TECHNICAL SESSION V

Participatory approach of competitive advantage (PACA) for local economic development in Sri Lanka: the case of the coir industry in Southern Sri Lanka

G T Wasantha Sriyani
Department of Management and Entrepreneurship, Faculty of Management & Finance, University of Ruhuna, Matara.

Abstract

Local Economic Development (LED) is a participatory development process that encourages partnership arrangements among the main private and public stakeholders in a locality. The goal of LED is to create decent jobs and stimulate economic activities. LED is mainly focusing on promoting rural entrepreneurship. In Sri Lanka LED has been introduced in a few districts, but at the moment, it is in the initial stage. The experience of countries which have implemented PACA and LED initiatives have revealed that it is a better approach to solving the constraints faced by small and medium scale entrepreneurs (SMEs) as well as for SME promotion, and for developing economic activities to reduce poverty especially in rural areas. Therefore, this study mainly focuses on identifying the constraints for development of SMEs in rural areas; and reviewing the key actors of the market value chain. Finally this study suggests how the participatory development approach can be activated to bridge the gap between the development constraints and functions of the key players in entrepreneurship development and thereby ensure the sustainable development of SMEs and to reach competitive advantage at national and global level. To simplify the findings and recommendations of the study the Southern Province was selected as the research site; and the coir sector as the industry type. The study examines the constraints of all three categories of the coir industry including primary level producers, middlemen level, and exporter level. Attention has been paid to the nature of the existing service spectrum of the public-private sector organizations and also to international interventions on promoting the sector. Lack of and low quality of raw material; Lack of knowledge of better technology and value added products, increasing cost of production, poor market links specially with large scale coir producers and export companies operating at local level, low profitability due to intermediaries and high cost of production; lack of financial assistance for investing in better technology; negative attitude of the younger generation to take up the industry, and poor coordination among the key actors of the coir sector value chain are the major constraints revealed.

Key Words: competitive advantage, Local Economic Development, Participatory Approach of Competitive Advantages, SME promotion

Introduction

Local Economic Development (LED) is attracting a certain amount of attention these days and is increasingly being propagated by donor agencies and governments in developing countries. LED is a participatory development process that encourages partnership arrangements among the main private and public stakeholders in a given locality. Many development initiatives all over the world revealed that entrepreneurship is increasingly being recognized as the central force of economic growth and development and is critical for the economic development in any country. The participatory development approach is recognized as a better approach to accelerating entrepreneur promotion by integrating all stakeholders who have been engaged in economic development, especially at the regional level, to eradicate poverty by creating a number of

employment opportunities at the rural level, improve the infrastructure facilities, and finally enhance the quality of life of the rural people.

This recognition begs the question what types of strategies will be most useful for encouraging and supporting rural entrepreneurs. Traditionally, credit access and business counseling have been at the forefront of entrepreneurial support systems. Organizations such as the Ministry of Small Industries Development, Small Business Development Division, and others have provided technical assistance, while banks, community development organizations, and local governments have provided credit access. However, the acceptance of entrepreneurship as a central development force by itself and the above mentioned conventional supportive mechanism will not lead to economic development and the advancement of enterprises which are scattered in rural areas. It is becoming evident that entrepreneurial support requires more than these basic tools. By integrating all these conventional and contemporary approaches, the new concept called Participatory Approach of Competitive Advantage (PACA) has emerged as the most prominent approach for LED in developed countries as well as in developing countries. The objective of this participatory approach is to facilitate the joint design and implementation of a common development strategy, using local resources and competitive advantages in a global context to create decent jobs and stimulate economic activities.

Even though LED is increasingly being propagated by donor agencies and governments in developing countries, yet there is only slight evidence that LED has ever been successful anywhere. Sri Lanka has even less experience in participatory approach to LED due to the LED programmes being initiated only in four districts, namely, Kurunegala, Chilaw, Anuradhapura, and Polonnaruwa. But the experience of countries (U.S., Germany, Italy, Spain, South Africa, etc) which have implemented the participatory approach and LED initiatives revealed that this was a better approach to remove the constraints faced by SMEs as well as for SME promotion and for developing economic activities to reduce poverty.

Therefore, this study mainly focuses on identifying the constraints for development of SMEs in rural areas; reviewing the key actors of the market value chain; and proposing how to activate a participatory development approach to bridge the gap between the development constraints and functions of the key players in entrepreneurship development, and thereby ensure the sustainable development of SMEs to achieve a competitive advantage at national and global level. To simplify the findings and recommendations of the study, the Southern Province has been selected as the research site; and the coir sector as the industry type. The research covers the constraints of all three categories: primary level producers; middlemen level; and exporter level. Attention has been paid to the nature of the existing service spectrum of the public-private sector organizations and also to international interventions on promoting the sector.

What is Local Economic Development and Participatory Approach of Competitive Advantage?

Local Economic Development (LED) is a participatory development process that encourages partnership arrangements among the main private and public stakeholders in a locality. The objective is to enable the joint design and implementation of a common development strategy, using local resources and competitive advantages in a global context (ILO, 2005). According to the World Bank definition, LED is about local people working together to achieve sustainable economic growth that brings economic benefits and quality of life improvements for all in the community (Meyer, 2004). The ultimate goal of LED is to create decent jobs and stimulate economic activities. LED is increasingly being propagated by donor agencies and governments in developing countries. The PACA is a strategic approach of how to encourage the partner organizations to network with each other for the purpose of providing a broader range of effective business development services to potential and existing entrepreneurs.

LED can be applied in three contexts: development context; crisis context; and refugee context. In a development context, LED can be applied to integrate all stakeholders together who have being engaged in economic development especially at a regional level to eradicate poverty by creating number of employment opportunities at the rural level, improve the infrastructure facilities, and finally enhance the quality of life of the rural people. Its aim is to ensure the sustainable development of rural entrepreneurship and there by reach the desired level of economic development of the country (ILO, 2005). In a development perspective, LED connects fragmented policy approaches at the territorial level focusing on SME promotion, entrepreneurship promotion, investment promotion, export promotion, skills development, employment generation, agriculture development, research and development, and technology extension (www.mesopartner.com). More specifically LED can be initiated by local government, local business associations, local companies, or other stakeholders alone or in collaboration to remove bureaucratic obstacles for local firms; tackle market failures; strengthen the competitiveness of local firms; and create a unique advantage for the locality and its firms.

Participatory approach encourages close co-operation among different institutions supporting to create an entrepreneurial culture, both public and private, in order to develop programmes that would address the key barriers to entrepreneur development: human and financial capital drain, inefficient use of natural and productive resources, inability to meet the local business needs, inability to create effective community infrastructure, inability to encourage new enterprise formation, inability to increase local economic opportunities, inability to find potential markets etc. What is crucial is the development of personal and organizational networks which combine otherwise individual efforts into a comprehensive approach to economic development especially in rural areas.

Experiences of LED and PACA approach

The increasing interest in LED has come mostly due to pursuing decentralization policies by many developing countries. The promotion of economic development is considered as part and partial responsibilities of the provincial or local governments. Therefore, recently, local governments have become much more proactive in using instruments for entrepreneurship promotion such as business and technology incubators, establishing industrial parks, cluster promotion, etc. Many locations are approaching economic development in a more strategic manner, trying to shape a specific profile in order to create a local competitive advantage (Meyer, 2003).

Advanced industrialized countries have been doing LED for quite a while. There is an increasing interest in LED mostly due to two factors: first, many developing countries are pursuing decentralization policies, and as part and parcel responsibilities for promotion of economic development are also delegated to provincial and/or local governments. There is a hope that governing may be easier at the local level, and that developmental local government may be feasible, since issues such as low national cohesion and ethnic tensions on the one hand and overburdening of government bodies and increasing differentiation and fragmentation of problems, policies and governmental institutions on the other hand are less of an issue at this level.

Second, many developing countries suffer, for different reasons, from limited governance and delivery capacity at the national level. The days of centralized industrial policy, as it has been pursued with some success in most newly industrializing countries, are gone – both due to external pressure and to the weakening of internal governance capacity. Irrespective of the existence of a decentralization policy, local actors start to get involved in economic promotion activities since problems of unemployment and poverty are most urgently felt at the local level (Meyer, 2003).

Even though LED has increasingly being propagated by donor agencies and governments in developing countries, yet there is only slight evidence that LED has ever been successful anywhere. As evidenced by Stamer (2003), inherent reasons and issues related to globalization are the two sets of reasons for the poor performance of LED. Inherent reasons are (a) strategy- and planning- instead of action-driven approach to LED, (b) confusion between community development and LED, (c) unclear theoretical and conceptual background for LED, and (d) profound confusion about good practice in terms of governance of LED. Globalization creates (a) the life-cycle paradox (companies in emerging and growing industries rely mostly on localized factors, but they are the most difficult group to engage in LED), (b) the incongruity of upgrading in global value chains (the latitude for local collective upgrading efforts tends to diminish as local companies are integrated into chains), and (c) the location and globalization paradox (mobile companies may be interested in high locational quality, but their propensity to get involved in efforts to create such a quality tends to be limited).

One of the biggest dilemmas faced by both developed and developing countries as well as industrialized countries in LED is how to differentiate LED from community development. Any successful LED initiative is based on the involvement of the local community. But LED is about creating favourable conditions for business and alleviating local market failure, whereas community development is about health, housing, education, crime and support for the disadvantaged. On the other hand, local politicians play a major role in LED and economic promotion is part of the everyday political struggle. Political actors launch economic promotion activities to respond to the problems and demands of their constituency. The agendas of political actors are different from what LED programmes exactly plan to implement. Therefore, the paramount goal of LED is difficult to achieve. In achieving LED, the PACA has been used as one of the most superior tools especially for better utilization of human and natural resources for the development of rural economy. Research evidence shows that "There was an extraordinary commitment, creativity, and resourcefulness shown by individuals, communities, and organizations across rural areas in many countries.

The themes of entrepreneurship and of regional and institutional collaboration, which were the hallmarks of many projects which lead to economic development, provided the impetus for thinking afresh about how rural areas can chart a new economic future for themselves. Entrepreneurship had attracted enthusiastic attention across the diversity of geography, ethnicity, and culture, the characteristics exist in rural. The call for regions and institutions to explore common futures and to make the best use of scarce human and financial resources appeared to mark a shift from generations of destructive competition and narrow-mindedness to the possibilities of forging new regional and national competitive advantages. The fact that thousands of organizations came forward to engage in entrepreneurship explains that there is a significant pent-up demand for this type of approach" (Meyer, 2003).

Global context of the coir industry in Sri Lanka

Since the early 1900s, Sri Lanka has been the world's primary supplier of coir fiber, which can be crafted into a range of semi-finished and finished products. Together with India Sri Lanka accounts for almost 90% of global coir exports. There are essentially four main categories of fiber grades ("Bristle", "Omat", "Mixed" and "Mattress"), which are either sold as raw material or processed into value added products such as brooms, brushes, boot scrapers, twine, matting, woven and stitched geo textiles, rubberized coir mattresses, and upholstery. The key markets of coir products include: South Korea; Japan; France; Netherlands; Germany; USA, Canada; China; UK; Australia; and Spain. Table 1 illustrates export performance of coir based products.

Table 1. Export performance of coir based products

Products in Major Category	Value in Rupees (millions)				
	2004	2005	Growth %	2006	Growth %
1.Bristle fiber not twisted	11.81	11.75	-0.50	9.22	-21.45
2.Bristle fiber twisted	24.02	28.47	18.50	25.42	10.71
3.Matress fiber	52.59	53.93	2.53	156.38	189.99
4.Mixed coir fiber	249.45	231.74	-7.10	275.67	18.95
5.Other Mixed coir fiber	850.07	1224.49	44.05	1278.31	4.4
6. Coir Yarn	20.01	24.82	24.01	31.47	26.79
7.coconut shell charcoal	65.97	41.42	-37.21	44.32	7.00
8.Coco peat	296.29	268.93	-9.23	271.65	1.01
Total	4119.81	3474.16	-15.67	4226	21.64

Sources: BOI and EDB Reports

Although Sri Lanka has traditionally been the lead exporter of coir fiber and coir pith, India holds the dominant position in terms of revenue generated by the industry, given the higher value-added component of its coir exports. Comparison of the value of coir products exported from India and Sri Lanka show that lower-value commodities- fiber and coir pith- account for over half of Sri Lanka's coir exports, while more than 95% of India's export revenues are from value-added coir based products, including yarns.

From 2003 to 2005, the percentage share of coir products with all other exports is respectively 0.6 percent, 0.7 percent, and 0.8 percent. It shows that there is a slight increase in coir products in relation to other exports in Sri Lanka. According to the CDA records, it has been predicted that the export value of coir based products will increase by 23.2 U$ million in year 2007 (up to U$79 mn), and it is estimated to earn U$. 6.3 million through introducing new products. When compared with the year 2003, it is expected to increase the percentage share of the export value by 1% increase in value added products, 2% increase in floor coverings, 4% increase in geo-textiles and 8% from completely new products. The situation now was conducive for producing better quality and diversified products, increased production, expansion of existing markets and exploring new avenues for improvement.

Two market trends that have supported Sri Lanka's coir industry in recent years are the rapid growth in the domestic mattress market, especially the demand for twisted fiber for the use of high end car seats, and the enhanced competitive opportunities for geo-textiles and high end twine used in horticulture in several countries.

An exporter of coir fiber for many decades, Hayleys Pvt Ltd has metamorphosed into a predominantly value added supplier, seeking global dominance as an innovative provider of retail and industrial fiber based solutions. Their fiber base encompasses a variety of fibers, including recycled synthetic and textile fibers, in addition to their staple coir fiber base. Continuing product and process innovation, and new designs, with over 400 locally and internationally patented products, have been the sine qua non of their global market penetration. The products are widely present in brush manufacturing, floor covering, mattresses, automobile upholstery, erosion control, furniture, bedding, and horticulture industries. The businesses in this sector have been classified under Surface Care (coir and rubber based mats including scraper mats, woven coir and cast iron mats, flocked mats, textile based looped pile mats, bath room mats and other specialty mats, most of which are our own innovations, with designs and processes patented locally and internationally), Industrial Fiber (includes bristle fiber, twisted fiber, coir fiber pith, pith briquettes for horticulture, twine, woven geo-textiles, stitched erosion control blankets, vegetation fascines and coir beds for ornamental and decorative purposes), and Bedding &

Cushioning (includes rubberized coir mattresses and sheets used in bedding and furniture). For horticulture applications Hayleys manufactures coco pots and moulded basket liners. Hayleys pioneered the manufacture of moulded coir pots used in automatic feeding machines. These segments identify the end product or markets served. Hayleys' global market share is for Coir scraper mats - 69%; Coir fiber in primary form - 13%; Coir twine - 53%; and Coir brush ware - 36%. With the need for a greener tomorrow the potential for innovation of new products and new uses for eco-friendly fiber based solutions is great and Hayleys as a global market leader is well placed to serve these needs.

Coir industry in Southern Sri Lanka

Coir industry is one of the major livelihoods among the rural poor in the Southern Province over several hundred years especially along the coastal line of the Southern Province. Ambalangoda, Balapitiya, Bope, Poddala, Hikkaduwa and Habaraduwa from Galle District; Devinuwara, Denipitiya, Dickwella and Weligama from Matara District; and Tangalle and Hambantota from Hambantota District are the most popular areas for coir industry in the Southern Province. There are over 10,000 families involved in the coir industry within the Southern Province and 90 % of them are women. The scale of many of the industries is self-employment and micro type. Coir is a critical source of income and sometimes the only source of income for some families. Earning in the sector has historically been very low. A worker who engages in traditional coir industry earns only Rs.1500 to 3500 per month. That is not even enough to fulfill their basic subsistence.

There are eight distinct categories of people engaged in the coir industry. These are: i) independent producers who own pits; ii) those who do not have pits but buy soaked husks; iii) labourers who worked in other pits and coir factories; iv) producers who produce value added coir products; v) subcontracting modality for agents; vi) collectors; vii) export companies; and viii) members of organized groups.

Today the industry is encountering a series of problems on production, marketing, technology and various other socio-economic factors. With the heavy devastation caused by the tsunami the situation became even worse, where most primary producers suffered heavy losses not only to their machinery, raw materials, finished products, and coir processing areas (coir pits) but also to their lives and household properties. The largest challenge is how to rebuild better. Many development agencies are now looking for avenues to develop the sector under tsunami rebuilding programs through different ways and means. However, they came to a common understanding that this has to be handled in a very precise and strategic manner. With that conclusion, they have organized a steering committee for development of the coir sector within the province, which is led by Oxfam GB. The steering committee is composed of leading agencies that are implementing rebuilding works on the coir sector and private sector exporters of coir products. Sri Lanka Export Development Board, Industrial Development Board, Coconut Development Board, Southern Development Authority, UNDP, SAHANA Foundation, and private exporters have been selected as office bearers of the committee and institutions like RADA, Practical Action, CHA, CADREP, CAPS have been invited as resource and supporting agencies to develop the Coir sector.

Situational analysis of the coir industry in the Southern Province

Strengths

1. Prospects are good for value addition, where a significant percentage is still exported in the raw form.
2. High return in export market

3. Moving to many forms of value added products eg: brooms, brushes, twine, matting, woven, geotextiles, Coir disc, coco husk chips and bales, coir fiber pith brick, coir fiber husk pith brick, table mats, etc.
4. Involvement of international organizations such as Oxfam, USAID, Sevalanka Foundation after the Tsunami, and their action as lead agencies in the Southern region.
5. Establishment of Producer Associations and coir clusters.

Weaknesses

1. Much overlapping and poor coordination of the developmental tasks of service providers
2. Younger generation does not like to take up this industry
3. No safety actions have been taken for injuries
4. Salary is not sufficient – 3 women for a machine and value of Rs. 45 coir rope can be produced per day.
5. Lack of information about the export market and credit, tax and other concessions
6. Using traditional technology that may cause low quality
7. Lack of raw material
8. The poor and declining profitability of small mills
9. Need large initial investment to start a coir mill with new technology
10. Low price for traditional products in export market
11. Slow upturn and recoveries after the tsunami due to most of the small mill owners and home based producers losing all their dwellings and business properties (coir pits, machines, skilled labors etc.)
12. Absence of an effective quality control system particularly between fiber mills and buyers, due to coir mills using old and labour-intensive fiber extraction technologies and cleaning methods; variability in husk quality; weather and operation conditions; lack of electricity supply; poor plant layout
13. No proper coordination among the government and other organizations
14. Gap between the spectrum of BDS providers and the requirements of the coir manufacturers

Opportunities

1. Emergence of China as a principal buyer of Sri Lankan coir fiber for use in its rapidly expanding domestic market
2. Resurging demand from German automotive manufacturers for twisted fiber for use in high-end car seats
3. Moving into coir-based erosion control products (geotextiles) and high-end twine used in horticulture in North America and Japan, and coir pith from Sri Lanka is used as a peat substitute in horticulture
4. Establishing a number of organizations and associations to promote the growth and development of the coir sector eg: Coir International Council, Ceylon Coir Fiber Exporters Association, Sri Lanka Coir and Allied Products Manufacturers Association, Millers' Association etc.
5. Public sector and academia are represented through the CDA, CRI, ITI etc.
6. Establishment of the National Enterprise Development Authority (NEDA)
7. Sri Lanka and India, the two largest coir exporting nations work co-operatively for mutual benefit
8. Proposed highway line and infrastructure facilities are fairly well developed in the southern parts of the country

Threats

1. Global coir production has grown by approximately 6 percent per annum
2. Competition from synthetic substitutes
3. Exports of coir pith/husk chips (29% of the sector export value) will reflect in an increase in the price of basic raw materials and reduce the value adding process of coir sector
4. Stagnation of the coir prices
5. Bargaining power of importers on Sri Lankan coir products
6. Funds coming through the donor funding projects for developing the coir sector cannot be utilized efficiently and effectively due to the invisible hand called Political Will and hidden agendas of INGOs.
7. Industry will creating a lot of environmental and health problems if not handled properly.
8. The coastal conservation regulations restrict resiting of coir pits near beach and it will reduce the supply of good quality white fibers to the industry
9. Blocking out coconut lands and the Mieta hazard in coconut palms further increase the scarcity of husks
10. Several other countries like India, Vietnam etc are dumping their products on the export market at low prices

Constraints faced by the key actors of the coir value chain

Stakeholders are facing several inefficiencies and issues along the value chain. Those issues can be classified according to the level of market chain actors. The value chain of the coir sector shows in Figure 1.

Constraints at primary producer level

i. High cost of production: The producers are getting coir from outside suppliers where the prices are high and similarly the producers are unaware of cost reduction methodologies.
ii. Abandoning of coir pits along the coastal belt. Majority of producers used bristle fibre for their production which was produced through those pits. As a result of the Tsunami the majority of those pits were either destroyed or filled with garbage/debris which the producers are afraid to use.
iii. Low availability of raw material (husks). It seems that majority of husks are now getting wasted. There is no proper system to collect those husks.
iv. Low supply of coir fibre and poor quality of raw material. Coir mills continue to use old and labour intensive fibre extraction technologies and cleaning methods. Variability in husk quality, weather, and operating conditions, as well as poor plant layout contribute to poor quality, high dust content, short fibre, husk residues, and moisture in the fibre. But the price per kilo is very high, which is difficult to bear by the household coir spinners.
v. Coir producers get coir from middlemen on informal credit procedure. Those middlemen charge high interests for their raw materials which create a dependency to the producers. No proper credit facilities for small scale producers.
vi. There are lot of primary producers producing coir ropes that create less demand for the products. The producers have large stocks of finished products in their stores and the price is highly competitive.
vii. Younger generation is not willing to join the industry as this is not very attractive either financially or socially.
viii. No specific market for bristle fibre produced in coir pits even though the quality of the bristle fibre is high.

ix. Majority of primary producers are from the poorest group of society and most of them are women. They produce mainly coir ropes in very unproductive manner.
x. Market chain actors especially at the primary levels have poor knowledge about business management. These needs have not yet been addressed by the service providers.

Constraints at middlemen level

i. Use old and labour intensive fibre extraction technologies. Highly skilled labourers are required to use these machineries otherwise they will damage the hands of operators. Those skilled labourers are controlling the system where mill owners have to depend on them. Similarly the quality of output is not up to the standard.
ii. As a result of high cost of production the producers are always try to reduce the quality of coir ropes which creates poor quality of products
iii. Coir pith is considered to be the most profitable output of the coir industry where in the district it is under utilized. Drying of coir pith is a serious issue here. No proper mechanism to increase the utility of coir pith.
iv. The large number of middlemen involved within the market chain leads to low profit margin for each player.
v. Millers have little or no financial incentive to improve equipment and plant layout, or improve operations to achieve consistent quality.

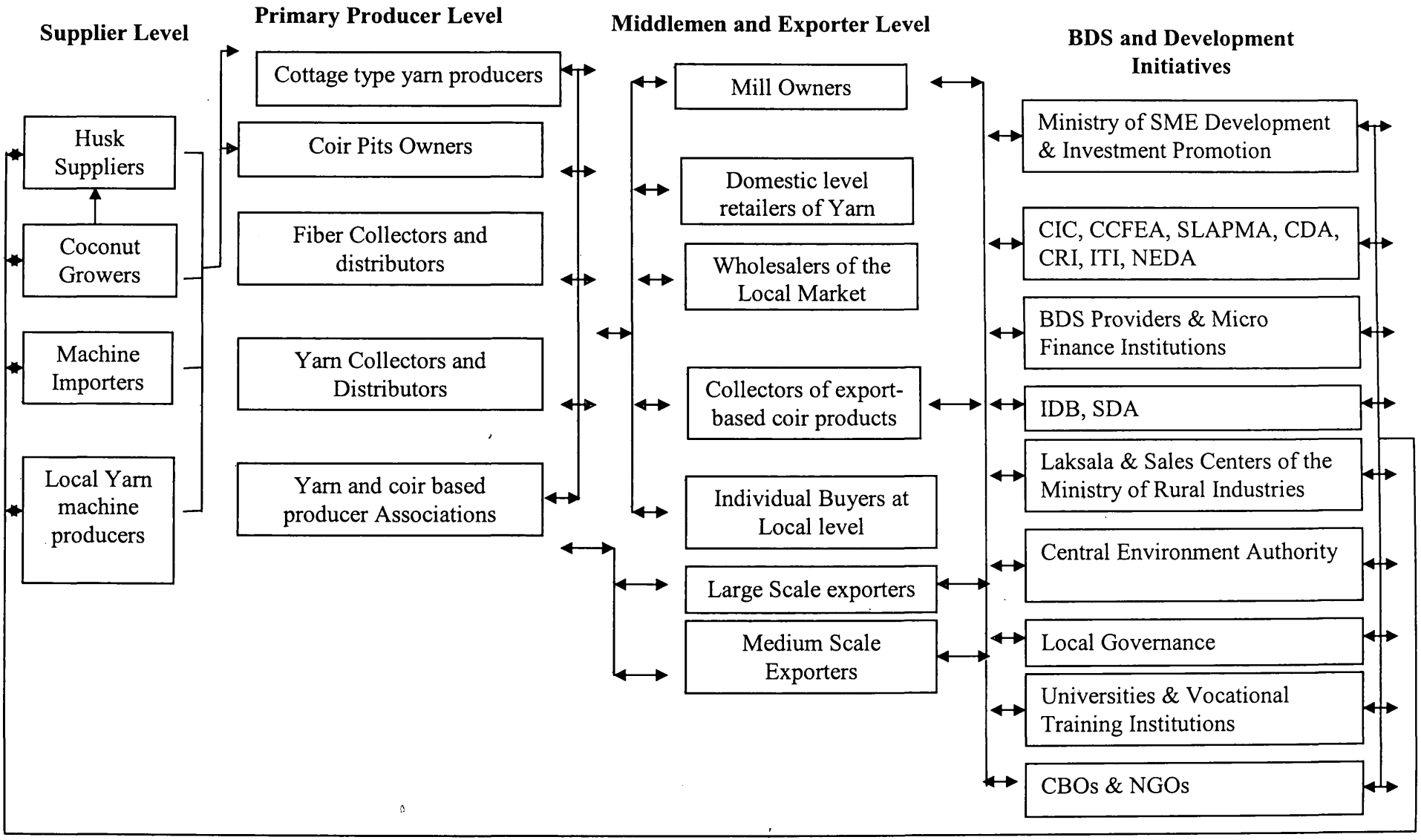
Constraints in exporter level

i. Small and Medium scale exporters are having problem of accessing information regarding the new markets sources and facing lot of barriers in entering to the new markets.
ii. Low price for traditional products in export market due to lack of new designs and innovations within the sector.
iii. The importers having bargaining power over purchasing of coir products which is the major barrier to increase prices for Sri Lankan products.
iv. Finding good quality material to export is a critical issue within the province. Most of the products made by small producers are not up to the export quality. Due to absence of an effective quality control system.
v. Many exporters are concentrated in either Colombo or coconut triangle where very few exporters operate within the Southern. Then the price of coir products is determined by those few organizations which are not very healthy for the sector.
vi. Increasing exports of husk chips, raw coir affects the market price of basic raw materials. This will reduce the value adding process of coir sector.

Applying PACA for promoting the coir industry

The actors of the coir sector value chain, depicted in Figure 1, need to work collaboratively to ensure the ability to compete at the domestic market as well as at the global market. As revealed through this survey, the following section describes how this participatory development approach assists in taking advantage of strengths and opportunities while minimizing or avoiding the weaknesses and threats affecting the coir sector in Southern Sri Lanka. On the other hand, it also describes how this approach supports the opening of avenues for achieving competitive advantages in the domestic and global market and ensuring the sustainable development of the coir sector as well.

Figure 1 **Value Chain of the Coir Sector**



PROCEEDINGS OF THE FOURTH ACADEMIC SESSIONS 2007

1) ***Increase community participation by strengthening the CBOs:***
Formation of registered CBOs representing each category of the coir cluster i.e. groups of house hold coir yarning, coir fiber producers, coir-pluckers, coir spinners and people who produce products out of coir such as coir rugs, ropes, mattresses, etc. This can be initiated by the local government or a BDS organization who plays a major role within the industry (eg: Oxfam or SewaLanka). As the supply of coir fiber and the quality of raw material are still not at a satisfactory level, the lead agency can support the cleaning of pits and establishing coir-mills with de-husking machines for certain CBOs. This will increase the supply of quality raw materials at a low cost. Linking with these CBOs the representatives from the Sri Lankan Coir Cluster, an industry grouping of millers, manufacturers, exporters, academics and government officials, should work to increase Sri Lanka's competitiveness in this sector of the economy.

The high cost of a machine is a bottleneck at primary producer level. Government and institutional intervention to provide financial support and high tech machines is required to solve this problem. The lead agencies of tsunami rehabilitation programs (eg: INGOs, UNDP projects, SDA, Agromart) can assist in establishing coir mills and raw material collecting centers, purchasing a two- wheeler tractor etc. and provide concessionary loans.The ownership and responsibility of these machines should go to certain group members within the CBO. They can produce high quality raw materials at a lower price than the commercial level mills.

2) ***Expanding existing markets by exploring new and emerging applications***
This initiative aims to develop a more thorough understanding of the structure, competition and opportunity for innovation in priority markets, both domestic and abroad. Opportunities for coir product development in advance composites (i.e. in the automobile construction industry etc), geo-textiles, and matting are being explored with a view to increased in-country value addition and enhanced returns for all stakeholders. Sri Lanka's export value per metric ton of coir material is less than 40 per cent of India's, indicating a need for local industry to move toward exporting greater value added coir products.

3) ***Joint research aiming at building capabilities of local research institutions:***
Public, private sector and academia (CDA, CRI, ITI, Ministry of Industries, Universities) can do collaborative research to introduce commercialized new applications and new uses for old products etc. and to introduce innovative technology that will be capable of attracting the younger generation in poor families to the industry. Research capacity should also be focused to increase the coconut harvest and thereby increasing the availability of coconut husk. Annual coir conventions should be held to share research knowledge and expertise, and allow speakers from around the world to focus on challenges to the industry, and opportunities for joint marketing and collaborative research and development to ensure the industry's success.

4) ***Work cooperatively with the world's largest coir exporting nations for mutual benefit:***
The successful meetings laid the groundwork for co-operation in research and development, marketing, bilateral trade and opportunities for product development.

5) ***Improving productivity via managing product quality***
Improving supply chain efficiencies including the mill level, aiming to increase the productivity, product quality and consistency for coir products, will result in gaining competitive advantage in local and export markets, increasing the value of export products, and ensuring the viability of the sector. Incorporation of selected coir-based products into construction specifications to provide a wider use in target markets; performance validation of selected coir EC products; product development programs; laboratory capacity building to conduct ASTM quality testing for coir erosion control products, are possible strategic initiatives to be activated by joint participation of the CDA, ITI, CRI, and Universities.

BDS organizations can create awareness among the actors in the supply chain about quality management techniques and its importance in reaching competitive advantages.

6) ***Central Coordinating Body should be established under the government to manage and control the donor funding projects which assist the development of the coir sector in the Southern Province***

Most donor funding projects are handled by an invisible hand called Political Will. Therefore it is critical to consider the local politicians as one of the most important group of stakeholders who need to be incorporated into the participatory process of economic development.

7) ***Creating an enabling business environment***

Promote an overall environment conducive for the growth of the coir industry through trade facilitation, simplification of business regulatory procedures, and capacity-building for business membership organizations will encourage entrepreneurs to come up with innovative products and reduce the cost of production by increasing the capacity and maintaining product quality. Such an environment will also facilitate dialogue between the public and private sectors, including coir clusters and policy and institutional reform aiming to serve as the central forum for consensus building among growers, millers, manufacturers and exporters of coir and coir products. Meanwhile the emphasis of the government and BDSs should be given to providing micro finance facilities by introducing soft loans and other loan schemes through development banks or any other commercial banks for working capital and expansion purposes.

Conclusions

The Sri Lankan coir industry is a viable sector which can be promoted to the level of a major export earning industry. Although it forms a relatively small proportion of its domestic market and has less than 40 per cent of export value compared with India, the situation now is conducive for producing better quality, diversified and innovative products due to resurging demand from automobile manufacturers; moving into coir based erosion control products and high-end twine and coir pith as a peat substitute in horticulture. By motivating, integrating, coordinating, and monitoring the roles and efforts of all actors in the value chain illustrated in Figure 1, the Sri Lankan coir industry can be supported to improve competitiveness and achieve viability through innovation, coordinated research, enhanced market intelligence, workforce development and effective representation.

References

Brian Dabson (2005), Entrepreneurship as a Core Economic Development Strateg, for Rural America, Presentation to the Secretarial Advisory Committee Strengthening America's Communities, Clearwater, Florida.

Business Page of the Online Edition of Sunday Observer Sri Lanka, India work together to increase coir competitivness, 7- April, 2002, Sri Lanka.

Coconut Development Authority (CDA), *Coconut Statistics,* 2003, 2007:

International Labour Organization, (2005); Livelihood and Employment Creation: Local Economic Development, Geneva.

Meyer-Stamer, Jörg (2003); Why is local economic development so difficult, and what can we do to make it more effective? www.mesopartner.com

Meyer-Stamer, Jörg, (2004), Regional Value Chain Initiatives: An opportunity for the application of the PACA-approach, Mesopartner Working Paper, 06/2004

Web sites: http://www.coir.lk; http://www.hayleysltd.lk