Inclusive trade in Indian silk industry during post globalized era

Chandan, Roy

Kaliyaganj College, West Benga, India

July 2016

Inclusive Trade in Indian Silk Industry during post globalized era*

Chandan Roy

Associate Professor, Department of Economics, Kaliyaganj College, West Bengal, India;
 E-Mail: chandanroy70@gmail.com

Abstract

This article addresses the question of whether free international trade flow in silk industry, especially in the post MFA regime, could usher inclusive development in that specific sector. I propose 'employment' and 'production' as the two parameters of inclusive development in this sector and derived initially cohesion, though weak, of this parameter with earnings from exports of silk and silk goods. However, analyzing the secondary data over the post globalized era (1995-96 to 2014-15), I conclude that 'inclusive development' which have virtually taken place in Indian sericulture sector is not originated from free flow of international trade, rather 'land productivity' is conducive to inclusive development in this sector.

Keywords: Sericulture, Silk, Inclusive Development, Land Productivity, Export Earnings

JEL: _F-10, F-60, O-13, R-12;_

I. Introduction

Silk production, including sericulture is a hugely labour intensive activity ideally suited for the immensely populated and agro-based economy like India. From silkworm rearing to production of silk goods, it spreads its welfare enhancing distributive impact both in rural as well as urban sector. While farmers in the rural areas practice sericulture activities, silk weaving and production of silk goods are concentrated in the urban towns and cities. Therefore inclusive international trade, which is gaining importance in academic and political periphery during this post globalised era, is expected to be plausible in Indian silk industry. This paper would try to explore the extent of this inclusiveness in Indian sericulture sector and will investigate whether that is originated out of the growth in export sector during post MFA periods, i.e., 1995-96 to 2014-15.

In 1981-82, the share of silk in country's total export basket was 0.9 %, while globalization could hardly raise its share beyond 1.5 % in 1991-92 and 1.2 % in 2000-01 respectively (Roy et al., 2002). Despite all these odds, the contributory role of this sector in uplifting a section of rural producers in backward areas through generation of productive employment and

income augmentation have made the status of the industry vibrant in the era of post globalisation when the issues of trade driven development are much sought of in all most all the developing nations.

Theorists opine that flourishing international trade can boost economic growth, but to ensure inclusiveness, targeted policies are required along with a closer connection between different level of micro and macroeconomic policies (United Nations, 2014). In India, the Ministry of Textiles launched New Textile Policy in 2000 that facilitated the expansion and restructuring of the industry through providing access to international intermediate inputs, raw-materials and machinery and scale expansion. Meanwhile textile industry across the world has gone through liberalization process as the stepwise phasing out of the Multi-Fiber Agreement (MFA) had started in 1974 and concluded in 2004. The MFA was basically designed to regulate imports of textile products from developing country to developed country. USA and European Union used this MFA mainly to protect their own domestic textile industry from external competitions of the developing countries. But from the perspective of developing countries like, India, the beneficial impact was that the country was given limited but assured market in the developed countries and that prevented bigger and more competitive nations from capturing the entire Textile markets (Pal, 2014). Now, in order to realize the impact of MFA abolition, it is imperative to find out whether the quota removal has increased the risk of the artisanal classes of Indian silk industry against the dominant market strategy of China or it ameliorates the impoverished situation of poor Indian silk manufacturers. The export sector's potential for inclusion would be gauged through its increasing internal and external linkages and by increasing the numbers of employment associated with it.

II. Trade Liberalisation in Silk Industry (1990-2015)

The silk-textile policy has been progressed along a trajectory in India where the major efforts were put forward to make the industry efficient and competitive. In the textile policy of 1985, greater emphasis was given to modernise the industry through upgradation of technology. This policy removed unnecessary controls and regulations on the existing units and regulations on the existing units and closer of unviable mills. During 1989-90, the Central Silk Board and Department of Sericulture in five traditional states (i.e., Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal and Kashmir) initiated 'National Sericulture Project' along with financial assistance of World Bank for the development of mulberry sericulture. Even in the pre-reform period (1985-90), thirteen sericulture training schools for farmers

have been established in various states under TRYSEM (Training the Rural Youth for Self Employment) to impart training to farmers in sericulture aspects and self employment (CSB, 1999). Economic reforms of 1991 brought some changes in the industrial policies in India. It sought to deregulate industries and expose firms in international competitions. The process of globalisation welcomed various potential entrants by reducing the trade barriers. The simple mean tariff was reduced from 80 percent to 30 percent within 1990-2001. The share of product subject to quota restriction decreased from 87 percent in 1987-88 to 45 percent in 1994-95.

In 2000, a new textile policy was announced by the Government with the aim of modernizing the textile industry to meet global competitions and implemented it with technology up gradation in a time bound manner. The policy relaxed the restrictions on foreign investment, foreign technology and foreign equipment to make the domestic industry more competitive and efficient. In 2001, 35 percent of tariff line was freed from non-tariff barriers which facilitated many exportable commodities where intermediates are imported in large volume. Globalisation policies abolished the system of licensing and the list of reserved small scale industries was also removed from textile sector. This undoubtedly opened up the scope for multiple domestic farms in this sector to show their inherent excellence in silk textile industry.

Indian textile industries started integrating themselves with WTO since January, 2005. The bi-lateral quotas regulating global textile trade for many years in the name of MFA was phased out at the end of 2004. Porter (1994) analyzing the performance of garments sector in post-MFA regime presaged Indian exporters about China's possibility of deriving scale economy and technology advantage much more than India. According to him, only the best capable firms can reap the benefit out of this liberalised condition.

India's position in global silk trade was not up to the mark since the inception of the planning period despite possessing significant global production rank. This anomaly between production and exports indicates two plausible outcomes- (i) India is a huge consumer of silk goods; So Indian silk-traders are catering the need of domestic market instead of concentrating on foreign market. Only 15% of its domestic product is exported (Samuel, 2000) (ii) Indian Silk (raw silk and silk goods) fails to get access in foreign market due to low quality and poor brand-image. (Exim Bank, 2002; CSB - Online Annual Reports, Rajesh 2011, Naik and Babu, 1993). These hypotheses are however tested by several researchers (Rajesh, 2011; Roy and Roy Mukherjee, 2015) who identified both the reasons with equal importance behind this unsatisfactory performance in export frontier.

Umesh et al. (2009) have attempted to measure trade competitiveness of Silk Industry on the basis of the data during 1984-85 to 2006-07 through calculating Nominal Protection Coefficient. In the post WTO period, with the abolishment of exports restrictions, the nominal protection coefficient for silk goods has been found to be declining, which explains lack of export competitiveness of the sector.

The year 1995 was benchmarked as the foundation year of WTO and year 2001 as entry of China (which is India's biggest rival in global market) in that multilateral trade facilitating body. According to India's perception Chinese silk was highly subsidised and therefore under subsidies & countervailing measure (SCM), China would have to control its subsidies based on standard production, cost and other parameters. That would indirectly raise the price of Chinese silk and India's silk industry was expected to be protected from Chinese competitions. China and India were the two large silk producing countries in 1995, producing 70.37% and 14.58% of the world production. But the global silk market was dominated unambiguously by China. In 1995, share of Chinese exports in global raw silk (SITC 2613) market was 85.74% (in value terms), which was followed by Germany (6.78%), Singapore (3.28%), Italy (1.27%) and India (0.40%). On the other hand in global export basket of silk fabrics and fabrics of silk waste (SITC: 6541), China captured one third of the share (33.3%) which was flowed by Italy (24.4%), Korea Republic (13.5%) and India (6.17%).

The year 2005 was earmarked as the beginning of the trade liberalized era as the MFA has been abolished completely by that time. India and China were two dominant producing nations followed by Thailand and Brazil and their respective production share was 80.2%, 14.1%, 1.3% and 1.2%. In this year, the silk and silk goods export share of China was 90.8 % while that of Brazil, Japan and India were 5.6%, 2.1% and 1.5% respectively (ISERCO, online). Thus the beginning of the MFA free phase started with Chinese domination in world market; while India's relative position was hardly visible. Contrary to the market expectations, this Chinese domination in world silk market has been intensified during the post MFA phase and ultimately in 2010, India could export only in 1.13 % of global raw silk while China captured 94.4% of global market of raw silk exports. However, China faced some severe import restrictions after the MFA abolition as Chinese exports of textiles initially surged more than proportionately in both US and EU markets.

III. Objective & Methodology

Our specific objective in this paper is to detect the inclusiveness of sericulture sector sourcing out of international trade flow of Indian silk industry. For this purpose, two parameters of inclusiveness have been chosen i.e., 'employment' and 'production' of the silk industry, which are directly connected with the welfare of the marginal people involved in this sector. We will derive the determinants of these two parameters through our proposed econometric models applying OLS technique. Our objective is to discern whether inclusiveness is being significantly explained by the trade parameters, like 'export earning' or 'import volume' of silk and silk goods in India.

Model 1:

In this proposed model, it is assumed that employment in silk and sericulture sector for a definite period of time is being explained by the land productivity of sericulture (measured in terms of Kg/ha) and flow of export earnings (measured in terms of Rs. in crore) by Indian silk industry. Therefore, the regression equation will be

$(ESS)_t = \beta_0 + \beta_1 (LP)_t + \beta_2 (EE)_t + \mu_t$

Where, ESS_t = Employment in Silk Sector in period-t

LP_t = Land Productivity of Mulberry Cultivation Area in period-t

EE_t = Export Earnings of Silk Industry in period-t

μ_t = Error term

β_0 captures the impact of all other factors in employment of silk industry except the explanatory factors, LP and EE.

Model 2:

In this proposed model-2, it is assumed that production of raw silk is being explained by two factors, namely, import of raw silk and land productivity of the silk sector. Hence, the regression equation will be:

$(PRS)_t = b_0 + b_1 (IRS)_t + b_2 (LP)_t + u_t$

Where, $(PRS)_t$ = Production of Raw Silk in period- t

$(IRS)_t$ = Import of Raw Silk in period –t

$(LP)_t$ = Land Productivity in period-t

u_t = Error Term

b_0 = Impact of all other factors on PRS other than the IRS and LP

5

b_0 would capture the impact of those factors other than the explanatory factor and u is the error term.

In section V, we will test our hypothesis using the available secondary data in the above econometric models and will interpret the result of the coefficients.

IV. Relationship between Trade, Production, Employment and Productivity in Indian Silk Industry

In the post globalization era, when dismantling of MFA is providing an opportunity to play on a level playing ground, Indian silk Industry fails to reap the benefit of free-trade. Despite enjoying natural geographical advantage and privileges of having huge cheap household labour and institutional supports from CSB, ISEPC and State Governments, Indian silk Industry is far away from successfully penetrating its export frontier mostly due to the prevalent rudimentary technology (Doshi, 2009). In the post WTO period the industry has been adversely hit by environmental regulations and social controls like, issues of Child labour. Moreover, India is also a leading consumer of silk goods. Analysts have measured 85% of the domestic production is used for domestic consumption (Samuel, 2000). Therefore, pressure of excessive domestic demand always diverts the export orientation of the industry. As sericulture is assumed to be the low budget livelihood option to a large chunk of rural people of our country, export orientation requires rigorous governance over its quality and uniformity.

If the production growths of various countries are being observed especially between two periods of time, i.e., Pre-MFA period (1995-2004) and post-MFA period (2005-2011), then India's situation is revealed to be better than any other silk producing countries in the world. While the raw silk production growth has risen from 2.48% to 3.10% worldwide, India has experienced a production growth from 0.55% to 6.9% between pre MFA and post MFA phases. This clearly indicates abolition of MFA has indirectly influenced the domestic production of raw silk in India.

Table 1: Annual Growth in Raw Silk Production during 1995-2011

Country	CAGR (1995-2004) (Pre MFA Period)	CAGR (2005-2011) (Post MFA Period)
China	2.66	2.8624
India	**0.5555**	**6.9084**
Japan	-24.35	-18.49
Brazil	-5.299	-12.98
Korea Rep	-100	-1.741

Uzbekistan	-100	17.089
Thailand	0.8743	-12.1
Vietnam	NA	-5.038
Others	-100	-48.19
Total	2.4872	3.1035

However, the export market share failed to exhibit any impressive performance during post MFA period. Table -2 portrays a comparable picturesque between India and China on the basis of their global production and exports share. It reveals that the global share of silk exports in China has sustained a rising trend in exports, while India's export share has shown a consistently declining trend. This, in a way, reflects how Chinese silk goods have captured India's market in the developed countries.

Table 2: Global silk production and exports share by India & China in Pre & Post MFA

	1999	2005	2010
India			
Global Silk Production Share	19.3	14.11	17.5
Global Silk Exports Share	4.48	1.52	1.13
China			
Global Silk Production Share	72.52	80.22	79.10
Global Silk Exports Share	76.3	90.8	94.37

Source : Exim Bank(2002), CSB (online), ISERCO(online).

Table 3: Impact of MFA Abolition in Indian Silk Industry

Year	Export Earning	Import Expense	Net Exp earning	Imp/Exp Ratio	Domestic Income	Domestic Wage (Monthly)
	Rs in Cr	Rs in Cr	Rs in Cr		Rs in Cr	Rs
1999-00	1755.55	490.16	1265.39	0.279206	1415.31	2645.45
2000-01	2421.98	574.46	1847.52	0.237186	1610.61	2982.613
2001-02	2359.56	820.25	1539.31	0.347628	1680.83	3056.066
2002-03	2294.05	859.94	1434.11	0.374857	1176.66	2101.194
2003-04	2779.19	1035.27	1743.92	0.372508	1374.64	2433.005
2004-05	2879.56	1187.1	1692.46	0.41225	1337.73	2306.431
Pre-MFA Average			1587.118	0.337273	1432.63	2587.46
2005-06	3194.2	1581.53	1612.67	0.495126	1624.81	2730.78
2006-07	3338.35	1366.25	1972.1	0.409259	1754.95	2923.46
2007-08	2727.87	1597.11	1130.76	0.585479	1666.73	2723.43
2008-09	3178.19	1749.58	1428.61	0.550496	2005.88	3178.89
2009-10	2892.44	1839.25	1053.19	0.635882	2578.87	3783.01
2010-11	2863.76	1749.1	1114.66	0.61077	3476.50	4795.17
Post –MFA Average			1385.332	0.547835	2184.63	3355.79

Source: CSB (2003, online)

Table-3 gives us a brief idea about the changing pattern of trade, production and income of Indian silk industry during the pre and post MFA periods. It narrates that the average net annual export earnings from the silk sector has declined from Rs 1587crores to Rs. 1385crores, which is not only due to fall in export earnings but also rise in import expenditure of silk industry. The average Import-Export ratio has risen from 0.34 to 0.55 during these periods, showing trends of rising import dependence. However despite all these odds in the trade frontier, the average domestic annual income generation from the sericulture sector has been elevated to Rs. 2184.63crores from Rs. 1432.63crores during this period. The average monthly income of a sericulture artisan/farmer which was Rs. 2587.46 during the pre-MFA phase, increased to a monthly average of Rs. 3355.79 during the post MFA period. Data corroboration leads us to conclude that MFA abolition has indirectly brought down the trade performance of Indian silk industry, while the domestic market has experienced a favorable trend both in production and income generation.

Major focus of this section would be to unfold the relation between trade liberalisation and inclusive development with special reference to silk Industry in India. We specifically intend to test the hypotheses regarding the connectivity of export performance and inclusive development.

Table 4: Export, Import, Production, Productivity & Employment in Indian Silk Sector

(1995-2015)

Year	Export Earnings from Raw Silk & Silk Goods (Rs in Crore)	Raw silk production (MT)	Employment Generation (Millions)	Import of Raw Silk (MT)	Land Productivity (Kg/ha)
1995-96	846.08	13909	5.05	4149	45.05
1996-97	880.44	14126	5.07	2911	46.09
1997-98	926.28	15236	5.3	2760	49.82
1998-99	1250.55	14260	5.3	2824	52.81
1999-00	1755.55	13944	5.35	5018	61.65
2000-01	2421.98	14432	5.4	4713	66.81
2001-02	2359.56	15842	5.5	6808	68.28
2002-03	2294.04	14617	5.6	9054	75.35
2003-04	2779.19	13970	5.65	9258	75.51
2004-05	2879.56	14620	5.8	7948	85
2005-06	3194.2	17305	5.95	8383	86.25
2006-07	3338.35	18475	6	5565	86.12
2007-08	2727.87	18320	6.12	7922	87.84
2008-09	3178.19	18370	6.31	8392	87.73
2009-10	2892.44	19690	6.82	7338	88.82

2010-11	2863.77	20410	7.25	5820	90.2
2011-12	2353.33	23060	7.56	5685	93
2012-13	2303.58	23679	7.65	4959	100.61
2013-14	2480.89	26480	7.85	3260	95.93
2014-15	2829.88	28708	8.28	3489	97.31

Source: Central Silk Board(1999, 2003, online)

The following hypotheses will be consequently tested in this section:

1) Whether the employment growth and export or import growth is bearing any significant correlation in the post globalisation period;

2) Whether the average productivity of labour is rising with increased export earnings during the above mentioned period, signifying inclusive growth;

Table 5: Correlation between Trade Parameters & Employment in Indian Silk Industry

(1995-2015)

	Export Earnings from Silk & Silk Goods	Import of Raw Silk
Employment in Silk Industry	Pearson's Correlation Coefficient = 0.485* Kendall's tau-b Coefficient = 0.449** Spearman's Rank Correlation = 0.602**	Pearson's Correlation Coefficient = -0.075 Kendall's tau-b Coefficient = 0.090 Spearman's Rank Correlation = 0.226

** Significant at 0.01 level (2-tailed); * Significant at 0.05 level

On the basis of the available secondary data (see Table 4), we estimated the Pearson's Correlation Coefficient, Kendall's tau-b and Spearman's Rho between our test parameters, i.e., 'employment in silk industry' and 'export-earnings from silk and silk goods' and 'import of raw silk'. Table- 5 supports our first hypothesis identifying that level of employment and export earnings from silk industry is bearing a significantly positive relation in post-globalised era, while no such significant association is observed between import of raw silk and employment in silk industry.

Our second hypothesis is more intensive as it tries to measure the rise in average productivity of sericulturists with export earnings. Theorists of inclusive growth always speak in favour of rise in productive employment opportunities. Therefore we feel it's mandatory to test whether

9

there is any strong correlation between productivity parameters of sericulture sector (land and labour productivity) and export earnings from this particular sector.
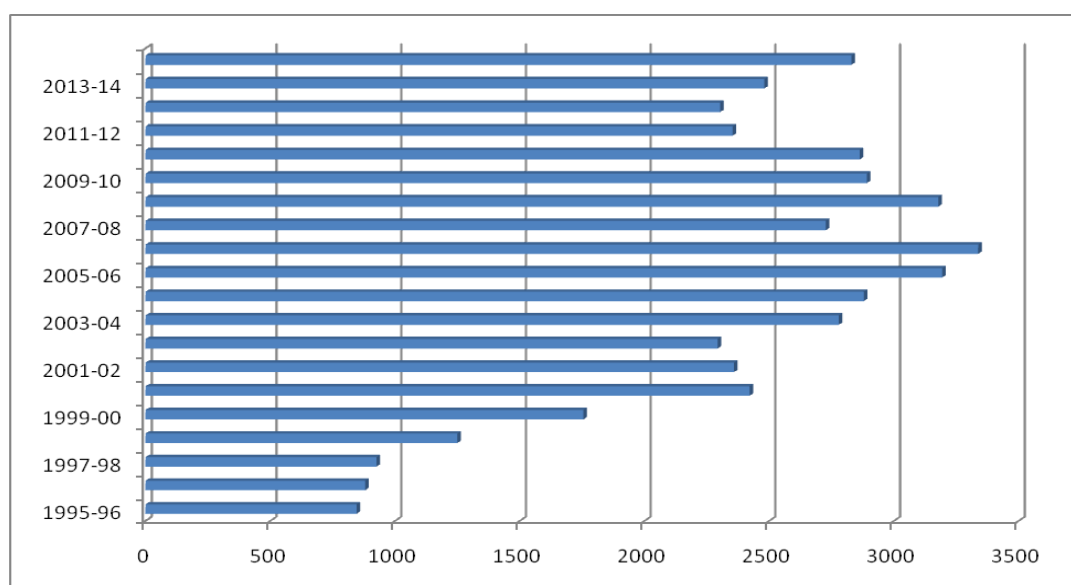
Table 6: Correlation between Export Earnings & Land Productivity in Indian Silk Industry (1995-2015)

	Export Earning from Silk & Silk Goods
Land Productivity in Sericulture	Pearson's Correlation Coefficient = 0.840**
	Kendall's tau-b Coefficient = 0.411*
	Spearman's Rho = 0.576**
Labour Productivity in Sericulture	Pearson's Correlation Coefficient = 0.242
	Kendall's tau-b Coefficient = 0.2
	Spearman's Rho = 0.31

** Significant at 0.01 level (2-tailed); * Significant at 0.05 level

It signifies that higher export earning is significantly related with higher land productivity but not with labour productivity. Therefore we can infer that flourishing of export frontier is associated with higher productivity of land but not with labour productivity. Annual export earnings from silk and silk goods have shown an impressive growth performance from 1997-98 to 2006-07 and then it shows some fluctuations (See Fig:1). Labour productivity has failed to exhibit any significant connectivity with this fluctuating trend of export earnings form silk industry.

Fig 1: Trends of Export Earnings from Silk & Silk Goods in Post Globalized Period

V. Econometric Models

As it has been previously mentioned, secondary data on various production, employment and trade parameters have been collected from Central Silk Board (1999, 2003, online) for the year 1995-96 to 2014-15. Data on 'export earnings from silk and silk goods', 'import volume of raw silk', 'raw silk production', 'employment in sericulture and silk industry', 'land-productivity have been tabulated (see table:4). Data have been designed on the basis of our hypothesis (as stated in the proposed models, in section III) to determine the factors influencing 'Employment in Silk Sector' in Model-1 and 'Production of Raw Silk' in Model-2.

Model-1

To run the regression of 'Employment in Silk Sector', OLS method is used. The regression result is enumerated in table:7

Table 7: Results of regression

Dependent variable: Employment in Silk Sector(ESS)

Estimated Coefficients	B	T	Sig
Constant	2.0069*** (.389)	5.165	0.000
Land Productivity(LP)	0.0836*** (.009)	9.583	0.000
Export Earning(EE)	-0.00097*** (.000)	-4.899	0.000

*** sig at 0.10 level, ** sig at 0.05 level; * sig at 0.01 level;

R^2 = 0.8806, Adj R^2 = 0.8665, F (df) = 62.68 (208)[*] ; No. of Observation= 20
DW= 1.539
Breush Godfrey LM test for autocorrelation shows
Chi^2 = 0.155, Prob > Chi^2 = 0.6939 , which implies Null Hypothesis is accepted, i.e., no serial correlation is present.

It can be inferred that land productivity has a positive impact on employment generation in silk sector. If land productivity is raised by 1unit (1kg/ha), the employment level in the country would be raised by 0.08 million i.e., 80 thousand persons.

On the other hand, export earnings have a detrimental impact on employment level in sericulture sector. For rising in export earnings by 1crore rupees, 970 persons would lose their level of employment. It means labour intensive silk goods are not doing good business in foreign market. Thus Model-1 helps us to infer that inclusive development in sericulture sector is not possible through export promotion of Indian Silk industry.

Model-2

OLS method has been used to run the regression on 'Production of Raw Silk' (PRS). Results and discussion are as following:

Table 7: Results of regression

Dependent variable: Production of Raw Silk (PRS)

Estimated Coefficients	B	T	Sig
Constant	5771.587***	3.622	0.002
Land Productivity(LP)	250.571***	11.748	0.000
Import of Raw Silk (IRS)	-1.221***	-7.036	0.000

*** sig at 0.10 level, ** sig at 0.05 level; * sig at 0.01 level;

$R^2 = 0.895$, **Adj R^2 = 0.883, F (df) = 72.552 (20)*** ; No. of Observation= 20**
DW= 1.714

Value of Durbin Watson Statistic is closer to 2, which signifies no serious autocorrelation problem is in the model. Significant F statistic justifies that the model is a good fit model. 88% data variation of the dependent variable is explained by the explanatory factors. If land productivity is raised by 1 unit (1Kg/ha), the domestic production of raw silk will be increased by 250. 6 MT, while increase in import volume by 1 MT would in turn reduce the level of raw silk production by 1.22 MT. This implies that volume of import is not beneficial for the raw silk production sector, which signifies imported silk is better substitute than domestically produced raw silk. Therefore import parameter is not supportive to inclusive development in domestic sericulture sector.

Therefore both employment and domestic production are inversely affected by the trade parameters and trade is not promoting inclusive development in sericulture sector of India

VI. Concluding Remarks

From the foregoing sections though we have initially observed a positive association between employment and export earnings, but the Econometric Model-1 helps us to conclude that export earning inversely affects the employment generation in sericulture sector. Therefore, inclusive development which has been observed in the post globalised period is not supported by the export performance of the silk industry.

Similarly, production of raw silk is adversely being affected by import sector, which signifies trade promotion of silk industry is not conducive to development of the domestic industry.

However, in this liberalized trade regime, a positive movement towards inclusive development in silk industry cannot be overlooked, though trade parameters can hardly be

claimed to have any contributory role behind that. In fact MFA abolition itself leaves some detrimental impact on export earning in Indian textile industry. Indian silk industry needs to be strengthened specially in weaker parameters, like quality and brand image since competing with China exposes its vulnerability in cost inefficiency and poor quality.

The bright hope for Indian sericulturists lies in the fact that domestic production and employment have experienced an accelerating trend in this phase of globalisation. Indian silk merchants are perhaps scared of losing their own huge market, which leads them to concentrate on domestic sector, which would eventually open the inclusive process of development in this sector. However, the contribution of land productivity cannot be undermined in this process of development. Institutional measures need to be strengthened to raise the level of expenditures on Research & Development to innovate new methods of raising productivities.

References

Anand, Rahul, Saurabh Mishra, and Shanaka J. Peiris (2013): "Inclusive Growth – Measurements and Determinants", IMF Working Paper, WP/13/135.
Barua, Alokesh and Pavel Chakraborty (2010): "Does Openness affect Regional Inequality? A Case Study for India", *Review of Development Economics*, Vol. 14, No. 3, pp 447-465.
Central Silk Board (1999): Compendium of Statistics of Silk Industry, CSB, Ministry of Textiles, GOI.
Central Silk Board (2003): Sericulture & Silk Industry Statistics- 2003, CSB, Ministry of Textiles, GOI.
Central Silk Board (2010): Annual Report 209-10, CSB, Ministry of Textiles, GOI
Central Silk Board (2011): Annual Report 2010-11, CSB, Ministry of Textiles, GOI
Central Silk Board (2012): Annual Report 2011-12, CSB, Ministry of Textiles, GOI
Central Silk Board (online) : Sericulture At Glance (2002-2007), (2008-2012)
Commission on Growth and Development (2008): Growth Report- Strategies for Sustained Growth and Inclusive Development, The World Bank.
Dollar, David, & Aart Kraay (2002): "Growth is Good for Poor", *Journal of Economic Growth*, Vol. 7 (3), pp. 195-225.
Doshi, Gaurav (2006): Indian Silk Industry, http://EzineArticles.com/364907 viewed on 28.10.2013.
Exim Bank of India (1991): How Import Intensive are Indian Exports ?, Exim Bank of India, Occasional Paper No.16, Dec 1991.
Exim Bank of India (2002): Indian Silk Industry – A Sector Study, Exim Bank of India, Occasional Paper No. 90.
Feng, Liu, Sun Shimim, and Qiao Xianjuan (2009): "China-Indian Silk Trade – Current Production and Future Prospects", Chinese *Journal of Population, Resources and Environment,* Vol.7, No.2.
Gaur, Achal Kumar (2010): Regional Disparities in Economic Growth, A Case Study of Indian States, Paper presented on 31st General Conference of the International Association for Research in Income and Wealth, St. Geneva, Switzerland, www. iariw.org
Hanumappa H G and Erappa S (1986): "Economic Issues in Sericulture – Study of Karnataka", *Economic and Political Weekly*, Vol. XX No.13, pp .1322-1324.
Hashim, Danish (2005) : "Post MFA - Making the Textile and Garment Industry Competitive", *Economic and Political Weekly*, Vol. XL (2), pp 117-127.
Ianchovichina, Elena and Susanna Lundstorm Gable (2009) : "What is Inclusive Growth ?" Unpublished mimeo, World Bank, PRMED, Washington D.C.
Ianchovichina, Elena and Susanna Lundstrom Gable (2012): What is Inclusive Growth in Low-Income Countries, ed by R. Arezki, C. Pattillo, M. Quintyn and M. Zhu, International Monetary Fund.
Imbs, J. and R. Wacziarg (2003): Strategies for Diversification, American Economic Review, Vol. 93(1), pp.63-86.
IMF (2011): Regional Economic Outlook- Asia Pacific, October, Washington, DC.

Institute of Applied Manpower & Research (2002): Report on Comparative Backwardness on North Bengal Region, A study sponsored by Planning Commission, IAMR, GOI,

Jay Mazur (2000): Labour's New Internationalism, Foreign Affair, Vol. 79, Jan-Feb, 2000.

Joseph, K.J. (2010): "Inclusive Innovation System in Plantation Sector- The State Database and Its Limits", NRPPD Discussion Paper, Centre for Development Studies, Trivandram.

Kakwani,Nanak and E. Pernia (2000): "What is Pro-Poor Growth?" *Asian Development Review*, Vol. 18 (1), pp.1-16.

Kanbur, Ravi (2010): Regional Disparities and Indian Development, Contribution to Vox-India (http://kanbur.dyson.cornell.edu/papers/Regional%20Disparities%20and%20Indian%20Developm ent.pdf) viewed on 28.8.2013.

Kraay, Aart (2004): "When Growth is Pro-poor? Cross-country Evidence", IMF Working Paper, No. 04/47.

Lederman, Daniel (2011) : International Trade and Inclusive Growth, The World Bank, Poverty Reduction and Economic Management Network.

Margit, Sugata, Saibal Kar and Dibyendu S. Maiti (2007): "Regional Trade Openness Index and Income Disparity – A New Methodology and the Indian Experience", CSSS, Kolkata.

Matttigatti R, Srinivasa G, Iyenger M N S, Dutta R K & R G Geetha Devi (2000): "Price Spread in Silk Industry- An Economic Analysis", *Indian Journal of Sericulture*, Vol. 39 (2), pp- 163-164.

Mukherjee, Rila (1994): "The Story of Kassimbazar: Silk Merchants & Commerce in Eighteenth Century India", *Review*, Vol. 17(4), pp 499-554.

Nabar-Bhaduri, Suranjana (2012): "Free Trade and Inclusive Development – Lessons from Indian Experience", *Issues in Brief*, Boston University, The Frederick S Parade Centre, USA.

Naranpanawa, Athula and Rashmi Arora (2012): "Trade Liberalization and Regional Disparities: Evidence from a Multi-Regional Equilibrium Model of India", Presented at 15th Annual Conference on Global Economic Analysis, June 27-29, Geneva, Switzerland.

OECD (2012): "India- Sustaining High Growth and Inclusive Growth", OECD Better Policies Series, Oct 2012.

Planning Commission of India (2008): Indian Planning Commission, 11th Five Year Plan (2007-2012)- Inclusive Growth, Vol. 1, Indian Planning Commission, Oxford University Press.

Ravallion, Martin and Shaohua Chen (2003): "Measuring Pro-poor Growth", *Economic Letters*, Vol. 78, No.1, pp 3-99.

Ray Chaudhuri, Bibek and Debottam Chakraborty (2010): Export Potential at the State Level- A Case Study of Karnataka, IIFT, Working Paper, No. EC-10/02.

Roy, Chandan (2013): "Economic Backwardness of Uttar Dinajpur- A Block Level Analysis" in D. Roy (Ed) Economy of North Bengal (National Library Publishers, India) pp. 484-501.

Roy, Chandan, Sanchari Roy Mukherjee and Santanu Ghosh (2012): "Sericulture as an Employment Generating Household Industry in West Bengal: A Study on its Current Problems and Prospects", *Artha Beekshan,* Vol.21, No.3. pp. 131-155.

Samuel P.Jacob (2000) : Strategies for Silk Export Promotion, Indian Silk, Jan-Feb.

Sinha, Sanjay (1989): Development Impact of Silk Production- A Wealth of Opportunities, Economic and Political Weekly, Vol. XXIV. No.3, pp.157-163.

Umesh, K.B. Akshara, M.B. Shripad, B. Harish, K. and S M. Srinivasan (2009): Performance Analysis of Production and Trade of Indian Silk Industry under WTO Regime, Paper presented at International Association of Agricultural Economists Conference, Beijing, China, August 16-22, 2009.

United Nations (1994): Silks in Asia, Economic and Social Commission for Asia and the Pacific

United Nations (2011): Compact for Inclusive Growth and Prosperity, Report of the UN Secretary General's Eminent Persons Group on Least Developed Countries.

White, H. and E. Anderson (2000): Growth Vs Redistribution – Does the Pattern of Growth Matter? Development Policy Review, Vol. 19(3), pp. 167-289.