CHAPTER II

REVIEW OF LITERATURE, METHODOLOGY AND
PROFILE OF THE STUDY AREA

2.1. Review of Literature

The review of related literature is a crucial aspect of the planning of the study and the time spent in such a survey invariably is a wise investment. Its chief objective is to justify the rationale of an ensuing study. The ‘How’, ‘What’ and ‘Why’ of research study under investigation can be guided in the right way with the help of related literature.

There are several studies about the match industry and match workers and some are related to women workers. A brief review of some of the selected studies are presented below.

According to the Rage Committee Report on Labour Conditions,\(^1\) (1946), in the glass industries, it is almost impossible to describe sufficiently and accurately the wretched conditions in which labourers work. No wonder the children in the glass industry look emaciated, anemic, myopic and gloomy and they invariably suffer from rickets and eye diseases.

Smith, E and Thomas W.W.,\textsuperscript{2} (1972) have studied the attitudes of employees. They viewed that the Indian industrial workers show contradictions of belief in group based participative decision making and little faith in the attitude of the managers for taking initiative and responsibility. There exists a high level of overall cynicism that ethics and morals would need to be compromised to accomplish a task and promotional process also involves their cynical response.

Vina Mazumdar\textsuperscript{3} (1975) in her article “Women workers in changing Economy” states that in the traditional economy women have played integral and protected roles in agriculture, industry, and services. Development with increasing complexity of markets, production techniques and technological changes have been the relentless force which has displaced large masses of working women from their traditional occupations, made their productive and professional skills obsolete, and reduced them to the status of unskilled unwanted workers. The alternative opportunities that have opened up as a result of development in services on new industry, are for a different class of women educated and with new type of skills. They cannot absorb the displaced women who are mostly illiterate, rural and with restricted mobility.


Gurusamy V.,\textsuperscript{4} (1978) in his study titled “Child labour with reference to Ayyaneri village” observed that 63 percent of the children below the age of 15 years are employed in the match industries of that village and they are forced to work continuously from 8 to 12 hours a day.

The Indian Institute of Foreign Trade\textsuperscript{5} attempted a study on the match industry in the year 1979. The study reported on the evolution, the hazards and the employment potential of the match industry.

Perumalammal\textsuperscript{6} (1981) in her study tilted “Women workers of match factories in Thayilpatti, Kamarajar District” has analysed the working and living conditions of women workers in match industry. The study is based on 56 match industries of Kamarajar District. The researcher observed that the working conditions of women workers of the industry taken up for study were unsatisfactory because they were oppressed with long hours of work, low wages, and poor health and the like.


\textsuperscript{5}Report on the “Study on the safety Match industry” Indian institute of Foreign Trade, 1979, p.25.

Ramalakshmi M.,\(^7\) (1982) in her study titled “An Economic study of the working and living conditions of the women labour in the match units in Virudhunagar” had tried to bring out the importance of the working and living conditions of the women labourers in the units where men and children were also working. She found that the match industry was highly labour intensive and women were given only piece wages. The findings also reveal that the work is suitable only as a secondary or supplementary one, but was primary for the women. Mostly men are not willing to take up such jobs. According to this study, women are working due to poor economic conditions and a considerable portion of the income is spent on bare necessities.

Moulik T.K and Purushotham P.,\(^8\) (1982) in their study titled “A study of match industry in Sivakasi” indicate the various findings, which include women members supervising all operations performed by hired labourers. The wage payment is followed and they are paid on piece rate basis. They work more than 9 hours in the factory and on returning to their homes they do spend another three or four hours in box making. This shows how hard they worked to get more wages to meet their family expenditure.

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Sushila Mehta\(^9\) (1982) in her study of the last several decades of the 20\(^{th}\) century (1920-1990), states that there were vast and sweeping changes in the economic and industrial development in India. A United Nations survey of progress of women towards equality from 1975 to 1980 pointedly brought out the fact that in developing countries economic development in itself has been bad news for women. The economic participation of women has been declining in these countries with the introduction of new technology and industrialization of production.

Murali Manohar K.,\(^10\) (1983) in his “Socio-economic status of Indian women” says that the low status of Indian women is the result of contradictions existing in the society. When women play an important role in controlling the productive forces and participating in productive operations, their position would be quite significant and dominating. But they are not allowed to do so. The exploitation is not only carried on the class lines but also on the lines of male domination over females. As a result, women become dependent and subservient in all walks of life. The social conditions continue to be anti women and exploitative in character.

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Usha Rao N.J.,¹¹ (1983) in her study, deals with the all India pattern of varied types of women workers. For her, there has been a growing concern in recent years regarding the declining work participation rates of women in India. Regarding the services sector it may be mentioned that according to the occupational categories of the census, there has been a marginal increase in the proportion of women in white collared occupations, viz, doctors nurses and other health personnel, teachers, clerical staff and office workers. This increase has been offset by the decline in the number of women in trade, commerce and other categories. This expression requires a lot of in depth secondary data analysis.

A study title “Child labour non-solution”¹² (1983) was conducted to ascertain the problems of workers especially child labourers of match and fire work units in Sivakasi. It has pointed out that the workers in the match and firework units are to be paid reasonable wage, because their wages are lower than the minimum wages fixed for agricultural labourers. If the wages for the adult workers are increased, it may solve the problem of child labour to a considerable extent.

A study was conducted by Smith Kothari\textsuperscript{13} (1983) to know the Working conditions of women workers of match industry in Sivakasi. According to him, the working conditions of women workers in match industry are poor. There is very little facility for ventilation in the small rooms of the cottage units. Similarly all the activities require squatting, which makes the women uncomfortable and forces them to suffer from postural defect. The occupational conditions in the various production stages are hazardous.

Suresh Babu M.,\textsuperscript{14} (1983) has studied the various aspects of hand made match industry. He observed that the match industry gives scope to men, women, adults and children equally. He also compared the various working conditions of match industries controlled by private entrepreneurs with those of the cooperative match industries.

Esakky S.,\textsuperscript{15} (1984) in his study titled “On the economic and social consequences of child labour employment in match industry in and around Sivakasi in Tamilnadu” stressed that the child labour in Sivakasi cannot be

\textsuperscript{13}Sumith kothari: (1983) “There is a blood on those match sticks”, \textit{Economic and Political Weekly}, Vol.18, pp.119-1202.


eradicated unless the welfare of their families and the socio-economic conditions are considerably improved.

**Vishwapriya Iyengar L.,**

16 (1985) in her study titled “Rights for little workers” has evaluated the various recommendations of Gurupadasamy committee, which was appointed to study the problems of child labour.

**Kamali C.,**

17 (1986) in her study titled “Child labour in match and firework units at Sivakasi” has analysed the socio-economic conditions of child labours working in match and fire units. As per the analysis, it is clear that the conditions of the child labourers were pathetic.

According to **UNICEF**

18 (1986), there are 45,269 children working in Match industry. This particular estimate does not cover home based match work in and around Sivakasi town as well as nearby areas. If they are also covered in the present statistic then there are 1,25,000 children working in match industry. Out of this total working children’s population, 80 per cent are girls and the remaining are boys.

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18UNICEP: (1986) [www.thehindu.com](http://www.thehindu.com)
Tiwary S.N., 19 (1986) in his study titled “Personnel management in cooperative institution retrospect and prospect” has analysed the importance of human resources management and its impact on the society.

Natarajan S.R., 20 (1987) in his study titled “The wage problems of women and child workers in the safety match industry” observed that the child and women labourers are getting low wages and that there is discrimination in the wages between these two and of the men workers. He gives the following reasons for such wage differences:

1. The contribution of labour in safety matches is heterogeneous in character.
2. A dominating feature of child labour and women workers.
3. Lack of capital and creditworthiness along with market imperfections and uncertainty.
4. Lack of workers associations and ignorance of labour legislations. He suggested that the steps have to be taken to protect the child labour and the women workers from being exploited by restricting working hours and fixing minimum wages. Proper implementation of the

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Harban Singh Committee Report (on child labour) should be insisted on. The government should provide easy and cheap credit facilities.

**Rohini Nayar**\(^{21}\) (1987) talks about the female participation rates in rural India and the factors responsible for increasing the female participation rate. It was found that female work participation is highly correlated with poverty and landlessness in India. Poverty has a great influence in increasing the female participation rate. Increase in the earnings of the household due to greater propensity in agriculture leads to withdrawal of some of the female labour from labour market. The other factor which is inversely related to female labour participation is landlessness. On the whole, it can be said that both economic and socio cultural factors determine female participation in rural India.

**Gomathi V.,**\(^{22}\) (1988) in her study titled “A study of job satisfaction of women employees in public and private sector banks in Tirunelveli Town” has analysed the theme of job satisfaction. She has found that the employees of public sectors are highly satisfied than those in private sectors.


Pradeep Kumar Saxena\textsuperscript{23} (1988) in his article “The initiation of the process of Economic Development in India” says that a number of significant structural changes have taken place in the labour market, increased labour force participation of women being one of them. While stressing the importance of education and training in manpower development, in the Seventh Plan (1985-1990) states that “Trained and educated on soundlines”, a large population, can itself become an asset in accelerating economic growth and in ensuring social change in desired directions. Education develops basic skills and abilities and fosters a value system conductive to and supportive of national development goal, both long term and immediate.

According to Ruth and Richard\textsuperscript{24} (1988) one reason for the negative impact of development on women has been the tendency of planning to concentrate on the industrialized and monetised sectors of the economy, which are dominated by men. Informal and subsistence sectors where women’s contribution is generally high, are not given the priority they deserve.


Kathiresan K., (1989) conducted a study titled “Perception towards specific aspects of the work situation”. He has examined the extent of satisfaction or dissatisfaction on job factors, as perceived by workers and trade union leaders. For the conduct of the study, the dispute prone textile units were identified and then, a total of 708 workers and 67 trade union leaders were contacted, from the units thus identified at random. Most satisfactory factors as perceived by the workers are supervision and opportunity for advancement. Though the workers perceive leave facilities, working conditions, termination policy and hours of work as satisfactory, the extent of satisfaction is very low. Trade union leaders perceive supervision and leave facilities as the most satisfactory ones as compared to other job factors. However, they consider opportunity of advancement, working conditions and hours of work as the most satisfactory ones.

Gopalsamy R., (1989) in his research work titled “A study of human resources in Ramnad District central cooperative bank in Madurai” has studied the various aspects of the personnel management situations prevailing in the bank. He observed that the employees are recruited mainly from district employment office


and the promotion policies adopted by the bank do not give satisfaction to the employees of the bank.

A study was conducted by Thennarasu M.,\textsuperscript{27} (1990) to review the various factors relating to the personnel of district cooperative spinning mills, Melur. He found that the job satisfaction of workers is very moderate.

Kaptan S.S.,\textsuperscript{28} (1990) in “A case study of Amarvati city: The Income, wages and working conditions of women workers in the unorganized sector” explains that insecurity and uncertainty, heavy burden, stagnant wages, long working hours and temporary nature of work were found in the occupational structure of unorganized women working as beedi makers, cotton spinners, tea plantation workers, grainmill producers. He has reported that these women may not work after 40 years as they had already lost their physical stamina or working capacity by doing long hours of work.


Pranati Mukherjee\(^{29}\) (1990) maintains that India is a country with the highest number of illiterate people in the world. It is the Indian women who are bearing the brunt of this serious problem of under development. The literacy rate among Indian women, even after four and a half decades of independence, is only a little more than 25 percent. There are villages in India where women's literacy rate is as low as 3 per cent. Illiteracy and poverty go hand in hand. In our country, in 1990, 60 per cent of the population was illiterate and half of the population lived under subsistence level. It is for this reason that in many states of India, mass rural education programmes have been conducted. Literacy could find solution to many of our problems.

Bimlesh Kumar Mishra\(^{30}\) (1990) says women as a ‘group’ constitutes an important part of the labour force. Even today, they form no more than a safety value for labour market in India. Stagnant agriculture, decline in household industries and lack of generation of additional employment opportunities, according to him, are major factors of low work participation rate of women.


Kamalraj\textsuperscript{31} (1990) is of the view that India is one of the important countries in Asia. Many women labourers are engaged in the salt industry of ‘Solar Evaporation Method’. The article explains salt production and highlights the role of women in this industry, their working conditions, wage level and also their problems. In recent times, in India, highly mechanized salt production has been resorted to. It means displacement of labour by capital and losing of jobs by many. The government of Tamilandu ordered that salt manufacturers should produce iodized salt only. The non-iodised salt is prohibited for sale.

Muthusamy A.,\textsuperscript{32} (1991) in his study titled in “Amaravathi cooperative sugar mills limited” has analysed the working conditions of the workers in detail. He suggested that in order to develop the morale of the employees, the management must provide adequate housing quarters and adequate lighting and ventilation facilities in the buildings of the mill and provide training facilities to the employees.


Narasimhalu K., and Sathya Murthy G.,\textsuperscript{33} (1991) in their study “Performance of Match Industry” a case study of Chitoor district have stated that cottage Match Industry has a unique place since it offers job to male, female and children. Further it does not need huge investment in plant and machinery.

Manim Mekalai N., and Sundari S.,\textsuperscript{34} (1991) study on, “Female Labour force in the unorganized sector of Mat industry - Some Evidence”, which they carried out in Amoor and Ayyampalayam villages in Tamilnadu. The pathetic condition of women in the unorganized sector is highlighted in that study. These women labourers were forced by poverty and destitution to accept low pay and insecure work in the Mat industry.

Solaiappan V. and Subramanian S.,\textsuperscript{35} (1991) in their research report titled “Agro forestry situation” have pointed out that India is one of the largest producers of matches in the world and about 80 percent of the matches produced in India are handmade. According to them, about 95 percent of the handmade match industries in India are in the southern districts of Tamilnadu. The survival


of this industry depends largely on the availability of the important raw material for the industry, namely the matchwood.

**Madasamy V.,**<sup>36</sup> (1994) in his unpublished thesis titled “A study on the problems of production in cottage Match industrial units in Kamarajar District” has analysed the raw materials and labour problems of match units. He has also discussed the sources of working capital and the process of manufacturing. He has suggested that the entrepreneurs should be exempted from getting exemption certificates for cottage match units. He has also discussed the sources of working capital and the process of manufacturing. He has suggested that the entrepreneurs should be exempted from getting exemption certificates for cottage match units. He has also suggested that the licenses issued for chemicals like chloride and sulphur should be for at least three years. In order to provide more employment opportunity he has suggested that the government should encourage entrepreneurs to start cottage match units. He also suggested that the procedure for getting the subsidy and term loans should be simplified.

**Mehra**<sup>37</sup> (1994) study, “The working conditions of women workers in informal sector” has indicated that self employed women in unorganized sector

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being poor are exploited and are low class workers. Labour laws and other special benefits which are available to women workers in organized sector are not available for informal sector.

Subhadra Patwa\(38\) (1995) “The comparative study of female and male workers in diamond trade industry” indicated that female labour receives less awards than males. It has been revealed that advantage to industry is more from female labour on account of characteristics of female labour such as reliability. The strict gender specific literacy at firm level does not accept females as brokers or co-merchants and at and manufacturing level where male worker would not like to take orders from female managers. Owners curtail self employment opportunities for females. The study cautions that any deliberate attempt to undertake feminization of manufacturing units will make the female more vulnerable in terms of lower wages.

Niranjan Pant\(39\) (1995) in his study gender bias and poverty study by Jodijacobson, a researcher at the world watch institute, discrimination against women, reinforced by conventional approaches to development, is a primary cause of poverty and rapid population growth in the third world. The study


\(39\)Niranjan Pant: (1995) “Status of Girl child and women in India”, APLT publishing corporation, 5- Ansari Road, Darya Ganj, New Delhi, p.73.
mentions that gender bias in its various forms, prevents hundreds of millions of women from obtaining education, health services, child care and legal status needed to escape from poverty. Most of the women’s activity takes place in the non wage economy for household consumption, producing food crops, gathering firewood and collecting fodder. Although women toil longer and contribute more to the family income than male family members, they are viewed as ‘unproductive’ in government statistics. The study asserts that gender bias is also the single most important cause of rapid population growth. Where women have little access to productive resources and little control over family income, they depend on children for social status and security.

Janette Moritz\(^{40}\) (1995) who carried out research in Ahamedabad city of Gujarat state on “Women workers in the waste Economy”, explains that collaboration with the self employed women’s Association (SEWA) focused on the employment experiences of twenty five paper pickers in the city. This study also brought out the hardships of women in the form of exploitation, lack of protection and infrastructural support, job insecurity and absence of organized power for collective bargaining. Eighty-eight percent of the participants started working between the ages of twelve and fifteen and some as young as at nine

years of age in agricultural and factory work, domestic service and waste collection.

The study on the living conditions of workers in Bakery industry in India\textsuperscript{41} (1995) revealed that 95 percent of the total workers in the industries were men, 4 percent women and only 1 percent children. The percentage of scheduled caste and scheduled tribe workers was only 1.77 and 0.17 respectively. 59 per cent of the workers were unskilled, 17 per cent semiskilled and 24 per cent skilled. 66 per cent of the workers were male and 34 percent female. About 32 per cent of the units were extending maternity benefits to the female employees and Employees State Insurance Act 98 per cent of the units were provided with drinking water facility.

Nancy David I.,\textsuperscript{42} (1996) considered women labourers as arduous workers and wage earners, piece rate workers, casual and unpaid, family labourers without maternity care and other social security measures and Minimum wages Act. They have indefinable employer-and employee relationship and cannot escape from sexual harassment and other exploitations due to lack of security in life.

\textsuperscript{41}Director: (1995) Labour Bureau, “Study on the working and living conditions of workers in bakery industry in India”, Controller of Publication, Civil lines, Delhi.

\textsuperscript{42}Nancy David I.: (1996) “Plight of unorganized women workers in Tripathy S.N.: (ed), \textit{Unorganised women labour in India}, Discovery publishing house, New Delhi, pp. 15-26
Satyasundaram\textsuperscript{43} (1996) stated that the women formed 25 percent of the labour force accounting for over half of the food produced in the developing world besides their excellent service in household chores. Yet women have been made the most vulnerable section in the society and they have been treated as working machines rather than human beings.

Ganiger, S.B. and Rajeshwari, N.V.,\textsuperscript{44} (1996) in “The study on female employment in non-agricultural sector in urban Karnataka” reveals that urban work participation rate in non-agricultural sector in Karnataka has not depicted significant increase during 1977, 1991 and has remained very low. This study has witnessed gradual replacement of male workers by female workers in professions like teaching, purse making and beedi making. The study has enlisted reasons that prevented women from choosing modern occupations, like low level of literacy, lack of proper skill, absence of competition avenues, etc.


\textsuperscript{44}Ganiger S.B: Research Investigator and Rajeswari N.V: Research Officer (1996) “Female employment in non-agricultural sector in urban Karnataka”, Population research centre, JSS institute of economic research Vidyagir, Bharwed – 4, Karnataka.
Tripathy S.N., and Patnaik P.K.,\(^{45}\) (1996) found most of the women labourers in the unorganized sector without fair wages and good living standards and invisible vulnerability. Treated as second class citizens women workers are putting in more hours of work than men and yet without participation in the decision making process.

Preeti Rustagi\(^{46}\) (1997) states that the level of female participation in the unorganized sector is tremendously increasing due to economic compulsion, low employment, avenues, increasing cost of living and employer’s preference.

Amitabh and Kundu\(^{47}\) (1999) assert that the percentage of female workers during 1981-91 saw an upward movement from 19.7 to 22.3 and a corresponding decline in the male workforce from 52.6 to 51.6 during the same period. Adding further, he argues that during 1971-91, female work participation rate registered a northward movement across both in rural and urban areas while for men, it had shown a decline correspondingly. Female unemployment rates seem to have been on the decline over the years. Although unemployment rates

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for women in 1977-78 were higher than men they have generally shown decreasing trend in the 1970s and 1980s. This trend is reported to have continued during 1983-87. The decline among rural females appears to be larger than their male counterparts.

Meenakshi Sundaram N.,\(^{48}\) (1999) in his paper “Working Conditions of Women Workers in Tanneries” says that in Tamilnadu leather industry plays a vital role in the process of industrial development. Tamilnadu contributes nearly 55 percent of total leather exported from India. 70 percent of the total hides and skins produced in the country are tanned and finished in Tanneries located in Dindigul. For these Tanneries the labour force is drawn from in and around Dindigul. The study analyzed the working conditions of women employees. The study revealed that, the women labourers were employed on temporary basis as helpers which is mostly considered to be unskilled, wages paid were very low and medical allowance was inadequate and poor transport facilities exist for the workers to reach the tanneries from their village.

Saraswathy N., 1999 in her paper “Women labour in unorganized sector needs reappraisal of labour laws” explains that while women’s issues in the developed world are more sharply focused on the equality question, in the developing countries, these issues are seen primarily as developmental. This is not to imply that equality is not an issue for the developing countries. However, the present development crisis and the controversies about the impact of development on women’s employment conditions have pushed the question in the background. These issues have been discussed in her paper.

Harbans Singh (1999), in the study, the researcher analyses the impact of the rural labourers were defined as change in socio-economic conditions and changes in employment income and socio economic status. This study was undertaken in the non agricultural labourers in Chandigar. A sample of 150 respondents were selected by random sampling for the purpose of the study. A structural interview schedule was prepared and collected by conducting personal interview with the 150 respondents. He pointed out that the problems of the non agricultural labourers in Chandigar are lack of job availability, lack of awareness level about the government lablour laws, and backwardness in education.


Lalitha (1999) in her paper, “Female labour force in construction Industry” explains that working conditions and occupational hazards were admirable. In the organized sector, a significant percentage of women are engaged in construction industry. The number of women workers in construction industry has increased from 2.9 lakhs in 1951 to 7 lakhs in 1991 in India. The condition of women construction workers is pitiable. They face instability and insecurity of employment are paid low wages, are not protected by labour laws and are even exploited by middlemen who employ them without providing adequate facilities and securities enjoined by legislation. Their life is perceptually in a state of flux as they have to keep on migrating from site to site. The average wages for women are generally lower than that of their male counterparts. Further women construction workers are totally unskilled. In the event of accidents, sickness or during maternity, workers had to forgo employment and wages. They were in debt during the crisis periods either to the money lenders, neighbours or to subcontractors. The study undertaken at Athoor block of Dindigul District revealed that 76 per cent of the women construction workers expressed willingness to become skilled. Therefore, workers special efforts should be made for imparting skill training like masonry and carpentry to women workers under government and Non-Government Organisation initiatives. There should be a

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statutory provision for contribution by the contractors to the extent of 10 per cent
of net earnings towards construction workers welfare fund.

Amarjothi\textsuperscript{52} (2000) explained the human resource management of match
industry in Sivakasi. It was found that about 76 per cent girls and 24 per cent of
boys were engaged in this match industry. The cause for the employment of more
number of female child labourers is the preference by employers to female
children. In these match industries the contribution of child labourers to their
families is sizeable. In total an average of 22 per cent of the total family income is
contributed by the children which has substantially increased the income level of
the households of the working children.

Billings and Singh\textsuperscript{53} (2000), a major study of this type is who, on the basis
of certain assumptions, concluded that over the period from 1998-to 1999 farm
labour demand in Punjab declined by 17 per cent. Their conclusion was based on
the assumption that by 1998-1999, 20 per cent of all cropped area would be
tractor plighted the entire wheat crop mechanically harvested and that tube well
and pump sets covered 60 per cent of irrigated area. They estimated a 14 per cent
increase in cropped area and a cropping pattern determined by pat trends and

\textsuperscript{52}Amarjothi (2000): “Human Resource management of match industry in

\textsuperscript{53}Billings and Singh: (2000), “Real wage of Agricultural labour in Punjab”,
optimality conditions. Of the total direct labour displacement in the model of Billings and Singh, about half would occur in the peak harvesting months on account of mechanized harvesting and threshing, thus effecting the casual laboures most. The remaining displacement, on account of pump irrigation and tractor ploughing, was spread over the year. Although considerable degree of mechanization had taken place in Punjab since 1998-99 there was no sign of a substantial reduction in demand for labour.

Ramana Rao, D.V.V.,\textsuperscript{54} (2001) studied the impact of institutional credit on the socio-economic conditions of rural women in self help groups. From this analysis, it is obvious that the Self-Help Groups have spread their reach by serving a large client with small amount of credit, but financial de-opening of credit system through Self-Help Group movement still remains a far cry. Further there seems to be a tendency among Self-Help Groups members to borrow from various agencies, which may lead to repayment problems due to multiple financing. In this connection, the policy to integrate Self-Help Group within mainstream banking should receive greater attention. Only 24 per cent of Self-Help Groups members demanded credit for agricultural purposes and in terms of amount also it constituted a big chunk (24 per cent) of the total demand for credit.

Gothoskar\textsuperscript{55} (2003) points out that informal work is the product of a complex combination of historical, economic and social factors and processes which may change with circumstance and time. These include; the legacy of colonial exploitation and the consequent lack of capital in developing countries, which induces low rates of investment as well. Faulty government policies as well as economic mismanagement including outright theft of public assets and other corrupt practices of authorities, which allow tax evasion as well as other practices encouraging informalisation, mismanagement by international financial institutions, especially the introduction of structural adjustment polices of a “one-size fits all” variety as conditions of government borrowings; the gender division of labour in the economy and in society at large all had their impacts. Finally, the inherent logic of capitalism, which implies the continuous search for means of cost reduction and more flexible use of labour had a say in the matter.

According to Devadoss J.,\textsuperscript{56} (2004) Joint secretary, South India Match Manufacturers Association, Kovilpatti, the traders have a stranglehold on the cottage sector, which turns out match boxes of indifferent quality day in and day


out in poor working conditions. Pointing out that there was no illegal matchmaking industry in TamilNadu, as such, he said the cottage sector should be freed from the clutches of the trade, and brought back into the cooperative fold under Government supervision.

**Palani Kumar**\(^{57}\) (2004), General Secretary of the All India Federation of cottage Matches Manufactures Association, told Business line in Sattur that the government needs to come out with a clear policy clarification on where the cottage matches units actually stood today. Asked if the entry of organized players in the Sivakasi, Kovipatti areas purely for outsourcing purposes was improving the living conditions of people in and around, he replied in the negative.

**Vaiko**\(^{58}\) (2004) said, “There has been no change in the policy of reservation for matches in the small-scale sector and no licences or permission have been issued in the recent past for the setting up of mechanized units.”

**Research Gap**

After an extensive review the researcher found that there are studies on women in general and women in unorganized sector in particular. But studies focusing on the status or plight of women in unorganized sector specially in the

\(^{57}\)Palanikumar: (2004), *op.cit.*

match industry is not much seen. That is why the researcher is interested in carrying out the present study in Sattur Taluk where most of the match industries were situated. In this study researcher comprehensively explains the socio-economic status of the women labourers, impact of their earnings on their family, intensity of poverty, factors influencing the magnitude of women labourers and the level of job satisfaction.

2.2 Methodology

Nature of Study

The present study is an exploratory study descriptive in nature. It is a fact finding survey, “Descriptive Research studies are designed to obtain information concerning the current status of a phenomenon”. They are directed towards determining the nature of a situation as it exists at the time of the study. The aim is to describe what exists with respect to variables of conditions in a situation. The survey method has been used in this study with the help of a pre-tested interview schedule specially designed for collecting comprehensive information for fulfilling the objectives of the study.

Sampling Design

Sattur taluk has been chosen as a study area which is located in Virudhunagar district. In Tamil Nadu, the highest number of Match industries are
concentrated in Sattur taluk. Sattur taluk comprises three blocks namely, Sattur, Vembakottai and Virudhunagar. Among these three blocks, two blocks namely Sattur and Vembakottai which are having more than 95 per cent of match industries have been selected for the purpose of primary data collection. In Sattur taluk, there are two types of match industries namely semi-mechanised and non-mechanised. Non-mechanised sector alone has been selected for this study. In both blocks, there are about 1659 match industries functioning and these industries form the universe of the study. From the universe, 100 match industries, 6 per cent of total industries, have been selected proportionately from Sattur and Vembakottai block. Out of 100 sample units, 65 units come under Sattur block and 35 units fall under Vembakottai block. For the purpose of primary data collection, 300 sample women workers, 3 each from 100 sample match industries were randomly selected. The total number of 300 sample women were selected by using simple random sample technique. If the sample is taken proportionately or as percentage to the women labourer in each industry, it will come around 1000. It is unaffordable and expensive for the researcher. Hence, the sample size is restricted to 300 and gives equal representation for all industries irrespective of the number of women workers. The number of match industries selected and number of sample women workers block-wise are given in Table 2.1.
TABLE 2.1
SAMPLE DESIGN OF THE INDUSTRIES AND WOMEN WORKERS

<table>
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<tr>
<th>S.No</th>
<th>Name of the Block</th>
<th>Total number of the Match industry</th>
<th>The Match industry sample</th>
<th>Women Workers sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>65 (64.98 is rounded)</td>
<td>225</td>
</tr>
<tr>
<td>1</td>
<td>Sattur</td>
<td>1083</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Vembakottai</td>
<td>576</td>
<td>35 (34.56 is rounded)</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1659</td>
<td>100</td>
<td>300</td>
</tr>
</tbody>
</table>

Source: Computed from primary data

Sources of Data

The present study is based on both primary and secondary data. The secondary data were obtained from the offices of various agencies such as inspectors of factories, Statistical Office, Collectorate, District Industries Centre of Virudhunagar, Sattur Small Match Producer’s Service Industrial Co-operative Society, Taluk Office of Sattur, Sattur Block Office of both Sattur and Vembakottai blocks, Central Excise Department, various journals and websites, and also from various reports connected with the Match Industries.

The primary data were collected from the women labourers of the Match industries in both blocks of Sattur and Vembakottai taluks by using the structured interview schedule method and also observation techniques. Data was also obtained from the Match industry owners, managers and General Secretary of All India Federation of Cottage Match Manufacturers Associations, Manager of
Chamber of Commerce, Sivakasi, Special Thasildar for matches, Sivakasi and also from various officials connected with the Match industries.

**Tools of Data Collection**

Personal interview was carried out by using structured interview schedule in order to collect required information from the respondents in consonance with objectives formulated for the study. The researcher collected data from the field through actual contact with different activities carried out by the respondents in the Match industries. In addition, observation technique was used to supplement the primary data.

**Pre-test**

The constructed interview schedules were put to field test with a few women labourers in order to test their suitability and relevance. After that, schedules were edited, modified and standardized based on the results of pre-test.

**Statistical Analysis of Data**

After the data collection was over, the schedules were scrutinized for the removal of errors and omissions. After the editing work was over, the classification of data was taken up. On the basis of available data. For the analysis of the data, SPSS (Statistical Packages for Social Sciences) software was used and qualitative interpretations were drawn creatively. The data collected for the study
were examined carefully. The investigator prepared a code design and classified and grouped the data for the purpose of analysis.

In order to study the relationship between income of women labourers and their family characteristics, Chi-square was used.

To analyse the contribution of women labourers towards their family income, multiple log linear regression model was computed.

In order to examine the impact of women labourer earnings on income and savings, Z-test has been used.

To analyse the extent of inequality before and after the contribution, Lorenz Curve and Gini coefficient were used.

In order to study the impact of employment of women labourers on household’s savings, simple linear regression model was used.

Sen’s poverty index was applied to analyse the intensity of poverty.

In order to identify the factors influencing the magnitude of women labourers, multiple linear regression model was used.

To examine the factors influencing the level of job satisfaction, multiple log linear regression model was used.
Method of Study

The success of any research work largely depends upon the methods and techniques adopted by the investigator without which the researcher cannot attain the designed goal of research. The correct result can only be attained when the methodology and the procedures used in the study are well organized. The survey method has been used and the data have been collected with the help of a pre-designed interview schedule.

Reference Period

The reference period of this study was 2007 to 2008.

The field investigation and data collection for the study were carried out during the period from October 2007 to March 2008. The data collected from 300 women labourers from 100 Match industry situated at two blocks namely Sattur and Vembakottai in Sattur taluk were scrutinized and processed for analysis.

2.3 Concepts

Time Rate Payment

Time rate payment means payment of wages to the labourers according to the number of hours worked. This type of payment is made to administrate staff such as managers, clerks and other office labourers. The permanent employees are also paid monthly salary. The temporary office employees are paid once in ten
days or once in a week. Based on the performance of work, efficiency and loyalty to the management the temporary staff are made permanent and monthly salary is paid to them.

**Piece rate payment**

The piece rate payment means payment of wages according to the number of units produced. Since there is much freedom to the labourers in the factory to carry out all the operations like box making, frame filling, box filling and band rolling, piece rate payment is adopted. Naturally the labourers, especially women and children turn out the maximum output due to the existence of piece rate payment.⁵⁹

**Semi mechanized Match industry**

A semi mechanised Match industry denotes any concern which produces safety matches partly by hand made operations and partly by machines. It is otherwise called “B class” unit. There is no production limit.⁶⁰

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⁶⁰Excise Duty Department, Arupukottai
**Mechanized Sector Match Industry**

The mechanized sector Match industry is one which produced matches by using machines. It is otherwise called “A class” unit.\(^6^1\)

**Small Scale Match industry**

The small scale Match industry is one that produces matches using labour and having no limit on production.

**Non-Mechanized sector**

The Match industry that produces matches only by labour is included under non-mechanised sector.

**Match industry**

‘Match industry’ means any establishment which manufactures safety matches or colour matches by the use of chemicals.\(^6^2\)

**Unorganised Sector**

Working in the unorganized sector means almost working without legal protection, without job security and for low level wages.

\(^6^1\) *Ibid*

Splints

The term splint is generally used for the matchsticks before they are chemically processed.\textsuperscript{63}

Veneers

They are the thin layers or sheets of wood of uniform thickness, cut from the suitable softwood species.\textsuperscript{64}

Match stick

Match stick means a stick to one end of which chemicals producing fire are attached, and which produces fire on friction.

Match box

Match box means a box in which match sticks are packed, inclusive of the inner and outer cases.

Women labourer

In the present study the term “women labourer” is defined as female labourers having more than five years of experience in the the Match industry. Generally a woman labourer signifies a woman who does the most slavish and

\textsuperscript{63}John Thomas Chirayath: (1968), \textit{A Study of the Match Industry in Kerala}, \textit{(Industrial study series)} Labour and Industrial Bureau, Trivandrum, P. 68.

\textsuperscript{64}Ibid.
less skilled part of a laborious work, as that of husbandry, masonry etc. The terms ‘labour’, ‘labourer’, worker and employee are used practically as synonyms and are interchangeable meaning wage labourer.

**Unit**

A unit contains 100 match boxes.

**Bundle**

A bundle contains 6 units or 600 boxes.

**Frame filling**

Arranging splints in a frame of 50 clamp–wood pieces to enable collective dipping in match composition is called frame filling. Each frame holds about 2600 match splints.⁶⁵

**Labour**

The word ‘labour’ would mean any exertion of mind or energy from body for some monetary contributions.

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2.4. Profile of the Study Area

In this section, an attempt is made to describe the profile of the study area, Virudhunagar District, in terms of origin, location, administrative set up, area classification on the basis of industrial backwardness, human resources, agricultural resources, forest resources, trade and commerce, industries and other infrastructure facilities. Besides this, the profile of the four blocks namely Sivakasi, Rajapalayam, Watrap and Tiruchuli is also given briefly.

Tamil Nadu is the southernmost state in the Indian sub-continent. It is bound on the north by Andhra Pradesh and Karnataka States, on the south by the Indian Ocean, on the west by the State of Kerala and the Western Ghats and on the east by the Bay of Bengal. Tamil Nadu covers a little over 1,30,000 sq.km., representing about four per cent of India’s geographical area. In terms of area, Tamil Nadu ranks eleventh in the country.
According to the 2001 census, Tamil Nadu had a population of 62.1 million which makes it the seventh largest state in the country. Tamil Nadu is one of the most densely populated states in India, with 378 persons per square kilometer, as against the all-India figure of 324. As regards the density of population, Tamil Nadu stands fifth among the States of India.
VIRUDHUNAGAR DISTRICT

Origin

The erstwhile Ramanathapuram District was formed on first June, 1910 by carving out certain portions from Madurai and Tirunelveli districts. The Government of Tamil Nadu decided to bifurcate large district into small districts in order to ensure an effective, and transparent administration. To fall in line with the above policy, the Government trifurcated the erstwhile Ramanathapuram, district into Kamarajar, Ramanathapuram and Pasumpon Thevar Thirumaganar district.

Kamarajar district was formed on 15th July, 1984 and was named after the freedom fighter and former Chief Minister of Tamil Nadu, Sri. K. Kamaraj. The district started functioning on 15th March 1985. Later, there was a continuous class struggle among the various sections of the people in the southern regions of Tamil Nadu. Because, of that Government of Tamil Nadu changed the name of Kamarajar District into Virudhunagar District on 1st July, 1997. Now, the district is functioning with Virudhunagar as its headquarters.

Location

The Virudhunagar District is located between 9°07 and 10°22 north latitudes and 77°22 and 79°25 east longitudes. It has an area of about 4270.3 square kilometers. It is bound on the east by the Western Ghats, on the North by
Madurai district, on the North–East by Sivagangai district, on the East and the South-East by Ramanathapuram district and on the South by Thoothukkudi District.\textsuperscript{66}

**Physical Features**

Virudhunagar District is landlocked on all sides with no direct access to the sea. It is bound on the north by Madurai, on the northeast by Sivaganga, on the east by Ramanathapuram and on the south by Tirunelveli and Tuticorin districts.

Physiographically it consists of two distinct regions. The eastern slopes of the Western Ghats in Srivilliputur and Rajapalayam taluks and the black soil plains of Sivakasi, Virudhunagar, Sattur, Aruppukkottai, Tiruchili and Kariapatti. The average height of the hills of the eastern slopes of the Western Ghats is 1500m, though a few peaks rise to 1700m. The highest peaks are Peyimalai Mottai and Kottamalai. The foothills have rich loamy soil with good vegetation cover. The plains with black cotton soil (locally known as karisal) have underlying calcareous formations.

Virudhunagar does not have any perennial rivers. The Vaippar, Arjuna nadi, and Gundar constitute the river network of the District. Numerous streams and rivulets, activated by the monsoon, feed these rivers. The Mandiri odai and Girudhamal nadi flow into the Gundar, which irrigates the northeastern region of the District. The Sengundrapuram odai, Kausika manadi, Uppodai and Mannarkottaiyiar are feeder streams of the Arjuna nadi, which flows through the central portion of the District. The Kayalkudiyar and Nichepa nadi join the Vaippar, which runs through the southern part of the District. The Arjuna and the Vaippar meet at Irukkangudi.

**Administrative Set-up**

For administrative convenience, Virudhunagar District has been divided into two revenue divisions, one at Sivakasi comprising Srivilliputhur,
Rajapalayam, Sattur and Sivakasi Taluks and the other at Aruppukottai comprising Aruppukottai, Kariapatti, Virudhunagar and Thiruchuli Taluks. It has 11 community development blocks namely, Rajapalayam, Sivakasi, Virudhunagar, Sattur, Aruppukottai, Vembakottai, Srivilliputhur, Watrap, Thiruchuli, Narikudi and Kariapatti, six municipalities namely, Aruppukottai, Virudhunagar, Sattur, Sivakasi, Srivilliputhur and Rajapalayam, 600 revenue villages, 464 village panchayats, 11 panchayat Unions and 10 town panchayats. It covers one parliamentary constituency and six assembly constituencies.\textsuperscript{67}

**Area and Population**

According to the Director of Statistics, Chennai, the district covers an area of 4270.3 square kilometers or 1648.8 square miles. Virudhunagar district occupies the fifteenth rank among the districts of the State of Tamil Nadu with regard to its size. Table 2.2 clearly indicates the total geographical area of the district.

TABLE 2.2
TOTAL GEOGRAPHICAL AREA OF THE DISTRICT

<table>
<thead>
<tr>
<th>Status</th>
<th>Area in</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sq.km.</td>
<td>Sq. Miles</td>
</tr>
<tr>
<td>Rural</td>
<td>4179.4</td>
<td>1613.7</td>
</tr>
<tr>
<td>Urban</td>
<td>90.9</td>
<td>35.1</td>
</tr>
<tr>
<td>Total</td>
<td>4270.3</td>
<td>1648.8</td>
</tr>
</tbody>
</table>

Source: Director of Statistics, Chennai.

The population of the district is 15,65,037. Of this total population, 7,84,912 (50.15 per cent) are males and the remaining 7,80,125 (49.85 per cent) are females. In the district 9,79,333 persons constituting 62.58 per cent of the total population live in rural areas and the rest of 5,85,704 persons constituting 37.42 per cent of the total population live in urban areas. The population of scheduled castes and scheduled tribes is 2,91,879 persons accounting for 18.64 per cent of the total population. The density of the population of the district is 363 persons per square kilometer. The total number of literates is, 8,48,127 (54.19 per cent). Workers constitute 47.9 per cent of the total population.68

From the above statistical figures, it is noted that more than 60 per cent of the population is living in rural areas and the educational level of the district has improved to a considerable extent. Above half of the population is able to read

and write. Further, even today more than two-thirds of the workers derive employment from agriculture and its allied activities.\textsuperscript{69}

**Resources – Human Resources**

The total population of Virudhunagar district is 15,65,037 according to the 2001 Census.

**Education**

According to the 2001 census the percentage of literate population in the District is 62.91. The percentage of male literacy is 75.67\% and female literacy is 50.17\%.

\textsuperscript{69}Unpublished Records of District Educational Office, Virudhunagar, 2006, p. 10.
TABLE 2.3
EDUCATIONAL INSTITUTIONS

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Category</th>
<th>No. of Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Primary Schools</td>
<td>1426</td>
</tr>
<tr>
<td>2.</td>
<td>Middle Schools</td>
<td>171</td>
</tr>
<tr>
<td>3.</td>
<td>High Schools</td>
<td>58</td>
</tr>
<tr>
<td>4.</td>
<td>Higher Secondary Schools</td>
<td>107</td>
</tr>
<tr>
<td>5.</td>
<td>Colleges for Arts &amp; Science</td>
<td>11</td>
</tr>
<tr>
<td>6.</td>
<td>Teacher Training Institutions</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Engineering Colleges</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>Polytechnics</td>
<td>8</td>
</tr>
<tr>
<td>9.</td>
<td>No. of Industrial Training Institute</td>
<td>15</td>
</tr>
</tbody>
</table>

Health

The District has fully equipped Government and Private hospitals. There are 9 Government hospitals with combined bed strength of 772 beds. There are 36 Primary Health Centres and 284 Sub-Centres attached to Primary Health Centres in various blocks of the District.
Agricultural Resources and Irrigation

Agriculture is the predominant occupation of the district. Nearly 66.3 per cent of the total population of the district is dependent on agriculture and its allied occupations.

The district is a drought prone district. The most striking feature of the district is the absence of dependable irrigation sources like perennial rivers. Assured irrigation is available through wells only for 57 per cent. The remaining area is irrigated by rainfed tanks. The reservoirs namely Periyar and Kovilar at Pilavakkal in Watrap irrigate about 3000 hectares through 40 tanks. There are also a number of irrigation schemes like Anaikuttam, Kullursandai, Vembakottai and Golwarpatti.

More than half of the total geographical area of the district is being utilised for cultivation and net cultivated area amounts to 2,70,800 hectares. About 7.4 per cent of the cultivated area falls under double cropping; 5.82 per cent is covered by forests; 2.8 per cent is not suitable for cultivation. The permanent pasture and other fallow land constitute 15.67 per cent of the total area.70

Paddy, cumbu, sugarcane, groundnut, cotton, cholam, maize, ragi, varagu, plantain, samai, chillies, greengram, blackgram, horsegram, and gingelly are the

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70 Lead Bank Section, Indian Overseas Bank, Credit Plan for Virudhunagar District, 2005-06, Madurai Regional Office, 2006, p. 46.
important crops of the district. Paddy is the most predominant crop and it is cultivated in 27,892 hectares. Cotton is the next important crop grown in 38,859 hectares. Cotton is intensively cultivated in Rajapalayam, Srivilliputhur and Aruppukottai taluks. Teak and other trees are grown in some parts of the Western Ghats. The plains of Sattur taluk have black soil which is locally known as Karisal. This soil is suitable for cotton cultivation.

Another important commercial crop in the district is chilli. Sattur Chilli is very popular in Tamil Nadu. Food crops are cultivated in 46.95 per cent of the total area in the district and in the rest of the cultivable area commercial crops are cultivated.

The district is generally hot and dry with a low degree of humidity. Normally the temperature varies from 20°C in December – January to 37°C in April-June. The average annual rainfall is only 386.7 mm. The district receives scanty rainfall. March-July are the hottest months (Summer). The South-West monsoon season is from June to September. The North-East monsoon season is from October to December. The district receives the bulk of its rainfall from the North-East monsoon which often sets late besides being irregular and scanty. However, the upper slope of the Srivilliputhur Hills has the benefit of both the South-West and the North-East monsoons.
Activities Allied to Agriculture

The activities allied to agriculture assume great significance by virtue of their nature and closeness to agricultural activities as they supplement the income of the farming community and also provide gainful employment during the agricultural off-seasons. The important activities carried out by the cultivators and agricultural labourers are dairying and sheep-rearing. There are milk chilling plants at Virudhunagar and Srivilliputhur. The district offers considerable scope for the development of sheep-rearing. The district has a sizeable sheep population of 1,67,078, but they are often of low genetic potential. Further, they suffer from malnutrition on account of the poor quality of available forage and the excessive pressure on the grazing land. Sheep population is large in Aruppukottai, Sattur and Srivalliputhur taluks. The Regional Agricultural Research Centre at Aruppukottai is doing research to improve the genetic potential of the sheep. The development of poultry farming is not significant in the district owing to hot climate, high mortality rate of birds and high cost of feed. However, Poultry Development Programmes are formulated and implemented in Narikudi block. Marketing booths are opened at Pulvakkarai.

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Fisheries

As Virudhunagar is land-locked with no coastline, fishing is restricted to inland water sources. Fish farms have been established at Periyar and Vembakottai dams. Around 8.09 lakh fingerlings were reared in these farms. The fish catch in these reservoirs during 1999-2000 was 3558 tonnes. Fishponds have been developed at the Pilavakkal dam under the drought area development programme.

Forest Resources

The forest area in the district is negligible. Forests are found in Srivilliputhur and Rajapalayam taluks. The area under forest is 25,634 hectares, which is 5.82 per cent of the total area of the district. The reserved forest in Srivilliputhur taluk contains jungle and deciduous species. Palmarah trees are found everywhere, especially in Sattur, Aruppukottai and Srivalliputhur taluks. The mountains in Srivalliputhur and Rajapalayam taluks have teak trees and valuable timber of several kinds. Cardamom Plantation, Mango, Orange and Lime are also found in Srivilliputhur taluk. Cashew, fuel, eucalyptus, sandal and casuarinas trees are the chief forest products of the district.

Animal Husbandry

As per 2001 census, there are 5 veterinary hospitals, 28 veterinary dispensaries, 70 Govt. veterinary sub-centres, 70 visiting centres and 11 mobile
veterinary dispensaries engaged in rendering service to the livestock. An Intensive Cattle Development Project with 39 artificial insemination centres was launched to improve the quality of the cattle.

There are two milk-chilling plants one at Virudhunagar and another at Srivilliputur.

This District offers considerable scope for development of sheep rearing. This District has a sizeable sheep population say as 165416 but they are often of low genetic potential. Sheep population is rich in Aruppukottai, Sattur and Srivilliputur Taluks. Hot climate, high mortality rate of birds high cost of food etc. are some of the significant factors arrest the development of poultry in this district.

**Mineral Resources**

The soils of the district are mainly red loam, black soil and red sand. Most of the areas in the district are mainly covered by black loomy soil. The important minerals available in the district are lime stones of different grades, gypsum, fire clay and graphite. Lime stone is the most important mineral available in this district. In Sattur area, cement grade lime stone is available in plenty which is the primary raw material for the cement industry. Nearly 12 million tonnes of lime stone deposit have been estimated in Alangulam area. Another reserve of about 2.5 million tonnes of lime stone has been recorded at Kakkivadanpatti. The
reserves at Pandalgudi, Chettypatti and Velayuthapuram villages of Aruppukottai taluks are estimated at 12 million tonnes. Similar deposits to the tune of 0.5 million tonnes have been estimated near Virudhunagar.\textsuperscript{72}

Owing to the great potential of lime stone reserves available in the district, there are already two large scale cement factories, one at Thulukkapatti in the private sector and the other one at Alangulam in the public sector. According to the geographical findings, red clay is available in the district, which is a suitable raw material for brick industry.

Besides lime stone, there is a small occurrence of gypsum deposit in Thenkarai and Kovinathampatti village of Rajapalayam and Sattur taluks respectively.

\textbf{Trade and Commerce}

Internal trade of the district is developing on a large scale. Fireworks, matches, polythene articles, litho-printed calendars, posters, diaries and the like are manufactured in Sivakasi. These products enter the markets situated in the different parts of the country. The products, which are produced in the district, have got insignificant local market. Market Committees are functioning in the district for the purchase and sale of cotton, groundnut, jaggery, chilli and other

\textsuperscript{72}DIC Action Plan from 2001-02 to 2005-06, p. 18.
products. A number of studies are held in the district at various places for helping the rural folk to purchase and sell their products such as food grain, vegetables, groceries, textiles, cattle and the like.

There are two warehouses in this district, one at Virudhuangar and other at Rajapalayam. The commodities of the chief wholesale trading in the district are pulses, cotton, groundnut and coffee (Virudhuangar block), cotton and groundnut (Rajapalayam block) and chillies (Sattur block).

**Banking**

Virudhunagar district is served by a network of banking giving an average of 15,680 persons per branch. These branches are located at 58 centres. Eleven public sector banks, 6 private sector banks and one regional rural bank are operating in the district. Indian Overseas Bank (IOB) is functioning as the Lead Bank of the district. There are 164 banks, both nationalized and scheduled, taking care of the banking needs of the district.

The Virudhunagar District Central Co-operative Bank Ltd., (VDCCB) is the central financing agency of the co-operative sector in the district catering to the short-term and medium-term credit needs of the co-operative institutions established there. The bank also finances the Handloom Weaver’s Co-operative Societies. The VDCCB Ltd., with its head office at Virudhunagar, has 16 branches in the district which are located mostly at the block headquarters. Urban
Co-operative Bank is also operating in the district with five branches. Besides, the Tamil Nadu State Co-operative Bank, Land Development Bank Ltd., has five branches functioning in the district for advancing long-term loans to the farmers for the purpose of land-levelling, minor irrigation and horticulture crops.

**Infrastructure**

All taluks in the district are well connected by transmission network and the overall position of power supply to industries is satisfactory. Industrial feeders are available in eight out of the 11 blocks in this district.

Six hundred and fourteen villages in the district are covered under rural electrification scheme. The total length of metalled roads is 329.9 kms., while the total length of non-metalled road is 601.6 kms. Virudhunagar, an important commercial centre of this district, is well connected with other places by rail. The total length of railway tracks is 153 kms. There are 349 post offices serving 538 villages. The number of telegraph offices is 48 and they cater to the needs of 108 villages.

There are 392 cloth shops, 934 provision stores, 408 general merchants, 178 stationery shops, 368 hotels, 1206 tea stalls, 2874 petty shops, 436 cycle hiring shops, 206 fruits and vegetables shops, 89 medical shops, 57 utensils merchants, 468 barbers/laundries and 973 tailors in the district.
The total number of regulated markets in the district is only seven and they serve 146 villages. There are 21 co-operative marketing societies, four regulated recognized markets covering 52 villages, 28 villages mandi or weekly shandy and two recently, established Uzhavar Sandhais (Farmer’s Fair Shops) in the district.

**Small Scale Industries – At a Glance**

The importance of the development of Virudhunagar District has to be viewed against the background of the twin characteristics of the area.

i) It is a dry district with a low annual rainfall, with neither too fertile soil for agricultural purposes, nor blessed with a surfeit of river water potential.

ii) The people of the district have a low standard of living and are obliged to eke out their living by very hard work, often migrating to more prosperous neighbouring districts and quite often to far away places as well.

The industrial growth is significant and it contributes much to the economic development of the district in providing employment for many people. There is ample scope for the development of resource-based and demand-based industries in this district. Sivakasi and Sattur are well known for their chemical-based industries like match industry and fireworks industry and these areas have
the highest number of match factories in the country. It is reported that the production of safety matches in the district accounts for about one-third of the all India output. In fact, Sivakasi is the most important centre on which the whole country depends for the supply of fireworks. This industry provides employment for thousands of people in and around Sivakasi.

Sivakasi is also famous for off-set printing. The development of match industry and their dependence on printing presses for the supply of trade mark labels, and fireworks labels gave an impetus to the printing industry. Printing industries are concentrated in Sivakasi, Thiruthangal and Sattur.

There were 34 large scale industrial units in the district as on March 31, 2001, comprising 16 textile units, 10 printing units, two cement factories, one cement product industry, two automobile industries, one food product, one chemical product and one engineering industry. There were 5,226 cottage and 4,548 handicraft industries in the district as on march 31, 2006.73

In addition to the large scale units, there were 20,040 small scale units in Virudhunagar district. As per the DIC, Virudhunagar, small scale industries are classified into 10 categories. The industry-wise distribution of small scale units is shown in Table 2.4

TABLE 2.4
INDUSTRY-WISE DISTRIBUTION OF SMALL SCALE INDUSTRIES IN
VIRUDHUNAGAR DISTRICT AS ON MARCH 31, 2006

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Nature of Industry</th>
<th>No.of Units</th>
<th>Percentage to Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Agro-based Industries</td>
<td>1941</td>
<td>9.69</td>
</tr>
<tr>
<td>2.</td>
<td>Forest-based Industries</td>
<td>3112</td>
<td>15.53</td>
</tr>
<tr>
<td>3.</td>
<td>Mineral-based Industries</td>
<td>695</td>
<td>3.47</td>
</tr>
<tr>
<td>4.</td>
<td>Textile-based Industries</td>
<td>2269</td>
<td>11.32</td>
</tr>
<tr>
<td>5.</td>
<td>Engineering-based Industries</td>
<td>1202</td>
<td>6.00</td>
</tr>
<tr>
<td>6.</td>
<td>Electrical and Electronic-based Industries</td>
<td>954</td>
<td>4.76</td>
</tr>
<tr>
<td>7.</td>
<td>Chemical-based Industries</td>
<td>4451</td>
<td>22.21</td>
</tr>
<tr>
<td>8.</td>
<td>Animal Husbandry-based Industries</td>
<td>857</td>
<td>4.28</td>
</tr>
<tr>
<td>9.</td>
<td>Building Material-based Industries</td>
<td>968</td>
<td>4.83</td>
</tr>
<tr>
<td>10.</td>
<td>Miscellaneous Industries</td>
<td>3591</td>
<td>17.92</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>20040</td>
<td>100.00</td>
</tr>
</tbody>
</table>


Table 2.4 shows that out of 20,040 units, chemical-based industries account for 22.21 per cent. Miscellaneous industries, mostly including printing and paper industries account for 17.92 per cent. Forest-based industries account for 15.53 per cent while textile-based industries account for 11.32 per cent. Agro-based industries account for 9.69 per cent and engineering-based industries
account for 6.00 per cent, while building material-based industries account for 4.83 per cent, animal husbandry-based industries account for 4.28 per cent. Electrical and electronic-based industries account for 4.76 per cent and mineral-based industries account for 3.47 per cent.\footnote{http://www.tidco.com.}

**Agro-based Industries**

These include rice, flour, and dhal mills, oil mills, industries producing cattle feed and poultry feed, confectionery units, bakery units, vermicelli units, units engaged in manufacturing appalam, potato chips, pickles, fruit jams, mango pulp, jaggery; masala powder, chilli, oil, desiccated coconut, groundnut cake and the like. Fruit jam and Masala powder produced in these regions have a good demand both in internal and external markets. Project profiles and technical know-how can be had from food and nutrition centre, Madurai, at free of cost.

**Forest-based Industries**

These include saw mills, industries connected with the production of match-boxes, splint and veneers, wooden furniture, wooden building materials, cardboard, defibred coconut, charcoal and the like.
Mineral-based Industries

These include industries producing polished granite, lime powder, gem powder, bricks and the like. Lime stone is an important mineral available in plenty in this district. The estimated lime stone deposit is 27.0 million tonnes. Though there are two large scale cement factories functioning at Alangulam and Tulukakkapatti, cement-based small scale industries also have a vast scope. As per the geographical findings, red clay is available in this district which is a suitable raw material for the brick industry. Hence, there are 656 brick industries operating in this district to cater to the needs of the local people.

Textile-based Industries

These include units connected with cotton ginning, willowing of waste cotton, dyeing of yarn, winding and warping handlooms and powerlooms engaged in the production of terry towels, lungis, grey cloth, sarees (including art silk sarees), surgical cotton cloth, hosiery, ready made garments, tailored garments and the like. These industries are mostly located in the areas like Rajapalayam, Srivilliputhur and Aruppukottai. These products have a good demand both in the domestic and foreign markets.

Engineering-based Industries

Engineering-based industries are the most modern ongoing industries in the district. These include units engaged in the manufacture of steel furniture,
fountain pens and nibs, bolts and nuts, domestic utensils, metal screws, rivets, door handles, locks, agricultural implements, gates and grills, stoves and tin containers. There are general engineering units and units connected with servicing printing machines and automobiles (both two wheelers and four wheelers).

**Chemical-based Industries**

These include units producing safety matches, fireworks, plastic containers, printing ink, offset plates, insulation tapes, agarbathies, camphor, tablets, soaps and soap oils, P.V.C. pipes, polythene bags, potassium chlorate, varnish coating, wax coating, de-processing of plastic wastes and the like.

**Animal Husbandry-based Industries**

These include units producing leather chappals and leather products, animal glues, fancy leather goods, and the like.

**Electrical and Electronic-based Industries**

These include units connected with television servicing and repairing, motor rewinding, data processing and software development, chokes and starters, emergency lamps, voltage stabilizers, T.V. boosters and the like.
Building Material-based Industries

These include brick kilns, units engaged in the manufacture of mosaic tiles, floor tiles, cement moulded articles and cement hollow blocks.

Miscellaneous Industries

These include industries engaged in the manufacture of paper envelopes, paper cartons, paper cones, paper bags, paper tubes, playing cards, posters and corrugated paper boards, printing press, trelde printing, screen printing, offset printing, xerox copying, lamination, job typing, ornamental gold cutting, ice factories and the like.

Industrial Estates

There is one Industrial Estate in Sulakkari, Virudhunagar. Besides, there is one co-operative industrial estate managed by the Director of Industries and Commerce at Sivakasi. SIDCO has also constructed tiny Industrial Sheds at Watrap, Tiruchuli and Kariapatti. The detailed sketch of the number of estates and sheds is given in Table 2.5.
### TABLE 2.5
PLACE-WISE DISTRIBUTION OF INDUSTRIAL SHEDS IN VIRUDHUNAGAR DISTRICT

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Places</th>
<th>Number of Sheds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SIDCO Industrial Estate at Sulakkari, Virudhunagar</td>
<td>49</td>
</tr>
<tr>
<td>2.</td>
<td>Co-operative Industrial Estate, Sivakasi</td>
<td>20</td>
</tr>
<tr>
<td>3.</td>
<td>SIDCO Tiny Industries Shed:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Watrap</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ii) Tiruchuli</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>iii) Kariapatti</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>109</td>
</tr>
</tbody>
</table>