CHAPTER-6

SUMMARY AND CONCLUSION

6.a. INTRODUCTION

This study was aimed at analyzing the profitability and viability of Sericulture Industry in the district of Purulia. This chapter presents the brief summary of the chapters discussed previously in brief, Role played by Government for development of the industry, Strength Weakness Opportunity and Threat analysis (SWOT), limitations of the study and the sericulture industry in the district, scope for further study, suggestions on the basis of these findings and conclusion.

Literature part is based on secondary data, information, history, books journals reports and theses obtained in the form of hard copy or from internet in soft copy. On the other hand survey part is based on official records of International Sericulture Commission, Central Silk Board, official records from the office of the Assistant Director, Directorate of Sericulture, Ministry of Textile, Government of West Bengal, Office of the Directors of Tasar Seed Supply Centers at different blocks and above all field survey through interview with farmers, reelers, weavers and traders selected from different corners of the district. Interview was taken place against pre structured questionnaire.

6.b. SUMMARY OF THE CHAPTERS

We have discussed and presented our findings in details in the previous chapters. The entire study is divided into two broad parts: i) literature and ii) Survey and findings. The main focus of the first part was to draw relevant literature in a logical way and in a lucid manner. This has been done in order to throw maximum light on the basic statement of our study. For the second part we have presented our findings from the
survey with the financial information and its analysis in order to justification of our basic hypothesis.

In the first chapter justification for selection of silk industry and Purulia district as study area was discussed. With a general introduction about the rural economy meaning of silk is sketched as pasty secretion from the silk glands of silk worms. The fluid coming out of the glands becomes strong and dried thread to spin around the silk worm to form a hard oval shaped shell to protect the worm until it transforms to be a silk moth. This shell is known as cocoon. First two crops of cocoon production take place during June to July and August - September every year are kept as seed cocoon. On the other hand third crop cultivated in the months of October - November is used as commercial cocoon. Commercial cocoons are boiled to kill the silk worms inside the cocoons and to make silk threads loosen for reeling, spinning and twisting. It forms hanks of silk yarn which passes to the weavers for weaving silk fabrics. Silk fabrics are purchased or otherwise acquired by the traders for marketing.

Profile of all four types of silk worms, viz, Mulberry silkworm – *Bombyxmori*, Tasar Silk worm: *AntheraeaMyletta*, Muga Silk worm: *Antheraeaassamensis*. Eri Silk worm: *Attacusricini* has been discussed.

Different stages of sericulture industry are also sketched and described.

Features of silk are also described in details. Some of the notable features may be reproduced.

- Silk has natural shine.
- In spite of having soft and smooth texture silk is not sleeper.
- Silk is strongest among all of the natural fibers.
- It has moderate wrinkle resistance.
- Silk is exothermic. As a consequence it is cool in the summer and warm in the winter.
- Silk has more resistance to heat than wool.

In the same chapter we have narrated the uses and importance of silk.
Some of the popular uses of silk are:

- Luxurious outfits.
- Gorgeous furnishing appliances.
- Making parachutes.
- Manufacturing of bicycle tires.

Apart from direct use of silk there are several by products which have importance of their own.

Historical, mythological and literary references of silk and sericulture industry are also depicted in this chapter. We came to know about the origin of silk found to be dated back to about 4000 B.C. History of spread of the art of sericulture over the globe out of Chinese monopoly was also elaborated. Reference of silk in Indian mythology indicating existence of this luxurious fiber even in the days of Rig Veda one of the most ancient literature of the universe has also been traced.

Present status of the industry in global, national, state as well as in the perspective of the district Purulia also mentioned in brief.

It is found that more than 30 countries including China, India, Uzbekistan, Brazil, Japan, Republic of Korea, Thailand, Vietnam, DPR Korea, and Iran are engaged in silk production. Whereas USA, Italy, Japan, India, France, China, United Kingdom, Switzerland, Germany, UAE, Korea and Vietnam are among the leading consumers of silk.

In India sericulture is practised almost all over the country, starting from Kashmir in the extreme north to the southernmost Tamil Nadu and eastern most Arunachal Pradesh to westernmost Gujrat. These states have a numerous varieties in climatic conditions. As a consequence India holds the pride to produce all varieties of silk. India ranks second in producing mulberry and tasar silk ranging up to 19% of total raw silk production of the world following China (ranging up to 84%). India is the sole producer of Muga and Erisilk. The state follows the tradition of India owing to same reason i.e. verities in climate. In West Bengal silk producing regions ranges from Darjeeling at the north to Jhargram at the south.
It has been found that there is some fluctuation in raw silk production at global, national and state level. China the largest producer has also experienced fluctuation in raw silk production but the district Purulia shows a steady growth in the production of raw silk over the study period except a marginal decrease in 2009-10. The said year experienced decline in production in spite of increase in all other levels. As reported by the farmers and the officials of the district engaged in various activities related to development of sericulture the cause of such decline was the outbreak of virosis a viral disease of silk worms causing death of silk worm at a large quantity.

In chapter one we have elaborated the justification for considering the district Purulia as study area. The basic reasons behind such selection are

i. Engagement in sericulture is a Traditional and heriditary occupation of the people of Purulia since long.

ii. Capability of Employment Generation and Socio-economic Upliftment with the growth and development of sericulture industry in the district.

iii. Generation of awareness for engagement of women and differently able persons at an increasing rate in the sericulture industry in the district.

iv. Limited scope of expansion and growth of the industry in the district.

v. Eco-friendly nature of the industry.

We have statistically shown the eco-friendly nature of the industry against a comparative study of carbon emission, carbon absorption and Oxygen emission.

In chapter-2 topography of the district relevant for development of the industry is discussed. In this chapter we have sketched profile of the study area, in terms of brief history of the district. It is observed that there is no proven source for name of the district. The district emerges on and from 1956. It has Jharkhand in three sides of it’s boundary. On the other hand Burdwan and Bankura are on the north-east and western parts respectively.

Administrative set up of the district shows that there are 20 blocks with 2468 villages.

While analyzing features of human resources of the district pattern of employment, scope of small scale industry, educational levels of the people of Purulia, migratory nature of
labours and hindrances for establishment of large scale industry were carefully and logically stated. We have found over burden of population on rural areas (87.24%). One notable point to be born in this regard is that the district Purulia is a pocket of ST and SC category people. 18.29% of total population and 18.27% of the same belongs to S.C. and S.T. community respectively. The distinct ranks second in terms of tribal population following Jalpaiguri (18.9%).

Population in Purulia in 2011 increased by 276 percent over the population in 1901. The number of females per 100 males decreased continuously. There is a steady reduction in percentage of rural population has also been observed.(100% to 87.25%). Age composition shows that at least 50% of the total population remains in the working group. Density of population shows that the same has increased from 296 per K.M.² in 1981 to 468 per K.M.² in 2011. Literacy rate has also been increased from 21.50% in 1971 to 65.38% in 2011. Besides employment scenario shows reduction in the percentage of non-workers. The chapter has also shown brief picture of, Configuration of Land, Climate and Rainfall, Ground Water Resource, Forest Resource and Mineral Resource. While describing profile of the district it has been found that infrastructure of the district in terms of irrigation, power, transportation, communication and financial facilities in the district is far below than the moderate level.

So far as social infrastructure is concerned the district is featured with 2998 primary schools, 197 junior high schools, 163 high schools and 171 higher secondary schools. 17 degree colleges, 9 technical schools including polytechnics, industrial training institutes and junior technical schools and 9 technical colleges including 4 B.Ed colleges one university, named Sidho-Kanho-Birsha University is established w.e.f. 6th July 2010. There is one District Hospital (Purulia), one State General Hospital (Raghunathpur), two State Special Hospital (Purulia), one Central Aided Hospital (Adra), four Private Aided Hospitals, five Rural Hospitals, 15 BPHC and 53 PHCs in the district rendering medical services for the people of the district. Still quantity does not speak for quality. All of the medical aides mentioned above suffer from lack of physicians, lack of modern pathological facilities, and inefficiency in using radiological equipments.
There is a District Science Centre which primarily aims at motivating and encouraging the people of the district to popularize science.

Regarding agriculture detailed picture of agricultural land, labour, availability of irrigation, land utilization, cropping pattern are discussed. It is shown that agriculture though backbone of the economy of Purulia is not profitable in the district. As the district is featured with huge barren and uncultivable land (3.2 thousand hectors) against net sown area (226 thousand hectors), it is highest in the state. While total barren land in the state as per census 2011 is 17.126 thousand hectors. Another feature is lack of irrigation and in turn low productivity of land. The district of Purulia has recorded lowest productivity as one hectare of net sown area provided crop output worth Rs. 34974 at farm gate price. While West Midnapore ranking second from the bottom has the same figure at Rs 51522 per hector.

In regard to industry and employment we found two major and large scale industrial units and several small scale and cottage based industrial units including Lac and Sericulture are to act as booster for the economy of Purulia.

This section of the study ends with explaining the reasons behind adopting the district of Purulia and the specific areas for our study. It is shown that

- The location of this district is very significant. Baring the east, which is covered by Bankura and WestMidnapore, entire Purulia district is edged by the state of Jharkhand with river Subarnarekha acting as the demarcating entity. As such, topography and geography of this district resemble almost the same characteristics as that of Jharkhand. The state ranks the topmost in all counts of tasar culture. Our study is meant for analyses of profitability and viability of sericulture more specifically tasar culture in the district of Purulia.

- The climate is of absolute nature. Agriculture is not a perennial job in all rural places. On the other hand sericulture is one of the most dominant supporting occupations of the people of Purulia along with agriculture.
✓ The district head quarter Purulia town and sub divisional town Raghunathpur are not far away from industrially advanced areas like Asansol, Burnpur, Raniganj, Bokero, Tatanagar, Dhanbad and Ranchi. The district is well connected by Railways and roadways. So neighborhood to these areas could open up several prospective in solving the problems of industrialisation and employment. These areas provide an enriched marketing base to the district. Besides, Jharkhand contains a huge raw material base to support the sericulture industry in Purulia

✓ This district has a thermal power station with production capacity of 480 megawatt at Santaldih and A hydroelectric power project in Ayodhya hills. So increased demand for power, if at all arises, can be catered successfully.

✓ Another important point is that there is a huge supply of labourers and that could be available at a competitive cost.

Areas chosen as sample area for our study produces 86.2% of total output in the agriculture phase of the industry (up to production of cocoon) and 100% of the total production in manufacturing phase( including reeling, weaving and trading).

In second chapter the section headed as Review of literature has shown that twenty eight (28) reports, eighteen (18) books, twenty seven (27) theses and sixty one (61) articles are reviewed. The findings includes history of silk, years back position of the industry, economic viability of the industry, silk production processing and marketing has been covered. Whereas the theses and articles covered several aspects of the industry including technological changes and their implications on sericulture industry in the perspective of rural development, Emergence of non-rural concerns and rural development, development of secondary and tertiary sector, sericulture Industry as a resource base industry, impact of sericulture on rural development, development of sericulture industry in West Bengal economics of production, trade and commerce, growth constraints, regional analysis, Economics and ergonomics of silk processing activities impact on Meitei women in Manipur
However none of the study is meant for tasar culture. Moreover no study has dealt with profitability or viability aspect of the industry.

In the next section of the chapter we have narrated the objectives of our study as

- To analyze the profitability and viability of sericulture industry in the district of Purulia.
- To analyze the income and employment generation capacity from cultivation to processing of silk products.
- To identify the problems faced by the industry in pre and post cocoon stages.
- To analyze the role and attitude of different stakeholders of the industry towards development of the industry.
- To study the attitude of unemployed people about their involvement in the industry as the source of livelihood.

While analyzing the scope of the study in this section of chapter 2 we have observed that Sericulture industry being labor intensive has ample scope for the economic development of rural people of the district particularly the physically challenged and old aged population. The study has scope to show that plantation of host plants for tasar culture instead of deforestation will be better means of their livelihood. The study aims to measure profitability and viability of the industry on the basis of data collected directly from the farm level and activity level units.

The chapter also contains research methodology as one of its section. We have explained in details the research methodology along with study area (nine blocks for agriculture and four areas for manufacturing and trading), study period(2001-02 to 2011-12), data source (primary and secondary), samples (100 units and 150 families), basis of calculation (cost and revenue structure for each type of engagement), basis of analysis of
profitability (calculation and interpretation of twelve relevant ratios) and basis of analysis of viability (calculation and interpretation of financial profitability ratios taken all together).

In chapter-3 global, national, state and district level status of sericulture industry have been discussed in detail. We have found that the district of Purulia performed better in all counts as compared to global, national and state levels. The same has already been discussed in the previous chapter. Regarding global information we have presented raw silk production over the study period. It is observed that raw silk production has increased from 90488 metric ton in 2001-02 to 152868 metric ton in 2011-12. It implies that global production has increased by about 68%. On the other hand growth of raw silk production in the national level is by 33% i.e. 17351 M.T in 2001-02 and 23060 M.T in 2011-12. For West Bengal raw silk production was 1433.20 M.T. in 2001-02 and increased by 38% to 1979.23 M.T. IN 2011-12. Purulia district as mentioned earlier has shown an increase of 176% to produce 9.879 M.T. in 2011-12 as compared with 5.59 M.T. IN 2001-02.

Import of raw silk has been increased from Rs 624.73 crores to Rs 1676.05 crores i.e. an increase by 168%. On the contrary export has been reduced from Rs 2359.56 crores in 2001-02 to Rs 2353033 crores in 2011-12. The findings in this chapter show that our study area has a steady growth over raw silk production.

In chapter-4 we have presented the demographic profile of the samples chosen over the district.

For our study we have selected 250 samples from different parts of the district Purulia. As mentioned earlier 9 blocks of the district are performing 86.2% of total agricultural activities related to sericulture industry of the district. We have selected 100 units comprising of a number of farmers ranging from three to twenty one out of these selected blocks.

In manufacturing and trading phase three types of engagements are found. However these activities are contracted to only four regions. We have taken 150 families as samples from all of those areas. Out of them 55 families each are engaged in reeling and weaving. Whereas 40 families are engaged in trading of silk products are taken as sample for our study.
The chapter portrays profile of the samples for providing better expression of the greater environment in terms of total population, literacy, sex ratio, S.C., S.T., population, working population, income distribution, educational status, motivation and types of occupation.

Findings from this chapter in brief are:

- Agriculture stage of the industry is dominated by S.C. and S.T. population (80% on an average).
- In agriculture stage there are 3 to 21 families to form a unit with an average family member of 5.
- Agricultural stage as well as the engagement in reeling is dominated by women (average-65%).
- Male population dominates weaving and trading (almost 90%).
- Just one percent of total family members are left as non-working population as they mostly engaged in education.
- We have logically chosen the sample units in which leader or head of the family are educated at least up to class eight so that data required for our study can be obtained.
- A wide variation in income distribution of the population of the is observed.
- Two key motivators for engagement of people of the district in this industry are non-availability of alternative auxiliary occupation and the district has a long tradition in engagement in sericulture more specifically tasar culture.
- Sericulture is not the sole source of income. For all the families it is an auxiliary activity. Even the traders who have notable turnover along with handsome profit do not scare to sale other than silk products, like khadi cloths, cotton cloths, synthetic garments and even forest products as honey.
In the chapter 5 we have analyzed our principal hypothesis “sericulture Industry is profitable and viable in the district of Purulia”

For analysis of profitability we have calculated twelve ratios for every type of engagement. The ratios are, direct cost to sales ratio, indirect cost to sales ratio, Gross Profit Ratio, Net Profit Ratio, Return on Capital Employed, Return on Total Asset, Fixed asset To Total Asset ratio, Current asset To Total Asset ratio, Fixed asset turnover ratio Current asset turnover ratio, stock turnover ratio and debtors turnover ratio.

Increasing trends of eight (8) ratios, decreasing trend of two (2) ratios and fluctuating trend of two (2) ratios are indicators of overall improvement of performance of Sericulture Industry both in terms of Physical and financial count during the study period. the researcher intends to come to the conclusion that the statement of hypothesis is right and true.

6.c. ROLE PLAYED BY THE GOVERNMENT FOR DEVELOPMENT OF THE INDUSTRY

Analyzing present position of the industry in the state and the district, along with analysis of immense potential of the industry, both state government and central government have adopted several measures for development of the industry. These are mentioned in under noted paragraphs.

i. Efforts have been taken for strengthening the R&D effort and extension work for increasing the output and productivity of the industry right from plantation of food plants, cocoon production till weaving.

ii. Duty exemption on Silk machinery till 2015: Silk machinery should be exempted from duty for at least up to 2015, and it would be an aid in modernization of post-cocoon stage and to make the sector more competitive. The target has not yet been attained to the desired extent.

iii. Export incentives: Silk products should be covered under Focus Product Schemeso that the duty scrip or similar other benefits can be provided to the exporters.

iv. Sericulture should also be included under VisheshKrishi and Gram UdyogYojana (VKGUY).

v. Introduction of Price Support Scheme: “Price Support Scheme” (PSS) to support farmers against fall of cocoon prices due to adverse weather conditions in traditional silk producing states are recommended.
vi. Increased thrust on R&D for scientific ways of increasing silk productivity and quality.

vii. Development of silkworm breeds and their food plants.

viii. Development of disease forecast and forewarning system are introduced.

ix. Economic farming models and practices and mechanization in sericulture farming and silkworm rearing will also be undertaken.

x. Basic research should be conducted to widen knowledge base useful in developing new methodologies for every stage of activities of silk industry. Emphasis should particularly be given on development of improved reeling, weaving and processing devices for silk at low cost to produce quality silk.

xi. Strengthening of extension activities should be done by the states by organizing refresher courses/training programmes of farmers and other persons engaged in different activities of the industry at regular interval. The course should be structured in such a way that can help in getting all round information regarding industry and motivating the farmers, reelers, weavers and traders to have with the industry.

xii. Quality based pricing and incentive system: Advanced systems of quality-based pricing mechanism for cocoons should be introduced. This kind of pricing will help in building quality consciousness among the farmers. In turn quality silk items will gain advantage for competitive global market.

xiii. Cottage basin reeling units should be provided to all the states and not only to Karnataka.

xiv. Extension of benefits of Agriculture and Allied activities to Sericulture sector: It is proposed to treat sericulture at par with agriculture and allied activities and the post cocoon activities at par with the small and village /cottage industries to bring parity in extending all benefits of various schemes like Rashtriya Krishi Vikas Yojana (RKVY), Vishesh Krishi and Gram Udyog Yojana (VKGUY) and National Calamity Fund.

xv. Merging sericulture with other programmes/ funding agencies to tap resources:
Sericulture should also be included as priority sector in other flagship programmes of the Government such as MGNREGS, SGSY for providing necessary labour input, infrastructure and skill development.

xvi. Sericulture should also be listed as priority sector for external funding through agencies like World Bank, Swiss Agency for Development and Cooperation, JICA, UNDP, UNIDO, FAO etc.

xvii. Silk Bank scheme: Silk Bank Scheme is implemented by the Department of Sericulture at national level. Very recently ministry of textile, Government of West Bengal has announced to for creating a silk bank at Baharampur of Murshidabad District.

xviii. Catalytic Development Programme to be continued with some modifications: The Catalytic Development Programme (CDP) should also be continued during XII plan with some modifications like support to increase the area under food plants with higher inputs, special incentives to farmers to encourage them to take up sericulture in new areas, support for strengthening the extension system, promotion of moisture conservation and water saving techniques to promote rain-fed sericulture, support to adopted seed rearers and improvement in seed multiplication infrastructure to produce silkworm seed as per quality standards, creation of infrastructure at stakeholders level to improve the quality and productivity, establishment of reeling and duping reeling infrastructure to produce import substitute quality silk, improvement in weaving infrastructure, processing, dyeing, printing etc. to produce quality silk products based on market demands, and skill development in all stages of silk production chain etc.

xix. Cluster approach for integrated development of sericulture: Some of the selected clusters should be developed as Medium-sized Clusters mainly in the post cocoon areas. In August 2009 Raghunathpur silk cluster has been established at Raghunathpur, Purulia. Though its function has not yet crossed even the level of infancy mainly due to non-completion of own building, non-availability of electricity and water.

xx. Subsidy is an integral part of government assistance

xxi. Crop and group insurance are provided.
Educational assistance in the form of books, school dress are given to reellers and weavers and traders from cooperative societies for a maximum of two children per family.

6.d.SWOT ANALYSIS

Through the passage of our study all over the district and all over the survey we have found both pre-cocoon stage of sericulture (agriculture) and post cocoon stage of sericulture (manufacturing and trading) have several problems. However it is also observed that most of the problems are manmade where as some problems are climatic and environmental which are beyond the control of human. On the other hand it is well known that man made problems are subject to be sorted out. Against this conception we would like to undergo a SWOT analysis of the industry in the district. SWOT analysis is a tool to evaluate strength, weakness, opportunities and threats to be faced by any unit of operation. It identifies the internal and external favourable and unfavourable aspects related to the unit of operation. Specifically strengths and weaknesses are the internal factors required to be monitored internally. On the other hand opportunities and threats are the external factors to be explored and take care off respectively. SWOT analysis acts as a guide for future planning and precautions.

SWOT analysis of sericulture analysis in the district Purulia shows that:

STRENGTHS are:

i. Sericulture is a part of tribal life since time immemorial.
ii. The district possesses heritage of sericulture.
iii. Climate of the district favors growth of the industry in both agriculture and manufacturing processes.
iv. Direct patronage of Panchokot Raj since 1st AD made the industry flourished.
v. Increasing trend in tasar silk production during the study period.
vi. Tasar made head cover is a must to wear in any sorts of festivals of Afganistan, the year long importer of silk from Purulia.
vii. Silk fabrics are exothermic, therefore ideally suitable for the domestic population.
viii. The industry is labour intensive and the district having a huge amount of unemployment is fit to supply labor for the industry.
ix. The industry is capable to engage aged and differently able persons in various stages of the industry.
x. Manufacturing phase being located in district town Purulia, sub-divisional town Raghunathpur and their adjacent areas enjoy developed road and railway communication.
xi. Government has adopted and is adopting several measures for the development of the industry as already mentioned.
xii. Agricultural sector is supervised and controlled by Government as a consequence role of middle is eliminated in this phase.
xiii. Presence of a stable local market and demand base.
xiv. Above all ever increasing market of the silk products throughout the globe.

WEAKNESS

i. Variation in productivity,
ii. Variation in the price of D.F.Ls and cocoon as par Government norms.
iii. Absence of integration among the phases of production.
iv. Contribution of the industry to state production in spite of ranking third in tasar production is not worthy to mention (0.39% to .49%).
v. Quality of tasar cocoon is not as good as cocoons from Jharkhand, Orissa and Bihar.
vi. Middle men manipulate earnings of reelers and weavers.
vii. Only third crop is used as commercial cocoon.
viii. Persons engaged in both the phases scared to adopt modern technologies.
ix. The sericulture industry in the district operates basically on local demand base,
x. Marketing is the weakest part of the industry.
xi. Proper up-keep of relevant data is absent.
xi. Persons involved in the industry used to refuse to provide data unless there is a support either from Government officials or from known persons.

OPPORTUNITIES ARE:

i. Change in fashion world increasing demand for silk products.
ii. Multiple uses of silk are yet to be explored.
iii. Government though various projects, Fiber Policy and various aides trying to develop the industry.
iv. There is ample scope for utilization of unutilized barren lands for the development of the industry.
v. A huge scope is left for utilization of by products.
vi. Prior to our study period, more specifically up to middle of nineties thirteen areas of the district were engaged in manufacturing phase. Since the end of nineties the areas where manufacturing phase is in operation has reduced to four.

THREATS ARE:

i. Ignorance about application of modern techniques and technologies both in farming activities and manufacturing cum trading part..
ii. Low productivity of labour.
iii. High cost of production.
iv. Low priced cotton goods.
v. Chinese silk at cheaper rate..
vi. Tendency of traders to make silk cloths impure by mixing cotton and or synthetic fibers along with silk fibers.
vii. Young generation accepts the industry as non-prestigious. They even prefer to spend time idly.

Against this analysis it may be commented that SWOT analysis as presented above opens the scope regarding planning for betterment of the industry in the district.

6. LIMITATIONS OF THE STUDY

The researcher faced a number of limitations while carrying with the study.
Absence of any sort of data bank even in the district level,
Refusal of a number of people engaged in the industry to provide any sort of information.
Persons engaged particularly in manufacturing phase think access to their books of accounts will publish their trade secret to the fellow traders.
Showering of quarries regarding possibilities of own benefits through ours study instead of supply of data.
Low level of education of the people engaged in the sericulture industry of the district Purulia.

6.f. SUGGESTIONS
Against above noted paragraphs where we have tried to sketch every corner of our study we would like to prescribe some suggestions for the betterment of the industry.

Entire process of sericulture industry in the district is not technology friendly. Farmers are reluctant to use modern farming and rearing mechanism in the form of use of tractors for land preparation, use of modern sprayer machines, binocular for watching birds to eat away the silk worms, use of rearing machines. Reelers do not want to use modern reeling machines. Weavers are not ready to use sophisticated and imported weaving machines. Traders do not have attracting window display, proper advertisement and trained salesmanship. The researcher suggests both individual and government initiative for adoption of all of the technical aspects mentioned above.

Local supplies of raw materials particularly cocoon for reeling are not sufficient. Chibasa of Jharkhand possessing a huge supply base of cocoon is a few k.m. away from the district. An initiative from government and organized form of reelers to make a permanent link with Chibasa for uninterrupted supply of raw material may act as a booster for the industry.

Financing from external sources is not notable in any form of activity. It leads to weak capital base. Proper imitative from government, commercial banks, rural development banks and co-operative banks for supply of finance will develop the industry to a desired extent.
iv. Farming is done on unit basis consisting of a number of families and all of the other three activities are mono family based. In units engaged in farming the team leader directs the other to implement the scheme of production of cocoon. In all of the other activities head of the family leads. They need proper training in human resource management, use of technology and effective utilization of available funds, generation of same and procurements.

v. Proper supervision of government is needed.

vi. For quick development of the industry in the district, all of the stages of the industry are required to be integrated. Raghunathpur weavers cluster is one of such efforts in manufacturing stage.

vii. Introduction of new techniques and modern technologies are very much necessary. In this regard arrangement of workshop and training at the block level as well as district level is very much necessary. These workshops and training programmes will be designed in such a way that can be able to the farmers and other people engaged in sericulture on new technology with extreme zeal and enthusiasm.

viii. Another aspect is marketing that has wide scope of improvement following state of the art of marketing technologies.

ix. It is suggested that young generation is required to be educated about sericulture industry and attachment of the district with sericulture.

x. We recommend one of the most popular forms of marketing known as fare trade practice to be explored.

With globalization, teleshopping media hype, increasing consumer awareness, growing trend for using fashionable goods the arena for marketing been experiencing several changes in recent times. In this field it is very much true that there may be many things but one thing is a must and that is change.

Towerling shopping malls, fashion shows, revolution in advertisement have many folded the world of consumerism.

Sericulture industry at national and international level is not also lagging behind.
Fashion shows on silk fabrics, outlets with silk fabrics only and regular advertisements for silk products are common in international and national level. The district as well as state lags far behind.

However participation in different fares as a sales booster is not uncommon to the traders of Purulia. Particularly cooperative societies are regular participants to the fares organized by Government of West Bengal and other private agencies.

We have collected data from Raghunathpur Silk Weaver’s Co-operative Society regarding their sales in different fares and over the counter sales during same period. Our experience regarding comparative study between sales in different fares and corresponding over the counter sale (OTCS) of Raghunathpur Silk Weaver’s Co-operative Society for the period from 30.08.08 to 30.09.2011, is presented in following table.
Table (T-6.1.) showing sale in fare as well as over the counter.

<table>
<thead>
<tr>
<th>SL.NO</th>
<th>NAME</th>
<th>DURATION</th>
<th>SALES IN FARE Rs</th>
<th>OTCS Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>TantBastramelaPurulia</td>
<td>30.08.08 to 07.09.08</td>
<td>381390</td>
<td>305112</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(47673.75)</td>
<td>(38139)</td>
</tr>
<tr>
<td>2)</td>
<td>AsansolMela</td>
<td>07-09-08 To 21.09.08</td>
<td>539760</td>
<td>404820</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(35984)</td>
<td>(28916)</td>
</tr>
<tr>
<td>3)</td>
<td>Spring festival Delhi</td>
<td>13.08.2009 to 25.08.09</td>
<td>826900</td>
<td>578830</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(63608)</td>
<td>(44525)</td>
</tr>
<tr>
<td>4)</td>
<td>Katwamela</td>
<td>21.12.10 to 27.12.10</td>
<td>498730</td>
<td>423920</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(71247)</td>
<td>(60560)</td>
</tr>
<tr>
<td>5)</td>
<td>BurdwanMela</td>
<td>10.09.11 to 18.09.11</td>
<td>218853</td>
<td>170705</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(24317)</td>
<td>(18967)</td>
</tr>
<tr>
<td>6)</td>
<td>Midnaporemela</td>
<td>07.09.11 to 18.09.2011</td>
<td>288300</td>
<td>259470</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(24025)</td>
<td>(21623)</td>
</tr>
<tr>
<td>7)</td>
<td>Kharagpurmela</td>
<td>19.09.11 to 30.09.2011</td>
<td>339655</td>
<td>288707</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(28304)</td>
<td>(24059)</td>
</tr>
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</table>

Figures in parenthesis shows average sales per day.
The above mentioned table shows variation was found among the sales in different fares. However, it is evident that over the counter sales is always lesser than sales in fares. This is mostly due to greater exposure of the products to larger number of purchasers.

The researcher humbly suggest to all of the stake holders to make better initiatives to adopt this newly immerged technique to the fullest extent.

xi. Anti-terrorism measures: Among several factors Poverty, deprivation and ill growth of an area turns to be important causes to make a portion of its population to be terrorist. Sericulture industry possesses some unique features which is absent in most of the industries. The industry is labour intensive, requires very low investment, require no specific climatic condition to grow any one of the four varieties of silk worms. Owing to this unique feature of the industry it may be developed in any place against any sort of economic, social and cultural condition. With proper nurturing by the state and integration of all sorts of activities constituting sericulture industry will surely be able to develop the economic condition of the area through development of sericulture. More over any type of labour including women, old aged persons and differently able persons can easily be a part of the industry. These unparallel features of sericulture industry alleviating poverty and generating a flow of employment may turn an area from undeveloped to develop. Thus a few of the causes for development of terrorism can be eradicated. It in turn may be an aid to combat terrorism.

6.g CONCLUSION

- Investment and proper patronage by the Government in Sericulture Industry in the district can play a vital role in the all round development of the life and living of the people of a backward district. Purulia having high percentage of S.C. and S.T. Population (18.29% and 18.27% respectively).
- From our study it is revealed that all the units selected have shown a steady rate of growth regarding G.P. ratio, N.P. ratio, ROCE and ROTA during the study period.
- These ratios are indicators of the profitability, solvency, and stability of the units. The industry in the district is featured with the same.
• Social benefits reaping from the investment in the industry is an important aspect.

• A small investment from the government creates employment to a large volume. sericulture industry being a labour intensive industry has potential to many fold the employment generation with the help of such initiative from the part of government.

• There are huge barren lands in the district. These lands neither suits agriculture nor horticulture. However these lands are suitable for sericulture.

• A large no of unemployed persons are living in the district and investment in large scale is very meager. This feature speaks in favour of increasing involvement in sericulture industry.

• Agriculture in the district is monsoon dependent and ill-irrigated. Those land are suitable for profitable utilization regarding Food plant cultivation and pre-cocoon stage of sericulture industry.

• People of Purulia are forced to leave their residence in search of livelihood. This kind of migration during a sustainable part of the year hinders their generation after generation in obtaining minimum education. As Education builds community so migration of labour bars community building.

• Considering backwardness of the district both Central government and State government have carrying on investment in this industry which is justified against profitability of the industry.

• In this study value of barren land has been taken from the office of the B.L.L.R.O and sub-registrar of the concerned blocks.

• The industry from all corners is labour intensive.

• Gestation period is too minimum and it ranges from 45 days to 65 days only.

• With light skill and common knowledge a large number of people can be parts of the industry.

• The industry is eco-friendly.

• Medium and large scale industries are hearts of the district. The district has thermal power station at santaldhi and Damodar Cement Company an associate of ACC group.
Role of government for development of the industry has already been discussed but the industry requires more support to flourish to the desired extent. It is still true that agriculture continues to be the major occupation of rural Purulia. However, if all-round attempts are made for development of sericulture industry that could be a good path for industrialization of rural area.

Dominance of female labour is a vital feature of the industry. Women are not treated equally to men. They were not allowed to own property. Usually, they do not even have share in the property of their parents though legally it is in favour of the women. They had no freedom to choose their work or job. The list of women deprivation was not the culture of ancient India. During those days women enjoyed equal rights with men. After independence India consciously ensured gender equity through constitution. In spite of that girl child is still unwanted. For proper women empowerment changes on the individual, group and social/community level are required. According to Amartya Sen, the world famous economist and Nobel laureate for a better future empowering women is a need of the day. Sericulture industry all over the globe shows dominance of women in every stage of production. The industry in the district Purulia possesses almost similar type of engagement. The engagement in sericulture industry portrays male dominance instead of total women empowerment as women are debarred to participate in weaving and trading. These are due to the cultural features of the district. In spite of all growth and development of Sericulture industry would surely be an instrument of women empowerment.

Culture of the rural society of Purulia to some extent is static in nature. Economic backwardness helps in restricting the people of the district to accept new ideas and changes in the world. World is not a static entity change in the common phenomenon in all spheres of life. So with the growth of sericulture industry our gut feelings is that the rural society of the district will move forward at a greater speed. Development and nurture of sericulture industry must be an instrument for cultural upliftment of the rural people. As the industry has the huge opportunity to earn, the women of varied economic and social backwardness are able to earn their livelihood. Sericulture industry can play the role of women empowerment as well as inclusive growth that
are the long cherished motto of our National Planners. Dominance of female workers in the farming, reeling and weaving in the district is a part of sericulture industry is another important point to hint for women empowerment. Women empowerment and inclusive growth though sericulture industry has potential for rural upliftment.

In our study we have observed a steady and favourable behavior of all the parameters of the sericulture industry over the study period. This is a favourable aid for women empowerment. Moreover if the trend continue these would be helpful for quick growth of Sericulture Industry in the district as well as the well being of the people engaged. In turn the district Purulia one of the most backward district of the state would get a new economic and cultural shape with the help of Sericulture Industry.

THE END