

Cottage industries :

Many families were engaged in hand printing of textiles for the export market. The local pottery industry developed some features which found expression in a new style of architecture. The manufacture of papier mache and terracotta toys was another popular avocation. Just before *de facto* transfer of the French Establishments, the village industries were badly hit due to the unsettled conditions in the Territory. Many families engaged in cottage industries were forced by circumstances to migrate to the neighbouring States for livelihood.

Mines :

Lignite was found as early as 1883 at Bahur and some other places in Pondicherry region. Seven samples of the lignite analysed in Paris showed an average ash content of 8.35 per cent. A French Company then attempted at compressing the material into briquettes but did not succeed. Permission was accorded in the year 1903 to one private firm to exploit the lignite deposits in 22 villages.²⁸ This venture too did not prove successful.

Interestingly in the year 1914 **Usine Sainte Elizabeth** of M/S. G. Gaudart & Co. is said to have obtained a mining lease over 4,369 acres in the Kanjamalais for exploiting the iron ore. Some iron ore is said to have been extracted and sent to France for magnetic concentration test. The report was found favourable but the outbreak of World War I seems to have prevented the working of the concession and the lease was cancelled in 1916.²⁹

III. Industries and manufactures of the territory

Soon after merger Pondicherry lost its status of a free port. Restrictions were imposed on the import of foreign goods and the customs barriers put up on the borders prior to the merger were removed.

The Administration, at the same time, came forward to help the growth of industries in the Territory in various ways. The Directorate of Industries started functioning from 26 November 1955 and the benefits of the First Five Year Plan, then on the last lap of the quinquennium, were extended to the Territory.³⁰ A sum of Rs. 70,000 was spent during the First Plan period.

There were no reliable means to assess the scope for the development of any particular industry in the Territory. Therefore, when proposals for the II e Year Plan were finalised, a lump sum allotment of Rs. 20.00 lakhs was made for Village and Small-Scale Industries. ³¹ Progress was, however, slow due to lack of machinery, buildings and skilled personnel, etc.

In 1958 the Government of Pondicherry requested the Small Industries Service Institute, Madras to conduct a survey of the Territory to study the scope for expansion of the existing industries and the possibilities for establishing new industries. The report of the survey, which was carried out by the Economic Investigation Branch of the Small-Scale Industries Service Institute, Madras, was submitted in March 1959. In the context of the conditions prevailing immediately after merger the survey identified a few industries which offered scope for development in the small-scale sector.

Based on the recommendations made by the Small Industries Service Institute, Madras, the State-aid to Industries arrêté was passed in 1959. Licences were issued for starting units for the manufacture of various items like umbrella ribs, cycle chains, steel trunks, wire nails, bolts and nuts. A local firm was given licence for assembling 7,500 cycles a year. Various other units were given import licences for machinery and raw materials for the manufacture of gem clips, paper pins, etc.

An Extension Centre for General Engineering of the Small Scale Industries Service Institute was started in Pondicherry on 6 July 1960. In 1966 the Centre shifted to its own premises located adjacent to the Industrial Estate, Tattanchavadi. Its chief function is to provide technical guidance and assistance to small-scale industrialists in the Territory. The Centre also functions as an Information Centre providing useful information on technical matters relating to small industries. The Centre organises from time to time training programmes for artisans in the Territory, besides providing common facility and laboratory assistance. It has developed special dies and punches required by sheet metal, ceramic and pharmaceutical industries and special moulds required by plastic industries. It is now equipped with a Sand Testing Laboratory. Till March 1973 the Centre had trained 173 artisans.

Even during the II Plan period attempts were made by the Bureau of Statistics to collect industrial statistics on a voluntary basis which, however, did not prove successful due to lack of co-operation on the part of industrial units. The Administration was, therefore, impressed on the need to extend the Collection of Statistics Act, 1953 to the Territory to provide a statutory basis for the collection of industrial statistics. The Act was extended to the Territory and the first Annual Survey of Industries was conducted in the year 1962.*

The Third Plan outlay on 'Industries' was increased to Rs. 30.50 lakhs, nearly half of which (Rs. 13.50 lakhs) was meant for the two Industrial Estates proposed to be established at Pondicherry (Manappattu) and Karaikal (Kottuchcheri).³² The expenditure actually incurred was Rs. 26.10 lakhs. A sum of Rs. 3.22 lakhs was spent for the development of the handloom industry. New spinning mills were licensed. A sugar mill started production. A number of small-scale industries came to be established in the Territory one after another. A steel rolling mill was also registered with the Iron and Steel Controller for a capacity of 4,800 tonnes per annum. A major achievement of the Third Plan was the completion of the Industrial Estate at Tattanchavadi.³³

In January 1964 the National Council for Applied Economic Research was requested to undertake a techno-economic survey of the Union Territory. The principal objective of the survey was to make an appraisal of the various resources of the Territory and to assess its immediate as well as long-term economic and industrial development possibilities, having due regard to the size and location of the four scattered regions. The Council agreed to undertake the survey at a cost of Rs. 30,000. The final report which was submitted in August 1965 recommended feasible developments in various fields over a ten-year period viz. 1966-76 and also suggested approximate phasing of major developments in the Territory. The three-year period from 1966 to 1969 marked the phase of annual plans almost amounting to a plan holiday. The Fourth Plan was delayed and the recommendations of the Techno-Economic Survey did not have any immediate impact.

* This survey covered only the factory sector, i.e., factories employing twenty and more workers without the aid of power and factories employing ten or more workers with the aid of power. As such, the survey does not present a complete picture of industries in the Territory.

According to the Annual Survey of Industries, the number of industrial units in the factory sector in the Territory increased from 54 in the year 1962 to 72 in the year 1968. Investment by way of fixed capital in all industrial units increased from Rs. 14.28 lakhs to Rs. 16.36 lakhs. Working capital actually decreased from Rs. 1.83 lakhs to Rs. 1.52 lakhs. However, during the same period, employment in the industries is said to have increased from 10,597 to 11,627 in 1968. 34

The work on the Rural Industrial Estate at Karaikal and Pondicherry spilled over to the Fourth Plan. The first Service-cum-Facility Workshop started functioning at Villianur, while work on the remaining two workshops spilled over to the period of Annual Plans. 35 The State-aid to industries arrêté was replaced by the Pondicherry State-aid to Industries Act, 1970 and a Board of Industries was constituted under the provisions of the Act to decide matters connected with the grant of loans, payment of subsidy, etc.

In September 1971, i.e., soon after Pondicherry was declared as an industrially backward area, the Development Commissioner for Small-Scale Industries, New Delhi wanted to have a survey of the Territory conducted to assess its industrial potentialities and to formulate suitable schemes for its development. The Government of Pondicherry also requested the Small Industries Service Institute, Madras, to take up the survey.

The report which was submitted in 1972 indicated the lines on which industrial development in Pondicherry could take shape in the future. Its recommendations were expected to form the basis for the formulation of the programmes for the ensuing decade.

Although handicapped by the paucity of resources, particularly of raw materials and by the small size of the home market, the industrial base gained strength through the impact of the Five Year Plans. A fact that cannot, however, be overlooked is that industries are concentrated mostly in Pondicherry and Karaikal regions. Mahe has at least a few units to its credit. But in Yanam the number of units is almost negligible.

In the next few pages is given an account of the industries in the Territory.

Large-scale industries:

Messrs. Cannanore Spinning & Weaving Mills Ltd., Mahe:

Messrs. Cannanore Spinning and Weaving Mills, Cannanore, were permitted by the Government of India to set up a spinning mill at Mahe. The unit with a capacity of 20,160 spindles went into production in the year 1963-64. The mill did not function well and the workers of the mill went on an indefinite strike from 26 June 1971 demanding the take over of the mill by the Government. A sum of Rs. 9.00 lakhs was paid by the Administration towards working capital and the mill was taken over by the National Textile Corporation on 24 February 1972.³⁶

Messrs. Soundararaja Mills Ltd., Nedungadu, Karaikal:

Messrs. Soundararaja Mills Ltd., Dindigul, was authorised in 1962 by the Government of India to set up a spinning mill at Karaikal with a capacity of 12,000 spindles. The mill went into production during 1964-65. Later on, the management was authorised to increase its capacity from 12,000 to 25,000 spindles.³⁷

At the end of the Third Plan period (1966) the employment potential in all the five textile mills was of the order of 9,000. The total production of cloth and yarn in the mills was of the order of 50.1 million metres and 9.4 million kg. respectively. In 1971 the textile mills together (5 Nos.) had 1.23 lakh spindles and 2,668 looms. The total investment was about Rs. 780.00 lakhs. The total output in yarn and in cloth was to the tune of 9.40 million kg. and 52.8 million metres respectively.³⁸

New Horizon Sugar Mills Ltd., Ariyur:

Licence was issued by the Government of India in the year 1957 to set up a sugar factory in the private sector. The mill was erected at Ariyur and went into production in September 1960 with a crushing capacity of 800-1000 tonnes per day to start with.³⁹

The crushing capacity of the mill was subsequently (1965) increased from 1,200 tonnes to 1,500 tonnes per day. The total output of the mill was about 18,600 tonnes in 1968-69, 17,100 tonnes in 1969-70 and 17,290 tonnes in 1970-71. The mill provides employment to about 500 persons during off season and about 950 persons during the crushing season.

The factory does not experience any difficulty in getting its raw materials, though it has to obtain the required quality of lime (with 80 per cent or more Ca content) from Dronachalam in Andhra Pradesh.⁴⁰

The mill obtains its sugar-cane from the local farmers as also from outside the Territory. The by-products of the sugar mill are the molasses and the press mud. About 8,000 tonnes of molasses are available per annum and they are made use of by the Government distillery. About 6,000 tonnes of press mud obtained per annum are sold to agriculturists.

Small-scale units :

The small-scale industry registered significant progress only after independence. The number of units is said to have increased from 85 in 1951 to 472 by 1973. This however, warrants an explanation. The growth pictured here indicates only the number of units registered with the Directorate of Industries. It must be noted that there are a number of industrial units in the Territory which would fall within the description of small-scale industries but are not registered with the Directorate because registration is not a pre-condition for establishing a small-scale unit. The number of registered units do not, therefore, indicate the actual number of small-scale units in the Territory. All manufacturing units with an investment not exceeding Rs. 7.50 lakhs on plant and machinery are defined as small-scale industries. While this definition covers only establishments engaged in manufacturing processes, it does not include such servicing establishments as rice mills, oil mills, etc. and such essential service establishments as saloons, laundries etc.

A satisfactory image of the industrial economy of the Territory will emerge only if all the above mentioned categories of industries are dealt with. An attempt has been made here to present, in as broad a canvas as possible, the true dimension of the Territory's industry.

Mechanical industries:

Agricultural implements: Though of recent origin, the industry's growth has been marked, keeping pace with the demand for modern implements from the agricultural sector. In 1959, the Small Industries Service Institute, Madras, recommended the establishment of such units for the manufacture of agricultural implements to meet the growing requirements of the Territory which was

predominantly an agricultural area. The 1959 survey pointed out that Villiyanur fast becoming a market centre for surrounding villages, and Pandacholanallur having a large number of blacksmiths and carpenters, were suitable for setting up units for the manufacture of agricultural implements in the Territory. ⁴¹,

As on 31 March 1973 there were sixteen registered units in this Territory, eleven in Pondicherry region and five in Karaikal region. They are engaged in the production of traditional implements and also such modern tractor-drawn implements as cage wheel cultivators, trailers, etc. All the products are marketed locally except tractor drawn trailers which are in demand in the neighbouring districts of Tamil Nadu. ⁴²

Re-rolling Mills : The Annales refer to the establishment of a rolling mill in Pondicherry as early as 1911 ⁴³ (*Vide* p. 554). Chartres Molony in his "A Book of South India" alludes perhaps to the same rolling mill as belonging to the family of Gaudarts. The rolling mill was subsequently sold to an English company. Following the imposition of tariff on imported iron by the Government of British India, the Pondicherry iron works had to be closed down. ⁴⁴ After merger, the rolling mill is said to have gone into production in the year 1959. This unit was also recognised as a registered re-rolling mill by the Ministry of Commerce and Industry. ⁴⁵ Another such unit was set up in Pondicherry on 20 April 1968. The two units manufacture non-ferrous rods and allied items, M.S. rods, 'Z' angles, 'T' angles, gate channels and flats. Together the two units have attracted an investment of Rs. 4.82 lakhs as fixed capital and Rs. 7.00 lakhs as working capital with a production capacity of Rs. 82.00 lakhs per annum. As regards raw materials for these units, allocations of non-ferrous metals are made state-wise from out of the import of the Minerals and Metals Trading Corporation of India and these are reallocated to the Small-Scale Units by the Administration. ⁴⁶ Billets are supplied by the Iron & Steel Controller. Scrap is obtained from the open market.

There were three steel rolling mills as on 31 March 1973 in the Territory, all in Pondicherry region.

Domestic utensils : About ten *pathar* families residing in Kamatchiamman Koil Street in Pondicherry town and in the vicinity are engaged in the manufacture of brass and copper utensils like *thavalais*, *kudams* and *dekshaws*, etc. The industry is still unorganised and follows the traditional pattern that it

would only be appropriate to call it an household industry. The investment in the industry consists mostly of equipment like hand-driven polishing wheels, *ratanams*, *karavaïs*, hammers, etc. In 1959 production was estimated at Rs. 1.50 lakhs per annum. The raw materials required for the industry are brass and copper sheets, *vengaram*, *kungetam* and *nagam* (chemicals), besides charcoal and firewood. They are obtained from the local dealers. In certain cases the local dealers supply the raw materials to the manufactures and get the articles made by them on contract wages. The produced goods are sold out in the local markets. Their products do not face any competition even though similar items are imported from the neighbouring State of Tamil Nadu, i.e. from Madras, Kumbakonam and Tiruppur.⁴⁷

There were fifteen such units as on 31 March 1973 in this Territory, eleven in Pondicherry and four in Karaikal.

Aluminium utensils : As on 31 March 1973 there were two units, both in Pondicherry region, engaged in the manufacture of aluminium utensils. The units are of recent origin. The first was started in 1969 and the second the next year. The products are sold in the local market and also in Tamil Nadu. The main raw material viz. aluminium circles, is obtained from the open market.

Cycles, cycle parts and accessories : The Small Industries Service Institute, Madras, which undertook a survey of the industries in Pondicherry region in 1958, pointed out that the existence of a large number of traders dealing in imported cycles and parts with connections all over the country offered good scope for the development of this industry in Pondicherry. Added to this was the existence of a large local market. The value of complete bicycles sold by dealers of Pondicherry in 1957 was Rs. 7.80 lakhs and that of parts and accessories Rs. 0.81 lakh. According to the survey, traders had also enough resources and contacts to push the sales of any new manufacturing unit in Pondicherry almost all over the country.⁴⁸ Licence worth Rs. 3.50 lakhs was given to a local unit for the import of necessary machinery from a German firm to set up its plant in Pondicherry. The unit started manufacturing cycle chains. This unit now manufactures industrial chains also.

Requirements of cold rolled steel strips are met both from indigenous sources and also through imports. The products are marketed in India and has also fared well in overseas markets.

Ferrous and non-ferrous castings : There are in all twelve registered units in the Territory, ten of which are in Pondicherry and two in Karaikal. The units undertake ferrous and non-ferrous casting works, besides manufacturing items such as industrial valves, etc. required for large industries. Cable boxes are supplied to the railways by one of the units.

The requirements of the textile industry for spare parts like cross bars, weighing hooks, twist carriers, levers, filler motion pulleys and spindles are also met by some of the foundries.

This is the small-scale industry which has attracted the largest capital investment viz. Rs. 17.45 lakhs in fixed capital and Rs. 8.88 lakhs in working capital. All the units put together have a production capacity valued at Rs. 13,53,226 while actual production amounted to Rs. 8,67,854 in 1972. 49

Stainless steel articles : There are eleven registered units manufacturing hospital, dairy, chemical and domestic equipments out of stainless steel. All except one are located in Pondicherry region. Manufacturers are given licence to import the required raw material under the Actual Users Licence. The items manufactured by the units are marketed all over India.

Steel furniture : There are nine registered units in the Territory, eight in Pondicherry and one in Karaikal. They manufacture mainly items such as almirahs, racks, iron safes, folding chairs, sofa-cum-beds, etc., for domestic and office use.

C.R. sheets (8 MM, 1 MM, 1.2 MM sheets) are supplied to the units through the N.S.I.C. Raw Material Depot. Some of the units have established their reputation in the national market.

Tin containers : There is only one unit under this category in the Territory. The unit produces tin containers and other tin articles. A sum of Rs. 1.00 lakh is invested as fixed capital and Rs. 1.00 lakh as working capital. The unit has a production capacity valued at Rs. 40.00 lakhs per annum. 50 Requirements of tin plates are met from indigenous sources. The products are mostly marketed in Tamil Nadu.

Wire meshes and sieves : The only unit in the Territory, located in Karaikal, is engaged in manufacturing wire meshes and sieves. The raw materials are obtained from indigenous sources and the products are marketed locally and in the neighbouring state.

Wire products : There are two units engaged in the production of wire-nails, staplers, pins, gem clips, etc. Requirements of enamelled copper wire are met from imports. Other requirements such as steel wires, etc. are obtained from indigenous sources. The products are marketed locally and in the neighbouring state. Both the units are located in Pondicherry.

Aluminium alloy pistons : Aluminium alloy pistons are manufactured by two units functioning in Pondicherry. The units are not hampered by scarcity of raw materials which are easily obtained from indigenous sources. The products are marketed all over India.

Steel trunks/metal boxes : There are in all ten units, six in Karaikal and four in Pondicherry. The units manufacture items such as steel trunks, meter boxes, school boxes and metal articles out of B.P. sheets, G.P. sheets and aluminium sheets. B.P. sheets (.63 MM) and G.P. sheets, being scarce items, are supplied to the industrialists through the N.S.I.C. Raw Material Depot, at Pondicherry. The products are marketed locally and in the neighbouring districts.

G.I. Buckets : As on 31 March 1973 there were two units manufacturing G.I. buckets in the Territory. Both the units are located in Pondicherry. B.P. sheets being scarce are obtained through the N.S.I.C. Raw Material Depot. The products are marketed locally and in the neighbouring state of Tamil Nadu.

Metric measures, beam scales, etc. : There are three units, all in Pondicherry region, manufacturing metric measures and beam scales. Raw materials are obtained from indigenous sources. The products are marketed mostly in Pondicherry and in the neighbouring state of Tamil Nadu.

Mechanical toys : There are two units, one located in the Industrial Estate, Tattanchavadi and the other at Nellitoppu in Pondicherry, manufacturing baby cycles, bicycles, etc. Almost all raw material requirements are met from indigenous sources. The finished products are marketed within the country.

Iron structural items : There are in all ten registered units engaged in the manufacture of iron structurals. Eight of these units are located in Pondicherry region and two in Karaikal region. They manufacture grills, trusses and other items.

Automobile parts : There are in all four registered units in the Territory manufacturing items such as automobile bushes, bolts and nuts, etc. These units also undertake maintenance and servicing of automobile vehicles. The units have attracted an investment of Rs. 1.36 lakhs as fixed capital and Rs. 0.60 lakh as working capital. All the four registered units are located in Pondicherry region.

General engineering workshops : The general engineering workshops attend to repair of oil engines, motors, centrifugal pumps, etc. They sometimes undertake pipe threading and welding work also. Although the number of registered units in 1972 was only twenty six, there are many more such units which have not been registered as small-scale industries. Among the registered units twenty-three are located in Pondicherry region and three in Karaikal.

Electrical industries :

Electrical accessories : Prior to *de facto* transfer, 'all kinds of electrical accessories were imported from foreign countries to meet the local demand as well as demand from outside the Territory. Soon after *de facto* transfer restrictions on the import of these goods from foreign countries were imposed gradually with a view to encouraging the establishment of electrical units in the Territory itself.

Licence was issued in 1957-58 to one unit in Pondicherry for the manufacture of electric switches in the small-scale sector. The unit registered steady progress and the Government of India upgraded this unit as a medium-scale industry* and registered it with the Directorate General of Technical Development, New Delhi. With the increase in the requirements of electrical goods, more units came to be established.

* Following the revision of the definition of small-scale industry in September 1966, the unit fell again under the category of small-scale industries.

There were as on 31 March 1973 seven units engaged in the production of chokes, small transformers, band switches, sockets, ceiling roses, battery chargers, rectifiers, power transformers, induction motors, emergency lights, P.V.C. cables, insulators, shackle pins, etc.⁵¹ While most of the raw material requirements are met from indigenous sources, items such as enamelled copper wire and some electrical switch bands are met through imports.

The products are mostly marketed within the country. One of the units also ventured into the export market during 1969 and 1970.

Dry cells : There is one unit manufacturing dry cells in the Rural Industrial Estate at Manappattu. In the small-scale sector this is the only unit of its kind in the region including Tamil Nadu. Its products are mainly used in flash light torches. Being handy, they are made use of as convenient sources of power in instruments like hearing aids, post and telegraph equipments and various electrical and electronic appliances and portable transistor sets. Raw materials required are zinc, manganese dioxide, acetylene black, carbon rods and graphite. All items are imported except manganese dioxide which is obtained from Bangalore. The unit has to contend with competition from larger units.

Insulators : The only unit started in 1971 is located in the Industrial Estate, Pondicherry. Items manufactured by the unit include ceramic insulators like shackle insulators, pin insulators, etc., for overhead transmission lines. Some of its raw material requirements are met from Neyveli. The products are marketed mostly in the neighbouring state of Tamil Nadu.

Electronic industries :

Hard and soft ferrite products : There is one such unit in the Territory. Located in the Industrial Estate, Tattanchavadi, the unit manufactures hard and soft ferrite products. It has an installed production capacity of 60 tonnes. The unit also assembles scientific instruments such as rotameters, monometers, etc. The raw material requirements are met from indigenous sources. The products are marketed within the country.

Radios : At the time of merger there were only two registered units in the Territory, one started in 1932 and the other in 1949, engaged in assembling radio receivers. The unit located in Pondicherry town is a proprietary concern

and the other situated in Mudaliyarpettai is a private limited company. One of the units is also engaged in the manufacture of carbon resistors, radio transformers and radio coils.

The requirements of the units include items like silver, gold-silver, steel chromium, tin, aluminium alloys, adhesives, varnishes and chemicals, valves, resistances, condensers, transformers, loudspeakers, etc. While most of the items are obtained from indigenous sources, some requirements are met through imports. The units are fairly well equipped and are owned by experienced radio engineers. The products are marketed locally. Radios are also assembled on orders. Although the units face competition from imported goods as well as from Indian assembled radios, the price advantage offered by the units render their radios easily marketable. The rapid improvement in the living standard of the people had increased the demand for radio sets in the Territory.⁵² There were as on 31 March 1973 four registered units in Pondicherry region and one each in Mahe and Karaikal.

Chemical industries:

Soap industry: Some years ago there were only four units in the Territory engaged in producing soaps. Of these, three units produced only washing soaps and the remaining one produced both washing and toilet soaps. These units were started between 1949 and 1955 with a total investment of Rs. 1.05 lakhs approximately. In 1957 the output of these units worked out to 132 tonnes, of which toilet soaps accounted for 1.56 tonnes only and production value amounted to Rs. 1.58 lakhs.

Raw materials like coconut oil, groundnut oil, castor and palm oils, mutton tallow, caustic soda, rosin and perfumeries are obtained from dealers both in Madras and Pondicherry. One of the units imports palm oil. Three of the units use the semi-boiling process and one the steam process in which full boiling is resorted to. Imported mutton tallow is supplied to the producers by the Directorate of Industries through the N.S.I.C. Raw Material Depot. Requirements of caustic soda are met from import as well as from indigenous sources.

The units market their products locally and also in the neighbouring towns of Tamil Nadu like Tindivanam, Chengalpattu, Cuddalore, Tiruvannamalai, etc. through retail dealers. Although the units face competition chiefly

from the large-scale units, the higher cost of products of the large-scale units enable the local units to hold ground. Moreover, these units being small are able to adjust their production according to demand. The 1959 survey rated the industry as having moderately good prospects provided manufacturers could obtain the imported components by direct imports as actual users. 53

The popular brand of 501 Tata Soaps are manufactured and supplied by one of the units. Another unit meets the requirements of Railways and Defence Establishments through the D.G.S. & D.

There were ten units as on 31 March 1973 engaged in soap manufacture in the Territory. Seven of them are located in Pondicherry and three in Karaikal.

Candles : There are five registered units in all, four in Pondicherry and one in Karaikal. Requirements of paraffin-wax are allotted to the small-scale units by the Directorate of Industries through the N.S.I.C. Raw Material Depot. The products are marketed locally and in the neighbouring districts.

Paint and varnish : Five units in the Territory manufacture paint, varnish and distemper. Four among them are located in Pondicherry and one in Karaikal. Denatured spirit is obtained from the local distillery. Other requirements are met from indigenous sources. The products are marketed within the Territory and in the adjoining state of Tamil Nadu.

French polish : There were twenty-one units as on 31 March 1973 manufacturing french polish. Seventeen units are located in Pondicherry, two each in Karaikal and Mahe.

Denatured spirit is obtained through the Revenue Department from the local distillery. Other chemicals required by the units are obtained from indigenous sources. The products are marketed in Pondicherry and in the adjoining state of Tamil Nadu.

Pharmaceuticals/fine chemicals : Pharmaceutical industry is one of the important industries in this Territory. In all there are eleven units, ten in Pondicherry region and one in Mahe, manufacturing pharmaceutical goods. The main items manufactured are APC tablets, tinctures, oral liquid syrups, ointments and capsules. The products are marketed throughout the country.

About 75 percent of the manufactured goods are marketed outside the Territory. Bismuth, citric acid, bromine, menthol, clove oil, filter papers, filtering acids, cadmium metals, activated carbon, potassium carbonate, gallic acid are some of the chief raw material items obtained through imports.

Siddha and ayurvedic medicines: One *Siddha Vaithyasala* and three *Ayurvedic Vaithyasalas*, registered as small units, are engaged in preparing medicines in the Territory. Among them two are located in Pondicherry, one each in Karaikal and Mahe. Raw material requirements are met from indigenous sources. They produce such items as *lehiams*, *surnams*, etc., mainly to cater to local demand.

Starch: There is one unit manufacturing starch from tapioca tubers. Set up in 1969 in the Industrial Estate, Tattanchavadi by a technocrat with the assistance given by the bank for unemployed engineers, the unit has a total production capacity of 600 tonnes per annum on single shift basis. The final product is sold to the local textile mills and also outside the Territory. The unit is said to experience some difficulty in obtaining adequate quantities of tapioca tubers as these are not regularly cultivated in the Territory. Though the product faces keen competition, it is able to hold ground because of its good quality.

Safety matches: The only unit located in Pondicherry was started in 1955. While among raw materials required, gum arabic and sulphur are imported, other ingredients are obtained from the open market. The products are marketed locally and in Tamil Nadu.

Fire-works: Three units are engaged in manufacturing crackers and fire-works. Two of them are located in Pondicherry and one in Karaikal.

Requirements of chlorite of potash, barium and strontium nitrate, etc., are met from imports through the State Trading Corporation. The products enjoy only a seasonal market and they are marketed mostly in Tamil Nadu.

Chalk: Among the four units in the Territory, two are located in Karaikal region and two in Pondicherry region. The units manufacture both white and colour chalks. Gypsum is obtained from indigenous sources mainly

from Andhra Pradesh and Tamil Nadu. One unit supplies its products to the Controller of Printing and Stationeries, Calcutta. The other units supply the local markets.

Mixed fertilizers : Two units manufacture mixed fertilizers (N.P.K. mixtures of different ratios). The units have a total production capacity valued at Rs. 12.00 lakhs. Both the units are located in Pondicherry. Raw materials such as ammonium sulphate, urea, ammonium phosphate, etc., are obtained from indigenous sources as well as through imports. Allotment of raw material is made by the Directorate of Agriculture. The products are marketed locally and also in Tamil Nadu.

Zinc oxide : One unit in the Industrial Estate at Pondicherry is engaged in the manufacture of zinc oxide. Zinc requirements are met from imports through the M.M.T.C. and from indigenous sources. The products are marketed all over the country.

Salt : After merger, salt industry has once again revived in the Territory. An area of 28 Ha. 34 A 42 Ca. situated at Nallavadu village (Ariyankuppam Commune) was leased out to a party on an annual rent of Rs. 1,611 with effect from 12 September 1966 for a period of 20 years. A licence for the manufacture of salt during 1967-68 was also issued by the Assistant Salt Commissioner, Tuticorin. The party, however, did not pursue the venture. The lands were surrendered and the lease was terminated with effect from 1 October 1968.

In Karaikal, an area measuring 47 Ha. 07A. 71 Ca. in Oduturai village (Niravi Commune) was leased out to a party with effect from 23 September 1967 on an annual rent of Rs. 3,466 for 20 years for salt manufacture. Although licence for salt manufacture was issued as early as on 7 November 1968, no significant progress was registered.

In Yanam, an area of 403 Ha. 06 A. 72 Ca. comprising the four Isukatippa islands belonging to the Yanam Municipality was leased out on 7 August 1970 on an annual rent of Rs. 1,650 to a private party. A licence to manufacture salt over an area of 213 Ha. 32A. in Isukatippa island No. 1 was issued in 1971. Even here not much progress was in evidence.

Plastic industries :

Plastic goods : There are five units, one in Karaikal region and the remaining four in Pondicherry. The units manufacture such items as polythene lay-flat tubes, bags, sheets, plastic canes, injection moulded articles, celluloid bangles, etc. The actual production in 1970-71 was valued at Rs. 7.30 lakhs. In spite of keen competition from large-scale units these products enjoy a ready local market. The products are also sent to other marketing centres with comparative ease.

HDPE woven sacks : One unit located in the Industrial Estate, Pondicherry, is engaged in this line of production. The unit manufactures high density polythene woven bags for packing fertilizers, pesticides, etc.

Raw material requirements are met indigenously and from imports through the State Trading Corporation. The products command a nation-wide market.

Nylon buttons : One unit in the Territory manufactures nylon buttons. The unit is located in the Industrial Estate, Pondicherry. Raw materials are obtained from indigenous sources. To a certain extent imports are allowed on a restricted basis through the State Trading Corporation. The products are marketed all over the country.

Food processing industries :

Confectionary/bakery : There were twenty-eight units as on 31 March 1973 engaged in manufacturing wheat products, confectionary items, etc.

Sugar and maida required by these units are supplied by the Directorate of Civil Supplies. The other requirements are met from other indigenous sources.

Coffee roasting and grinding : There are six units registered as small-scale units in the Territory catering to local requirements. Some of the units obtain their requirements of raw seeds by participating as members in the open auctions held by the Coffee Board periodically at Bangalore and Coimbatore. The other units get their raw materials from the local market.

Aerated water : Nine units are engaged in producing aerated water drinks in the Territory. Raw material requirements are met from indigenous sources. The units in Pondicherry, being relatively small, face competition from large-scale units selling popular brands. One of the units in Karaikal has an established market for its products in Kumbakonam, Mayuram, Thiruvapur, etc.

Liquor : One unit is engaged in producing liquors like brandy and whisky with a total investment of Rs. 5.00 lakhs under their own brand names. The unit is located in Pondicherry.

Ethyl alcohol is obtained from the local distillery. Requirements of flavouring essences are met through imports. The products are marketed all over the country.

Vermicelli : Among the five units manufacturing vermicelli in the Territory, three are located in Pondicherry and two in Karaikal. The required maida is supplied by the Directorate of Civil Supplies. The products are marketed in the Territory and in the surrounding districts.

Ice products and ice-cream : There were in all five registered units in the Territory, four in Pondicherry region and one in Karaikal, manufacturing ice, ice-cream, etc. Ice blocks are sold to parties engaged in the procurement and transport of prawns from Pondicherry to places like Cuddalore, Cochin, etc.

Pickles : Among the three pickle manufacturing units in the Territory two are located in Pondicherry and one in Karaikal. The units cater mainly to local requirements.

Tobacco products : There are five registered units in the Territory, all located in Karaikal region, engaged in the manufacture of cheroots and chewing tobacco. They market their products in the region and in the neighbouring state.

Popcorn : The only unit of its kind in the Territory is located in Karaikal. The unit obtains all the raw materials required from indigenous sources and markets its products locally and in the neighbouring towns, besides doing good business during fairs and festivals.

Wood based industries :

Wooden furniture : At the time of merger there were three well established furniture making units (1959), besides individual carpenters spread all over the Territory engaged in the production of furniture required for offices, restaurants, houses, etc. The units also produced building accessories, doors, windows and other wooden products such as looms, carts, etc. The earliest among the three is said to have been started by a skilled carpenter sometime during the first decade of this century. The second one was started in 1950 and the third in 1957. The raw materials such as teakwood, mahogany, rose wood, plywood, hard-ware and various kinds of jungle woods and varnishes are obtained generally from Tamil Nadu, Kerala and Mysore.

These units manufactured goods mostly against orders from Government Departments and did not face much competition in marketing their products except from those outside the Territory. The 1959 survey rated the industry as having 'moderately good prospects'. But from the point of view of demand alone the industry was rated as having 'excellent prospects.'⁵⁵

With the growing demand for wooden products among the public and with the increased construction works undertaken by the Government for the implementation of various plan schemes in the Territory, the industry flourished. There were as on 31 March 1973 twenty-eight registered units spread all over the Territory. Most of the units cater mainly to local requirements and fulfil orders from parties in the neighbouring state. One of the units, attached to the Ashram, produce sophisticated items of furniture which are supplied to institutions of national and international reputation like the State Bank of India, Air-India, etc.

Boat building : There were two boat building units in the Territory, one at Ariyankuppam and the other at Manappattu. They manufacture special type of rowing boats and fishing trawlers. The requirements of the Directorate of Fisheries for fishing trawlers and for rowing boats by the Directorate of Information, Publicity and Tourism are increasingly being met by these boat units.

The units obtain their wood requirements from Kerala and Mysore.

Rubber based industries :

Tyre retreading : There is only one retreading unit in the Territory. Orders for tyre retreading are obtained locally and from the neighbouring districts.

Leather based industries :

Leather goods : In all six registered units are engaged in producing leather goods. Among these, five are located in Pondicherry and one in Karaikal. There are many more unregistered units.

One of the units located in Pondicherry town manufactures calipers and shoes for the disabled. The requirements of the local hospitals are also met by the unit from time to time.

Paper based industries :

Handmade paper : Licence for setting up a handmade paper unit in the Territory under the private sector was issued through the Khadi and Village Industries Commission. The unit, largely financed by the Khadi Commission through grants and loans, was commissioned in December 1959. It has a production capacity of 30 tonnes. The unit manufactures a large variety of handmade papers and stationery articles. Its products are marketed all over India. The unit first entered the export market in the year 1969 and exported paper and such stationery items as pads, envelopes, etc. 56

Paper products : There were three units in the Territory as on 31 March 1973, all located in Pondicherry region, manufacturing such varied items as cardboard boxes, envelopes, paper bags, etc. Local pharmaceutical units are the main consumers of cardboard boxes. Items such as envelopes and paper bags are sold locally and in Tamil Nadu.

Printing presses : There are twenty-one registered units in this Territory engaged in printing and bookbinding. The All India Press is the only unit of its kind in South India undertaking photo composing in English, French, German, Italian, Hindi, Marathi, Sanskrit, Gujarathi, Assamese, Nepali and Bengali. Sri Aurobindo Ashram Press, another unit attached to the Ashram, also does printing work in Tamil, Oriya, Kannada, Punjabi and Chinese apart from some of the languages mentioned above. Sri Aurobindo Ashram Press had been exporting its products since 1961.

Bookbinding : While most of the printing presses undertake book-binding work, there are a few bookbinding units in the Territory which do not fall under the category of registered small-scale industries. The emergence of the printing industry in Pondicherry helped the growth of bookbinding in turn. The standard and quality of bookbinding work was so good that one of the skilled craftsmen (Shri Sengol) of Pondicherry was awarded a certificate of merit by the French Administration. Books are received from France and some other European countries for binding here. Leather binding of books with gold embossing is a speciality.

Cement based industries :

Cement products : Ten units are engaged in producing various cement products in the Territory in the small scale sector. Six of the units are located in Pondicherry region and three in Karaikal region. They produce mosaic tiles, ornamental grill works, cement pipes, tiles, hollow bricks, well rings, etc. Products are marketed locally and in Tamil Nadu.

Miscellaneous industries :

Bricks : The Territory has large deposits of good quality clay and brick making is resorted to by a number of persons in villages like Muttirappalaiyam, Ozhukarai, Kommapakkam, Odiyambattu, etc. producing annually about 150 lakh bricks. Brick making is not resorted to as a full-time job and the kilns are burnt mostly during the non-rainy season. Brick makers do not, therefore, engage labour on a regular basis. Labourers are entertained mainly for cutting or moulding bricks and for preparing and arranging the kilns.

Bricks of the following sizes are manufactured in the region :

- | | | |
|--------------|-------|----------------------------|
| 1. Large | | 9" x 4" x $2\frac{3}{4}$ " |
| 2. Medium | | 9" x 4" x $2\frac{1}{2}$ " |
| 3. Small | | 9" x 4" x $2\frac{1}{4}$ " |
| 4. Chotos | | 6" x 4" x $1\frac{1}{4}$ " |
| 5. Kindi | | 8" x 3" x $1\frac{3}{4}$ " |
| 6. Achchakal | | 8" x 4" x $1\frac{1}{2}$ " |

Clay is mostly obtained from the lands belonging to the manufacturers themselves. In certain cases, clay lands are taken for specified periods on a fixed rent. (Rs. 150 per annum for one *kani* or $1\frac{1}{4}$ acres or 50 Ca.) The old method of stack burning is still being followed here. The capacity of stack varies from 80,000 to 3,00,000 bricks.

The products are sold by the manufacturers directly to the parties concerned or to the building contractors and they do not face any competition from outside. Sometimes builders themselves resort to brick making to meet their own requirements.⁵⁷

There were only two registered units as on 31 March 1973, one at Tavalakuppam and the other at Tondamanattam in Pondicherry region.* Although the industry is rated as having 'excellent prospects', entrepreneurial effort in this direction had been lacking.

*Power - looms*** : In 1965 the Techno-Economic Survey pointed out that, apart from the mill sector, the Territory had some share of power-looms and handlooms, and placed the number of power-looms at 165 and handlooms at 3,368.⁵⁸ There were also a few power-looms licensed by the Textile Commissioner. Some of the power-looms in the Territory were engaged in the production of art silk fabrics.⁵⁹

In May 1966 the Territory was allotted 310 power-looms which were subsequently increased to 500 in June 1968 with a view to replacing gradually the handlooms in the Territory. This allotment followed the recommendation of the Ashok Mehta Committee set up by the Government of India in January 1963 to study the problem of the power-loom industry in the country. The looms so allotted were meant to be distributed to individual weavers, institutions and units in the co-operative sector. In all 130 power-looms were allotted to the Co-operative Sector. These were distributed through the Registrar of Co-operative Societies.

* Brick makers often shift the location of their kiln from one place to another.

** Power-looms do not come under the small-scale sector. They are therefore, not registered as small-scale units.

The power-loom industry was also declared eligible for the grant of loans under the Pondicherry State-Aid to Industries *arrêté* towards purchase of machinery, construction of factory building and working capital upto a maximum of Rs. 50,000 depending on the number of power-looms installed, security offered, etc. All the looms allotted by the Government of India were distributed to various parties and co-operative societies in the Territory.⁶⁰

The 1972 survey also pointed out that the 'main difficulty experienced by the power-loom mills was the non-availability of warped beam from local sources* which have to be procured from outside. The survey report referred to a proposal to set up a sizing plant in the Territory which is expected to remove the difficulty experienced by the existing power-looms and encourage the installation of additional power-looms in the Territory.⁶¹

Coir and coir products : Coconut is grown in about 1,500 hectares of which about 630 hectares are in Pondicherry and about 500 hectares in Mahe. The annual yield of coconut is about one crore nuts. In the process of separating the copra from the coconut, the husk is obtained as a by-product. The 1959 survey indicated that fibre from about 96,00,000 coconut husks was available annually in Pondicherry region. The husk is then processed to make various coir products. Some of the husk is burnt as fuel.

About 650 tonnes of fibres are said to be available annually in the Territory. About 1/5 of the fibre is used for making thick ropes for deep sea-fishing. A small portion is also used for the preparation of ropes meant for general use. Mostly members of the fishermen community are engaged in the industry.

Ropes are mostly made by hand. Some families are known to use machines for making ropes. A major portion of the fibre is exported to places outside the Territory.

With a view to helping the artisans engaged in the industry, two co-operative societies were formed, one at Vambakirappalaiyam in Pondicherry region in the year 1957 and another in Mahe region in the year 1961. In spite of all the assistance extended to the societies, both the units went into liquidation.⁶²

There were two units as on 31 March 1973 manufacturing coir, fibre and ropes in the Territory. Both the units are located in Pondicherry.

Umbrella ribs : One unit is engaged in manufacturing umbrella ribs both solid and fluted types, besides profile wire. Licence for this unit was given in the year 1958 and the unit went into production in January 1960.

Raw materials like C.R. steel strips are obtained from indigenous sources and imports. The imports are authorised under the Actual Users Licence. The products are marketed all over the country.

Waste cotton : There are two units in the Territory, both in Pondicherry, engaged in the processing of cotton waste. Cotton waste is obtained from the local textile mills. Processed cotton waste is sent to Madras after meeting the local demand.

Ready-made garments : Two units are engaged in this line of production, One of the units secured an order for the supply of garments to hospitals and supplied postal bags to the Postal Department through the D.G.S. & D.

Block making : There are a few block making units in the Territory catering mainly to local demand. Among these, only two units are registered with the Directorate of Industries. Sophisticated types of block making work is entrusted to firms outside the Territory. Though an adjunct of the printing industry, block making industry in Pondicherry has not made commensurate progress.

Hand bags : There is only one unit in the Territory manufacturing hand bags with cloth and canvas. The unit is located in Pondicherry. Cloth and canvas are obtained from indigenous sources. The finished products are marketed in and around Pondicherry and in the surrounding districts.

Spray painting : Although the number of registered spray painting units is only two, there are many more such units in the Territory which have not cared to register themselves. Both the registered units are located in Pondicherry. The units mostly attend to spray painting of automobiles, motor-cycles, scooters, steel furniture, etc.

Cattle feed : The only unit manufacturing cattle feed is located in Mahe. It has attracted an investment of Rs. 1.08 lakhs. The unit has a production capacity valued at Rs. 0.85 lakh. Raw material requirements are obtained locally and the products are marketed in and around Mahe.

Straw covers for packing bottles : The only unit in the Territory is located in Karaikal. This unit manufactures straw covers for packing bottles. Raw materials are obtained from local sources. The products are marketed locally and in the neighbouring state.

Rice mills : The number of rice mills in the Territory (in the factory sector) increased from six in 1962 to ten in 1968. A study carried out by the Directorate of Pilot Research Project in 1972, however, showed that out of 483 small industrial units in Pondicherry region, 100 were rice mills, and gave the following commune-wise break-up :

<i>Commune</i>				<i>Nos.</i>
Pondicherry—town	..	..	..	8
—block	..	..	..	7
Ariyankuppam	..	..	..	7
Mudaliyarpettai	..	..	..	11
Ozhukarai	..	..	..	15
Mannadipattu	..	..	..	17
Villiyannur	..	..	..	14
Bahur	..	..	..	12
Nettappakkam	..	..	..	9
Total	..	..	..	100

The above figure indicates the total number of units holding licence for rice milling. But not all of them function throughout the year.⁶³ Paddy is the principal raw material. Rice bran and broken rice are the principal by-products.

Oil mills: Oil mills too do not fall under the category of small-scale industries and are not registered with the Directorate of Industries as small-scale units. The Directorate of Pilot Research Project indicated that there were 79 oil mills in the region as shown below:

Pondicherry-town	..	..	..	20
-block	..	..	..	13
Ariyankuppam	..	..	..	13
Mudaliyarpettai	..	..	..	3
Ozhukarai	..	..	..	11
Mannadipattu	..	..	..	6
Villiyannur	..	..	..	7
Bahur	..	..	..	4
Nettappakkam	..	..	..	2
Total	..	..	..	79

The oil mills are mostly concentrated in Pondicherry and Ozhukarai Communes.⁶⁴

Other units :

Betel-nut powder and tooth powder are some of the other products which are manufactured by some of the small-scale industrial units located in the Territory.

Departmental units :

Soon after the Directorate of Industries was established, the Small Industries Service Institute, Madras, was requested to prepare a few small-scale industrial schemes for the Territory. The Institute furnished blue prints for the following schemes.⁶⁵

Investment proposed

	Rs.
1. Wooden Toy Factory, Pondicherry	1,18,000
2. Leather Goods Manufacturing Unit, Pondicherry	1,38,000
3. Leather Goods Manufacturing Unit, Yanam ..	1,38,000
4. Tannery and Leather Finishing Shop, Yanam ..	3,81,700
5. Handmade Match Factory, Pondicherry	1,77,730
6. Factory for the manufacture of splints & veneers, Pondicherry	1,27,590

Wooden Toy Factory, Pondicherry : This factory was started in April 1956 at an estimated investment of Rs. 1.19 lakhs. In the beginning, the factory manufactured only a few items of toys and in the course of the year the unit made some improvement by undertaking the manufacture of a large variety of toys, especially educational toys meant for children in pre-primary schools. The factory, however, had to restrict its production as its products did not have a ready market in the absence of either a sales emporium or a show-room to push up sales. In February 1958, the National Small Industries Corporation, Madras, was appointed as its sole selling agent. Subsequently with a view to providing training facilities in carpentry and to undertake the manufacture of furniture besides toys, the Wooden Toy Factory was converted into a Wood Working-cum-Training Centre in 1961 with a Foreman (Instructor) to be in charge of the Training Scheme. The Training Centre provided training for 75 candidates during the Third Plan period.⁶⁶ The venture, however, did not prove a financial success. In spite of attempts to prop up the unit by entrusting all government jobs to it, the unit had to be ultimately closed down on 1 November 1972.

Leather Goods Manufacturing Unit, Pondicherry : Though sanctioned in the year 1956, the unit could start functioning only from August 1958 as the receipt of the machinery was delayed. Started at an estimated cost of Rs. 1.38 lakhs, the unit functioned with an initial capacity of 100 pairs of footwear per day. Apart from the manufacture of footwear, training in improved methods of shoe making was also imparted in the unit. A show-room

was opened in October 1961. A Sales Emporium was opened during 1962-63 to improve the saleability of its goods. Though production increased in the early years, it began to decline from 1967-68 onwards forcing its closure in September 1972.

Leather Goods Manufacturing Unit, Yanam : This unit started production in 1960. In about five years the unit developed a tendency towards decreasing production. Soon production touched the level of Rs. 600. Under the circumstances, it was proposed to hand over the unit alongwith the Tannery to the Small-Scale Industries Corporation in Andhra Pradesh. The proposal fell through. Tenders were then called for either to lease out the unit or for its outright sale. The tenders, however, did not evoke any response. The machinery was then sought to be disposed of through the Director General of Supplies and Disposals without success. The question of outright sale was under active consideration.

Tannery and Leather Finishing Shop, Yanam : This unit established in 1958 was expanded during the year 1963-64 with the addition of one more tanning drum and a water heater. This venture too did not prove a financial success. The question of its sale was under consideration.

The proposals for a Handmade Match Factory and a Splints and Veneers Factory were given up as they were not considered economically viable.⁶⁷

Service-cum-Common Facility Workshops : These workshops provide technical assistance and common servicing facilities to artisans and agriculturists in the Territory at very nominal rates. The first workshop started at Villiyanur on 17 August 1963 showed marked progress in the following years necessitating its expansion during 1968-69.

The second workshop in Karaikal started in March 1967 is located in the Rural Industrial Estate Campus. The third unit, located in the Manappattu Industrial Estate, was commissioned on 26 September 1969. All the three workshops attend to repairing of pump sets, oil engines, agricultural implements, etc. They also undertake the manufacture of minor agricultural implements, light structurals, etc. on order. All the three workshops undertake blacksmithy work. The Villiyanur workshop undertakes ferrous and non-ferrous castings by green sand moulding. The Villiyanur and Karaikal Workshops attend to light carpentry work.

The progress registered by these three units may be gauged from the following statement :

Year	Villiyannur		Karaikal		Manappattu	
	1*	2**	1*	2**	1*	2**
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1963-64	N.A.	N.A.	—	—	—	—
1964-65	571	769	—	—	—	—
1965-66	3,695	1,770	—	—	—	—
1966-67	8,814	1,770	—	—	—	—
1967-68	12,151	1,453	1,348	95	—	—
1968-69	11,828	1,537	1,982	127	—	—
1969-70	10,428	1,879	2,831	155	2,645	289
1970-71	12,446	1,434	4,527	194	9,850	872
1971-72	10,299	1,178	4,488	216	11,728	1,152
1972-73	14,386	1,329	4,321	307	12,633	1,264

* Service charges collected.

** Number of artisans / agriculturists benefited.

Industrial Estates :

Among the three industrial estates set up in the Territory as part of the plan schemes, the first one to come up in Tattanchavadi near Pondicherry, was a semi urban industrial estate. Those established at Kottuchcheri near Karaikal and at Manappattu in Bahur Commune are rural industrial estates.

Industrial Estate, Tattanchavadi, Pondicherry : The establishment of an industrial estate in the Territory was one of the schemes included in the II Five Year Plan intended mainly to give a boost to industry by providing the essential infrastructure, viz. power, water, land and factory building required

for setting up industries. The Government first acquired 8.91 hectares of land in Tattanchavadi at a distance of about three km. from Pondicherry for the purpose. The construction of the estate was completed at an estimated cost of Rs. 11.12 lakhs and thrown open to entrepreneurs with effect from 16 February 1963.

The construction of sheds was carried out in a phased manner and allotted to entrepreneurs as and when they were ready. There were as on 31 March 1973 two 'A' type sheds, five 'B' type sheds and 21 'C' type sheds, besides 15 'A' type developed plots and two 'B' type developed plots. The A, B and C type sheds were originally charged Rs. 182, Rs. 132 and Rs. 82 per mensem respectively (at 50 per cent subsidy). The rent was raised to Rs. 224 Rs. 201 and Rs. 129 on 1 September 1966. With effect from 19 February 1968 this was raised to Rs. 447, Rs. 402 and Rs. 258 per mensem.

There were also five godowns, of which three were under allotment to private parties and two under the occupation of the Wood Working Unit. A monthly rent of Rs. 117.30 was charged for the godowns.

Separate plots were allotted to the Wood Working Unit and the Leather Goods Manufacturing Unit for which no rent was collected. The plot allotted to the Pondicherry State Model Weavers' Co-operative Society measuring 0.712 acres or 28A. 82Ca. was subsequently sold to the society for Rs. 8,462 and the amount was to be recovered in instalments. An area measuring 0.56 hectares was sold to the Government of India for setting up an Extension Centre for General Engineering. The Estate Complex also included an Administrative Block, a Canteen, a First-Aid Centre, a Baby Creche, a Geological Museum and a Show-room.

The availability of land, built-in-factory sheds, water and power facilities and the low rent charged for the sheds encouraged the otherwise timid entrepreneurs to venture more and more into the field of industry. This necessitated the acquisition of lands to the extent of 11Ha. 29A. 10Ca. of which an area measuring 7Ha. 11A. 90Ca. has been taken up for development and allotment to new entrepreneurs. On this site, 15 'C' type sheds were being constructed. The remaining stretch of land was divided into 24 'A' and 8 'B' type plots. 'A' type plots are charged an annual rent of Rs. 448 while 'B' type plots are charged Rs. 300.

An evaluation study conducted in 1969 by the Bureau of Statistics and Evaluation, Pondicherry, indicated that there was scope for increasing the production capacity of the units in the Estate through adequate supply of power and raw materials. The study further drew pointed attention to under-utilisation of installed capacity of the units functioning in the estate due to scarcity of raw material and power shortage. The study attributed raw material scarcity to low allotment to the Territory. The Evaluation Study, therefore, proposed that the power scarcity experienced by the units could be overcome by the installation of another sub-station within the Industrial Estate.⁶⁸ A wide range of items like wooden products, agricultural implements, domestic utensils, iron structurals, etc., are manufactured by the units located in the estate.

Rural Industrial Estate, Manappattu : The Rural Industrial Estate situated at Manappattu about 16 km. away from Pondicherry on the Cuddalore road was completed in February 1969. The land for the estate covering an area of 2Ha. 29A. 75Ca. was acquired in July 1967. An additional area measuring 4Ha. 78A. 70Ca. was acquired on 15 July 1969 for the 'Developed Area' programme. The estate has eight 'A' type and six 'B' type sheds. There are also 34 'A' plots in the developed area.

The units functioning in this estate are engaged in the production of hard and soft ferrite products, dry cells, chemical products, french polish, wooden products, besides dyeing and printing of cloth.

Rural Industrial Estate, Kottuchcheri, Karaikal : The construction work of this estate covering an area of 2 Ha. 99 A. 60 Ca. (7 acres 41½ cents) was completed during 1965-66 with a complement of 25 sheds consisting of 14 'A' type, eight 'B' type and three 'C' type sheds, all of which were allotted to entrepreneurs. It was formally declared open on 9 September 1968.⁶⁹

As on 31 March 1973 fourteen units were functioning in the estate manufacturing such items as agricultural implements, domestic utensils, steel trunks, polythene tubing and bags, etc.

An estate for electronic industries : The Industrial Potential Survey conducted by the Small Industries Service Institute, Madras, in 1972 found scope for a planned electronic complex in the Territory. The survey examined

a few items of manufacture of electronic and electrical items in the Territory and proposed the setting up of a functional industrial estate, preferably adjacent to the existing conventional industrial estate at Tattanchavadi wherefrom the available infrastructure facilities could be made use of. The survey pointed out that the functional estate would "create the required climate and actually foster development" of the industry in the Territory. Once the proposals take shape, the survey pointed out, starting of units for the manufacture of electronic equipments, instruments and computer components can be considered at the second stage of development. The survey report expressed the hope that with the setting up of a functional industrial estate in the Territory, there will be a new class of technicians, engineers and entrepreneurs to unlock a new era in the technology which will carve out a special name for Pondicherry in the industrial, particularly electronic map of India.⁷⁰

Industrial co-operatives :

Industrial co-operatives came to be organised in the Territory with a view to helping small artisans, craftsmen, carpenters, mat-weavers, toy makers, brick makers, metal workers, etc., who were found languishing for want of support.

The Directorate of Industries was put in charge of industrial co-operatives with effect from June 1961. There were then nineteen such societies in the Territory engaged in such activities as oil mongering, mat weaving, coir spinning blacksmithy, toy making, etc. These co-operatives were given technical and financial assistance which, to some extent, helped to revive the handicrafts and provided better facilities for rural artisans.⁷¹

Industrial co-operatives were also made eligible for managerial subsidy, equipment subsidy, reserve fund subsidy, share-capital subsidy and for loans to purchase equipments for the construction of buildings and towards working capital, etc. Out of a sum of Rs. 5.00 lakhs provided in the Third Plan for the development of handlooms, an expenditure of Rs. 3.32 lakhs was incurred by way of financial assistance to the Weavers Co-operative Societies in accordance with the pattern approved by the All India Handloom Board, viz. towards payment of rebate on sale of handloom cloth, managerial subsidy, interest subsidy, etc.

Out of about 4,000 looms in the Territory, 2,916 looms are said to have been brought under the co-operative fold. According to an estimate made in 1966 there were twelve co-operative weavers societies in the Territory with an average monthly production of 4,57,000 metres of cloth.⁷²

In 1969 there are 21 industrial co-operatives with 875 members and a share-capital of Rs. 61,740.⁷³ As on 30 June 1970 there were 23 industrial co-operatives in the Territory, 17 in Pondicherry, four in Karaikal and two in Mahe. Out of these, seven industrial co-operatives functioned under the auspices of the Khadi & Village Industries Commission. An investigation conducted sometime later showed that only nine units were functioning properly. The same year, orders were passed for the liquidation of five societies.

The industrial co-operatives were transferred to the care of the Registrar of Co-operative Societies, with effect from 1 July 1970.

Cottage industries and handicrafts :

A comprehensive survey of the handicrafts of the Territory was first attempted at the time of the 1961 census with a view to throwing some light on the traditional crafts having a cultural link with the past. The study identified in all 19 crafts which were of particular significance to the Territory. Of these, toy making, bronze image casting and korai grass mat weaving are of greater artistic value.⁷⁴ Another survey of the handicrafts in the Territory was undertaken by the All India Handicrafts Board in April 1964. This survey studied the economics of the various crafts and suggested suitable measures for further development.⁷⁵

The following crafts fall under the category of cottage industries :

- | | |
|------------------------------|----------------|
| — Handloom weaving (cotton). | — Carpentry. |
| — Handloom weaving (silk). | — Blacksmithy. |
| — Dyeing of cloth. | — Cane-works. |
| — Oil extraction. | — Hosiery. |

The following crafts may be mentioned as handicrafts of traditional value :

- | | |
|------------------------------------|---|
| — Korai mat weaving. | — Goldsmithy. |
| — Bronze image casting. | — Perfumery. |
| — Toy making. | — Wood-carving. |
| — Hand printing of cotton fabrics. | — Cutting and polishing of precious stones. |
| — Pottery. | — Agar bathies. |
| — Screw-pine mat weaving. | — Handwoven carpet weaving. |
| — Basketry. | |

Although the manufacture of coir, soap and foot-wear falls under the category of cottage industries, they have already been dealt with under small scale industries.

Cottage industries :

Handlooms (cotton) : The ancestors of the weavers in Pondicherry migrated to this place during the time of François Martin and the craft thrived till the last quarter of the XIX century. We have evidence of the popularity of such varieties as "*Lampasse, Mouchoirs de Vignettes, Silasse and Kambayi*" during the time of Anandarangapillai.⁷⁶ With Pondicherry becoming a free port and following the introduction of land customs around the territory, Pondicherry lost its competitiveness and the craft entered a period of decline.⁷⁷

The industry then passed through a phase of revival during the First World War period. Till a few years before merger, the industry flourished alongside the textile industry when again, as a result of restrictions imposed on the borders and the political turmoil within the settlements, about 2,000 families of weavers were compelled to abandon their profession and emigrate to the Indian Union.⁷⁸ When after merger a large number of them returned to the Territory, they were helped to organise themselves into co-operatives.

The handloom industry is the most important cottage industry in the Territory providing employment to about 5,000 weavers. Those engaged in this industry belong mostly to the Mudaliar community. There are a few who belong to the Vanniar and other castes. In tune with the policy of the Administration to develop the industry through co-operatives, more than 50 per cent of the weavers were brought within the co-operative fold.

Most of the craftsmen work in pitlooms. Weavers who are members of the co-operative society get the raw materials like hand and mill spun yarn, staple yarn, etc. from the societies which procure them in bulk at cheaper rates. The craftsmen then return the finished products on receipt of their wages. Independent weavers sell them to the dealers in the neighbouring towns or in the open market or to the middlemen who advance money or supply raw materials. Some years ago, a variety of lungis produced here was in great demand in South-East Asian countries. Varieties such as shirting, dhoties, towels, bedspreads, etc., were also manufactured here. In spite of competition from the mills and the power-looms, the industry is still practised by the poorer sections of the people.

Plans are underway to form an Apex Institution for the procurement of raw materials and weaving appliances and to distribute them to the primary societies at reasonable rates and to pool their production for sales. The Apex Institution will also provide training for weavers in advanced techniques of weaving and dyeing.⁷⁹

Handlooms (silk): Handloom weaving of silk is another traditional craft practised in Pondicherry for more than two centuries by members of the Devanga Chettiar community. The craftsmen are mostly concentrated in Molappakkam and Kuchchipalaiyam villages in Nettappakkam Commune. Some artisans are also found in Kariyamanikkam, Madukkarai and other villages in the same commune. All of them are traditional artisans. The raw materials viz. silk yarn, gold and silver laces are purchased from Kanchipuram, Bangalore and Mysore and the dyes from Madras. They get their designs from the master weavers and from the Design Centre of the All India Handloom Board at Kanchipuram. They produce silk sarees and blouse bits similar to Kanchipuram designs. With a view to rendering assistance to these artisans, the Government started the Bhadravathi Amman Silk Weavers Co-operative Society, Molappakkam-Kuchchipalaiyam in December 1958. The society was

sanctioned grants, rebate on sales, subsidies for equipment, rent and working capital. The society supplies raw materials to its members and also arranges for the marketing of the finished products.⁸⁰

Dyeing of cloth : Dyeing of cloth is an old time craft of repute (*vide* page 547). At present there are seven registered units engaged in printing and dyeing of cotton fabrics in the Territory. All the units are located in Pondicherry.

Oil extraction : The traditional method of oil extraction is followed by 68 men in Pondicherry, 15 in Karaikal and five in Yanam. In Pondicherry and Karaikal, members of the Vania Chettiar (Saiva) caste are engaged in this profession. The raw materials used mostly are ground-nut, gingili and coconut. Occasionally mango seeds, castor seeds, etc., are also crushed. Palm or sugar-cane jaggery is occasionally mixed to add to the flavour of the oil obtained. The raw materials are obtained from the Territory itself and sometimes from the adjoining Tamil Nadu or Andhra Pradesh. The *ghani* made of wood and driven by bullocks is the traditional tool still in use. Of late, however, owing to mechanisation of oil presses the traditional craft is losing ground, although oil produced in *ghani* is always of a better quality. The Khadi and Village Industries Commission came to the aid of the industry by forming co-operatives among them and providing them with improved Wardha *ghani* loans and grants.⁸¹

Carpentry : Carpentry is one of the traditional crafts followed by the *Asari* community in Pondicherry. Prior to the arrival of the French, they were engaged in the manufacture of wooden agricultural implements, *rathas* and *vahanas* for the chariots to carry the images of gods during the festival times, etc. They also supplied carved wooden doors, windows, beams, rafters, etc. With the advent of the French the use of furniture also spread among the people.

According to the 1961 census, there were in all 398 persons (287 in Pondicherry region, 65 in Karaikal region and 46 in Yanam region) engaged in this craft. The impact of western culture affected their traditional craft. They began manufacturing furniture and wooden articles against orders with the raw materials furnished by the parties and they got the wages for their work either in cash or in food grains.

This is mostly an household industry, although some carpenters work in the workshops put up by their employers. Wooden furniture still seems to hold ground in the Territory against steel furniture as people with taste and the aesthetically minded still go in for wooden furniture. With a view to providing relief to the large numbers of carpenters and blacksmiths in Pandacholanallur village (Nettappakkam Commune) a co-operative society was started in the year 1959 with 27 members. The borse ploughs manufactured by this society are purchased by the Government and supplied to the ryots at subsidised rates.⁸² (*vide* also p. 461).

Blacksmithy : This is one of the hereditary crafts carried on by the people in all the four regions. In Pondicherry and Karaikal the people who attend to this work are known as *karumars*. There were in all 142 in Pondicherry (all male), 39 in Karaikal, 36 in Yanam and two in Mahe. In the past, they supplied such iron and steel implements as knives, sickles, crow-bars, spades, cart wheel tyres, ploughs, etc., which they made from unserviceable scrap and iron bars. For such service they were paid wages or allotted *manyam* lands by the village community. In Pondicherry region the blacksmiths are engaged in making pipes out of iron sheets of 10 or 18 gauge thickness which are in great demand for sinking bore-wells. This craft is also passing through a phase of decline.⁸³

Cane works : The cane industry of Pondicherry is of recent origin (1949). The process adopted is entirely manual and the craftsmen produce such items as chairs, cycle baskets, waste paper baskets, food carriers, cots, etc. Cane and paints are the most important raw materials required by the craft. The entire requirement of cane is procured from outside the Territory, chiefly Mangalore, Hubli, Belgaum, etc.

As cane is available only for two months a year at the above places manufacturers are compelled to procure large stocks of cane for round the year use. The Directorate of Industries encourages the industry by granting financial assistance. Tools are supplied to the craftsmen at half the price to improve the quality of the products. As on 31 March 1973 there were two registered establishments in the Territory, both in Pondicherry. There are said to be good prospects for the industry.⁸⁴

Hosiery : Hosiery too is of recent origin and is carried on by a unit attached to Sri Aurobindo Ashram. Plain cotton socks and banians are made by this unit. The required cotton yarn is obtained from Madurai. The unit mainly caters to the requirements of the Ashram, although the products are also kept for sale to the public in the Ashram's Cottage Industries Emporium.⁸⁵

Handicrafts :

Korai mat weaving : Mat weaving is an important handicraft practised in Kakkalippattu, a village in Mannadipattu Commune and Odiyambattu, a village in Villiyanur Commune. The village of Kakkalippattu is situated on the bank of the river Sankaraparani (Gingee river) and to the north-west of Pondicherry at a distance of 19.3 km. About 400 years ago, the village is said to have been the abode of Kaikolavars (Kaikkolar-meaning handloom weavers). In the XVII century when François Martin invited handloom weavers to Pondicherry by offering them incentives, most of them migrated from Kakkalippattu to Pondicherry.

In course of time, Vanniars and Thuluva Vellalas came and settled in the village practising agriculture. Due to adverse seasonal conditions, agriculture became less attractive and the mat weaving industry began gradually to spread in the village. About 120 years ago, it is said that Muslims used to visit the village every season when the *korai* grass was in full growth. They used to stay on in the village till the entire grass in the river bed was exhausted. Those villagers who assisted them in cutting and processing the grass gradually learnt the craft. In due course, it became the subsidiary occupation of the villagers themselves. In 1943 a flood in the river is said to have uprooted and removed the entire growth of *korai* grass from the river bed. The villagers, thereafter, had to purchase the grass from Mannadipattu, Villiyanur and Nayinarmantapam and also from Chinnababusamudram and Vandavasi in Tamil Nadu. According to the Handicrafts Survey of 1964, three-fourths of the requirements of raw materials were obtained from Karur. Considering the distance of Karur from Pondicherry (240 km.) the survey recommended that the Administration could explore the possibilities of earmarking a certain portion of land near Kakkalippattu for *korai* cultivation.

The mats are produced mostly with colour stripes, both vertical and horizontal to the warp. Generally they produce mats with red, green, blue or violet stripes. Occasionally they weave mats with designs known as *Chittippoo*, *Thutippoo* and *Vazhaippoo*. The sokkattan mat is a specialit

depicting the squares required for the *sokkattan* game. The mats are generally of three sizes viz., 121.92 cm. x 175.26 cm. 99.06 x 175.26 cm. and 76.20 cm. x 175.26 cm. Occasionally mats of larger size viz., 45.72 cm. x 304.80 cm. used during marriages, etc. are also made. Mats depicting flowers and *sokkattan* are rarely produced. The weavers normally sell their products to merchants or dealers who visit the village from time to time. They also take their products to the surrounding villages or sell them at fairs held at Cuddalore, Pondicherry and Villupuram.⁸⁶ The Kaikalapet Mat Weavers' Industrial Co-operative Society was formed on 30 March 1957 with a view to encouraging the craft. The society was provided with a Design Instructor whose salary was subsidised by the Government. The society produced new items like handbags, decorative table mats, etc. Following the formation of the co-operative society, the responsibility of marketing their goods fell on the society. Some of the mat weavers now sell their finished products to the society.

The mat weavers sell a good number of their mats during *Masi Magam* at Pondicherry, *Panguni Uthiram* at Mailam and *Laksha Deepam* festival at Villupuram. The Handicrafts Survey of 1964 identified as many as 44 establishments out of which 31 establishments carry on their manufacturing activities in their homes, while the remaining 13 establishments carry on their work in the common workshed provided by the Mat Weavers' Co-operative Society.⁸⁷

Bronze image casting : Bronze casting is an old time craft dating back at least to the middle of the XVIII century. At present this craft is practised only in one village viz. Uruvaiyar in Villiyanur Commune of Pondicherry region. The village is located on the southern bank of the river Sankaraparani at a distance of 11 km. to the south-west of Pondicherry town. Even in Uruvaiyar the craft is now practised by only one Asari family, i.e., carpenters. How this has come about is not known. All that one could say for certain is that the craft is being practised by the ancestors of this family for not less than four generations. It is gathered that a *stapathi* had come from Villupuram to execute some orders of a local zamindar. After having executed the orders of the zamindar, he is said to have been persuaded to stay on permanently in the village to attend to other orders. With the passage of time, the family settled permanently in the village and continued the craft.

The images or icons are cast of an alloy of copper and brass obtained in the form of scrap or unserviceable and worn-out vessels made of these metals. These two metals are mixed in the required proportion, melted and the images cast. Brass and copper, clay cakes and wax are the main raw materials required. The other subsidiary raw materials are cow-dung cakes for heating the mould and charcoal for metling the metal. All these raw materials are obtained either from local dealers in Pondicherry town or from surrounding villages.⁸⁸

The craftsmen use very simple tools and implements such as pliers, hammers, files, blowers, chisels, vessels of different sizes, etc.

Images of various gods and goddesses such as Vishnu, Siva, Nataraja, Vinayagar, Subramaniam, Muthumariamman, Parvathi and Kali are mostly made by these craftsmen. The images made are of various sizes viz., 15 cm. to 90 cm. and are of different postures such as sitting, standing, dancing, etc. The artisans have to put in much labour and time for giving a final shape to an image. For instance, it has been estimated that it takes about 200 hours, i.e., 25 days of labour at the rate of eight hours per day to make an image of Goddess Kali measuring 45 cm. and weighing 27.24 kg.

The artisans find no difficulty in marketing their products since they undertake works against firm order and only on getting advance money for them. Almost all the images cast at Uruvaiyar are indented and purchased by the temples in the surrounding villages.

Another craftsman who came to Pondicherry from Swamimalai is also engaged in this craft now. He is working with a unit attached to Sri Aurobindo Ashram. His craftsmanship finds its finest expression in the images of Kalyana Sundarar, Parvathi and Nataraja.

One small-scale industrial unit in Pondicherry town manufactures the famous *kamatchiamman kuthuvilakku*. A great deal of religious significance is attached to this *kuthuvilakku* in South India. In fact every Hindu family takes pride in possessing one such *kuthuvilakku* in the home for purposes of worship. Made of the legendary *panchalagam* (five metals), these lamps represent the cultural tradition of an almost forgotten age.

The size of the attractively finished toys range from three cm. to 54 cm. The designs are based on Hindu epics like Ramayana, Mahabaratha, etc. These toys are purchased in large numbers in the months of Purattasi for decorating the *Navarathri kolu*. Toys are also in great demand during *Dasara*. Christians prefer toys depicting the images of Virgin Mary, Baby Jesus and St. Joseph for decorating the cribs during Christmas. The demand from educational institutions is for toys of educational value. The special type of spring toys throb as if with life even at a slight blow of breeze. The Gitopadesh chariot made of plaster of Paris and those of Lord Nataraja are purchased by the rich for display in their drawing-rooms. The late Vaithilinga Pathar of Kusappalaiyam was a doyen among toy makers. The Gitopadesh chariot designed and made by him secured for him the title of "Master craftsman" and the National Award for creating an outstanding masterpiece in the year 1964.⁹¹

Prior to the formation of the Toy Makers Co-operative Society, the toy makers used to sell their products to dealers in Pondicherry and also to the toy merchants in Madras, Bangalore, Tiruchchirapalli, Salem, Coimbatore and Bombay.

Handprinting of cotton fabrics : Handprinting of cotton fabrics through the block printing process flourished even during the French period, the products having an assured market in France and French Overseas Territories. According to the survey conducted during the 1961 census, about 2,000 persons in Muttiyalupettai, Mudaliyarpettai, Villianur, all in Pondicherry region were engaged in this craft. The craftsmen obtained the designs from the Weavers Service Centre of the All India Handloom Board at Madras and also from private parties. Chemicals and dyes are obtained from Madras and the plain white cloth from handloom weavers and textile mills in Pondicherry. Although the craft was found to be languishing in 1965, it was reported to have revived subsequently.

There were six handprinting units producing such varieties as *Kalamkari*, *Batik*, *Picasso* and pen art. The situation had so changed that dearth of skilled craftsmen seems to bog down the growth of this craft.

Pottery : From time immemorial, Pondicherry's name is associated with pottery and pottery craft. In the site of Arikamedu (near Virampattinam) where the existence of a Roman settlement was brought to light, were found specimens of a local pottery ware. The excavations of Casal have shown that

“the potteries found in and around at the time of digging (in Suttukanni) belong to the same type (red, red and black, black) which were characteristic of those found in the megalithic site of Muttirappalaiyam and in the lower reaches of Virampattinam.⁹²

The pottery craft is now carried on a limited scale at Murungappakkam, Nayinarmantapam, Ariyankuppam, etc.

Only members of the Kusava or Kuyavar community are mostly engaged in pottery.* Male members of this community add the title *Pathar* to their names. In Karaikal region, Vellalars are engaged in the craft. The 1961 census enumerated in all 120 potters (males only) in Pondicherry and 61 (males only) in Karaikal. Of these, 64 in Pondicherry and 22 in Karaikal region are said to be very highly skilled. In Yanam 77 potters including 24 females were counted. All of them work with potters' wheel.

The main raw material required for making earthen vessels is clay which is available in abundance in all those villages. The earthen vessels are manufactured against orders from dealers or for personal use. The artisans also take them to the neighbouring villages for sale. The study conducted at the time of the 1961 census pin-pointed the growing preference among the public for aluminium, brass and copper vessels. With the growing popularity of brass and copper utensils and stainless steel articles among the public, the craft is slowly losing ground.⁹³ The rivalry of ceramic industry, lack of organisation, improved tools, techniques and marketing facilities are said to be the other reasons for its decline.

Screw-pine mat weaving : This craft is being carried on in two villages in Pondicherry region. The screw-pine leaf is taken from screw-pine plants, popularly known as *thazhampoo chedi* grown widely on the banks of Sankaraparani river.

The process adopted for screw-pine mat weaving is similar to the weft and warp method. But strips of leaves are used both as weft and warp and woven by inter-locking them. Mostly mats and small baskets are produced. The survey conducted during the 1961 census revealed that out of forty-seven artisans engaged in this craft, all of whom are muslim women, twenty-three are within the co-operative fold (in Sultanpettai) and the rest independent.⁹⁴

* They are now called Kulalar.

Basketry : The 1961 census revealed that in Pondicherry region 15 males and 35 females, all of them Kuravar by caste, were engaged in the craft. In Karaikal about 20 persons (Naidus and Vaniars) are engaged in this craft. They produce baskets of different sizes and shapes, sieves, winnowing trays, etc., out of bamboo and the mid ribs of the leaves of country date palm. Most of the Kuravars engaged in this craft are nomads who go from village to village where date palms are found to grow. They sell their products in the villages and also during festivals at Virampattinam, Villiyanur and Pondicherry during *Masi Magam*.⁹⁵

Goldsmithy : There were 125 goldsmiths in 55 villages in Pondicherry region, 82 goldsmiths in eight villages in Karaikal and 22 goldsmiths in six centres in Yanam and five in Mahe according to the 1961 census. The goldsmiths in Pondicherry and Karaikal are known as Thattars and belong to the Asari community. They manufacture not only ornaments in gold of different carat purity but also bowls, plates spoons, tumblers, images of gods and goddesses, *kuthuvilakku*, sprinklers for rose water and a variety of other articles of day to day use in silver. They also manufacture golden ornaments with the gold supplied by the parties and according to the designs specified by the parties. The craft which must have flourished even before the advent of the French passed through a period of transformation adopting the alloyed gold and silver instead of pure metals for making ornaments.

The tools used by them are the clay crucible, iron blow pipe, anvil tongs, pincers, trays, steel $\frac{1}{2}$ draw plates with several holes of different sizes to draw wires, besides various types of small chisels and engravers.

Many of the goldsmiths have migrated to the nearby towns where they are nowadays employed by jewellers for making gold ornaments and silver articles.⁹⁶

Perfumeries : The origin of the perfumery industry in Pondicherry may be ascribed to French influence. Its simple existence is an evidence of the presence of the French who enjoyed world-wide reputation for their Parisian perfume-makers of a luxurious product of national speciality.⁹⁷

There are two units in Pondicherry producing such deodorants as **Eau de Cologne** and such varieties of perfumes as Lavender, Jasmine, Chypre, etc.

Chemicals are obtained through imports from France and Holland. Alcohol is obtained locally. **Eau de Cologne** is the most popular item among deodorants. The products are bottled in one, two, four and ten-ounce bottles. Sale of products is not a problem for the units.

Wood-carving : It can be said without doubt that this craft must have flourished in the region for more than two centuries. Anyone who visits the house of Anandarangapillai at No. 69, Rangapillai street, Pondicherry, built in the Indian style with a courtyard and interior verandahs can have an idea of the pattern of wood-carving of this epoch. There, one can admire the beauty of the pillars carved in wood. Specimens of exquisitely carved door frames can still be seen in some of the ancient mansions in the Territory.

With the arrival of the French, the traditional art acquired a new dimension of western orientation. This fusion, according to Labernadie, "added to the robustness of the material, a touch of grace which reflected the style of Louis XV in its finest shape".⁹⁸ Individual artisans still carry on the craft thanks to the patronage they enjoy of a few foreign and Indian connoisseurs of art. The wood-working unit of Sri Aurobindo Ashram engages a few workmen who make small carvings of animals, images of gods and goddesses, besides items of carved furniture.

Cutting and polishing of precious stones : A couple of units were started recently which were engaged in the cutting and polishing of artificial stones for ornamental purposes. These units catered mainly to the requirements of local jewellers. However, both the units found the going hard and closed down subsequently.

Agarbathis : Agarbathis are made by a unit attached to Sri Aurobindo Ashram. Although it is not a traditional craft, it has a traditional value and is being carried on as a cottage industry. All the raw materials viz. sweet smelling herbs and bamboo sticks are obtained from Mysore. Besides meeting the requirements of the Ashram, the unit sends its products to Bombay and Madras. Its products are exported to foreign markets as well.

Khadi and Village Industries Commission :

Following merger, the All India Khadi and Village Industries Commission evinced interest to extend its sphere of activity to the Union Territory of Pondicherry. It was, however, considered unnecessary to set up a separate Khadi Board for the Union territory to implement the programmes of the Khadi Commission. Instead it was found more feasible to implement the schemes in the Territory through the Directorate of Industries. This was so arranged because the Territory was small and the institutions eligible for assistance from the Khadi and Village Industries Commission were too few. In 1958 the Directorate of Industries, in consultation with the Khadi and Village Industries Commission, prepared some schemes for bee-keeping, oil extraction, mat weaving, toy making and for the manufacture of palm jaggery and palmyra leaf products.

A training programme in Ambar Charkas was introduced in Mahe with the help of the Commission in 1959. A loan of Rs. 22,000 was given by the Commission to the Mahe Nirmana Pravarthi Samithi for providing Ambar Charka training.⁹⁹

The Directorate of Industries also extended necessary assistance to start a handmade paper factory in Pondicherry.¹⁰⁰ The handmade paper unit started production in December 1959. The Karaikal Handmade Paper Industrial Co-operative Society, the Nayinarmantapam Hand Pounding Rice Workers Industrial Co-operative Society (Pondicherry), the Pandacholanallur Carpentry and Blacksmithy Industrial Co-operative Society (Pondicherry), the Ganapathy Oil Makers Industrial Co-operative Society and the Pondy Palm-gur Industrial Co-operative Society received financial assistance towards working capital, cost of machinery and equipment and for the construction of factory building, etc. Yet none of the societies functioned successfully. Non-functioning societies were liquidated.

In the year 1968 the Pondicherry Khadi and Village Industries Association was formed and registered on 18 November 1968 under the Societies Registration Act with a view to revamping the Khadi and Village Industries movement in the Territory. The Managing Committee of the Association consisted of the Secretary, Development Department and the Director of Industries (ex-officio members), besides five non-officials who

functioned as Executive Committee members. The Association was to function under the patronage of the Lieutenant-Governor. Assistance amounting to Rs. 3,13,000 was assured for the development of a tannery unit, a lime kiln, a brick plant, a glazed pottery and mangalore tile unit and also for hand pounding of paddy in this Territory. The proposed brick manufacturing project and the lime kiln project were soon abandoned as not feasible.

An Ambar Charka Unit with 25 textool model Ambar Charkas and other preparatory machines was started in Pondicherry and placed under the management of the Tamil Nadu Sarvodaya Sangh on 23 April 1969. About 30 women were initially employed. An Ambar Charka unit (25 charkas with accessories) was sold to the Pondicherry Central Jail where training was given to the prisoners.

Financial assistance in the form of grants (Rs. 2,800), loans (Rs. 4,400) and working capital (Rs. 60,000) was extended to the Pondicherry Khadi and Village Industries Association by the Khadi and Village Industries Commission.

A hand pounding unit was started on 23 April 1969 which was later shifted to the Industrial Estate. It was also decided to allot a plot (3,000 sq. ft.) for the unit within the estate campus. The unit, however, did not fare well. A plot belonging to the Public Works Department in Nonanguppam was selected for the tannery unit. This project too did not register further progress. Hence the Executive Committee of the Pondicherry Khadi and Village Industries Association which held its meeting on 15 June 1970 decided to implement the schemes with the help of private individuals or co-operatives. Even this decision was not found enough to implement the projects.

To sum up, the Pondicherry Khadi and Village Industries Association did not achieve much success in implementing the Khadi and Village Industries Schemes in the Territory. At the beginning of 1971 all that remained was a sum of Rs. 68,696.52 of the Association in the Pondicherry Co-operative Urban Bank.* On 2 August 1971 the Executive Committee decided to refund the unspent portion of the loan and grant to the Khadi Commission.

* Based on a note on the working of the Pondicherry Khadi and Village Industries Association (Mss.) of the Directorate of Industries.

Bee-keeping : The Gandhi Niketan Ashram, Kallupatti, Tamil Nadu, with the financial and technical assistance offered by the Khadi and Village Industries Commission gave a start to bee-keeping in the Territory in 1963. An Area Office in Pondicherry and five sub-stations were opened in the year 1968.

The table below gives a picture of the 10-year progress of bee-keeping industry in the Territory :

Year				No. of villages covered	No. of bee colonies at the end of the year	Quantity of honey collected
(1)				(2)	(3)	(4)
						In kg.
1963-64	..	..	..	26	88	14
1964-65	..	..	..	24	312	177
1965-66	..	..	..	58	655	533
1966-67	..	..	..	75	810	1,562
1967-68	..	..	..	75	773	2,101
1968-69	..	..	..	78	745	2,191
1969-70	..	..	..	79	1,060	2,530
1970-71	..	..	..	105	1,237	2,715
1971-72	..	..	..	106	1,393	4,151

During 1970-71, 20 bee-keepers in the Territory were given one month's intensive training in bee-keeping at the Area Office, Pondicherry. All the bee-keepers receive practical training from the fieldmen during their routine visit. The Territory with its rich flora and the abundant number of bee colonies combined with its moderate climate is said to offer great scope for the expansion of bee-keeping industry. According to one estimate, over 5,000 colonies can profitably be set up in the Territory with a capacity to extract 25,000 kg. of honey per annum.