

## ESTIMATION OF GROWTH OF TRADE IN INDIAN SILK PRODUCTS

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### ABSTRACT

India is the second largest producer of raw silk after China and the biggest consumer of raw silk and silk fabrics. The study area pertains to India the country as a whole in general. Analysis was carried out for the period from 1990-91 to 2008-09. The statistical techniques like analysis of growth was used in the study. As far as the total mulberry silk export is concerned, it has increased from 303.72 lakh square meters to 1271.69 lakh square meters during the study period in quantitative terms, and the export earnings increased from Rs. 41719.63 lakhs to Rs. 326352.4 lakhs. The growth was found significant in all the countries such as USA (8.76 per cent), Hong Kong (17.47 per cent), UK (11.05 per cent), UAE (18.25 per cent), Italy (17.02 per cent), Germany P. Republic (2.85 per cent), Spain (19.87 per cent), France (11.05 per cent) and others (18.87 per cent). There has been a significant increase in the growth rates of export of all silk varieties both in terms of quantity and value during the study period. The instability in export earning was mainly caused by the interaction between the change in mean quantity and mean price. This was due to increased quantum of exports as well as the high price realized by these silk products in the development period.

**KEYWORDS:** Export, Growth, Price, Raw Silk, Silk Varieties

### INTRODUCTION

Sericulture is both an art and science of raising silkworms for silk production. Silk as a weavable fiber was first discovered by the Chinese empress Xi Ling Shi during 2,640 B.C. and its culture and weaving was a guarded secret for more than 2,500 years by the Chinese. Silk was a profitable trade commodity in China.

The production of raw silk and silk fabrics are limited to only a few countries in the World of which China (1, 03,620 MT; 81.95%) occupies the first place and India (19,690 MT; 15.44%), the second. Other countries such as Brazil (811 MT; 0.6%), Uzbekistan (750 MT; 0.6%), Thailand (660 MT; 0.5%), Vietnam (550 MT; 0.4%), Korea Republic (135 MT; 0.1%), Japan (90 MT; 0.1%), Iran, Turkey, Bulgaria, Yugoslavia (altogether 304 MT; 10.20%) also contribute to World silk production. Silk goods from India are exported to major countries like USA, Germany, UK, Italy, France, Spain, Canada, Australia, Switzerland, Greece, Netherland, UAE, Belgium, Denmark, Austria, Portugal and few others.

### EXPORT SCENARIO

World GDP is expected to grow by 4%. In such a scenario, total value of exports (in INR) is estimated to record a CAGR of 14.2-16.0% during the period between 2010-11 and 2014-15. For the period between 2014-15 and 2019-20, exports are likely to increase by 14.3-16.1%. Among the various product categories, exports of „natural silk yarn, fabrics and made-ups“ are expected to post the highest growth during both these periods. The export earnings from the silk are growing steadily because of increasing demand for Indian Silk goods particularly from small markets of Asia Region in

addition to the traditional major markets like USA and European countries. Exports earnings which was `2,294.05 crores during the year 2002-03 has increased to `3,338.35 crores during the year 2006-07, showing an increase of around 46%. Due to melt down in the global economy, sharp appreciation in the rupee vis-à-vis US\$ witnessed in the year 2007-08, there was a slump in silk goods exports of about 18.3% (`2,727.87 crores) during the year 2007-08 compared to 2006-07. However, in the year 2008-09 & 2009-10, the data shows an increase of about 16.5% (`3,178.19 crores) & 6.0% (`2892.44 crores) respectively in the silk goods export earnings when compared to the same period of 2007-08.

## MATERIALS AND METHODS

In order to evaluate the objectives of the study, the data was collected from secondary sources. The study area pertains to India as a whole in general. Growth rate in exports was studied for the country as a whole. The data pertaining to the various aspects under study were collected from the following secondary sources. Central Silk Board, Bangalore (Annual Reports, Technical Reports, Journals, etc.), Central Sericultural Research and Training Institute, Mysore, Karnataka, Ministry of Textiles, DGCIS (Directorate General of Commercial Intelligence and Statistics, CSB website, [www.indiastat.com](http://www.indiastat.com)). Data was subjected to analyses through the following statistical techniques i.e. Analysis of growth.

## RESULTS AND DISCUSSIONS

The exponential form of the function was employed to estimate the growth rates. Growth rate in unit value in terms of rupees for variety-wise export was arrived at by subtracting per cent growth rate in quantity from per cent growth rate in value. The period wise estimated growth rates are presented in table 1 and table 2.

**Table 1: Item-Wise Compound Growth Rate of Export of Silk Products (Value in Rupees) (In Per Cent)**

Silk Products	Period-I 1990-2000		Period-II 2000-2009		Overall Period 1990-2010	
Sarees	-3.49	NS	6.51	NS	-0.13	NS
Scarves	12.73	**	43.97	**	21.81	**
Dress material	18.45	NS	-10.18	NS	3.64	NS
Readymade Garments	3.99	NS	5.99	**	11.91	**
Carpets	11.91	**	-7.50	NS	2.74	NS
Others	3.78	*	5.04	NS	8.08	**

\* = Significant at five per cent

\*\* = Highly significant at one per cent

NS = Non-significant

**Table 2: Growth Rates of Indian Silk Products Export (1990-2010)**

Type	Growth Rate in Value (%)		Growth Rate in Quantity (%)		Growth Rate in Unit Value Rs.
	Sarees	-0.13	NS	-6.96	**
Scarves	21.81	**	7.05	*	14.76
Dress Materials	3.64	NS	5.53	**	-1.89
Readymade Garments	11.91	**	-3.63	NS	15.54
Carpets	2.74	NS	0.61	NS	2.13
Others	8.08	**	7.90	**	0.18
<b>Total</b>	<b>10.46</b>	<b>**</b>	<b>4.63</b>	<b>**</b>	<b>5.83</b>

\* = Significant at five per cent

\*\* = Significant at one per cent

NS = Non-significant

As far as the total mulberry silk export is concerned, it has increased from 303.72 lakh square meters to 1271.69 lakh square meters during the study period in quantitative terms, and the export earnings increased from Rs. 41719.63 lakhs to Rs. 326352.4 lakhs. The growth rate of total mulberry silk products export was 4.63 per cent per annum with the value registering a marked growth rate of 10.46 per cent per annum. The regression co-efficient was statistically significant at one per cent level. The unit value in terms of rupees registered a 5.83 per cent growth rate per annum.

## SUMMARY AND CONCLUSIONS

The growing trade deficit of India is a matter of concern for policy makers. Despite the trade liberalization policies initiated by the Government of India, exports have failed to pick up in real terms. Trade deficits both in rupee terms and dollar terms continue to widen. Thus the Indian economy is passing through a difficult phase due to continued pressure on balance of payments. Thus a strong emphasis should be given on a rapid and sustained growth in the value of exports. Agricultural trade can, therefore play an important role in economic development by supplementing the contribution of industrial sector to reduce the external debt burden. In this context, the export potential of sericulture, especially, silk products needs emphasis.

Total silk products export has grown at the rate of 4.63 per cent per annum with its value growing at an annual rate of 10.46 per cent at nominal prices. Significant increase in the growth rates of export of all the silk varieties both in terms of quantity and value is because of tremendous increase in the production of silk under the influence of an intensive promotional efforts such as increasing the area under mulberry cultivation, improving the productivity and also by improving the technology in silk reeling and weaving.

## REFERENCES

1. ACHOTH, L., NAGARAJ, KESHAVAREDDY, N., REBELLO, T. R., N. S. P. AND RAMANNA, R., 1988, A study of the growth and variability of pulse production in Karnataka. *The Asian Economic Review*, **30**(2): 274 -286.
2. ADOLF, W. AND MANFRED, S., 1985, Observations on the geography of wheat production instability. *Quarterly Journal of International Agriculture*, **24**(3): 202- 211
3. ANGLES, S., 2001, Production and export of turmeric in South India- An economic analysis. *M. Sc. (Agri.) Thesis*, University of Agricultural Sciences, Dharwad.
4. ANONYMOUS, 1987, Central Silk Exporters. *Indian Silk*, **25** (11): 3.
5. ANONYMOUS, 1997, Silk exports: Aiming high. *Indian Silk*, **35** (12): 3-4.
6. ANONYMOUS, 1999a, Silk in world markets, International trade centre. *International Trade Forum –Issue*, **42**(4): 56-68.
7. ANONYMOUS, 2006a, Silk export and import review. *Indian Silk*, **45**(1):37-43.
8. ANONYMOUS, 2006b, Planning the progress. *Indian Silk*, **45**(6):3.
9. ANONYMOUS, 2007, Exports Statistics, Sericulture and Silk Industry Statistics-2007, Central Silk Board, Bangalore, P.31.

10. BANDOPADHYAYA, S., 1982, Economic analysis of some critical problems of tea exports of India, *Indian Journal of Agricultural Economics*, **9**(1):306-312.
11. BANDOPADHYAYA, S., 1982, Economic analysis of some critical problems of tea export of India. *Indian Journal of Agricultural Economics*, **37**(3): 306-312.
12. BANSIL, P. C., 1972, Production pattern of green revolution. *Indian Journal of Agricultural Economics*, **28**(4): 104-117.
13. BRAHMA, K.C., SHANKAR RAO, K. V. AND SAHU, R., 2008, Sericulture in Orissa-an overview. *Indian Silk*, **46** (10): 15-17.
14. CHENGAPPA, P. G., 1981, Growth rates of area, production and productivity of coffee in India. *Journal of coffee research*, **11**(2): 19-26.
15. DASS, S. R., 1985, Growth rates in Indian Coffee Exports. *Agriculture situation in India*, **38**(2):315-329.
16. DESAI, M.N.R., 2001, Export potential of mango in northern Karnataka. An econometric analysis. *Ph.D Thesis*, University of Agricultural Sciences, Dharwad.
17. FAILOR, S., 1985, An analysis of the production pattern and marketing of cocoa in Ghana. *Unpublished M.Sc. (Agri) thesis*, University of Agricultural Sciences, Bangalore.
18. GEMTESSA, K., 1991, An analysis of the structure of Ethiopian coffee exports. *Unpublished M. Sc. (Agri) thesis*, University of Agricultural Sciences, Bangalore.
19. GOSWAMI, S.N., CHOUDARY, A.N. AND SARMA, B. K., 1995, Growth trend in oilseeds and pulses in India. *Agricultural Situation in India*, **52**:191-193.
20. GOVANDE, P. M., 2001, Silk exports: challenges ahead. *Souvenir, National Seminar on Mulberry Sericulture Research in India*, KSSRDI, Bangalore, 26-28 November, pp.1-4.
21. HARMANN, R., 1984, Instability in exports of major plantation crops. *Quarterly Journal of International Agriculture*, **22**(2): 514-522.
22. HAZELL, P.B.R., 1984, Sources of increased instability in Indian and U.S. cereal production. *American Journal of Agricultural Economics*, **66** (3): 302-311.