CHAPTER – V

SUMMARY AND CONCLUSIONS

As evident from Chapter 4, Results and Discussions, in present study various attributes have been analyzed through numerical analysis, which lead to some significant derivations found through survey. In this chapter such derivations have been summarized and the areas in which further applications of the study can be implemented have been identified, so that the study may not prove an endpoint rather a beginning for newer studies which is the basic objective of any scientific enquiry. However, the objectives of present study, given in first chapter, Introduction, have been attained through this study, though not completely, yet to a large extent. The analysis of this attainment is given in following paragraphs.

The first objective was to study the process of yarn making through shoddy industry and its eco-friendly implications. This process has been dealt with in detail in Chapter 4, Results and Discussions, with the help of Photographs, tables and schematic chart of the processes involved in shoddy yarn making. These processes have been explained in detail in previous chapter. However, in this chapter the basic stress is upon the implications involved which may lead to major derivations. Eco-friendly measures involved have also been analyzed and synthesized in discussion segment.

Eco-friendly implications are evident from four R’s that is, Reduce, Reuse, Recycle and Redesign the bulk of old clothing, which otherwise leads to pressure on landfills. Moreover, synthetic yarn is not bio-degradable and even bio-degradable substances also take a long period to decompose which further leads to pressure on land. Through shoddy industry bulk of old clothing in
recycled and products made from this yarn lead to reuse. Thus, the basic objective of eco-friendly techniques and sustainability aspects are achieved side by side. In this way shoddy industry is a boon for poor masses as they get products of shoddy yarn like shawls, lois, blankets etc at a low price as compared to products of fresh wool yarn. Moreover, recycling of rags on the other provides products at a lower price, which are affordable for lower income group. Besides, effluent western society where people change their wardrobes more frequently provide a good raw material resource for shoddy industry.

In nutshell one may say that the process of shoddy yarn making is totally an eco-friendly process in which the major thrust area is recycling. As noted earlier shoddy industry is facing problem of recession due to competition and negligence of industry by the government, which is an alarming situation for this eco-friendly venture.

The second objective of the present study was to study the utilitarian aspect. This attribute was tested through general survey in which responses from the respondents were quite significant and $X^2$- Value of three-way test proved significant at 1% level of significance. This proves, that utilitarian aspect of the industry is very high. Moreover, products like blankets, shawls, lois, sweaters are available at a much lower cost as compared to products weaved through yarn of fresh wool or cotton. The addition of synthetic yarn also provides greater strength to shoddy yarn. The utilitarian aspect of the industry is evident from the fact that the largest supply of relief blanket, to U.N.O is from Panipat, which itself speaks about the utilitarian aspect. Moreover, utilitarian aspect was further augmented with viewpoints of manufacturers of products from shoddy yarn and dealers engaged in its trading who were interviewed to find out utility and demand of these products along with consumer’s survey. The findings have already been given in previous chapter.
The third objective regarding development of local pool for raw-material could not be attained as elaborated in fourth chapter Results and Discussion. This is due to lack of receptivity on the part of industrialists, as well as, response from the public was also not that positive. Psychological implications are there in terms of mental makeup of the society in general, as industrialists feel local rags are of little use as compared to rags from western society owing to strength of rags as already described. On the other hand general public is not that aware in terms of environmental awareness as compared to Western society. They are not ready to part with their old rags without any return. On this theme a student from psychology or consumer behaviour can undertake an independent study which may prove of great significance. Moreover, as the Indian society is becoming more effluent with the growth of economy, these age-old views are necessarily going to change. Then, development of local pool for rags can become a reality. At present generally clothing is being utilized to its 70-80% strength and even after that these are given to maids and servants or used as dusters and moppers until they are decomposed in garbage, irrespective of the fact that whether that rag is biodegradable or not. Increase in purchasing- power and environmental awareness may alter the old thinking and pave way for a more rationalistic society provided educational standards are also increased. Thus, in this theme there are potentials for further research.

The fourth objective regarding sustainable development aspect of the industry received mixed responses. The majority of industrialists feel that industry is leading to sustainable growth, while some are of the view that the problems being faced by the industry may affect the sustainability aspect negatively. This part has been elaborated in next part of this chapter that is problems of the industry. As far sustainable development is concerned, it is evident from industrial survey discussed in Chapter IV, that sustainable growth depends upon four R’s , that is, Reduce, Reuse, Recycle and
Redesign. Reduction of solid waste is attained through check on rags in garbage. Some may question that rags of Western society are being dumped in developing economies, than how far it is beneficial in Indian context? Here, it is pertinent to mention that environmental management and sustainable development are to be taken in global perspective not in isolated regional considerations. In future when economy of India will further improve, even then shoddy industry will also sustain as the population living below poverty line is quite large and they will always require low cost products. Besides it, other developing economies in Asian and African continent have also potential markets for these products.

The three other R’s Reuse, Recycling and Redesign are requirement for sustainable growth. The shoddy industry is based upon the principles of reuse and recycling. Moreover, no by-product of the industry goes waste, as the leftover of rags after yarn making is used for stuffing of mattresses, sofas, pillows etc as already mentioned in previous chapter.

The fifth objective of the present study was to study health hazards, if any, of the workers engaged in shoddy industry and the ways to overcome them. As evident from health survey in previous chapter of shoddy industry workers, no serious health problems of the workers have been found. This does not mean that health status of all workers in shoddy industry was very good and no health problems are there. The general problems of labour class like malnutrition, skin problems owing to lower awareness about personal hygiene and dietary habits are there. Similarly, in female labour force headache, dizziness and backache problems persist but one cannot blame the industry regarding these problems, though there are many reasons for the same. Therefore, shoddy industry may not be termed as hazardous to health of workers, though problems of lower wages, higher working hours and lack
of amenities etc often lead to labour unrest in industries, which is another topic for research. Although, Norris (2012) an English scholar has painted a grim picture about the labour conditions in shoddy industry as described in Chapter II, yet the situation is not that bad as per Indian Labour Law conditions. However, if we perceive the picture from western society’s perspective, than conditions are not that good like European industrial labour.

**Problems of Shoddy Industry:**

During survey while interviewing owners of shoddy industry the investigator had a discussion regarding problems of the shoddy industry. The major problems of the industry are as under:

1. **Power:** The shortage of electricity in Haryana and consequently power-cuts has been pointed out by industrialists as the major problem. Although, every industry is having their own power generating systems, yet the cost of power becomes detrimental to the production as the prices of diesel the major fuel for power generation are continuously rising. A comparison of per unit cost of electricity tariff and diesel generated power also shows that former is a cheaper source of energy as compared to the latter. But the variability in electricity supply and the uncertainty affect the production in a negative manner. Therefore, power supply is the first and foremost problem as reported by industrialists.

2. **Competition:** Another alarming problem pointed out by industrialist is that they are facing tough competition in shoddy industry due to Chinese products. The products from China like blankets, Shawls, Lois and Sweaters of fresh yarn are available at a lower price in comparison to shoddy products. This is why, demand for shoddy yarn is decreasing. After WTO pact Chinese products
are giving a tough competition to Indian industry in general and shoddy industry in particular. Therefore, some industrialist’s fear that in future the production and demand for shoddy yarn may further diminish, thus giving a blow to this industry. This fact is attested by a special article in Economic Times dated 20/Oct/2011 (Scanned article at page….)

3. **Labour Laws:**

Shoddy Industrial units are generally small units giving employment to 40-50 workers per unit. Thus, these units are small scale industrial units while labour laws are applicable on these industries at par with large industrial units for which industrial owners generally complain that their profitability is not that high, that may provide facilities as per labour act. Besides, it industrialists have also informed that Government officials entrusted with checking these things tease the industrialists for the same. Industrialists are of the opinion that these small scale industrial units should have some concessions from the Government sector.

4. **Unorganised Development:**
The shoddy industry has developed in an unorganized sector and this is why no incentives from administrative set-up is received. Moreover, production and trade data is also not available from any agency rather units have to be visited for the same. However, in present times due to more openness in markets larger units have developed their own websites for depicting their products and receiving online orders for their product supply. The industrial units are dispersed in various localities and surrounding areas of Panipat. Had there been an organized development of shoddy industry in Panipat the situation would have been more conducive for growth, while at present industry is either stagnating or on decline, owing to lack of incentives from government.

5. **Declining Profitability:**

Shoddy Industry is facing a decline in profitability due to increasing cost of production. This trend is a combined effect of tough competition with Chinese Clothing as discussed in earlier paragraphs and power problems. Further the situation is also worsening due to increase in diesel prices, thus leading to higher freight charges on rags transportation. This is why, a trend has developed that industrialists who were exclusively in shoddy industry earlier are now installing other type of industrial machinery also like handloom, power looms, weaving units and as like to cope up with the declining profitability in shoddy industry. However, larger industrial units which can afford alternate plants are working on both types of production simultaneously while smaller shoddy workers are also shifting to other type of entrepreneurship rather than shoddy due to decline in profits mainly owing to competition. The encouragement to this eco-friendly industry is possible through governmental policies and incentives which are not available at present.
However, in spite of above mentioned problems, shoddy industry at Panipat is performing an efficient production process of yarn making at a reasonably low price and simultaneously, serving a good cause of environmental management by recycling the rags without creating any solid waste. The products of this yarn are available to consumers in general and for lower income group in particular at cheaper prices. The blankets made out of this yarn are significant at international level as most of the supply for relief and rehabilitation programmes of U.N.O is done by this industry. Similarly, disaster management department and Fire extinguishing workers also prefer such rough and tough blankets for relief work. Besides it Sweaters, Shawls, Lois etc. are also weaved through this yarn.

**Some Ethical Questions regarding Shoddy Industry:**

Some ethical questions regarding shoddy industry have been raised mainly in two studies - firstly by S. Laxinarain (1978), “This shady shoddy business” and secondly by Lucy Norris (2012), “Recycling imported second hand textiles in the shoddy mills in Panipat, India: An overview of the industry, its local impact and implications for the UK Trade”. Both the scholars have questioned the ethical basis for exporting used clothing by businessman which had been given in charity by U K people. Secondly, the used clothing which are sometimes as good as new garments are mutilated before entering the Indian border to avoid customs duty objections. Lucy Norris (2012) opines- “The commercial relationships between charities, local authorities and textile recyclers are not transparent in UK, and public donors and third sector collectors remain largely unaware of the global political economy of used clothing and the distribution of economic value it generates.”
Similarly S. Laxminarain(1978) opines- “These discarded garments which are as good as new, are often taken up in lots by internationally recognised organizations….. as also by garment dealers in the west who are well aware of the weakness for ‘foren’ goods among consumers in the under-developed or developing countries of the world’. …… “all consignments have to go through operation mutilation before they get clearance certificate.”

Both abovementioned opinions raise some ethical questions-
1. Is it justified that the clothing given in charity may be used for shoddy industry?
2. Is it justified to mutilate the clothing which can be reused as it as good as new?

But answers of these questions are open to debate and involve not only Indian market only Indian market rather also the market conditions of the west. The shoddy industry is utilizing rags as raw material which is supplied by business community to the industry. Thus, ethical issues are not for the industry, but are for the trading community mainly in Western countries dealing in used garment trading. Moreover, in modern age of liberalism and WTO, such issues cannot be taken in isolation rather in the whole mosaic of industrial set-up.

**Conclusion**

After having an analysis of the various aspects of shoddy industry, its problems and prospects, as well as, ethical implications one may derive the following inferences

1. The shoddy industry at Panipat is the largest hub not only in India rather in whole world. This conglomeration is unique in terms of production, sustainability, cost- effectiveness and is largest supplier of blankets for relief purposes in International market. Moreover, yarn produced by this
industry is quite significant for products required by lower income group population general and for winter season in particular. Therefore shoddy industry being an enterprise for weaker sections, its sustainability is quite high in a developing economy like India.

2. The shoddy industry is an eco-friendly venture in global perspective as it sustains on the principle of Reuse, Reduce, Recycle and Redesign. The solid waste of society would have become unmanageable, had it not been recycled in terms of yarn – making by shoddy industry. Moreover, no solid waste is generated in shoddy industry as every part of the waste is reusable. Thus, the industry is quite eco-friendly as well as, sustainable.

3. The products made from this yarn are much lower in cost as compared to the products made from yarn spun from the fresh resources. Thus, cost-effectiveness is another aspect which is an encouragement for shoddy industry. But as already noted in problem of the shoddy industry, at present a tough competition with Chinese market has lowered the potentials of cost-effectiveness to a large extent. This has occurred mainly after LPG (Liberalization, Polarization and Globalization) effects of WTO (World Trade Organization). This is why, some shoddy industries have shifted to other enterprises as profits in this industry are moderate, neither very high nor low. But Chinese products capturing the market are causing concern.

4. The present study started with five-fold objectives of studying the process of yarn making, its eco-friendly implications and sustainability, utilitarian aspects, cost-effectiveness and investigating health hazards, if any for working force; and those were attained successfully as evident from Results and Discussions Chapter. But developing a local pool for rags as a cost-effective measure proved unsuccessful as explained in attributes of receptivity and disposability (Chapter 4). However, in future course of time with the development of economy and increasing environmental awareness, the possibility of such pool cannot be ruled-out. The rise of middle
class in upper income group may lead to the development of tendencies in Indian society, which are prevalent in western society at present, that is, changing the wardrobes more frequently which will lead to generation of local pool for rags.

5. The shoddy industry is safe from health hazards point-of-view as noted in Health Survey (Appendix III) and its analysis in previous chapter. Although, Common ailments among labour exist but these cannot be attributed to working conditions in industry, rather these are related to lack of hygiene awareness dietary habits.

6. The shoddy industry in Panipat not being organised sector and lack of attention from administration, power pangs and other problem discussed in previous section of present Chapter have created a threat for the industry. This is why, a group of shoddy industrial entrepreneurs have shifted to alternate ventures. If this eco-friendly venture declines it will be a threat for environment as well.

7. It is recommended that government agencies and industries department in particular should pay heed to this wake-up call and some incentives for the industry in the form of tax exemption, uninterrupted power supply and abolition of ills of “Inspector Raj”, which the union of shoddy – industrialists is taking up with the government from time to time be taken care of. If shoddy industry flourishes than path economy will also be augmented.

**Limitations of the study**

The present study has some limitations also, which need to be mentioned here –

1. The industry is in an unorganised sector and therefore no agency has the compiled and published data in terms of production, profitability, turnover, quality etc and therefore one has to rely upon
information given by industrialists whereas subjectivity creeps in. Although, attempt have been made to derive objective deductions through cross-checking yet it cannot be totally error free.

2. Industrialists were hesitant in giving information as part of their business tactics and were reluctant to disclose some names of their units due to legislation hiccups. Most of the industrialists provided information on the condition of anonymity.

3. Panipat is the only sector in India where a cluster of industry has developed and the leading production comes from here only. The yarn is exported to various towns like Ludhiana and Amritsar for products manufacturing. In other areas shoddy has developed in a scattered manner. This is why, relative study or comparison with other centres was not possible.

4. Due to lack of quantitative data statistical analysis is limited and most of the findings are analytical and descriptive.

In spite of above mentioned limitations the study may prove of paramount importance as it is based on empirical survey and first hand information of production, process, sustainability, and eco-friendly techniques being used have been studied in this survey. Moreover, it is a departure from traditional dry data based analysis and a try to bring to the forefront a lesser known industry which is helping the producers of sweaters, shawls, blankets and other woollens in cost-management by mixing blended yarn of shoddy in fresh products as well. Thus, the present study is a firsthand survey and based on primary data where the investigator has visited the industries personally and manufacturing process of shoddy yarn was understood through empirical survey. Such empirical surveys may be of paramount importance for the analysis of overall assessment regarding industries in which various aspects have been studied ranging from cost management analysis, sustainability perspective and overall importance of the shoddy industry in social setup and its economic implications as well. The
process of shoddy yarn making and various steps involved in this industry have been discussed in
detail in chapters to follow.

**Further applications:**
The present shoddy is not an end in itself; rather it can pave way for new beginning. Various studies
on Consumer’s response to shoddy yarn manufactured products, the comparative analysis of shoddy
yarn products, qualitative analysis of garments of the shoddy yarn, and cost-effectiveness aspects
imported rags and local rags are some of the aspects which can be investigated. For these purpose
students from economies, entrepreneurship, Clothing and Textiles, Textile engineers, sociology,
Environmental Sciences and other disciplines can study various aspects. Moreover, in this age of
globalization global impact of the industry and eco-friendly and sustainability aspects at regional,
national and international level can be studied. The shoddy industry should not be allowed to exist in
“shoddy state” not it should decline rather its prosperity will pave the way for eco-friendly and
sustainable economy. New innovations in recycling can also be attempted by the students of pure and
applied sciences. Other allied disciplines of Home Sciences like fashion designing and garment
designing may also come up with new innovations of Reducing, Reusing & Recycling. Therefore,
present study may prove beginning for new beginnings if further research is done on these lines.