APPENDIX

APPENDIX 1

The Hindu

Tirupur, April 17, 2011

Knitwear exports from Tirupur register growth

Knitwear exports from Tirupur cluster have registered growth during the just-concluded 2010-11 fiscal despite the textile hub being beset by a plethora of problems including raw material price hike and closure of dyeing units by a court order for violating pollution control norms. The statistics disclosed by Tirupur Exporters Association (TEA) president Arumugam Sakthivel states that exports from Tirupur knitwear cluster had leapfrogged from Rs.11,800 crores in 2009-10 to Rs.12,500 crores in 2010-11 financial year. However, Mr. Sakthivel was quick to point out that though the exports had shown an increase in terms of value, the profit margins for the exporters shrunk in 2010-11 fiscal due to the abnormal rise in the prices of cotton as well as cotton yarn and the transportation costs.

On the crisis experienced in the dyeing sector, Mr. Sakthivel said that steps were being taken to expedite the compliance of zero liquid discharge (ZLD) norms stipulated for the effluent treatment process. "About Rs.1,200 crores have been invested so far into the setting up of Common Effluent Treatment Plants and Individual Effluent Treatment Plants in the cluster, in an attempt to prevent any further discharge of effluents into River Noyyal", he added. Mr. Sakthivel was all praise for the eco-green industrial evaporator developed by NIFT-TEA College of Knitwear Fashion which had come as a feasible solution for attaining the ZLD in the effluent treatment process. "We will make sure that the gadget get popularised among the dyeing unit owners and also obtain the necessary approval for its operations from Tamil Nadu Pollution Control Board", Mr. Sakthivel said. He said that the marine discharge project was seen only as a long term solution for disposal of treated industrial effluents.

APPENDIX 2

Business Line

Tirupur, December 16, 2011

TN gives Rs.127crores interest free loan to effluent treatment plants to clean up their act

The Tamil Nadu Government has sanctioned an interest free loan Rs.127.40 crore to upgrade the 15 Common Effluent Treatment Plants in Tirupur, according to an official press release. The move is a significant development for the knitwear industry in Tirupur, where over 754 units including dyeing units were shut down in February this year following an order of the Madras High Court due to pollution concerns and failing to achieve zero liquid discharge. The State Government had taken a policy decision in July to provide the CETPs over Rs.200 crore as interest free loan to enable the CETPs to purchase the modern equipment to achieve zero liquid discharge status, the release said.

Welcome Move

The Tirupur Exporters' Association has welcomed the State Governments move. In a letter to the Chief Minister, Ms J. Jayalalithaa, the association thanked the Government for providing the loan. The Association said six CETPs and 22 individuation effluent treatment plants that support 225 dyeing units have started functioning. The latest announcement of financial support will enable the remaining CETPs to reopen. (EOM)

QUESTIONNAIRE

Survey on Innovation Adoption with reference to the Small and Medium Enterprises in the Knitwear Cluster of Tirupur Information to the respondents

Purpose of Research

This research aims to gather data to understand the extent of innovativeness among the Small and Medium Enterprises operating in the knitwear cluster of Tirupur. Your response will help me to measure the drivers of innovation and the consequences of the same in the form of business performance.

Confidentiality

The information provided by you will be kept confidential and used purely for academic purpose. Results will be aggregated and presented as summaries only. Individual respondents or their respective organizations will not be identified.

Questionnaire Structure

This questionnaire contains 8 pages with 4 parts. The first part requests information pertaining to the antecedents of innovation. The second part deals with innovation adoption, its types and its implementation. The third part enquires information on business performance indicators. Finally, the fourth part solicits background information.

Definition of Important Terms used in this Questionnaire

Innovation for the purpose of this study means- "generation, development and adaptation of an idea/behaviour/practice, new to the adopting organization". Types of innovation for the purpose of this study are **Technological innovations** that include **Product innovations** (new or improved products brought out by the firm); **Process innovations** (new or improved ways of production processes); **Administrative innovations** (new or improved administrative practices); **Marketing Innovations** (new or improved ways of marketing products

manufactured by the firm). **Innovation adoption** refers to the taking up of the above mentioned innovative practices by the organization. **Innovation implementation** refers to the continuous use of the adopted innovative practices and integrating them in the total value system of the adopting organization.

Part 1: This part contains 2 sections.

Section A- Innovation Objectives & Drivers

1. Do you think innovation is essential for growth?

	OYes	\circ	No		ODon't l	znow		
2				- C 41			C4	:
	Please indicate	1			Tollowing	decisions/	iactors	ın

2. Please indicate how important were each of the following decisions/ factors in influencing innovation adoption at your organization during the past 3 years. (Please tick in the appropriate columns)

Sl.No.	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Innovation Objectives					
2.1	I innovate to enter new markets	•	•	0	0	0
2.2	I innovate to increase market share	O	O	0	O	O
2.3	I innovate to increase range of products	O	O	0	O	O
2.4	I innovate to improve quality of products	O	O	O	O	•
2.5	I innovate to increase capacity of production	•	•	0	O	•
2.6	I innovate to reduce costs per unit produced	O	O	O	•	O
2.7	I innovate to improve health and safety	O	O	0	•	O
2.8	I innovate to reduce environmental impacts	O	•	0	0	0
2.9	I innovate to replace outdated products & processes	O	O	0	0	0
2.10	I innovate to meet regulatory requirements	O	O	0	0	0
	Leadership for Innovation					
2.11	I search and promote new methods/ideas to solve problems in my business	O	O	O	O	O

Sl.No.	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
2.12	I show confidence in my beliefs	O	0	•	•	•
2.13	I don't stop during difficulties	C	O	O	O	O
2.14	I encourage others to express their ideas	O	0	O	O	O
2.15	I appreciate by giving public and meaningful recognition	O	0	O	O	O
2.16	I express an exciting vision for the future	O	O	O	O	•
2.17	I encourage others to share resources	0	0	O	O	O
2.18	I consult others while making decisions	O	0	O	O	O
2.19	I network informally with other operators in the cluster	O	O	O	O	O
	Market Orientation					
2.20	I listen to the opinions of customers	O	0	•	•	•
2.21	I value customer inputs in planning	O	0	•	•	•
2.22	I am quick in identifying market opportunities and capturing them	O	•	•	•	•
2.23	Our business objectives are driven by customer satisfaction	O	0	0	0	O
2.24	We monitor our level of commitment and orientation to serving customers' needs.	O	0	O	O	O
2.25	We respond to competitive actions	O	0	•	•	•
2.26	I give information about my customers to all important employees	O	O	O	O	O
2.27	All of our business functions are integrated in serving the needs of our customers	O	0	O	O	O
2.28	All of our managers understand how they can contribute in creating customer value	O	0	O	O	O
	Innovation Climate					
2.29	My employees are involved in planning and implementing our long term goals	O	0	O	O	O
2.30	They have freedom to make their own decisions	C	O	O	O	O

Sl.No.	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
2.31	They have enough time to think before doing	0	0	0	•	•
2.32	They are encouraged to suggest new ideas	O	0	0	•	O
2.33	They take risks in implementing new ideas	0	0	0	0	0
2.34	They have and express trust in each other	•	0	0	O	•
2.35	They work in a relaxed environment	O	0	O	O	O
2.36	They work well as a team	O	O	O	O	O
2.37	They raise and actively debate issues	O	O	O	O	O
	Organization Structure					
2.38	Rules and procedures are less important in my company	O	O	O	O	O
2.39	There are less written procedures available in my company for almost everything	O	0	0	O	O
2.40	There is plenty opportunity for informal talks among employees	O	0	O	O	O
2.41	My employees are accessible to each other.	O	O	0	O	0
2.42	Access to information is quick and easy.	O	•	•	O	•
	Competition					
2.43	Competition is very intense in our local environment	O	0	0	O	C
2.44	Our business has strong competitors in the market place	O	O	O	O	•
2.45	There is uncertainty in my business due to changes in customer preferences & demand	0	O	O	O	O
	Collaboration with cluster					
2.46	I collaborate with cluster members for information & experience exchange	0	•	0	•	0
2.47	I collaborate for quality improvement	O	0	0	C	O
2.48	I collaborate for product specification/design sharing	O	0	0	O	C
2.49	I collaborate for delivery conditions	O	O	O	O	O

Sl.No.	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
2.50	I collaborate for employees' training	O	O	O	O	O
2.51	I collaborate for order sharing	O	O	O	O	•
	Sources of innovation					
2.52	In my business, internal sources (within company) provide information about innovations	0	O	O	O	O
2.53	Market sources (Suppliers/customers/ Competitors) provide information about innovations	•	O	O	•	•
2.54	Institutional sources (Consultants, labs, Universities, Government institutes etc.) provide information about innovations	0	O	•	•	•
2.55	Other sources (conferences, trade fairs, journals, professional/industry associations etc.) provide information about innovations	0	O	0	•	•
	Research & Development					
2.56	I carry out internal Research & Development	0	0	•	•	•
2.56 2.57		о О	о О	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •
	Development I purchase external Research &					_
	Development I purchase external Research & Development					_
2.57	Development I purchase external Research & Development Collaboration Status I collaborate with Financial Institutions I collaborate with Government agencies	•	•	•	•	0
2.57	Development I purchase external Research & Development Collaboration Status I collaborate with Financial Institutions I collaborate with Government agencies I collaborate with Trade/Business associations	0	0	0	0	0
2.57 2.58 2.59	Development I purchase external Research & Development Collaboration Status I collaborate with Financial Institutions I collaborate with Government agencies I collaborate with Trade/Business associations I collaborate with Suppliers of materials	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	0	0	0
2.57 2.58 2.59 2.60	Development I purchase external Research & Development Collaboration Status I collaborate with Financial Institutions I collaborate with Government agencies I collaborate with Trade/Business associations I collaborate with Suppliers of	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •
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		on the responses provided above, Can you odies best supporting your business?	ou n	nenti	on t	he n	ames	of
	1.							
	2							
	3							
	4							
	5							
S	ection B	- Barriers of Innovation						
		indicate to what extent were the followand adoption at your organization (Please tick in	_					_
	Sl. No.	There is	Always	Often	Sometimes	Rarely	Never	
	4.1	Lack of funds within my business	O	O	O	O	0	
	4.2	Lack of finance from outside	O	O	O	O	O	
	4.3	Lack of qualified personnel	O	O	O	O	0	

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Lack of information on technology

Lack of collaboration with Universities/ Labs

Market domination by established businesses.

No need because of no demand for innovations

Excessive government regulation in industry

Lack of government incentives for innovation

Uncertain demand for innovative products

Lack of information on markets

No need due to prior innovations

4.4

4.5

4.6

4.7

4.8

4.9

4.10

4.11

4.12

Part 2- Innovation adoption and routinization

5. Please indicate the **innovations** (technological/administrative/marketing innovations) adopted and implemented by your firm during the past 3 years (Please tick in the appropriate columns)

Sl. No.	Compared to our competitors, we have	Always	Often	Sometimes	Rarely	Never
	Technological Innovation Adoption					
5.1	Introduced more innovative products/designs	0	O	0	0	O
5.2	Acquired advanced machineries/ technologies etc. for innovation	O	O	0	O	O
5.3	Our new products/ designs are considered very new by customers	O	O	0	O	0
5.4	Allocated considerable funds for product related innovations	O	O	0	0	0
5.5	Increased the quality of our products	0	O	O	0	O
5.6	Reduced the cost of our products	O	O	O	O	O
5.7	Improved our business processes	O	O	O	O	O
5.8	Eliminated non value adding activities in production processes	O	O	0	O	O
5.9	Decreased variable costs in manufacturing processes	0	O	0	0	0
	Administrative Innovation Adoption					
5.10	Introduced new/significantly improved internal administrative practices	O	O	0	O	O
5.11	Improved the production/quality management systems	0	O	0	0	0
5.12	Improved the human resources management system	0	O	0	0	O
5.13	Improved management information system /practices	0	0	0	0	0
5.14	Renewed the organization structure to facilitate teamwork and coordination	O	O	0	0	0
5.15	Provided training to employees for innovation activities	O	O	O	O	O
	Marketing Innovation Adoption					
5.16	Improved the design of our products through changes in appearance, packaging etc.	O	O	O	0	O
5.17	Improved marketing techniques	O	0	O	0	O
	· · · · · · · · · · · · · · · · · · ·			•		

Sl. No.	Compared to our competitors, we have		Often	Sometimes	Rarely	Never
5.18	Renewed pricing techniques		O	O	O	O
	Innovation Implementation					
5.19	Implemented most of the product innovations	0	0	O	0	O
5.20	Implemented most of the process innovations	O	O	O	O	O
5.21	Implemented most of the administrative innovations	0	0	O	0	0
5.22	Implemented most of the marketing innovations	O	O	O	O	C

Part 3- Business performance

6. Please mention the average percentage of your company's sales on the basis of the following categories during the past 3 years

Categories	% of Sales
Products manufactured as per buyer's design specifications	
Products designed by your company	
Products designed by your company and sold under your own	
brand name	

7. Please specify your investment in R&D as	a percentage of your firm's average
annual turnover during the past 3 years	

O Up to 5%	O 5-10 %	O 11-15 %	O 16-20 %
Q 21-25 %	O >25 %		

8. Please mention your company's average annual turnover for the past 3 years (Average of 2009, 2010 and 2011 turnover):

O<10 crores	O11-15 crores	O16-20crores	
O21-30crores	O31-40crores	Q 41-50 crores	O>50 crores

9. Please indicate the extent to which the average annual turnover of your business for the past three years has increased due to adoption of innovations

O Upto 20 %	Q 21-40 %	O 41-60 %	O 61-80 %
O 81-100%			

10. How do you rate your company against comparable * competitors on the following business performance measures over the last 3 years

Sl. No.	Performance indicators	Under performer	Low performer	Moderate performer	High performer	Top performer
10.1	Profit growth	O	0	O	O	O
10.2	Turnover growth	O	0	O	O	O
10.3	Productivity growth	O	0	O	O	O
10.4	Operational efficiency	O	0	O	O	O
10.5	Growth in return on investment	C	0	0	O	O
10.6	Ability to increase market share	O	0	0	O	O
10.7	Ability to attract new clients	O	0	0	O	O
10.8	Ability to gain repeat business	O	0	0	O	O
10.9	Ability to deliver promises	O	0	O	O	O
10.10	Level of customer satisfaction	O	O	O	O	O
10.11	Overall reputation	O	0	0	O	C

^{*}Comparable competitors refer to those firms which operate in a similar market and have comparable resources and opportunity constraints as that of your firm

Part 4- Background information

11.	Name of the company (Optional):							
12.	Designation (Optional):	of	the	respondent				
13.	Nature of ownership: O com			Sole proprietor Sole proprietor	orship	OPartnership	OLimited	
14.	Age of the company:			O 6-10 year	ars O	11-15 years	O 16-20 years	
15.	Which among the following segment of the knitwear value chain are you engaged in?			OKnitting O Wet-processing O Compacting OGarmenting OPrinting/Embroidery OOthers				

	Please specify the		<20		21-40	41-60	61-80	81- 100	>100		
n	number of employees	Permanent	O		0	O	O	0	O		
	in your company:	Contract	•		•	•	•	O	O		
17.	How many years of experience do you have in the knitwear industry?				O<10 years O11-20 years O21-30 years O31-40 years O>40 years						
18.	Please mention whether you are a				OFirst generation entrepreneur OSecond generation entrepreneur OThird generation entrepreneur						
19.	What is your highest level of education?				OHigh school ODiploma OBachelor degree OMaster degree OOthers						
20.	Please indicate the percentage of exports out of your company's total final sales				O Upto 20% O21-40 % O41-60 % O 61-80 % O81-100 % O100% exports						
21.	Do you face problems while doing innovations in your business? If yes, can you explain them?										
22.	Do you have any suggestions to the Government to improve innovativeness in your cluster, at large?										
23.	Do you have any suggestions to other entrepreneurs in the cluster to improve innovativeness										

Thank you for your information