REVIEW OF LITERATURE

In any research, review of literature plays a significant role. It gives us a guideline for attacking the problem, preparing the research design and selecting tools for data collection. It even tells us the research gaps in a particular field under study. Hence, review of literature is inevitable and even some of the relevant studies are reviewed here.

The chapter has been divided into following sections.

2.1 Handloom Weaving in Europe.
2.2 Handloom Weaving in Italy.
2.3 Handloom Weaving in France.
2.4 Handloom Weaving in United States.
2.5 Handloom Weaving in India.
2.6 Organisational Structure of Handloom Industry.
2.7 Techniques in Handloom Industry.
2.8 Economics of Handloom Industry.
2.9 Schemes for Handloom Weavers.
2.10 Studies Conducted.

2.1 Handloom Weaving in Europe

Birrell (1959) narrated that after the fall of Roman Empire wool and linen fibres were in use. Silk and cotton were expensive. Burre cloth was for common masses of the early middle ages.

A primary cause of the Hundred Years War between England and France (1339-1453), for example, was a textile monopoly agreement between England and Flanders.
Weaving During the Renaissance

Until about 1250 A.D. textiles used in Europe were imported from the Orient, from the Near East, and from lands bordering the Mediterranean. Europe became independent of southern and eastern sources, began to weave her own fine fabrics, and finally mastered the intricacies of the textile arts.

2.2 Handloom Weaving in Italy

Crusaders helped to open up trade routes between the East and the West. During the Roman Empire weavers were brought into Rome from various lands bordering the Mediterranean. It was the Saracens, who had been brought to Sicily from Byzantium and Persia during the Arabian occupation, in about 827-1140 A.D. by the Norman conqueror, King Roger II, who took Sicily in about 1140 A.D. He brought other skilled weavers from the Near East. When this island was conquered by the Franks under Charles of Anjou, the Florentines captured the city and took many of them back to Florence. The city of the Florence soon became an outstanding centre of the fine fabrics.

2.3 Handloom Weaving in France

Pope from Avignon in 1308 took number of spinners and weavers with him. In 1492 Charles VIII invaded Italy and brought back to France 40 tons of fine Italian cloth and weavers. In 1507, the silk weavers of Lyons were copying Florence tapestries Genoa, Milan velvets and Venice and Lucca damasks. In 1520 Francis I, brought weavers from Italy and put them to work in France. Naturally with so many influences from Italy, French fabrics could scarcely be distinguished from those of Italy.
need for fabric finishing is relatively less with handloom fabrics than with powerloom fabrics.

It's small scale of operation constitutes one of the major strength of handloom weaving. Short runs can be handled without any loss in efficiency or increase in cost of waste. Hand weaving therefore lends itself well to the production of handloom with woven color patterns on the product range.

Fabrics wider than about 150 cms are difficult to weave on handlooms as are fabrics of high thread density in either warp or weft. There is no inherent limitation to the range of yarn counts that can be used. Nevertheless because of the difficulties in producing a dense fabric, only yarns of coarse and medium counts are employed, (Appropriate Industrial Technology for Textiles 1979).

According to Fact Finding Committee (1942) below given factors are responsible for the decline of Handloom Industry.

**Effect of the War (1914-18)**

The decentralised handloom sector depends upon supply of yarn, processing of cloth and its sale said Sastry (1984) and Gaur (1977). For nearly the whole of the yarn supply, the handloom under the raw dispensation came to depend on mills both home and foreign. This resulted in the handloom sharing in the ups and downs of the mill industry to a considerable extent. Hence in 1914-18, imports of cloth having diminished and the internal demand for cloth decreased, Indian mills used up much more of their yarn themselves and left much less for the handlooms.
Thus the estimated production of handloom cloth fell
from 1,088 million yard in 1914-15 to 598 and 741 million yards in
1916-17 and 1917-18 respectively and further to 506 million yards in
1919-20. Till 1910-11 the annual handloom production had been more
than the mill production and in some years nearly double. But from
that date mill production began to increase steadily and rapidly and
in years 1911-12 to 1914-15 both lines of production became nearly
equal. Then came the war, and taking advantage of the cessation of
imports, mills made a serious effort to increase production and
capture the home market. As Bell (1942) said that 'The handlooms were
finally beaten and not only beaten but probably severely crippled for
the time being. In the tariff policy removal of three and a half percent
excise duty in 1926 created an immediate handicap to the hand-weavers
while mills got an immediate relief.

**Khaddar Movement.**

In this a great emphasis was laid on hand spinning and
the use of Indian mill made yarn. Both the first and the second Non-
cooperation movements embraced Swadeshi as an important plank of their
programme. The handloom benefitted in a general way by this latter
phase of the Swadeshi Movement but the result was quite different in
regard to the handlooms weaving fine sarees with imported yarn. The
handloom had then a monopoly in finer sarees and Dhotis, but those
were made with imported yarn and therefore, when the Congress ban on
imported yarn was imposed, the public became reluctant to buy such
cloth.
In 1931, the Congress introduced a policy of certification in favour of a number of mills which agreed to certain conditions imposed by it in regard to the use of yarns. Unfortunately for the handloom weavers, this certification could not be extended to them, owing to a number of practical difficulties. The net result was the handloom weavers lost their long established custom as they could not prove that their goods were made out of yarn spun in India.

Kasturbhai Lalbhai (1932) stated before the Tariff Board that the ills of the handloom weavers were not due to the import duty on yarn but to the great Swadeshi movement which had come over the country and hampered weaver from marketing his goods made from the imported yarn.

**Changes in clothing habits**

In general, the change has been towards simplicity and plainness of attire. The older 'bhadralog' classes of the country delightedly wore costly and elaborate clothes. The result of this change of outlook however manifested itself visibly in the clothes of men, women and children all over the country.

In Southern India formerly Hindu women of the upper classes wore tastefully coloured nine yards woven sarees. In Western India the heavy and costly Paithanis and the Ilkal sarees of traditional design went out of fashion, and then, elegant or light coloured Patals from the mills became the vogue.

A preference for simpler attire spread over Northern India also, and a large number of women changed over from their ornamented, handmade Lehngas or Salwars to light mill made
sarees and blouses.

Formerly, Hindu men of upper classes wore lace bordered dhoties and chaddars or angavastrams on all occasions. But of late a craze of simplicity has come over them everywhere. In Madras, high class Dhotis and dupattas of Madura and Salem continued to be the fashion longer than elsewhere in India, but after 1921 they also felt the pinch. A simpler kind of Dhoti has taken their place, and the mill made stuff came in as handy. Further the growing use of trousers, pants, and khaki drill shorts, especially in towns, has curtailed the demand for dhotis and lungis.

Today the growing simplicity of habits has obviated the need of upper garments with the result that many handloom centres have been dislocated. The knitted underwear vest or Baniyan has come as a cheap substitute for Kurta and has obviated the need for an upper garment. In all these cases, let it be noted that the vagaries of fashion have benefited the mill and hit the handloom.

Formerly all over India about 70 percent of men, both Hindus and Muslims, wore some kind of turban and some of these were many yards long. Today only a small proportion of people wear such headgear. Even in rural areas caps have taken their place.

In former days boys wore little dhotis or pyjamas, but today a growing number of boys, wear khaki shirts and knitted vests, girls wear frocks and not sarees. This has greatly affected the industry.

Changes in fashion abroad have also affected
Indian hand-weaving industry adversely. Dacca formerly sent embroidered "bourkhas" for the use of Turkish women. After the Turkish reform movement the demand for such bourkhas rapidly declined and Dacca lost its market. Similarly, Masulipatam which formerly had a flourishing trade in Kalamkaris with Persia lost it after 1930 as such cloth went out of fashion there and this Industry has been completely stopped.

Growing Competition

Western and South Indian mills took to the manufacture of sarees and dhotis suited to the requirement of common people. Such competition was greatly helped by the steady decline in the price of cloth.

The Western Market

South India supplied handkerchiefs to the West and Africa, but owing to competition of imitation Madras handkerchiefs were produced in Europe so this trade was considerably affected. Similarly large quantities of lungis and kailis were being exported to Burma, Federated Malay States, Ceylon, Siam, Borneo, Java, Sumatra and parts of Africa. Owing to the trade depression and the competition of cheaper Japanese goods this trade was greatly affected and there was a great decline both in quantity and value. The value of exports of Madras handkerchiefs and lungis fell drastically.

Powerlooms

Powerlooms have been growing in many centres, where the handloom had been deprived of its market, and were worked by weavers who formerly plied the handloom. Thus the three cornered contest, which began in the nineteenth century between the handlooms, importers and Indian mills has became a four cornered one and already
this has had repercussions on the mills as well as on the handlooms. But the less resourceful party (Handloom) has been the worst hit.

Trade depression

The prices of all staple cloth declined rapidly from 1930 and especially after the exchange depreciation of 1931, a ruthless price cutting went on in the cloth market. The industry was able to stand such competition as their production costs were then falling as a result of technical improvements, but the handloom weaver had hardly any of these advantages and he had to face the full force of the price cutting. The hand weaving industry was subjected to a severe strain.

In Colourage (1992) it is stated that handloom industry is declining due to stiff competition with an organised sector textile industry. Existence of master weavers who exploit the poor weavers, non-availability of adequate finance on time and at reasonable rate of interest, absence of proper marketing facilities, non-availability of yarn dyes, chemicals in adequate quantities and also at reasonable prices, inadequate facilities providing for development of new techniques skills designs and inadequate arrangements to propagate the developments that take place. Failure to build up well integrated institutional structure on the cooperative basis.

Handloom in Maharashtra.

According to Maharashtra Government Committee (1971). In Maharashtra however, it is seen that the handloom industry has been on the decline for the last few decades. As per the statistics collected by the Tidke Committee (1971) the number of handlooms in Maharashtra was 1,85,000. As per census conducted by the
Directorate of Handlooms in 1976 the number of installed looms were 77,325. Later on, as per the registration of handlooms started in 1981-82 the number of installed looms stood at 65,745. The causes for this decline are that handloom products of the state have failed to find a market outside the state. Even within the state the handloom market is confined to the rural poor and to the urban lower middle class. The handloom products as seen today do not measure up to the quality of the products of other states, which are not only acceptable but even valued items of wear and use among the urban rich. This state mostly produces item of cheap janata cloth which is accepted by the urban and rural poor and other cheap varieties of handloom fabrics have a rather limited market. This statement is borne out by the fact that out of the total production of Rs.38.35 crores in the state, Rs.16.11 crores is of Janata Cloth and remaining Rs.22.44 crores worth of non-Janata fabric is almost exclusively marketed by the primary level weavers cooperative societies which have a limited clientele confined to their immediate vicinity. The inability of the state to expand its handloom production is a direct result of its failure to seek out newer and remunerative markets. Other causes of this downward trend are inadequate flow of finance to the sector; the poor earning capacity of the weaver; lack of leadership and lack of good management have been highlighted later.

On June 30 1984, in Co-operative sector there were 26103 working looms and 9150 non-working looms. In cooperate sector all the 12000 looms were in working conditions, but in private sector of the 18610 only 12860 were in working condition.
Production of handloom fabrics varies in different sectors e.g. cooperative sector produced 797.92 lakh worth of Janata cloth and Rs.209.79 lakh worth of non-Janata cloth, whereas corporation has produced Rs.814.85 lakh worth of Janata and Rs.229.38 lakhs worth of non-Janata cloth during 1984.

The number of registered handloom weavers cooperative societies are 741. The concentration of handlooms in the state is in Nagpur and Solapur districts with the maximum number of looms being located in the urban areas of the two district headquarters. It is seen that in each registered society there are a certain number of non-working looms. The position region-wise is as under.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Region</th>
<th>No. of Societies</th>
<th>No. of working looms.</th>
<th>No. of non-working looms.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Nagpur</td>
<td>369</td>
<td>14202</td>
<td>1156</td>
<td>15358</td>
</tr>
<tr>
<td>02.</td>
<td>Solapur</td>
<td>196</td>
<td>9570</td>
<td>6316</td>
<td>15886</td>
</tr>
<tr>
<td>03.</td>
<td>Bombay</td>
<td>100</td>
<td>1770</td>
<td>561</td>
<td>2331</td>
</tr>
<tr>
<td>04.</td>
<td>Aurangabad</td>
<td>77</td>
<td>561</td>
<td>1117</td>
<td>1678</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>741</td>
<td>26103</td>
<td>9150</td>
<td>35253</td>
</tr>
</tbody>
</table>

The Maharashtra State Handlooms Corporation looks after the requirement of yarn and the requirement of marketing of about 12300 weavers in the State. Most of these weavers belong to the two districts Nagpur and Bhandara. The Corporation supplies them with dyed yarn and takes back the finished fabrics from them for marketing.
through retail shops, authorised agents and through exhibitions and fairs. The remaining looms in the private sector manage their own affairs. They depend either on themselves or on the middle men for the supply of yarn and for marketing.

During 1983-84, sale of handloom cloth was very poor. Handlooms Corporation reported sale of Janata cloth worth Rs.1107.59 lakhs and that of non-janata worth Rs.95.85 lakhs. Vidarbha Central Weavers Cooperative Society Ltd. Nagpur and Western Maharashtra Weavers Society Limited, Solapur sold janata cloth worth Rs.688.86 lakhs and Rs.63.05 lakhs respectively.

The following factors have a direct bearing on the state of handloom industry:

Finance

As per the guidelines of the Reserve Bank of India, the flow of working capital to the handloom industry should be at the rate of Rs.3000/- per loom for cotton fabrics. As per this estimate the flow of capital to the 26103 looms in the state should be Rs.783.09 lakhs. As against this the actual flow of capital is only Rs.504.84 lakhs. It has a direct bearing on the number of weavers who are able to find employment in this sector.

The weavers' earning capacity

In weavers communities the younger generation preferred to look for their livelihood elsewhere. The profession has not been able to provide the weavers either with regular and sufficient work or with adequate returns for their labour.
Marketing

There has been a failure on the part of the regional apex societies, the state apex society and the State corporations to find newer and larger markets for their productions. The primaries depend on their own contacts. Marketing has a very limited geographical area. The regional level and state level organisations have failed to take the products outside the state successfully and promote its marketing vigorously. In the matter of product diversification or designing to suit different tastes, the apex institutions have failed miserably.

Leadership

This leads directly to the question of leadership. The industry has not thrown up either a state level or even a regional level leadership able to correctly project the requirements of the industry, vigorously pursue financing and decision making bodies or enter into aggressive marketing. The regional apex societies are quite content to trade in the low cost Janata fabrics and the state level apex society has squandered all the resources placed at its disposal by the Government, in the process of opening expensive retail outlets in exclusive localities in a number of cities but purchasing only substandard material at high prices and then trying to sell it through such outlets. Developmental efforts have been totally neglected at the regional and at the state level.

Management

There has been a neglect of sound management practices at the primary, the regional and state levels. The primary societies
are assisted by Government to appoint good managers. While making use of financial assistance given by Government under the schemes, the societies have failed to select capable managers able to introduce sound management techniques into the working of the societies. The same is true of the apex institutions. The state level apex body, MAHATEX has ceased to function mainly, because of poor management in the past. The State Government although aware of these facts, has failed to play an effective role in inculcating sense of discipline among the institutions being financed by it. The state run Handlooms Corporation has similarly been neglected by the state government. The state government has been either disinclined or disinterested in considering such issues as are of vital importance to the health of the Corporation. There are 741 registered societies in the state. Out of which 313 societies are in Nagpur district and 112 are in Solapur district. Very few are in the rest of the district.

The entire Janata fabric produced by the societies is lifted by the regional apex societies, while the marketing of non-Janata fabrics is left almost entirely to the primaries. The primary level societies can avail themselves of a number of benefits such as the share capital contributed to them by the Government, managerial subsidy assistance for construction of worksheds, 20 percent rebate during specified periods and so on. The role of the society lies chiefly in the making available of yarn to its members and in the marketing of the fabrics.

Role of the regional apex societies and MAHATEX

There are three regional level apex handloom weaver
cooperative societies registered in the state. These are Vidarbha Weavers Central Cooperative Society (VCW), Western Maharashtra Central Weavers Cooperative Association (WEMCOTEX) and Maharashtra Kendriya Hatmag Vinkar Sahakari Sanstha Ltd. (MKHVS). The area of operation of these societies are as follows:

VCW
- Nagpur and Amravati division.

WEMCOTEX
- Bombay, Pune and Nasik division.

Maharashtra Kendriya Hatmag Sahakari Sanstha Limited.
- Aurangabad division.

The Government has so far assisted these societies with a share capital of Rs.82,316 lakhs. In addition to this, the societies have working capital limits of Rs.330.00 lakhs from the Bank and Cooperative Institutions. With these financial resources at their command the societies should have been able to organise production on at least 13700 looms, but the picture is not so bright.

The societies concentrated almost exclusively on procuring and marketing janata fabrics. It is strongly felt that the role of the apex societies need not be confined to the marketing of janata fabrics but should be that of agent of development. The apex societies should play an active role in involving financial institutions in assisting the industry. An active role is called for in the matter of designing and marketing. Collection of market information should also be one of the tasks of the apex societies.

As far as the state level apex society is concerned it presents an even sorrier picture than that of the regional apex societies. The Maharashtra State Handlooms Cooperative Federation Limited (MAHATEX) was registered on 6-1-77 with the object of
marketing the handloom products of the state on large scale, both within and outside Maharashtra. A share capital of Rs.120 lakhs was given to MAHATEX in the year 1976-77 and 1977-78. With this it should have been possible for MAHATEX to undertake marketing on a substantial scale. Out of its resources MAHATEX spent Rs.50.87 lakhs on opening retail outlets in 16 places, 5 within Maharashtra and 11 outside. No attention was, however, paid to the products that were to be developed for selling through these retail outlets. The result was that quantities of substandard fabrics were dumped on MAHATEX at higher than normal rates. MAHATEX found it impossible to sell this material at competitive prices, leave alone making any profits. Today entire activities of this apex institution are at a standstill and the institution is saddled with retail shops that are of no use to it.

Tamil Nadu

Tamil Nadu Government Committee (1973) stated that conditions of the handlooms in other states are not encouraging even though in some of the states handloom industries are said to be performing satisfactorily, for example in Tamil Nadu Handloom plays a vital role in the economy of the state. It provides employment for about 10 percent of the working population. It was the report of Santhanam Committee which after surveying the condition of Handloom Industry recommended that the weavers cooperative societies should continue to receive special assistance. The committee further suggested that they must be provided with cotton yarn, dyes and chemicals, art silk and other material at subsidised rates. To ensure regular and adequate supplies it is necessary for the Government to have at least two months stock. Further, it was recommended that Tamil Nadu Government should again approach to the RBI to have the
cash credit limit raised from 25 to 10 percent. Steps should be taken to reduce the rate of interest charged by Tamil Nadu Handloom finance and trading corporation and make the loans available to a large number of small producers. A special liaison officer for export needed to be appointed and further the weaver should be provided with all the possible welfare facilities such as housing, sanitation etc. Finally the committee recommended production of Handloom reservation and control of powerlooms. Also it has been suggested to exempt the finished product from levy of excise duty and other taxes. However compared to the handloom industry in other state handloom industry in Tamil-Nadu is a little better.

Orissa

Orissa Government Committee (1975) opined that Handloom Industry flourished in Orissa also. Patnaik (1945) said that because of the textile mills the Handloom Industry is facing several problems. They have problems in fetching yarn, problems in getting processing unit for tussar fabric for dyeing, bleaching etc. hence the facilities should be made available to the weavers. On an average the cost of handloom is more than the mill cloth and hence it is difficult to compete in the open market. Hence committee suggested that modern designs and color schemes must be introduced and finally the taxes should be reduced, proper market should be available. Even the working group on handloom New Delhi and High Power Study Team (1965) reported that in the interest of the planned growth of the handloom industry as a whole, the weavers outside the cooperative sector should also receive appropriate assistance.
Hunter (1872) pointed out the adverse effect of the Orissa salt law of the 19th century on the textile industry. Mahatab (1964) expressed that the weavers fled away from the state in the 18th century as consequence of the chaotic condition prevailing in the region due to frequent confrontation between the Moghuls and Marathas. Das (1978) dealt in broader context of the economic history of the state, he has analysed the role played by European traders in the temporary prosperity of the industry and in it’s decline. According to Jena (1978) Industry faced fierce competition from Lancashire products. The final blow came from cotton textile mill Bombay. It almost collapsed in 19th century. Mohanty and Krishan (1974) gave importance to the tie and dye Ikat Fabrics. Patnaik (1980) studied the famine and some aspects of the British Economic Policy in Orissa 1866-1905.

Andhra Pradesh

Andhra Pradesh Government Committee (1975) observed that in Andhra Pradesh Handloom Industry appears to be relatively in better condition. In order to examine the activities of Handloom cooperative organisations a committee was appointed. It was headed by Narayana Reddy. The committee observed misuse of rebate by Handloom Cooperative Institutions. Again the same problems, that is, meeting the production cost and the sale price proved to be a difficult dilemma. In the misappropriation made by the personnel in sales department the ultimate effect was on those who were producing and manufacturing Handloom products. The cost of the raw material is increasing day by day, but there is no rise in the wages the weavers
are getting and hence the committee in their review suggested that adequate financial support must be given to the weavers and they should be provided with proper housing and sanitary conditions.

**Kerala**

Kerala Government Tampi Thomas Committee (1977) observed the problems related to the credit requirements of Handloom primary societies and Apex society in Kerala. In fact in Kerala probably because of higher rate of education the payment given to the workers is relatively more than what it is observed in the other states. However regarding the loan facilities the committee noted down some important irregularities. They are mostly related to the difficulties in receiving the loans, mode of payments and the rate of interest.

From the brief accounts of Handloom Industries in different states it is clear that in most cases Handloom Industry is in dilapidated condition. In all these the worst sufferer is the weaver and his or her family members who receive negligible amount for tedious and time consuming job. In general it is observed that like all the trades in the Handloom Industry also the middle organisations or middlemen is the most benefitted class. It is hereby suggested that wages to the weavers should be paid in proportion to the working hours and of course according to the skill. It is necessary to protect the weavers having one or few handlooms or pitlooms.

**2.6 Organisational Structure of Handloom Industry**

According to Dudeja (1981), organisation may be defined as the process of defining, identifying and grouping the job to be done, defining the role which each member of an enterprise is expected
to play effectively in cooperation and coordination with the other member in accomplishing objectives in a team spirit.

Handloom should be modernised and constituted into viable units so that they may contribute both to the domestic and export capabilities.

About the organisation of Handloom industry Nanekar (1969) opined that despite the recent growth of cooperatives the independent weaver system continues to dominate the Handloom Industry. A survey of Nagpur, Bhandara, Chandrapur and Burhanpur revealed that the weavers working on an independent basis, were approximately 80 per cent. In this system the cottage employer who is a weaver himself employs labour on some of the looms owned by him. Next to the independent weaver system there is master weaver. In this type of organisation the master weaver supplies the weavers with raw materials and takes back the woven cloth at pre-agreed rates of wages. The weavers work on their own looms in their own houses, the master weaver takes the risk of business.

The third type of organisation is Karkhana or factory system. Here Karkhana owner has his own looms and employees weavers on a piece wage basis. These Karkhanas have their own arrangements for work. Apart from these three organisation fourth one is cooperative system. Except for a few exceptions Handloom Industry deserves a sympathetic treatment from both the public and the Government.

Structure of Hand weaving industry

It shows various complexities resulting largely from the
series which it has undergone during the many centuries of its existence. It began as a cottage industry and even today it is a cottage industry. It is because of the peculiar social organization of the classes of the hereditary workers who have been pursuing this industry from the time immemorial.

In fact hand weaving is considered as one of the subsidiary occupations open to agriculturist but it is not a job that can be done during leisure time. In other words it is a full time occupation, except in Assam, in all the other parts such as Sindh, Bombay, Madras, Punjab United provinces and Bengal it is a full time job. Similarly in Mysore, Hyderabad and Kolhapur full time workers are engaged in it. In Assam weaving is mainly associated with women and it is a part of their culture. All the women know weaving which they do during leisure time.

Complete culture of India is based on caste system. In other words what is called as Indian culture is caste specific and it cannot exist without the hierarchy of caste. The weaving caste or communities are called by different names in different parts of the country. The popularly known are Salis, Devanagas, Koshtis Khatris and Tantis. They all are Hindus. Julahas, and Moomins are the Muslims. There are others also such as Padmsalis who are spread in most part of the country. When the hand weaving industry came into severe competition its prospects were affected. As a result large number of weavers gave up their hereditary profession to join other occupations but some others entered into it. It is a result of the demand for certain handwoven cloth in some parts of the country. The new
entrants were found largely in Madras and Bengal because here handloom weaving is still giving at least marginal profit. The entry of outsiders has affected in many ways. The one being extreme competition and secondly specialisation crept in. It is going on especially in Southern India.

Handloom Industry also could be compared on the basis of its location such as urban or rural. In urban centres profit of the weaver is relatively more whereas in rural centres the gain is meagre. Moreover, in most rural centres the economy is largely controlled by Barter, where yarn is bartered for cloth. As a result of which the weaver found himself helpless in his village without credit from a financier but since the other opportunities were available in urban centres the weavers population reduced.

Handloom Industry has urbanised gradually in the urban centres, for example in Bombay (State) 45 percent of the total number of looms are found in 26 urban centres, secondly the urban centres obtained for mechanisation and in place of Handlooms Powerlooms were introduced. All this has led to complication of the structure of Handloom Industry. With the Introduction of powerlooms the number of workers increased. Also there was an increase of production and margin of profit was more. In recent times the weavers started forming their organisation and associations. Some of the organisations the decline of Hand spinning took place and dependance on mill yarn increased. The development of communications and the dependence on imported yarn effected the drastic change in the hand-weaving industry.
Perceiving the large production and profit of margin different types of middlemen entered in this profession. First there are Sawcar which are called master weaver. He employs under him weavers mostly of his own caste. Secondly there are the merchants of yarn or of cloth. Some are the merchants of both. Thirdly there are the Karkhandars who bring the weavers together into small factories or workshops. All these lead to more profit to the middlemen and for the weaver meagre wage. Some of salary is retained. The payment of advances is not for the convenience of weavers but it is for the advantage of the middlemen. Since there are many weavers the poor weaver is at the Mahajan’s mercy.

In some places the weavers have their societies and they are working in the organised sector but in the absence of coordination between demand and supply the weavers fail to get full time job even in the organised organisations. In the more elaborate business of specialized hand-weaving centres there were a chain of middlemen in trade. e.g. in Solapur there are Karkhandars and three different kinds of middlemen who intervene between wholesale dealer and weaver. Similar is the case with Banaras Sarees. The complexities in the business of handloom cloth have brought about a hierarchy of middlemen in most of the centres. (Fact finding committee, 1942)

Organisational structure of Handloom Cooperatives

Deshmukh (1978) opined, cooperative form of organisation is the most suitable for handloom industry where small weavers could be organised and they could be provided with majority of services required by them and their exploitation from other agencies could be avoided, or at least minimised. Supply of finance, raw material and
marketing of finished products could be taken care of by cooperatives.

However, amongst different types of cooperatives, weavers cooperative is perhaps one of the weakest type of cooperatives in the country as a whole. In the country there are certain areas wherein handloom industry is well developed and in such areas there are a few examples of successful handloom weavers cooperatives.

Present structure

The structure of handloom cooperative as it exists today as on 30th June 1975, in the country consists of:

- National level society (1)
- State level cooperatives (24)
- Central/Regional level cooperatives (94)
- Primary cooperatives (12,508)

Out of the 12,508 societies majority of them are in the states like Uttar Pradesh, Assam, Bihar, Maharashtra and West Bengal. The number of societies in other states is very nominal.

Out of the 94 central societies as many as 63 are dormant, while out of 12,508 primaries 6,296 societies are dormant. Their percentage to the total number of societies is 66 and 50 respectively.

Total number of individual members of primary societies is 7,51,121. While considering 10 million people are engaged in weavers industry, this percentage is less than 7.5 percent of the people employed in the sector. Even out of this total individual members as many as 3,50,965 come from dormant societies. This number
is only half of the total membership. This means that out of the 100 persons employed in the handloom industry only three persons have been brought under active cooperatives. This speaks for the weakness of cooperatives so far as membership coverage is concerned.

If we look to the paid up share capital position of these societies, we would find that Government contribution made either directly or indirectly is much higher at the National, State and Central level while it is much less at the primary level. This can be seen from the following table:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Level of societies</th>
<th>Total paid up share capital</th>
<th>Of which Government (direct or indirect.)</th>
<th>Percentage to paid up share capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>National level</td>
<td>27.86</td>
<td>16.96</td>
<td>61 %</td>
</tr>
<tr>
<td>02.</td>
<td>State level</td>
<td>346</td>
<td>242</td>
<td>70 %</td>
</tr>
<tr>
<td>03.</td>
<td>Central level</td>
<td>126</td>
<td>76.6</td>
<td>61 %</td>
</tr>
<tr>
<td>04.</td>
<td>Primary level</td>
<td>1,328</td>
<td>298</td>
<td>22 %</td>
</tr>
</tbody>
</table>

The purpose of giving these figures is to show that the government share capital at primary level is very low. This may be one of the reasons for their weakness. This is an All India position. This picture may be still worst in some of the states.

The financial position of the State Level Handloom Cooperatives as shown in the RBI report in 1974-75 indicates that only Andhra Pradesh, Jammu & Kashmir, Haryana, Maharashtra, Tamil Nadu and Pondicherry show that their assets are more than the liabilities while in case of other states their liabilities are more than their assets.
In case of the Central Societies only four States show more assets than liabilities while in other States the position is just the reverse. There are 29 states and Union Territories in which primary handloom cooperatives function. Out of 29 States/Union Territories only in 11 States/Union Territories the primaries have their assets more than the liabilities. This shows that the financial position of majority of the State level, Central level and Primary level societies is very unsatisfactory.

Out of the total number of 12,508 primaries only 5,928 societies undertake production activities while only 1,146 societies undertake the activity of supply of raw material and sale of the finished products and provide other services to their members. Total number of members covered under this head is only one lakh. This also helps to show a sorry state of affairs of handloom Cooperatives in India. Statistical information in the other spheres of activity do not indicate better position anyway.

If the above information is carefully analysed it can be seen that the membership coverage of handloom cooperatives is much less as compared to the total persons involved in the handloom industry, the financial position of most of the handloom cooperatives is not satisfactory and the Government assistance in the form of share capital particularly at the primary level is much less than what could be desired. The majority of the primary societies are not undertaking the production activity which indicates that the purpose for which they have been organised is totally defeated. Besides the supply of
finance the primary cooperatives are supposed to undertake the supply of raw material and other services and also undertake the marketing of finished products.

Reasons for the Weak structure

Reasons for weakness of handloom cooperatives could be grouped into following important heads:

1) Weak capital base.
2) Low coverage of membership.
3) Failure to undertake essential activities such as supply and provision of other services and sale of finished product.

It has been argued from time to time that the cooperatives are only suitable organisations which could help the weavers meet their requirements. If cooperatives are properly organised and assisted they could help the weavers to come out of the clutches of other agencies which exploit them and could give him reasonable returns for his work.

To develop a strong cooperative infra-structure systematic efforts are necessary. These efforts could be in the direction of reorganisation and rehabilitation of the weak primary cooperative societies; providing necessary capital base to the primaries by direct share capital contribution by the Government in the ratio of 1:3 as is done in the case of other industrial cooperatives and also provide medium term loan facility to the primary to purchase share capital of primaries. Evolving systems, where under the capital structure of handloom cooperative could be further
strengthened. Strengthening the relations between the handloom cooperatives functioning at different levels by evolving proper policies and procedures and by assigning to them specific programmes. Making available to the handloom cooperatives on priority basis and in certain cases on monopoly basis the agencies for supply of raw materials. Making available to the handloom cooperatives at all levels adequate finance at a concessional rate of interest. Strengthening the marketing facilities for handloom product.

Before such a programme is implemented it would be useful if detailed study is conducted about the present position of handloom cooperatives on the basis of sample survey, finding out the reasons for their failure and trying to note the views.

Labourers and Employers Organisations.

The weavers working as labourers have organised themselves into unions for securing their common interest. In some of the Karkhana centres, this organisation has been utilised for negotiating higher wages. Such unions are seen in Solapur, Manglore and other places. Similarly there are unions of the employers also, for example Yarn Merchants Association, Hand Cloth Merchants Association and Commission Agents Association. However, very few Associations are doing useful work. For instance the Handloom Merchants Association has fixed the rate of commission to be charged to agents and the period of credit to be allowed to them. This organisation has a healthy influence on prices and on marketing as a whole.

Thus the handloom industry at one end contains
independent handicraftsmen struggling for earning their bread in some freedom. At the other end there are the weavers working on different kinds of contract for the industrialist. All this has changed the structure of the industry and it has put down the socio-economic status of the individual weaver. (Fact Finding Committee, 1942).

2.7 Techniques in Handloom Industry

In 1942 a fact finding committee was established. The committee has given impetus to the problems of technical guidance. In this technique the first factor is the weaver who needs technical know-how specially to use improved appliances. So that the quality of the cloth is improved. It is necessary to widen the outlook of the weavers with regard to the new structure of fabrics.

The second factor in the technique is training given by experts. For this purpose trainees with good general education need to be selected and training must be extended to them in all branches of the industry. Training must include buying and selling of raw material as well as the finished goods. In the textile institutions most attention is paid to the structural side of the fabric. But it is now necessary to provide adequate training of selling and purchasing or in other words the weavers must be provided with the techniques of business.

As suggested by Indian Textile Journal 1981, for boosting cottage industries such as the Handloom and Khadi sectors four aspects must be taken into consideration as important functions of techniques because these four factors are responsible for low loom efficiency.
These four factors are:

Those arising from warp breaks, Piri changes etc. which cannot be reduced below a certain level.

Those which are peculiar to handloom such as adjusting and positioning of the warp shed, frequent doffing and dressing of the fabric etc. which can be minimised by improved methods of operation and equipment.

Those due to time spent for fetching yarn, preparation of warp, delivering of cloth etc. which can be reduced by better organisation and control.

There are no means of testing the quality of yarn produced by the handloom weavers.

Narsinham and Bose 1981 after carrying out an extensive survey reported that the availability of yarn is a major problem faced by the handloom industry. Secondly there is a need of improved efficient looms. The further necessary techniques are dyeing, printing and designing. In addition to these it is absolutely essential to have modern processing houses catering to the needs of weavers.

One of the biggest problem is that of marketing. This area needs special attention where market intelligence, feedback is necessary. Due to the lack of feedback the materials produced became obsolete and thus caused losses. Finally in technical know-how importance is given to training and educating the handloom weavers.
Rangrajan (1990) after carrying out time and motion study had given a valuable suggestion for modifications, increasing production and wage, improving the designing capacity of loom, improving quality of cloth and reducing the fatigue of weavers.

According to Indian Textile Journal (1990) every effort should be made to modify the machines or processes in handlooms with a view to lessening the strain on the operatives, increase productivity and enhance quality of the products, thereby increasing the wage-earning capacity of the weaver.

The position being so, the aims and objects for the utilisation of improved tools, appliances, equipments and accessories should be:

To increase production of cloth and wage-earning capacity of the weavers;
To improve designing capacity of loom;
To improve quality of cloth; and
To reduce fatigue on the weaver.

The above could be accomplished by the use of the following improved gadgets, appliances and accessories:

To increase production and wage.

Flyshuttle sleys and in broad width.
Semi-automatic looms.
Take-up motion attachments.
Double and multiple shuttle box sleys.
Let-off motions.
Roller temples and
Special attachment for weaving long bolts of cloth.

To improve the designing capacity of loom.

Dobbies.
Jacquards.

Drawbox harnesses to work in conjunction with jacquards to increase figuring capacity.
Better reeds.
Better healds and Shuttles.

To improve quality of cloth.

Ments.
Let-off motion.
Roller temples.
Improved methods of sizing and processing.
Improved fly-shuttle sleys.
Better reeds and
Better healds.

To reduce the fatigue on weavers.

Dobbies.
Jacquards.
Take-up motion attachments.
Let-off motion.
Better healds.
Better reeds.
Shuttles and
Pirns.

According to Technol Organ Poozrod (1986) and Modif
Swister Drev. Mater (1983) the use of plastic material can even be extended to the modification of the conventional materials e.g., the hardness and shear of the polystyrene modified wood is much higher than of untreated benchwood thus finding use in spools, picking sticks, and loom shuttles. It is suggested by Collog. Appl. Babr. Technol Plastics and Romanian Patent in the use of polyamide coating helps to prevent wear and decrease the friction in machine parts. Polycaprolactum has been widely used as a replacement for shuttles, gears and bushes. Japan Kokai suggested that fibre reinforced resins give increased resistance to wear. The metal polymer-bound machinery parts like bearings are very useful in textile machinery either without lubrication at low loads or with lubrication under heavy loads. Mater and Ludailgshafen (1973) opined that metal reinforced polyformaldehyde, polyamides and polycapromide possess lower friction co-efficients, excellent corrosion-resistance but relatively low heat resistance as compared to metals.

Melet and Sandner (1974) opined that Technol and Romanian patent suggested that one of the apparent drawbacks of plastic is about their performance at high temperatures but polycaprolactam (Nylon 6) have been shown to have the same properties even at 150 °C. to 160 °C. as those at room temperature Eswar (1973) opined that thermoplastic like polyalkylene terephathate have considerably replaced hitherto-used thermosts in warp yarn guides, can dies, ring twister, guide roller, yarn guide roller etc.

A detailed technical study of handlooms has identified many areas which offers scope for increased productivity. In case of warp preparation in which the hank yarns are first wound on dabbas by
using Rattai, the production rate is low, being only 1 to 2 kg. per operative per shift. This operation could be improved by attaching a chain drive to obtain 50 to 100 percent extra production. Similarly, in coarse counts where the hank yarn is wound on to bobbins, adoption of dabba in place of bobbins would yield substantial improvements in productivity. Further, use of dubba winding practice enable the productivity of winder to be increased three fold as compared to conventional rattai.

The improved horizontal type of warping would give four fold increase in production rate in coarse counts. Longer tape lengths of 100 metres for pit looms and of over 300 metres for frame looms will not only help to improve the loom productivity but will also cut down waste.

The overall loom efficiency is found to be extremely low for handlooms being around 30 percent in majority of the sorts. Adoption of modified let-off and take-up and use of roller temples and better healds are some of the measures which will help to reduce the loom stoppages and improve the loom efficiencies by better organisation and control. The loss in loom utilisation of about 15 to 20 percent which are attributable to causes such as fetching yarn, preparing warps delivering cloth etc. can be minimised. Changing over to beam warps on pit looms will be beneficial. In as much as the efficiency will be improved by 5 to 8 percent since the weaver need not unroll ball warp and separate entanglements at frequent intervals. Provision of extra empty beam, installation of drop box looms for checks of two different colors. Use of varnish healds and steel reeds are the other
measures which should help to improve the loom productivity.

The Committee were informed that the Government of India had been providing financial assistance to the State Governments for carrying out technical improvements in the handloom industry. These improvements are designed to increase the productivity of the handlooms, to better the quality of the product, to bring down the cost of production and to reduce the strain on human labour.

The Working Group (Study Team) for the Handloom Industry (1959) suggested that appliances were supplied to societies which had no use for them and not to those which required them. The Committee were also informed by a representative of the handloom industry during evidence that some of the semi-automatic pedal looms given to the primary weavers' societies by the State Cooperative Societies were lying unused. He was of the view that practical demonstration of the improved designs of the appliances should be arranged with a view to popularising them among weavers and that research should be carried out to improve the pick-up motion so that weavers could weave the fabrics evenly. The Committee would like to stress the need for standardising the appliances for handlooms and ensuring their further technical improvement by sponsoring suitable research schemes. They suggest that practical demonstrations of the improved designs may be extensively arranged so that weavers become familiar with them and show greater readiness and enthusiasm to adopt them.

2.8 Economics of the Handloom Industry.

Economics of Handloom Karkhanas need special attention for two reasons. No steam or electric power is employed in these
factories hence the economy deals with labour and the raw material only. In order to lower down the cost of production the raw material can be purchased in bulk. It helps in reducing the overhead charges per unit. Even without the use of machinery some division of labour is possible. Specially when the production is on a fairly large scale it could be divided into three stages the preparation, weaving and finishing. In this way the wastes can be avoided in factories. However there are serious limitations to the economics available in the Handloom Industry. For example the owner invests money for purchasing raw material, also he invests money for working capital. But when costly raw material is used such as gold thread or silk then it is necessary to appoint supervisor, which increases the cost of the production. Similarly there are wide diversions in the working conditions, as a result the output is not homogeneous. Secondly the position of the entrepreneurs is not secured because marketing of Handloom is not an easy job. There are several draw-backs with the type of weavers also, and hence it is difficult to speak about a specific economy of Handloom. For example the independent weavers form a different economy. Most of these purchase yarn on credit from the Mahajan but they are not bound to sell the cloth to the Mahajan. Secondly there are contract workers they weave the cloth in their own house with their own tools but they work for the Sawar cloth worker and they get a fixed earning out of it.

The third kind of worker is called as a out worker. These are the weavers who work with raw material provided by the middlemen for a fixed piece wage. Part of it is given as an advance. The Fourth kind of worker is known as a wage worker. These are the
weavers who merely contribute their labour and possess no capital of their own. They are just like factory labourer’s in status. Because of these diversities it is not possible to speak about a perfect economy of Handloom. All this had led to the indebtedness of the Handloom weavers. (*Report on fact finding committee 1942 *)

Handloom weavers are unable to secure two square meals a day even after working for 10 to 12 hours. It is a cottage industry, a family occupation in which all members of the family including small children, old men and women too are involved. (*Deshmukh, 1978*)

Where there was some employment the weaver was getting only a pittance. Messers W.A. Boardsell & Co. Ltd., a Madras firm which has long experience of the export trade in handloom cloth wrote in 1935 in their memorandum to the Tarrif Board, The cumulative effect of various factors operating against the handloom weaver is that today he is in a most precarious position. There is no continuity of work. He has to change from weaving of sarees to the weaving of exportable articles. But however hard he may try he can never get more than a starvation wage under the present conditions. Every little cut in the duty should certainly help him, try making him more competitive not only in internal markets, but in those outside countries, where his goods are marketable. Every discouragement and setback means greater unemployment and the loss of this country in the disappearance of an ancient handicraft will be fraught with considerable misery.

In spite of the decline in some areas, in India as a whole handloom production has been maintained and that on balance the decline is not great. We have to remember in this connection the
production is not a safe criterion in the case of an industry like handweaving pursued hereditarily by certain classes or castes. A mill will close down if it does not earn a profit but a handloom will go on working even if it brings no profit because the weavers depend on it helplessly for their livelihood. It is even said that the weaver works longer and produces more where wages go down in order that he might make up by quantity what he loses in price per piece. The increased use of fly-shuttle sleys had also a great influence on output. Since the handloom weaver cannot regulate his production according to the state of the market without risking starvation for himself and his family the true criterion for judging the position of the handloom industry is not the proportion of the quantity of the cloth woven on handlooms to the total production but the wages earned.

Thus far, his position on the evidence we have received must be regarded with some concern.

Tarrif Board of 1932 stated that "The severe Trade depression has been accentuated by the relative increase in the cost of yarn on account of the protective duty. Thus the position of the handloom weavers in comparison with the mill industry has considerably deteriorated since 1927." This view of the tarrif board is amply supported by the contemporary evidence. Bitter complaints from various handloom weavers' organisations regarding the yarn duty and mill competition were made to the tarrif board. The Bombay Province was perhaps the worst hit in this respect. Even in centres like Belgaum where specialised cloth was produced, the wages declined, but in centres where ordinary cloth were produced and in the case of cloth which came under mill competition, the fall was more rapid and drastic.
Affected centres are Dhulia and Malegaon. In centres like Sholapur where although the cloth produced had to face competition, the wages did not fall so steeply because the weavers were organised. A large number of the hand weavers there took to beedi-making for livelihood and this has since been their mainstay. The demand for Ilkal sarees also fell down drastically and the once flourishing centre of Ilkal experienced a severe depression. The decline of the hand weaving industry in Baroda was phenomenal. Of the 10,000 looms which were foremerly at work, more than 5000 were discarded.

Things were not much better in other parts of India. In 1900 Burhanpur (C.P.) had about 10,000 looms making turban cloth and silk bordered sarees, which found a ready market in the States of Central India, but after 1921 both these industries declined, causing serious unemployment not only among weavers but also in the numerous subsidiary trades like jari work, and dyeing. The weavers of Hyderabad were greatly affected by loss of markets and they migrated to mill centres and other areas in the Bombay province. The well-known centres in Madras were also affected. Before 1920, Madura produced high class dhotis and dupattas chiefly. The demand for this fell rapidly after the Khaddar Movement started and a large number of weavers who previously had been earning from Rs.1-8-0 to 10 Annas daily lost their employment. It is true that Madura weavers had the energy and enterprise to change the line of production but this involved some dislocation and distress for some years. Salem also passed through severe unemployment, because of the falling demand of the Gundanohu dhotis, a former speciality of Salem, and the dumping of Japanese artsilk goods. The well-known Karnad sarees suffered the
same fate as the Madura dhotis, and the turban cloth weavers of Dindigal and Aruppukottai found their whole trade gone by freakish change of fashion. Two the principal centres in Bengal, Dacca and Satipur were in doldrums as a result of the ban on foreign yarn and in both places large number of hand weavers seemed to have given up the trade and taken to agriculture. Wages in Santipur used to be Rs.1-8-0 daily but fell to between 8 and 12 Anna’s by 1930 and to 4 Anna’s since.

In most of the above mentioned centres, the bulk of the towns’ population depended on handloom weaving and when it declined the prosperity of whole town vanished. A visit to celebrated weaving centres like Burhanpur, Dacca, Dholka, Kanjeevaram and Shantipur, shows how seriously this has affected the urban population as a whole. Centres like Solapur, Poona, Gokak and Baroda have not suffered so severely in spite of a decline in hand-weaving because mills or other industries came to their rescue.

Thus, in the early thirties the condition of the handloom industry reached a pitiable stage. Unemployment was rife in most important centres, and even where there was some employment the weaver was getting only a pittance. (Fact Finding Committee, 1942).

The weavers earning capacity.

According to note on working of handloom industry in Maharashtra State it has been the general experience of the state that the younger generation of people from the weavers communities preferred to look for their livelihood elsewhere. The profession has not been able to provide the weavers either with regular and sufficient work or with adequate returns for their labour.
In Maharashtra State Handloom Corporation Ltd., Nagpur, the wages are being paid to the weavers covered under production programme as per the price rate fixed for different sorts by the corporation. The earning of the weavers working in the cottages ranges from Rs.250 to Rs.300 per month. The average earning of the dyer is about Rs.500 to Rs.600 per month. The corporation is paying ex-gratia @8.33% since 1978-79 to the weavers falling under its production activities.

According to Deshmukh (1978) a long list of reasons for the poverty of weaver could be prepared consisting of: (1) Stiff competition with an organised sector - Textile Industry, (2) existence of master weavers who exploit the poor weavers, (3) non-availability of adequate finance on time and at reasonable rate of interest (4) non-availability of yarn, dyes, chemicals, etc., in adequate quantities and also at reasonable prices, (5) absence of proper marketing facilities, (6) inadequacy of facilities providing for development of new techniques, skills, designs and inadequate arrangements to propagate the developments that take place, (7) failure to build up well integrated institutional structure on cooperative basis.

2.9 Schemes for Handloom Weavers.

More than 10 million people are engaged in handloom industry and export earning of the country. The Government, therefore is deeply committed to the promotion, development, and protection of this sector. According the investigations of Interministerial Committee. The Government has chalked out many schemes with a massive
investment of Rs.1321.20 crores 'a package programme' handloom sector for the first time is taken up as a part of the rural development strategy. It consists of four main schemes.

Coverage of loomless weavers under IRDP. SC, ST Handloom weavers under Jawahar Rozgar Yojana Scheme (JRY Scheme) Rs.682.05 crores.

Training handloom weavers under TRYSEM. Training Rural Youth Centres for weavers with Jawahar Rozgar Yojana assistance within 3 years of Rs.9.85 crores. A sum of Rs.523.20 crores is allotted for providing looms, work sheds and working capitals for loomless weavers. For SC ST weavers Rs.1.32 crore allotted for housing 1.2 lakh housing workers.

Rs.17 crores are allotted to cover 1000 centres for serving 250 weavers with common facilities under JRY Schemes.

Hank Yarn obligation Scheme (Rs.639.15 crores). Under this scheme 3000 handloom development centres would be set up in four years all over India. 500 quality dyeing centres will be set up. In this scheme there in assured availability of yarn and 100 percent buy back production facility.

As per the Inter-ministerial Committee recommendations:

1) Spinning mills were required to produce 50 percent of their total marketable yarn output as hand yarn to be used by handloom and not less 80 percent of the above should be in 40's count or below.

2) Spinning mills should supply yarns at reasonable and steady price to handlooms (as per textile policy, 1985). Decentralised Training of Weavers Scheme launched in 1987 helps in
transfer of technology for improvement in all aspects of processing of handloom goods. Market Development Assistance Scheme intends to provide help to handloom corporation and cooperative societies for interest subsidies, rebate in products, setting up show rooms.

The most important measure taken up by the Government in persuance of textile policy (1985) is the Handloom Reservation Act (1985). According to the above, protection to handlooms is given by reserving 22 items exclusively for handloom production and this has come into effect from March 93 onwards. (Government order of March 11, 1986).

Increased credit flow is attempted to be made available by the Government to handloom sector to solve their problems of handloom cooperatives and handloom weavers through NABARD and SIDCO (Raji, 1993)

The major proposal was to declare 1986-87 'The year of handlooms'. Some other proposals to be implemented include the formulation of a scheme for decentralised training of weavers, setting up handloom marketing complexes, special projects for the development of handlooms in hill areas and organising national publicity campaign to promote handlooms.

The Janata cloth production target for handlooms would be raised from 420 million square metres in 1985-86 to 500 million square metres in 1986-87.

A pilot scheme for training of weavers in the production of mixed and blended fabrics had already been launched in
collaboration with Petrofils. Training campus 17 in all, would be organised in Assam, Gujrat, Madhya Pradesh, Rajasthan and West Bengal during the current year so that they will become familiar with blends in general.

A scheme with 100 percent Central assistance for the development of weavers belonging to the minorities had been approved. About Rs.120 lakhs had been released to Assam, Gujrat, Jammu and Kashmir, Maharashtra, Tamil Nadu and Uttar Pradesh for renovation and purchase of looms and for streamlining market support (Indian Textile Journal 1985).

The Textile Ministry has decided to supply an additional 20 million Kg. of yarn at mill rate prices to weavers, over and above, the present level per annum, through the National Handloom Development Corporation. One lakh weavers living below the poverty line would be provided a package including coverage, under the cooperatives with an enhanced capital base. About 30,000 looms would be covered under the modernisation programme and an equal number would be provided accessories.

The Janata cloth scheme is to be gradually phased out and an alternative scheme of assistance is to be made available for handloom units for production of Non-Janata cloth. (Textile Dyer and Printer 1993).

Gawande and Adhau (1990) observed that Maharashtra State Handloom Corporation workers are entitled to get the below given benefits.
Maharashtra Government have fixed the minimum wages for the weavers and issued a notification in the year 1983. The corporation is at present paying the wages more than that mentioned in the notification of minimum wage Act.

Corporation workers are being paid the ex-gratia of Rs.8.33 percent as a bonus of their annual income at the time of Diwali and weavers are paid emergency and festival advance of Rs.200/- once in a year. The advance paid is recovered as Rs.1 per piece from the wages being paid to them.

Employees State Insurance Scheme gives five types of benefits i.e. sickness, maternity, disablement, dependents and medical benefits. In Employees Thrift Fund Scheme 6 Paise per Rupee is deducted from the wage earning of workers and the same amount is contributed by the Government, which is deposited in banks.

Schemes of Maharashtra Government.

Award of prizes to the best designs of handloom fabrics scheme, 1972 awarded 42 prizes at district level and state level competition to encourage the handloom weavers and popularise handloom products amongst the consumers.

Government contribution to thrift fund for weavers and cooperative and corporate sector (1972-73) deducted 5 paise per rupee from the wages of the weavers of cooperative societies and working under handloom corporation for the thrift fund. The Government also sanctions the same amount which is then deposited in the bank as a contribution towards thrift fund, in the name of individual weaver.
Financial Assistance to weavers members of societies for purchase of tools and equipments (1972, Revised 1984-85) is given to members of primary weavers cooperative societies at the rate of Rs. 400 per loom of which 25 percent is loan and 75 percent is subsidy.

Loan to weavers for purchase share of weavers cooperative societies Centrally Sponsored Scheme on 50:50 basis by State and Centre (1972) enable the members of weavers cooperative societies to purchase shares of Rs. 200 for becoming a member of primary weavers society. A member has to pay Rs. 20 and remaining Rs. 180 are sanctioned to him by way of loan by Government.

Share Capital to the Primary Weavers Cooperative Societies (1971-72) is contributed by state and central Government in the ratio of 50:50. Share capital of the primary societies in the ratio of 1:2 to assist in securing adequate credit facility from the cooperative banks. The share capital is sanctioned to the new primary societies in the ratio of 1:2.

Twenty percent rebate on the sale of handloom cloth (Partially Centrally Sponsored 1976-77) is given to those handloom societies which produced handloom cloth for sale in the particular period of rebate or in the period of exhibition declared by Government only. The rebate is given 20 percent of the sale value of handloom cloth, 50 percent of the rebate is borne by Central Government and State Government.

Publicity and Propaganda Scheme (1972) envisages publicity like conducting district level exhibition, publication of
posters, cinema, pamphlets and participation in various exhibitions.

Subsidy for production and sale of janata cloth (100 percent centrally sponsored in 1976).

The Maharashtra State Handloom Corporation, Vidarbha Central Weavers Society and Western Maharashtra Central Weavers Society have been declared as main production and marketing agencies of Janata cloth. The Development Commissioner, handloom has prescribed the rate of Rs.2.00 per square metre for giving subsidy of Janata cloth. The entire amount is given by Central Government as subsidy to state Government to the concerned institutions.

Share capital contribution to Maharashtra State Handloom Corporation (Partially Centrally Sponsored 1976-77) to undertake various activities to facilitate the corporation like design centres, intensive development programme, processing facilities. The Central and State Government give share capital on 50:50 basis. Central Government gives an amount as loan to State Government, and State Government then passes it to Corporation in shape of share capital.

Share capital to Apex Regional, Primary Handloom Weavers Societies under 100 percent National Cooperative Development Corporation Sponsored Scheme (1980-81).

Under this scheme the assistance is given as (a) Subsidy for workshop Rs.2000 per weaver, (b) Subsidy for workshop Rs.3000 per weaver. This subsidy is to be borne by state and central Government on 50:50 basis, (c) Subsidy for land Rs.5000 to the weaver, to be paid after completion of the house. The subsidy is to be borne by state.
Government only.

**Strengthening Marketing.**

Under the new Textile arrangements, marketing would further be strengthened. The NHDC would open marketing complexes in metropolitan cities. These complexes would go a long way in popularising handloom products of all the states at one place. Besides this, we are also considering a scheme for assisting state Government institutions in opening retail outlets in rural parts of the country.

Under the new Textile Policy, the entire production of controlled cloth shall be transferred to the handloom sector by the end of the 7th Plan. This is an important decision in favour of handlooms. This shift would provide continuous employment to a large number of weavers who do not possess high skill required for the production of value added items but at the same time are thrown out of job in absence of adequate demand for their product. In fact, it is estimated that at present about 6 million looms out of 30 million are dormant. These looms could be profitably used for production of Janata cloth. However, areas known for exclusive handloom products like Chanderi, Kancheepuram etc., could be kept outside the purview of implementation of Janata cloth scheme. (Mishra S., 1985).

It may be revealed that Chemicals and Fibres of India (CAFI) had made sustained efforts to popularise the use of polyester staple fibre among those connected with the khadi and village industries. The company also volunteered to give its expert service to the handloom sector. A few organisations connected with handloom
like "Co-optex" and "Apco" had enjoyed the technical expertise from CAFI.

The recommendations were also made by CAFI as to the construction particulars for making sarees, shirtings and dress materials towards the production of high value fabrics.

It had already been decided by the Government that the rebate period which had earlier been reduced from 45 days to 30 days, in 1986-87 had been restored to 45 days. A specific representation from Government of Tamil Nadu added that the centre was now allowing rebate on handloom products in three National expo, of one month duration each, making it 90 days in a year.

National Handloom Development Corporation (NHDC) was taking steps to ensure timely supplies of yarn and other inputs at reasonable prices. Its sales turnover in the second year of operation was nearly Rs.7 crores.

In 1986-87 a special thrust had been given to modernise handlooms. For this, a target of 30000 looms had been fixed and a budget provision made for Rs.1.75 crores. (Indian Journal of Textiles, 1986)

Integrated handloom village development

It is a centrally sponsored scheme being implemented since 1991-92. It envisages adoption of villages known for excellence in craftsmanship in weaving but lacking in the required infrastructure.
The scheme covers activities like training of weavers and project managers, modernisation of looms, setting up of common facilities centres, construction of house-cum-worksheds, roads, schools, shops and community halls, provision of drinking water supply, setting up of auxiliary, nurse, mid-wives centres and artificial insemination centres, and village electrification.

Supply of looms and working capital to the weavers is also arranged under this scheme. A provision of Rs. 25 lakhs is made for the development.

The estimated total cost of a rural workshed-cum-house is Rs. 20,000 and of an urban workshed-cum-house Rs. 30,000. A central subsidy of Rs. 14,000 is made available for both.

A thrift fund scheme was introduced in the Seventh Plan for creation of a fund in the name of provident fund. The weavers are required to contribute eight percent of their wage to the fund, and both the central and state Governments contribute five percent each.

The group insurance scheme has been introduced from 1992-93 to provide insurance cover of Rs. 10,000 to each weaver for an annual premium of Rs. 120, one-third of which would be paid by the weaver and the remaining two-thirds shared equally between the central and state Governments. Thus, the weaver gets an insurance cover of Rs. 10,000 on payment of an annual premium of only Rs. 40.

The health package scheme introduced in 1992-93 is designed to provide financial assistance to weavers for treatment, particularly of weaving related diseases like asthma, TB,
inflammation of alimentary system, etc. and also for testing of eyes and spectacles.

The scheme covers infrastructural facilities like supply of drinking water, maternity benefits to women weavers, additional compensation for permanent measures of family planning and creation of infrastructure for primary health care.

The silk yarn bank scheme is a Centrally-sponsored one introduced in the Eighth Plan period to ensure availability of quality silk yarn to handloom weavers at stable prices. The scheme is operated by the State Handloom Development Corporations, Apex Cooperatives and the National Handloom Development Corporation. The Centre provides equity support to these organisations for operating the scheme. These agencies procure and stock silk yarn and build up a buffer stock for releasing yarn in the open market during times of shortages.

Common facilities centres.

A scheme for setting up 1,000 common facilities centres over the next years is also being implemented with financial assistance under IRDP and JRY. While the funds for the cost of equipment would be provided from IRDP, the labour component of the cost of construction of the building would be met by JRY. (Textile Magazine, 1993).

New handlooms strategy.

This is a central plan scheme designed to take care of the basic problems faced by the weavers in coordinated manner. An ensured supply of yarn, reliable marketing channel and inputs to gain
the qualitative edge hold the key to coordinated development of the handloom sector. To tackle all these crucial components in an integrated and comprehensive manner Government has drawn up the biggest ever scheme with an outlay of Rs. 849.15 crore.

Under the scheme 3000 handloom development centres (HDCs) and 500 quality dyeing units (QDUs) would be set up throughout the country over a period of four years. This would benefit one third of the weavers population in the country.

In the current year, 120 HDCs and 20 QDUs would be set up whereas 960 HDCs and 160 QDUs each would be set up in the subsequent three years. The programme is an addition to the Rs.682 crore scheme announced earlier under various rural development projects.

The present scheme emphasises the production facilities at the village and primary society levels and encourages the weavers to come into the cooperative fold. It is expected to increase the existing coverage of about 20 percent to more than 50 percent. This will give a tremendous boost to the cooperative movement in the handloom sector.

Each HDC would be set up at the cost of Rs.27 lakh and it would consist of at least 250 looms and about 1000 weavers and produce about 2.5 lakh metre cloth every year. The HDC strategy would be to tie up the marketing of the cloth through State Handloom Development Corporations, Apex Handloom Cooperatives and other agencies. It is expected to generate employment for at least 2 lakh
persons in the marketing area.

A Production Plan would be drawn according to the market demand and the cloth would be purchased by HDCs at remunerative prices. Rs.5.25 lakh have been earmarked for the marketing package. The provision made for the input package comprising working capital, yarn dyes and chemicals is to the tune of Rs.21.75 lakh.

With the HDCs 500 quality dyeing units would be integrated to make quality dyes and chemicals available to the weavers. Each QDU would be set up at the cost of Rs.7.83 lakh. For the development and diversification of skills, weavers will be trained in quality dyeing through weavers service centres and state directorates under competent technical personnel.

Management and functioning of these centres would be free from bureaucratic control and Government would act only as promoter and facilitator for success of the programme.

Government has drawn up a Rs.849.15 crore project to set up 3000 Handloom Development Centres (HDC) and 500 Quality Dyeing Units (QDU) for sustained production and marketing of handloom products. This is in addition to the Rs.682 crore scheme under various Rural Development Programme. (Indian Textile Journal 1996 and Textile Magazine 1993).

Thakkar (1994) opined that textile industry is correlated with social, political and economical event of the state but it should be delinked.
2.10 Studies Conducted.


Programme Evaluation Organisation of Planning Commission (1946) found out that a weaver works for about 29 days in a busy month and 19 days in a slack month. The income of the average weaver household was found to be lower than that of an average Indian household.

As Bhogendranath (1957) found out that the Handloom Industry in Madras consumed 75 million lbs of yarn both local and foreign. They used all counts of yarns between 12 and 200. For the bulk of the finer yarn they depended on the imported yarn. The case of the handloom weaver and how he would be affected by grant of the tarriff was ably advocated by the representatives of the provincial Government in their evidences before the Tarriff Boards.

They stated in their evidences that, "The Industry affords a means of substance to a large number of people and ranks in importance and magnitude next only to agriculture. From the standpoint of Rural well being the Industry plays a conspicuous part".

When the import duty on yarn was imposed, it hit the handloom weaver hard as the cost of the yarn, represented generally about half of the cost of production. The cost of producing hand woven cloth rise in this period due to the naturally high prices of imported yarn with their various commissions and transport charges. The imposition of the high import duty enhanced the prices still more.
Added to these handicaps, the mills were protected by the duty and competed with the unprotected Handloom Industry.

The imports of foreign yarn declined during the period due to the protection granted to the Industry and this afforded a chance for the local mills to raise the prices of their yarn. The handloom weaver could not pay the very high price for the foreign yarn turned to the local mill for his raw material.

It cannot be denied by the mill interest that the prosperity of the mills was in no small measure due to the purchases by the handlooms. If the mills prospered it must be remembered that it was at the expense of handloom weavers. These people were unorganised and lived in meagre wages. Weaving with them was not a business, it was like agriculture in our land, a tradition. He was like a farmer, he would till the land not because it was paying out because his forefathers before him did it. Of course it cannot be pleaded that the handloom should be protected at any cost against the powerloom but Bhogendranath’s contention was only that the dice should not be loaded against handlooms as it happened under the tariff of 1933. The letting down of the handloom weaver was disservice to the rural population. How the starting of the Mill in our country was detrimental to the village Industries will be dealt with when considering the "Decentralisation of Industry". Therein it would be argued that the powerloom in the state should not be encouraged and that the only way of humanising production in the textile Industry would be decentralised weaving industry. The lot of handloom weavers would go a long way to solve the problems of cloth production in the
right way. In spite of the difficulties imposed on the patronage of the consumers, the Industry survived the shock of this period.

In a study on handloom Industry in Madhya Pradesh Nanekar, (1958) found out that the availability and adequate quantity of yarn of the weaver is important. During the course of his survey he found that due to non-availability of yarn, required count, and quantity, many weavers particularly weaver of high count cloth to move from one count of yarn to another with great difficulty, which affected the production.

According to Textile Magazine (1969) the Textile Commissioner has been asked to chalk out a scheme to resolve the practical difficulties in implementing the Government decision to reserve the production of coloured sarees for the handloom sector. This was announced by the Minister of Foreign Trade. Members of the Maharashtra Assembly drew attention of the Minister to the difficulties that would be experienced by the powerloom if the decision was enforced. It was stated that nearly 19,000 workers would be thrown out of employment. The Minister said that reservation would not affect the mills. An important suggestion made was that new Industries must be set up in the areas in which powerloom units were located to absorb the labour that might be rendered jobless. The Chairman of the State Trading Corporation informed the committee that the corporation proposed to export manmade fibre fabrics worth Rs. 9 crores in the 1969 financial year.

Indranil and Sarswati (1970) in their study of relative economics of yarn spun in the new model of Ambar Charakha units and
Mills revealed that there is highly significant difference between quality of the two yarns. The new model Ambar Charakha yarn has a lower twist and strength. It could be used only as weft yarn and for coarser variety of a cloth.

Due to economic large production of yarn spun in Mills, it is cheaper than new model Ambar Charakha yarn to the extent of Rs.1.27 per kg. The new model Ambar Charakha units are able to absorb more labour and are less capital intensive than mills, though mill labour is more productive than Ambar Charakha labour.

In Maharashtra Tidke Committee (1970) undertook the study of the problems of weavers in Maharashtra. After the survey, the Committee found that the daily earnings of the weavers families is not more than Rs.3 or Rs.4 per day. Further the Committee had recommended that the yarn on reasonable price should be made available to weavers.

Dhagynam and Raji (1971) conducted a study to understand the preferences of selected homemakers for Coimbatore Handloom Sarees. Some of the finding were:

Sarees, Bed/spreads, Dhoties and Towels were the major handloom items bought by the home makers.

Among colours, blue seemed to be favourite for most of the homemakers. Green and Red came next in the order of their preference. Light and Dark shades were preferred by many but bright and dull colours were acceptable only to few homemakers.

The traditional Kodi borders with intricate designs were
liked by homemakers of all age groups. Cotton-jari and cotton, art silk and cotton jari cotton and art-silk were the combinations of yarns preferred for the borders.

Homemakers of all age groups showed their preference mainly to cotton for the body of Coimbatore handloom sarees because of the desirable qualities.

The main problem felt by them were the prices not being standardised, lack of salemanship and lack of attractive designs. Also there was problem of durability and shrinkage of the Sarees even Jari got blackened in use.

In 1973, a high powered study team of Sivaraman opined that to ensure adequate supply of yarn, control over the price is necessary and the enrollment of weavers under the cooperative societies should be increased.

Angadi (1975) explained about the recent development in the handloom Industry and pleaded for more earnest policy for reservation.

A high power study team headed by Sivaraman (1976) recommended that the coverage of the weavers in the active cooperative sector should be increased to 60 percent as against the estimated coverage of 30 percent of the total by the end of the Fifth Five Year Plan. For this purpose it will be necessary to organise new cooperatives wherever possible in addition to enrolling new members in the existing societies.

In a study of Raji and Nirmala Devi (1976) it was found
that with regard to the properties like fabric count, fabric weight, breaking strength, bursting strength, abrasion resistance, the millwoven fabrics showed better results when compared to the Handloom fabrics. This may be due to the closeness of yarns in millwoven fabrics. The Handloom fabric showed less strength perhaps because of the processing factors involved in the weft preparation and the difference in the fabric count. So it is recommended that more care should be taken in the preparation of weft yarn for handwoven fabrics. With regard to crease recovery both fabrics behaved almost in the same manner. The yarns used and processed undergone by both types were same. Air permeability in the handloom fabrics was high. This may be due to lower fabric count in the handloom fabrics. With regard to pilling handwoven fabric showed better results. It was concluded that millwoven was better than the handwoven.

Colourage (1976) in its research study revealed that 50 percent of the cooperatives in Handloom sector are dormant. Since cooperatives will have to play an important role for the revitalisation of handlooms their organisation on modern lines is of vital importance.

In the study of Vimala and Krishnabai (1977) "Developing and Weaving Jacquards designs" it was evident that 84 percent of the students showed deep appreciation for Handloom Sarees with cotton ranking first due to its dignified look and low cost. Mixture of cotton and rayon was preferred since it is comparatively cheaper than mixture of silk and polyester.

Jacquard woven designs were accorded high priority by
majority of the students. All of them expected the border and pallu to be in larger form.

The entire sample of evaluators expressed the appropriateness of the saree for formal and informal parties, festivals and functions, temples, weddings, evening wear, window display, but it was found to be too grand for daily wear.

Vasantha and Raji (1977) observed that 60 percent of the families had 4 to 6 members in the family and 40 percent had 1 to 3 members in the family. Seventy-six percent of the weavers had elementary education. Ninety-eight percent of them belonged to the low income level.

In this study, 52 percent weavers were members of cooperative societies, and the rest were independent weavers. More than half of the weavers had experience of weaving from 11 to 20 years. While 55 percent of them had just 1 to 10 years of weaving experience. The study revealed that approximately 55 percent of them spent about 7 to 9 hours per day in weaving while 35 percent spent more than 10 hours a day. Plain simple dobby loom was possessed by 90 percent of the weavers and on an average they were weaving 4 to 6 meters of cloth per day. But their earnings were very poor. Forty-five percent of the weavers earned Rs 1 to 3 as wage per meter, while 55 percent earned Rs 4 to 6 even though the wages were very poor, they were receiving the wages regularly. Thirty percent of them tendered their dissatisfaction with the wages, they were receiving. Ninety percent of the weavers were using 100x100 counts per saree and 10 percent used 50x40 counts for shirting. The weavers belonging to the
cooperative societies obtained the yarn from their respective societies, while those who are not members of the cooperative societies were receiving yarns once in a fortnight and about 50 percent received it after every 10 days. Seventeen percent of the weavers formulated the designs by themselves and rest got the design from the cooperative societies and manufacturers.

The weavers were receiving assistance from their family members. Sizing, winding weft yarn were done at home by majority of the families. Dyeing and reeling the warp yarns were not done at home. More than 60 percent of them were getting help in weaving and setting up the looms.

While commenting on the factors affecting weaving process it was mentioned that poor yarn quality, climatic conditions, number of members assisting, sickness of the weaver, and efficiency of skill were the major factors which affected weaving. All of them had adequate space and loom accessories, but 20 percent had maintenance problems while 80 percent knew the technique of repairing looms. Despite these facts more than 60 percent reported that they needed help in repairing looms and preparation of loom accessories.

Unfortunately none of the weavers were members of weavers association but they were aware of the new economic programme, and the changes or the rapid improvement taking place in handloom sector.

Daftary and Associates (1978) evaluated the properties of handloom casement at different temperature level. The authors made an attempt to find out average shrinkages. They had selected three
conditions 20°C, 40°C, 60°C. In case of Handloom casement material the tensile strength of warp and weft was seen independent on coarseness of the yarn used for warp and weft. The shrinkage values were more or less the same for warp and weft. Of all the six samples irrespective of time and temperature, 30°C temperature and length of soaking did not influence shrinkage of Handloom casement.

In case study of weavers in Punjab village by Harnek Singh (1979) it was found that even though weaving business is able to provide employment, the weavers face a lot of problems for raw material and marketing like low prices of finished goods and lack of transportation facilities.

As Menon (1980) pointed out that the low level of income and expenditure of any Industry naturally restricts the consumer expenditure on clothing in India. In 1964-65 the National Council of Applied Economic Research carried out a survey which indicated expenditure on textiles.

The per capita expenditure per month on cotton clothing comprising Mill-made, Khadi and Handloom cloth averaged Rs.2.00, Rs.1.49 and Rs.1.66 respectively, against the total expenditure of Rs.33, Rs.23, Rs.27 respectively for the developmental area.

SITRA (1981) investigated a wide range of problems connected with different segments of the decentralised sector viz. handlooms and powerlooms and SITRA studies have indicated that considerable economics are possible by modifying the existing practises with regard to the preparation of hanks and packing them in
bundles. The suggested modifications may be outlined as follows:

Selling of Bank yarns in double hank plain form instead of single hank plain form would improve the resting productivity by 30 to 40 percent which in turn would reduce the cost of production by about 3 percent.

Discontinuing of double tie in counts 80's and finer would increase the reeling productivity by 25 percent which would reduce the yarn cost about 2 percent.

Changing the methods of grouping Hanks in a knot from 10 Hanks to 20 Hanks and also increasing the bundle weight from 2.27 kg. to 4.54 kg. in 60's and finer counts would help to reduce the cost to certain extent. Selling of yarns straight on ring frame bobbin can substantially reduce yarn costs since the expensive reeling process is eliminated thereby. This sweeping break from the traditional practice would not pose any major problem in so far as the handweavers is concerned.

On the other hand it would appreciably improve the competitiveness of handlooms in relation to both powerlooms and mill sectors. There are however some difficulties associated with the supply of yarn on bobbins. For one thing it may not be possible to bleach the dye yarns directly from bobbins. Also suitable arrangements have to be proposed to enable mills to secure back the empty bobbins for reuse. Exemption has to be obtained from the excise authorities for selling yarns on bobbins. Since under the existing excise duty regulations, all yarns other than plain reeled are liable
to excise duty.

A comparison of cost figures for manufacturing two sorts namely, bleached dhoti and grey lugada on handlooms, powerlooms and in mill sector showed the cost of handloom product to be higher by about 10 to 15 percent largely because of the excessive weaving conversion changes. Handlooms cannot compete with the mill sector since the latter enjoys, the advantage of low yarn costs as well as high productivity nor can handloom withstand the competition from the powerloom sector because of the wide gap of 500 percent in the productivity of handloom and powerloom weavers. If the mills are to adopt the handlooms i.e. supply yarn on bobbins as suggested earlier, pay the conversion charges, procure the fabric, and market the product after suitable finishing then it may be possible for the handloom fabrics to successfully compete with the mill-made as well as powerloom produced goods without the support of subsidies.

In two popular sorts namely sarees and lungis SITRA studied the advisability of using yarns of better quality to see if this will help to improve the productivity of handlooms. The study revealed that an increase of yarn C S P from 1800 to 2000 for 60's count increased the loom efficiency only marginally by about 3 to 4 percent. There was however a good reduction in end breaks in winding to the extent of 25 percent and the yarn waste was also lower. On the other hand, the overall cost increased disproportionately higher, indicating that the quality of yarns as are being used in the industry can be regarded adequate for handloom requirements.

One of the frequent complaints about handloom fabrics is
that the borders tear off easily and this is due to the practise of single yarns for selvedges. If double yarns are used instead, this deficiency can be remedied.

Bad selvedges, damaged designs in borders, missing ends, less picks, uneven dyeing, shrinkage and defective designs are some of the commonly observed defects in fabrics and these could be avoided through suitable remedial measure. There is a need for standardising the specifications of fabric width, reed and pick for each sort with a view to create a better product image and consumer acceptance. Another point noted in some centres was that the warp yarn was subjected to unduly excess stretch during sizing, causing high loss in yarn elongation and more breaks.

The present state of technological stagnation is mainly attributable to poor transfer of technology rather than the dearth of innovations. There is therefore an imperative need to constitute technical cells in each state so that the twin problems of rapid transfer of technology and its implementation may be tackled effectively. The wide variations in the practises adopted among different regions suggest that attempts should be made to pick out the good practises at each region, disseminate them among handloom weavers of other regions. The ultimate aim should be to obtain uniformly high efficiencies throughout the country. In order to realise this objective, these technical cells should be entrusted with the responsibility of collection and dissemination of information about the good practises and of providing necessary infrastructure for training floor level demonstration and implementation, wherever necessary. To begin with, these cells should be set up in intensive
development areas.

Industrial Development Organisation New York (1979) have been compared the various technologies of weaving with respect to production rates, investment and employment potential. There are coherent limitations to an analysis of this type, since the product ranges of the various sectors differ markedly. Hand-loom fabric have a relatively low thread density and are produced from coarser yarns. At the other extreme the art-silk sector produces lightweight fabrics, employing fine yarns and high thread density. The power-loom and organised sector cover the entire range, so any comparison on the basis of a common product is rendered difficult. Moreover if fabrics with elaborately coloured pattern are considered, the manufacturing costs in the mill sector will rise considerably. The results therefore should be viewed mainly as broad indicators.

Krishnabai and Rajkumari (1981) investigated that, the ends and picks per inch of the selected mill and hand woven fabrics were found to be more or less the same. There was not much difference between the samples for fabric weight. In thickness Mill woven samples were thinner than hand woven tensile strength of the samples revealed that among the 1,2 and 3 power-loom was found to be stronger than handloom in both warp and weft wise but the elongation of same powerloom was found to be less. Whereas among samples 4,5 and 6 it was just the reverse of the powerloom, sample 6 was lesser in tensile strength but greater in elongation. Abrasion resistance of the selected samples were found to be more or less the same. Bursting strength of the handloom samples were found to be greater than power.
loom samples.

Crease recovery test proved that Handloom samples 1 and 2 were greater than powerloom samples 3, whereas among samples 4, 5 and 6, it was found that sample 6 (Power loom) was greater than samples 4 and 5 (Handloom).

Comparison of Handloom and powerloom showed that both were more or less same as far as fabric count, fabric weight, fabric thickness, and Abrasion Resistance is concerned. Tensile strength was found to be more for powerloom sample than for handloom but the elongation was just reverse. Bursting strength of handloom samples were more than powerloom samples. Crease recovery of one set proved that powerloom sample was greater than handloom but in the next set it was just opposite. Hence it could be concluded that each sample is having its own characteristics feature. It is known fact that there is about Seventy Five Lakh families depending upon handloom sector. Most of these families concentrated only in Dhotis, Towels, Sarees and Dress materials. But in Karur the handloom people concentrated on novelty fabrics. It is felt that in South Coimbatore, Erode and Salem handloom weavers can also be trained for the production of novelty fabrics which will definitely improve the status and indirectly will help the country by getting foreign exchange.

The Silk and Art Silk Mills Research Association (1983) had undertaken a National Research Project in blended textiles in Maharashtra. The project aims at promotion of the use of blended yarns handspun or mill spun by the unutilised or underutilised handloom in the rural areas. The result of the project expected to
releive unemployment and underemployment and further to solve the problem of marketing of handloom products by offering consumers a fabric of better quality and lower price. However the major objective of project is generation of employment in rural areas the objectives are of importance and more relevant to present study. It aimed at upgrading the traditional skills and making them commercially competitive for home and export market ensuring maximum production with minimum capital conservation of electricity and promotion of production in non electrified villages. According to the Association there are about 37 Lakh handlooms in the country. These handlooms are underemployed hence it is suggested that cluster of units of Ambar charakha and handlooms must be promoted and necessary provijan for marketing the finished product must be provided.

Rajeshwari and Kamala (1981) carried out an experimental study in which Powerloom original sample A, Handloom original B, Shirting Materials A1, Handloom original B1. The fabric chosen was polyster cotton blend of 80/20 combination woven in hand and powerloom. The study was conducted to find out whether handloom and powerloom has an impact on the performance of the fabric.

The shirts namely A1 B1 were constructed from handloom and powerloom materials respectively using 1.65 metres of cloth. The rest of the materials namely A and B were left aside as original samples for handloom and powerloom respectively. Each of the shirts were worn for a period of 25 days (300 hrs) and underwent washing after each wear.

The originals and washed materials were evaluated
visually and by laboratory tests.

Visual inspection revealed that there was no difference in samples in texture and thickness. Sample B and B1 were rated to be brighter than A and A1 respectively. All the samples were rated to be free from pilling.

The fabric weight of samples A and B were the same. The weight is increased in washing.

Fabric count of both samples A and B was the same in warp direction, but in weft samples A had more count than B. Irrespective of the type of loom a reduction in fabric count was noticed in samples A1 and B1 due to washing.

Breaking strength of samples B was greater than that of A1 in the warp and weft direction. On washing samples A1 had reduced in strength in warp while B1 increased in the weft direction both A1 and B2 had reduced in breaking strength.

The elongation of samples B was more than of A in both warp and weft directions. On washing, samples A1 and B1 had gained elongation in the warp. But in weft direction samples B1 gained elongation but A1 had reduced.

Bursting strength of sample A was greater than B. Washing has increased the bursting strength of both A1 and B1.

Sample A was more abrasion resistant than B. The weight loss due to abrasion was more in sample A1 and B1 when compared to their respective originals A and B.
The crease recovery angle of sample A was more than that of B in the warp direction. It was just the reverse in the weft direction. On washing the crease recovery angle decreased in A1 but increased in B1 in the warp direction. In the weft direction, both samples A1 and B1 showed a reduction in the crease recovery angle when compared to their originals.

The thickness of sample B was greater than that of A. The reduction in thickness was noticed in sample A1 and B1 when compared to their respective originals A and B.

Fill were absent in all the samples. Statistical analysis revealed that the mode of operation of loom and washing had a significant impact on the performance of the samples to various laboratory tests.

Hence it may be concluded that sample A excels sample B in aspects like abrasion resistance and bursting strength. It is also lighter than sample B in the thickness.

Sample B excelled A in aspects like breaking strength and elongation. The price per metre of both samples were the same.

Mahapatro (1986) conducted a study on "Economics of Cotton Handloom Industry in India", and drew the following inferences:

As reported in Annual administrative report (1975-76), in the course of time, various unfavourable factors led to the decline of the hand-weaving industry in the state. In spite of its decline even today it happens to be the most important household industry.
According to Garg (1978) the industry is not as sound as it appears and however a bright future it may have, it cannot progress unless the fundamental handicaps are removed. As stated in Strategy For Handlooms (1980), it has been often viewed that the multi-pronged drive launched by the Government has failed to achieve the desired results due to which a huge amount has gone down the drain. Monterio (1969) opined that huge stock of looms and accessories in the handloom industry cannot be put to alternative uses. The measure will also render the large number of handloom weavers unemployed for whom it is difficult to find alternative and remunerative occupations.

Field survey was conducted in Orissa State which according to Census of India (1961) covers an area of 1,55,707 Sq.Km. Sahu (1969) said that in the olden days Orissa had a flourishing trade with the outside world and textile goods were among the chief items of export. Between 900 B.C. and 350 B.C. the important item of export was cotton cloth for which Kalinga was famous. But Acharya (1975) said that during the nineteenth and twentieth centuries, fierce and irresistible competition of mill made cloth from Britain in the beginning and from within the country at the later stage utterly crippled the Indian Handloom Industry. Shetty (1986) reported that the advantages of decentralised sectors production will also be instrumented in distributing income and economic power more equally among the people and eventually among the regions thereby contributing to the emergence of an economically sound, politically and strategically stable and regionally balanced democratic society.

In the field survey all the sample units reported that
they were working in their own premises. However, this is not indicative of their sound economic conditions. Eythell (1969) suggested that, it may not be correct to infer that the nature of the work does not require separate work place. Hand weaving when carried on in the home, contributes nothing either to industrial efficiency or to domestic comfort.

Another finding of the field survey is that 52.01 percent of the total looms in the samples are fly shuttle pit looms. The weavers are being encouraged to switch over to fly-shuttle frame looms with 75 percent subsidy and 25 percent loan of the total cost of the loom. Some weavers have availed of this facility but in some cases it was found that such frame looms lie idle and have even been dismantled and the weavers are using their own old pit looms. Kulkarni (1983) opined that in case of pit loom, the yarn spread nearer the ground helps to guard it against the blowing hot wind. It is revealed that 137 units of 37.13 percent of the total 369 sample units reported belonging to independent weaver category. In Karnataka and Solapur Handloom Survey it is mentioned that Independent weaver means who is completely free to organise his production in such a way as to maximise his profits without the intervention of any outside agency. Mere ownership of loom does not make the weaver an independent manufacturer. It is mainly the lack of working capital which compels him to depend upon the master-weaver. Yagaiah (1979) said that lack of sound financial position of the weaver is the root cause of the situation. There is no discipline in the household industries like Handloom Industry with regard to work hours. Further the main worker in this Industry is assisted by other members of the
household in the various processes of manufacture. The workers in the industry attend more than one process of work and thus generally enjoy a multi-activity status. According to the report of the working group (1959) it becomes difficult for these reasons to gauge the nature and magnitude of employment in this industry. There is high percentage of women labourers in the sample units indicating its importance in this household industry. Chakravarty (1955) said that women are considered as an economic asset to the weavers families in Orissa.

As suggested in study of Handloom Development Programme (1967), the earnings of a weaver household depends, among other things on the intensity of employment. Intensity can be judged from the number of days in a year and the number of hours per day. The average number of working days in a year for the sample units was estimated to be 284 days. While estimating this, days of temporary stoppage of looms were taken into account which occurs because of social ceremonies, illness, visit of guests, etc.

It is observed that the industrious and skilled weavers are capable of earning good money, and the ambitious ones may even succeed in raising their social status. In general, large part of the labour force comprises inferior labour. This is the basic reason for the existence of widespread poverty among the cotton handloom weavers. According to Batra (1979) the weavers are not in position to improve their condition by producing merely cotton fabrics. The time has come when better fabrics from synthetic yarn should be produced by Handloom weavers. Synthetic fabrics are crease resistant, durable, easy to care for and they bring better returns to the weavers.
It is observed that Industry is able to provide income at around the subsistence level only. It does not provide even subsistence level of income to the weavers engaged in production of coarse and plain varieties of cloth. Gupta (1980) observes that technically all handlooms are old and obsolete on which weavers exhaust their energy and the returns from such looms are uneconomical.

The independent weaver is not always able to dispose of his products directly to the consumer. He has to approach the middlemen. The weaver problem is not merely how to dispose of his cloth but also to obtain raw material for the next day's work. Venkatraman (1975) opined that even a small time lag between production and marketing hurts the weavers. Singh (1979) expressed that the market survey of Handloom Textiles in Orissa conducted in 1979 reveal great potentiality for the cooperative handloom sector through a planned growth strategy. Vishwanathan (1981) stressed that supplies of Handloom cloth from outside the state, originate mainly from the wholesale markets of Salem, Erode and Hawara. Consumers in inter state and foreign markets mostly belong to the rich and middle classes who usually have a taste for variety and artistic designs. Kamat (1978) points out that there is need to persuade and train the tradition bound weaver to change his production that should meet the needs of discriminating foreign customers. Wherever weavers have favoured change they have enjoyed the benefits. Ojha (1982) opined as far as finance and credit facilities are concerned the National Bank for Agriculture and Rural Development set up in 1982 to achieve effective implementation of the concept of integrated rural development. Since then the NABARD is providing by way of refinance all kinds of
production and investment credit to agriculture, small-scale industries, handicrafts provided by Reserve Bank of India and Agricultural Development Corporation. Consequently the Reserve Bank of India Scheme for financing handlooms in the corporative sector, now falls under the NABARD perview.

Janata Cloth Policy of entrusting the production of coarse varieties of cloth to the handloom sector is being questioned. Jain (1983) is of the opinion that the real purpose behind the introduction of the scheme is to save the mills from the losses which have now been transferred to the handloom account. Even the announcement of discount is nothing but as Bhattacharya (1978) said that it is a psychological stunt designed to dupe the customers, since it is a process of escalating the label price and then slashing it down to the extent of discount. Moreover, the number of cotton powerlooms between 1975 and 1981 increased by 120 percent. According to Sixteenth Annual Report (1979-80) there has been no scheme or plan worth the name for the development of powerlooms. At present per capita availability of cotton cloth in the country is very low. Rao (1973) pointed out the per capita availability of cotton cloth was low in the country because of the low rate of the increase in the availability of cotton for internal consumption. Report of Textile Enquiry Committee (1959) suggested that the growth rate of Handloom production should be achieved ensuring a reasonable income to the weavers and reasonable price of cloth to the common consumers. It must not be forgotten that Handloom is a relatively inefficient tool of production for ordinary fabrics.

The state policy is directed more to protect mill
industry, than to make it economically viable to ensure its healthy growth. This means that the industry has to live on doles and on reservation for years to come.

Reddy and Vatsala (1989) conducted a study to simplify the traditional handloom Ikkat processes two techniques, screen and spray printing were tried out on cotton yarn using reactive dyes. Colour fastness tests were conducted and survey was conducted to study the acceptability and effectiveness of the techniques. The cost difference was also analysed. The techniques were accepted by majority of the respondents.

From the results of survey it was found that the design effect produced by two techniques had close resemblance to the Ikkat technique and majority of the weavers were ready to adopt the technique provided; there is some assistance either from the Government or some private enterpreneurs. The weavers were also of the opinion that both spray and screen printing could form good substitutes for the traditional Ikkats.

Laboratory tests on colour fastness properties revealed that there was not much difference between three techniques in their colour fastness to washing, pressing, and cracking. The fastness to sunlight was better in screen printed and spray printed fabrics. When compared to the Ikkat fabrics but the Ikkat fabrics have better fastness to alkaline perspiration than the other two.

From the cost analysis it was found that the fixed cost of weaving screen and spray printing was higher than the Ikkat
technique. But this would not affect the weaver. When the screen and spray printing are taken up by the Government or private entrepreneurs. The weaver will have to pay only the printing charges. The production rate would be increased as time and labour required is less when compared to the Ikkat technique. Also only a few members in the family would have to devote their time in these two techniques while the others can engage themselves in other gainful employment. Which may raise their family income as well.

It can be concluded that those alternative techniques would be more beneficial but whether it would be taken advantage still remains to be seen.

Raji and Rupnita (1989) conducted study of Handloom in Assam. The total income per month for 37 percent happened to be Rs.100-1500 for 30 percent Rs.1500-2000 and for 28 percent Rs.500-1000. The rest earned less than Rs.500 per month. The other sources of income for the households happened to be agriculture, since 31 percent earned about Rs.500-1000 and 12 percent around Rs.500. For 12 percent earning around Rs.1000-2000. The other sources of income happened to be service.

Organisational structure of the weavers was cooperative society. Individual household, Private owner, State Handloom Corporation and from each organisation 25 households were selected.

The highest number of working looms i.e.32 found in Individual households next highest in co-operative society. i.e.30 and rest had 25 working looms each.

The highest number of idle looms found in co-operative
society i.e. Nine and the rest Individual household had 4 State handloom corporation had 3 and private owner had only two.

Working looms were 112 number of idle loom were 18. In all the working looms Mills Spun yarn was used.

Out of 112 working looms 87 belongs to fly shuttle looms. While 15 and 10 belonged to Jacquard and throw shuttle loom respectively. Out of 18 idle looms 9 belongs to fly shuttle looms where 5 and 4 belong to throw shuttle and Jacquard looms respectively.

Looms estimated by economic features.

All the weavers produced their cloth for commercial purpose only. They sold their products and earned cash. They possessed 100 commercial looms and 12 domestic looms.

Members engaged in weaving activities.

The weavers families were either full time weavers or part time weavers. Mainly women were involved in weaving. The percent of full time weaver was 75 and Part time 25 percent. Preparatory work was done by women only assisted by their children.

Number of working days on handloom varied in different seasons. Samples selected from Individual household and cooperative societies worked on all days during January to March and April to June respectively. The number of weaving days happen to be higher during the first and second quarters than the third and fourth quarter.

Yarn Consumption.

Private owners consumed the maximum amount of yarn for
constructing Towels, Bed-sheets, Curtains followed by state handloom corporation weavers for producing each shawls (Silk Mekhalas). The weavers of cooperative societies ranked next. The high yarn consumption in private owner weavers can be attributed to the fact that they possessed jacquard loom for producing handlooms.

Average per month Income.

Weavers working under private owners obtained high wages as compared to other categories. This was because their production of bed sheet and curtains happened to be high. The weaver of cooperative society ranged next followed by weavers of state handloom corporation.

in June 1985 Ehl held Textile Reformers' Day by the Union Government to recognize the distinct and unique role of Handloom sector will be preserved. The growth and development of this sector shall receive priority”.

Both the Planning Commission and the Government have discovered to their dismay that the measures adopted by them to strengthen the Handloom sector have failed to yield the desired results.

The Ahmedabad Textile Industry's Research Association (ATIRA) (1983) has covered among other things the handloom sector in production mode. Technology is one-sided emphasis on how to produce the handloom sector is costlier than that produced by organized mill industry and the powerloom sector”. This is exclusively due to very low productivity”.

Unless a degree of increase in productivity is
introduced the cost handicap of Handloom weaving cannot be minimised", according to ATIRA report.

Sarkar (1989) conducted a study on viability of using plastic parts on handlooms and aims at studying the technical and economic advantages of the plastic parts used in Textile Machinery. For this study data was collected from Textile Machinery Manufacturers, for the plastic parts they are using on their machines, plastic parts manufacturers and/or suppliers. From the opinion of textile machinery plastic manufacturers and the mills, it is revealed that plastic has better performance than wood, paper and metal both from the technical and economic point of view. Mechanical properties of wood are inferior than that of plastic. Plastics may not have excellent heat stability compared to metals but it is better than wood. A great advantage of the plastics lies in its low weight as compared to metals for example a gear with 112 teeth fabricated from metal will have weight of about 115 kg. While that fabricated from ultra high mol.wt. polyethylene (UHMWPE) is less than 2 kgs. This results in low energy consumption and easy maintenance when plastics are used. Moreover the process of lubrication is eliminated in case of plastics if nylon bushes are used. Elimination of noise is an added advantage of plastics. Comparing price structure of plastic, cost of wooden bobbins is at par with those of plastic ones. However, the performance of plastic bobbins is much better, they have resale value of about 30 percent to 40 percent. The costs are comparable with 30 to 40 percent resale value, improved performance and more life. Similarly the price structure and economic viability of fibre gears, false twister, card cans, plastic cones are better when
plastics are used. As far as fatigue reduction is concerned if plastic parts are used on handlooms, it will result in reduction of fatigue due to lightness of plastic parts resulting in higher productivity. This will also result in improving the quality of woven product due to lower frictional resistance offered to the yarns in weaving.

The study conducted at Samichellipalayam (Tamil Nadu) by Radhika and Raji (1990) revealed that Forty Four percent weavers were under the age group of 15-25 years and Eighteen percent belonged to 25-35 years. The educational level was low for nearly Seventy Four percent, more than Fifty percent belonged to very low income level of Rs.200-400 per month. Fulltime or Part-time weaving was done by Seventy Four percent and Twenty Six percent acted as helpers to the weavers.

Weaving was traditional practice for Seventy Four percent and for others it was recent carrier. Eighty percent owned a loom and rest worked on other loom. Sixty Five percent used part of the house for weaving. Plain looms with dobby attachments were used by Fifty Six percent.

Eighty One percent of women were responsible for bobbin winding. The other activities done by women were folding and pressing (54 percent) preparation of warp beam (41 percent) setting up looms (31 percent) Seventy Seven percent of the men purchased yarns. Around Sixty percent did dobby desings and transported the finished products. Fifty to Sixty percent did drawing, twisting, preparing wooden pegs for dobby desings.
As a full time job more than Fifty percent of men did twisting and preparation of wooden pegs for dobbey desings. Eighty three percent of men involved themselves in purchasing of yarns as part time work. Bobbin winding happened to be a full time activity for the women, (47 percent) and folding and pressing as a part time activity for women (52 percent). Both boys and girls did mainly part time activities.

Nearly Forty four percent of men spent 2-4 hours in setting loom. For bobbin winding Seventy Three percent women spent 4-6 hrs. per day. Men took a main lead drawing, as Eighty One percent spent 4-6 hrs. per day. Fifty percent men spent 6-8 hrs. per week for purchasing of yarns and Forty percent spent 4-6 hrs. Men spent 8-10 hrs. per week for twisting.

Eighty one percent of men spent 4-6 hrs. per week and Sixty Five percent spent 6-8 hrs. for the preparation of wooden pegs.

Sixty percent of men spent 2-4 hrs and 35 percent spent less than two hrs for folding and pressing the finished product.

While Fifty Three percent of women Twenty Seven percent of Girls spent less than 2 hrs for transporting the products. Forty percent of men spent 2-4 hrs for this job.

About Forty two percent of children and Thirty percent of women spent 1-2 hrs per week for formulation of dobbey desings.

Thirty three percent and Twenty Eight percent of men had experience of about 5-10 years and 15-20 years respectively.
Nine percent of women had the experience of 5-10 years, 100 percent of children has less five years experience.

Plain construction were done by Fifty one percent of men and dobby Thirty seven percent of women and Jacquard by Seventy three percent of men. Also Twenty percent of girls did jacquard construction.

Bed sheets were produced by Seventy three percent and Twenty four percent of girls produced dhoties. Thirty eight percent of women and Twenty Four percent of girls produced sarees.

Weavers stated that society helped them in technical guidance, (30%) training the candidates in design development, (30%) modernising looms (20%) and improving colour combinations (20%).

According to Indian Textile Journal 1991 based on the report of the carpet promotion council. The carpet export was around Rs. 53 crores in 1980-81 increased to Rs. 120.07 crores during 1989-90. Besides earning foreign exchange, the Indian carpet industry with 150,000 looms provided employment to about million workers and generated production roughly estimated to be Rs. 500 crores during 1989-90.

With the improvement in major markets after 1985 consumption of Hand-made carpets show upward trends which is quite evident from the figures of world imports of Hand-made carpets upto 1989. From 1983 to 1989, the rise was from $ 1193.13 million to $ 2089.60 million.
When most Koshtis were engaged in their profession, they favoured no change and expressed strong desire that at least one in their family should remain in the profession. But there was a dramatic change in the situation within a period of just over a decade. An overwhelming population of Koshtis (89 percent) now seek white collared jobs.

Indications of economic changes were clearly visible. The economic structure is slowly undergoing a change. The Koshti masses now desire to bring economic and social reforms. But they lack the correct ideas about the direction of economic and social changes. They are vague on this issue and only want help from the Government to change their lot. Their ideas are limited to economic changes only to such profession which resembled their own traditional occupation of weaving.

Mehta (1991) in her study draws attention towards the drastic social change the community had witnessed over last 100 years from the days of fighting for the rights to use sacred thread (Yadnyopavit) the community now demanding its inclusion in the scheduled tribe category. After studying in detail the socio-economic condition of the community, the researcher favoured concession but solely on economic criterion. The politics of the community is centred round this issue only. There are signs of new leadership from among students of the community coming up to raise the issue of concessions. The Koshtis are an educated polarised mass only to be misguided by the leaders who play on their sentiments and so-called temporary interests in pursuit of their political motives.
According to Pokharna and Arora (1992) the Textile Industry is regarded as among the oldest manufacturing industries, catering to the essential requirements of clothing and protection of human beings. Spectacular changes have taken place after the IInd World War in the technological upgradation of textile machinery with a view to improve a quality of end product and saving in labour cost. Most of the restructuring took place in the past three decades. After half a century of stagnation spectacular technologies took place the centuries.

A significant development took place during which the International trade in textiles increased tremendously. The production of yarn fabrics and Government in developing countries increased enormously due to lower wages combined with perfection in manufacturing capabilities and marketing practices whereas the major consumption centre continued to be the developed countries. This onslaught of developing countries on to the Textile Industry of developed countries resulted in accelerated pace for development of highly sophisticated, fast, efficient and automated textile machinery in the developed countries where labour is expensive and at the same time to avert the closure due to stiff competition among the newer technologies, the yarn and cloth manufacturing areas continued to dominate the technological advancement for productivity maximisation. The present articles deals with new technologies adopted by the Indian Woollen Industry for productivity maximisation.

The Indian woollen Industry is complex in nature and is spread over in organised decentralised and cottage sectors. The woollen sector caters to the requirement of carpet industry which has
1.5 lakh looms; employs 5 lakh people and earned foreign exchange for
the country to the extent of Rs. 400 crores in 1989 which was expected
to be 525 lakh crore in 1992.

According to Indian Textile Journal (1992), the
Government has sanctioned Rs. 300 crore for the development of Handloom
Industry during the current plan as against 131 crore in the seventh
plan.

The Government has committed to the all round growth of
the handloom sector was evident from its enhanced allocation to this
sector in the Eighth Plan.

The Textile Ministry envisaged combining the ancient
tradition of hand-weaving with modern techniques to facilitate regular
flow of new designs. Government has also sanctioned Rs. 25 crore for
setting up new Textile Mill.

Clothes-line (1994) suggested that - Child labour
exploited or trained is the hot issue in the west. Back home, the
handloom carpet business is basically a cottage industry; where the
entire family, including children pitch in their efforts. Could this
be termed as exploitation of child labour? On the other hand it is
training given to these children to help carry on the family tradition
weaving. Besides bringing in the much needed money.

The west obviously cannot understand these family ties.
Concerned about these sensational reactions, the Development
Commissioner conducted survey which revealed that only eight percent
of the work force comprised child labourers, and within this as high
as 4.8 percent were working with family units. Thus only 3.5 percent of the total workers were violative of the norms laid down; for which legal action being taken.

According to Hindu (1994) paper the Government proposed to amend the Minimum Wages Act shortly to provide equal wages for child and adult workers in an effort to discourage employment of children. The Labour Minister informed the Rajya Sabha.

Replieding to supplementaries during question hour he said the amendment to be introduced in the parliament would also stipulate less hours of work of the child workers compared to the adult worker. The details were being worked out by the Labour Ministry.

To encourage better understanding between industry and trade unions, a proposal to amend the Industrial Disputes Act was pending before the cabinet. Once it was cleared by the Cabinet, the Government would encourage bipartite fora for resolving Industrial disputes. The measure would discourage the tripartite mechanism in which the Governmental agencies have a say in ending industrial disputes. The proposal is based on the recommendations of the Ramanujan Committee which went into the issue.

Replieding to questions the Labour Minister said the Government was confident of ending child labour at least in hazardous industries by the turn of the century.

Eight hundred fifty crore special scheme announced by the Prime Minister to take the problem of child labour was under implementation. To another supplementry the Minister admitted that
the implementation of existing laws against child labour had not been effective.

From the brief review of relevant literature it is clear that much needs to be studied to bring out the relevant facts about the Handloom Textile Industry. As far as Nagpur Handloom Industry is concerned most of the studies are conducted on economic and political aspects. Now it is the need of the day to study the facts of weavers life, as far handlooms production is concerned. Present study is an attempt in this direction.