

REPORT OF THE COIR DELEGATION TO L A C REGION

The LAC has been rated as the second fastest growing region in the world. The region with 43 countries, several of them showing good perspective in growth and dynamic trend in their markets, offers a potential market for Indian exports. The export of coir and coir products to LAC has been negligible over the years. Whatever seen in the market was mainly reexported by US or European buyers. The Coir Board had taken some initiatives in the recent past through catalogue shows, product exhibition etc. in this region for which it was given an award by the ITPO. Encouraged by the responses received and looking at the growing market potential it was proposed to take an exploratory and trade promotion delegation to LAC. The proposal was approved by the Govt. The delegation was led by Shri Ashok Pradhan, Secretary, Ministry of SSI & ARI, Govt. of India and consisted of Shri Christy Fernandez, Chairman, Coir Board and coir exporters, Dr. K.S. Subhash, Koncherry Coir Factories, Shertallai and Shri C S Suresh, Techno Exports, Kochi. The delegation visited Brazil, Chile, Panama and on its return New York, USA, where a seminar focusing on promotion of coir geotextiles was also held. The period of visit was from 19th to 30th of May, 2002.

BRAZIL

Brazil has the largest market in the LAC with 170 million people, with a reasonably stable economy and a growing middle class adding to the existing high income consumers who are influenced by trends in the US Market. Indian exports in general to Brazil have been on the increase.

At Sao Paulo a meeting with the Consul General, Shri Deepak Bojwani was held who briefed the delegation about the Brazilian business environment, business culture and areas to be focused upon. He emphasised the need for participation in product specific exhibitions and fairs for generating and sustaining interest in the product especially in the initial years. A press interview was given by the leader of the delegation to a reputed Brazilian Daily, "Folha de Sao Paulo".

The Coir Board participated in the 18th Paulista Supermarket Expo, 2002 (CAPAS Fair) held at Sao Paulo from 20th to 23rd May, 2002. It was for the first time that the Board participated in any fair in the LAC region. The pavilion was inaugurated by Shri Ashok Pradhan and was attended to by the Consul General of India at Sao Paulo and the Resident Director of ITPO. Samples of products from a dozen exporters were tastefully displayed. Product catalogues and trilingual publicity materials were distributed. Promotional and commercial video films were frequently played. The stall attracted hundreds of visitors and over 40 business representatives who had made trade enquiries. There were about 9 commercial representatives, 3 representatives from the packing industry, 4 from *food* manufacturers, 10 from super market owners, 5 from distributors for the super markets, 3 from publicity firms, 1 from consultancy firm, 1 from traders association, 1 from landscape and gardening firms and 2 from representatives of the

firms. They mainly wanted to know whether business in coir products is possible in Brazil through any authorized representative. The fair provided an excellent opportunity to showcase Indian coir products.

The trade delegates held one-to-one meeting with M/s. A GROTTA Decoracoes, M/s. RELF and M/s. Walmart (Sams Club) arranged by the Board. M/s. A GROTTA Decoracoes have shown interest in marketing the product, but have no experience of importing goods. If there is any importer of the product, they were interested in marketing the product. M/s. RELF showed interest in import of coir products, but in small quantities. The trade delegates were hopeful of getting a firm supply order from M/s. RELF. M/s. Walmart showed interest in the product, but they were not interested in importing it directly. If there are any importers or stockists for the products in Brazil, they would like to market coir products. The trade delegates also established firm business contacts with an importer M/s. Ahammed Ijaz who have expressed desire to import coir products from India.

While the trade delegates were busy at the fair, the official delegates met with Mr. Carlo Lavatelli, President of the ABIOVE and Bunge Group which is the apex association of Agro-industries, Brazil, and other business representatives, where issues of common interests were discussed. The leader of the delegation spoke about Rural and Agro Industries and SSI Sector in India. The Chairman, Coir Board made a presentation on the Indian coir industry and coir products, especially the Coir Geotextiles and Coco Pith. The General Manager of M/s Cargill, Complexo Soja, Mr. Guillawme Cambour, showed interest in the possible use of coir geotextiles and coco pith in their farms and said that he would take up the matter with the concerned in their organisation. The delegation met the Indian Business Community at a dinner arranged jointly by the Consul General and Coir Board.

The Leader of the Delegation and Chairman, Coir Board visited Rio de Janeiro and attended a meeting arranged by the Consulate General and the Federation of Chamber of Commerce (FECAMARA) which was attended by about 50 leading business representatives. At the meeting, the Leader of the Delegation and the Consulate General, Sao Paulo outlined the salient features of the India-Brazil relations and the significance of agro rural industries as well as small scale industries in the development of Indian economy. The Chairman, Coir Board made an extensive presentation on Indian coir products and possible avenues for business. Some of the business representatives showed keen interest in establishing contact with coir manufacturing companies and to set up arrangements for import of coir products.

From the discussions and meetings the delegation had with the officials, business community, visit to supermarkets, interaction with members of Chambers of Commerce, Trade Associations etc. certain information relevant to Brazil could be obtained. They are as follows:

- (i) The tariffs are high for coir and coir products. There are three types of duties viz. import duty ranging from 3.50% to 21.50%, an industrial tax from 0% to 10% and a state tax of 18%. All items of coir require import license to be obtained by the importer before shipment. Vat system exists.

- (ii) High transactional costs and some common banking problems have to be kept in mind. High interest rates (3 to 7% per month in certain cases) and reluctance of importers to open Letters of Credits is a major challenge for Indian exporters. Invoicing exports Brazil in Real, the Brazilian currency may be an option, if hedges are not too expensive.
- (iii) Five Year Multiple Entry Visas to Indian business visitors is generally available. But recently even five year visa only permits stay of upto 180 days in a year. There is of late a trend to issue short terms visas for 90 days. Overstay involves fine on departure.
- (iv) Lack of information and language problems also cause some hurdles. The Indian Embassy has a list of interpreters whose services could be commissioned by the visiting Indian exporters.
- (v) The shipping situation has improved. M/s P & O Nedloyd has a regular weekly shipping service from India to Brazil via Singapore. The sailing time is about 25 - 35 days and charges are about US\$ 4000 for a 40 ft. container. There are other lines like Norsul Line (Brazilia) Mitsui, Zumi and MSC. Sailing time is 35 to 40 days.
- (vi) There are about 250 major stores in Brazil. Price realisation is comparatively high, though volumes are low. It is beneficial to a product like coir.
- (vii) Labour costs are high. Though coconut production is there, it is wide spread and may not be viable to produce coir products in Brazil using local raw material. There were some preliminary enquiries about the possibility of setting up production infrastructure through JVCs.
- (viii) A Market Survey may be held. Local agents who are capable of promoting the coir products may be identified, trained and promoted.
- (ix) Apart from the fact that Brazil is the largest market in LAC region, it is the gateway for Indian exports to the Mercosur regional market and other South American countries, which are reportedly integrating and lowering trade barriers. Indian exports to Mercosur to a large extent are dependent on the demand from Brazil.

CHILE

The Chilean economy, of late, has grown strong and is considered to be the most stable economy at present in Latin America. The domestic market is comparatively small as the population is only about 15.21 million (2001). Its per capita income in 2001 was US \$ 4415/- (1 US\$ is about 664 Chilean Pesos). The annual rate of inflation is low and was only 2.6% in 2001. The balance of trade was favorable to Chile in 2001. However, the imports have shown sustained growth in the recent past.

On arrival the Ambassador of India in Chile Shri K.P. Earnest briefed the delegation. Visits to Departmental Stores, Buyer Seller meets and a meeting with the Exporters Association and meetings with Ministers and high officials of Panama were scheduled for the delegation.

The trade delegates along with the Chairman, Coir Board had visited several super markets and stores of Santiago and held detailed business discussions. The prominent amongst them

were Alto Las Contes Super Market; Fala Bella, SACI; Ripley S.A; Alma Cenes Paris Commercial S.A; and Park Arauco.

Jute and sisal products were prominently exhibited along with other floor coverings, carpets and area rugs in these stores. Coir door mats were not seen, but small area rugs were seen in small quantity. But the quality of area rugs exhibited was found to be very poor. The stitching was shabby and the latex backing was substandard. It is understood that these coir products were imported from small manufacturers/exporters through European and U.S bulk importers. Majority of the stores, it seems, had no idea about the high quality coir products except in Park Arauco where some quality products, both mats and mattings, were displayed. The price mark-up was pretty high. There was near total absence of awareness about the exquisite wide range of coir products from India which could be made available to the Chilean Market.

A meeting with Chilean Exporters Association (ASOEX) was held, where about 15 prominent business leaders and diplomats attended. In the meeting, Mr. Ronald S. Bown, Chairman of the Board of ASOEX had explained the way how the agricultural commodities especially the fruits and vegetables were cultivated in a highly professional manner and how the yield and quality could be improved through Good Agricultural Practices (GAP). He also explained the impressive strides made by Chile in Food Processing Sector. The leader of the Indian Delegation Shri Ashok Pradhan referred to Indo-Chilean bilateral relations and explained to the members of the ASOEX about the Indian coir products, its biodegradability and Ecofriendliness especially about the use of Coir Geotextiles in agricultural applications. A significant lesson learnt from the interaction with the members of ASOEX was the effective way in which a system of Good Agricultural Practices (GAP) introduced by them have helped them in improving the productivity and quality of their products. Introduction of a similar system of Good Management Practices (GMP) by the manufacturers and exporters of coir and coir products through training and awareness building programme over a period of time can hopefully bring about better productivity and a qualitative improvement in the Indian Coir sector.

The highlight of the delegation's visit was the one-to-one buyer seller meeting arranged with the Indian trade delegates and their counterparts in Chile. 12 major importers of Chile were invited for the one-to-one meeting, out of which 11 had turned up. The one-to-one meeting with the trade delegates and a mini exhibition of products catalogues and literature has helped in establishing useful business contacts and to enter into business deals with them. According to the trade delegates, there were serious business enquiries although no firm orders have been placed on them at the initial one-to-one meeting. In an exploratory mission like the present one, it was only but natural that firm orders were not forthcoming at the first instance especially in the case of an unfamiliar product like coir. But the enthusiasm and keenness shown by the participants in the one-to-one meeting was pointer to a very positive business response from Chile.

The major issues that have come to the notice of the delegation through interaction with the trade, business representatives, officials, diplomats etc. are as follows:

- (i) Chile practices free import and export policy. There are no special trade regulations. Importers and exporters are free to conclude deals with exporters and importers of any other country.
- (ii) The local custom rules do not permit free entry of samples and custom duty is charged on samples also.
- (iii) There is no direct shipping service between India and Chile. Transshipment at Singapore becomes necessary. Any request for enhancement of agreed price or claim of freight charges made subsequently will not be acceptable to Chilean parties. M/s. Nedlloyd has 4 services every month from India - Singapore - Chile and vice versa. Average transit time is about 42 days. M/s. Compania Sudamericana de Vepores has two services every month. The main obstacle to expansion of trade is the distance and lack of direct shipping. Establishment of direct shipping links between India and South America via South Africa would reduce voyage time by nearly 50% and freight costs by 25%.
- (iv) The import licenses issued by the Central Bank of Chile have stipulation to the effect that payment will be made within a period of 120 days. Extending the validity of Letters of Credit is a cumbersome process and expensive, a factor to be kept in mind while opening L.C. Adherence to the time schedule is very important.
- (v) All Letters of Credits are to be authenticated by the Banks in US or any third countries where both Chilean and Indian Banks have corresponding arrangements. There is no branch of any Indian bank in Chile.
- (vi) On most of the items, the custom duty on CIF value is 7%. A value added tax at the rate of 18% is charged after the custom duty is calculated. A tariff reduction programme with the Mercosur member countries is being pursued.
- (vii) The inability of Indian exporters to provide long term and short term credits required by Chilean importers and lack of mutual awareness of market possibilities, compounded by problems of language are barriers to rapid trade development to Chile.

PANAMA

The Population of Panama is 2.9 million (2001). The annual rate of growth of GDP in 2001 was 1 % and the inflation 1.5%. The Colon Free Trade Zone is very active and is considered a major hub for import to Central and South American region. Panama is one of the largest destinations for Indian exports in the LAC region.

On arrival the Ambassador Shri Tara Singh, briefed the delegation. Visits to Departmental Stores, business meeting with the Vice President and Ministers of Panama, business representatives, officials, diplomats etc. were also arranged besides a mini exhibition of coir products.

The trade delegation along with Chairman, Coir Board visited some of the supermarkets and one of the biggest mega stores Do-it-centre where quality coir mattings were displayed, but was surprised to see them classified as jute products. Coir mats and small area rugs exhibited were of inferior quality, poor in finish and devoid of value addition. High quality products like fibre mats, PVC tufted and flocked mats were not seen. There seems to be a near total absence of awareness about the wide range of high value added quality coir products from India. As is the case elsewhere, these products were mainly imported through other countries like Europe or U.S. Demand for upmarket products was evident, but high end coir products were not available at the showrooms. Here is an opportunity for direct export of quality high value added coir products from India.

A seminar cum buyer seller meet was organised in which about 45 prominent business representatives, CEOs of selected departmental stores, etc. attended. The seminar was also attended by the Secretary General and Director (Asia) from the Ministry of External Relations, a Legislator of the Province, Ngobe Bugle, officials from Ministry of Commerce, Trade and Industry, Agricultural Development, Ambassador of EI Salvador, Hon. Consul General of India in Nicaragua, members of Indian Community and representatives of print and electronic media. The leader of the delegation gave an account of Indian small and cottage industry sector, the unique features of Indian coir products and possible areas of bilateral cooperation in the field of agro rural industries and small scale sector. A documentary film on Indian coir industry was shown and a power-point presentation on the coir products was made by the Chairman, Coir Board. A mini exhibition of coir products was arranged at the conference hall which has helped in creating awareness about Indian coir products and the possibilities of developing market for it in Panama and neighboring countries. In the interactive session that followed, the Panamanian businessmen showed keen interest in the coir products especially on account of their eco-friendly nature. They have expressed desire for transfer of technology and to arrange training programmes for utilisation of locally available coconut husk in Panama as well as for eradicating diseases prevalent in the coconut farms. The leader of the delegation advised them to contact Indian coconut research institutions like ICAR, CPCRI etc. for availing programmes of mutual interest.

The Embassy had also arranged one-to-one business meet along with a seminar followed by meetings at the premises of major chain stores. The trade delegates could successfully utilise this opportunity for concluding business transactions and there were serious enquiries which are likely to materialize in exports. A preliminary trial order has also been received by the trade delegates. The potential for Panama to be developed as a hub for importing products for Panama as well as for other Latin American Countries seems to be quite bright. Some of the serious business discussions with representatives of supermarkets and importers gave indications that a few of them are willing to import coir products in bulk to the Colon Free Trade Zone from where they could ship in required quantities to other L.A Countries.

The officials of the Ministry of Commerce and Industry of Panama and a couple of voluntary organisations had held separate meeting with the Chairman, Coir Board. They were keen to explore the possibility of setting up small production units to manufacture coir and coir products in the coconut growing areas of Panama. They enquired about the possibility of getting training programmes organised for their workers, especially in Colon province where there is coconut cultivation. The Coordinator from the Ministry of Commerce enquired about the machinery, cost of production, manpower development, etc. The Chairman, Coif Board advised them to specify the raw-material availability and the number of people they would like to train, based on which a course of action can be suggested to them for the type of machinery required, training needs and other support mechanisms.

The Hon. Consul General of Nicaragua Mr. Emilio Daboub requested the leader of the delegation to arrange similar presentation on coir products in Nicaragua also. Mr.Daboub expressed keen interest in getting suitable coir geotextiles to replace the synthetic geotextiles currently being used by them in melon farms. If a geotextile product to meet with their specifications could be developed and offered he has assured good market in Nicaragua. Its experience, according to him, would open up new avenues in the adjoining countries as well. The Ambassador of El-Salvador, who was present in the seminar, also desired to have such seminars and exhibitions organised in that country to develop the market.

Mr. Manuel Motta of M/s.Original Store had held discussions with the Chairman, Coir Board, to explore the possibility of setting up a joint venture or to set up a production unit in their province. They have sought a quotation for one defibering machine (stationary and mobile), two automatic coir yarn spinning machine, one machine for making mats (fibre and creel) and other accessories. They have also sought the help of Coir Board to get a couple of their employees trained in India or in the alternative to depute some experts from India to train their men in Panama.

The trading and banking features of Panama have much in common with other L.A Countries.

Visa Regulations are strict. Ordinary passport holder's applications require reference to the Department of Immigrations, Panama for prior approval. It is advisable to apply for visa eight weeks in advance. Duplicate Visa application, first four pages of passport, copy of visa obtained for US/UK/Canada/Mexico, a letter from the company stating his designation, purpose of visit and undertaking responsibility of expenditure during visit, may be sent to the Indian Embassy in Panama for expediting issue of visa clearance.

Identifying Indian agents for coir products may be beneficial. They can operate from Colon Free Trade Zone to cover L.A Countries.

NEW YORK

The Dy. Consul General of India, New York Shri R. V. Warjini had arranged a luncheon meeting with the leading business representative, end users of coir geotextiles, representatives

of Government and local Self Government agencies, voluntary agencies and press. About 40 representatives attended the meeting. A power-point presentation was made on coir geotextiles by the Chairman, Coir Board.

The Chairman, Coir Board said that with the growing environmental awareness and with new norms under NPDES Phase II, the US market should seriously consider enhanced use of Coir Geotextiles, which is rated as the best long term biodegradable product for soil bioengineering applications. In the early 90s India was the major or the only supplier of several coir geotextile products. Now the share has gone down to 30-40%, a trend which is causing concern. Coir Geotextile is facing a "Recognition problem" and this delegation is an exploratory mission to find out the causes of the decline. It also aims at building confidence on the capabilities of Indian coir industries and Indian Coir Geotextiles. The Chairman said that technology based promotion is key to popularise an engineering product like coir geotextiles, for which he sought the help and guidance of American Universities and organisations like EPA, USDA, ASCE, Army Corps of Engineers, etc. There are no ASTM standards specifically for coir geotextiles. Approval of .regulatory agencies of USA is necessary, especially since it is in the public realm that this product is being used on a large scale. Capacity building, training of manpower, preparation of manuals, etc. are required to be carried out to meet with the demand of US end users. US want large volumes which the Indian manufacturers find difficult to supply in short delivery schedules. So warehousing becomes necessary, which is often expensive. The Indian suppliers do not know in detail what are the expectations of the end users about after-sale services. Coir Geotextiles attract 5 to 8% customs duty in US as it is classified as "Textiles" while jute attracts '0' % duty. This anomaly has to be removed.

The leader of the delegation drew attention to the unique properties of coir geotextiles as an ecofriendly, biodegradable product best suitable for soil bioengineering applications. He assured supply of quality products to meet the quality conscious US market. The marginally higher cost of coir geotextiles compared to the synthetics, should not be held against the use of the former on account of the long term environmental benefits that could be derived out of it. The rationalization of import duty on coir geotextiles may be taken up with the authorities in consultation with the Indian Consulate General, N.Y.

Different varieties of coir geotextiles being manufactured by Indian producers were also exhibited. The participants evinced keen interest in the products. Some of the end users had one-to-one meeting with the trade delegates.

Ms. Cathy Shea, and Ms. Julie Walsh of the Council on the Environment of N. Y City said that there are several non-Governmental environmental groups which undertake environmental restoration work using natural geotextiles. They may be contacted to promote the product. Ms. Walsh agreed to send a list of such environmental groups. Ms. Walsh also advised to approach the Ford Foundation (N. Y based) for a grant for increasing production, marketing and workers training to promote coir geotextiles.

Mr. Krish Shekhar of Art Karat Corporation, N . Y said that the American Market is not a monolith and that it consists of several niche markets for specific products. Ecofriendly products like geotextiles are a thrust area. It requires niche marketing efforts, mass mailing and a country level focus for which local representative is required especially for frequent interaction with the end users.

Mr. Rick Larrabee, Head of Port (Commerce) and Ms. Doris Have of International Port of New York and New Jersey, said that port reconstruction and remediation is gaining priority for which natural geotextiles would be in demand.

Mr. Scott Gordon, Executive Vice President of Gordon Global Associates, a consultancy firm, said that participation in fairs are important to popularise the product and also suggested that Washington lobbyists may be engaged for promoting the product.

Mr. Piyush Patel of Roselyn, N. Y, said that, engagement of Washington lobbyists may not be really required, but local representatives, who have requisite expertise and knowledge about the product, may be engaged.

Mr. E. W. Dadson, Transporters and infrastructure building consultants, said that often the end users do not know about the distribution channel and desired to know about the marketing and distribution network of the product in the USA. He said they would be keen about knowing supply sources. Shri Shan Madhavan of M/s. William Kemp who joined the delegation at N. Y explained the distribution channel. A CD-ROM containing the list of Manufacturers/exporters of Coir Geotextiles were made available to the participants.

Meeting With N.Y. Park Authorities

Mr. Michael J. Feller, Dy. Chief of Natural Resources, New York City and Mr. David Kaplan of US Department of Agriculture said that 90% of their purchase of geotextiles for New York Park Department restoration work is natural and they have been using coir for a decade with encouraging results. The Government projects hire private contractors who look for cheaper products which are readily available. Products which are "approved" or "approved equal" which will serve the same purpose are what the private contractors look for. The designer of the project decides what kind of products is required to be used and the contractor procures it. The coir products are not being marketed through professional and trade magazines. Standards are important and necessary if the product is going to be sold to civil engineers. The engineers are going to compare synthetics with naturals as the former has standards. There are several restoration works going on where the emphasis is on the use of natural geotextiles. They may be explored.

Meeting With Ms. Eugenia Flato, Director S & W Conservation Dist, N.Y., USDA

The Chairman, Coir Board held meeting with Ms. Eugenia Flato, Director, Soil and Water Conservation, New York under the U.S Department of Agriculture. Ms. Flato enquired about the properties of coif geotextiles for underwater applications. If the properties are proved to be

good, there is a good potential for its use by the port authorities of New York and New Jersey. The Hudson river which requires frequent dredging, is facing a problem of removing the dredged silt. The silt has to be stored in temporary bags which can retain the silt while draining out the water. It may be explored whether coir bags could be used for this purpose. Chairman, Coir Board informed that the experience with the use of coir bags to fill sand for sea erosion control application has proved that they can be used to carry heavy loads of soil for long periods in the face of severe current and raging waves. Perhaps closely woven coir bags of different sizes can be used for temporary storage of silt. Ms. Flato suggested that the New York and New Jersey port authorities may be contacted for this purpose, with available data and samples.

Ms. Flato said that there is a need for a sheathing material as the first cover on land fill areas and brown field areas. Perhaps coir geotextiles can be used as a first cover over the contaminants. Above the geotextiles, good soil can be spread. An economic evaluation of the product for this application is necessary and if proved beneficial, there is plenty of opportunity for the product.

The new farm policy aims at retaining the soil quality, for which the use of natural geotextiles is generally recommended. Coir Geotextiles which is biodegradable and eco- friendly, has an edge over synthetic geotextiles. It would help hold soil, minimise use of chemical fertilizers and improve the health of soil. Ms. Flato advised to contact Cornell University, New York - a land grant college specialised in agriculture, for getting their technical opinion on the use of coir geotextiles.

The storm water management is a major activity where restoration of water fronts using natural products is recommended and encouraged. At present water fronts are ripped with stones for protection of shores. They would like to reverse it and put vegetative cover to protect the shore.. The Chairman said that coco logs and coir geotextiles are ideal for such applications. According to Ms. Flato the local Self Governments, voluntary agencies, Department of Environmental Conservation, etc. are the concerned agencies who are required to be contacted for this purpose. She also recommended that the National Association of Conservation Districts which are under the USDA have their national meetings where it is desirable to familiarize the applications of coir coco logs and coir geotextiles.

The Core of Engineers, Brooklyn gives the specifications to the end users, who may be approached for suitable certification of the product. The geotextiles can also be used in Historic Area Restoration Sites (HARS) under the E.P.A. Ms. Flato has agreed to send the details of the contact persons for these purposes.

Meeting with Mr. Bill Ragen Recommended by Corps of Engineers

The Chairman, Coir Board had also held a meeting with Mr. Bill Ragen of Ragen Associates who was recommended by the Army Corps of Engineers. According to Mr. Ragen, the marketing of coir geotextiles has been grossly inadequate. The producers and distributors of coir geotextiles

have not been effectively emphasizing the strength and durability factor of coir geotextiles and its significance. The U.S market wants 3 categories of geotextiles viz. short term degradable products, long term degradable products and permanent products. Coir Geotextiles fit into the long term degradable products category. Some recognition has started settling among a few end users about coir geotextiles. But this has to be further augmented and carried forward. The straw and excelsior manufacturers try to convince that they are long term degradable products, which according to Mr. Ragen is a false claim. But their claim has not been effectively disproved. The Texas Transportation Research, Institute conducts tests on different products and it may be a good idea to get coir geotextiles tested by them. There are some American producers who manufacture biodegradable erosion control products. But they do not promote coir as such. Most of their marketing promotions go for promotion of synthetic products. Coir geotextiles manufacturers have not really understood the marketing and distribution system in the U.S. It also remains as a fact that distributors are not good educators. The potential end users have to be educated about the advantage, quality and desirability of using coir geotextiles.

According to Mr. Ragen quality is a major problem with Indian Coir Geotextiles, especially of coco logs. Coco logs of Philippines stands first in quality followed by Srilanka and then India. The knots are not firm, and openings vary very much. The fibre used is too short. The logs are either overfilled or underfilled. The overfilled coco logs lose their flexibility which adversely affects the maneuverability at the time of application. Even seeding of coco logs becomes difficult if they are overfilled. The Indian coco log is not the product of choice. It requires special effort to improve the quality and make the end users know as to how to use it and where to use it. There is a need to explain it on a regular continuous basis.

The USA is becoming increasingly environment sensitive. But there seems to be no communication between the end users and producers of coir geotextiles. The manufacturers do not have any presence or if at all any, it is not felt in USA. For low end erosion application as in mild slopes, coir is expensive Straw and excelsior are more suitable for this. It seems, the synthetic permanent product lobby and the straw/excelsior low end product lobby are pushing into the long term degradable mid end market which is legitimately that of coil geotextiles. But, no serious effort is being made to retain the market share of coir geotextiles or to expand its share. According to Mr. Ragen that is the reason why coir geotextiles seems to lose its ground. The coir geotextiles, if succeed in establishing their durability and give a guarantee that it would stay for 2 to 3 years the U.S market would accept it for that particular reason. The major competitor for coil is straw and excelsior products.

The Federal Code Regulations regarding storm water management under NPDSE Phase. II is proposed to be changed by March 2003 This brings down the minimum area to 1 acre for mandatory sedimentary control measures. Any disturbance in an area more than 1 acre must have a management plan for erosion control. One of the best management practices being talked about for this purpose is the use of coir geotextiles. This is yet another opportunity for coir geotextiles that has to be tapped systematically and effectively as early as possible.