio inputs for organic farming and the influence of the Bt seed industry. The majority of farmers in the region have an attraction to non-fuzzy, chemically treated GMO seeds and talk of higher yielding Bt seeds. Despite the challenges Dhawal and Arvind told their audience that the seed project farmers have evolved into a more empowered and self sufficient group.

Project 3: Seed Guardians Of Odisha, India

Project partners: Chetna, Inditex, Textile Exchange

Arun Ambatipudi of Chetna Organic showcased the Seed Guardians project, based in the districts of Kalahandi, Bolangir and Rayagada which targeted tribal small-holder farmers, especially women, in the economically depressed region of Odisha. The emphasis is on open source seed systems that empower women to deliver good quality non-GMO cotton while ensuring nutritional security, and offers tremendous seed security though seed saving. Sixty seed guardians from 600 families work through six seed banks supporting 26 cotton seed varieties. Arun answered questions on how the farmers were empowered, their training, and the importance of heirloom varieties of cotton. He said the Chetna Organic farmers participated in seed festivals, interacting and exchanged seeds and ideas with farmers from other regions.

Project 4: Green Cotton Project, India

Project partners: FiBL, bioRe, Chetna, and the University of Dharwad

Monika Messmer of Fibl presented this project, stressing its importance when more than 90% of the cotton grown in India is Bt, where most of the Indian cultivars are extinct, and where there is a high degree of contamination. Seed sovereignty and autonomy of small holder farmers is the goal and the project aspired to give good quality non-Bt cotton seed to farmers. Monika drew attention to the importance of participatory breeding and re-establishing the non-GMO seed chain, while engaging and networking with all stakeholders. Engaging the farmers was key, she said, and using their knowledge to define critical traits was important to the success of a breeding program. Sixty non-GMO cultivars from the UAS Dharwad were tested in organic growing conditions and varying irrigation regimes in the states of Odisha, Madhya Pradesh and comparisons have been made between species (*G. Arboreum* vs *G .Hirsutum* and *G. Barbadense)*, hybrid vs. varietal, yield and resistance, as well as fibre quality. Monika answered questions on the issues faced and spoke of the bigger concerns such as climate change. She emphasised the local yet global nature of this engagement.

Project 5: Developing Participatory Cotton Breeding for Low-Input Farming Systems in Uganda

Project partners: Agro Eco, Louis Bolk Institute, and Wageningan University

Edith Lammerts van Bueren explained how in Uganda cotton is a strategic crop. Uganda follows a one variety policy (BPA, Bukalasa Pedigree Albar) in order to standardise lint. In this environment, LBI and WUR started a low budget project in 2010, working with farmers in the Lango and Teso regions. The aim was to explore participatory breeding by marrying the knowledge of the farmers and the expertise of the breeders, and to support the development of a non-GMO variety adapted

to low input conditions, rainfed, and climate change prone. Several workshops were held, she said, to identify the promising breeding lines. Both farmers and breeders appreciated the exchange of ideas with respect to farmers' preferred traits and breeders' perspectives. For example, farmers had a better idea of the more suitable branching patterns and the height of the plant. The project revealed that farmers' complementary knowledge was invaluable and an important component for selection and improvement of varieties, especially in rainfed conditions and that both sides benefited by incorporating farmers suggestions.

QUESTIONS FROM THE AUDIENCE

Questions revolved around project funding, and the sustainability of seed in a vertical model. A representative from Pratibha reported that it was a lot of work to become self-sufficient and that it needed lot of people to build a platform. Another thought was that funding was a political issue and therefore governments needed to be involved. In addition, the World Bank was mentioned as a potential source of possible funding and should be involved, since it is a public concern to insure a good livelihood. Finally, it was affirmed that the production of high-quality cotton is a long-term issue.

Edith Lammerts van Bueren, through the example of participatory breeding, illustrated that farmers were self-sufficient with their own seed but seed supply needed to be renewed. With an example of China, she said there was a need for participatory breeding to have its public value recognized and that policy should exist at different levels. Farmers in China are connected with the local but also national government. In summary, she stressed the need for government acknowledgement of the situation of small-scale farmers and the need for governmental support.

11. Exploratory Panel

This panel style Q&A was led by experts across a range of disciplines, representing a rich tapestry of roles and experiences. The panellists presented a brief response to a question from the Chair. This was followed by a five minutes for questions. The panellists were:

- **Peter Melchett**, Policy Director, Soil Association, UK- (*focus: Agro-ecology, seed fit with long term sustainability*)
- **Mans L Lanting**, Consultant, Netherlands (*focus: investment, partnerships, stakeholder platforms*)
- **Dylan Wann** Agrilife Texas (*R&D seed needs, sustainability, climate change*)
- **Binay Choudary**, Control Union Certifications India (*focus: challenges to certification in a GMO dominated environment and maintaining integrity*)
- **Monika Messmer**, FiBL Switzerland (*focus: approach to multidisciplinary research and action*)
- **Prof. S.S. Patil**, University of Agricultural Sciences, Dharwad, India (*focus: R&D for non-GMO seed and working towards farmers self sufficiency*)

Peter Melchett's response was nothing if not uplifting. After hearing about the five projects presented "I am blinded by optimism" he said. As part of a textile sustainability agenda the UK Government was looking into the use of pesticides in the growing of cotton. Seeds should not be viewed as a mere commodity, they are extremely important to the fabric of society. The organic community can take heart "We have a great story to tell".

Mans Lanting was asked "How can we create partnerships and what do we need for the future?" The only way forward for partnerships was to have a "win win" situation. We need non-GMO seed as it is established that GM does not do well in stressful conditions. Minor pests are turning into major pests, Bt now has resistance and more pesticides are being used, there is a huge limitation on diversity. Farmers are interested in partnerships, as is the textile industry. The general public would also like to see more healthy partnerships. There is a need for investment and effective partnerships, and we need to make a start with subsidies from international agencies and seed companies before we target local investments.

Dylan Wann of Agrilife was asked about climate change and adaptation. In response he said that 90 to 95% of US cotton was grown in West Texas with weather extremes ranging from good rain in 2010 to a bad drought in 2011. From dry to wet to extremely dry was a normal phenomenon. Dylan pointed out that while the rainfall is unpredictable, not many varieties of seed adapted to this factor were available. As a researcher, he was glad to report that his university, Texas Tech University, could freely research on organic cotton. Still he mentioned that there was a constant concern about keeping the quality of the seed and risk of contamination. Agrilife is working alongside farmers with different germplasm, and focussing on improving seed quality to meet the challenge of climate change.

Monika Messmer of FiBl was asked about engaging farmers in breeding and the challenges in resolving tensions. From her experience Monika said engaging farmers may be challenging in the initial stages, but once they have bought into programs they become leaders in seed development. Invariably they can indentify good cultivars and we can combine the knowledge of the farmer with the experience of the breeder and vice versa. Both sides will gain knowledge. Collaboration between farmers and breeders is very important for the future.

Prof. S.S. Patil was asked how he saw himself as a breeder in the public sector. The seed chain is in a shambles, he said, especially in India with 90% of companies selling only GM, and even the state owned companies are not interested in non-GM. The public sector and private sector both have roles to play. Efforts should be concentrated on local solutions and needs. Farmers are interested in good non-GMO seeds, they want self sufficiency. New lines can be created to improve productivity. For each of the different regions, a local breeding program should be developed adapted to local conditions. About self-sufficiency, he stated that it was not hard to put in practice (900g seed by farmers is enough). There needs to be a partnership of farmers within breeding programs and breeding must happen in organic conditions.

Binay Choudary spoke of the dangers of contamination, the poor regulatory systems and of the need for more responsibility all round. As the general manager of Control Union India, Binay gave insight into the challenges in the seed landscape linked with certification. The regulatory environment and standards must be well understood by the Certification Bodies and the producers need to also understand the system. There is a need for a multi-stakeholder approach to resolve

these issues and meet the challenges. He underlined the importance of the integrity of people and processes. Another pitfall raised was the problem of contamination of the seed at the different levels (physical, chemical, biological, social also). He stated that the problem was not well defined, hard to assess and that it was also difficult to prevent contamination. This is a challenge especially in countries where the GMO rates are very high.

QUESTIONS FROM THE AUDIENCE

The audience were interested in university breeding centres. A question about the responsibility of the university sector was answered by Prof. Patil. He commented that despite the public investments in research, investment was not always used efficiently; the outcomes were strongly dependent on the people involved. About the problem of seed contamination, Dylan Wann explained that even in a university environment where they have the freedom to work in organic only, it was a problem. In order to limit the risk of contamination, strong controls on genetic contamination have to be made.

12. Building A Strategy For Seed

The final exercise on the day was to breakout into focus groups, World Cafe style. Discussion centred around four themes.

THEMES

- **Task Force Action Strategy** The Role of this task force, TE's role and investment model. Host Peter Melchett, Soil Association.
- **Investment Strategies** Public Private Partnerships, Socially Responsible financing, crowd funding. Host Dylan Wann, AgriLife.
- **Regional & Global Strategies** How can one feed into the other? Host Prof. S.S. Patil, Dharwad University.
- **Co-existence Strategies** How can organic/non-GMO growers work alongside GMO? Host Binay Choudary, CUC.

OUTCOMES

Task Force Action Strategy Peter Melchett hosted this breakout. The role of TE was repeatedly emphasised and unanimously all participants saw TE playing a central role in steering Task Force activities, convening meetings to share experience from different countries, and playing a huge role in steering policy and advocacy. It was emphasised that this role should be ongoing and not sporadic in nature. Individual projects do not have the clout and needed someone like TE to play the role of an Industry leader and independent party. TE should facilitate meetings between stakeholders and steer important activities such as the seed issue. Peter Melchett pointed out that business would say that markets should drive investment, but the group felt some of the issues at stake were too important to leave to the market. A platform must facilitate, engage in advocacy, and help support a Seed Fund. Brands should support the Seed Fund as their supply chain resilience is at stake. The role of TE is also making Governments understand the role of organic and non-GMO. The role of this Task Force was seen as one supporting TE. A steering group could emerge from within the larger Task

Force. TE should enable advocacy, support pressure groups and get funds to create things like the "Future Shapers" of 2012 which was exciting. We should do a similar one for seeds, he said.

That TE should have a separate Seed Task Force within TE was yet another suggestion. There could also be Regional groups which can be supported by TE. TE should channel all the forces and provide the platform for the movement.

Many felt that funding should be tapped by TE and distributed and shared across continents. This should be made attractive for companies and brands. The feedback and information from this Task force should be fed into the main conference and not just kept within this group. TE had a huge role to play in the future of organic cotton production.

Investment Strategies This strategy discussion was hosted by Dylan Wann. The discussion raised investment as a priority, and said that big funders and banks should be targeted before targeting Governments. Public Private Partnerships could play an important role. There was a role for agricultural universities to invest. Since Governments may feel that the percentage of the non-GM or the organic market was too small to be significant the private sector could invest as they needed the end product. Local governments and local implementing agencies of repute must be engaged to handle the investment responsibly. There is a need to talk of seed from "breeder to farmer" just as we talk about "fibre to fabric". Elections can change investment policies. There must be policy advocacy engagement to facilitate this, for example in India there is a recent law that companies must invest in CSR activities. In Turkey NGOs play a catalyst role; though GMO is forbidden there is need for investment in collection of germplasm, training and guidance of breeders. There must be a single driving force, even if we target different sources such as Crowd Funding for which there must be creation of public awareness using social media.

Regional & Global Strategies Host Prof. S.S. Patil stressed the need to define strategies across countries, identifying regulations and outlining issues to be tackled. Regional and Global strategies must be seen as complementing each other. There is a need for all stakeholders to take responsibility from seed companies, the value chain and universities as well as Government and science and technology. Though countries tend to compete, this is to be seen as a global issue with sharing and leanings transferred. Breeders must be part of the value chain. There must be global co ordination, especially in areas such as legal framework, advocacy for organic, gm free zones. Much work is to be done. A system approach was necessary.

Co Existence Strategies Binay Choudaray's group said there was a need for balance and an even bigger need for the whole chain to be involved and engaged with the issues regarding co existence and contamination. Rules on issues such as Refugia were being ignored. Farmers are unable to tackle the issues by themselves and need support. There must be good quality refugia seeds given and preferably cotton (not other crops) should be used. There is an urgent need to engage with policy makers and create awareness. India was seen as an example of how things could go badly wrong and need strong action to reverse damages. There is a need for a good manual as a guide to co-existence.

13. Recommendations and Next Steps

Textile Exchange together with a small expert advisory group has taken the outputs of this session and will incorporate into a live working document. The draft will be circulated for your feedback and input. A core team of the Seed Task Force should follow up and draft a global TE Organic Cotton Seed Masterplan.

The newly formed TE Organic Cotton Accelerator – planned out by the Business Models Task Force alongside the Seed Task Force meeting in Istanbul – will provide the foundation structure for developments in Seed.

IMAGES: SEED TASK FORCE MEETING IN ACTION

APPENDIX A: TASK FORCE PARTICIPANT LIST

Surname	First Name	Organisation	Country
Wann	Dylan	AgriLife	U.S.A
Hariharan	R.	Agrocel	India
Uskuc	Tolga	Akasya	Turkey
Chinaswarmmy	Mani	Appachi	India
Arunachalam	Narayanasamy	Armstrong Spinning Mills (P) Ltd	India
Ramakrishnan	Mahesh	Arvind Mills	India
Crossland	Brent	Bayer	U.S.A
Rivera	Orlando	Bergman Rivera	Peru
Ducoin	Eric	Biocoton	France
Suter	Christa	bioRe	Switzerland
Rawal	Vivek	bioRe India	India
Hohmann	Patrick	bioRe	Switzerland
Ambatipudi	Arun	Chetna	India
Prasad	Ram	Chetna	India
Kaut	Christoph	CmiA	Germany
Lanting	Mans	Consultant	Netherlands
Choudury	Binay	Control Union	India
Prose	Mark	Control Union	Bangladesh
Nabadawewa	Mahesh	Control Union Inspections (Pvt) Ltd.	India
Rewal	Arvind	CottonConnect India	India
Wei	Xueguang	CottonConnect China	China
Patil	Dr.	Darwhard University	India
Sanfilippo	Damien	Fairtrade International	Germany

Surname	First Name	Organisation	Country
Messmer	Monika	FiBL	Switzerland
Bulent	Acikoz	GAP RDA / UNDP	Turkey
Karrahocagil	Sadrettin	GAP RDA / UNDP	Turkey
Murat	Candemir	GAP RDA / UNDP	Turkey
Mutlu	Nusret	GAP RDA / UNDP	Turkey
Bischof	Andrea	HELVETAS	Switzerland
Soth	Jens	HELVETAS	Switzerland
Arapov	Ismailjan	HELVETAS Kyrgyzstan	Kyrgyzstan
Lammerts van Bueren	Edith	Louis Bolk Institute	Netherlands
Doshi	Rohit	Mahima	India
Yeung	Tong	Mecilla	China
Kocagöz	Barış	National Cotton Council	Turkey
Jeromin	David	Organimark	U.S.A.
Shultz	Heinrich	Organimark	South Africa
Ertem	Atila	OTS	Turkey
Mane	Dhawal	Pratibha	India
Meher	Pravakar	Pratima Organic Grower Group	India
Compson	Sarah	Soil Association	UK
Melchett	Peter	Soil Association	UK
Weerdestijn	Marieke	Solidaridad	India

UNABLE TO ATTEND:

Surname	First Name	Organisation	Country
Haider	Riyaz	BioSustain	Tanzania
Woodward	Mike	Caproexnic	Nicaragua
Kranti, Dr	Keshav	CICR	India
Venugopalan	Dr. M. V.	CICR India	India
Lancon	Jacques	CIRAD Eastern and Southern Africa	Kenya
Mor	Anand	Ecofarms	India
Jorge	Pedro	Esplar	Brazil
Mann	YC	Esquel	China
Eyhorn	Frank	Helvetas	Switzerland
Abdurakhmanov	Shaknoza	HELVETAS Kyrgyzstan	Kyrgyzstan
Leu	Andre	IFOAM	Germany
van Elzakker	Bo	Louis Bolk Institute	Netherlands
Tyrell	Keith	PAN UK	UK
Chaudury	Shreyaskar	Pratibha	India
Sitaram	Meher	Pratima Agro	India
Potdar	Dr.	Seed breeder	India
Abouleish	Helmy	SEKEM	Egypt