



COIR BHOOVASTRA Some thoughts on Market Promotion

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The term Geotextile covers the entire range of woven, non woven and composite materials used in ground and civil engineering applications for improving the soil behaviour, preventing soil erosion and help consolidation of the soil. There are over five hundred different forms of geotextiles available such as meshes, grids, geo beds, antiweed blankets, needled felts, erosion control blankets, geo-rolls, geo-webs, fascines etc. etc

A review of the strengths and weaknesses of the product in relation to the competition is essential for its competitive positioning. It is also equally important to recognise the opportunities that can be taken advantage of and all the threats the product has to face to tackle them effectively. While identifying the strength and weakness of a product it would also be advantageous to identify the strength and weaknesses of the competing product, as well as strength and weaknesses are always relative to competition.

Strength

The strengths of coir bhoovastra as a geotextile material are considerable. Its greatest strength in the present global scenario is its characteristic of being eco-friendly and bio-degradable. In a world where the return to nature movement and preference for natural products have been growing tremendously, Coir bhoovastra which are entirely natural and bio degradable enjoy this natural advantage. The fact that production of coir so also Coir Bhoovastra which is predominantly a handloom industry does not involve depletion of nature's resources is extremely important. The other strengths of coir as a geotextile material are :

- Indigenous availability of raw material, skill and labour.
- The properties of Coir bhoovastra like -
 - The high tensile strength of coir which protects steep surfaces from heavy flows and debris movement.
 - Five to ten years longevity which allows for full plant and soil establishment, natural invasion and land stabilisation.
 - Being 100% natural and bio-degradable, coir fibre functions as a soil amendment
 - Water absorbent coir fibre acts as a mulch on the surface and as a wick in the soil mantle.
 - The Excellent microclimate coir provides for plant establishment, natural invasion and balanced healthy growth.
 - Restoration of terrestrial and aquatic riparian habitat & the coir meshes provides .
 - The characteristic of being environmentally responsible and aesthetically pleasing
 - Capable of being customised to specific requirements according to the topographical conditions.

Weakness

Indian Coir Industry is a traditional industry mostly following a cottage industry nature except of course those in the organised sector. There has not been any proper production planning. Production continues to be geared on the basis of demand. Being mainly in the handloom sector the possibilities of undertaking mass production are also very limited. Geo-synthetics are the major competing products to coir bhoovastra in the geotextiles market. The synthetic industry has the resources and ability to develop uses for their materials more than those of natural fibres. It is an inevitable result of concentration of production and economics of synthetic fibre prices. The synthetic producers often has production surplus which they get rid of even at price which will not meet their production cost. Moreover they have enormous budget provision to support the industry by way of providing the much needed publicity and propaganda. While this being the case with Synthetic Geotextile industry, in coir industry production is mainly based on demand and this makes it difficult to the industry some times to keep up time schedule in addressing to import requirements. Resource constraints stands in the way of a handful of producers and exporters in coir sector to popularise coir bhoovastra and to project its advantages in a highly publicity conscious global market environment. In India surface erosion control by run of and revegetation as a measure of controlling soil erosion and conservation of land have not been practiced very widely. The engineering profession has been concerned mainly with soil conservation and preservation of land space by structural/ purely civil engineering solutions being followed traditionally and not in terms of bio-approach. The result has been lack of adequate familiarity with the latter approach and lack of appreciation of bio-engineering applications.

Opportunities

The green movement and growing preferences for natural products provide substantial opportunity to promote the use of coir geotextiles. With the soil erosion and degradation of nature's resource taking place at astonishing speed, environment alertness is a global phenomenon and concerted efforts are now on to rejuvenate and restore degraded lands with the help of geotextiles. This opens up new opportunity to natural fibre based geotextiles including coir. Relative scarcity and high cost of sand and gravel, particularly in Europe, necessitated locating an alternate material to face the situation arising out of soil erosion. The phenomenal growth in the consumption of geotextiles materials in the industrialised countries during the last three decades and the expert prediction that the boom in geotextile market will continue points to the potential market that exist for coir bhoovastra, although the present share is not very significant.

Threats

Threats facing the industry are both internal as well as external. Lack of price stability often causes shrinkage in demand for coir made materials. Competition for this product is growing- A wide range of synthetic products as well as all sorts of natural materials such as, straw, wood chips, waste fibres and many other materials on a local base compete with coir for a share of the market. Reportedly, Philippines and Indonesia with abundance of raw material are potential threats as they are increasing production. The Papua New Guinea sending stitched blankets to a number of markets has also increased their production.

Geo synthetic materials are manufactured by high tech process and they are invariably applied in hightech civil and structural hydraulic engineering situations - not normal construction governed by ordinary civil and structural

engineering. The synthetic geotextiles are accepted as highly technical material, perform highly specified and applied in comparatively hightech situation and under the aegis of fairly advanced engineering professionals. Non-inclusion of Coir Bhoovastra in the list of approved products and specifications maintained by the local/regional/ national regulatory authorities results in not conferring the required recognition to coir as a soil erosion control material.

Marketing

Marketing of coir geotextiles cannot simply be considered as introduction and sale of the products. Rather it involves marketing of the concept. Coir Bhoovastra is a technology based product. It cannot be marketed in the domestic as well as the export market as in the case of other consumer articles.

Home Market

In India the user agencies have been showing interest in the concept as well as in the product but the interest could not be translated into real business as expected.

The Indian context as of today is characterised by lack of proper awareness about this highly potential eco-friendly product. The scope of natural fibres for soil erosion control land scaping/agricultural and horticultural operations extending to civil and geotechnical engineering applications should be marketed as a concept. Why the Indian market for geo-textiles in particular coir bhoovastra appears to be narrow is the “country’s limited exposure to engineering projects using geo textiles and a scarce exposure to the subject of transitory erosion control for enduring re-vegetative protection”. Added to this, the limited eco sensibility, priority resource constraints for environmental issues also affects the increased offtake of geotextile material for geo engineering applications.

The situation calls for interaction with the concerned decision making Govt Departments/Establishments like Irrigation, Roads and Highways, Port Trust authorities, Water Works, Construction and land scape, hotels and resort projects, Railways, Defence and other similar projects/organisations. With a view to impress upon them the suitability of coir bhoovastra for permanent eco-friendly solution to soil erosion and other civil engineering problems. There is enormous potential in the domestic market as is evident from the fact that already many synthetic geotextile manufacturers have entered the Indian market and many more are interested to enter the market. A number of projects using geotextiles, reportedly more than 300, are in the offing in north India is an eye opener. Geo material protection measures can be advantageously inducted into the system in roads, highways, construction industry, water works or irrigation, canal project, river and channel protection etc. The interaction with the concerned authorities with a view to selling the concept and persistent efforts thereafter will definitely yield beneficial results. Besides, seminars, preparation of manuals and guidelines conducting lab trial and field trial, collaborative research projects etc. should be undertaken to popularise the use of coir geotextiles, through awareness creation. The need for supplementing the effort through publicity need no emphasis.

The user requirement of geo textiles vary from application to application. Often it become necessary to develop products as per enduse requirement of the geo technical/civil engineers with designed/specification criteria and cost factors. It should be Customised with specified norms. The experience of the suppliers of geotextiles for domestic use has been that standardisation of the erosion control materials with defined specifications are not always possible in view of the variations in characteristics of the products required by users depending upon the applications and site parameter and sometimes even based on the special references of the user agencies. The Aspinwall experience with Konkan Railway Corporation is worth mentioning in this context. Aspinwall Geotech Company offered Erosion Control Blankets of coir to Konkan Railways for applications. In fact the company had to develop a blanket with new specifications to meet their requirement of product with high tensile strength. They had to undertake field trials with various type of netting so that cost and price of the product are controlled without sacrificing the strength aspect. This experience, however, shows that standardisation of the Erosion Control material with specification being laid down rigidly may not be feasible. The most important aspect in respect of Erosion Control coir matting/blankets is its capacity to promote re-vegetation. Selection of suitable re-vegetative material such as seeds, seedlings etc. is important in addition to the use of right type of material.

Coir Board Initiatives

Coir Board has been doing pioneering efforts in popularising Coir Bhoovastra as a soil erosion control material.

The Board has undertaken various field trials on the use of coir geotextiles to prevent soil erosion in India. Some of them are:

1. Protection of road slopes in the Mettupalayam Coonur Road in Nilagiri District.
2. Protection of slow slopes of Cabani Canal in Karnataka.
3. Slope protection of Muvattupuzha Valley Irrigation Project
4. Protection of road embankment in Muvattupuzha Valley Irrigation Project.
5. Protection of road slopes in Elite Gardenia in Trichur.
6. Protection of road slopes in Idukki
7. Protection of banks of KSEB Reservoir in Kakkayam
8. Protection of Railway cuttings in Kudal Sector of Kongan Railway
9. Protection of hill slopes Nirjuli in Arunachal Pradesh
10. Protection of hill slopes of Gangtok in Sikkim.
11. Application of Coir Bhoovastra for Soil Conservation and Erosion Control Studies on hill slopes of Dehradun.
12. Application of Coir Bhoovastra on the slope of the approach road near the railway overbridge connecting the International Airport at Cochin.

All the experiments conducted were in different climatic and soil conditions. The experiments were successful and coir geotextiles were identified as an ideal material for preventing soil erosion in peak slopes

and high velocity streams. Recently the Board has started an experiment for protection of mud walls in Kuttanad area using coir geotextiles. Another experiment has also been initiated to reclaim the water shed areas of Kuttanad for making it suitable for cultivation of paddy using coir matting and bamboo poles. A number of other collaborative projects on field trials with various Govt. organisations/ PSUs in different States, particularly in north eastern States, are underway.



Export Market

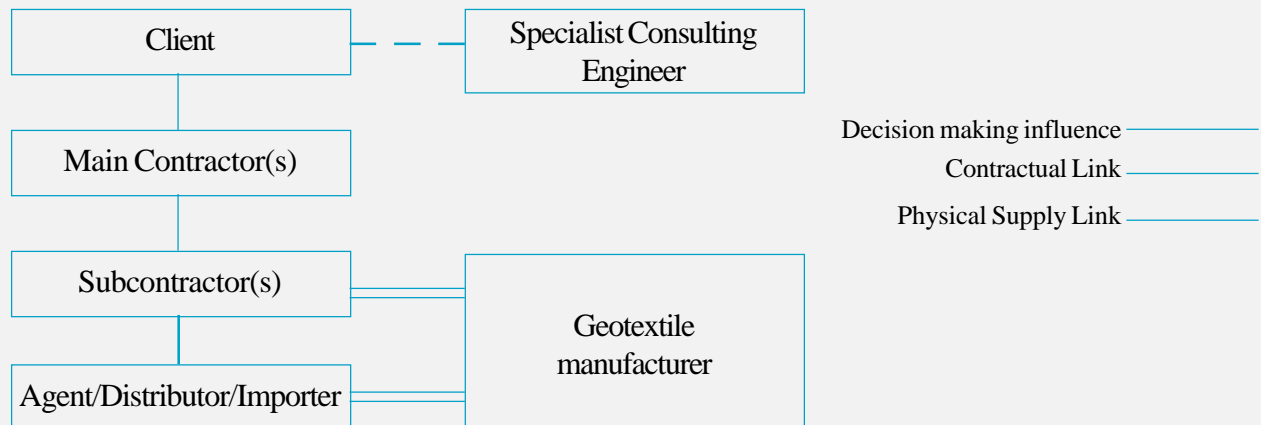
“The market for geotextiles is mainly confined to the industrialised countries of Western Europe, North America, and Japan/Australia, with each of the three regions accounting for roughly one third of global consumption that is quite difficult to quantify but is estimated to be in excess of 800-1,000 million square meters. Use of geotextile materials on a commercial scale is of relatively recent origin dating back to the end of the 1950s. It was promoted mainly by producers of synthetic fabrics during the 1960s and has since been established as a growth sector. Europe may have led the way initially but today, the United States lead consumption of geotextiles, using some 550 million square meters each year, followed by the other two main regions. The total estimated market of 1,000 million square meters translates to roughly 3 million tonnes of textiles. The market is growing at the rate of around 5% per annum and has the potential to maintain at least this rate of growth in the foreseeable future”. At present the world market of geotextiles is dominated by synthetic based items and is largely shared by players like DuPont, Exxon, AKZO and Amoco.

The largest market of Coir Bhoovastra at present is Korea. Vietnam is reported to have the major share in the supply of Coir Bhoovastra, to the Korean market. For mesh type coir bhoovastra, Vietnam uses only single ply coir yarn which enables her to supply Coir Bhoovastra at a very cheaper rate. Qualitywise the product being supplied from Vietnam is understood to be not comparable with the better quality products produced in India. The proximity of Vietnam into Korean market is another advantage that helps her in keeping the landed cost of commodity low on account of freight benefit.

Besides Vietnam and Sri Lanka, the emerging competitors to India in the supply of coir bhoovastra are Indonesia, Malaysia, Sri Lanka and Philippines. Among those countries the material supplied from Indonesia has the price advantage on account of cheap labour available in the country. In Malaysia they produce geotextiles from Palm fibres, Rice straw which are locally available.

Marketing Channels

Because geotextiles are technical construction materials their marketing and distribution is linked to a large extent with specialist engineers who specify the use of particular geotextiles material based on its suitability for the initiated applications. Although a small volume of geotextiles is sold directly to retail buyers the marketing and distribution of the major portion of such products takes place according to the pattern given below:



Marketing Strategy

Strategic Options

The broad strategy for marketing coir bhoovastra could be development of an internal market in highly potential regions in India particularly north eastern States and expansion of the existing export market in selected countries.

Recommended Plan

Production

The production front of the industry supplying coir bhoovastra has to be streamlined so as to provide timely supply of quality materials to the endusers. Identification of few small scale units with necessary infrastructure capability of supplying different categories of geotextiles will provide the desired boost to the production base. Production technology has to be studied with a view to provide advice of high productivity proper technology to the producing unit/entrepreneurs.

Technical Specifications

Although the customer requirement vary from one to another some sort of standardisation and specification of the material is a basic requirement for the healthy growth of any product. In the light of the evaluation and feed back on characteristic/quality requirement on the basis of collaborative research and field trials on enduse applications of coir bhoovastra with various national and international research institutes and other agencies like IIT, IIM, BRO etc., and use application wise specifications may be drawn out broadly to provide guidance to the manufacturers as also to the users.

Focal points for domestic market

Coir Board Showroom & Sales Depots in different parts of the country could be made the focal points for promotion of coir bhoovastara in India. The Manager concerned will have to put in persistent effort in educating the potential users the advantages of coir bhoovastara as a soil erosion control material. This may require intensive travel to meet the decision makers, specifiers, influencers and endusers. In the first place Manager should have thorough product knowledge and he should be equipped with all basic materials like technical/promotion literature, samples etc. Being a technology based product the Manager concerned will have to be provided with the necessary technical support from the Head Quarters, particularly in organising field trial and its application by the endusers. Motivation forms an integral part of modern marketing technique. Manager successful in promoting the product at the desired level may be provided some incentives in appreciation of the effort.

Brochure on Technical Aspects

Unfamiliarity with coir geotextiles and insufficient clarity on technical specifications are presently the important bottlenecks for large scale application of coir geotextiles, although there exist untapped market potential and a highly favourable market environment. The technical characteristics of coir fibre geotextiles should be tested keeping in view the various end use applications, documented and certified by the authorised institute in various importing countries. The technical manual containing the specifications, installation technique and product description will have to be provided to the geotextile users, specifiers, contractors, importers and R&D institutions. The environmental aspect to be projected. In many developed countries the use of coir geotextiles could create the synergy effect with respect to the environment policy and development co-operation of country concerned. The efforts to promote the uses of coir bhoovastara should be designed in such a way as to capitalise this favourable climate promoting environmentally sound project and the policies of importing countries.

Effective Communication

The existing information about the advantages of coir fibre geotextiles could be optimised. The development in the national and international market for geotextiles should be collected and disseminated on a regular basis, particularly information on technical aspects, environmental aspects etc. This will help in providing a systematic and regular feedback to the industry and trade and also to the strategy formulators. Establishment of a coir bhoovastara cell at the Headquarters of the Coir Board with modern communication infrastructure can tackle this effectively. The Cell can also be entrusted with other responsibilities connected with the promotion of coir geotextiles in the domestic and international market.

Promotion

The advantage of technical information as envisaged above should be translated into effective instruments for communication and market penetration. These instruments have to convince potential users of the advantages of coir geotextiles. The bio-degradability of coir fibre should be presented as a major technical advantage over synthetic material. A manual well designed could serve the purpose. The test results on technical aspects and benefits of the coir fibre geotextile application in developing countries could also be mentioned in the manual.

A technically supervised documentary on application of coir bhoovastara for different soil erosion control projects/ landscaping etc. may be produced in countries, where the products are employed widely with great success. This video/ CD may be screened to the potential users in different countries for awareness creation, simultaneously improving the

distribution net work with the active co-operation of the existing suppliers. In this regard the assistance being rendered to by the Import Promotion Offices in overseas countries, may be exploited. Coir Bhoovastra is a natural solution to the growing environment problem on account of soil erosion. Erosion control through bio-engineering applications of eco-friendly natural geotextiles is a development of the recent past and hence would be a subject of great public interest of this century with environment conscience people all around. It would therefore be possible to persuade International/national TV channels like Discovery Channel/National Geographic Channel/BBC etc. to produce a documentary on Coir Bhoovastra and its role in erosion control applications and telecasting the same in their channels will help to provide Coir Bhoovastra the much needed global exposure.

International Platform to be Used

Geotextiles are design soecific. The specifiers, civil engineers, contractors, importers etc;involved in application areas are specific targets. Therefore, it would be advantageous to use the international organisations like International Erosion Control Association (IECA) and International Geo-synthetic Association (IGA) as promotional channels. Coir Board can facilitate membership of Coir Bhoovastra producing companies in India into IECA and initiate colloborative arrangements for marketing coir bhoovastra with the active support of International Geo-synthetic Association. This will provide a more harmonised market environment for natural fibre products to co-exist with its counterpart geo-synthetic materials. The global market for geotextiles is very vast and in view of varying requirements and product type characterised with strength, longevity, price, availability, product flexibility etc. it would be mutually advantageous if efforts could be made to co-exist with synthetic in the market, both domestic and export.

Participation in International Events

Coir Board may jointly participate with major market players of coir bhoovastra in leading international trade events for awareness creation among the potential users. It should be promoted through selective promotional campaign abroad. The Board could also organise international seminars and workshops in leading markets of coir geotextiles giving participation to endusers potential users, decision makers, specifiers, influencers etc.

