From July 16 – 22, the ITMF Spinners Committee travelled to Brazil for a visit to the cotton growing areas in the states of Mato Gross, Goiás and Bahia which form the major part of the high Savannahs found in the centre of Brazil, south of the Greater Amazon Basin.

The Spinners Committee would like to express gratitude to the Brazilian hosts for sponsoring as well as organising the logistical requirements. The visit required many hours of flying by small planes to cover the vastness of the area. The hospitality in the form of the excellent reception received on every occasion, and the lunches and dinners extended to our Committee was beyond any expectation and was deeply appreciated.
Participants

Committee Members & Secretariat

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<tr>
<th>Name</th>
<th>Country</th>
<th>Company</th>
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<tr>
<td>Ziad Bashir</td>
<td>Pakistan</td>
<td>Gul Ahmed</td>
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<td>Werner Bieri</td>
<td>USA</td>
<td>Buhler Quality YarnsCorp.</td>
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<tr>
<td>Jung-Soo Kim</td>
<td>South Korea</td>
<td>Ilshin Spinning Co.</td>
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<tr>
<td>Andrew Macdonald</td>
<td>Brazil</td>
<td>Santista Textil (Committee Chairman)</td>
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<td>Walter Simeoni</td>
<td>South Africa</td>
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<td>Christian Schindler</td>
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Invited Guest

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<tr>
<th>Name</th>
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<tr>
<td>Peter Graham</td>
<td>Paraguay</td>
<td>Weil Brothers Cotton Inc.</td>
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Synopsis of the Visit

The Committee started the visit on Monday afternoon, meeting with representatives of AMPA (Mato Grosso Cotton Growers Association) headed by the President Sérgio de Marco at the headquarters in Cuiabá, the capital of the state of Mato Grosso. The next day the Committee visited the cotton fields and the gin at the Maraba Farm in Campo Verde owned by Mr. José Pupin, before being received in Rondonópolis by Mr. Christopher Ward representing the Mato Grosso Agricultural Foundation. On Wednesday the Committee visited Fazenda Nova, near Primavera do Leste and was received by the partner Mr. João Luiz Pessa, and after a presentation on ginning, visited the installations and cotton fields. This was followed by a visit to UNICOTTON, the local cooperative where the Committee attended a presentation and visited their cotton classing facilities. In Goiana, the capital of the state of Goiás, the group met with representatives of AGOPA (Goiás Cotton Grower Association) headed by Mr. Haroldo Rodriguez da Cunha and of FIALGO (Cotton Development Fund of Goiás) headed by Mr. Paulo Cesar da Cunha Peixoto. From Goiana the Committee travelled to the State of Bahia where the members visited cotton fields and gins of the Mizote Farm of Mr. Paulo
Mizote and the Busato Farm of Mr. Marcos A. Busato. In the town of Luiz Eduardo the Committee met with representatives of ABAPA (Bahia Cotton Growers Association) and watched a presentation made by their Vice President Mr. Sergio Pitt. The visit terminated with a visit to the Cabeceirinha Farm of Mr. João C. Jacobsen Rodrigues who is growing irrigated cotton. He is currently the President of ABRAPA (Brazilian National Cotton Growers Association).
Observations and Recommendations

Observations

The Committee was particularly pleased to notice the progress which has been made since its first visit in 2000. Already six years ago the standard in cotton farming and ginning was excellent, but clearly has improved even further since then.

The Committee predicted after its first visit that Brazil had the potential to increase steadily its cotton production and to become an important cotton exporting country. This prediction has been realized, and generally speaking despite the substantial increase of cotton production, the basic recommendation and emphasis of the Committee in 2000 with regard to gentle and careful ginning has been followed. Gins of previous generations have been well maintained and are generally running at speeds that do not harm the cotton fibres more than necessary. Newer gins which have been installed during this period, and visited by the Committee, should lead to improved efficiency. However, the Committee was pleased to note that the new gins are not running at full speed so as not to damage the cotton and preserve the intrinsic values. Clearly the final objective is to meet the high quality requirements of their customers.

All installations which the Committee visited were of a high standard, and there were only subtle differences between various farms and gins, which showed the competitive spirit existing in the Brazilian cotton industry.

Therefore, it was observed with pleasure that the farmers have the desire to respond to the customers' requirements and needs in the spinning industry, and that they have reacted positively to suggestions made by the industry at large.

The farmers in Brazil are clearly conscious of the necessity to produce high quality cotton, but they are also very concerned to apply best management practices in order to be economically efficient and competitive. This becomes noticeable when one realises that Brazil did not export cotton in 2000, whilst in the intervening period has become one of the largest cotton exporting countries, supplying the spinning industry around the world with good quality cotton. Exports reached 380,000 tons in 2005. Therefore the Brazilian cotton industry is now meeting the challenges of the global textile industry in the international markets, and has adapted the marketing of its cotton to this environment.

The concept of transparency and traceability of the cotton produced and delivered through the use of tags on each bale is of particular importance and much appreciated by the spinning industry. It demonstrates that the Brazilian farmers are willing to improve the quality of the cotton by eliminating any weaknesses within the production and delivery chain.

The Committee was also pleased to notice the great awareness for integrated pest management methods as well as other environmental aspects.

The great confidence of Brazilian farmers in their own future and the confidence of their customers are demonstrated by the selling of cotton for forward deliveries, even before the cotton has been planted. This positive approach assures the off take of their production, and sustains their continuity, covering their costs, hopefully with a reasonable margin, as well as giving the buyers maximum flexibility to make the best use of their cotton purchases.

The continuous, scientifically based efforts by the farmers to improve technically the ginning process in order to achieve an even better cotton quality, as was witnessed during the visit, are supported by the Committee.

In summary the Committee has enormous confidence in the future of Brazilian cotton.
Recommendations

i) Genetically modified cotton seeds

The Committee learnt during the visit that Genetically Modified (GM) cotton seeds would be welcomed by most of farmers, but they are not available for legal restrictive reasons. This was a great disappointment in the light of the modern approach to farming in Brazil.

GM cotton will undoubtedly drastically reduce the usage of toxic chemicals over the long run and therefore reduce the damage to the ecology of the region. Also, even though the GM cotton seeds are more expensive than the conventional ones, it would reduce the total costs of production by the elimination of certain applications of herbicides and insecticides, while at the same time possibly increasing the average yield.

It is noteworthy to bear in mind that GM cotton would also improve the quality of the cotton, as the plant is exposed to fewer chemicals which though protecting the plants, also increases plant stress which in turn effects the quality of the lint.

The Committee is therefore in favour of the concept of GM cotton, properly managed, and is confident that the Brazilian farmers could well achieve such the management standards required.

ii) Plant height

The Committee continues to be concerned regarding the height of the cotton plants seen in many fields in Brazil. During the visit to other countries it has been observed that an excessive height of the cotton plant is generally responsible for high bark content, so that either the height of the harvesting spindles should be raised to accommodate the taller plants, or the plants should be shorter and denser which would reduce bark, neps and spindle twist, which occurs when harvesting "oversized" plants. Shorter and individually denser cotton plants, would, the Committee believes, also increase the uniformity of the cotton fibres, as the variation in characteristics from the top bolls, slightly immature, to the lower ones, which are more mature, would be reduced.

iii) Contamination

The Committee cannot stress enough the importance of preventing the use of any material other than cotton strings throughout the cotton growing and harvesting process. It appreciates the extent to how far Brazil has gone to remove these from the fields; but they should not get complacent in this respect. Ropes for tying down the plastic covers of modules should be carefully examined, and ropes which contain synthetic fibres woven into the centre of ropes avoided. The Committee encountered examples of this problem.

iv) Ginning

While it is encouraging to note the reduction of leaf content in the ginning process, the Committee must emphasise that this should not be achieved at the expense of an increased neps and short fibre content which are not acceptable to the spinning industry.

The installation of pre-cleaners immediately at the module-eater, for dry cotton, should be recommended provided the extraction equipment does not force even a small amount of fibre separation from the seed. Loose fibres in the process tend to either become neps or attach themselves to seed coat fragments effecting yarn quality.

The modernization of the ginning is appreciated, but at the same time the Committee must recommend that with Brazilian cotton - rain grown and machine picked - the gins
should not be running at full speed otherwise the cotton fibres may certainly be damaged.

Also from the experience in the spinning industry the Committee recommends minimizing the transportation of cotton in the ginning process and to limiting the amount of machinery in the process in order to reduce the negative impact on the cotton.

So it is important not to improve one aspect or one quality parameter at the cost of another.

v) Promotion and internal competition

The Committee noticed the many similarities between the areas visited in the Cerrado and fully recommends that the efforts for the penetration and promotion of the cotton in the international markets could be better achieved by combining the efforts between the various States and working together in a unified manner. While encouraging competition between farmers is healthy, this should not be reflected in the international market. Individual promotion through the use of the bale tags identifying the gins and farmers would be a far more acceptable marketing tool as a way of encouraging quality and performance.

vi) Bale covers

The Spinners Committee with its vast experience in fabric forming technology recommends that woven cloth for the protection of the cotton bales is preferable to knitted cloth. Since the packaging is the visiting card of each bale when it arrives at the spinning mill, it is advisable to pay attention to this matter. In general, the packaging of cotton reflects the efficiency and the proficiency of the Brazilian cotton industry, so this area requires further improvement. Many bale covers were already torn and dirty even before leaving the gin. In addition, the Committee observed that in some areas bulky knots were being made to close the bale wrapping, which is not only inadequate for bale stability, but also uses more material than would otherwise be necessary.

Generally speaking synthetic straps are to be preferred to steel wires because the latter can rust and contaminate the bale. Very often steel wires are also a source of injuries in the process of opening a bale. Synthetic straps are cheaper and lighter and the handling is much easier and safer and do not damage the fibre in the event of the bales coming in contact with humid conditions.

vii) Stickiness

The stickiness of cotton is a threat to every cotton farmer. Stickiness will deteriorate the quality and consequently the international price of Brazilian cotton. Some very restricted evidence of aphid infestation was noted from the characteristics of fumagin on the cotton. An integrated pest control management is the best guarantee to prevent sticky cotton

viii) Alternative energy

The production of bio-diesel for the farmers own use is encouraged. The Committee welcomes efforts of the farmers towards energy independence by converting edible oils into bio-diesel products.
Conclusion

It was impressive to see the passion shown by the Brazilian cotton growers. If that were the case in many of the other cotton growing countries then in all likelihood cotton as a fibre would reclaim its rightful place amongst all fibres in the world.

If other areas in Brazil such as transport, logistics, shipping ports, etc. would developed the same passion and attention, then Brazil could play a larger role in the world cotton arena and assist in positioning the cotton fibre as a preferable fibre, making cotton once again the fibre of choice of the final consumer.

July 2006
BRAZIL - 5TH LARGEST COUNTRY
GNP - 1 BILLION US DOLLARS
POPULATION 174 MILLION
38% GNP BACK TO GOVT IN TAXES
INTER BANK - INTEREST RATE 15.25%
INFLATION 4.5 - 6%  GNP GROWTH 1.5 - 2%
113 MILLION HECTARES OF AGRICULTURE
180 MILLION HEAD OF CATTLE
30% OF GNP FROM THE PRIMARY SECTOR & RELATED INDUSTRIES

FIBER USAGE IN THE BRAZILIAN TEXTILE INDUSTRY

BRAZILIAN - COTTON PRODUCTION & CONSUMPTION / 1990-2002

BRAZILIAN - COTTON import & export comparison / 1990-2005

(Productivity - Mato Grosso x Brazil)

Spinners Committee, Travel Report Brazil 2006