CHAPTER VII
SUMMARY OF FINDINGS AND RECOMMENDATIONS

The handmade paper industry occupies a key role in the spectrum of village industries due to its eco-friendly processing, converting waste into wealth and offering scope for artistic and craft work for high value addition. The last decade saw vast changes in the economic front of India where liberalization, privatization and globalization have been introduced affecting the prospects of village industries. Under this clumsied environment, the prospects of the handmade paper units have been evaluated to decide on the future trends and course of action needed. Against this backdrop the study revealed the following findings.

The big paper mills under the factory sector are using forest products like wood, bamboo and other forest resources. Continued felling of trees and consumption of forest resources will lead to deforestation affecting the green cover of the ‘Mother Earth’.

7. Major Findings
7.1 Raw Material Consumption

The handmade paper units never use forest resources for paper making as they do not require huge volumes of raw material and their production capacity is less than one metric tonne per day per unit. These units facilitate de-centralization of paper making and they utilize locally available raw materials and generate employment for the local people.

The handmade paper units under review have used waste materials like waste paper, hosiery cuttings, condemned jute rags, tailor cuttings etc. This has confirmed the first hypothesis that the handmade paper units used only waste materials as raw materials for production of handmade paper products, saving scarce forest resources.
7.2 Production and Sales

Of the five handmade paper units, three units, namely, the handmade paper unit at Senbahapudhur, the handmade paper unit at Ponnavarayankotti and the handmade paper unit at Veeraragavapuram, are using lower level of technology in couching and sheet formation. They use hand operated dipping vats and foot operated auto vats. These three units have shown declining trends in production and sales were also affected due to low quality of the paper produced. The handmade paper units at Pidagam and Thiruchengodu are using cylinder mould technology. Cylinder mould technology helped to improve the quantity of production and quality of the paper.

Most of the units do not have a sound production plan based on market demands and witnessed fluctuating trends in production. Lack of production plan will lead to excessive inventories, under utilization of plant and machinery and generate more wastage.

Because of the patronage extended by Tamil Nadu Khadi and Village Industries Board, Government of Tamil Nadu, these units have never ventured to undertake private sales. This dependency syndrome on Tamil Nadu Khadi and Village Industries Board has affected the sales performance of all the units and they have shown declining trend in sales. In the span of ten years, the cumulative value of sales by all units was less than the total value of production by Rs.77.70 lakhs. Inadequate sales coupled with absence of market linkages and networking have affected the sales performance. These handmade paper units have vast scope due to the ban on HDPE carry bags as the right alternative to the plastic carry bags is the handmade paper carry bags. It is high time that these units pulled up their socks to make an entry into carry bag manufacturing with their own handmade paper. The Tamil Nadu KVIB, Chennai, should ensure that these units capitalize on the vast opportunities available to
these and adequate technical and monetary inputs may be assured for successful operations and marketing.

Lower level of technologies in couching and sheet formation have led to declining trends in production in three units. Two units namely, the handmade paper unit at Pidagam and the handmade paper unit at Thiruchengodu, using cylinder mould technologies, have shown increasing trends and their growth rates are quite reasonable and positive.

In respect of sales, use of improved technologies has produced better quality of paper, enabling the handmade paper unit at Thiruchengodu to record better sales and this unit due to better market linkages, has posted reasonable success in marketing. All the other units have suffered in terms of growth rates in sales.

Thus, the hypothesis that the handmade paper units have shown meagre growth rate in production and sales has been proved except in the case of the handmade paper unit at Tiruchangodu which has shown impressive growth rates in production and sales.

7.3 Employment, Earnings and Labour Productivity

In respect of the per capita earnings also the hypothesis has been proved as it ranged from Rs.0.079 lakh to 0.190 lakhs per employee in the paper units under review. Low wage earning capacity and low labour productivity have been attributed to lower level of technologies and under utilization of plant and machinery.

The hypothesis stating that the per capita investment will be very low has been proved in respect of all the units, as they have recorded average per capita investment ranging from Rs.0.24 lakh to 0.26 lakh.

7.4 Capital Output Ratio and Marginal Cost

In the study units the capital output ratio is not directly related to the technology adopted and it is also a function of the value added
products and diversified products. The handmade paper unit Ponnavarayankottai has employed lower level of technology like dipping vats and auto vats and yet it has recorded greater capital output ratio than the units which have installed cylinder mould technology, namely, the handmade paper unit at Pidagam, and the handmade paper unit at Thiruchengodu, could record better values due to production of paper covers, envelopes, shoe boxes, sweet boxes etc.

So the hypothesis stating that the capital output ratio is a function of technology has been disproved and it is a function of diversified products as far as the present study is concerned.

Trends in cost of production and value of output in the sample units indicate lack of control over costs. As a result even occasional increase in business operations failed to yield the benefit of cost reduction. In particular fixed costs, comprising largely of wages and salaries, kept increasing despite fall in production. For instance, in the handmade paper unit at Pidagam variable cost rose by 2.4 times from Rs.5.00 lakhs in 1992-93 to Rs.12.00 lakhs in 2000-01 whereas wages and salaries spiraled by 3.15 times from Rs.2.31 lakhs to Rs.7.25 lakhs during this period. It should, however, be acknowledged that it may not be feasible to reduce fixed costs though further increase can be controlled and the major solution to the ailment lies in substantial expansion of scale of production and capacity utilization. Therefore, the handmade paper units under review have to enlarge their volume of production. That will at least meet their fixed cost components and variable cost components. The trends observed in all the five units have shown that the increase in the value of production could not match the fixed costs affecting the margins. Only one unit, namely, the handmade paper unit at Thiruchengodu has, managed its costs and expenses comfortably and the other units have suffered.
Initiatives and dynamism on the part of the management to handle the production and costs effectively can alone save these units. Orienting the unit in charges for such efficient cost management has to be undertaken by Tamil Nadu Khadi and Village Industries Board, Chennai, for the survival of these handmade paper units.

So the hypothesis stating that absence of professional management has led to higher marginal costs and lack of control over costs and prices has been proved partially as four units, namely, the handmade paper unit at Pidagam, Ponnvarayankottai, Senbagapudhur and Veeraragavapuram could not contain marginal costs and prices. Only one unit, namely, the handmade paper unit at Thiruchengodu was good at managing marginal costs and prices. The unit is well supported by an experienced professional Manager while the other units did not have such leadership.

7.5. Management of Working Capital

Assessment of management of working capital through operating cycle was undertaken in the present work to identify the pitfalls in their management practices. Being a labour intensive activity, the scope for advanced technologies and automated production systems are very low. In such conditions, the success of the business operations in handmade paper production units depends on the successful management of the current assets. Hence the management of working capital plays a key role in deciding the future thrust for these units. It revealed major deficiencies such as: out of the five units under review, three units, namely, the handmade paper unit at Pidagam, the handmade paper unit at Poonavarayankottai and the handmade paper unit at Veeragavapuram were bogged down by long net raw material cycles and storage cycle affecting their business prospects.

In the case of the handmade paper unit at Thiruchengodu, they have expanded their production base by introducing cylinder mould
technology and enhanced the quality of output to satisfy the market requirements.

Enthusiastic innovative managements like that at the handmade paper unit at Senbagapudhur, even with auto vats, and the handmade paper unit at Thiruchengodu have done fairly well by improving the quality of the paper, the technologies for improving the quantity, establishing right market linkages with multiple varieties. These units have posted reasonable success due to the competence of the management, for example the handmade paper unit at Senbagapudhur has done reasonably well despite their conventional technologies like dipping vats and auto vats. Due to their efficient inventory control techniques, right choice of product mix, quality products and independent marketing, it has shown better management of working capital.

So, the hypothesis stating that operating cycles of the working capital management would be very long due to absence of vigorous marketing strategies had been proved as the handmade paper units at Pidagam, Ponnavarayankottai and Veeraragavapuram posted very long operating cycles, particularly storage and collection cycles, while the handmade paper units at Senbagapudhur and at Thiruchengodu posted shorter storage and collection cycles due to their marketing efficiencies. Among these two, the handmade paper unit at Senbagapurduhur recorded short, and crisp storage cycles due to their efficient marketing skills and high quality of the products.

8. Policy Recommendations

8.1 Use of Agricultural wastes for handmade paper Industry

The handmade paper units under review have used only hosiery cuttings, tailor cuttings, condemned rags and waste paper. These are mainly industrial wastes produced by urban industrial units. The handmade' paper industry is one of the village industries supported by
KVIC, Mumbai, to provide employment to village people by utilizing locally available raw materials. Indian villages have plenty of paddy straw, stems of plants, banana fibres, sisal and pineapple leaf fibres which have considerable fibrous materials suitable for handmade paper production. None of the units under review even ventured to use a few of the fibrous agricultural waste as raw materials. After 1995, Self-Help Groups have emerged as leading task groups working for the development of the villages in terms of micro credit, small business enterprise management etc. These groups may be trained in collection and processing of agricultural fibrous wastes for supply to handmade paper units. At present the agro wastes like banana fibres are disown in the waste yard after harvesting. Some of the dry fibrous agro wastes are used as fuel. When these agro wastes are put into use for handmade paper, production, the earnings will increase and in one way it will help to reduce the raw material costs to the units. Most of the units reported high raw material costs affecting profitability. The use of agricultural wastes as raw material for handmade paper production will add value to the village economy and support the handmade paper units. So the use of agro wastes has to be explored by the study units to produce varieties and high value addition to the outputs.

8.2 Use of Natural / Vegetable Dyes for Colouring Handmade Paper

Handmade paper units use synthetic chemicals and dyes for colouring the paper products. Handmade paper products are demanded by environmentalists and special groups who have concern about ecology and health of ‘Mother Nature’. To make the handmade paper a full fledged eco-friend by product, the units may think of using vegetable colours which are non-toxic and natural. Trials on the use of natural and vegetable coloured papers may be conducted to improve marketing and for better value addition.
8.3 Tamil Nadu Khadi Village Industry Board, Chennai

The KVIB of Tamilnadu has its head office at Chennai and it has a Directorate for dealing with the administration of the Village Industry Staff working under the Directorate. The personnel of village industries may have assorted qualifications and experiences in different fields of village industries like Ghani oil production, soap production, brick works, pottery, honey processing, material industries etc. Among the available staff, a person who has not been trained in handmade paper production but trained in village oil industry is at times put as unit in-charge in the handmade paper unit. Thus putting a person whose qualification may not match the requirements of handmade paper production will affect the prospects of the units. The present work also revealed the incompetent management of the unit in-charge in dealing with quality and inventory control and working capital management. Hence, the unit in-charges of the handmade paper units have to be trained in handmade paper products, quality control, marketing of handmade paper productions and administration of the unit. Unless a right person occupies the right place in the handmade paper unit, its future prospects are bleak.

8.4 Establishment of Export Wing

Handmade paper products have high demand in foreign countries as they are eco friendly and it is made out of saving forest resources. Tamil Nadu Khadi and villages Industries Board, Chennai should make efforts to tap the vast potentiality in exporting the paper products of the study units. Hence, it is suggested that the KVIB, Chennai may establish a export wing for undertaking export of handmade paper products. The wing should establish market linkages in abroad through participation in buyer and seller meets, under take market surveys and supply goods to meet customers demands. This effort will generate high returns to the
handmade paper units under review as unit sales value realisation will be higher in foreign countries.

8.5 Net Working Among Other State Khadi and Village Industries Board

The TNKVIB, is the apex body at Tamil Nadu level for production and sales of KVI products in Tamil Nadu. The TNKVIB should establish net working with other state KVIBs like Andrapradesh state KVIB, Karnetaka state KVIB and Kerala state KVIBs etc.

This will facilitate in expanding the scope for marketing of the KVIB products particularly the handmade paper products. For example, kerala state khadi village Industries Board, do not have any handmade paper manufacturing unit and the paper products of TNKVIB, can be marketed through Kerala state KVIB, Trivandrum. Hence, TNKVIB may undertake net working with other state KVIBs for belter marketing.

The above policy recommendations may help the handmade paper units operating under TNKVIB, Chennai for their rejuvenation and future prospects.

9. Conclusion

Handmade paper units covered in the present work are functioning under the patronage of Tamil Nadu Khadi Village Industries Board a state level apex body promoting Khadi Village Industries. Under such governmental support mechanism, the units had tree flow of funds, protected marketing environment and expert managerial guidance. Despite these, the handmade paper units have shown lack lustre performance due to unit level operational inadequacies; lack of innovativeness and absence of proactiveness to market situations. Hence, these units have to improve their performance considering the changed economic scenario posed by Scenario under globalization and
liberalisation regime. The emerging policies of the Government of India in this context may be taken as the guiding force in planning their future operations.

10. Areas identified for Further Study

The study has not covered the private handmade paper unit as they could not show continuous working for ten years. They could not maintain and supply data required for this study and has not covered areas like materials management, production management, quality control and management of sundry debtors. Therefore further studies in inventory control, production control, quality control and management of sundry debtors promise to be rewarding exercises benefiting handmade paper units.