



Tamil Arasu

JUNE 1991 Re.1

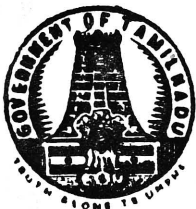


37th Handloom Festival inaugurated in Madras
on 10-5-'91.



Born:20.8.1944

Died:21.5.1991



**TAMIL NADU
GOVERNMENT GAZETTE
EXTRAORDINARY**

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MADRAS, WEDNESDAY, MAY 22, 1991

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PART II — SECTION 2

NOTIFICATIONS BY GOVERNMENT.

PUBLIC DEPARTMENT

(Special)

**DEMISE OF Thiru RAJIV GANDHI
FORMER PRIME MINISTER OF INDIA**

[G. O. Rt. No. 2014, Public (Special-B), 22nd May 1991.]

No. II (2)/PUSP/2872 (a)/91.

The following resolution of the Executive Committee of Tamil Nadu is published :—

RESOLUTION.

The Governor of Tamil Nadu and the Executive Committee record their deep sense of sorrow at the sudden demise of the beloved former Prime Minister of India Thiru RAJIV GANDHI and wish to convey their sincere and heartfelt condolences to Thirumathi Sonia Gandhi and family.

(By order of the Governor)

T. V. ANTONY,
Chief Secretary.



FORMER PRIME MINISTER RAJIV GANDHI ASSASSINATED

Thiru. Rajiv Gandhi, Former Prime Minister of India, was killed in a bomb blast at the venue of an election campaign public meeting at Sriperumpudur, near Madras at about 22.15 hours on 21-5-1991. The explosion took place when Thiru. Rajiv Gandhi was receiving garlands while on his way to the dais. Thiru. Rajiv Gandhi died on the spot.

The mortal remains of the former Prime Minister were kept in Teen Murti House, New Delhi for the public to pay their homage.

On 24th May, the body of Rajiv Gandhi was cremated at Shakthi Sthal with full State honours.

Heads and representatives of countries all over the World attended the funeral of Thiru. Rajiv Gandhi and paid homage to the leader who played a dominant and vital role in all major international issues.



BIO-DATA OF THIRU. RAJIV GANDHI

Thiru. Rajiv Gandhi, born on 20th August, 1944 in Bombay, was the eldest son of Thiru. Feroze Gandhi. His illustrious grand father, Pandit Jawaharlal Nehru was free India's first Prime Minister. His mother Tmt.Indira Gandhi too became the Prime Minister of India. His parents moved to New Delhi from Lucknow. His father, Feroze Gandhi, a journalist turned politician earned a reputation as a fearless and hardworking Parliamentarian.

Rajiv briefly went to school at St.Columbia's in New Delhi but soon moved to the residential Doon School in the Himalayan foothills. After leaving school he went to Imperial College, London, then shifted to Trinity

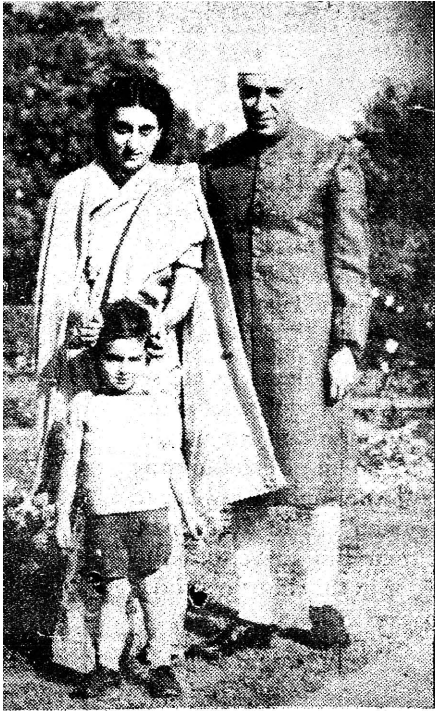


College, Cambridge and there he did a course in Mechanical Engineering. Thiru.Rajiv Gandhi became a pilot in Indian Airlines.

Thiru.Rajiv Gandhi met Sonia Maino, an Italian lady while at Trinity College, Cambridge and they were married in New Delhi in 1968 and two children Rahul and Priyanka were born to them.

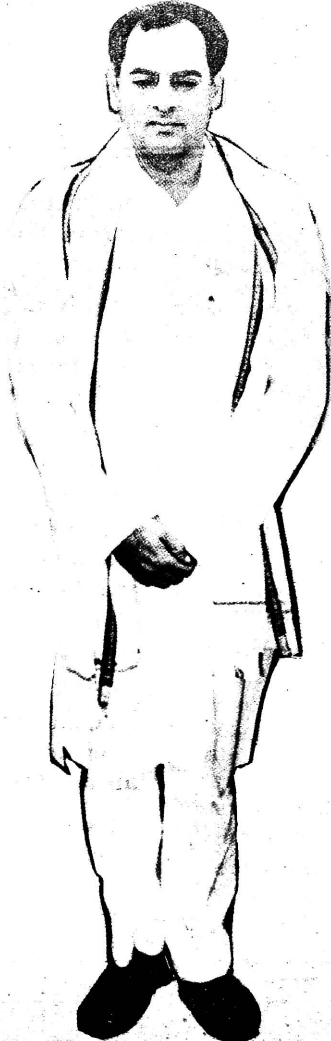
Thiru Rajiv Gandhi's younger brother Sanjay Gandhi, M.P., died in an air crash in 1980. Rajiv entered politics in 1981. He contested the election to the Parliament from the Amethi Constituency in Uttar Pradesh and won with a big margin.

His mother Tmt.Indira Gandhi, the Prime Minister of India was



shot dead on 31-st October 1984. Then Rajiv Gandhi became the sixth Prime Minister of India, at a very young age of 40.

As Prime Minister of India, he set himself to the work of building a modern India, and also became the Chairman of the Non-Aligned Movement representing 101 Nations. He became the torch-bearer of the developing countries; he



championed the cause of politically exploited and downtrodden people in so many countries as in South Africa, Namibia, etc.

He brought forth the Punjab Accord, Assam Accord and the Mizoram Accord to solve important issues and usher in peace.

He was the Prime Minister of India till December 1989. During his tenure, he gave a fillip to the modernisation of India, ushering in a new era in Indian Science. He helped in finding solution to many a national and international problem. He impressed the World so much that he was regarded as the voice of the third World countries.

On 21st May, 1991, the former Prime Minister Thiru. Rajiv Gandhi was killed in a Bomb blast around 10.15 pm. at Sriperumpudur, near Madras.

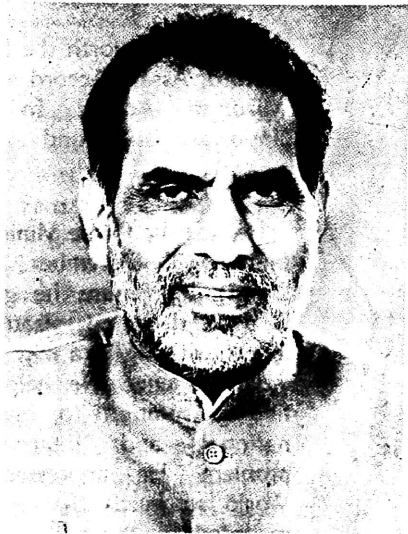
CONDOLENCE MESSAGES



"The heinous assassination of Rajiv Gandhi has caused me the deepest anguish. Words cannot adequately express my grief nor condemn this barbaric act. A brave and dedicated son of India has been felled by an act of a coward.

This savage act should lead us all to resolve to fight the cult of violence in our public life. Let us all maintain the utmost calm and use this moment of grief to pray for peace in our motherland. I appeal to my fellow countrymen not to allow passions to overtake them but strive to maintain peace and order in this hour of trial."

— THIRU. R. VENKATARAMAN
President of India



"We are facing one of the worst tragedies of our national life. A promising career has been cut short at the cruel hands of an assassin. We never expected this tragedy to come in such a way. Only

our courage, determination to fight the cult of violence can bring us out from this crisis.

Shri Rajiv Gandhi worked for the development and prosperity of this Nation. He had his own vision of a new India.

I appeal to our people to keep patience, endurance and courage and keep going on the path of peace and also maintaining our democratic structure. Let us not be taken by emotions. I hope that the Nation will face this crisis with fortitude and we shall come out of these difficulties very soon.

Let the whole Nation remain united to face the challenge posed by the enemies of democracy and also those who are against all our traditions and cultural values.

I salute the memory of Shri Rajiv Gandhi."

— THIRU. CHANDRASHEKHAR
Prime Minister of India

“ Our beloved former Prime Minister Thiru. Rajiv Gandhiji is no more with us. He has fallen a victim to the designs of misguided elements and in his death the Nation has lost a great young leader.

Looking back, Thiru. Rajiv Gandhiji had been in public life for a short time. He joined public life in 1981 after much persuasion and soon after was elected to the Lok Sabha. After the assassination of Indiraji, he became the Prime Minister in 1984 and the Congress Party secured an overwhelming majority in those elections.

The five years of his Prime Ministership were indeed momentous. He brought about the much needed healing touch in sorting out the challenges facing the Nation. The Punjab Accord, the Assam Accord and the Mizoram Accord are outstanding examples of the efforts and initiatives of Rajivji. The issue of Tripura was also settled by him. I recollect the trust and confidence Rajivji reposed on me to bring about the Assam settlement and the drive and speed with which the challenge was sorted out due to his encouragement.

Rajivji's heart always went with the underprivileged people. When I was the Chairman of the North Eastern Council, the developmental body for all the North Eastern States, Rajivji readily agreed to an 80 per cent increase in annual allocation to the plan funds. Sixty per cent of the population of the North Eastern States were tribals and Rajivji showed special interest in the progress and development programmes for the tribals. Again, it was due to his interest that statehood was conferred on two more Union Territories.

Rajivji's bold initiatives will long be remembered in our Country. The budgets under his Prime Ministership were hailed as bold measures for reinvigorating



India's economy. Apart from reducing the burden of taxation on individuals and the corporate sector and providing incentives for increased production, and encouraging scientific research, Rajivji's economic measures included the formulation, for the first time, of a long term fiscal policy to provide a sense of stability and direction to India's economic progress.

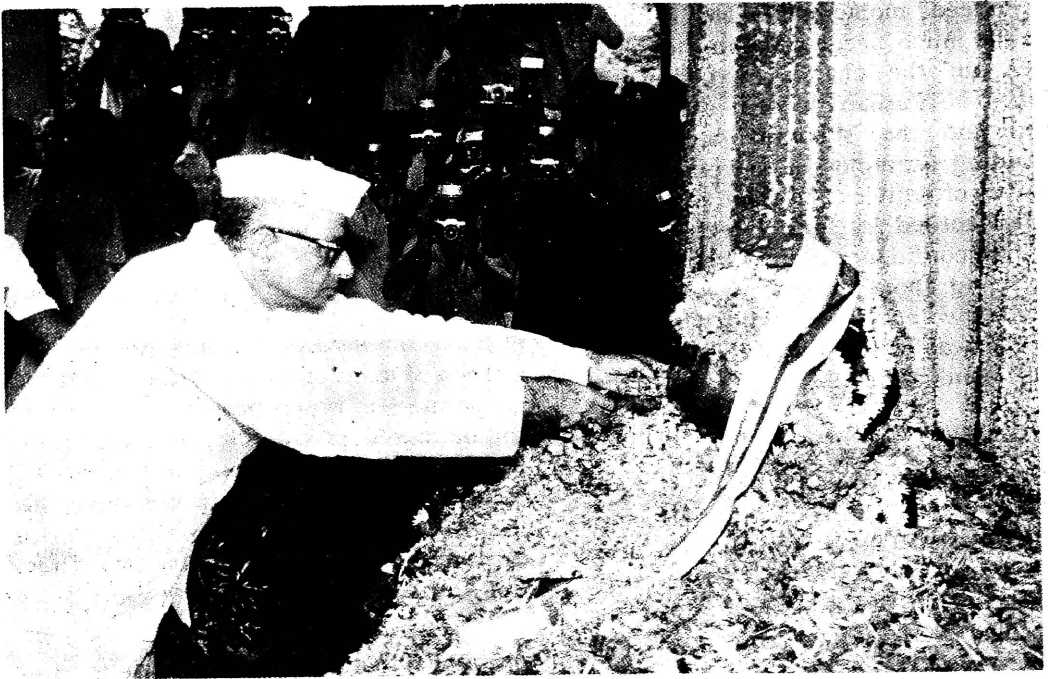
Rajivji's imaginative approach to problems was truly unique and became the most striking feature of his Prime Ministership. Whether it is in constituting the Central Ganga Authority to clean up the Ganges or in setting up a National Wastelands Development Board to halt the growing deforestation or in framing the New Educational Policy, Rajivji's creative approach saw appropriate and bold measures for the building of modern India.

Rajivji was indeed sincerely committed to the building of modern India. The manner in which he conducted the affairs of the Nation with transparent sincerity evoked widespread appreciation both in India and abroad.

Churchill once said courage is rightly esteemed to be the first of human qualities because it is the quality which guarantees all others. Rajivji's courage and confidence weathered many storms facing the

Nation with considerable ease and guided the country onward to its tryst with destiny. At this hour of crisis when we are mourning the loss of an outstanding leader of our times, it is our duty to imbibe in ourselves this courage to face the challenges facing the Nation that was the hallmark of Rajivji in life and in death".

— THIRU. BHISHMA NARAIN SINGH
Governor of Tamil Nadu



The urn containing the ashes of the former Prime Minister Thiru. Rajiv Gandhi was kept at Rajaji Hall on 28.5.1991 for Public Veneration. His Excellency the Governor of Tamil Nadu, Thiru. Bhishma Narain Singh paid homage to the departed leader.

It gives me great pleasure to be here this evening to inaugurate the 37th Handloom Festival organised by Co-optex. I understand that the Co-optex is organising such Handloom exhibitions every year during summer. The sale of textiles in general and handlooms in particular is poor between the major festival months

(The Governor's address at the inaugural function of the 37th Handloom Festival at Madras on 10th May, 1991).

- i.e between Pongal in January and Diwali in October- November, the two major festivals which account for large sale of textiles. Therefore, this festival is being organised during these lean months to promote sales so that there is continuous employment to the weavers. A few days back, I had inaugurated the Summer Festival at Ooty, a hill resort, which serves as a tourist place for the

more affluent of the society. Today, I am more happy to participate in this festival, a different kind of summer festival which helps the millions of weavers who are dependant on handloom industry.

Handloom industry plays a vital role in the economy of the State since ancient times. It ranks next only to agriculture in providing

direct and indirect employment to a large number of rural population. This industry is labour intensive and provides more employment opportunities than most other village industries. It is the largest industry in the unorganised sector in terms of employment that it generates. By one estimate, the industry in India

HANDLOOM INDUSTRY - A POWERFUL SECTOR OF RURAL ECONOMY

THIRU. BHISHMA NARAIN SINGH
Governor of Tamil Nadu



engages about 10 million people mostly from rural areas on over 30 million handlooms. It has been estimated that about 27% of the total textile production in the country is from the handloom sector. As this industry is in the cottage and small scale sector, it plays a crucial role in the rural economy by providing full time and part time employment to the millions of persons who are either directly engaged in the production of handloom cloth and fabric or in the ancillary processes like dyeing, etc. It provides employment to everyone in the household and thus helps augment their family income. However, this powerful sector of rural economy has not had a planned growth because of various constraining factors, foremost among them being different systems of employment that it engages in, which has not always been conducive to the welfare of the individual weavers. The independent weaver system that is still in vogue in many areas of the State does not help the weaver in obtaining optimum level of income. The various activities of production and marketing, from

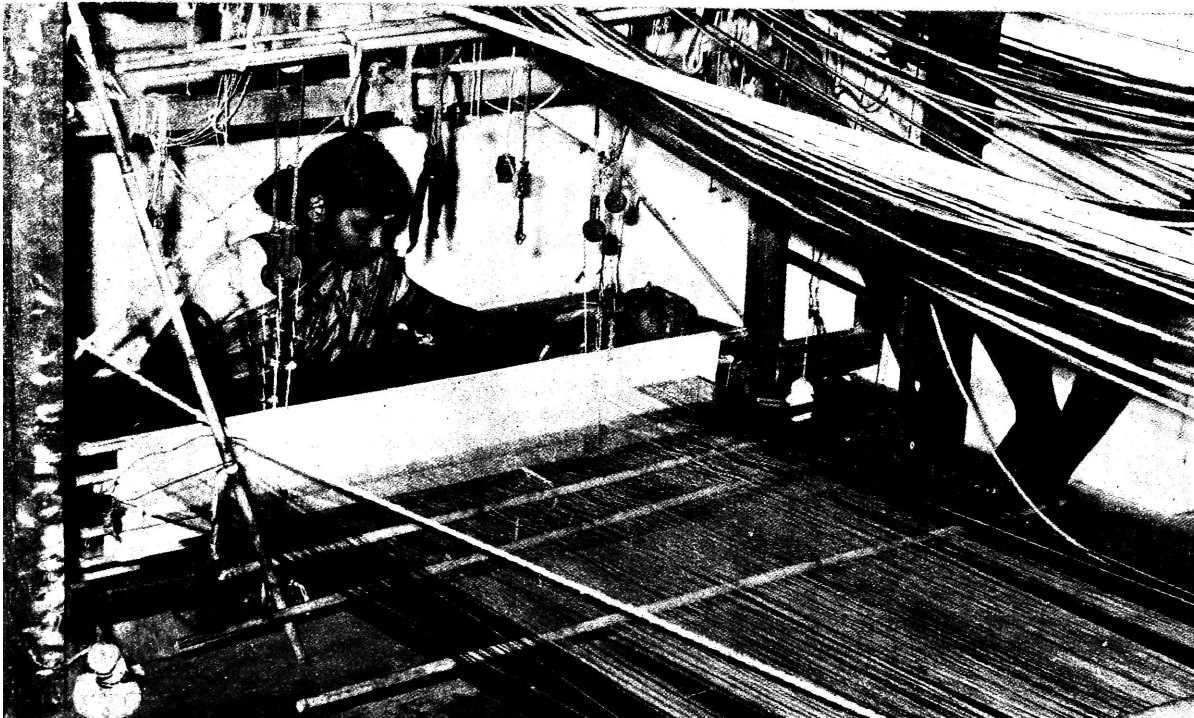
purchase of yarn and other raw materials to weaving with the help of family labour and finally, marketing the product is done by the individual. As a result, the forces in the market economy and various stages involved in the production and sale of the finished product reduce his productivity. Therefore, this class of weavers rarely own more than a loom and live a hand to mouth existence. There is the second more common group of handloom weavers



who are under the master weaver system wherein the weaver is distanced from the market by intermediaries and works only as a wage-weaver. Therefore, in this, the weaver does not get any share in the profit and merely works like a labourer, as a counterpart of the labourer in the handloom sector of those in a textile mill. However, there is great disparity between the wage earnings of the mill

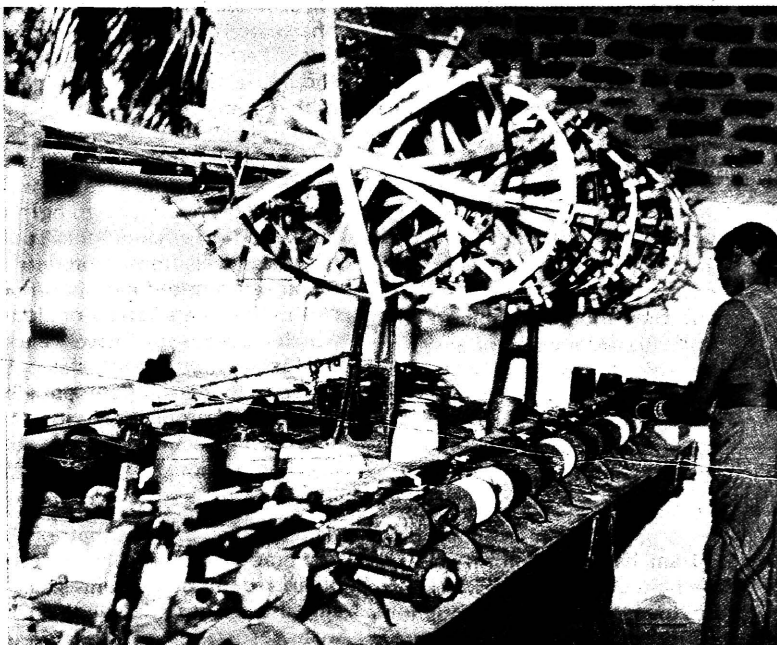
worker and the handloom weaver and therefore the wage - weaver is doomed to live in the condition of poverty for life.

It is here that the co-operatives have come to play a significant role in the handloom industry. The primary societies take on the role of master weavers. But the profits are shared by the members of the society. The co-operativisation of handlooms has been one of the major thrusts of the Government in the last few decades so that the handloom weaver could be brought into the organised form of production. To encourage more private looms to be brought under the co-operative fold, the Government have been extending credit facilities to the weaver co-operative societies for enlisting more members. It is heartening to know that out of about 4.27 lakh handlooms functioning in the State, 2.85 lakh looms have been brought under the co-operative sector. However, a comparison of the statistical figures in the last few years causes some concern. In 1984-85 there were 1,590 weaver co-operative



societies with 375 lakhs looms working; while the number of primary co-operative societies have increased to 1,677 in 1990, the number of looms is only 2.85 lakhs. The causes for the decrease in the number of looms have to be investigated. It should also be ensured that more number of looms are enlisted in the co-operative fold. For this to be achieved and to wean the weavers from the master weavers, easy credit facilities should be made available to the weavers since the master weavers offer credit to the weavers at times of need and work on an individual human plane. The co-operative institutions, unlike the Government agencies, should be able to adopt the individualistic human approach to its members and not act as a bureaucratic wing of the Government. The great bane of the co-operative system has been that the spirit of co-operation is missing and that it tends to become a department of the Government. The co-operative system can succeed only if the spirit of comradeship is developed and an institutional loyalty is assiduously cultivated. It should be the endeavour of the apex co-operative bodies like the Co-optex and the Government alike to build up this spirit so that the weaver can give his best.

I am happy to learn that the Tamil Nadu Handloom Weavers Co-operative Society (CO-OPTEX) which came into existence in 1935 with the primary purpose of ensuring supply of quality raw materials, mainly yarn and to lend marketing support to its member societies, has been playing a significant role in fulfilling these twin objectives. I understand that the yarn requirement for the handlooms is supplied from the co-operative spinning mills in the State at rates slightly below the market rates, price being fixed by a Committee every month. The work plan is also given by the CO-OPTEX to these member societies and the products are purchased



by them. A common complaint one hears of is that many of the co-operative spinning mills are not supplying quality yarn to the weaver co-operatives. It is also said that the co-operative spinning mills which produce high quality spinning yarn are reluctant to sell their yarn to the weaver co-operative societies but prefer to sell them in the open market. Only the mills which have marketing problems, prefer to sell yarn to these weaver co-operatives. Perhaps, the price fixing committee should think of different prices for the yarns of different mills so that the weaver co-operatives get adequate supply of good quality yarn. One also occasionally hears of the criticism against few of the weaver co-operatives, that good quality yarn that they get from the co-operative spinning mills at a rate much lower than the market rate is sold off in the open market and this is substituted by inferior quality of yarn with the result that the cloth that they produce is not comparable to the best in the market.

It is also said that some of the weaver co-operatives have as its members those who are not well trained and therefore the quality of the weaving is not comparable to those of the private handlooms. These defects could be overcome by providing adequate training, by supplying quality yarn and by an effective mechanism of supervision. However, it should be borne in mind that any amount of supervision could not ensure the quality or prevent malpractice. The work ethos and good work culture must be imbibed by the weavers themselves and the co-operative set up should actively engage themselves towards achieving such a goal.

Though in the last few years CO-OPTEX has earned a name for quality especially in the silk sarees, for the quality of the zari and the silk yarn, yet there needs to be much improvement in the design and the range. Many of the private houses selling the same product with profit margin of over 30% are able to sell the fabrics at

prices lower than that of the CO-OPTEX, if we do not take into account the rebate given by the Government. They also have varied designs, colour ranges which are not normally found in CO-OPTEX. I am happy to note that there are a few design-cum-service centres run by CO-OPTEX which provide new designs in handloom products. There should be greater research on the part of this wing of the CO-OPTEX and they should be able to come out with wider range of designs to be able to compete with other private designers. Particular attention should be paid to designing in sarees, draperies and in furnishings.

I am happy to inform you that we have decided to allow a rebate of 20% on handloom goods for a period of 100 days in a year as a permanent measure. The handloom industry in Tamil Nadu has been able to survive mainly because of the rebate or discount given on sales and promotion of sales by credit. The rebate has been in vogue for the last 36 years. It is time that we think of making the handloom industry viable without the rebate scheme. Certain assistance from the Government in the form of market exploration, market development and in designing can be expected, but the product should be able to find a clientele without a rebate system.

In order to achieve this objective, there should be technology upgradation in the handloom industry. It is particularly relevant to Tamil Nadu since, though we occupy third position in the country as regards production of handloom cloth, we are below the national average in productivity per loom; our average daily production works out to 4.8 metres per loom as against the national average of 5.1 metres. There must, therefore, be a change of Govern-

mental policy towards handlooms. There is need for a shift in the emphasis from protection to promotion. Perhaps greater research should be made on the conditions of the looms and these should be modernised. With the modernisation of looms and the increase in productivity, greater thrust should also be given on designing and marketing. The handlooms could then free itself from the fetters of manufacturing ordinary variety of cloth - the Janata variety of cloth - which does not have either qualitative or artistic value and will be able to concentrate on high value added production. Only this approach could help the handloom industry in the long run.

I am happy to learn that for the first time this Handloom Festival is organised in permanent stalls. I am also glad to know that the weaver societies of other States

like Andhra Pradesh, Uttar Pradesh and Haryana are also taking part in this festival. I am sure this festival would provide greater opportunity for interaction between these States which would help in bringing out better handloom products.

I am also very happy to name the newly constructed exhibition complex as 'Padmashri M.P. Nachimuthu Kaithari Thidal'. Thiru. M.P. Nachimuthu was the President of Co-Optex from 1953 to 1969 and this exhibition ground was purchased during his Presidentship. Thiru. Nachimuthu devoted his entire life for the development and growth of the handloom industry in Tamil Nadu and it is only appropriate that this exhibition ground is named after him.

With these few words, I have great pleasure in inaugurating this Handloom Festival."

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Tamil Nadu Industrial Exposition - 1991 (IND EXPO '91) sponsored by the Directorate of Industries and Commerce in association with the Tamil Nadu State Board of All India Manufacturers' Organisation and Tamil Nadu Small Scale Industries Association is proposed to be held for a week at Anna University, Guindy. This Tamil Nadu Industrial Exposition '91 will give a thrust to the Industrial activity of Tamil Nadu.



Anna University, Madras
10 - 16th June 1991

The IND EXPO '91 will consist of Technical Film Shows, Seminars, Exhibition, Catalogue Shows, Buyer-Seller Meet, etc.

TAMILNADU INDUSTRIAL EXPOSITION - 1991



Thiru. Jor Singh Syiem, I.A.S.,
Industries Commissioner
and Director of
Industries and Commerce



INFO CENTRE

The Special feature of IND EXPO '91 will be the "Theme Stall" in the form of Information Centre where a common man can get all informations regarding setting up of an industry and the variety of assistance provided by the promotional organisations. In this stall, over 2,000 project profiles will also be sold for the benefit of entrepreneurs.

In the Catalogue Show, there will be a variety of Catalogues displaying Indian and Foreign manufactures. A consultant meet will also be organised to enable small scale industries to identify suitable consultants in various disciplines.

BUYER - SELLER MEET

The Buyer-Seller Meet will enable Industries to interact and identify sources of manufacture. Large undertakings will focus on import substitution. Actual samples and drawings will be displayed to enable Small Industries to find out the possibility of substituting them.

FILMS AND SEMINARS ON THE LATEST TECHNOLOGY

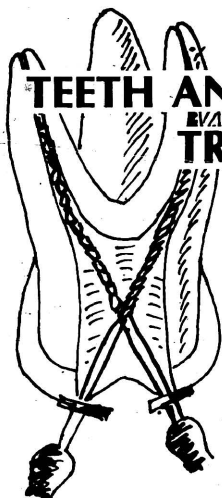
The Technical films will create an awareness on the latest technology and manufacturing practice of various industrially advanced countries. Seminars will also be held on various subjects. Technical Institutions Promotional Institutions and Financial Institutions will participate in the seminars.

EXHIBITION

The Exhibition will have over 200 stalls consisting of large, medium and small industries. Separate pavilions to highlight Rural Industries and Exports are also organised.

Over two lakh industrialists are expected to witness this fair.

To coincide with this, the Annual Conference of Small Scale Industries called SIACON 1991 is also being organised on 15th June 1991 at Anna University Campus.



TEETH AND ROOT CANAL TREATMENT

Dr. A. Parameswaran, Professor of Operative Dentistry, Madras Dental College, explains about the Teeth and the Root Canal Treatment, in particular.

Q. Why do the teeth decay, doctor?

A. A Tooth is made-up of a surface cover, Enamel, which has got irregularities on the surface for grinding purposes. The sticky carbohydrates, lodged on the surface, interact with the bacteria in the mouth to form an acid which causes the decay.

Q. Why is there immense pain when a tooth is affected?

A. The Tooth is made up of harder surface Enamel, Dentin which is less hard, and Pulp containing blood circulation and nerve tissues. When the pulp suffers inflammation it becomes thicker and grows in size. As the pulp is covered from all sides, the tissue is unable to grow in size, and hence severe pain occurs.

Q. Why is it more painful at night than during day time?

A. When a person lies down to sleep or rest, the blood circulation is increased due to the lying position and as a result there is more pain.

Q. Will one affected tooth infect other teeth also?

A. The answer is no. But due to the affected tooth, a person tends to eat with the other side, not using the side of the affected one. So, the disused part becomes decayed and organises another infection.

Q. Will a bad tooth cause any other body ailment?

A. As a person suffers from immense pain, the tendency to take food is minimum, resulting in nutritional deficiency. Patients develop pain in joints, ear and suffer constant headache.

Q. What is the common disease/factor which causes damage to tooth?

A. Persons having dry mouth easily get their teeth damaged. Saliva has got a protective character. Persons suffering from asthma breathe through their mouths, and as the saliva is dried up, due to this, the teeth get decayed.

Q. What are the specialities in Dentistry?

A.

1. Oral surgery.
2. Conservative dentistry (deals with fillings, restorations, Root canal treatment and crowning of teeth.)
3. Prosthesis (artificial teeth making)
4. Periodontia (treatment of gum diseases)
5. Orthodontia (correction of irregular teeth)
6. Oral diagnosis and Oral pathology.
7. Paedontia (treatment of children's teeth)

Q. What is the significance of conservative dentistry?

A. It is an elaborate, most time consuming procedure. It can range from a small filling of a tooth to a detailed, complicated precision - oriented Root Canal Treatment.

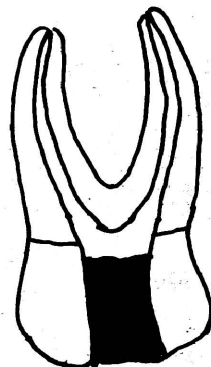
The importance of retaining the natural teeth is very well understood by the public. A loss of a single tooth in a mouth can totally disorganise the masticatory mechanism. Loss of one single tooth may lead to dislocating of the efficiency of biting, since the tooth behind the space migrates or moves forward. Often the opposing tooth which misses the opposite pressure tends to grow totally jeopardising the biting efficiency. So earlier replacement of lost tooth is essential.

Q. Is it necessary to drill a tooth before filling?

A. Yes, it is drilled to remove the decay, to receive and retain the filling. Presently, we are using newer techniques and restorative materials which do not need extensive drilling.

Q. What are the different types of filling?

A. Filling materials are basically permanent, semi-permanent and temporary. The permanent fillings are metals, semi-permanent fillings are resins and the temporary fillings are cements. Depending upon the



defect in the tooth, the filling materials are chosen.

Q. Can you please explain in detail the Root Canal Treatment?

A. Whenever a person comes to a Dentist with tooth pain, it is the obligation of the Dentist to identify the cause of pain. If he locates the cause of pain to dental caries or a tooth which has got injury to dental pulp (due to a fracture), the dentist should decide to conserve the tooth by doing specialised treatment-Root Canal Treatment.

Selection of specific case for this treatment is important but 80% of the teeth which might have been extracted can be saved and the natural tooth retained by this treatment. Despite time-consuming, sensitive and precision-oriented, once it is successfully done, the tooth is rejuvenated to serve for number of years more.

All our teeth can be treated by Root canal procedures; each tooth has got different form and function. Knowing this variation in sufficient details, Root Canal Treatment can be successfully performed.

By doing the Root Canal Treatment, the tooth is treated internally (the pulp of the tooth). The pulp and the infected materials are removed through an opening made on the tooth. Of course this is done under a local anaesthesia so that no discomfort is felt. The total removal of the contents of the pulp serve the Root Canal open for further instrumentation, application of medicaments. Repeated instrumentation and cleaning of the infected canal is performed in another two sittings and the empty treated Root Canal is filled with a medicated inert (non-reactive) material. By doing this treatment, the tooth is brought

back to the normal functioning and painful part of the tooth is totally removed.

During the course of treatment, the pain is relieved; there is no discomfort after the first day, when the preliminary treatment of the removal of the infected part of the tooth is done. The diet restriction is not there during the treatment. Routine works can be performed without interference.

After the tooth is treated by Root Canal Treatment, there is a tendency for the tooth to crack due to extraordinary pressure. This is accounted to the large opening made on the tooth as well as the change in the structure of the tooth due to dehydration. It is customary to follow the treatment with metallic restoration or crown for the grinders since the modern teeth are subjected to the biting pressure of roughly about 120-180 pounds per square inch.

A properly Root Canal treated tooth will serve the person for his life time. The success rate is more than 85%. If failures occur, which is rare, it can be due to certain variation in the formation in the teeth which cannot be judged during the procedure.

Root Canal Treatment was considered as a treatment for the elite in the earlier days and it involves time and maintenance of the appointment with the dentist. Presently the public are aware of various (filling and other restorative) treatments, to save the teeth.

This treatment has to be made popular among the people by giving wide publicity, stressing the importance to the presence of natural teeth, which are more essential and efficient than the artificial makeshifts. ●

— R. Rajasekaran

EAT CHEESE AND SMILE

Recent research shows that cheese definitely has some relation with teeth. Eating cheese can not only check but also reverse the early effects of tooth decay, says a report in Science Update, a newsletter on Indo-US Scientific Cooperation and Technological Advances in America.

After a two-year study on about a hundred people, Dr. Anthony Hargreaves, a Dental researcher from the University of Alberta, came to following conclusion. He says that calcium released while eating cheese not only prevents tooth decay but that it also replaces the decayed material with new and healthy minerals. The Dentist noted that some varieties of cheese are more effective in the prevention of tooth decay than others.

As part of the same study, Dr. Hargreaves observed the effects of sunshine on the teeth of schoolchildren. Children whose classrooms had access to natural light had fewer dental problems than those whose study areas were illuminated with artificial lighting such as fluorescent bulbs, the report says.

Source : Centre for Environment Education

South Indian Temple Architecture

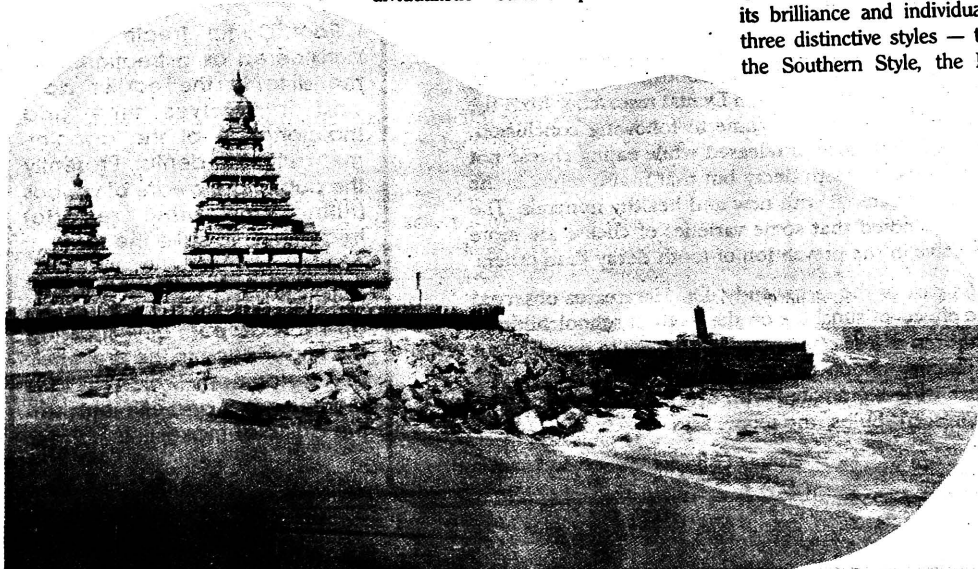
The history of India goes back to thousands of years, making it one of the oldest cultures of the world. Indian civilisation, which has come down the centuries without any break to us, is a rare and phenomenal fusion of one cultural strain by another in ancient India.

Temple Architecture in India is a synthesis of architecture, sculpture and painting with symbolism playing an important part. Infact, the temple was the epicentre of the Indian Community. The rare blend of architecture and sculpture made the sculpture develop into an extent unseen in any part of the world. The finesse of the Indian sculpture helped India reach a glorious status, the acme in artistic expression which is the greatest achievement of our Nation. Sculpture became a part of the architecture.

With the spread of Vedic Culture to South India, there resulted a synthesis of the Dravidian and Aryan cultural strains. This produced a powerful traditional way of life in the South. This individualistic culture presented the

country with wonderful treasures of art and architecture.

The architecture of the South is unique and has become world famous for its brilliance and individuality. Of the three distinctive styles — the Dravida, the Southern Style, the Nagara, the



Northern style and the third, the Chalukyan school of Karnataka — the Dravida style evolved in the South-eastern region.

The Dravida school of temple art is vividly exhibited in some early monuments such as the Cave Temples seen at Mamallapuram and Kancheepuram. This art form even spread to Indonesia and Campoochea as the Pallavas were great seafaring Kings. These early monuments were followed by the exquisite 'Shore temple' at Mamallapuram and Kailasanathar temple at Kancheepuram. The 'Vimaana' of the shore temple influenced the spires of Pagodas of South-East Asia. The

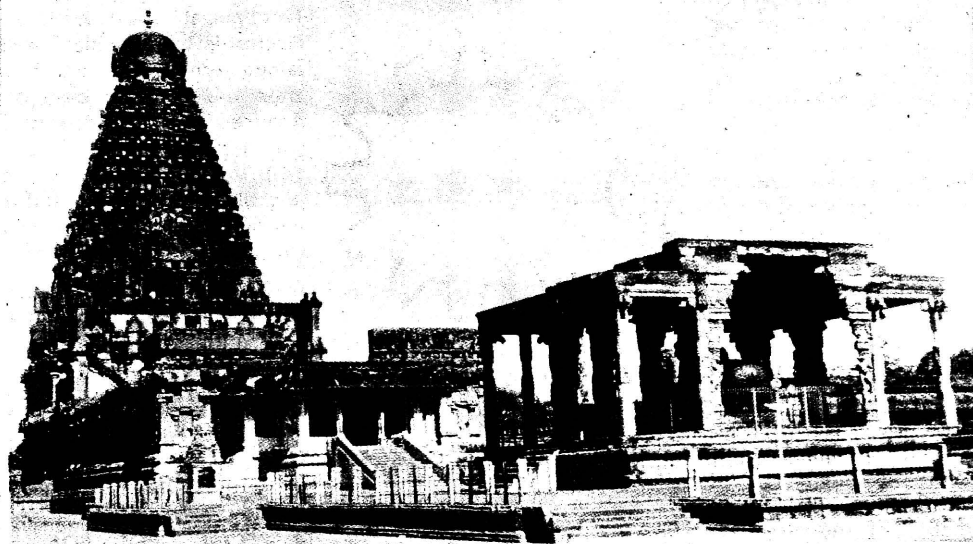
sculptures for which this dynasty is unparalleled. Their stone sculpture form has been hailed as one of the best sculpture forms of the World. The bronze statues of Shiva as Nataraja performing the Cosmic Dance are peerless in the field of art.

Apart from the Sculpture form, bronze statuary and enormous lay-outs, another unique feature of the South Indian temples is their towering 'Gopurams' (the gateways).

This was a contribution of the Pandyas. All four sides of the gopuram were covered with splendid carvings of stories from epics. By the 14th century,

hall which is one of the finest in the World. The temple has 22 massive gateways, the 22nd rising to 73m being the tallest tower in Asia. Another example of this style is the 17th Century Rameshwaram Temple. This temple has 1,230 m. of pillared corridors. The Chidambaram Temple has exquisite carvings of dance poses. Numerous tanks, pavilions, carved pillars and gopurams are examples of this phase of elaborate and massive temples.

These magnificent temples, emblazoned with finest forms of carvings, paintings and statuary stand



Kailasanathar Temple pioneered the beginning of the "Gopuram" in temples.

The Brihadeeswarar Temple in Thanjavur, (around 1,000 AD) of the Chola dynasty has a huge 'Vimaana'. The spire is topped by a huge 80 ton monolithic cupola taken atop by means of a 6km long ramp, a technique adopted by the Pyramid builders. The Parampanan Temple in Indonesia was modelled on this temple. The temple at Gangaikondacholapuram, of same style, for the first time was introduced with a hall of 150 pillars.

The Cholas are even better known for their bronze statuary and Stone figure

a new addition, the Kalyana Mandapam or Marriage Hall, was made to the temple structure.

The dynamic dynasty that ruled the Vijayanagar in Karnataka made an outstanding contribution to the South Indian temple architecture. Their style brought in extravagant carvings on walls, pillars and huge sizes of the temples and elaborate statuary. The magnitude of the temple owing to the Vijayanagar dynasty, was further enlarged by the Pandyas. The Madurai Meenakshi Temple is measured at 262 m. to 223 m. with 11 gopurams in all whereas the Srirangam Temple is 762m by 886m, and has a 1,000 pillared

testimony to a wonderful architecture left as a legacy by our great ancestors. India's contribution towards Culture World-wide will remain for centuries in history. Our architecture, along with the marvellous examples of sculpture and paintings will reign glory in the future too for it is peerless, ageless and marvellous. Each one of us can certainly bask in the glory of the greatest achievement of our nation - our art and culture at zenith which is a dream for any civilisation. Our temple architecture, like it has done for centuries, will remain forever to tell the world in future about the greatness of Indian art and culture.

MAJOR INCENTIVES FOR INDUSTRIAL DEVELOPMENT

The Government of Tamil Nadu is committed to accelerated industrial development of the State. To achieve this objective, Government of Tamil Nadu have been implementing a package of incentives which is considered to be one of the best packages in the country. The package mainly consists of Capital Subsidy linked to investment in industrially backward areas and Sales Tax waiver/deferral. A special investment subsidy is also given to selected category of industries irrespective of the location. Another salient feature of incentives is that they are available for any number of expansions/diversifications in addition to new industries.

The details of incentives available to entrepreneurs are as follows:

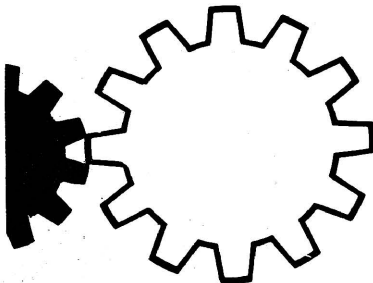
1. NORMAL STATE CAPITAL SUBSIDY FOR BACKWARD AREAS:

A capital subsidy of 15% on fixed assets subject to a maximum of Rs.15.00 lakhs is available to medium and major industries as well as small scale industries to be set up in industrially backward and most backward taluks and in SIPCOT Industrial Complexes, Growth Centres and Industrial Estates developed by Government Agencies, including SIDCO, Madras Export Processing Zone and Madras Metropolitan Development Authority.

This subsidy is available to industries which have obtained the term loan sanction on or after 14.91. In the case of self financed units, the date of taking effective steps viz. acquisition of land or commencement of building construction or placement of firm

orders for machinery, whichever is earlier should be on or after 14.91.

Medium/Large industries being set up within 50 Km radius of Madras City, 15 Km radius of Coimbatore and Madurai Cities or within the Municipal limits of other Municipalities and Municipal Townships, are not eligible for this Subsidy Scheme.



2. SPECIAL SUBSIDY FOR PIONEER INDUSTRIES:

Any new unit with fixed investment exceeding Rs.5.00 crores being set up as the first unit in industrially backward and most backward taluks where there is no such unit of that level of investment, is eligible for a capital subsidy of Rs.25.00 lakhs. New units with fixed investment exceeding Rs.25.00 crores being set up anywhere in Tamil Nadu, as also existing units expanding or diversifying with additional fixed investment in excess of Rs.25.00 crores, are eligible for a capital subsidy of Rs.25.00 lakhs.

The Pioneer Special Subsidy is available to major and medium industries which have obtained term loan sanction on or after 1.10.88. In the case of self-financed units, the date of effective steps should be on or after 1.10.88.

3. SPECIAL SUBSIDY FOR ELECTRONIC INDUSTRIES:

Electronic Units set up anywhere in Tamil Nadu are eligible for Special Subsidy at the rate of 20% of the investment made in fixed assets subject to a ceiling of Rs.35.00 lakhs. This is applicable both for Small Scale Industries and Medium/Major Industries. This Special Subsidy is available to Electronic Units, which have obtained term loan sanction on or after 14.91. In the case of self financed units, the date of effective steps should be on or after 14.91. Special Subsidy is also applicable to Electronic Industries which undertake expansion/diversification.

All new electronic industries are eligible for an interest rebate of 2% on the term loan granted by SIPCOT.

All electronic industries which have obtained term loan or taken effective steps on or after 9.5.88 but prior to 14.91 will be eligible for subsidy.

4. SPECIAL SUBSIDY FOR LEATHER INDUSTRIES:

Leather units set up anywhere in Tamil Nadu are eligible for a Special Subsidy of 20% on fixed assets subject to a maximum of Rs.20.00 lakhs. The Special Subsidy is available to leather industries which have obtained term loan sanction on or after 1.10.88. In the case of self financed units, the date of effective steps should be on or after 1.10.88.

5. SPECIAL SUBSIDY FOR SELECTED CATEGORY OF INDUSTRIES:

A Special Subsidy of 10% on fixed assets subject to a maximum of Rs.15.00 lakhs will be made

available to medium and major industries for the following selected categories set up anywhere in Tamil Nadu.

1. Automobile spare parts.
2. Drugs and Pharmaceuticals.
3. Solar Energy Equipment and other non-conventional energy devices.
4. Export oriented gold jewellery making and diamond processing units.
5. Pollution Control equipment.
6. Jute Industry in 6 taluks viz.
Ambasamudram (Nellai-Kattabomman District)
Madurai (Madurai District)
Musiri (Trichy District)
Kumbakonam (Thanjavur District)
Panruti (South Arcot District)
Chengalpattu (Chengai-Anna District)
7. Sports goods and accessories
8. Food Processing Industry and
9. Cost effective building materials like Aluminium or PVC Doors and Windows, Window frames etc.

This Special Subsidy is available to the selected category of Industries which have obtained term loan sanction on or after 22-5-89. In the case of self financed units, the date of effective steps should be on or after 22.5.89.

A Special Subsidy of 20% on fixed assets subject to the ceiling of Rs.15.00 lakhs will be made available to Small Scale Industrial Units for the categories of industries mentioned in para 51 above. This Special Subsidy is available to Small Scale Industrial Units for which means of finance is tied up on or after 22-5-89. In the case of self-financing units the date of taking effective steps viz., commencement of building construction or placement of order for machinery whichever is earlier should be on or after 22-5-89.

Small Scale Industrial Units which had tied up their means of finance or have taken effective steps as the case may be prior to 22.5.89, will be eligible for the then

existing rate of subsidy as per the then existing orders.

6. SPECIAL SUBSIDY FOR EFFLUENT TREATMENT PLANTS:

A Special Subsidy of 10% of the value of assets created towards setting up of effluent treatment plant with a monetary ceiling of Rs.2.00 lakhs will be made available for installation of effluent treatment plants by the existing tanneries.

7. SUBSIDY FOR PURCHASE OF GENERATORS:

New generators purchased for captive use will be granted subsidy at the rate of 15% with a monetary ceiling of Rs.5.00 lakhs. This subsidy will be available to existing industries, irrespective of their location with the following guidelines:

The Scheme of Generator Subsidy is not available for the following types of conventional and resource based industries and power intensive units.

Cement, Sugar, Textiles, Mining/Quarrying, Flour Mills, Hotels, Edible Oils and Solvent Extraction, Rice Mills, Distilleries, Breweries & Malt Extraction, Granite Polishing units (connected with Mining and Quarrying), Textile Processing, Crimping, Texturising etc., connected with Textile Industry and Ceramic manufacturing and the following types of power intensive units—

Steel and Aluminium Industries with a demand exceeding 2000 KVA.

Units consuming more than 2000 Units (viz., Newsprint, Caustic Soda, Fertiliser, Nylon/Rayon/Polyester Fibre, Potassium chlorate) per tonne of finished product.

List of Industrially Most Backward Taluks in Tamil Nadu

- | | |
|--|---|
| 1. CHENGAI ANNA
Pallipattu | 7. NORTH ARCOT - AMBEDKAR
Arcot |
| 2. DHARMAPURI
Pennagaram | 8. TIRUVANNAMALAI - SAMBUVARAYAR
Chengam
Polur
Cheyyar
Vandavasi |
| 3. DINDIGUL-QUAID-E-MILLETH
Vedasandur
Kodaikanal | 9. PERIYAR
Gobichettipalayam |
| 4. KAMARAJAR
Tiruchuli | 10. PUDUKOTTAI
Avudayarkoil |
| 5. MADURAI
Uslampatti | 11. SALEM
Paramathi Velur
Yercaud |
| 6. TIRUNELVELI - KATTABOMMAN
Tenkasi
Radhapuram | |

12. SOUTH ARCOT

Tirukovillur
Kattumannarkoll

13. THANJAVUR

Kudavasal

Nannilam
Pattukottai
Valangaiman
Tiruthuraiipoondi
Orathanadu
Tiruvarur
Peravurani

Papanasam
Sirkazhi

14. TIRUCHIRAPALLI

Thuraiyur
Udayarpalayam

**List of Industrially
Backward Taluks
in Tamil Nadu**

1. CHENGAI ANNA

Uttukottai
Ponneri
Kancheepuram
Tirutani
Cheyyur
Madhurantagam
Uthiramerur

2. CHIDAMBARANAR

Vilathikulam
Srivaigundam
Ottapidaram

3. COIMBATORE

Valparai
Pollachi
Palladam

4. DHARMAPURI

Uthangarai
Denganikottai
Harur
Dharmapuri
Palacode
Krishnagiri

5. DINDIGUL-QUAID-E-MILLETH

Natham
Nilakottai

6. KANYAKUMARI

Thovala
Agastheeswaram

7. MADURAI

Uthamapalayam
Andipatty
Vadipatty

8. TIRUNELVELI - KATTABOMMAN

Senkottai
Sankarankoil
Nanguneri

9. NILGIRIS

Gudalur

10. NORTH ARCOT - AMBEDKAR

Tirupattur
Vellore

**11. TIRUVANNAMALAI -
SAMBUVARAYAR**

Tiruvannamalai
Arani

**12. PASUMPON
THEVAR THIRUMAGAN**

Tirupattur
Devakottai
Ilayangudi
Sivaganga
Karaikudi

13. PERIYAR

Kangeyam
Dharapuram
Sathyamangalam
Perundurai

14. PUDUKOTTAI

Alangudi
Gandarvakottai
Aranthangi
Thirumayam

15. RAMANATHAPURAM

Mudukulathur
Ramanathapuram
Kamudi
Thiruvadanai
Paramakudi
Rameswaram

16. SALEM

Attur
Namakkal
Sankari

17. SOUTH ARCOT


Vanur
Ulundurpet
Villupuram
Kallakurichi
Gingee
Tindivanam
Chidambaram

18. THANJAVUR

Vedaranyam
Needamangalam
Thiruvidaimaruthur
Tarangambadi
Thanjavur
Nagapattinam
Mannargudi
Thiruvaiyaru
Kumbakonam

19. TIRUCHIRAPALLI

Manapara
Kulithalai
Musiri
Perambalur



Newsprint out of Bagasse

Tamil Nadu Newsprint and Papers Limited (TNPL), a company of the Government of Tamil Nadu, has been making steady progress over the years and achieving distinct landmarks. TNPL, with an installed capacity of 50000 MTPA of Newsprint and 40000 MTPA of Printing & Writing paper, has adopted an innovative technology for production of Newsprint out of bagasse (sugar-cane waste) as primary raw material with the objective of preservation of scarce foreign exchange and fast depleting forest resources.

TNPL commenced commercial production in October 1985 and since then has been achieving a capacity utilisation of over 90% and for the last two years the capacity utilisation has been more than 100%. Despite the high levels of production, the company has managed to achieve "Zero Stock" level of finished goods as at 31st March 1991 for the second consecutive year. The sales turnover

which was Rs.75.03 crores in 1985-86 has more than doubled to Rs.155.91 crores in 1990-91. During the year ended 31st March 1991, the company has earned a gross profit of Rs.75.93 crores and after providing for interest (Rs.17.66 Crores) and depreciation (Rs.21.83 Crores), the net profit has been Rs.36.44 crores. The company, in spite of achieving higher levels of performance, had incurred losses in the initial years mainly due to unremunerative prices for newsprint as well as printing and writing paper. The carried over loss of Rs.18.97 crores as at the end of March 1990 has now been wiped out and the company has proposed a maiden dividend of 15% amounting to Rs.14.35 Crores for the year ended 31st March 1991 after transfer of Rs.1.82 Crores to General Reserve at the meeting of its Board of Directors held on 1st June 1991. The balance of Rs.130 Crores in Profit and Loss Account is carried forward to next year.

The company has since incep-

tion produced 3.28 lakh tonnes of newsprint upto the end of March 1991 and thus has helped the country to save precious foreign exchange resources to the extent of Rs.354 Crores. The company has used 1652 lakh tonnes of bagasse on account of which the use of scarce forest resources to the extent of 9.86 lakh tonnes of wood has been saved resulting in conservation of forests to the extent of 33,000 hectares.

Having achieved a distinct place for itself in the industry, the company is now poised for further growth. The company is in the process of doubling its existing capacity from 90,000 MTPA to 1,80,000 MTPA at an estimated cost of Rs.360 crores. The project is expected to be completed within a period of 36 months.

The company is a premier institution in having adopted an innovative and appropriate technology for Newsprint production out of bagasse in India. ●

The Thanjavur School of Painting flourished in Tamil Nadu during the 18th and 19th Centuries under the patronage of the Nayakar and the Maratha Kings. Paintings on glass originated in China. It spread to Europe and then migrated to India.

The Painting was done on one side of the glass sheet so that it could be viewed from the other. First the outline of the picture was drawn with bold and firm strokes. Then the other details were filled in. The picture was then mounted with its unpainted side foremost so that it could be seen through the glass.

During his tour to Thiruvannamalai, the Curator, Government Museum, Vellore also visited Aavur Village in Thiruvannamalai-Samburayar District. There he visited the Perumal temple built during Pallava period. He has found an exquisite Thanjavur Glass Painting in it which was in a bad condition. When he approached the trustees they agreed to gift the painting to be restored and exhibited at the Government Museum, Vellore. It was then brought to the Chemical Conservation Section, Government Museum, Madras for restoration.

The Painting 'Gokulakrishna' is 2 feet by 1½ feet in size. It had been broken into thirty pieces among which four pieces were missing. The poster colour had been eaten by insects and micro-organisms in many places.

The painting was photographed before restoration. The front side of it was placed over a tissue paper on a work bench. The broken pieces were placed in position. Then it was decided to fill up the missing portions with white acrylic sheet pieces cut to the required shape as it was rather difficult to prepare glass pieces to the required size and shape of the missing portions. The acrylic sheet

RESTORATION OF A GLASS PAINTING

S. THANGAVELU

was marked and cut exactly to match the missing portions.

First, the large broken pieces were joined together using araldite adhesive. Then the small portions were joined with the main pieces. Care was taken to avoid the adhesive from spreading to the sides. Over the painting, tissue paper and cardboard were placed. A weight was then placed over it so that the painting was ap-

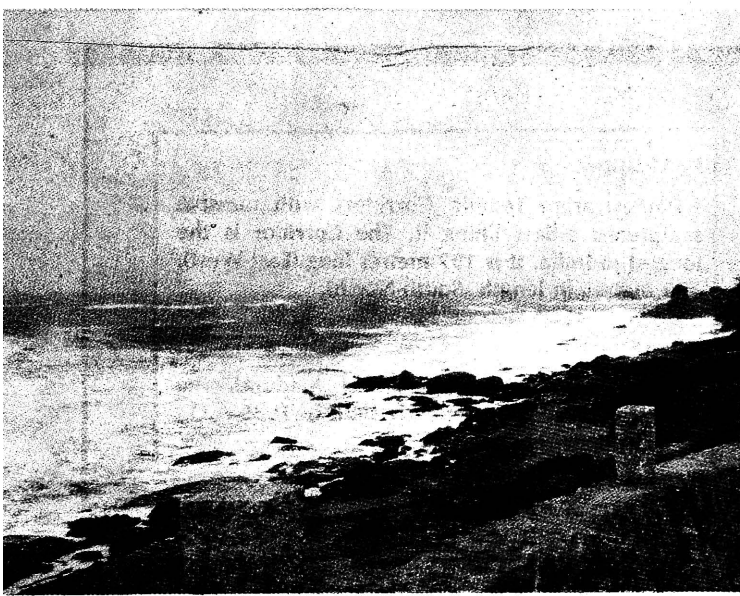
plied with uniform pressure in order that the pieces would be firmly joined together in the exact position.

The weight was removed the next day after the pieces had adhered firmly. Then the Painting was placed upside down and retouching was done on it wherever required so as to match with the original. Thus the painting was restored.



*"In the welfare of the weaker sections
lies the spirit of a nation
and the honour of its people."*

Mahatma Gandhi



weeds near high water mark are green in colour like land vegetation and lower down between tide-markers, there is a belt of olive forms sheltering red plants beneath them. Where rocks overhang the bottom, and in small pools these red forms also occur at this level. At extreme low-water mark and beyond it are found the brown tangles sheltering red

SEA WEEDS

Thiru A.G. Adikesavan,
Curator, Botany Section
Government Museum, Madras.

The study of sea-weeds is of very modern origin, and nothing beyond casual recognition of their existence is to be found in the literature and memorials of early times. The Greeks have left us engraved figures of Gorgons whose heads were decorated with sea-weeds; there is but one mention of them in the Bible, when Jonah exclaims. "The depths closed one round about, the weeds were wrapped about my head;" and the reference in Latin literature, even that of the poets, are merely contemptuous. While other plants received notice and were subjects of study in these early times and during middle ages, the flora of the sea remained unnoticed.

The first observation commonly made of sea-weeds is of the variation of their colours. The green hue that prevails throughout land vegetation, except in the colours of flowers and the bark of trees, is varied in the case of sea-weeds with olive and brown forms. An artificial classification of them according to their colours leads to the striking result that it nearly coincides with the natural classification of them according to their structure and development. Such

an artificial classification became firmly established and has left its mark on the names of the natural primary division or sub-classes of Algae viz. Rhodophyce or red-seaweeds, the phaeophyce or olive brown, the chlorophyce or green and the cynophyceae or blue-green. A simple experiment proves that fundamentally they are all green and that the red colouring matter, the brown, the yellowish-brown and the blue are each something added to the chlorophyll or leaf-green that is characteristic of vegetation in general, and by virtue of whole plants from the organic substances necessary for their nutrition. The colouring matters are characteristic of sea-weeds, and it is in the conditions of plant life in the waters of the sea that an explanation of their nature must be sought. It has been found that the colours of sea-weeds are more or less indicative of their range of depth in sea, and allowing for numerous exceptions that there is a zonal distribution of Algae according to their colours. The uniformity of this distribution is disturbed by the fact that the conditions are not equal for all in the face of the determining influence. As a general rule the in-shore sea-

forms again while at the lowest depths of plant life in the sea the red forms occur without shelter. Between 120 and 300 ft. sea-weeds become more and more rare while below the depth their occurrence is exceptional. That the main influence determining this regulation of pigment is the nature of the supply of sunlight, necessary to the action of chlorophyll in the work of nutrition, is apparent from the following facts. The interception of sunlight by sea-water brings about a state of total darkness at 700 fathom. Not only is the quantity of sunlight reduced by its passage through the water, but its quality is affected, as spectroscopic investigation has shown. It is precisely those rays that are most efficient in the work of assimilation by plants that are first intercepted and only the blue and green rays travel to great depths. It may be taken that the red, brown and yellow colouring matters added to the supply of sunlight. Whether they act in the direction of height, the susceptibility of chlorophyll to a diminished supply of the useful rays, or as a protection against the

relative excess of the blue rays, has not been settled experimentally, but the balance of probability is in the favour of the Latin theory, since it has been discovered that certain pigments in other plants act as a shield against illumination of this character.

As light is the factor that determines the zonal distribution of sea-weeds, so the temperature is the leading influence of the Geographical distribution. We find sea-weeds from Arctic and Antarctic regions. We find 259 species in Arctic and 269 in Antarctic regions. In temperature regions there are about 1,132 species. The third factor which influences is the salinity of the sea. The north sea where the salinity is 3.5% is rich in sea flora.

Several marine Algae of economic importance, including Gelidium, Gracilaria, Chondrus, Laminaria Ulva Rhodmenia and Sargassum occur throughout the world. From time immemorial, marine Algae have formed a very important part of food of Japanese people. At present perhaps six or seven different kinds of sea-weeds are used in a single meal. The national diet in Japan consists of rice, fish and sea-weeds.

The food value of sea-weeds however is low. Their carbohydrates are not easily digested by gastric enzymes. Most of these species do not contain cellulose and starch is found only in a few. Several of them are poor in proteins and fat but they contain vitamins.

Sea-weeds are used as manure, particularly in areas where large quantities become available as drift weeds. They supply mainly potash and a small amount of nitrogen and the organic matter in them increase the humus content of the soil. The burning of sea-weeds for the recovery of potash and iodine is an old industry. 25% of world's annual production of

I - Wrapper

Rameswaram Temple Corridors with massive sculptured pillars lining it. The Corridor is the longest in India. It is 197 metres long (East-West), 133 metres in length (South-North).

IV - Wrapper

Thirumalai Nayakar Mahal at Madurai, the magnificent secular structure built in 1636 A.D., by Thirumalai Nayakar.

iodine is obtained from **ALGINATE** sea-weeds.

Many of the pharmaceutical products available in the market comprise natural products derived from terrestrial microorganisms, plants and animals. The diminishing source of terrestrial life forms as well as the resistance developed by pathogenic organisms to many conventional antibiotics, have placed many constraints upon the pharmaceutical industry in the development of new products. Among them are the marine Algae a diverse group of autotrophic organisms. As early as 8th century B.C. the Chinese and the Japanese used sea-weeds and other Algae to treat intestinal disorders, dropsy, menstrual difficulties, and gastro intestinal disorders. However the search for drugs from there is a relatively recent undertaking.

Several of phytoplankton and macroalgae produce substances which have a broad spectrum of antibiotic activity. They are also a good source of thiamin, niacin, folic acid, Vitamin A and ascorbic acid.

Alginates, an important extract from brown Algae are the salts of alginic acid with sodium, potassium, ammonium, and calcium. They are used as tablet disintegrating agent; as blood anticoagulants, for control of surface bleeding, and for dental impression materials. They are also used for the prevention and treatment of radioactive strontium poisoning. The isolation of laminarin dioxalate from laminaria is used in the treatment of hypertension. Recently anticancer properties of non-dialyzable fractions from Sargassum have been reported.

Agar Agar, a complex polysaccharide, is the most important product from red Algae. It finds wide use in microbiological studies and pharmaceutical industry. They are extracted mainly from gracilaria gelidium, hypnea etc. It is extremely used in medicine chiefly as laxative for treating prolapsed rectum.

Another principal product from red Algae is carrageenan chemically similar to agar. It is used as remedy for cough, antipeptic and anti ulcer. It is also a potent anti coagulant and anti thrombic substance.

TAMILNADU WOMEN'S DEVELOPMENT PROJECT



The Tamil Nadu Corporation for Development of Women Ltd., has taken up for implementation a massive project called Tamil Nadu Women's Development Project with assistance from the International Fund for Agricultural Development (IFAD). The Project with the total financial outlay of Rs.4,592 lakhs will benefit a total number of about 56,000 women over a period of 7 years in the Districts of Dharmapuri, Salem, South Arcot, Madurai and Pasumpon Thevar Thirumagan. This Project is being implemented in Dharmapuri District from the year 1989-90. These Districts have been selected on the basis of certain indices relating to the social and economic status of women.

PROJECT OBJECTIVES

The principal objective of this project is the economic and social

upliftment of women which is planned to be brought about by increasing their income earning potential, raising their level of awareness and fostering their confidence to strive for social change through the development of strong cohesive groups.

TARGET GROUP

The target group comprises of women aged 18 to 55 years whose family income is below Rs.6,400/- per annum and whose family has not benefitted under any other Government programmes. The women's groups are being established with a membership of about 15 women below the poverty line. Before being eligible for a loan for an economic activity, the members are required to make a regular contribution to the group savings fund. The fund is being maintained by the group itself

which takes its own decisions on the interest to be charged, repayment period and other conditions. Formation of group savings fund and capital development fund will primarily provide the members with an alternative source of short-term lending and offers key support to the project objectives. In the selection of beneficiaries, priority is being given to widows and female headed households.

ECONOMIC ACTIVITIES

The Project envisages assisting women with a wide range of income generating activities both on-farm and off-farm. On-farm activities include Agricultural Engineering, Agriculture, Horticulture, Sericulture and Oilseeds and Off-farm activities include Animal Husbandry, Cottage and Village Industries, etc. The identified beneficiaries under this Project are assisted with loan and subsidy for economic activities in the pattern of IRDP. Through this Project, the women are able to earn an additional income of about Rs.3,600/- to Rs.8,000/- per annum. The social awareness level of a large number of women is being enhanced by due to the involvement of MYRADA an NGO with a vast experience and good reputation which has been selected by the Government.

ACHIEVEMENT FROM 1989-90 TO 1990-91 AND ACTIVITIES PROPOSED FOR 1991-92.

During the year 1989-90 about 540 women have been assisted with income generating activities at a cost of Rs.2756 lakhs in Dharmapuri District. During 1990-91 about 2,633 women have been assisted at a cost of Rs.134.93 lakhs in Dharmapuri District. From 1991-92, the scheme has been extended to Salem and South Arcot Districts. About 7500 women are planned to be assisted with income generating activities at a cost of Rs.488.21 lakhs during 1991-92.



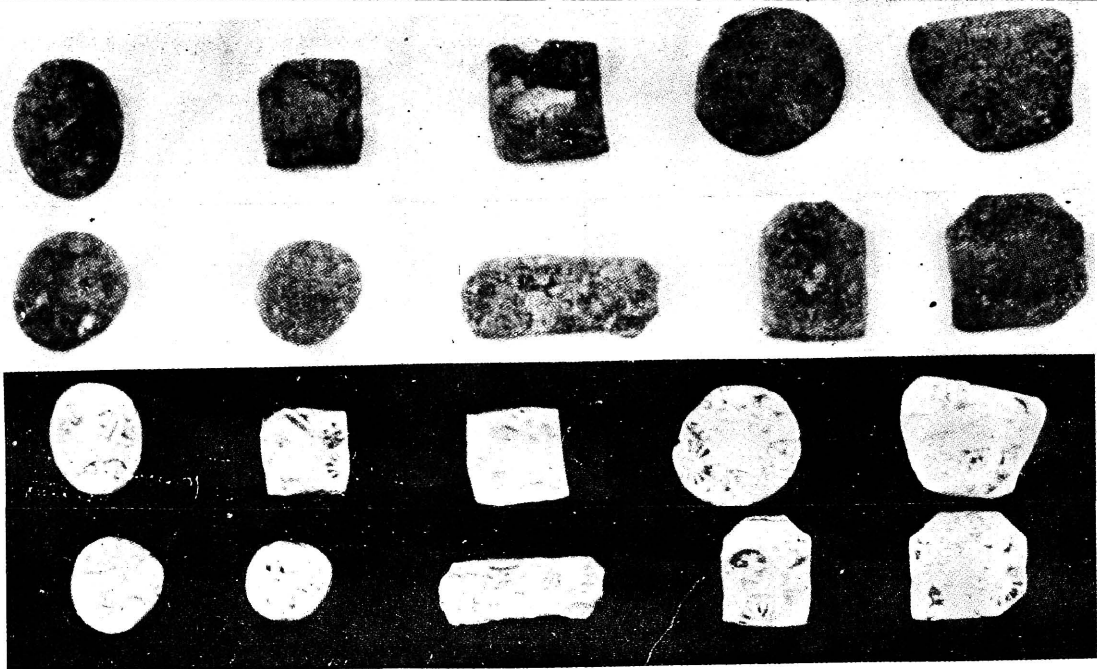
A unique Literary Debate on Poet Bharathidasan's Works participated by IAS and IPS Officers was held on 28.4.1991 under the Chairmanship of Kundrakudi Adigalar in connection with the Valedictory Function of Bharathidasan Centenary.



VAZHAKKADU MANDRAM



KAVIARANGAM



PRESERVATION OF SILVER COINS

THIRU. S. THANGAVELU

Curator
Government Museum
Madras

On 3rd October, 1984, a treasure trove was found in Kachirapalayam Madura Akarapalayam village, Kallakurichi Taluk, South Arcot District. While walking along the Komugi river poromboke, a mud pot hidden under the earth was noticed by six children, their age varying from nine to fourteen. As they could not dig and bring out the pot, they informed their parents. When dug out, a hoard of silver coins adhering with one another and with green incrustations on them was found in the mud pot. Kallakurichi Police confiscated the treasure trove on receiving information and handed it over to the Tahsildar, Kallakurichi on 5th October, 1984. Thereafter the Tahsildar conducted an enquiry on 14.10.1988 as per the Indian Treasure Trove Act 1878 after giving due publicity in the Gazetteer. After the enquiry, the

coins were handed over to the Numismatic Section of the Government Museum, Madras for preservation and study.

The coins were received by the Chemical Conservation Laboratory for proper treatment and preservation. When examined, the coins were found to be corroded with broken mud pot pieces and earthy matter adhering to them and having greenish incrustations on them. The treasure trove hoard weighed 7.160 Kgm. before treatment. As the coins were firmly adhering with one another, it was rather very difficult to separate the coins. First they were carefully separated by mechanical means. Then they were immersed in 5% formic acid solution in batches. By immersing them in the solution, the incrustations got softened and loosened. After an hour the

coins were taken out and brushed in running water using a mild brass brush. Again the coins were immersed in the same solution. The process was repeated until the incrustations were completely removed so as to reveal the minute details. Then the coins were washed in running water and finally in distilled water until they were free from chlorides. The coins were then dried and given a preservative coating with 5% polyvinyl acetate solution so that they may not be easily affected by atmospheric influence. The weight of the coins after treatment was 4.887 Kgm. There were 1,845 silver coins and twenty five silver bits in that hoard. All the coins were of the punch marked type. They were then handed over to the Numismatic Section of the Museum for documentation and study.



The Budget of Madras Corporation 1991-92

Income and Expenditure

The annual income of the Corporation of Madras for the year 1991-92 is in the order of Rs.82.07 crores and expenditure is Rs.89.32 crores.

Capital Budget

The Corporation of Madras has programmed to execute capital works such as Relaying of roads Construction/Improvements for bridges, Construction of Storm Water Drains, Procurement of additional lorries for conservancy, etc. during the year 1991-92 to the tune of Rs.40.80 crores. The details of the scheme to be executed are furnished below:

	Rs.in Crores	% of allocation
1. Relaying of Roads		
a. Interior Roads	9.38	23.00%
b. Bus Route Roads	5.62	13.77%
2. Provision of Street Lights, S.V. lamps and Relaying of cables etc.,	3.00	7.35%
3. Improvement to Private Streets	2.10	5.15%
4. Improvement to Traffic	1.00	2.45%

5. Procurement of Additional lorries for Conservancy	5.00	12.24%
6. Improvements/Construction of Bridges	2.59	6.35%
7. Construction/Improvements to S.W. Drains	1.58	3.87%
8. Improvements to Buildings	4.80	11.76%
9. Improvements to Parks and Gardens	1.25	3.06%
10. Improvements to Marina Swimming Pool	0.25	0.61%
11. Improvements to Zonal Offices for the Provision of furniture, Machineries, etc.,	0.50	1.22%
12. Improvements to Dumping Grounds	0.75	1.84%
13. Improvements to pay and use P.Cs.	0.50	1.26%
14. Construction of I.P.P. Centres	0.95	2.33%
15. Provision of equipments for I.P.P. Centres	0.55	1.34%
16. Provision of equipments for Dispensaries and C.D.H. etc.,	0.45	1.10%
17. Other items	0.53	1.30% ²⁹
Total	40.80	

HIGHLIGHTS OF THE BUDGET

Roads

During the year 1991-92, it is programmed to relay Bus Route Roads at a cost of Rs.562.00 lakhs giving preference to main roads. A sum of Rs.938.00 lakhs will be spent on improvements to non Bus Route Roads in the City and extended areas, including Rs.300 lakhs for lanes and bylanes of the City.

Street Lights

It is proposed to replace underground cables laid long back which are wornout. It is also proposed to install sodium vapour lamps in major Bus Route Roads and intersections. A sum of Rs.300.00 lakhs will be spent for this work during 1991-92.

Conservancy

Conservancy plays an important role in civic maintenance. The existing strength of Conservancy Vehicles and equipments are not sufficient to collect and dispose of garbage generated in the City of Madras. It is therefore proposed to purchase Conservancy equipments and vehicles for Rs.500.00 lakhs during the year 1991-92 towards both replacement of condemned vehicles and purchase of new vehicles.

Construction of Bridges and Traffic Improvements:

During the current year it is proposed to widen Binny Bridge over Coovum River and reconstruct the Bridge over Buckingham Canal at Ramakrishna Mutt Road. It is proposed to spend a sum of

Rs.259.00 lakhs on improvements and construction of bridges and Rs.100.00 lakhs on improvements to Traffic works.

Storm Water Drains

As against a length of 1,960 Kms. of roads, Madras Corporation has a net work of 550 Kms. of Storm Water Drains. This is highly inadequate. It is proposed to construct 14.50 Kms. of Storm Water Drains during 1991-92 at a cost of Rs.158.00 lakhs.

Apart from the above, a sum of Rs.480.00 lakhs is provided in Budget Estimate 1991-92 for construction of buildings viz., Zonal Offices, Unit Offices, Dispensaries, Child Welfare Centres and Additional Class rooms. Private streets are proposed to be improved at a cost of Rs.210.00 lakhs and Rs.125.00 lakhs are provided for improvements to Parks and Gardens.

Dog Vans

It is proposed to purchase 6 Dog Vans for the raid.

Hydraulic Ladders

It is programmed to purchase 5 numbers of Hydraulic Vehicles at a cost of Rs.22.50 lakhs during this year in order to maintain Street Lights.

Lilly Pond Shopping Complex

In order to rehabilitate the traders affected by the fire accident at Moore Market, a multi-storeyed building is being constructed at Lilly Pond area at an estimated cost of Rs.625.00 lakhs to accommodate 857 traders. The work is expected to be completed shortly.

Electric Crematorium

A modern electric crematorium is under construction at Besant Nagar Burial ground at a total cost of Rs.45.00 lakhs which is nearing completion. It will be put up for the use of public by 30.6.1991.

It is proposed to instal electric crematorium at Velangadu burial ground at a total cost of Rs.50.00 lakhs during 1991-92. It is also proposed to reactivate the existing electric crematorium at Mylapore burial ground by raising the floor of the existing furnace unit and providing one more furnace unit etc., at a total cost of Rs.41.00 lakhs during 1991-92.

Finance

During this year 1991-92, it is proposed to collect the property Tax to the tune of Rs.40.00 crores including arrears. Government have provided Rs.30.00 crores as grant for the Corporation of Madras out of Surcharge on Sales Tax. A sum of Rs.20.00 crores will be utilised for capital works and Rs.10.00 crores for revenue.

TAMIL CULTURE AND CIVILIZATION

The Madras Presidency is habitat of the Tamil race whose civilization was the most ancient and a branch of whom called the Sumarians spread a vast civilization on the banks of the Euphrates, in very ancient times, whose astrology, religious lore, morals, furnished the foundation for the Assyrian and Babylonian civilization, and whose mythology was the source of the Christian Bible. Another branch of the Tamilians spread from the Malabar coast and gave rise to the wonderful Egyptian civilization, and the Aryans also are indebted to this race in many respects.

-Swamy Vivekananda.



SHEEP DEVELOPMENT

Sheep farming has become one of the occupations for Agriculturalists such as small and marginal farmers. Sheep-rearing is a profitable occupation and it offers meat for millions of people to a great extent and enriches the farmers' fields with manure.

Breeds of sheep that are commonly seen in Tamil Nadu are Madras red, Ramnad white, Mandya, Mecheri, Kilakaraisal, Vembur etc. As per 1989 census there are 5.9 million of sheep in Tamil Nadu.

The two sheep farms at Sathur (Kamarajar District) Chinnasalem (South Arcot District) and the four sheep units in the District Livestock Farms, Tamil Nadu undertake Selective Breeding of Sheep for eventual supply to farmers in villages. Selective breeding of Sheep and Goats with a view to improve the meat/milk yielding qualities is the one of the main objects of this Animal Husbandry Department, Tamil Nadu.

Department of Animal Husbandry is implementing many programmes for sheep development such as

1. Special Livestock Breeding Programme
2. Special Central Assistance Programme
3. Integrated Tribal Development Programme
4. Sheep Development aided by European Economic Community.

Special Livestock Breeding Programme

Special Livestock Breeding Programme was launched in 5th Five Year Plan on the recommendations of National Commission on Agriculture with objective to generate additional employment and income for small and marginal farmers and Agricultural labourers. Two com-

ponents of the programme viz. a) Rearing of Calves, b) Setting up of sheep, poultry and piggery production units.

Sheep Production Programme is implemented by Animal Husbandry Department as part of Special Livestock Breeding Programme, in Districts of North Arcot, Salem and Tirunelveli. Under this scheme, assistance is given to small/marginal farmers and agricultural labourers for establishment of sheep units; each unit consists of 20 ewes and 1 ram. Unit cost is Rs.8,000/-.

The yearwise achievement is given below:-

Year	Physical Achievement	Financial Achievement (Rs. in lakhs)
1976-77	131 Units	2.98
1977-78	2415 "	24.18
1978-79	2813 "	32.01
1979-80	2822 "	30.20
1980-81	2902 "	42.95
1981-82	3000 "	50.19
1982-83	1454 "	29.28
1983-84	1219 "	27.21
1984-85	1238 "	31.41
1985-86	1216 "	33.01
1986-87	905 "	31.82
1987-88	929 "	44.83
1988-89	931 "	45.83
1989-90	1224 "	60.64
1990-91	2102 "	86.31
Total	28,791	572.85

Special Central Assistance Programme

This scheme is implemented mainly for the benefit of Hindu Adi Dravidar population with the subsidy of 50% arranged through nationalised banks. Unit cost is Rs.8000/-. Each unit consists of 20 ewes and one ram. Ewes and Rams are purchased for Government farms to the extent of availability. If not available in farms they are purchased through existing Sheep Breeding Co-operative Societies.

Yearwise achievement is as follows:

Year	Physical Achievement Units	Financial Achievement (Rs. in lakhs)
1983-84	1500	31.65
1984-85	1408	33.01
1985-86	2600	57.79
1988-89	3017	103.64
1989-90	1591	41.03
1990-91	1762	30.20
Total	11,878	279.32

Integrated Tribal Development Programme

This scheme is implemented for the upliftment of tribal people. This scheme involves distribution of productive animals such as milch animals, sheep, calves and work bullocks. The subsidy is given at 50% to tribal beneficiaries except for Kalrayan hills in South Arcot District (75%).

Yearwise achievement is as follows:

Year	Physical Achievement Units	Financial Achievement (Rs. in lakhs)
1976-77	370	2.39
1977-78	1281	7.72
1978-79	726	6.69
1979-80	666	5.39
1980-81	455	4.20
1981-82	524	8.04
1982-83	332	4.34
1983-84	374	4.84
1984-85	430	5.37
1985-86	511	6.70
1986-87	200	6.22
1987-88	130	4.66
1988-89	220	8.54
1989-90	310	12.20
1990-91	205	9.90
Total	6734	97.20

Sheep Development Scheme aided by European Economic Community

The objectives of the scheme are:

1. To increase the mutton production.
2. To improve the income situation of 15,000 sheep farmers.
3. Conservation of range lands, regulation of grazing in the communal grazing area.

Fodder production, with the view to supply fodder to the sheep breeding Co-operative Societies was selected and included in the scheme. The Scheme operates in five Districts such as Chengai-Anna, South Arcot, Salem, Dharmapuri, Thiruvannamalai Sambuvayarar and Vellore Ambedkar District. The Project is being implemented in the above Districts from 1989-90 onwards. The total outlay is Rs.13.67 crores. Main activities in this project are:

1. Pasture and fodder development
2. Disease control/Health cover
3. Multiplication and distribution of breeding stock
4. Extension service
5. Mobile Training Units for imparting training to the sheep breeders in their respective villages.

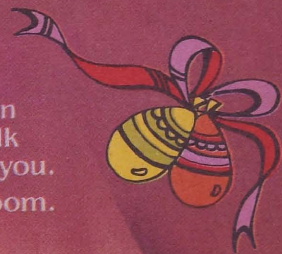
Achievement:

Year	Physical achievement	Financial achievement
1989-90	Purchase of Motor vehicles and Agricultural equipments.	Rs.60,98,000
1990-91	Building works in progress, purchase of furnitures, equipments, Audiovisual equipments, 176 ewes and 5 rams of mecheri, sheep at a cost of 1 lakh located at Chinna Salem.	Rs.1,29,88,067
	Total	Rs.1,90,86,067

This scheme implemented by the Department has given job opportunity to large number of farmer families and as on date nearly 2 lakh farmer families live on sheep rearing alone.

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