

SME & Technology-A New Business Metric for Rural

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1. Introduction

When financial crises continue to take its toll, the natural tendency of any entity or any economy is to hunker down, follows the status quo and just tries to survive in hopes that someday, this, too, shall pass. But that's exactly the wrong prescription (Bhaskar Chakravorty, *Wall Street Journal*, 2009). History witnessed that most of the path breaking innovations came into being when economy was undergoing a deep recession. Amidst the pain of an economic downturn, an economy can pass the test of success through innovating an overlooked opportunity. In this context Small and Medium Enterprises is an option to reverse the impact of downturn for economic growth. The importance of SME is also emphasized by Mr Manmohan Singh, while inaugurating the new campus of Institute for Studies at Industrial Development (ISID) on May 1st, 2007:

“Are we encouraging crony capitalism? Develop Small and Medium Enterprises. We cannot depend only on few large industrial houses and capitalists for driving our industrialization process. The employment intensive nature and the greater regional spread of the SMEs make an attractive option for industrial growth” (2nd May, 2007, The Hindu).

There is an urgent need for more innovative approaches in rejuvenating the health of SMEs. The policy at government level is not gender harmonious enough to facilitate women led Self-Help-Groups (SHGs) to transpire as SMEs. Although the right policy noises are made about advancing the technological competence of SMEs, hastening their productivity or augmenting credit delivery to the sector but the actual reality or truth has a different story to narrate. Since 1990s, post-liberalization, SMEs have been plunged into the corner of underdevelopment.

2. Rationale of the Idea and its Significance

The paper endeavors to highlight some of the theoretical and practical aspects of SMEs. It starts with looking at the contributions and conditions of SMEs in India. This paper looks at sectoral approach viz. rural handicrafts and discusses on it further like, the various challenges faced by handicrafts and government initiatives adopted so far. It also reiterates the importance of intervention of technology in terms of infusion of ICT (Information and Communication Technology) and Rural Handicrafts. At the end, a model or framework is proposed to uplift this industry not only to the point of economical viability but also to the juncture of social and cultural viability in order to attain sustainability.

3. Contributions and Conditions of SMEs in India

Small and Medium Enterprises have played a decisive role in deciding the growth trajectory of our economy. The report, *Towards Building World Class MSME*, states that SMEs contribute to over 45% of industrial production and about 40% of the total exports of the country. Apart from its contribution to international trade and macroeconomic growth, SMEs also assist the creation of small-scale entrepreneurs and offer employment to nearly 32.2 million people located in about 133 lakh units located across the country; Table-1 shows some facets about SMEs' contributions to the Indian economy. In 2007-08, the value of production in SMEs was around Rs. 695 billion while manufacturing more than 8,000 diverse products. The prime export items are hosiery and garments (29% of the total SME exports), followed by food products (21.45%) and the leather products (18%).

Table-1: Contributions of Small and Medium Enterprises

Year	Number of Units			Employment (in mill.)	Product ion (in bill)	Share in GDP (%)	Export (Rs.bill)
	Registered	Unregistrere d	Total				
2002-03	15.91	95.58	109.49	26.35	314.85	5.92	86.013
2003-04	16.97	96.98	113.95	27.53	364.547	5.79	97.644
2004-05	17.53	101.06	118.59	28.75	429.796	5.84	124.417
2005-06	18.71	104.71	123.42	29.98	497.842	5.83	150.242
2006-07	20.98	107.46	128.44	31.25	587.196	5.94	N.A.
2007-08*	24.68	108.99	133.67	32.23	695.126	N.A.	N.A.

*Projected figures

Source: Ministry of MSME, Govt. of India

It is manifested that out of the total number, Rural SMEs and Backward areas comprise about 42.20% and 48.30% respectively. But these all figures cannot hide the bleak situations of SMEs. Table-2 shows the inexorable growth of sick units and their amount outstanding with financial institutions. Hence, the importance of a new innovative approach to revive this sector becomes significant.

Table-2: Sickness of SMEs

Year	Total Sick Units		Potentially Viable	
	No.	Amount Outstanding (Rs. crores)	No.	Amount outstanding (Rs. crores)
1993	2,23,176	3,443	21,64	799
1994	2,56,452	3,680	,16,580	686
1995	2,68,815	3,547	15,539	597
1996	2,62,376	3,722	16,424	636
1997	2,35,032	3,609	16,220	479
1998	2,21,536	3,857	18,686	456
1999	3,06,221	4,313	18,692	377
2000	3,04,235	4,608	14,373	369

Source: RBI

4. Rural Handicrafts: A synopsis

India is basically Agriculture dominant economy and the development of rural economy hinges on the development of 700 millions rural populations. Of late, over dependency only on agriculture has made them succumbed to many predicaments like natural calamities, crop failure and price fluctuations of agri-commodities. So it is very indispensable to diversify the risk through rural handicrafts industry. Handicrafts occupy a major share of SME sector. Still unorganized households dictate the handicrafts industry. 98% of the units and 96.3% of artisans belong to

unorganized households. Out of the total households and non-households, rural community contributes 78.2% in total units and 76.5% in total artisans (Census, Handicrafts, 1995-96). Rural handicrafts, from the old National Industrial Classification (NIC), 13 groups were isolated that contain the major handicrafts. These groups comprise of five principal exportable handicrafts: carpets, embroider, hand-printed textiles, wood products and decorated metalware (Liebl and Roy, *EPW*, 2003).

5. Strengths & Challenges of Rural Handicrafts

After 1991, Indian economy has encountered a phenomenal growth of deregulation of industrial sectors, welcoming Foreign Direct Investment (FDI) and technology. The liberation of national economy has unwrapped both strengths and challenges to SMEs. The different sets of strengths associated with Rural Handicrafts as a part of SME are (SME, The Eleventh Five year plan):

- Low capital intensive
- Operational flexibility
- Location wise flexibility
- Low intense imports
- Use of indigenous technology
- Unique design or look

But rapid globalization and changing domestic preferences fetched a unique set of challenges confronting with handicrafts. The problem these industries face is not one of universal unqualified obsolescence in the face of competition from mechanized industries. There is usually a very wide disparity between manufacturer's price, export price and retail price for all handmade products. It is impossible to arrive at a prestige figure, but a ration such as of 1:10 between price at source and the retail price is not at all rare. In 1980s empirical works found that retail prices of carpets were often 4-5 times of FOB (Free On Board) value of exports (Kathuria, 1985). Limited information and finance restricts access to three key means of value addition: training in skill-up gradation, design input and technical advancement. Difficulties in accessing and understanding viable new markets pose another challenge. While rural artisans see traditional markets disappearing, often they are not aware of the potential new market for their products. If they are conscious, neither they know how to access to these markets, nor to understand the requirements for interacting with them. The challenges can be listed as:

i) Information Asymmetry

The key problem is vastly asymmetric information as well as asymmetric capability between the artisans and the market operators. An early 1990s study unearthed that 50% of the heads of households in the crafts producing families surveyed had received no formal education whatsoever. The number of totally uneducated women in these households was 90% (Kanika and Singh, 1995). It is thus not surprising that the more sophisticated traders and merchant who are often their only means of contact to distant markets can exploit the craft producer badly. The crafts producer at the bottom, usually, is squeezed the hardest.

ii) Less availability of institutional credit

There are too many institutional bottlenecks created by paucity of acceptable collaterals by banks, inadequate knowledge of credit risk assessment and delayed realization of receivables. Bank despite their best efforts have limited financial products to offer to rural handicrafts and have failed to move away from their traditional collateral requirements in their attempts to reduce 'adverse selection' and 'moral hazards'.

iii) Less bargaining power

Rural handicrafts which often have subcontracting relations with large companies are clutched by them due to their more bargaining power and prominence and less power on rural handicrafts' end. The existence of 'Delayed Payment Act' could not execute better to ensure the regular payments by large companies without defaults.

iv) Deficiency of branding

Rural handicrafts business is managed at tiny economic scale and caters to the market in a very fragmented way. The products are not standardized enough to branding them which causes hindrances from setting their own prices or becoming price maker.

v) Ineffective micro-credit institutions

Still India has to go a long way to bring in financial inclusion through channelizing micro-credit. Micro-credit institutions are not adequately enough to finance the rural handicrafts on large scale.

vi) Less knowledge of Intellectual Property Rights (IPR)

There is very less wakefulness among the rural artisans about IPRs. Thus, the products are easily copied by somebody else and marketed by them without putting much effort in.

6. Government Schemes and their Effectiveness

A number of schemes have been formulated and attempted to implement both by central and state government to prop up SMEs and to call balanced and inclusive growth in the society. But the schemes failed to address the core needs. The approach was highly top driven. The different schemes floated at different times are:

i) Khadi Village Industries Commission (KVIC)

Reflecting to Mr. M.K. Gandhi's preoccupation with khadi cloth and his linking to the rural development, in the year 1957, the government of India established KVIC. Many handicrafts industries fall under KVIC. But today KVIC remains just a mere body without proper functions. They sanction the finances but do not look for the opportunities or the latest developments which are necessary for rural handicrafts.

ii) Comprehensive Handicrafts Cluster Developments Scheme

The main objective of this scheme is to develop the infrastructures needed for handicrafts so as to make the business viable and the livelihood of rural artisans can be uplifted. But due to huge political doldrums at local level the scheme is not reaching the poor effectively.

iii) Cooperative Societies

Government sponsored cooperative societies even could help to boost the business of rural artisans. Even in India Co-operative movement had failed except in the case of Amul which succeeded because it had good leaders and it staved off the political contentions from cooperative activities.

6. ICT and Rural Handicrafts: A Pioneering Union

In these circumstances the need of the hour is the convergence of two; technology and handicrafts. In communities throughout India, independent artisans produce arts and crafts which imbibe the local culture, context, history and traditions. Generation after generation they market their products directly to the local consumers, tourists and through middleman to the exporters. Handicrafts boutiques, tourists, art galleries and export houses pay very remunerative prices for these products. But to reach them, local artisans have to work with middlemen who eat up the major share of the margin, leaving a very small pie for the producers. With the spread of internet these artisans can tap the opportunities to access the avenues that offer them competitive advantage (Fig: 1). The advantages that can be availed with the help of ICT are as under:

i) Relationship Marketing : Value Networks

As ICT helps in digitalization of the businesses, so it would support the artisans to sell their products through online stores. Websites can harbor the catalogue of range of products with price tags to attract the customers from all over the world.

Box-1

Case 1: Rangasutra, a Rajasthan based producers' company, now successfully positioned itself in the market of handmade crafts. Rangasutra collects the materials produced by artisans of western Rajasthan and sell them to FabIndia. It also sells its products through online services. Rangasutra connects the markets and artisans, matches the demands of the customers with the products supplied. It also provides training and capacity building to each artisan. Thus, it created tremendous livelihood opportunities for rural people in a variety of ways.

Source: Summer Project Report of one participant of IRMA.

Box-2

Case 2: Saksam, a Microsoft initiative, aims to enable the setting up of PC kiosks in many villages of Karnataka. An artisan accessing the kiosk can upload his/her latest *Madhubani* paintings on the net. A buyer anywhere in the world can order the items at the click of a mouse.

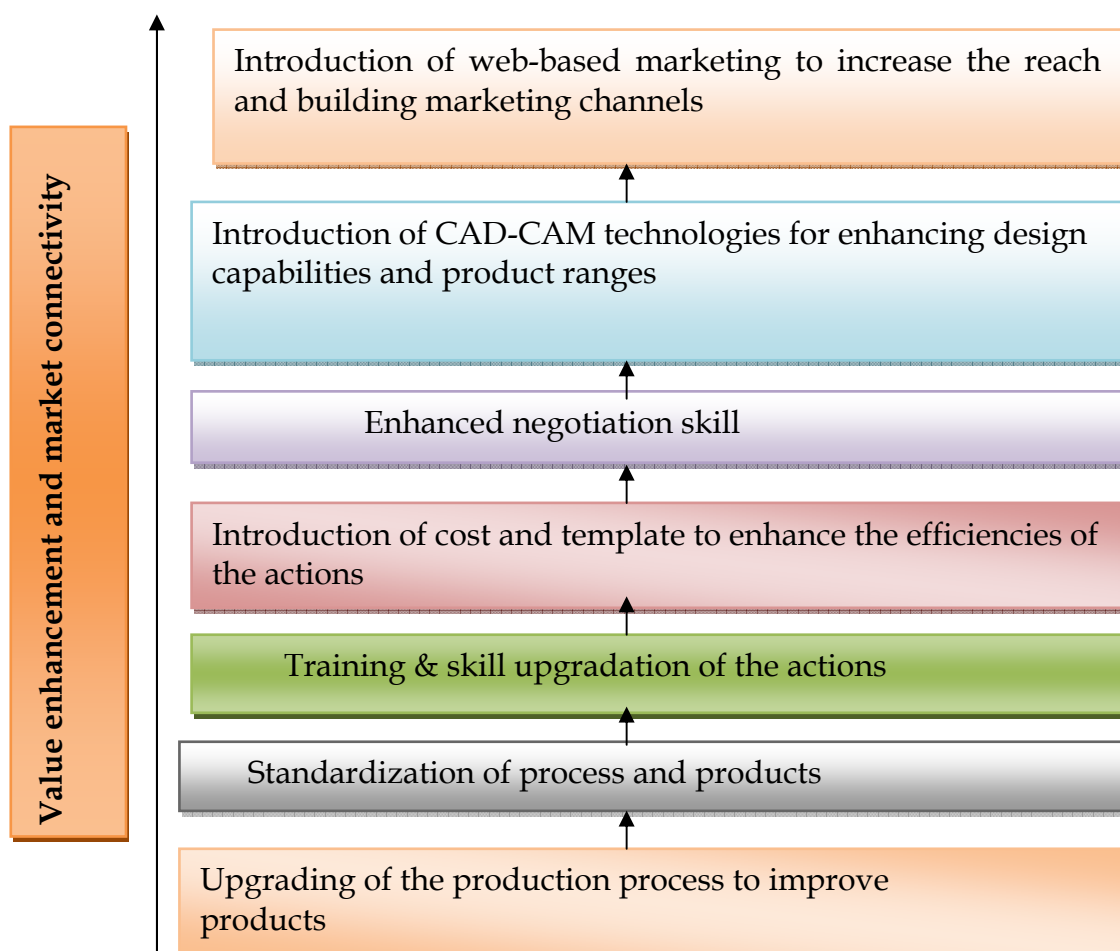
Source: Saravanan et al, 2007

ii) Skill Development

Most of the rural artisans produce the products based on their traditional knowledge and skills. Due to dearth of technology they cannot improve it further to cater the market demands. They do not experiment to develop new products, new innovative designs. As a result new generations are leaving the handicrafts aside in search of jobs elsewhere. But the introduction of ICT can help them design and shape new innovative and eye-catching products. New products and services are very much important for better economic and social life (Chatterjee *et al*, 2009).

iii) Benefit to women

Women do lots of crafts at villages but they cannot go to sell in the market due to family obligations. But ICT can bring them the opportunity to sell them without leaving their houses continuing their gender roles as well.

Fig: 1 Comprehensive Change through ICT

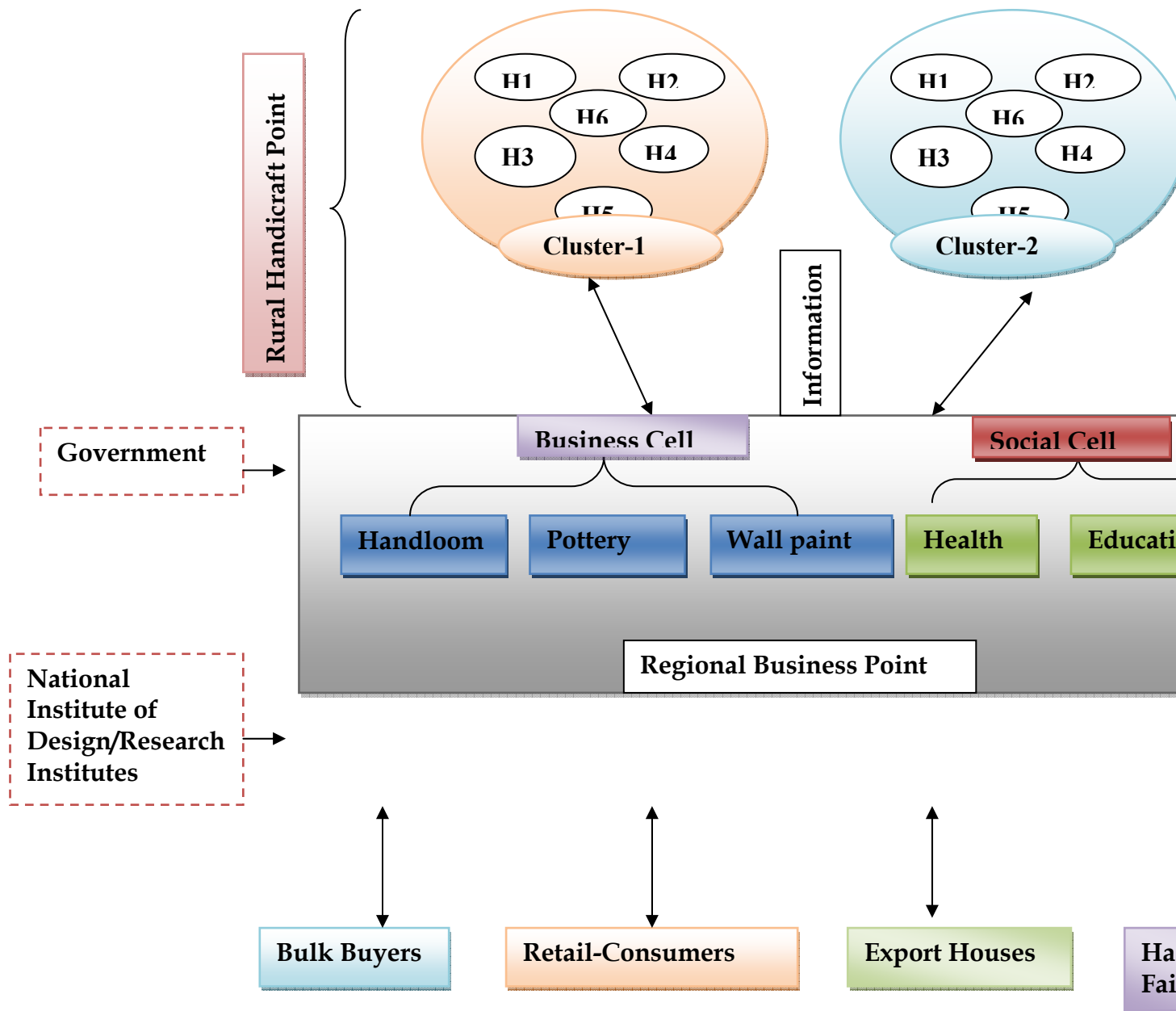
Source: Chain of Change process by Bowonder *et al.*

7. Proposed Architecture: A way to Sustainable Development

We strive to propose architecture accentuates the togetherness of business and technology. The entire framework is divided into two parts; 1) Rural Handicraft Point and 2) Regional Business Point. This would enable the rural community to access to the practical information on small business. Timely availability of market information via communication network helps them to customize their products and businesses.

There is a tremendous potential of wireless communications and networking in the rural areas. The recent swift ascent of mobile wireless users in the rural areas is an indication for this.

Fig: 2 Proposed Architecture



1) Rural Handicraft Point (RHP)

At village level potential handicraft (H) units will be identified and will be formed one cluster. It will be known as Rural Handicraft Point. Cluster should be homogenous within itself. All handicraft producers within a cluster should produce same products. One cluster would consist of 100-150 units to achieve economies of scale. Likewise a set of clusters will be developed based on the skill, knowledge and the items that they produce. These all clusters through wireless network connection would be connected to Regional Business Point which will be located at state capital or any other city of the state where the business potential have been mounting. The clusters will be having computer interface and it will be installed with design softwares too which would help the artisans to customize the products.

For instance, the villages of Rajasthan would form clusters according to the materials or items they produce and the Regional Business Point would be situated at Jaipur which would account high transactions of everyday business.

2) Regional Business Point (RBP)

Regional Business point is the interface between customers and producers, so they need to understand the market demand appropriately. Regional business point would also be connected with other agencies, government bodies, research institutions and financial institutions. RBP will have two divisions i) Business cell and ii) Social cell. Once RBP will get the order from different customers, may be bulk buyers, retail customers or export houses, they would process the demand and forward the information to the intended and respective clusters. The clusters would produce them according to the orders and send it to the regional business cell for sale. Social cell has the responsibility of managing health issues, education and other like agriculture etc. Regional Business Point will form alliances with different handicrafts associations to get the information of exhibitions, fair etc. Regional Business Point will have website to show the availability of different products to different customers all over the world. We will also connect RBP with research and other design institutions which will provide the information of cost effective design and the best way to produce them. All the financial requirements of clusters at RHP will be dealt by RBP so as to make it possible to negotiate with banks on interest rate.

8. Summary and Conclusion

Implementation of ICT for SMEs is not an easy mission to accomplish. Adoption of ICT is influenced by several dimensions, viz. socio-cultural factors, political-economic processes and internal beliefs of the participants towards the technology. These all can be triumphed over if government also comes forward with enabling policies and regulations for development of skills. Government should also come with more specific programmes to develop capacity of enterprise support programme in promoting e-business development services. In recent times, SEBI (Security Exchange Board of India) carved out one framework for recognition of stock exchanges for small and medium enterprises. Now SME can raise its capital from the equity market. In this context ICT infrastructure already built would work in tandem with SMEs. There are general apprehensions and misleading about SMEs as there is not enough knowledge about SMEs in the public domain. So, our integrated and innovative framework would not only suffice the need of foundations for survivality of SMEs but also would create awareness among all sections of the society, such as entrepreneurs, industrial giants and common investors to attract investment for the subscription of growth and development of Small and Medium Enterprises.

9. Originality of the paper

The paper inquires about the need and significance of amalgamation of ICT and SMEs to transcend the economy across the horizons. The framework given in this paper will serve the purpose of all the entities; SMEs, customers, exporters, govt. agencies and of course research institutions. Technology for big and think only for big is not satisfactory enough to guarantee the long term growth without adoring 'Small is beautiful'. I solemnly declare that this paper has not been published or sent for publication other than www.indiastat.com.

References

- Bownder, B., Shadulla, S. and Jain, A. "Evolving an ICT Platform for a Traditional industry: Transforming Artisans into Entrepreneurs"
- Chatterjee, S., A., Tiwari, A., Misra, M. and Dhande, S. "Designing Handicrafts using Information Technology", *Indian Journal of Export*, vol-12.
- Chakravorty, B. (2009), "How to Innovate in a Downturn", *Wall Street Journal*, March 18, 2009.

Kanika, S. and Singh, S. (1995). "India's Artisans: A Status Report", Society for Rural, Urban and Tribal Initiative (SRUTI), pp-8-9, New Delhi
Kathuria, *Indian Handicrafts Exports*, p-93
Liebl, M. and Roy, T. (2003). "Handmade in India: Preliminary Analysis of Crafts Production and Crafts Producers", *The Economic and Political Weekly*, PP-5366-5376
Report "Towards Building World Class MSME" (2008), *India Global Summit on MSMEs*, New Delhi.
Government of India Report of 'Organizational Understanding of Rangasutra (2008)', as part of *Organization Traineeship Segment*, Institute of Rural Management Anand,
Report of the "Working Group on Science and Technology for Small and Medium Enterprises", Eleventh Five Year Plan (2007-2012).
Saravanan, A., Ghatak, S. and Gupta, P. (2007), "Networking to Develop Economies" vol-5 (5), pp-8-9.

Web Links

<http://www.indiahandicrafts.org.in>

<http://www.msme.gov.in>

<http://www.rbi.org.in>

Information for Development (2007), vol-5 (5), <http://www.i4donline.net>

The Hindu (May 2nd, 2007). <http://www.thehindu.com/2007/05/02/stories/2007050205471200.html>