

Minister for Electricity and Thiru G. R. Edmund Special representative for Tamilnadu at New Delhi were present on the occasion.

Chief Minister Thiru M.G.R., called on the Union Home ister Thiru P. C. Sethi on 2-5-'83

The Chief Minister Thiru M.G.R., called on the Union External Affairs Minister Thiru P. V. Narasimha Rao on 2-5-'83.













Andhra Pradesh and Tamil Nadu signed an agreement for carrying Krishna water to Madras city. The signing ceremony was described as "sacred" by the Andhra Pradesh Chief Minister, Thiru. N.T. Rama Rao, while the Tamil Nadu

Chief Minister, Thiru. M.G.Ramachandran said: "We are always saved by our true friends. The people of Tamil Nadu will be eternally grateful to the Telugu people for sparing drinking water to Madras.

Estimated to cost about Rs. 760 crores, the scheme is expected to be completed in three to six years. The Tamil Nadu Government will contribute Rs. 200 crores as its share of the expenditure (for carrying the water upto its borders) and will give Rs. 30 crores every six months for the early execution of the scheme. The two Governments decided to approach the Centre for assistance. The agreement also provides for irrigating about 2.5 lakh hectares in the drought prone Rayalaseema and Nellore areas of Andhra Pradesh.

The earlier plan for a separate canal from Srisailam to carry the water was abandoned in favour of an irrigation channel to carry the Madras share additionally. The 15 tmcft of water (equally contributed by Andhra Pradesh, Maharashtra and Karnataka, according to the 1977 agreement) will be drawn at Srisailam, and through a left branch canal dropped in the Pennar river, from where it will be picked up again at the Somasila dam to be carried to the Khandaleru reservoir for storage.

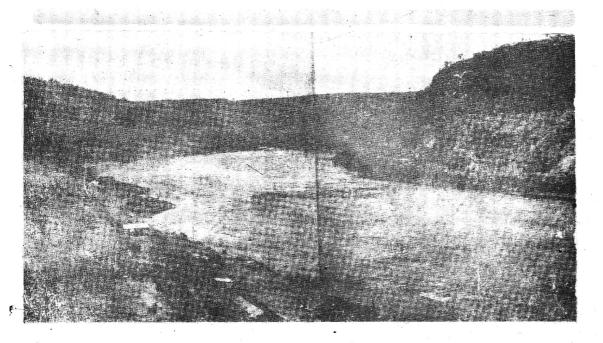
The cost of the project will be shared in proportion to the quantity of water utilised by the two States. Three tmcft of water was determined as the quantity lost in evaporation and Tamil Nadu would pet only about 12 tmcft.

Symbol of brotherhood

After the signing ceremony the two Chief Ministers said bilateral issues could always be resolved given the necessary will and faith on both sides. Thiru. Rama Rao said it was not that Andhra Pradesh had enough water to spare but felt duty bound to give drinking water to Madras on humanitarian grounds. He recalled the agreement between the two States six years ago and wondered why there was so much delay in starting the project. The agreement was a symbol of brotherhood between Telugu and Tamil peoples, he said.

The Tamil Nadu Chief Minister recalled that the Prime Minister Tmt. Gandhi had actually announced the scheme in 1976 and hoped that the Centre would provide assistance for the project.

The scheme was under study ever since independence, but an agreement could be signed within three months of the Telugu Desam Government coming to power. This showed that there was the will to implement the scheme. "At the same time, such a will should be oriented towards promoting national integration, unity and understanding. It is not enough if we merely talk and write about the unity and integration without faith" the Chief Minister of Tamil Nadu said.



KRISHNA RIVER, ANDHRA PRADESH





Rashtrapathi Bhavan New Delhi-110 004

I send my best wishes on the occasion of laying of the foundation stone of Telugu Ganga project which will provide much needed drinking water to Madras City and also irrigation facilities on the way to drought prone areas of Andhra Pradesh. I hope that the project will be completed as per schedule and help in bringing prosperity to people in the two states.



The gigantic Telugu Ganga project was given a start by the Chief Ministers of Tamil Nadu and Andhra Pradesh.



greetings of the rural masses who had come in large numbers to the functions.

They laid the foundation for two reservoirs and an off-take regulator in Cuddapah and Kurnool districts of the Rayalaseema region in Andhra Pradesh.

Besides meeting the water needs of Madras city, the Rs. 760-crore project is to irrigate the arid areas of Rayalaseema region.

The Tamil Nadu Chief Minister, Thiru. M.G. Ramachandran, who laid the foundation for the reservoir at Brahmamgari Matham, a rocky village about 70 km from Cuddapah, said it was a historic event and the project would further cement the friendly ties between Andhra Pradesh and Tamil Nadu. It was an 'insurance' cover, to the people of the two states, which would also generate many cottage industries, he said.

In a historic event the two Chief Ministers participated in foundation laying ceremonies, for the massive project which would not only bring 15 tmc ft of water annually to Madras to meet the needs of its 45 lakh inhabitants, but also irrigate vast stretches of arid lands in the districts of Rayalaseema and Nellore.

Large and exuberant crowds greeted thetwo Chief Ministers in all the three places and greeted them. Both the Chief Miniters acknowledged the





The Andhra Pradesh Chief Minister, Thiru. N.T. Rama Rao, who presided over the function said that the diversion of the Krishna water to Rayaleseema region was the only solution to frequent famines there.

The reservoir at the foot of the Nallamalai Hills at Brahmamgari Matham will have a capacity of about 11.5 tmcft and irrigate 48,000 hectares in Badvel and Siddavattam taluks of Cuddapah district.

The Andhra Pradesh Chief Minister declared that the Government would entrust the project work exclusively to the rural youth and the agricultural labourers who had migrated in search of water and work. The project would enable the labourers to return and settle at the project site.

For the Andhra. Pradesh Chief Minister the function signified greater importance, for, it was at Brahmamgari Matham, where a holy man had lived and attained siddhi three centuries ago he had drawn inspiration to plunge into politics and later to don the saffron robe.

The Andhra Chief Minister said that he was confident of overcoming all obsturctions and go forward as long as the people gave their support and blessings to the Telugu Desam Government. He further said that his Government was determined to provide food, water and shelter to the people. The Telugu Ganga, he said, would









Krishna Waters For Madras

I had already announced in this House that a final Agreement has been reached on 18-4-1983 between the Government of Andhra Pradesh and the Government of Tamil Nadu for bringing 15 TMC of drinking water from the Krishna river. This Agreement which is hailed by the Members of this House, the residents of Madras City and people of Tamil Nadu, is of historic importance and has a history behind it. The efforts made for a period of a century culminated in the Agreement signed by me and the Chief Minister of Andhra Pradesh. In remembering again all connected with this good scheme and how they worked for it., I would like to place before you briefly the relevant events that took place in the past.

The credit for making the suggestion first for Krishna water supply to meet the drinking water demands of Madras City goes to Col. Ellis. In 1881, a formal project was prepared by him in this regard. This scheme envisaged the linking of the Krishna river with Pennar and providing irrigation facilities enroute and drinking water to Madras City. Had this scheme been executed, Chengleput and South Arcot Districts would have been provided with additional irrigation facilities. But the then British Government did not take any action on this scheme. In 1947, the then Government of Madras Presidency prepared a detailed project report on this scheme and submitted it to the Government of India. This scheme came to be

known as "The Krishna-Pennar project". If this scheme had been implemented, the backward districts of Rayalaseema, West Godavari, Krishna, Guntur and Nellore in the present Andhra Pradesh State and the Chengalpattu district in Tamil Nadu would have received irrigation facilities for a total area of 36 lakhs acres. Besides, Madras City would have also received the required supply of drinking water through this scheme. But, even that did not fructify.

Disputes arose in sharing of Krishna waters among the States of Karnataka, Maharashtra and Andhra Pradesh. In 1951, the Central Planning Commission had announced its decision regarding the sharing of Krishna waters. Mention was made in this announcement about the irrigation requirements of Tamil Nadu as also the drinking water supply to Madras City. However, this decision was not accepted by other States. The Government of India appointed the Khosla Committee in 1953 to examine the schemes for the utilisation of Krishna and Godavari river waters. The Khosla Committee mentioned about the Madras City drinking water scheme. After 1956, the Government of India also appointed the Gulhati Commission to examine the availability of water in the Krishna and Godavari rivers. The Government of Tamil Nadu represented to this Commission about its requirements for irrigation and drinking water supply. This Commission recommended that from the Nagarjunasagar

dam under construction across the Krishna river, a canal should be constructed to supply 15 TMC of water to meet the drinking water requirements of Madras City.

Thiru Hafiaz Mohamed Ibrahim, the then Union Irrigation Minister, declared on the floor of the Lok Sabha on the 23rd March, 1963, that the States of Maharashtre, Karnataka and Andhra Pradesh had agreed to spare 5 TMC of water each annually to meet the drinking water requirements of Madras City. In continuation of this announcement, when the construction of a reservoir at Somarila across the Pennar was planned, the Government of Tamil Nadu requested the then Andhra Pradesh Government that 5 TMC of water should be supplied initially from the Somasila project and the remaining 10 TMC of water be supplied wnen the Krishna river was linked with the Pennar. The then Government of Andhra Pradesh accepted this demand. Thiru A. C. Subba Reddi, the then Works Minister of Andhra Pradesh Government, wrote a letter on the 25th April, 1965, to Thiru Kamaraj, accepting the above arrangement. Discussions, held afterwards, at official level once or twice yielded no results. It was not known whether discussions were held then with the other States except Andhra Pradesh. The Government of Tamil Nadu sent a letter on 15-11-1967 to the Secretary, Department of Irrigation, Government of India, requesting for expeditious action to supply 15 TMC of water to Madras City.

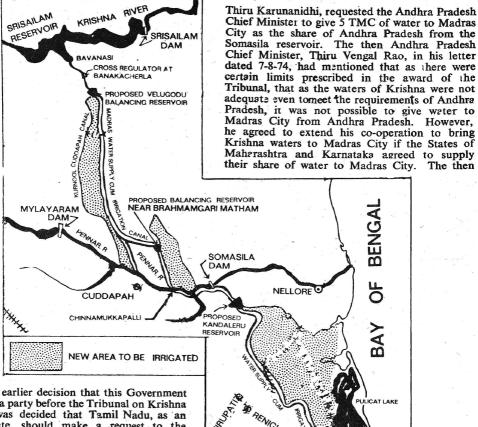
It was reported in December 1968 that the problem of sharing of the Krishna Waters among the riparian States of Maharashtra, Karnataka and Andhra Pradesh was being referred to a Tribunal. On 10-4-1969, it was officially announced that this problem was referred to a Tribunal the then State Government headed by Thiru Karunanidhi decided that the Government of Tamil Nadu need not request for impleading as a party before the Tribunal as the Tribunal was constituted to decide the share of Krishna waters among the Riparian States of Maharashtra, Karnataka and Andhra Pradesh, and Tamil Nadu is not a Riparian State; hence Tamil Nadu cannot be considered as a party. It was decided that the question of supply of 15 TMC of water to Madras City need not be raised before it, and, instead, it was enough if a letter was written to the Government of India to keep alive the agreed understanding already arrived at between the States of Andhra Pradesh, Maharashtra and Karnataka to supply 15 TMC of water to Madras City and accordingly the concerned States might be requested to make necessary arrangements for the supply of water to Madras City. A decision was taken on 20-10-1969 on the above lines and accordingly a communication was sent to the Government of India on 5-12-1969. That is, it was then decided that Tamil Nadu need implead itself a Party before the Tribunal as Tamil Nadu is not a riparian State and as such there was no basis for linking Madras drinking water supply with the sharing of Krishna waters between the States of Andhra Pradesh, Maharashtra and Karnataka.

In 1951, the Planning Commission stated that the scheme for the supply of drinking water from the Krishna river to Madras City formed part of the schemes for utilisation of Krishna waters. The Khosla Committee, appointed in 1953, recommended the drinking water supply scheme for Madras City. The Gulhati Commission appointed in 1956 stressed the importance of the scheme bringing drinking water to Madras City from the Krishna river, and mentioned that, among the various schemes proposed to bring drinking water to Madras City, the Krishna scheme was the best. Despite these facts, when the Tribunal appointed in 1969 in regard to the Krishna waters problem, it was not known why it was decided not to refer this issue before to the Tribunal. ill advised decision may be regarded as an important reason for the long delay in reaching an accord to bring Krishna waters to Madras city.

After the above decision in 1969, no further action was initiated till 1972 by the then Government regarding Krishna waters.

Subsequently, it was only on 11-3-1972 that the then Chief Minister, Thiru Karunanidhi wrote a letter to the Union Minister for Irrigation (Dr. K. L. Rao) and to the Union Minister for Planning (Thiru C. Subramaniam), explaining the details of the assurance given by the States of Andhra Pradesh, Karnataka and Maharashtra for supply of 15 TMC of water to Madras city, and requested for making arrangements for implementing the above scheme. In this letter, it was mentioned that Madras City was getting 37 million gallons of water per day, that by the year 2001, its requirements of water would increase to 105 million gallons per day, that 40 million gallons of water would be available through the Veeranam project and, in view of the future requirements of water, steps might be taken to bring 15 TMC of water quickly from the Krishna river. In his letter dated 16-4-1972 the then Union Minister for Planning, Thiru C. Subramaniam, advised to hold talks with the Andhra Pradesh Chief Minister for bringing 5 TMC of water from the Somasila reservior and said that he would do his best in this regard and that as the Krishna water problem was already before the Tribunal, he suggested that the Government of Tamil Nadu should approach the Tribunal on Krihna waters either directly or through the Andhra Pradesh Government. In his letter dated 4-4-1972, the then Union Minister for Irrigation, Dr. K. L. Rao, expressed his view as the Krishna water problem was already before Tribunal, it would be proper for the Government of India to take up the matter with the concerned State Governments regarding the supply of drinking water to Madras City only after the Tribual gave its award. The reply of Thiru C. Subramaniam, gives us the information that the issue would have taken a turn in our favour if Tamil Nadu had appeared before the Tribunal as a party in the beginning itself, that is in 1969. The letter of Dr. K. L. Rao may also be construed to confirm this view.

After the receipt of all these letters and re-



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viewing the earlier decision that this Government need not be a party before the Tribunal on Krishna waters, it was decided that Tamil Nadu, as an affected State, should make a request to the Centre to refer its claim to the Tribunal. A letter was written on 21-8-1973 to this effect. It is clear that the earlier decision of not being impleaded as a party before the Tribunal and staying away from it is a wrong policy decision. In reply to the above said letter, the then Union Irrigation Minister, Thiru K.C. Pant had stated that it was not practicable to place the question of supply of drinking water to Madras City before the Krishna Waters Tribunal and, as the Tribunal was about to complete its work and give its award, he had requested the Chief Ministers of Maharashtra, Karnataka and Andhra Pradesh to spare from their share 15 TMC of water to Madras city.

Had the decision arrived at in the year 1973 been taken in 1969 itself and put into action, it could perhaps be said that the Krishna water project works would have been completed by this time. The project cost would also have been very low.

Meanwhile, it was understood that the Centre had accorded sanction to the Somasila reservoir project in October, 1972.—But the Government of Tamil Nadu did not take up the matter with the Government of Andhra Pradesh to obtain 5 TMC of water as already agreed to. On the other hand, it was only on the 14th July, 1974, after a lapse of 20 months the then Chief Minister of Tamil Nadu,

Chief Minister of Tamil Nadu, Thiru Karunanıdhi, in his letter dated 20-11-1975, addressed to the Union Irrigation Minister (Thiru Jagjivan Ram) and to the Chief Ministers of Karnataka, Mahashtra and Andhra Pradesh, requested them to supply 15 TMC of water to Madras city. In the letter addressed to the Union Irrigation Minister, it was emphasised that the demand of Tamil Nadu for drinking water supply to Madras city should be placed before the Tribunal which was reviewing its award. The present Madras City water problem could not have arisen if such efforts had been made in 1969. The then Union Irrigation Minister, Thiru Jagjivan Ram, in his reply dated 19-1 1976, had said that the Government of India could not press anything before the Tribunal as the Centre was not a party to the Krishna waters dispute. Late Thiru Devaraj Urs, the then Chief Minister of Karnataka, in a letter dated 25-11-1975 replied that if the other two States agreed to give

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their shares of water to Madras city, Karnataka would also give its share. Thiru S. B. Chavan, former Chief Minister of Maharashtra, in his letter dated 29-1-1976 had stated that Maharashtra could not spare its share of Krishna Waters to Madras city and that it would consider its request only if additional quantum of water is supplied from the Godavari to the Krishna river.

Due to the failure of Tamil Nadu to implead itself as a party before the Tribunal and to represent its case before it in 1969, the problem has become complicated and confused, and the people of Madras City, had the fear as to whether they would get the Krishna waters. When the situation was like this, Presidential rule was imposed in Tamil Nadu on 31-1-1976. The Prime Minister of India, Thirumathi Indira Gandhi, announced on 15-2-1976 in Madras that Madras City would get 15 TMC of water from the Krishna river. She made this announcement after getting the concurrence of the three States of Maharashtra, Karnataka and Andhra Pradesh. In pursuance of this announcement, the Government of Tamil Nadu and three States signed an agreement on 14-4-1976. According to the Agreement, the above said three States shall provide a total of 15 TMC of water at the rate of 5 TMC each to Madras city and that the details regarding whence, how and when this water would be brought to Madras city, would be worked out later on by discussions. Then at the official level talk, the Governments of Maharashtra and Karnataka insisted that water should be supplied to Madras City only through conduit pipes.

After the assumption of office by All India Anna Dravida Munnetra Kazhagam in Tamil Nadu, a meeting was held on 27-10-1977 under the Chairmanship of the Union Irrigation and Agriculture Minister. According to the accord reached at that meeting, it was agreed that 15 TMC of water should be drawn per annum from the Srisailam reservoir during the period from July to October through an open lined channel.

Veeranam Project Given up. Why?

After we assumed office, the talks for bringing the Krishna waters to Madras City were continued, and, at the same time, we were seized of the Veeranam project which was already commenced by the D. M. K. Government but remained suspended. The Veeranam project was designed to bring 40 million gallons of water per day i.e. 2.5 TMC of water per annum from the Veeranam lake to Madras city through pipes. The work of manufacture of pipes and laying of pipes underground was commenced and proceeded with to some extent and in the middle of the year 1975 the, work was abruptly stopped. During the drought in Madras in 1975, water was pumped from Tiruvanmiyur on an experimental basis into these pipes manufactured for the Veeranam project and it was found that the pipes could not contain the pressure and they burst out. A Technical Committee was appointed under the Chairmanship of Prof. G. S. Ramasamy, former

Director of Structural Research Centre, Science and Research Institute, Madras, to examine the quality and types of pipes to be used for this project. The Committee submitted its report in May, 1976. In this report it was mentioned that out of 10,586 pipes already manufactured only 6,000 were found suitable and the rest should be repaired and retested, and the pipes already laid underground should be taken out and relaid after testing, that only the pipes manufactured by vacuum concrete process were technically acceptable and that as such type of pipes were not manufactured by this process anywhere in India, the Vacrete Company should hold itself responsible for the quality of the pipes.

In its 6th report for the year 1977-79, the Public Undertakings Committee has severely commented on this project and the manner in which it was executed from its very beginning.

Its comments are:

- (i) A fuller examination of the availability of water for the project and the handling capacity of the Veeranam tank should have been made with a view to assuring Government that Veeranam tank would be useful at least for a reasonable period.
- (ii) The provisional acceptance of the tender by the Government resulted in the entrustment of a work of this nature to an unsuitable contractor which in turn resulted in a heavy loss to the public exchequer and fiasco.
- (iii) The following irregularities were committed in planning and design—process of manufacture:—
 - (a) Allowing the work to be proceeded with before approval of detailed working drawings and mix-proportion of concrete;
 - (b) failure to ensure that the pipes are designed to withstand the test pressures as per I.S.S.; and
 - (c) failure to ensure a design in which the cover could be crack-free.
- (iv) The various tests laid down in the agreement were not enforced; the department failed to ensure that for the concrete test, the test cylinders were cast under identical condition; the pipes were continued to be manufactured eventhough it was known that the strength of M 450 was not achieved—
- (v) The Committee has expressed its unhappiness to note that every possible opportunity seems to have been taken to dilute the design criteria always to the advantage of the contractor.

(vi) The Committee has also mentioned in its report that another fundamental irregularity was, that out of the total value of the contract of Rs. 16.55 crores for the project, a sum of Rs. 13.25 crores was given to the contractor in the form of material and advances at the beginning of the scheme itself; No where in the annals of Government, such instance of release of huge amount to any contractor for any other work has come to notice.

In the concluding passage of the report, the Public Undertakings Committee has made the following observations:—

"The conditions laid down in the contract have not been carried out properly at any level from the very beginning. As a result, the project is a failure. Whether the pipes already manufactured can be tested and used and the work on the scheme can be resumed and completed remains a question mark. As the vacuum process of manufacture is not found suitable to this country, it is highly doubtful whether it can be applied again for manufacture of pipes. Even if this were possible, most of the pipes already manufactured can't be used and consequently a further amount of several crores will have to be spent on the scheme. Now that the scheme has failed, the Committee is unable to say how much of the outlay can be considered to be fruitful."

"As this scheme to bring drinking water has failed, the water supply to Madras city still remains unfulfilled, even after a lapse of so many years. Government should therefore arrive at a quick decision as to whether the scheme should be revived or abandoned. The Committee recommends that Government should take immediate steps either to resume work or to formulate a new scheme, if a solution to the problem of providing additional water supply to Madras city is not to wait indefinitely."

Further, the World Bank Team made a condition that if the Bank were to give loans to this project, it could do so only if steel pipes were used in the place of cement pipes. If steel pipes were used, the project cost would escalate to Rs. 205 crores. It was felt that a project designed to bring 2.5 TMC of water at a cost of Rs. 205 crores was uneconomical. In this connection, it should be remembered that today there is not even a drop of water in the Veeranam lake and that it is uncertain whether the Cauvery would receive water all through the year.

Kattalai Canal Project

Besides this, some alternative schemes were also examined. The scheme of supplying 995 million litres a day (about 13 TMC) to Madras city from a source near Kattalai dam across the Cauvery in Tiruchirappalli at a cost of Rs. 203 crores by excavating a 450 KM canal was examined. Unlike the Veeranam project for which crores of

rupees had to be given for steel pipes to foreign country, this scheme involving excavation of channel could provide employment to lakhs of families; that is why we wanted to study this project. The Veeranam project could supply water only by pumping water through the pipes. But the Kattalai project could carry water to Madras by gravitation. When this project was examined, it was not the idea that the scheme could be executed only with a larger quantity of water from Karnataka. We examined this scheme after taking into account certain quantity of the water available in the Cauvery, the rainfall in the Cauvery basin in the State and also the water from the tributaries. The ayacutdars in Tiruchirappalli and Thanjavur districts opposed the scheme on the ground that their ayacuts would be affected by this scheme. A few leaders who place their obdurate stand above the welfare of the country raised doubts whether Karnataka would agree to it and the farmers would accept the proposal by such attitude and made it a complicated one and a matter of dispute; they gave an indirect hint to Karnetaka. The person who suggested the Kattalai project refused later to give guarantee to the project. This project was also given up under the above said circumstances.

Efforts continued for Krishna Water Project

Thus, when alternate projects were being examined, this Government also continued to hold discussion with the Andhra Pradesh Government, on the Krishna water project. Dr. Chenna Reddy who was the then Andhra Pradesh Chief Minister and I met at Hyderabad on 15-6-1978 and held discussions in connection with this project. Dr. Chenna Reddy is responsible to a great extent for resuming the dialogue for the project. After my discussions with him, it was decided on both sides that the technical feasibility study on this project should commence immediately and that a Liaison Committee consisting of officers of both the States should be formed to monitor the progress made by feasibility study.

As a result of the study made by the Andhra Pradesh Government and the Government of Tamil Nadu, it was confirmed that the scheme was technically viable. The report of the Andhra Pradesh was made available to the Government of Tamil Nadu in November, 1982. Subsequently discussions were held at the level of officers of both the States for reaching an accord for undertaking this project. A decision was taken at a meeting that the former Andhra Pradesh Chief Minister, Thiru Bavanam Venkatram and his officers had with me and our officers at Madras.

Krishna Water Project Agreement

Finally, the concerned Ministers of our State and the officials and I held discussions with my brother Hon'ble Thiru N. T. Rama Rao, Chief Minister of Andhra Pradesh at Hyderabad on 18-4-1983. An agreement was reached at this meeting for the supply of drinking water to Madras City from the Krishna river. The salient features

of this Agreement are as follows:

- (1) The canal for Madras Water Supply shall take off from a location near Chennamukkapalli village in Cuddappah Taluk, Andhra Pradesh. The Government of Andhra Pradesh will finalise the arrangements for water from Srisailam upto Chennamukkapalli.
- (2) A separate canal will be dug for Tamil Nadu from Chennamukkapalli to Somasila reservoir on the Pennar.
- (3) The Somasila reservoir which is now under construction will be improved to enable the drinking water supply being drawn from this reservoir.
- (4) The Kandaleru Reservoir with a capacity of 54 TMC will be formed below the Somasila reservoir. This reservoir will not only store water for irrigation facilities in Andhra Pradesh but also for drinking water supply to Madras City.
- (5) An open-lined canal will be formed from Kandaleru reservoir upto Tamil Nadu—Andhra border to provide irrigation facilities in Andhra Pradesh and drinking water supply to Madras City.
- (6) Andhra Pradesh will execute the work pertaining to the Madras water supply scheme within their territorial limits. The cost of each component will be shared by both the States in proportion to the utilisation of the waters by the States. On the same proportion, the cost of maintenance will also be apportioned.
- (7) The Government of Andhra Pradesh have agreed to supply at Tamil Nadu border the specified quantity of water over a period of 8 months (except November, December, May and June) every year in accordance with the schedule furnished by the Government of Tamil Nadu.
- (8) The quantum of water agreed to be supplied will be 15 TMC per annum including transmission losses. The Government of Andhra Pradesh have also agreed to restrict the transmission losses to 3 TMC per year. If the transmission losses are more than 3 TMC, the cost of remedial measures to reduce the transmission losses will be shared by the Governments of Andhra Pradesh and Tamil Nadu as per the guidelines already formulated.
- (9) The changes, if any, found necessary in the bed level or the full tank level of the conveyance system during the implementation of the scheme, will be effected only with the approval of the

- Liaison Committee consisting of the officials of both the States.
- (10) The Liaison Committee will monitor the implementation and operation of the scheme.
- (11) The Government of Tamil Nadu will not use the water obtained from this scheme for any purpose other than drinking water supply to Madras City.
- (12) Both the Governments consider that it is possible to complete this scheme within a period of 3 to 6 years.
- (13) The Government of Tamil Nadu have agreed to place funds at the disposal of the Government of Andhra Pradesh to an extent of Rs. 60 crores per year during the first three years depending on the progress of works in order to expedite the implementation of the scheme.
- (14) This Agreement will be a permanent one, without any time limit.

In order to bring the waters from the Srisailam reservoir in Andhra Pradesh upto Tamil Nadu borders, canals have to be excavated to a distance of 354 K. Ms., Besides this, a number of works have to be executed in Tamil Nadu territorial limits for the Madras Water Supply Scheme. A canal from the Tamil Nadu border to Poondi reservoir and another from Poondi reservoir upto Chembaram pakkam reservoir to a distance of 25 K.Ms. have to be excavated. Also, to receive, store and regulate the Krishna waters, the full reservoir levels of Poondi, Red Hills, and Chembarampakkam reservoirs have to be raised by two feet and the conveyance and distribution lines for the water supply within the City and the drainage arrangements have to be provided. The cost of this work is estimated at Rs. 236 crores. Tamil Nadu's share of the cost of works to be implemented within the Andhra Pradesh limits, is, at present, estimated at Rs. 200 crores.

The requirements of water supply for the anticipated growth of population of Madras City in the next 20 years has been assessed at 1294 million litres per day. The quantity now available is only 299 million litres per day. The additional quantity required is 995 million litres per day. The Veeranam cheme, already designed and dropped, would have provided only 180 million litres per day, that too by pumping. This scheme which enables the City to get the required quantity of water permanently from the Krishna river is the best project. The Agreement now entered with the Andhra Pradesh Government will pave the way for speedy implementation, thereby enabling the supply of drinking water to Madras City. At the same time, the backward areas of Andhra Pradesh will also be benefited by the extension of irrigation. This scheme will also generate employment potential in both the States. There is no doubt that this is the first time in India that two States had signed an agreement in a single day for mutual benefit.

The State Government and the people of Tamil Nadu, particularly the residents of Madras City, express their grateful thanks to the Prime Minister of India who has been responsible for the conclusion of this Agreement. It is my duty at this juncture to state that it was possible to reach an agreement only because the Prime Minister got the concurrence of the States of Andhra Pradesh, Karnataka and Maharashtra on 15-2-1976. Our thanks are also due to the Governments of Maharashtra, Karnataka and Andhra Pradesh. It is doubtful whether this agreement would have been possible but for their concurrence. I also express my grateful thanks to Honourable Thiru S. Ramachandran, Minister for Electricity, Honourable Thiru S, Raghavanandam, Labour Minister, Chief Secretary to Government (Incharge) Thiru Chockalingam, P. W. D. Secretary, Thiru Madhava Sharma, Law Secretary, Thiru Vadivelu, Chief Engineer—(Irrigation) Thiru Mohanakrishnan and my Secretary, Thiru M. Paramasivam who have participated in the discussions on our side. I am greatly thankful to Honourable Thiru Bhaskar Rao, Finance Minister of Andhra Pradesh, Honourable Thiru Sreenivasulu Reddy, Irrigation Minister, Chief Secretary to Government, Thiru Raman, Irrigation Secretary, Thiru Natarajan, Finance Secretary, Thiru Madhava Rao, the former Irrigation Secretary, Thiru Raja Rao, Law Secretary Thiru Rao and the Chief Engineer, Thiru Rajendra Kumar, who have participated in the discussions on the Andhra Pradesh side. Finally I am obliged to express my grateful thanks and greetings on my own behalf and on behalf of the Tamil Nadu Government and the people of Tamil Nadu to my beloved brother Honourable Thiru N. T. Rama Rao, Chief Minister of Andhra Pradesh, who was very helpful to us, with a generous outlook, in solving even small problems which cropped up during the discussions.

Perhaps, someone would have signed this accord in a better way. However, I have done my duty on the lines adumbrated by Anna for solving expeditiously, with a sense of urgency, the long-felt drinking water requirements of the people of Madras City and the mothers who keep me in good stead and also for the cause of Tamil Nadu. I offer my greetings once again to the people of Tamil Nadu and Perarignar Anna, my mentor, who has brought me upto this position to implement this project.

May the name of Anna live long!

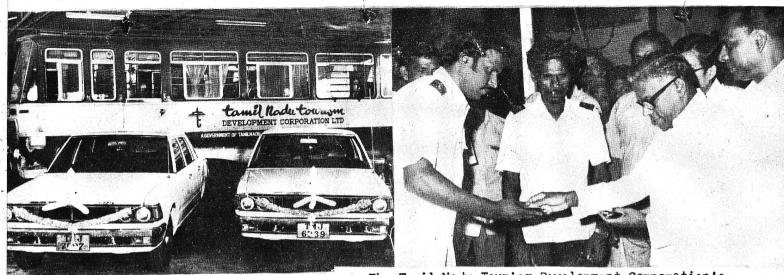
M.G. RAMACHANDRAN

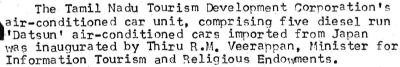
Chief Minister.

STATEMENT UNDER RULE 106 (i) OF THE TAMILNADU LEGISLATIVE ASSEMBLY RULES REGARDING THE AGREEMENT CONCLUDED WITH THE ANDHRA PRADESH GOVERNMENT REGARDING SUPPLY OF DRINKING WATER TO MADRAS CITY.

The Minister of State for irrigation in his message has said:

Very happy to know that Chief Ministens of Tamilnadu & Andhra Pradesh will be laying foundation stone for Telugu Ganga Project on 27-4-'83, being taken up consequent to the agreement between the two States for providing water for Madras City and Inrigation to drought prone areas in the districts of Rayalaseema and Nellone district. Heartiest good wishes on this auspicious occasion.





Though the India Tourism Development Corporation has been operating imported cars, the Tamil Nadu Tourism Development Corporation is the first among the States to import such cars to serve tourists.

Against the rate of Rs.4.50 a km charged by the Tamil Nadu Tourism Development Corporation for hiring the cars the Tamil Nadu Tourism Development Corporation would charge Rs.4.25 he said. Of the five cars imported, it is proposed to send one car each to Madurai and Coimbatore.

Thiru Balasubramanian, Chairman of Tamil Nadu Tourism Development Corporation, welcomed the gatering. Thiru M. Madhavan Nambiar, Managing Director, proposed a vote of thanks.



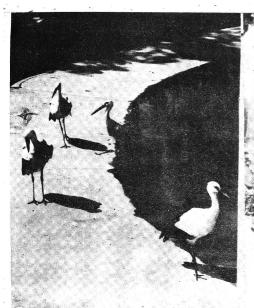


T.T.D.C. inaugurated its Temple Tour covering
Thiruverkadu and Mangadu, two popular shrines near
Madras. This tour is in addition to the already
existing T.T.D.C.'s six package tours being organised
by T.T.D.C.

The new Tour was inaugurated by Hon'ble Thiru R.M. VEERAPPAN, Minister for Information, Religious Endowments & Tourism, Tamilnadu, on 14th April 1983.

Four trips will be operated commencing at 6.00 a.m. 10.00 a.m., 2.00 p.m. and 6.00 p.m. on every Tuesday, Friday and Sunday each with a duration of 3 hours. The total distance covered per trip is 55 KMs. The boarding point is the T.T.D.C. Sales Counter.

Fare for this tour is Rs.10/- per head inclusive of special darshan fee at both the temples. As is usual, we make advance arrangements with temple authorities for easy and enjoyable darshan in both the temples.





Zoological Park For Conservation: And Education

The aims and objectives of Zoo management in the world has undergone a reorientation. Formerly Zoos were meant mainly to exhibit different types of animals and birds in cages. The accent then was amusement rather than education or conservation. The following are the objectives in setting up of a modern zoological park.

Endangered species of India and world fauna must, not only be displayed but also attempts to make them breed in large numbers have to be undertaken. Zoological Parks form the last refuge of a species on the verge of extinction. Besides endangered species, zoos should breed and multiply other species of animals with the aim of restocking other zoos.

They also serve the cause of conservation indirectly by creating in people the interest and concern for rare animals by exhibiting and educating about their status.

Modern zoos form persuasive and powerful means for education of people. Even casual visitors of various classes and ages who come to a zoo for pleasure and pastime absorb tremendous amount of knowledge with ease.

They are logical and most convenient places for the study of natural behaviour of animals. A Zoological Park offers wide scope to study the food habits, breeding habits, etc. of the animals.

A wild animal is, of late, having a cultural value and considered a national heritage. Hence their collection and display contribute to the cultural enrichment of the country.

They also form additional source of attraction to tourists both from abroad as well as from within the country. They provide wholesome recreation to weary urban public.

Madras can take pride for setting up the first organised zoo as far back as 1855. At present a most modern zoological park extending over 510ha. (1,265 ac) is taking shape at Vandalur. The area selected is situated 32 Kilo Metres from Madras and is easily approachable by road and electric train.

Madras, the capital city of Tamil Nadu and the cultural gateway of South India, has many a magic carpet that will thrill the tourists from India and abroad. Most of the tourists, especially,



Honourable Minister for Information going around the park.

foreigners, have a desire to see the wild life of the particular zone. The present zoo situated next to the Central Station could not keep pace with modern advancements mainly for want of space. The Government of Tamil Nadu, after careful thought decided to establish a modern zoological park at Vandalur in the vicinity of Madras.

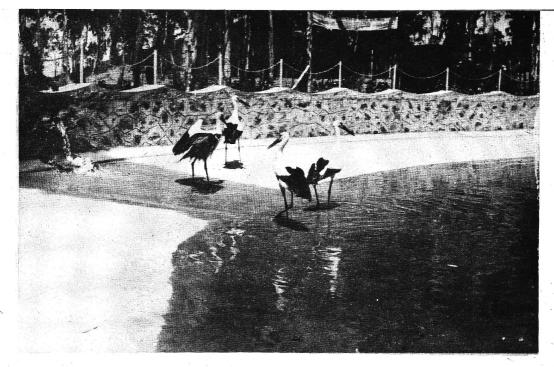
An expert committee selected the area for the location of zoological park at Vandalur, and the scheme was sanctioned for Rs.3 crores. The site selected is mainly a Reserve Forest and is bounded by the Grand Southern Trunk Road on the western side and by the Vandalur-Kelambakkam road on the South. On other sides we have only forests.

For the parking space and near the Otteri Tank some private lands have been acquired.

The vegetation of the area is of a very poor scrub type, with plantations of cashew and Eucalyptus hybrid.

The total area of the zoological Park is 510 ha. (1,265 ac.) including the Fodder Bank area. Originally, in the area selected, Vandalur Hill was not included. Recently a portion of the Vandalur Hill has been included, where a Safari Park will be located. Vandalur - Kelambakkam road has also been brought inside the zoological park area, in order that the animals do not get disturbed by the vehicular traffic as well as to get rid of noise and atmospheric pollution.





Cranes released at the Zoo

A fodder bank to supply green fodder for the animals have also been proposed to be developed over 120 ha. Planting of the zoo area with ornamental species and to replace the Eucalyptus and Cashew trees in a phased manner has been undertaken. Flower beds, spacious lawns, shady groves are also being developed.

A perennial source of water supply is very essential for maintenance and cleanliness of the Zoological Park. This, along with good drainage will ensure good health of the inmates. The total requirement of the Zoological Park is 3 lakh gallons (13.65 lakh litres) per day. This quantity will be obtained from Palar. A branch line will be laid from the Alandur pipeline at 32 Kilo Metres.

The enclosures for animals are nature simulating with moats, where the animals housed are in comparative freedom. The moats can be dry or wet. Hence the visitors can see the animals in their natural surroundings without any hindrance. Taking advantage of the slope provided by the hill in the centre, the lion and the tiger will be exhibited in the higher slope and deer lower down the slope with a moat separating them.

Apart from many cages, for birds, there will be a walk through an aviary. In this large aviary the visitors can walk among the birds and vegetation. Many migratory birds will visit the Otteri tank which will be within the zoological park.

The enclosures for the Zebra, Hippo, Deer, Transit enclosure, Monkey island and four cages for birds have been completed. The animals from the Corporation Zoo are being transported and housed in a phased manner, taking into consideration the availability of water. At present, in the animal category, three Hippos, two Zebras, two elephants, Nilgiri langurs, common langurs, Rhesus macaque, Malabar squirrel, Jackal, Sambar, spotted deer, Black buck, Hog deer, Barking deer, Slender loris are housed. The birds exhibited included Macaw parrot, Alexandrian parakete, Red breasted parakete, Blossom headed parakete, Bar headed geese, White geese, Brahmini duck, Manila duck, fan tailed pigeons, doves, Mynas, love birds, Quails, patritges, etc. Work is in progress for the construction of enclosures for monkey, Rhinoceros, Bison, Elephant, Bear, Lion, etc.

The Zoological Park will have a main circular Road and two loop roads covering a distance of 4.4 Kilo metres. Apart from this there are many foot paths connecting many enclosures. Due to the vast area the visitors have to cover, it is proposed to have battery operated vehicles to take the visitors around. There is also a proposal to have a monorail or aerial rope-way to cover the hilly portions of the Zoological Park.

Other major attractions of the Zoological Park will be an Aquarium, a Natural History Museum, a pre-historic Animal Park and a Nocturnal Animal House.

Gir lion Sanctuary

The Gir forest in the Saurashtra Peninsula of Gujārat is unique as the last stronghold of the lion (panthera leo persica) in Asia. This race of lions once ranged through similar semiarid tracts from Greece to North-east India. The Gir forest is one of the largest biologically intact continuous tracts of forest land reserved primarily for the conservation of its native wild fauna in this country. This Sanctuary harbours the remnant populations of many species which once constituted the magnificent faunal wealth of India including the spotted deer, sambar, Indian gazelle nilgai, wild boar and the world's only four-horned antelope.

In the not too distant past, the Asiatic lion roamed over a vast stretch of the northern and central portions of the Indian sub-continent right upto the Narbada river in the South; but now in the whole of Asia, this magnificent feline is found only in the Gir forest of Gujarat. The shooting of this species continued unabated and the population of the lion had gone down to a precariously low level of about fifteen only. Fortunately, a wise decision was taken to prohibit the further shooting of this species and with adequate protection, the population started increasing gradually to exceed 200.

In 1972 the area of the sanctuary was 1265.01 sq.km. In the year 1974, 147.11 Sq.km. were added to the Gir sanctuary, thus increasing its area to 1412.12 Sq.km. The central core portion of the Gir Sanctuary extending over both the major vegetational zones viz. teak and open scrub forests covering an area of 140.40 Sq.km. in Jamwala and Chhodavadi ranges of Gir was constituted into a National Park in the year 1975. The main object of creating this National Park in the core area was to provide immediate total protection from all forms of human disturbance. In the year 1978, an additional area of 118.31 Sq. km. has

been declared as National Park, there by increasing the total area under the National Park to 258.71 Sq. km.

The latest lion census carried out in May 1979 showed considerable increase in lion population.

Adult Lions Sub-adult lions

ons Cubs Total

Males Females Males Females

52 68 13 14 58 205

Gir is the only place in the world where lions can be seen on foot in their natural habitat from a distance of 10 to 15 metres. This is the main reason for the heavy rush of tourists to the Gir Sanctuary in steadily increasing numbers.

In view of the undesirability of the present artificial method of holding lion shows in Gir which has been widely criticized by the more knowledgeable visitors, it is proposed to set up a natural lion safari Park in the detached area of Devalia Block in the South-Western corner of the Sanctuary where lions and their prey animals will be released in a 400 Ha. enclosure surrounded by a 3 metre high stone wall in which visitors will be shown lions from vehicles in a natural setting.

It is proposed to reintroduce black bucks into eastern Gir where they had existed in the past. Surplus black bucks in Velavadar National Park and elsewhere will be captured and translocated to this area for release in the wild.

Steps are also being taken to reintroduce gray horn bills into the Gir Forests.





Employees State Insurance Scheme.

The Employees' State Insurance Scheme is being implemented in the State since 1955. The scheme is applicable to factories using power and employing more than 10 persons, and to factories not using power and employing twenty or more persons. The scheme provides for the following benefits.

- (1) Medical Benefit (rendered in kind)
- (2) Sickness Benefit (3) Maternity Benefit
- (4) Disablement Benefit
- 5) Dependent's Benefit (cash)

(in

(6) Funeral Benefit

With the progressive extension of the E.S.I. Scheme to new areas in the State, the number of Insured Persons covered by the scheme also registered increase. Details in this regard (figures as on 30.6.82) are given below:—

- (i) Total number of employees 4,89,050
- (ii) Total number of Insured persons 5,27,000
- (iii) Number of family units covered 5,27,000
- (iv) Total number of beneficiaries 20,44,760

During 1982-83, Government sanctioned the extension of the Employees' State Insurance Schemes to the following areas involving an estimated expenditure of Rs. 16.65 lakhs.—

Manamadurai in Ramanathapuram District; Hosur in Dharmapuri District; Ariyur in North Arcot District; Veeravanallur in Tirunelveli District; Padianallur, Alamathi areas in Red Hills in Chengalpattu District, Uthagamandalam in the Nilgiris District; Tiruvellore, Tirunindravur etc. in Chengalpattu District; Wallajah in North Arcot District; Wallajah

A total number of 47,204 persons including the insured persons will derive the benefits under the E.S.I. Scheme, consequent on the extension of the scheme to these areas.

There are 5 Hospitals, one each at Ayyanavaram (Madras), K.K. Nagar (Madras), Madurai, Coimbatore and Vellore (North Arcot District), 112 Static dispensaries, 9 mobile dispensaries, 3 Utilisation dispensaries and 2 part-time dispensaries functioning under the Employees State Insurance Seheme.

The bed strength of the five Employees' State Insurance Hospitals are as follows:—

- (1) Employees' State Insurance Hospital, Ayyanavaram, Madras 625 beds.
- (2) Employees' State Insurance Hospital, K.K.Nagar, Madras 206 beds.
- (3) Employees' State Insurance Hospital, Madurai 202 beds.
- (4) Employees' State Insurance Hospital, Coimbatore 500 beds
- (5) Employees' State Insurance Hospital, Vellore (North Arcot District) 50 beds

All the 5 Employees' State Insurance Hospitals and 45 of the 112 Employees' State Insurance Dispensaries are functioning in Government/ Employees' State Insurance Corporation owned buildings and the remaining dispensaries are housed in private rented buildings.

Proposals are under way for the construction of four more Employees' State Insurance Hospitals each with a bed-strength of 50, in the following places:—

- (1) Employees' State Insurance Hospital, Salem.
- (2) Employees' State Insurance Hospital, Mettur Dam.
- (3) Employees' State Insurance Hospital, Tiruchirappali.
- (4) Employees' State Insurance Hospital, Sivakasi.

A Convalescent Home with 25 beds started functioning in the premises of the Employees' State Insurance Hospital, Coimbatore from 2.12.82 onwards.

The Payment of Gratuity Act, 1972.

Insurance
Madras
this State since September 1972.
206 beds.
Under this Act, the Assitant Commissioners of Labour attached to the Insurance
202 beds.
Commissioners of Labour have been notified as Controlling Authorities
Insurance
500 beds and the Regional Deputy Commissioners of Labour as Appellate Authorities in their respective areas.

h Arcot During 1982, the provisions of this beds Act were extended by the Govern-



ment of India to the following new establishments:—

(1) Local Bodies. (2) Solicitors' Offices.

Subsidised Industrial Housing Scheme - (Private Sector Employers Projects).

Under this Scheme, financial assistance is being extended to employers in the private sector to construct houses for the benefit of industrial workers covered by the Factories Act, 1948.

The total number of houses constructed by the employers from the inception of this Scheme is 1,206 and the expenditure incurred so far is Rs.47.21 lakhs.

Plantation Labour Housing Scheme

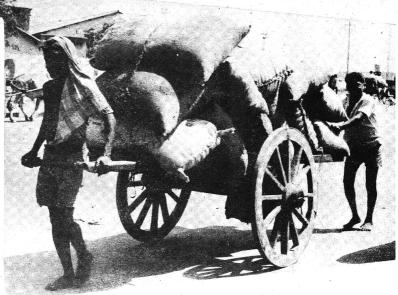
The scheme envisages assistance to the planters for the construction of houses for their workers with 50 percent loan and 37.50 percent subsidy based on the ceiling cost of construction, which has been fixed at Rs.4,000 - per tenement.

During the year under report, the following new projects were sanctioned by the Government:

Since the inception of the Scheme, 828 houses have been constructed at a cost of Rs.21.79 lakhs.

Industrial Accidents Distress Relief Fund.

This fund has been created by the Government with a recurring grant of Rs. 15,000 - per annum to difford relief to the workmen, who are permanently disabled by injury or to dependants of those who are fatally injured in the course of employment in stone-breaking, blasting, digging wells or other industries but where the employer does not have the financial capacity for paying the compensation awarded under the



Workmen's Compensation Act, 1923 or where for any other reasons the workmen or their dependants are unable to realise such compensation. This would benefit the workmen, who are engaged by petty contractors who may not have the resources to pay the compensation in cases of fatal accidents as well as non-fatal cases. During 1982, a sum of Rs.4,000/was sanctioned as relief from this fund in four cases

The Tamil Nadu Labour Welfare Board

The Tamil Nadu Labour Welfare Board functions under the Chairmanship of the Minister for Labour. It has taken up several welfare measures for the benefit of industrial workers.

During the year, Labour Welfare Centres were newly opened in the following 8 places in addition to the 22 centres already in existence:

	No. of Houses	Loan	Subsidy
Glendale Estate, Coonoor	40	80,000	60,000
Waterfall Estate (E) Valparai	12	24,000	18,000
Waterfall Estate (W) Valparai	34	68,000	51,000
Glanevass Estate, New Hope Post	44	88,000	66,000
Sholayar and Kalayar Estate, Valpara	ai. 100	2,00,000	1,50,000

Salem — Villupuram, Virudhunagar — Palani, Ranipettai— Tirunelveli, Kumbakonam — Palladam.

The other welfare schemes implemented by the Board and the number of beneficiaries were

Legal Aid

The Government sanctioned a scheme for the grant of financial assistance to meet legal expenses of the trade unions in respect of the proceedings in the High Court at Rs.150 per writ petition or writ appeal subject to certain conditions. The Commissioner of Labour has been empowered to sanction the Legal Assistance. There was however, no claim under this scheme during 1982.

A sum of Rs.1,000 per year has been provided by Government towards legal assistance at State cost to poor and deserving workers or their dependants claiming compensation under the Workmen's Compensation Act. Injured workmen are also, eligible for legal assistance to defend their cases in the High Court when the managements go on appeal against the orders of the Additional Commissioners for Workmen's Compensation provided such assistance was granted to them in respect of the proceedings before the Additional Commissioners for Workmen's Compensation. During 1982, four cases were received for grant of legal assistance and a sum of Rs.7,300 was sanctioned for these cases.

Labour Welfare Centres.			
Total number of centres	•		32
Total number of trainees	919		1,024
Kindergarten Schools.			-,,
Total number of centres			30
Total number of children benefited	•40	· · · ·	836
Child Care Centres.			
Total number of centres			5
Total number of Children benefitted	••		198
Reading Rooms.			
Total number of reading rooms		610	4
Total number of workers benefitted	0.40	****	38 ,290
Other Schemes		Number of persons benefitted	
Reimbursement of cost of spectacles to workers.		263	12,316
Payment of tution fees and examination		446	44,133

pregnant women and lactating

mothers belonging to the families of

workers are benefitted under this

scheme was extended to over 27,000

In addition to the above scheme, an Integrated Health Package Service

Scheme is also being implemented.

The Tamil Nadu Institute of Labour

The Institute pursues the objectives

programme. During

Studies, Madras.

beneficiaries in 98 centres.

1982 this

Administrative



Labour Legal Advisory Cells.

Three Legal Advisory Cells are functioning at Madras, Coimbatore and Madurai and these are being managed by Retired Judical Officers and Retired Labour Officers.

shorthand.

These cells disposed of 336 representations during 1982.

Tamil Nadu Industrial Nutrition Programme.

This scheme is being implemented of promotion of healthy trade uniofor the welfare of the workers emplo- nism, development of managerial yed in the factories/plantations with resources and the organisation of an the assistance of CAREOrganisation. efficient Labour Children below the school going age. Service.

Book Bank		• • •	•		9.923	1,42,728		
Funeral Expenses			٠.		494	98,800		
610 The Board	also	sanctio	ned	financial	occietomos	tamanda		

fees to workers' children for typewriting and

of scholarships for Students for the follow	wing co	urses (during l	982	.:		
		Number of persons benefitted.			Amount.		
		veneji	mea.				
Scholarships for Engineering Course			19]	16,906		
Scholarships for M.B.BS., Course	••		6		4,500		
Scholarships for Diploma in Engineering	ng		14		8,575		
Scholarships for courses conducted by Industrial Training Institutes.	/ 		8		1,950		

The number of courses and sen. nars conducted so far by this Institute is 160 covering 4,216 participants.

Part-time Diploma Course in Labour Administration.

The Institute has been conducting a one year part-time Post Graduate Diploma Course in Labour Administration since 15th September 1979. The fourth Post Graduate Diploma Course in Labour Administration was inaugurated by the Minister for Labour on 22nd June 1982. total number of participants in the current batch is 42.

Monthly Journal in Tamil.

The Institute is publishing in Tamil a monthly journal entitled "Uzhaippavar Ulagam". The journal contains digests of important decision of Labour Courts, High Courts and Supreme Court on labour matters. It also reproduces Government notifications. The number of subscriptions had gone up from 6,800 in April 1981 to 13,000 in December 1982.

One Uzhaippavar Ulagam Readers' Forum was also inaugurated in Sankar Nagar, Tirunelveli on 8th May 1982 by the Minister for Labour. The objective of the forum was to disseminate the messages contained in the Journal to as many workers as possible, by organising Reading rooms and worker s meetings.



BHARATHIDASAN-BARD OF REASON, REFORM AND REVOLT

Professor Dr. N. Sanjeevi

Of the three thousand years of dynamic, delightful and developing history of Tamil literature, a unique phenomenon in the world of literature, Bharathidasan, otherwise known as Pavendar meaning the king of Poets or Puratci-kkavingar meaning the poet of revolt shines as the latest and brightest literary luminary who rightly compels the attention and appreciation, admiration and adoration of literary scholars all over the world in view of the quantity and quality of his creative writings. The beauty and boldness of his varied literary forms are considered as a fitting sequel to the outpourings of Subramania Bharathi (1882-1921) whose acquaitance Bharathidasan was fortunate to secure when the former was in a political exile in a then French settlement namely Puducherry (Pondicherry) during the second decade of this century along with Sri Aurobindo, V. V. S. Iyer and others.

Bharathidasan was born in 1891 nine years after the birth of Subramania Bharathi and nine years before the birth of twentieth century in a middle class non-brahmin family. Although he became an avowed atheist and an intellectual revolutionary his respect for his mentor who was a believer and Brahmin by birth never diminished because Bharathidasan was fully convinced of Bharathi's zeal for social equality and emancipation, progress and peace. In short, not only the pen-name 'Bharathidasan' which he retained till the end of his life, but the statements in poetry and prose he has made whenever an occasion demanded about the qualities of head and heart of Subramania Bharathi stand testimony to Bharathidasan's qualities of truthfulness and gratitude.

Bharathidasan who lived a full life of 73 years died on the 21st April, 1965 at Madras and was buried at Pondicherry where the Government of Pondicherry has raised a memorial. By profession a Tamil teacher, by conviction an ardent follower of Periyar E. V. Ramaswamy, father of the Dravidian movement that ushered in a big political and social change in South India in fifties and sixties, a journalist, a political sufferer and a politician in later years Bharathidasan has created a deeper impact on the people of Tamilnadu which is more relevant in post-Independent era.

Besides being a poet of beauty, Bharathida san's irrefutable credentials were his fiery opposition to blind beliefs, wornout traditions, socioeconomic inequalities and imposition of Hindi. His pertinent contribution to Tamil poetry is his poems which encourage widow-marriage and birth-control. And his poems in praise of Lenin and socialism shall also be relevant for ever. Some of his poems are excellent examples of universal appeal.

We may now have a few examples in English translation (though inadequate as even any excellent translation may be) to have a glimpse of the heat and light of the volcanic personality of Bharathidasan.

(Sung in the style of the pole dancer's song)

Tiduthidum thiduthidum thiduthidum thiduthidum Tiduthidum thiduthidum thiduthidum thiduthidum thiduthidum Ahaha salute you all
Ahaha sit all orderly please
Ye all who have begotten children
Hallo my Young brother!
Hallo my brother old!
Look here brother a skeleton!
No flesh! no strength!
Yes thiduthidum what is its name?...
What is the name of this medicine?
When touched inside your soul it will be sweet
that is that crystal-clear Tamil! Yes that Crystalclear Tamil

Now I smear this medicine over this skeleton!
O! brother strike the drum
thiduthidum thiduthidum thiduthidum look the Tamil skeleton laughs!
blossomed our land that was barren and destroyed look our fresh-green Tamil land sings!
O! mothers! O! fathers!
no magic! no manthras!
What is wanted is will
What is wanted in the search for a way
To get rid of our woes!

Lullaby song for a female child

O! casket of camphor to spread such a sweet perfume Overwhelming the aweful bad odour of blindbeliefs!



O! Lady of ever-burning light to dispel the darkness of unwanted caste-system!

Lullaby song for the male child

O! the hero of young and strong shoulders! to catch and control those untamed bulls that attempt to hit us when told Of the evils of blind-beliefs that causes cruelty and waste our valuable life!

On widow-marriage

When the woman dies the widower seeks another woman like that we shall ask the widow to get a husband for her

Birth Control

While keeping the door for love open We shall shut the door for conception What harm is there Otherwise what for is a child? to die or to languish?

On a caste / Class free new communist society

O! the world is still in the dark dungeon!
Still the people who adhere to caste are alive!
Still are there the religious heads who threaten and curse

The world marches towards the goal where all get all

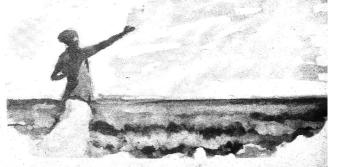
Let us create a new world Where the war-lords shall be wholy uprooted

When the poor begging-bowls

Become warriors to beat the rich
There shall be no beggars and barons
All will become equal. O! man realize this.

Up up climb! integrating country with country Up up climb over the hills that hit the skies! Up up climb ceaselessly! Having climbed up look around all-over! Look around all the people of the world all over! Look around the thick of your human population! Look around the army of men who were born with you!

Enjoy looking at the human sea! Cry out that you are the human sea!



An exhibition displaying masterpieces of South Indian Bronzes was organized in New Delhi in connection with the Non-aligned summit. The Tamilnadu Government spared about 70 outstanding bronzes mainly from the collections of temples of Tamilnadu. Care was taken to select only those bronzes which were not under worship and are known for their beauty and elegance. Most of the bronzes belong to the Thanjavur region. In addition to the bronzes from the temples, bronzes from the collection of Thanjavur Art Gallery, the Government Museum, Madras, The Tamilnadu Department of Archaeology and the Thiruvaduthurai Adinam were collected and included. few bronzes in the collection of the National Museum, New Delhi were also added. Altogether 87 bronzes were placed on show. The bronzes on exhibition dates from 8th century A. D. to 13th Century A. D. and fall into two distinct phases. The first phase represents the Pallava bronzes ranging from 8th to 9th Century A. D. and the second phase ranges from around 900 to 1300 C. A. D. The Chola bronzes are further subdivided into early Chola and later Chola bronzes

Aditya Chola was deeply religious and claims to have built or renovated 108 temples of stone, all along the banks of the river Kaveri especially in the deltaic region of Thanjavur district. Some exceptionally fine creations, not only the Nagesvara temple of Kumbakonam and some fine bronze sculpture can be attributed to his times. Parantaka I (907-955 A.D.) brought the southern country of the Pandyas under his rule, and erected more stone temples. We are fortunate in having a bronze image of Parvati dated A. D. 917 which is of great help in understanding the chronological development of South Indian bronze sculpture. References to the Nataraja form of Siva are also found in inscriptions of his reign and it is safe to conclude that the Ananda Tandava images of the God were made from at least his time onwards.

Among the successors of Parantaka I, the Chola queen Sembiyan Mahadevi needs special mention. Widowed very early in life, she devoted most of her life to renovating temples and instituting worship and endowments. This pious lady, of great ability and taste, was responsible for many metal images which are consecrated in temples





like the one at Konerirajapuram. An outstanding piece in the present exhibition, the Uma from Nallur is a particularly elegant example of her school.

The greatest of Chola emperor was Rajaraja I (985-1014 A. Ds) a great conqueror and a wise ruler. The great Thanjavur, of which temple he the builder, is a visual symbol of his achievement. Deeply devoted dance and music. The temple sculptures reverberate with the sound of music and the movement of dance. Rajaraja's personal attention to every detail of temple life is spelled out in his inscriptions which also refer to the consecration of several metal images that are described in tion of the inscription engraved image." under the orders of Rajaraja Chola on a wall of the great temple at Thanjavur, describing the installanage enjoyed by artists working in of Pallava bronzes also makes it tion of a Ganesa image.

with four arms and measuring four- are the lovely Somaskanda form, circumference.

image.'

metal and Rajaraja's contributions clear that the artist paid greater

to the art. The Vrishavahana with Devi in this exhibition is a superb example of his times.

Rajaraja's son Rajendra I (A.D. 1012-1044) was a great conqueror. his empire extending to Srivijaya and Kadara (modern Malaysia and adjacent territories). At home he reached the banks of the Ganga. assuming the proved title of Gangaikonda Chola. He also built a new capital and a great temple at Gangai-Temples of kondacholapuram. this later chola period also preserve consecrated bronzes that amplify our understanding of the art of this phase. Since the entire south, parts of which were once ruled by the Pandyas came under the effective suzerainty of the Cholas, the temples in Pandya country also have bronzes in the Chola idiom. Even when towards the end of the thirteenth century the later Pandyas overthrew mighty chola empire, the Chola school continued to flourish for another hundred years under the new dynasty. Bronze sculptures cast under the Vijayanagar and later under the Nayaka dynasty are numerically quite large but the style has lost its freshness and vitality.

While inscriptional evidence is of some help in dating bronzes of the Chola age, Pallava bronzes can be dated only on stylistic grounds. Several bronzes that bear very close resemblance to the dated stone sculpture of the eighth and ninth Century A. D. have come to light in recent years so that the existence of a "One solid image of Pillaiyar Paliava style is now beyond doubt. Ganapati in the dancing posture, Among well-known Pallava bronzes teen viral in height from the feet to Thiruvalangadu, Thanjavur District the hair; one lotus on which this now in the Government Museum, image stood, set with jewels and Madras (8th century A. D.), the measuring two viral and two torai in Vishapaharana (8th century), the height; one pedestal on which this Kuram Nataraja (8th century A.D.) image stood, measuring sixteen viral and the Maittreya (8th century) and two torai in length, thirteen from Kaveripumpattinam. A numviral in breadth and three viral in ber of images of Vishnu have been height; one solid aureole, covering reported from several places, like this image and measuring two Perunthottam. A magnificent image 800) is under worship in a temple near Madras. An extraordinary One solid image of Pillaiyar image of Trivikrama, in metal, Ganapati, in the standing posture, now under worship in Singanallur with four arms and measuring eight near Coimbatore, is a splendid viral in height from the feet to the image of the Pallava age. All these hair; one lotus measuring two viral images have broad and high shoulder in height and eighteen viral in cir- heavy lower garments, the rolled the legs, the upavita, often with broad ribbon-like uttariya carried This is clear proof of the patro- over the right arm. An examination



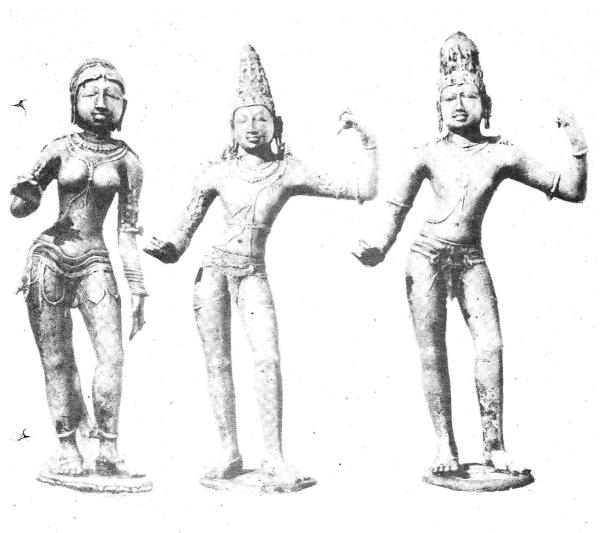
attention to even minute details in the wax stage itself so that there was little chiselling to do after casting the image. By contrast from about extensive chiselling had to be res- bronzes from orted to after final casting.

the Kuram Natesa and the Singa-trict. nallur Trivikrama, demonstrates that the Pallava artists had begun to eighth century.

Parvati dated A. D.9 17, (A Nataraja A.D. 900. bronze and inscribed Uma from Karaiviram viliage, R. Nagaswamy is the splendid Kalyanasundara from the three great Chola personages by delicate work manship.

the 12th century A. D., the wax Vadakkalattur, Thanjavur district model was fairly rough made and to be dated c. A. D. 875 (Pallava Vadakkalattur, R. Nagaswamy, Oriental Art, Spring 1971). The Nataraja and Sivakami To the list of Pallava bronzes from the same village were also given earlier, one can add newly made about the same times. It is discovered examples from Thiru-well to recall that Thanjavur district neipper village, Thanjavur district, was under the Pallava rule from the one of Vishnu (8th century A. D.) sixth to almost the 10th century A.D. another of Tripurantaka (9th century Several inscriptions including royal A. D.) and also an image of Sukha- charters on copper plates have come sana Siva of the Somaskanda group to light from Thanjavur, Kumba-(9th century A. D.) The Tripuran-konam, Mayavaram and Nagapatti- intimately associated in it. Of the taka is of large size and along with nam regions—all in Thanjavur dis- Aditya school type, real examples

are the outstanding Rama group from Paruthiyur and the great The art of the Cholas though Vishnu from the same village. A cast large size metal images by the soon to show an individuality and number of Rama groups that have vitality of its own, was essentially an survived, notably the Vadakkuppaextension of the art of the Pallavas, naiyur Rama in the Madras Museum, The discovery of an inscribed the transition taking place round the Paruthiyur Rama group, the Rama group from Thiruccerai and the Kappalur Rama group can also The art of the chola of the early be assigned to the finest traditions Lalit Ka.a No. 19, pp. 17-19), helps period may conveniently be sub- of Aditya school. In this connecus in assigning some rather elusive divided into the Aditya School, the tion one can recall the title of bronzes to the late Pallava period. Sembiyan Mahadevi school and the Kodanda Rama assumed by An outstanding example of this style Rajaraja school, after the names of Aditya. These bronzes are marked



rajapuram bronzes and the Nallur delicacy of the Sembiyan Mahadevi around A. D. 1045 (Consecrated Parvati. The Thiruvarangulam school yields here to a certain dignity around A. D. 1045), are the fine Nataraja, now in the National and authority. A great example of examples of the Rajaraja School Museum, is another outstanding Rajaraja school is the large size though made in the time of Rajendra example of this school. The style is Nataraja in the Thanjavur temple, to Chola. (New bronze finds from characterised by clarity of work- which Rajaraja dedicated several Thiruvenkadu, R. Nagaswamy, ing, and excels in rendering the and annual festivals. The Somasthe tribhanga. The accurate and kar, and the Nataraja, called Adaval- time that such a number of Master detailed delineation of ornamental lar in inscriptions, are of imposing pieces are assembled in a Special exhidetail is another distinguishing fea-size. The Somaskanda and the bition organised anywhere in the ture. The face also presumes a Subrahmanya images now in the world. Almost every bronze is an sharpness of rendering noticed in Gangaikondacholapuram the other schools.

the superlative Vrishvahana and his and consecrated around A. D. 1040, from Vadakkalattur.

is represented by the famous Koneri- in the Thanjavur Art Gallery. The the same place and datable to manship particularly in the modell-large size metal images for daily TASSI, 1960, pp. 108-122). bhangas of the body, particularly kanda, called Dakshinameru Vitan-

I, follow the traditions of Rajaraja The pride of place is of course given The majesty and dignity of the I period. The fine Bhikshatana- to the superlative creation of South Rajaraja school is best illustrated in deva unearthed. at Thiruvenkadu, Indian artist, the Kalyanasundara

The Sembiyan Mahadevi school consorts from Thiruvenkadu, now as well as the superb Ardhauari from

It is almost the first temple excellent specimen exhibiting proporconsecrated in the reign of Rajendra tions, modelling and their flexion.

FRICY GOODS Prom Parent 200 in State Annual Contracts Prom Pro

Tamil Nadu has a natural wealth of crores of palmyrah trees out of which two crores have been exploited. While one crore trees have been found unfit for industrial operation, two crores of palms are utilised to yield edible and non-edible products. In the district of Chengalpattu, 40 lakhs of palms offer employment opportunities to unemployed youths, widows and deserted women, besides other rural poor. This district has been selected as a model district to provide employment to the people living below poverty line through palm product industry.

During 1981-82, 1200 target group persons were given training through 40 centres in preparation of leaf articles, naar (fibre)-articles besides extraction, and sizing of palmyrah fibre for export.

Each trainee gets a stipend of Rs.750/- along with free supply of kit box. Rs.300/- per candidate has also been sanctioned to the State palmyrah federation as teaching grant. After the training period of six months, the trainees are admitted into the nearby palm products cooperative societies. Each society takes 200 to 300 trainees. There are block level and taluk level societies exclusive for women. Besides a grant of Rs.100/- a sum of Rs.

300/- is offered as loan to the trainee for purchase of raw material. Improved equipment is also provided to the artisans for sizing the raw material. Successful trainees are also taken in as instructors in the training centres of the palm products complexes.

Fancy goods and household articles made of palm leaves have good demand both in India and abroad. Novel designs to attract the foreign markets have also been prepared.

The high quality palmyrah fibre collected from Chengalpattu is sent to the district of Pudukkottai to be dressed in the palm products unit for direct export to foreign countries. Six sales bunks have also been sanctioned to sell the palm products produced by the IRDP beneficiaries. These bunks are functioning in tourist spots and pilgrim centres like Mahabalipuram and Tiruttani.

The Palmyrah trees of Tamil Nadu have opened a new vista for the rural poor by creating employment opportunities for their betterment. The palm products turned out by the rural artisans have caught the eye of the connoisseur both in India and abroad.







