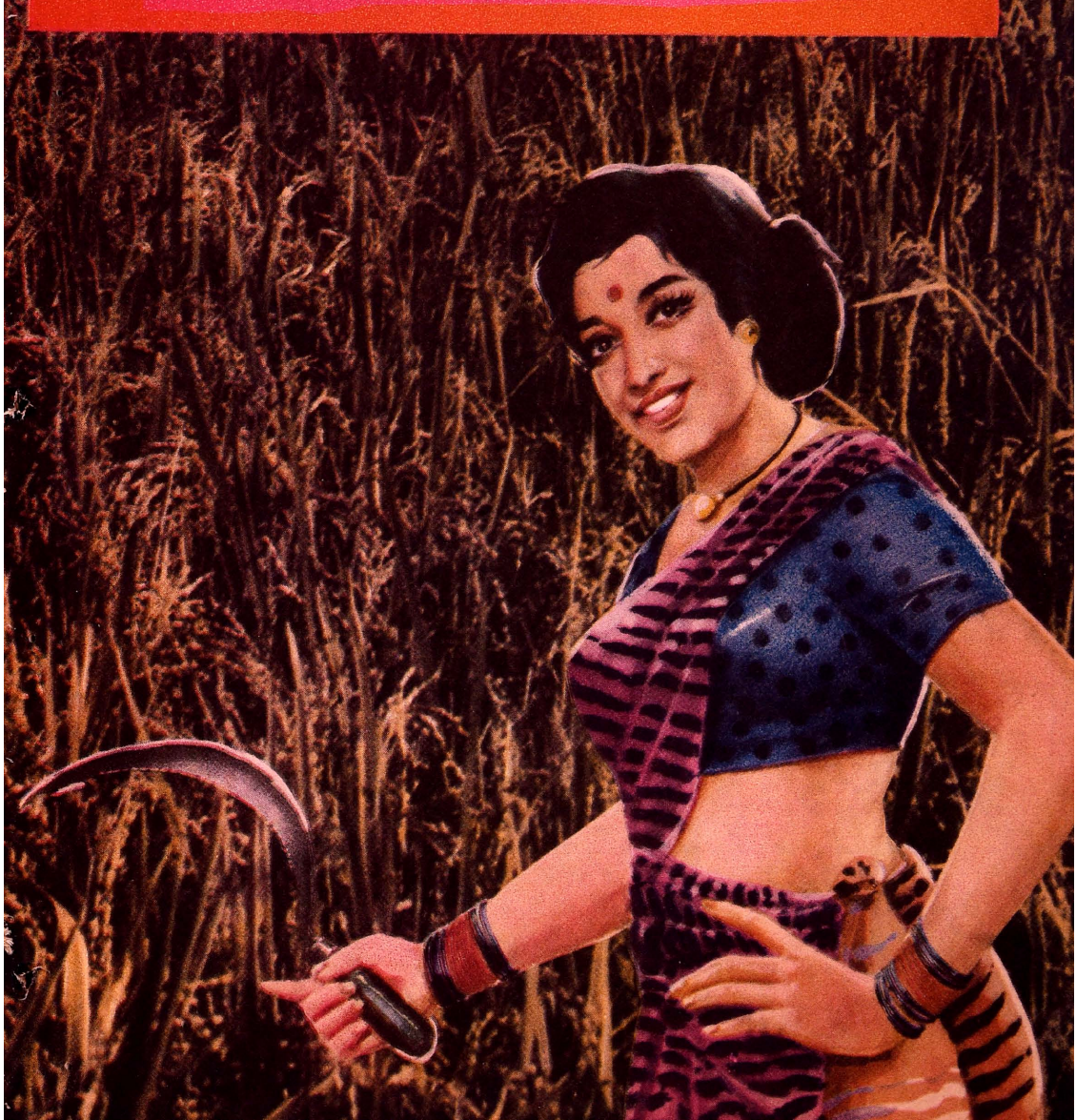


# Tamil Arasu

FORTNIGHTLY - JAN. 20th 1971 - 35 Ps.





# Dr. Nalini has an important message to all married couples:



"The problem facing millions of couples in the country is simply this: how to provide the essentials of life to everyone in the family. We talk about green revolution, but is it really going to help us because our increasing population wipes off all our surplus resources of food, clothing, and employment. At a rate faster than any Government can provide".

"How, then, are we going to give greater opportunities for our children and ensure our own happiness? Happiness is not just a national problem. Rather it is a matter of individual planning and adjustment: My advice to all couples is "Plan your family and live happily!"

Today you can have a child by choice, not by chance. That is when you desire one, and can give it the best care and attention. Ask your doctor. Ask any of your friends who have benefited by family planning. There are 10 lakhs of them in Tamil Nadu. Visit one of the family planning clinics. You'll get free advice, help and other aids from trained staff.



***Plan your family! And live happily!***

Issued by : Director of Information & Publicity,  
Govt. of Tamil Nadu, Madras-9.



## ANNOUNCEMENT

—:O:—

**THE NEXT ISSUE OF TAMIL ARASU  
WILL BE A COMBINED ISSUE FOR  
FEBRUARY 5 & FEBRUARY 20, 1971**

It is a Special Issue of Achievements and fulfilment of promises. The reckoning of an Era.

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Vol. 1 JANUARY 20, 1971 No. 14

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### *Cover Page :*

January heralds the harvest of the nicest rice, the sweetest sugarcane and the most succulent vegetables in Tamil Nadu. Thai Pirandal Vazhi Pirakkum is not merely a common saying in our land to mean that all problems will get resolved in January. It's a conviction. January this year has not belied this fond hope is illustrated in the cover page. Come January is the call of our conviction.





# Chief Minister's call to the People and Parties

In her Radio Speech as well as in her press statement, the Prime Minister Thirumathi Indira Gandhi has cited all the causes that led her to dissolve the Lok Sabha and hold the mid-term elections.

The Parliament, the Legislative Assemblies and the Local Bodies like the Panchayats and Panchayat Unions are symbols of the greatness of Democracy. The citizens of India, particularly the people of Tamil Nadu, have all along been extending their co-operation in realising the ideals of Democracy.

The country won freedom and with the dawn of freedom, darkness disappeared, and the rays of the sun of freedom began to spread everywhere. Yet, there is the murmur of the poverty-stricken people whose basic needs of food, shelter and clothing have not been satisfied. The fabric of society looks as deformed with social and economic inequalities as the physical phenomenon of our world which bears the onslaughts of natural calamities such as cyclones, floods and earthquakes.

A new enlightened society in which the poor and the middle class people live a happy life free from the ills of poverty and disability—it is just to establish such a society within the democratic set-up that the eminent heroes of this great country made stupendous sacrifices.

Freedom of convictions is available to all in such a way as not to infringe the integrity and security of the nation. On this basis, various political parties and movements with different ideologies are founded, and are functioning. People have the right to elect those who by words and deeds espouse their ideologies. Hence, it is that vox populi is equated with vox dei and our own Poet Bharathi was moved to describe the electors as “the rulers of this land”.

These ‘Rulers’—the electorate,—do not demand mansions or beds of roses but a peaceful and pleasant life unaffected by poverty and the consequent evils. When a Government is willing to implement schemes for the welfare and prosperity of these citizens, there should not be obstacles to the implementation of the schemes in the form of frequent elections, I think.

The Parliament has been dissolved now. If the elections are held only for the Parliament now, there would be Elections for the State Assemblies next year in 1972 and then will ensue the Municipal Elections in 1973 and the Panchayat Elections in 1974 and then again the Parliament Elections. Thus, there would be a succession of elections chasing each other like the toy-horses of the merry-go-round; the merits of Democracy would be



# Let us be a Beacon unto the Future . .

nullified, and the wheels of the administrative machinery would not be able to move even with the average speed.

There would always be the talk and thought of elections prevalent everywhere. The impassioned speeches of candidates, and the evils of political rivalry would fan the flame of election mania and daze the people. And consequently the progressive plans of the Government would stand still. Neither can the Government implement the schemes nor can the people co-operate with the Government in its worthy endeavours.

All these consequences were taken into account and, in spite of the golden opportunity of prolonging in power for one year with a stable majority—it was decided to dissolve the Assembly of Tamil Nadu and to conduct the Elections both for the Parliament and the State Legislative Assembly simultaneously just with intention of protecting the people from the harassment of two elections within a period of twelve months.

Further, elections involve enormous expenditure, and it would be uneconomic—rather extravagant—to hold the elections twice in one year. A prudent housewife doesn't put out the hearth immediately after rice is cooked and light it again for cooking the curry. I feel glad that I have avoided unnecessary election expenses by arranging to hold the elections for the Assembly and the Parliament simultaneously.

All the political parties are participating in the elections. I hope that all the parties including the ruling party to which I belong, will propagate their principles and ideologies magnanimously in consonance with our culture and tradition and see to it that their propaganda machinery functions within the bounds of decency, and I feel it is my duty to request them to do so.

The Chief Election Commissioner, Thiru Sen Verma has praised Tamil Nadu as one of

the States where Peace, Discipline, Law and Order are kept intact. To make ourselves worthy of this compliment, we must see that at the time of the Elections cordial relations are maintained among the workers of all the political parties. The public must also co-operate in keeping up law and order. No doubt peace will prevail. People will see to it. None who loves peace will like to settle differences of opinion through violence.

Evaluation of electoral gains and loss, commentaries on the fruits of elections and felicitations and congratulations will all last but a short while. But the fact that we maintained political civility and peace at a turbulent time will be the lasting beacon guiding the future generation and guarding our honour. This will be the glorious chapter of the history written by us—may it will be the glorious history made by us.

If all politicians including me, differing on political views but fighting for their principles, sincerely feel that all must one day come together for the welfare of the people, there will be no room for enmity and bitterness.

Don't please mistake that I, an ordinary citizen, am posing as an adviser to the partymen led by eminent leaders. I merely echo the desires of those eminent leaders only because I happen to hold a position of responsibility.

Parties may be many but let our friendship be kept up. Let us all take a vow :

1. To conduct the elections in a peaceful way.
2. To adopt the righteous means.
3. To do away with enmity and to be steadfast to our principles.

The Voice of the People is the Voice of God. Let us obey the order (Voice) of the people.

(Radio Speech by the Tamil Nadu Chief Minister Thiru M. Karunanidhi on 6th January 1971).



# THOSE TWENTY DAYS

## 12. SWISS SOIL.

On the next morning, the family members of two Tamilians serving in the French Army came to see us. That we could meet some Tamil families even in that distant land plunged me in joy. Later in the morning we set out for another city beautiful, Lucerne.

Everywhere in Switzerland one could see enchanting lakes fed from the snow and ice of the Alps. For the most part, the town surrounding a lake has come to be known by the name of the lake itself. The entire terrain leading to Lucerne looked verily like a world of gold.

## M. KARUNANIDHI

Snow-capped mountain-peaks, waterfalls cascading down the slopes of hills bathed in sunshine, the rush of the river and on its banks flocks of flowers, the nectareous music of birds and fascinating sceneries of pristine Nature wherever the eye roved—all these were of thrilling splendour.

Lake Lucerne is in the shape of a cross. The depth is said to be 700 feet. Against the backdrop of silvery hills and with a green-sward of emerald beauty stretched out in front, the very sight of the lake brought ecstasy to our hearts.

It is said that at the time of World War II, fearing invasion

from the Big Powers, the Swiss Government packed all its gold-reserve in cylinders and kept it concealed only in this lake.

Some people told us that this lake charged with so much beauty, could also be very dangerous. On the slopes of the mountain, a storm could originate without warning and churn up the waters of the lake. Thank goodness, during our stay there, no gale crossed our path! On the other hand, a zephyr was blowing salubrious and bracing.

From Lucerne, we continued our journey to the Pilatus mountain, more than 7,000 feet away. We travelled by train along an almost perpendicular mountain-track. In that country the railways transport one not only up to 7,000 feet but even beyond 11,000 feet. In some places the railway lines have been laid through tunnels. Even during the middle of daytime, it is shivering cold out there.

On top of the hill was a modern restaurant and there a friend who had accompanied us asked solicitously whether I would like to take fruits. The temptation to pun on the Tamil word for 'fruits' could not be resisted and I said that '*pazhangal*' if available could be served by all means, but not '*pazham kal*' (old toddy)! Our friends caught the point and they smiled.

Cable-cars are those that are operated from one hill to another along wire-ropes stretched out between two points. They are rather like palanquins. Each cable-car carries four passengers



and even to recollect the grand sight of the vehicles moving up and down, brings a sense of pleasure to the mind. Such cable-cars are in service in Switzerland for a distance of many miles even. The vehicles speed between the hill top and the town below with the aid of wire-ropes.

The azure sky above, upright hills all around covered with snow, small towns below, and lakes of intense charm—such is the natural beauty of Switzerland and in order to lap it up come hundreds of thousands of foreigners every year. Through their expenditure while holidaying, they pour crores into the coffers of the country before returning to their homelands.

According to the statement of accounts for 1965, three crores and fourteen lakhs of foreign tourists stayed in Swiss hotels and lodges during that year. Through income of hotels from tourists alone, the country earns 650 crore Francs every year. There are as many as 7,800 tourist-homes in the country, with a total bed-strength of 2,40,000.

The fascinating natural sceneries of India and in particular the luxuriance of nature in Tamil Nadu came to my mind.

The splendour of the Pothigai hills where the Pongaruvi, that foaming waterfall gives the impression of being in a doze, the grandeur of the Thenaruvi of Courtallam, the cascade of which can be heard in Tenkasi, the fascinating spectacle of the

he-monkey there offering fruits to his mate and working his way into her favours, the magnificence of the plantain and the areca trees spread out all along the way, that ideal summer-resort Kodai-kanal, Ootacamund, that enjoyable hill-station, Yercaud of immense charm, the rock-temples of Mahabalipuram where Art has come alive in sculpture, the temple-towers of Tamil Nadu touching very skies and blazoning forth to the whole world the genius of the Tamil race in the realms of Art and Architecture and the fervour brought to these fields of creative activities by the Tamil people, the shores of Kanyakumari where the blue-clad Sea-Damsel spreads her net of pearls, and Tiruchiralaivai that scatters a crore of pearls—all these are not a whit inferior to the panoramic scenes of Switzerland. Yet, to bring these to the notice of the people of the world and thereby raise the standing of the motherland; to increase the facilities and amenities available to tourists and through that to add to the income of the country—I did feel that our efforts in this direction have been far from adequate!

Although in Switzerland, there are people speaking four languages namely German, Latin, French and Romansch, I could see that social relationship was such as among members of a single family of steady affection. The reason is that there is no thought of or attempt at tyranny there. All the four languages have been accepted as national languages. The people who speak the Romansch language form

less than 1 per cent of the total population and this would go to show the regard and importance accorded by the Government to language which is as eye to the people.

The first three languages have the status of official languages, used in the Judiciary, Administration and the Educational institutions. No manner of difficulty has arisen in that country because of this. Since there is no question of imposition of any particular language, pupils learn other languages of their own free will. They receive their education only through the medium of their mother-tongue. English is there as an optional language only. The people of Switzerland have acquired an adequate knowledge of English. They are of the confirmed opinion that education through the medium of the mother-tongue and the mother-tongue alone is capable of expanding knowledge in any field of activity. Because of this, knowledge and industry have taken rapid strides forward, in that country.

It is the city of Zurich that is determining the fate of European economy to-day. Young men are not finding it difficult to secure jobs in Switzerland which, in addition, provides employment-opportunities for foreigners too. Every day, over 50,000 persons from outside come for their work to Switzerland in the morning and they return to their respective countries in the evening.



There is yet another lesson that we have to learn from the Swiss people. The young men of that country do not feel that studying and securing diplomas and degrees is with a view to gaining employment in Government offices and business concerns. Even as they learn, they get trained in Small Industries. When their education is completed, instead of falling a prey to the anxiety about job-opportunity, they plan as to what type of Industry they could engage themselves in so that the prosperity of the country may be augmented. By adding the manure of knowledge to manual labour, they are enhancing the prestige of their motherland in the arena of the world. Switzerland is a country that is markedly short of raw materials and minerals such as iron and coal. But this deficiency has been more than made up for, by the brain-power and working capacity of the youth of the land.

The industrial products of Switzerland are of remarkable beauty and sturdiness and no wonder they are rated high in the world-market. Quality watches, life-saving drugs, engines for electric trains, hydro-electric generators, machinery essential for ships, boilers, equipment for producing heavy water necessary for generating atomic energy, artificial diamonds—the list of products from Switzerland keeps on lengthening in this manner.

The Swiss currency 'Franc' has an excellent standing, since

the economy of the country is in good shape. As a matter of fact, the Swiss Franc ranks next only to the American Dollar, in world-trade.

Impressed and attracted by the standing of the Swiss currency and the integrity of the people of Switzerland, the Big Rich of the World feel their money is well-protected if it is deposited in Swiss banks. Sixty per cent of the Insurance income of Switzerland comes from foreign countries. Also, since the rates of income-tax are rather on the low side in Switzerland, business-concerns of the world have their head-offices located here.

Many who visit Switzerland cannot escape the happy wish as to how wonderful it would be if only one could stay on and settle in that Country itself. As for me, however, the overwhelming yearning was that India too should become a Switzerland.

I visited a few factories in Switzerland. Were they factories indeed! In orderliness and cleanliness, they seemed to be regular Art-Galleries. Lest factories should undermine the tranquillity and beauty of cities, they are distributed in villages and small towns. Swiss factories are located in the centre of gardens and in Natural environment and this provides yet another insight into the outlook and mental attitudes of the people of that country.

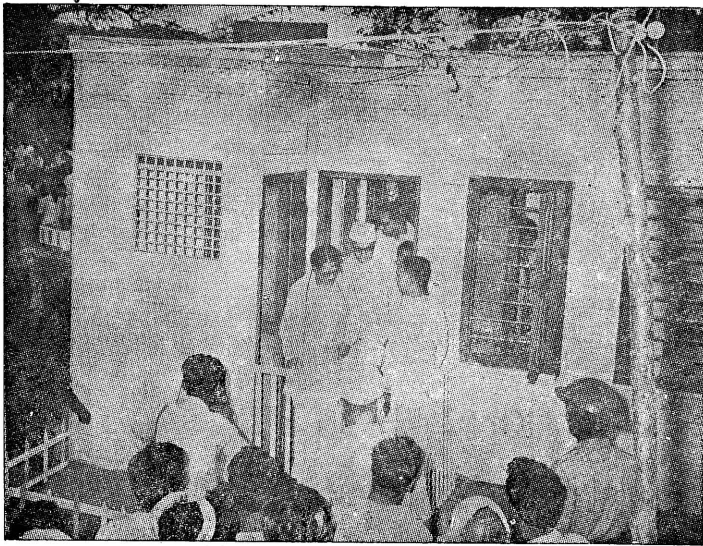
We had been invited to the Oerlikon Factory manufacturing, *inter alia*, guns and small aeroplanes. The Administrators of the factory received us with great pleasure and showed us round the entire place. They have also a section dealing in the spraying of pesticides. We discussed about the help they would be able to render in the matter of spraying pesticides in Tamil Nadu.

We then gazed at the beauty of the Alps once again and left for the aerodrome in order to continue our journey towards Paris. The Swiss time was 1-50 p.m.

I looked at my wrist-watch and the thought arose in my mind that not only in manufacturing watches and in being blessed with an abundance of natural sceneries that never cloy, but also in safeguarding the rights of citizens and in upholding the federal principle of Government, Switzerland is *facile princeps*.

I also thought of Jean Jacques Rousseau who was born on the soil of Switzerland and who wrote the undying book: *The Social Contract*. His birth-place was Switzerland but it was France that he migrated to and it was there that he spread the Revolution. We were travelling towards that celebrated country !

(to be continued)



AN  
IMPROVED  
SLUM  
TENEMENT  
BEING  
INSPECTED  
BY C. M.

## TAMILNADU GOVERNMENT TAKES FULL POWERS FOR SLUM CLEARANCE

The Government of Tamil Nadu have promulgated an ordinance to provide for the improvement and clearance of slums in Tamil Nadu and for the constitution of an autonomous body, called the Tamil Nadu Slum Clearance Board.

An explanatory statement states that the number of slums in the City of Madras and in certain other areas in Tamil Nadu is on the increase and these slums are likely to become a source of danger to public health and sanitation of the said areas.

At present, the slum clearance work has been entrusted to the State Housing Board. The Government considers that, for effective clearance of slums and to arrest their growth, to eliminate

congestion and to provide for certain basic needs such as streets, water-supply and drainage, slum clearance should be entrusted to a single agency.

To achieve its object, Government recently constituted a slum clearance board. Government is of the view that if the board could be set up as an autonomous body on a statutory footing, it will be conducive to speedier planning, investigation and execution of schemes in regard to the slum clearance work.

The ordinance accordingly provides for the constitution of an autonomous Tamil Nadu Slum Clearance Board.

The board shall be established with effect from such date as the

Government may, by notification, appoint. The board shall be a body corporate, having perpetual succession and a common seal.

The board shall consist of a Chairman and such other official and non-official members not exceeding 15 as may be prescribed. The Government will also appoint the secretary to the board.

The Tamil Nadu Slum Improvement (Acquisition of Land) Act, 1954 has been repealed in view of the new proposal.

### 'Slum area'

The ordinance empowers the Government to declare as a "slum area" any area which may be a source of danger to the health, safety or convenience of the public; any area where buildings



are unfit for human habitation in any respect or by reason of dilapidation, over-crowding, faulty arrangement of streets, lack of ventilation or sanitation facilities, etc.

In determining whether a building is "unfit for human habitation," regard is to be had to factors like repair, stability, freedom from damp, natural light and air, water supply, drainage and sanitary convenience and facilities for storage, preparation and cooking of food and for disposal of waste water.

Within a prescribed period, the owner or occupier of every building situated in any slum area has to send to the prescribed authority a statement in a prescribed form for registration.

The prescribed authority may direct that no person shall erect any building in a slum area except with the previous permission of the authority.

The authority may serve upon the owner of a slum area or a building there, a notice requiring him to execute works of improvement specified therein within such time, not being less than sixty days as may be specified in the notice. Owners of land can also be served upon for works to be executed outside the building.

If such a notice is not complied with, then, after the expiration of the time specified in the notice, the prescribed authority may himself execute the works required. All expenses incurred by the authority, together with interest,

can be recovered from the owner of building or land.

The prescribed authority, on a report from the local authority, can serve on the concerned parties a notice, as to why an order of demolition of the building should not be made. If the parties undertake to execute improvement works to make the building fit for human habitation, the authority shall not make the demolition order.

If no such undertaking is given, and where the undertaking is not carried out, the authority may order demolition within a prescribed time.

A procedure to be followed where demolition order has been made has been prescribed in the Ordinance.

When a slum area has been declared to be a "slum clearance area", the owners of lands and buildings in that area shall clear the area and demolish the buildings before the expiration of a prescribed period.

If any slum clearance area is not cleared or the buildings demolished before the expiration of the period mentioned, the prescribed authority can enter and clear the area and demolish the buildings and sell the materials subject to certain provisions.

The Government, through rules, can provide for or regulate the transfer to persons who, immediately before the declaration of any slum area to be a slum clearance area, were occupying lands or

# POWERS FOR MAKING OWNERS IN SLUM AREA TO MAKE IMPROVEMENTS

buildings in that area, of lands or buildings in such slum clearance area after its re-development.

### **Compensation.**

The Government is empowered to acquire any land for executing works of improvement, clearance, etc. Every person, whose land is acquired, has a right to receive compensation.

The compensation payable to any land acquired shall be determined under either Basis A or Basis B.

**Basis A :** The compensation payable shall be an amount equal to sixty times the net average monthly income actually derived from such land during the period of five consecutive years immediately preceding the date of publication of the notice of acquisition in the Gazette.

**Basis B :** The compensation shall be the market value of such land on the date of publication of the notice.

Within three months from the date of the publication of the notice or within such further time not exceeding three months, the concerned party should intimate his option on the basis of compensation. Where no such option is exercised within the specified time, the Government can declare Basis B as the Basis of Compensation.

### **Eviction.**

Notwithstanding anything contained in any other law for the time being in force, no person shall, except with the previous per-

## **POWERS**

## **FOR**

## **EVICITION**

## **AND**

## **ENTRY INTO**

## **SLUM AREA**

## **PREMISES**

mission in writing of the prescribed authority, institute, after the commencement of this Ordinance, any suit or proceeding for obtaining any decree or order for the eviction of a tenant from any building or land in a slum area. If a decree has already been obtained, no person can execute such decree or order.

Where any building in a slum area is let to a tenant after the execution of any work of improvement or after it has been re-erected the rent of the building shall be determined in accordance with the provisions of the Ordinance.

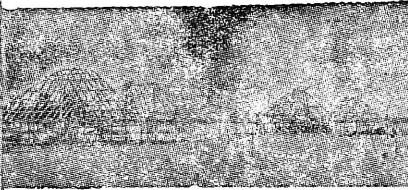
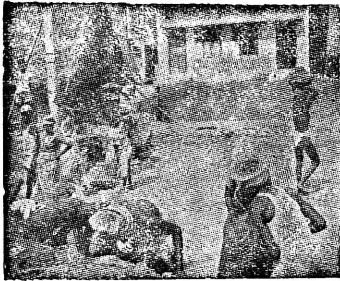
Any person authorised by the prescribed authority can lawfully enter into or upon any land or building in any slum area or slum clearance area, with or without assistance or workmen to make any inquiry, inspection, measurement, valuation or survey or to execute any work authorised under the Ordinance or any rule.

It shall be lawful for any person authorised by the prescribed authority to enter into any place or to open or cause to be opened by door, gate or other barrier if he considers the opening necessary for such entry and if the owner or occupier is absent or being present refuses to open such door, gate or barrier. Entry should be in day time.

The Ordinance shall come into force on such date as the Government may, by notification, appoint and different dates may be appointed for different areas and for different provision of this Ordinance.



# FACE LIFT FOR ALL SLUMS



10,000  
TENEMENTS  
TO BE BUILT  
EVERY YEAR

NOTHING  
WILL STAND  
IN THE WAY  
OF THE  
PROGRAMME

With a 7-year schedule and a Rs. 40 crore budget, the Tamil Nadu Slum Clearance Board has determined to change the face of the 600 slums in the city where nearly 7 lakhs people live. To this end the Slum Clearance Board has plans to build 10,000 tenements every year. Nothing will impede this pace of progress, because the Slum Clearance Board has entered into bi-lateral agreements and commitments for the constant supply of bricks and other construction materials. To meet the shortage of agencies and to keep down the cost of construction, it is proposed to take up the construction of tenements in selected areas departmentally on job work system. The work will be done on labour contract basis with all the materials supplied departmentally at site.

In order to meet the demand for the doors and window frames, the Wood Working Unit of the Tamil Nadu Housing Board is being

geared up so as to step up manufacture.

The Tamil Nadu Slum Clearance Board is proceeding with its work in a systematic way.

While preparing a scheme for the construction of multi-storeyed tenements, a problem arises when the slum-dwellers have to be rehabilitated temporarily from the place of their dwelling till such a time the tenements are completed and they could be allotted the built-up tenements. To achieve this, temporary sheds are to be put up in the adjacent areas, so that they could be moved in there for the period of construction of the tenements. This has not been found to be possible always and hence we have to find alternate methods of providing temporary accommodations for these persons. It has, therefore, been decided to construct what are called transit tenements in three parts of the City consisting of

500 flats each. These tenements will be of permanent nature multi-storeyed and exactly similar to other permanent multi-storeyed tenements put up in the slum areas. Three such places have now been chosen (1) Kotturpuram, (2) Mambalam Tank-Bund and (3) Vyasarpadi. In addition to the construction of the above Transit tenements, construction in 25 slum areas in the Madras City are now in progress.

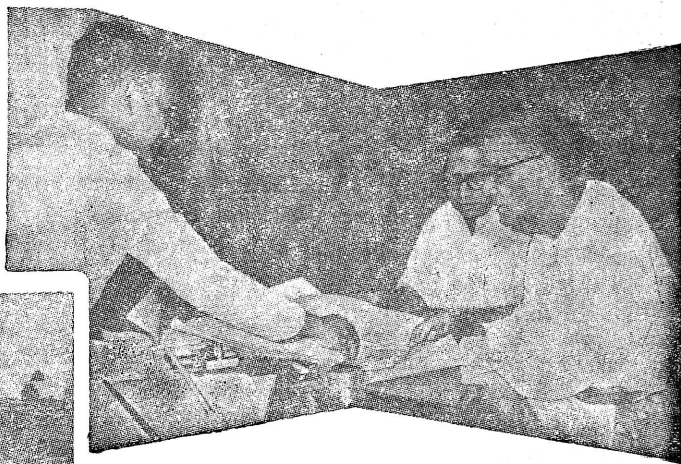
Under the Slum Clearance Scheme, 60 blocks with four

storeys each, are being built to provide 580 tenements at a cost of Rs. 37 lakhs at "Mambalam Tank-Bund" in Theagaraya Nagar.

At Kottoor (Saidapet constituency) three-storeyed blocks providing 1,848 houses at a cost of Rs. 130 lakhs are under construction.

At Vyasarpadi in North Madras, 1,020 houses costing Rs. 71.20 lakhs are being constructed.

These three schemes are known as the "Transit Tenements" projects. Apart from these under the slum clearance scheme tenements are being constructed in the following places as given below :



The Chairman makes a multi-pronged at tack on the problem. He brooks neither delay nor waste.

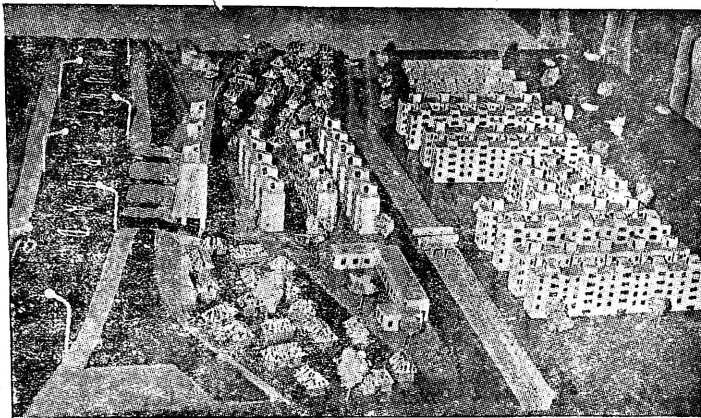
*Number  
of  
Tenements.*

*Name of Slum  
Area.*

1 Nochikuppam ...	1,000
2 Ayodhyakuppam	678
3 Dommikuppam	240
4 Visalakshi ...	768
5 Brindavanam ...	558
6 Subedhar Garden	330
7 Appavu Nagar ...	164
8 Mambalam Badri-karai.	1,422
9 Vengatapuram	384
10 Kapaleeswaran koil	138







An artist's view of proposed Tenements, Mambalam.

Whether in the Transit stage or permanent stage each tenement will comprise 201 sq.ft. carpet area, with kitchen, bath room and independent flush-out latrine. At present each such tenement costs Rs. 5,000 but further economics are planned.

The schemes drawn up by the Slum Clearance Board are such that apart from re-constructing living quarters for slum dwellers, the entire area is thoroughly replanned to prevent any further cropping up of new slums, creating and repeating the same set of problems.

The Planning cell of the Engineering Section is taking a survey of the slums to find out whether the areas occupied by them belong to the State Government, Central Government to the Corporation, Temples or individuals. After the particulars regarding the nature of the slum areas are collected, schemes will be evolved for rehabilitation of the occupants of those slums.

Survey is conducted to collect statistical data to find out which are the bigger slums that can be immediately taken for reconstruction. This survey will help all the proposed projects for slum-clearance. When the Planning cell collects particulars about the slum-dwellers, each family will be given a pass-book containing details of the members of the family with their photos affixed thereon.

A duplicate of the pass-book will always be kept at the office of Slum Clearance Board. This is to prevent misrepresentation by the slum-dwellers, and also to prevent new slums from coming into being. It is estimated that there are about 600 slums in Madras. About 8,400 hous-sites have already been allotted by the Housing Board to the slum-dwellers as O.D.Ps. and lease-cum-sale plots. It is planned to help the tenants construct these houses, with aid on co-operative basis or by the S.C.B. and make these houses their own. It is also envisaged to help them with sanitary

arrangements to prevent stagnation of water as an immediate measure.

The Tamil Nadu Slum Clearance Board is the first of its kind in India and it has secured the services of Thiru Rama Arangannal as Chairman. Interviewed by 'Tamil Arasu', he said :

As one associated with the slum-dwellers for a long time, I came forward to dedicate myself to the task of helping the slum-dwellers with new houses when I was called upon by the Chief Minister Thiru Karunanidhi, to do it. Though hesitant at first, encouraged by the co-operation of the engineers, officials, municipal Councillors and the public, I am confident now of my success. Further, people of all parties have taken it as a common problem and not as a political one and so I am intensely zealous in my activities. The Government treats this problem of the slums not as one concerned with the Metropolis alone, but it plans to help all other towns rid themselves of the slums. I welcome with gratitude suggestions and co-operation from the public in this endeavour.

## SLUM CLEARANCE.

When Thiru Arangannal toured Eastern countries some years back, Perarignar Anna had told him to make a special note of the execution of the Housing Schemes in those countries. Thiru Arangannal had followed Anna's behest. As Chairman of the Slum Clearance Board he finds himself fully equipped for the task.

During my sojourn in other countries as F.A.O. Expert in Agronomy of the United Nations, I have had occasion to witness many land reclamation schemes in many parts of the world. I have even actively participated in the planning and execution of some of them, as for example, the introduction of irrigation agronomy practices in the North-East Region of Thailand and in the running of Resettlement camps in North Burma for soldiers returned from the Second World War. I was therefore greatly interested, when I read in the papers, about the attempts to reclaim waste land for cultivation under what is known as the Kudumiamalai scheme in Tiruchirappalli. I immediately felt that this was a step in the right direction, in line with what I had seen so successfully accomplished in other countries. The Tamil Nadu Government authorities have displayed great vision and initiative in launching this scheme which I am sure will not only increase our State's food production but will also be a pointer to other similar schemes all over the country. This is Anna Form.

Kudumiamalai is the name of a hill about 6 or 7 miles west of Pudukkottai on the Pudukkottai-Manapparai road. Like most hills of South India, it is composed of huge granitic rocks which have undergone weathering during the ages and have given rise to deep red loamy soils all around. In fact from Kudumiamalai as the central pivot the contour

## A PROFITABLE STATE FARM WITH REVOLUTIONARY PRACTICES

slopes all round, with thousands and thousands of acres which for centuries have lain waste, without a thought occurring to anyone of utilising their potential wealth. The present scheme envisages the bringing under cultivation of about 3,000 acres cultivable waste land on the eastern side of the hill.

It is an undulating country with a number of elevations and depressions, the hollows showing more of vegetation than the elevations. The region enjoys a fair rainfall of about 30 to 40 inches annually, during which a number of tanks or Kanmois get filled up and provide enough water to somehow raise one crop of rice. In fact, the large number of Kanmois, all rainfed is a characteristic feature of this area, right from Pudukkottai through Chettinad and into Ramanathapuram district. Thus a system of agriculture has evolved dependent on rain with monoculture and single cropped lands being characteristic. Dry crops like millets, and pulses are more common

than rice, which is considered a luxury. The soils of this region are sandy and coarse textured, interspread with deep red sandy looms. They are lateritic in origin and have a deep red colour.

Curiously, the water table in this region is fairly high as I could see by observing some wells in the area. During summer, the time of my visit, the water table is about 5 to 6 metres below ground level and I was told that during rainy weather the level rises up to a metre or two from the surface. During my visit I could see at least 8 to 10 feet of water in each well. And, I also noted that most of them have good springs. A few wells where motor and pumps have been installed, are working for more than seven hours, a day, but are able to recoup supply in the course of three hours, after pumping is stopped.

The source of water is of course the rainfall. One third of the Earth's surface receives less than 10 inches of rain annually, an additional third receives between 10 and 20 inches. The remaining third alone receives more than 20 inches. It is not the total precipitation alone that is important; it is the distribution of the rainfall that is of actual significance. In certain favoured localities of the world, the rainfall is well distributed through the year. In other places, it comes down in torrents during a particular period followed by long seasons of drought. A well distributed rainfall of 20 inches

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BY PROFESSOR  
M. R. BALAKRISHNAN,  
(Retired Vice-Principal of the  
Coimbatore and Baptla  
Agricultural Colleges  
Agronomist of the U.N.)

in a year, is much more useful than one of 60 or 70 inches, all received in one or two months.

There has been a revolution in the method adopted for irrigation. Formerly it was by flooding the land making use of the gravitational flow of water over the land surface. Today flood is slowly giving way to sprinkler irrigation. Hungary, Greece and other countries in the Mediterranean together with Israel have taken to the sprinkler, but it is in Israel, that spectacular achievements have been made. The deserts of the biblical times have been metamorphosed into fertile agricultural land with maize, wheat, root crops and fruits giving very economic yields.

It is a happy augury that the sprinkler method is catching on in our country and I was particularly impressed with a sprinkler equipment assisting in the planting of tapioca and sugarcane in some fields of Kudumianmalai farm, at the time of my visit. The equipment has been supplied by Shaw-Wallace and consists of aluminium pipes and aluminium sprinklers. Equipment made of Hard Polyvinyl chloride (P.V.C.) pipe may be better, because it is cheaper, easier to assemble and longer lasting.

Another feature that struck me on my visit was, that after clearing xerophilic jungle of thorns, the land has not been disturbed, bulldozers and tractors have been used and the noteworthy point is that the cleared land has been contour-banded into convenient sized blocks. The original soil

layers have not been disturbed or moved about, which would have been the case if attempts had been made to level the land and form irrigation channels. The hard polyvinyl chloride pipes and sprinklers can bring the whole area under irrigation with portable sets easily negotiating the uneven terrain.

All told, the Kudumianmalai Reclamation Scheme is a wonderful phenomenon, visionary in concept, but proper in execution. It has a number of fists to its credit. It is the first time a large area has been taken up by the Government itself for reclamation. It is the first time sprinkler irrigation is being attempted on a large scale. Its total area is 3,000 acres

## SPRINKLER IRRIGATION IN WIDE USE

and it is the largest State-controlled Farm not only in Tamilnad but in the whole country. It is going to be the precursor for an agrarian revolution in our part of the country.

An extent of 650 acres on this farm is cultivated with groundnut, maize, ragi, redgram and castor all hybrid varieties—and vegetables are grown over the rest of the area. These vegetables sell like hot cakes in Pudukkottai in the evenings.

The proceeds from the sale of dry crop seeds during 1969-70 were about Rs. 3,95,000 yielding a net profit of Rs. 50,000. This year the farm is likely to earn a revenue of Rs. 6 lakhs granting that the monsoon is favourable. A

measure of the satisfactory working of the farm is the proposal of the Government to acquire for it another 1,000 acres in the adjoining area.

## Competitive Prices

In the other State seed farms in Tamil Nadu, the overhead expenditures are heavy, resulting in higher cost of the seeds produced. How does the Kudumianmalai farm fare in this respect? To this question, Mr. Perumal, Special District Agricultural Officer in-charge of the farm, said the fact that the seeds of this farm were being sold at competitive prices proved that the overheads were much less and that its seeds were as good in quality as those of private farms.

There are 32 open wells in the farm for irrigation of crops, but doubts have been raised whether supplies from this source would be adequate. The farm authorities ties have drawn up a proposal to put up a cluster of bore wells on the bed of the Vellar river nearby and if this proposal materialises, the farm would have an assured water supply source.

## Water Supply

Mr. Perumal said that a new ragi strain Saradha which was tried in the farm during the current khariff season had yielded more than a ton per acre on average and it might prove to be a good substitute for the local strain.



He also stated that a trial with a sprinkler unit on groundnut crop had shown that water economy of nearly 35 per cent, compared to flow irrigation, was possible. In the next stage paddy also is proposed to be raised by means of sprinkler irrigation heralding a new era, which will suit paddy more efficiently than the present method of flow irrigation. So much so, a dry farming research centre is coming up at the Anna Farm.

\*Kudumiyannmalai is full of historical associations. There is a grant according to which the place was once given away to the Maravars by the Kerala Vellalars. The rock-cut temple, and the inscription of Pallava-Grantha which are found here relate to the Pallava period prior to the 10th century A.D. There is an inscription of Kulottunga I, dated 1106 A.D. According to the Statistical Account of Pudukkottai (1813) the seven storied

dancing girl here. In 1681 Mallappa Nayaka Pallavarayar and Seventheluntha Pallavarayar were ruling in these parts, and were soon after succeeded by the Pudukkottai Tondaimans who following on old customs were installed in this place till recent times. Raghunatha Raya Tondaiman (1686—1730) built one of the *mandapams* of the cave-temples, and his minister Kuruntha Pillai another part of the shrine. In 1730 Raja Vijaya Raghunatha Tondaiman was crowned in this temple; and in 1773 his military chiefs Lingappa and Raghunatha Servaikar dug tanks for the public benefit. On the southern wall of the Ammankoil is an inscription, dated 1872 recording the *kumbabishekam* (consecration) ceremony of the two shrines by his Late Highness Raja Ramachandra Tondaiman.

The ancient historical and cultural objects of interest in the place are (1) a rock-cut temple called



Melaikkovil, (2) a rock-cut figure of *Valampuri Vinayaka*, (3) a rock-cut musical treatise in Pallava Grantha, (4) rock-cut figures of the *aruvathu muvars* or the sixty-three South Indian Saints with Siva-Parvati on the bull, (5) the principal shrines of Sikantha and Akilandeswari, (6) *anivettu mantapam* and the *ayirakkal mantapam*, and (7) the wells, *Thambikkinaru* (younger brother's well) and *Annankinaru* (elder brother's well). On the whole the Anna Farm is a show-piece of latest agricultural practices and one of the best centres for multiplication of seeds of improved strains in all crops. It has shown remarkable progress in a short span of time.

## THE HISTORICAL ASPECTS OF KUDUMIYANMALAI

Gopura of the temple was the gift of Pandya, and some of its *mandapams* were built by the Pallavarayars who ruled and worshipped here. In 1615 Achuyuta Pallavarayar, *arasu* (chieftain) of Valuthur, and Mallappa Pallavarayar granted lands to Brahmins of this village. Malla Palavarayar, the son of the first of them gave presents subsequently to a



# FERTILIZER AND SOIL PRODUCTIVITY

## TIPS FOR BALANCED APPLICATION

The consumption of fertilisers in agriculture has risen hearteningly in Tamil Nadu and yields have also risen in a like manner. But as fertiliser application has to be done in a balanced manner to increase crop yields without any adverse effect on soil producti-

vity, the function of each fertilizer and its required volume by plants are summarized below :

### (i) Function of Nitrogen

N-food is for physical construction of plants ; becomes a material for carbohydrate through photosynthesis. It is also the material for composition of protein, nucleic acid, chlorophyll and oxygen.

N. deficiency makes plants yellowish, small in height, less number of tillers, thin culms and small panicles. As plants cannot grow, N. deficiency leads to decline of yield.

### (ii) Function of Phosphorus

P-food is necessary to activate the growth and function of roots. Same as N. P. becomes a material for composition of carbohydrate and protein that are necessary for maturity of spikelets. Volume of  $P_2O_5$  absorbed by plants is less than others (22 kg. per 1,000 kg. of grains). It is 20-30 per cent of the entire quantity. When it is enough in the plants, it will help not only the growth of the plants on the ground, but also the root establishment. Thus, plants become resistant to pests, diseases and cold climate.

Deficiency of  $P_2O_5$  naturally makes root inactive and the growth of entire plants are retarded, and finally leads to decrease of yield.

### (iii) Function of Potassium

Among the 3 principal fertilizers, K. is consumed most by the plants. It goes to every part of the plant. K-food is to make

leaves and culms strong and is unavoidable for the movement of nutrients from roots to leaves and from leaves to panicles. It is considered that  $K_2O$  has some kind of relation with composition of sugar, protein and fat and flavour.

K. deficiency causes lodging of plants and greater occurrence of diseases and pests. Lack of K. means lack of yield. As it declines, leaves start to wither simultaneously from their terminals and from lower ones and then growth of plants is retarded.

When a plan for fertilization is worked out, degree of contents of fertilizer ingredients in the soil and in irrigation water as well as the features of varieties concerned and other involving factors must be taken into account, i.e., rational and effective planning is necessary. For instance, fertile or rich humus soil does not require much quantity of Nitrogen. Poor soil will, on the contrary, demand more.

Also the kind of fertilizers and system of manuring should be adjusted according to pH and water holding capacity of soil, and strength of reduction. Since  $PO_5$  is an important material for the activity of roots, it is useful to apply it more than it is needed by plants. Volume depends upon available phosphorus in the soil.

In many cases  $K_2O$  is contained in the soil and irrigation water, and so, it is not necessary to apply too much of it.

# OUT-PATIENT TREATMENT FOR MENTAL ILLNESS

## Revolutionary Methods At Madras Hospital



The Mental Hospital has started a new approach to psychiatric treatment in the form of an out-patient service. A new building costing Rs. 6.55 lakhs built in a spacious compound adjacent to the existing Mental Hospital has been declared open on 30th December 1970 by Chief Minister Thiru M. Karunanidhi for this purpose. The new wing is equipped with all accessories for the latest trends in psychiatric treatment such as:

(a) Electro convulsive therapy-Straight and modified.

(b) Insulin coma therapy.

(c) Psychosurgery in collaboration with Neurosurgery Department, Government General Hospital, Madras.

Drug treatment, and Psychological methods of treatment to such as Narcoanalysis, Psychoanalysis deconditioning therapy, Psychodrama individual and group therapy, are also adopted. Proposals are afoot to have a section for music and recreation therapy for these patients during day-time under hospital supervision and home treatment in the nights. The patients need not at all be confined in hospital. After pinel's revolutionary thesis of 1854 this is the latest break through in the treatment of mental patients.

### MENTAL HOSPITAL, MADRAS.

The Mental Hospital, Madras, had its beginning in the year

1795, when it was started in a rented building and was placed in charge of Surgeon Valentine Connolly, who was then the Secretary to Medical Board. In 1807, this property was acquired and rebuilt and was known as "Daltons' Mad Hospital". In 1922, the name was changed to Government Mental Hospital. At present this is the only mental hospital in the State. The hospital is situated in Kilpauk, on a plot with an extent of 46 acres of which 26 acres are enclosed by walls on all the four sides. The out-patient wing now opened is outside this compound and is situated in an equally extensive plinth.

Advantages of out-patient services:

There are several advantages of out-patient services.

(i) The stigma attached to admission in a mental hospital is overcome.

(ii) Due to the integrated out patient services available the necessity to admit every patient in the mental hospital is obviated, consequent on which stagnation in mental hospital by admitting patients well above the sanctioned bed strength is avoided.

(iii) In many cases, once patients are admitted in the hospital the relatives completely

forsake them and the patients are compelled to continue in the hospital devoid of any touch with the society, such long stay in the hospital among mental patients tends to make them chronic. The provision of out-patient services, therefore, helps to reduce chronicity among patients since admission in the hospital is not necessary for treatment and since when a patient is improved he can be discharged and take further treatment as out-patient.

(iv) The responsibility of treating the patients are shared by the relatives and hospital. The patients retain contact with family and friends and have the feeling that they are wanted and thus help them to improve better. Further, being in touch with the patients and the hospital, the relatives will be able to personally see the improvements in the patients. Thus they also will have more satisfaction.

(v) Out-patient treatment makes rehabilitation of patients easier and quicker since they will not find any difficulty in adjusting to the circumstances prevailing in

a work place due to their continued touch with relatives and friends during the period of treatment.

(vi) The absence of well-integrated out-patient services would affect the discharged patients of the hospital also. These services help for follow up, support and supervision of such patients as long as they are necessary.

The incidence of mental illness among the population is roughly found to be as follows :

Neurotics ...	1 in 10
Mentally retarded.	1 in 100
Epileptics ...	1 in 200
Psychotics ...	1 in 1,000

The above information will be an index to impress the scale on which out-patient services are required to cover the entire population.

#### **Set up of Out-Patient Services and Special Clinics.**

All the new cases are registered here, and then the detailed

case history is recorded by a trained social worker after which the Medical Officer and the specialist examines him. The different types of mental illnesses required different type of approach and treatment and for this purpose special clinics to cater to those patients' needs are functioning. The specialist at psychiatric clinic will decide whether the patient should be treated there itself or whether he should be sent to any of the specialised clinics which function in the same out-patient block.

*Day Hospital.*---This is a ward attached to the psychiatric clinic. Here the patients are treated by the day and return home each evening. Acutely excited patients could be treated in this way so that they do not disturb the household during the day and they are sent home in the evening in a manageable state. Some of the patients who are fairly well recovered could attend the occupation therapy and recreation therapy centres in the hospital during their stay in day hospital. Day hospital form part of to-



Mental Patients improve under occupation therapy.





day's trend towards treating the patient at the hospital rather than in it, and take account of the social needs of patients and relatives.

*Child Guidance Clinic.*—The problem of children and their illnesses in many cases require separate approach and special line of treatment. Children with behaviour disturbances, children who are mentally retarded and children with mental symptoms complicating physical illness are attended to here. Children up to the age of 12 are treated here.

*Adolescent Psychiatric Clinic.*—Adolescents in the age group of 13 to 17 years and with problem as referred to in the above para are treated here. They have to be treated separately because these problems—reactions and response are different and require different approach and management.

*Seizure Clinic.*—Epilepsy in certain cases produces psychiatric complication and needs medical, psychological and social advice.

This clinic undertakes investigations and treatment in all cases of epilepsy, complicated and otherwise.

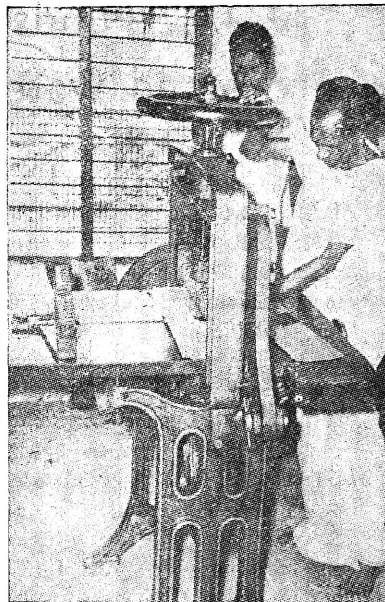
#### *Neuropsychiatric Clinic.*—

Patients who present mental symptoms due to disease of the brain are investigated and treated in this clinic. A Neurosurgeon from Government General Hospital visits this clinic and advises.

*Neurosis Clinic.*—Patients with problems of anxiety, phobias, various compulsive actions and repressive reactions are screened and treated here.

#### *Diagnostic Departments.*—

Unlike other patients, the mentally ill will not complain of various physical ailments. Therefore all bio-chemical and pathological tests are to be carried out, and X-Rays, Electroencephalograph, electrocardiograph, etc., are to be taken for the patients, to detect the presence of various physical illness prior to the treatment for mental illness. Hence there is great importance for laboratory, X-Ray department, EEG Department, etc., in the treatment of mentally ill. These diagnostic facilities are to an extent available now and proposals for their expansion are under way.



The psychology department is manned by qualified clinical psychologists. Every patient is psychologically tested and assessed here which helps the psychiatrist in treating the patient.

*Benefits of out-patient services to the Hospital.*—The natural corollary of the out-patient services is reduction in in-patient strength of this hospital. The pressure for admission has come down. Moreover this helps the in-patients because it is possible to give better attention to them when there is no overcrowding.

While giving better care and treatment to the patients through out-patient services, the Government has financial gain since the in-patient treatment costs more to the Government by way of diet, clothing, etc., for the patients.

(Cont. on page 22)



# L.I.C. Funds give boost to protected water-supply schemes

The financial assistance of L.I.C. has given a boost to the Tamil Nadu Government programme of providing protected water-supply to all towns and municipalities in the State before 1972. The State Water-supply and Drainage Board is sure it can spend as much as Rs. 9 crores in 1971-72 financial year, on schemes in advanced stages of implementation all over the State, as against Rs. 6 crores in the current year. The L.I.C. had sanctioned loans for Rs. 270.78 lakhs to 50 local bodies for their water-supply and drainage schemes during the current year. The Board had sent consolidated proposals to the L.I.C. for a loan assistance of Rs. 296.29 lakhs for 52 new water-supply and drainage schemes as well as 22 spillover schemes. Assistance was required for the remaining 24 schemes. The L.I.C. had assured that it would give credit for whatever expenditure that was incurred from the funds of the State or local bodies on the schemes this year. Consequently, it was proposed to take up these 24 schemes also for execution. A loan of Rs. 192.33 lakhs was secured from the L.I.C. for 1969-70.

**Three major Water-supply Schemes.** The Board was considering three major water-supply schemes and two of them were now at the investigation stage. One was a

Rs. 14-crore project to supply water to Singanallur and adjoining areas in Coimbatore district by tapping the Coonoor and Bhavani rivers. The other related to the Tuticorin harbour-oriented scheme to meet the requirements of the town as also the industries that might spring up there. The third was the Siruvani water scheme involving an expenditure of Rs. 4 crores, to augment water-supply in Coimbatore town.

Apart from these prestigious schemes running into several crores of rupees each, during the last 3 years 46 Municipalities availed Rs. 311 lakhs for water-supply schemes. Similarly 58 Town Panchayats and 2 Townships availed Rs. 34.79 lakhs. Drainage schemes with L.I.C. assistance are under implementation in Coimbatore, Vaniyambadi, Kancheepuram and Madurai.

*(Cont. from page 21)*

Patients and relatives are grateful for this type of treatment where recovery is quick and chances to occupy the previous position in occupation, etc., are greater.

## Targets for the future.—

At present psychiatric out-patient services are available only in Madras City, Madurai, Thanjavur, Tirunelveli, Coimbatore and Salem. Absence of psychiatric

out-patient services near one's dwelling makes treatment so costly and difficult for most of the patients consequent on which they do not avail of any treatment. Therefore it is essential that psychiatric out-patient services should be made available in every Headquarters hospital and take the services to Public Health Centres through mobile clinics, periodically.

## Training of staff.—

For manning all the psychiatric out-patient clinics envisaged for the district headquarters hospitals, qualified psychiatrists are necessary. It is expected that the D.P.M. Course, the specialised qualification in psychiatry, will be started in this hospital in April 1971. By the year 1975 we hope to train sufficient number of psychiatrists for the clinics.

## ANNEXURE.

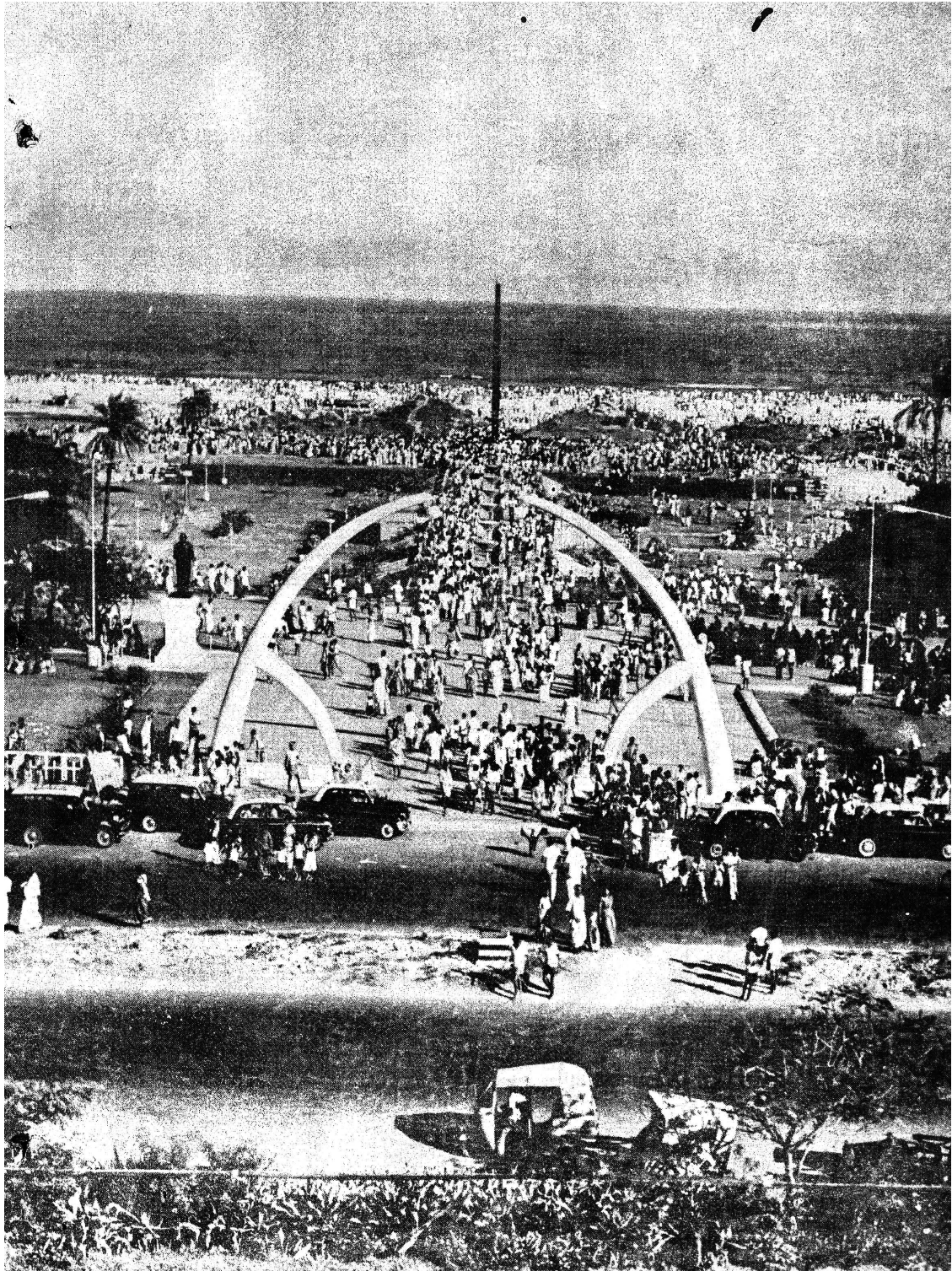
### ATTENDANCE IN THE OUT-PATIENT DEPARTMENT, 1969-70.

#### Out-patients—

1 New cases	...	2,144
2 Child guidance clinic.		450
3 Seizure clinic	...	166
4 Psychoneurosis clinic.		94
5 Neuropsychiatry and Neurology.		51

#### Diagnostic Tests Conducted—

1 E.E.G.	...	313
2 Bio-chemical	...	8,115
3 Pathology	...	53,968
4 Serology	...	2,913





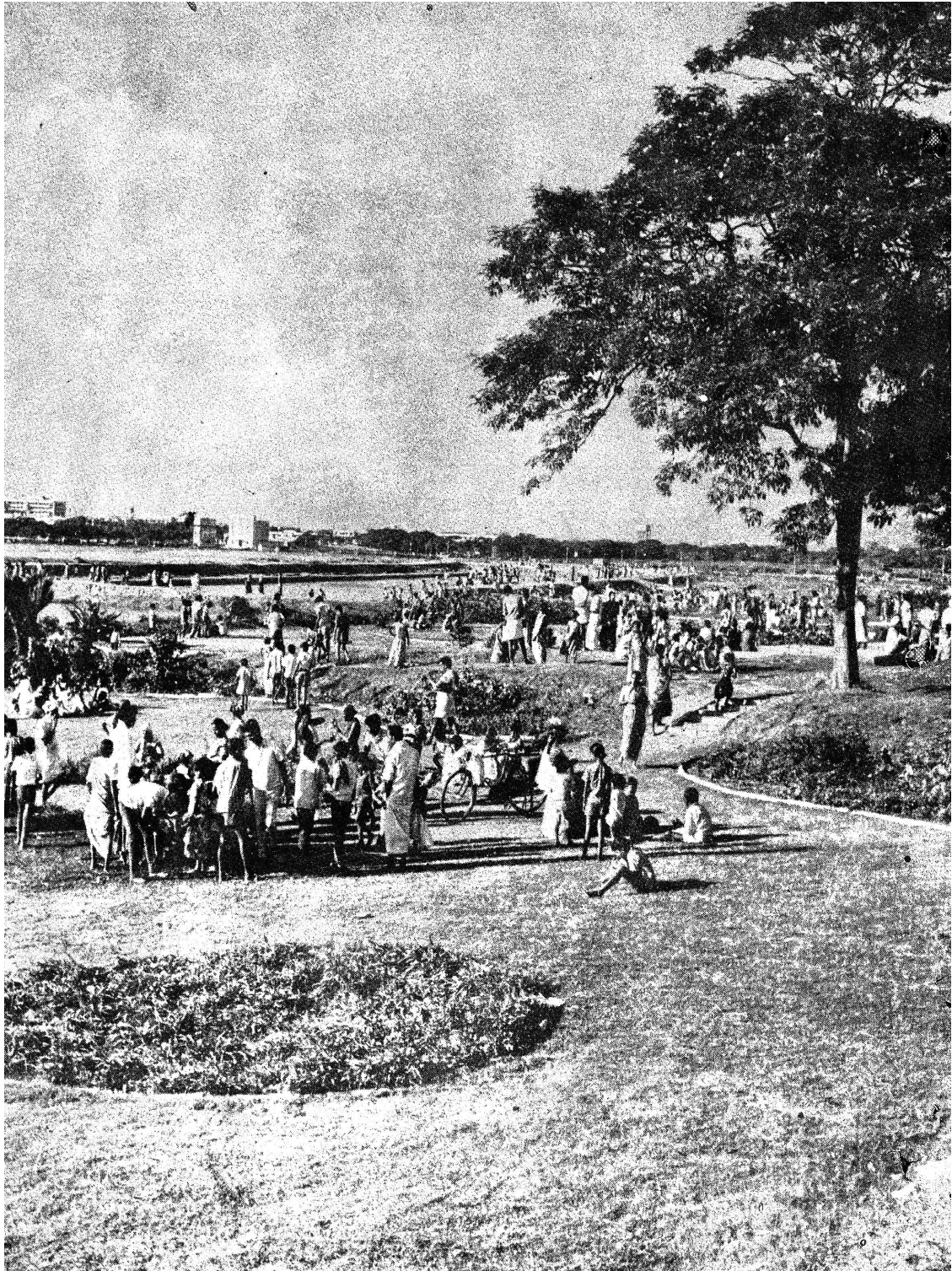
தமிழரசு  
பொங்கல்  
சுழந்தி

Tamil Arasu  
PONGAL SPECIAL  
ISSUE



கடமை  
கண்ணியம்  
கட்டுப்பாடு





# TEACHING ADULTS



## NEW TASK OF UNIVERSITIES

By  
Malcolm S. Adiseshiah

Hitherto there has been a tendency to regard adult education as a temporary measure—as something that was needed only until access to formal education had become universal. But no formal school system, however renovated, can convey all the information one will need throughout one's life. Children going to school today will have to be retrained for new jobs several times during their working life. The rapid technological and social changes in today's world make life-long education a necessity and therefore the organization of further education for adults is becoming increasingly important in all societies.

But I believe we can accelerate this process through a fuller university involvement in adult education. The pragmatic nature of the adult education approach—its tendency to respect the realities of student's lives and needs—can have an innovative influence on the university.

In discussions about university involvement in adult education, we always talk only about how the university can serve the community. This is right. It is only natural that university people who are privileged in comparison with so many others of our fellow citizens in the poor Third World should be conscious of this aspect. They should serve the community of which they are part.

But arguments about services to the community have tended to disregard how much the universities themselves can gain from

involvement in adult education. Let us turn the traditional view around for a moment and ask not what the university can give to the community but what the university can learn from the community.

Adult education means essentially teaching people who already have a lot of knowledge and experience, concerns and responsibilities and most university people who have taught adults have themselves learned a lot from their students. G.M. Trevelyan used to say that in adult education there are no teachers and students but only fellow learners. All of us can testify to this truth. Adult teaching, if it is worthy of its name, is not a monologue but a dialogue.

Adults evaluate what they are learning in the light of its relevance to their lives—their jobs, their families, their social situations. If they go for diplomas or other paper qualifications it is because employers want them, or are thought to want them—not for their intrinsic value. In this adult search for relevance the real problems of people—industrial workers, army officials, politicians, civil servants, housewives, farmers—move right into the seminar room of the university and the gulf that has so often separated the academic from the ordinary man narrows.

With proper feedback, many of the emphases and processes which have always characterized adult education teaching can have an

important innovative influence on the methods and processes in internal university courses :

(a) Internal course content may be affected when adult students taking the course react negatively or critically to the material. Several subjects that are now well established in the curricula of universities have first been taught outside the examination structure to groups of adults and from there fed into university courses.

(b) Relationships between professors and students may change. One of the clamours of our young students is to be given some responsibility, some right to form their own judgments, more right to discern some right to take part in their own decisions about what to learn and how to learn. These rights have long been recognized in all adult education programmes and I know countries where people engaged in university extension or extra-mural studies are now teaching their colleagues how to teach—in an effort to come the educational processes of the universities more mature and adult.

(c) In many universities individual and group work done by adult students has contributed directly to the research work of the universities.

(d) Moreover, in the same way as universities by teaching the products of the secondary schools in its internal courses glean valuable insights into the workings of the secondary schools as preparation for university studies, so

too the universities by involvement in adult education gain insight into how badly or adequately the formal education system prepares people for the tasks of life and for further education in adult years.

In short, then, both direct and indirect involvement with adult teaching opens up the university to the world outside, and leads to questioning of conventional academic approaches to learning. And changes in the university cannot help but have a “drip-down” effect on the secondary and primary systems.

The educational system in this part of the world to a large extent has been built on inspirations from other cultural traditions, mainly European, and there are many resulting points of contrast and incongruence between our education, Asian traditions of education and the realities of life outside of our schools and universities. A change of our attitudes and approaches which will take more account of the economic, social and cultural milieu of the students is needed. And it may well be that the university teaching of adults who are always vocal about their milieu will be a forerunner for the badly needed reform of internal university courses and give such courses a real functionality in relation to the needs of society.

Several Indian universities have been doing extension work as well. Three Indian universities have formal departments of extra-mural studies :

## TEACHING ADULTS MAY USHER IN UNIVERSITY REFORMS

Mysore, Poona and Rajasthan. Since 1932 Mysore University's department of extension and publications has been offering lecture series in the local language, Kannada and printing them. Poona University's Board of extra-mural studies has been active since 1948 and has established extra-mural centres for primary teachers in towns of over 10,000. This University organizes popular lectures and has a summer school.

Rajasthan University has had a full-fledged department of adult education since 1967. Apart from Australia, to my knowledge, this is the first one in this part of the world and I believe that we owe this to the inspiration of our beloved President Mohansingh Mehta. The guiding principle for this department has been community service. A five-month survey was used to identify the needs for adult education that were not being met. As a result, the traditional extra-mural courses were not developed. The department is located in a predominantly rural area where it organizes simple and practical courses that the survey revealed as needed, among them shorthand

# THE COIMBATORE EXPERIMENT IS AN EXAMPLE

and typing, improvement of English and home gardening. There are also refresher course for professional and occupational groups, mainly teachers, engineers, labour and welfare officers. Five adult education centres have been created by the university. Several extension lectures are also organized.

**Correspondence courses.**—At the University of Rajasthan there is a correspondence institute. The University of New Delhi has been organizing nation-wide correspondence courses for the Bachelor's Degree since 1962. The Chinese University of Hong Kong has also offered correspondence courses, as does Padjadjaran University in Indonesia.

**Community service.**—The Rajasthan University survey revealed that 58 per cent of the teachers involved in literacy teaching did not enjoy literacy work. Hence, here was one area where the university's help was needed: in better preparing the teachers and in developing good teaching and reading materials. A training programme for literacy teachers and workers was therefore established. A year-long training course for instructors of modern

agricultural techniques at village level exists in some Japanese universities. Japan's social education consultants, at least one of whom every municipality is required by law to employ, are also trained at a special university course.

In Coimbatore a purpose-designed adult education was run. The concept of this purpose-designed education based on a careful identification of needs and interests of the adults, viz., use of high-yielding varieties took care of this literacy as well.

Out of 80 farmers who attended the two functional literacy courses for a total of 18 months, and sat for the six-year primary school diploma at the end, 50 obtained it. Six years of school education in 18 months of out-of-schooling!

Universities all over the world have been slow to associate themselves professionally with literacy work. For too long there was a feeling that this work did not require much in the way of specialized skills. This is not so. Now universities are beginning to realize that they have a fundamental role to play in research, in the design of curricula and teaching materials and in training at the higher levels. And the university role is not restricted to one particular university department. The linguists, social scientists, agriculturalists, engineers and pedagogues to mention only a few have contributions to make. In making these contributions, by applying their know-

ledge and skills to new problem constellations, they become aware that their newly-gained experience has an important transfer value to their ordinary university teaching and research.

The universities must also assist governments and all those involved to work out comprehensive strategies for the development of adult education. And only the universities can provide this assistance. Technological development has increased the number of alternatives—and combinations of alternatives. What should be the respective role of radio and television, of correspondence education, of programmed instruction, of evening classes, of training on the job, of day release, of residential adult education? Time is against us. The technological development of the communications media has proceeded so fast that the utilization of these media for educational purposes is lagging way behind their use for propaganda and entertainment. How much should be devoted to training of teachers and instructors, how much to the production of teaching materials? These questions are pressing for answers, and how can rational answers be given in the absence of research and cost-effectiveness studies which only universities undertake.

## RADIO AND T.V. ONLY TO ENTERTAIN?



# UNESCO'S OFFER TO UNIVERSITIES FOR ADULT EDUCATION PROGRAMMES

And UNESCO will walk alongside of you as you respond to this challenge. It will assist Governments to extend educational planning to adult education, co-operate with you in developing adult education institutions and in the utilization of new media and techniques. In building your own high level manpower in adult education, it will co-operate with universities in developing professional training and research in adult education and making available short-term professors or lecturers in adult education. Above all, in aiding university renovation and reform in Asia and the world over, it will suggest structural, methodological and managerial models and means of universities becoming universities—centres of continuing education.

I have one further offer. It is that the conclusions of this meeting the canvas of needs and potential that it indicates, and the practical follow-up of its recommendations by you become an important input into the two UNESCO Conferences in 1971 and 1972, Conferences which will mark a further decisive stage in the development of education, all education viewed as an interrelated comprehensive learning process in Asia and the world:

The Fourth Asian Minister's Education Conference in Singapore in June 1971, and

The Third World Conference of Adult Education in 1972.

1970, the International Education Year is coming to an end. It has not been a year of celebrations or mutual praise. Rather it has been a year of reflection over our shortcomings and problems and a search for answers. It has been for me an unforgettable experience to see how the nations of the world have been able to engage each other in a constructive debate leading us nearer to the identification of the problems of education and to the concerted efforts for their resolution. The UNESCO General Conference which has just concluded has approved the establishment of an International Commission to study and report on strategies for the development of educational systems. Thanks to you and fellow educator like you, that Commission will not treat education as synonymous with schooling, nor will it limit itself to the education of the children and the young. The discussions at the General Conference showed, for the first time in the history of UNESCO, and for that matter for the first time in the modern history of education, universal acceptance of the concept of life-long integrated education. I started my address with this revolutionary concept and I close with it, viz. the decade of life-long education.

## GOVERNMENT ACTION ON YARN SHORTAGE.

The Government of Tamil Nadu feels very much concerned about the recent abnormal increase in the prices of yarn, particularly in counts of 40s and below. Not only are the prices of these counts very high, but there is also an acute shortage in the availability of these counts. This has affected thousands of handloom weavers in the State who are engaged in production of Dhothies, Sarrees, Bedsheets, towels, etc. The State Government have been urging the Centre to import immediately, large quantities of cotton, particularly of the short staple varieties and allot a sizable proportion to the spinning mills of Tamil Nadu. But as the import of cotton is a time-consuming process, and as the handloom industry is already in the grip of a serious crisis, the State Government have also requested the Government of India to import yarn itself, to feed these handloom and also to bring down the prices. In a telegram to the Prime Minister of India, Thiru M. Karunanidhi, Chief Minister, has urged the Centre to effect immediate imports of yarn and cotton. The State Government are also considering other steps to ensure fair and equitable distribution of yarn to the handloom weavers. A regulated distribution scheme has already been introduced in the co-operative sector, where yarn produced by the Co-operative Spinning Mills is allotted to the handloom Co-operative Societies in an equitable manner, at reasonable prices.

# NEW INSTRUMENTS FOR IDENTIFYING CRIMINALS

Dr. H.L. BAMI, Ph.D., F.I.C.,  
DIRECTOR, CENTRAL FORENSIC  
SCIENCE LABORATORY, NEW DELHI

Personal identification of both criminals and the suspects has been a basic need in crime investigation. Records of criminals' identification must be maintained and searched for establishing eventual guilt or innocence of the persons suspected of crime. Alternatively, a crime must be traced to a specific individual(s) so that he is personally identified in respect of the physical evidence. Tracing of the elusive criminal must thus depend upon methods of search and establishment of his true identity eventually. Correct personal identification also safeguards the innocent. To achieve this goal effectively, the police all over the world has always fallen back on available physical, scientific means and methods to evolve a fool-proof system of personal identification. The need for systematic crime investigation through organised police forces all over the world was greatly helped by the introduction of the finger-print system for personal identification. This was not only a significant technical advance but has also been universally accepted, since the beginning of this century. However the original finger-print system has been extended, elaborated and improved continuously and is at present the sheet anchor for crime investigation.

In recent years police forces have come to realise that the services of scientific experts covering a much wider field may be utilised

with advantage in the solution of not only the types of crime which may make headline news but also in the relatively prosaic day-to-day offences such as house-breaking, safe-breaking, robbery, dacoity, road traffic accident, forgery, fraud, arson, smuggling etc.

The forensic science laboratory forms a feature, rather an adjunct of the Police Force. This laboratory is to examine, compare and evaluate physical evidence, to link a suspect to the victim or to the scene of crime. The forensic science laboratory supplements the work of the police investigators in order to build a strong case against a suspect. Another important function of the forensic science laboratory which should not be under-estimated is to protect the innocent. It is the sacred duty of the forensic science laboratory to determine facts which are not subject to the bias, prejudice, and other human failings of the eye-witness. In fact the laboratory's resources, are resorted to even in the face of photographic evidence.

Amongst several advances in photographic equipment, recently an Infra-red camera has been developed for photography at night without the use of flashgun. It is very useful in apprehending suspects at night.

There has been little basic advance in the finger-print study and classification system although various sub-classification systems have been introduced to

cope up with the large number of prints in national collections which now run into millions. The problems currently faced are of cataloguing and search of a very large collection of finger-prints most expeditiously and correctly. Employing television video-tape system, finger-print images, have been recorded with relevant data. This has been used for storage and retrieval in case of large collections (over five lakhs). Attempts to use computer system for classification and search (such as electronic data processing) had limited success so far and even this cannot eliminate the need of trained finger-print experts altogether. However, constant efforts are being made to handle large number of finger-prints efficiently. Efforts to retrieve finger-prints under more difficult conditions have been constantly made. An X-ray method was evolved for developing finger-prints on the skin of the victim based on technique of electronography. In this method, lead powder is deposited on the skin of finger-tips and an X-ray photograph taken suitably. Similarly, on paper, volatisation and depositing of metallic powder can be used to develop finger-prints even upto two years.

Finger-printing of decomposed, burnt and mummified bodies has received special attention and various experimental techniques have been improved and developed. Using Periphography camera, it is also now possible to

take full picture of a finger-print on any small circular object. Considering the most infallible nature of finger-prints, efforts have thus been directed continuously to retrieve the finger-prints in all possible cases and situations.

Foot-prints (where ridges are present) as well as foot-wear evidence (shoe-prints) when scientifically presented on finger-print comparison basis, have a definite place today in personal identification. Worn foot-wear is of special significance today in the matter of identification based on comparison.

Next to finger-prints, ear offers most characteristic features for the identifications of the individual as they do not change from birth to death. Recently, a system based on 12 points of comparison has been developed which involved noting down of definite peculiarities and their cataloguing on a standard form. However, it is too early to finally evaluate this innovation.

Forensic odontology, dealing with study and comparison of teeth has gained a place of significant importance in personal identification. In several important murder cases, dental identification (including photographic superimposition of teeth) has led to successful prosecution. In the "Biggar Murder Case" in U.K. three bite marks on the body of the victim were the principal evidence. There were conclusively proved to be caused by the accused on the basis of exhaustive comparisons. Teeth deformities, fillings, missing teeth, diseased teeth, etc., are individual

characteristics which are often the basis for identification or elimination of the suspects. X-rays photography and general photographic data on teeth is of basic value in the comparisons. A system of artificial denture identification based on their initial markings by suppliers can also be incorporated in personal identification. In fact so specific and characteristic is the method of dental identification that many air lines and police agencies are keeping systematic dental records of their employees for purposes of subsequent comparison. Thus the teeth which were once only of use in determining approximate age of the individual, today can serve as specific means of personal identification-perhaps much more in times to come.

Dr. Kersta in U.S.A. introduced a method for transcribing a person's voice from a record through an electronic machine (called spectrograph) on to paper to obtain a sound pattern. These spectrograms normally consist of irregular vertical lines and horizontal bands of various widths. These voice-prints are considered to be unique for each individual because it is improbable that two speakers will have completely identical vocal dimensions and articular use patterns. In fact use of this method for personal identification was claimed to have 99.75 per cent matching. The technique has been successfully used in some cases of telephone threats, blackmailing and allied offences where recorded evidence is involved. However, voice-print as yet cannot be placed at the

same standard of reliability as the finger-prints. In times to come, with further advance, the voice-print could get increasingly into use for personal identification under suitable conditions.

### **Olfactronics.**

Olfactronics is the science of detection and measurement of odours (whether detectable by man or not). It is dependent on the materials which must emit vapours in sufficient concentration and they should also be characteristic from other odours from common sources. A suitable gas-liquid partition chromatograph is used in combination with high sensitivity detectors to measure odours. Apart from other uses (for detection of narcotics, explosives, etc.) attempts have been made to record individual odours, if they are in sufficient concentration. Furthermore, if an individual has been in contact with a substance giving odour vapours, this fact can be established to incriminate the individual. The technique is under further development and its potentialities are being explored.

The objective of individual identification is not only being achieved through the conventional means of photography, finger-prints, handwritings, study of bones and blood grouping, etc. but also by newer instrumental techniques involving sound and smell.

This multi-pronged attack on identification of a person (dead or alive) has already yielded great success and the present advances are bound to make the task of the police officers even more easy and fool-proof in the future.

# FOLK ARTS

*S.D. Sundaram*

The sense of art is not the exclusive monopoly of the minority happy-go-lucky people—the so-called aristocrats of Cities.

Millions of village folk too have abundant sense of art and innate sense of culture. In fact, the innocent rustic villagers with deep faith in the purer sense of art, unpolluted and uncorrupted by the so-called Civilisation. The Great Arts fostered and nurtured by the village folk are as pure as the laughter of the innocent child.

The child's laughter is boundless, unfettered and unaffected by any whims and fancies. Of course, it may not conform to any of the classifications of laughter devised by the grammarians of smile.

Yes, the first effulgence of the fountain of peace is the maiden blossom of the infant's smile. It has the mighty power to remove confusion and confer calmness peace and tranquility—which even thousands of Universities founded by wise men cannot infuse.

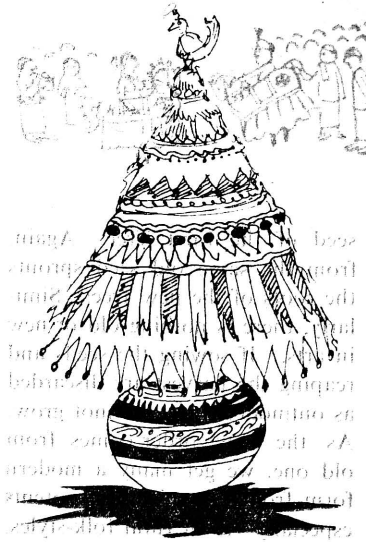
It is this eternal truth that the Immortal Poet Bharathi proclaims while portraying his Kannan's form as a child :—

“May the wild evil in me  
be washed away

By the divine glance of your  
smile's slay !

It is this divine power of the child's smile ingrained in the rustic arts of beauty that confers the boon of tranquility and peace to the village folk. Such Arts have come to be popularly known as Folk Arts.

In those days, there were no established theatres no booming radios with blowing loud-speakers—no cheap films that smash the human mind—no sexy dances to quake the earth ; no concert platform to deafen the ear-drums—no clubs to thrash their own problems in the Concert Hall without caring the presence of the performing artiste however genius he may be and no cheap artistes degrading themselves by crowd catching for petty chances. But in these remote hamlets there were genuine human soul with real devotion and severe



execution and tranquility served as the twin foundations of their daily life.

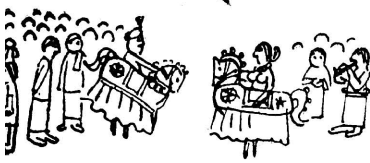
Strength of nerves—humility of mind—dignity of labour—passion for unity—magnimity of heart—pride of their heritage—fraternity, chivalry at heart and kindness in thought—such are the noble qualities of the village folk who fostered, developed and enjoyed through successive generations, their Great Arts, which we all hear and see and enjoy.

Even to this day, we are able to witness, in their pristine glory, the ancient folk-arts traditionally fostered by the Peasant people. We hear and enjoy their child-like simple tunes, and scintillating movements of dance varieties.

These arts, in their form may appear old but their content is eternally new, fresh and fine

The new things are developed on the foundations of the old. Thousands of banyan trees have sprung only from the tiny first





seed of the First Tree. Again, from the same old seed sprouts the roots of the new trees. Similarly, there is nothing old or new in arts. If sowing the seeds and reaping the harvest are discarded as outmoded, crops cannot grow. As the new order comes from old one, we get many a modern form, from the ancient art contents especially from rural folk-styles.

In the same way, if our traditional arts and traits are given up, no new arts can ever develop. We are even now able to get a glimpse of the pristine glory of the traditional form only through the arts among our village folk, who live with the Nature which is the perennial source of fine art.

The humming strains of the heart-springs spread sweet music amidst natural surroundings of the village. The people who enjoy this lively music group up to the stature of natural artistes. The following lines will give a picture of this Great Transformation and the subtle creation of natural melody :

“In the wind amidst trees,  
in tunes amidst woods,  
In the song of flowing rivers,  
of water-falls,  
In sounds for vast sea with  
roaring waves,  
In sweet honeyed-drips of  
soul-stirring strains,

From love-lorn hearts of  
of flower-like maidens,  
In the song of tillers in the  
field,  
In the sounds of women  
threshing grains,  
And flouring them with tasteful  
tunes,  
In lilting music of the Peasant  
Women,  
In the Sweet Group Songs  
of dancing maidens,  
Sung to the rhythms of clapping  
hands  
In the music of Veena and  
enchancing Flute,  
Of innumerable instruments,  
by hand and mouth,  
That fills the air of Land  
and Forest,  
Poor me ! For Ever, I've lost  
my heart !

This is the Pen picture portrayed  
by our Great Poet Bharathi  
about the natural resources  
of our Fine-Arts.



Submi...

These artistes are not mere students of art. Just as the renowned Stardom artistes of the urban areas, these artistes too are talented experts in their respective traditional arts. That is, they are the Star Artistes of the villages. We should also witness their talents.

The village folk have not differentiated, as the urban people

have done, their arts and profession. The reason is, their labour knows no rest. Time is precious to them. Only if they toil in the land without wasting even a day, the crops will grow and they can reap a rich harvest to feed the thousands of urban population.

From the time of sowing in the lands till depositing the produce in the granery, they cannot part from their work spot fields. When the rice boils, on the oven, the house-wife cannot stir out. Similarly, after sowing the seeds the peasants cannot attend to anything else till the harvest. They cannot afford to take rest from this life-saving avocation. Hence, the Peasant-Folk have interwoven their arts with their vocations.

Undoubtedly, the ecstasy of the Poet's heart portrayed in the above mentioned poem, kindless every other heart to patronise these living arts of the people without any distinction of high or low.

Let us go through a folk song sung in the natural back-ground of an ideal southern village :—

“There are signs of the  
river flooding tomorrow  
The lightning shines behind  
the mountains' row





Today and yesterday did the  
whirlwinds blow  
The water-bed frogs quack  
in pitch high-brow.

This is a line from the famous  
'Mukkudal Pallu' Let us see  
another some sung by a Modern  
Poet adopting the folk form.  
The song is on the River Cauvery:

"Like the eternal Truth, our  
Cauvery  
Protects this Land, our  
Cauvery ;

Ever fresh in golden form,  
our Cauvery ;  
Beautiful, as flower-garden ;  
and your creation

Kindles poetic flame in  
poet's heart  
Confers light of vision to  
to our eyes

The King of Western Wind  
Worships her feet  
The King of Clouds shelters  
her crown

The King of Poets  
provides the shawl of  
of poems

The King of Oceans adores  
with folded hands

In adi we plant the tender-  
lings in the field

With Divine Grace you  
provide the shield ;

The Lakes and Tanks with  
your mercy, Oh !  
Cauvery ;

You've filled with your munifi-  
cence, as Great Pari, the  
Benefactor.

Agriculture is the culture of all  
cultures. Just as a devotee  
prays to God during his work,  
the villagers link their entertain-  
ment with their daily routine of  
agricultural work.

Hence, the music rings along-  
side of their work. Tunes spring  
even from their toil. Flowing  
of music synchronises with the  
sowing of seeds. To the  
thousands of cattle grazing in the  
land, the breezy wind brings  
the sweet songs of the shepherd's  
lute. Yes, the vast earth as a  
whole is their stage. The blue  
sky is their decorated roof. The  
sun, moon and the shining stars  
are the spot lights of their  
beautiful comic stage. The  
boundless woods and mountains,  
rivers, and forests serve as  
nature's backdrops to the  
folk-stage.

Music at the plough ! Music  
at the fields ! Music in the  
garden ! Music at the Canal  
bunds ! Music while watching  
the crops ! Music while harvest-  
ing the produce ! Music while  
threshing the grains ! Thus  
the whole life will reverberate with  
music !

After the harvest, the festivals  
begin. The urge for art which  
was merged with the Peasant's  
work till January, culminates in  
devotion to the Divine in the  
months of March and April.

Yes, the people's art which was  
full of music till harvest, now  
takes the shape of dance.

Busy activity and constant work  
are their nature. Hence, at the  
end of their dedicated toil at the  
plough, they direct their arts  
to wards devotion to the Almighty  
in whom they believe with  
implicit faith.

In these months which form the  
Spring season (from January to  
April) the village youth celebrate  
festivals of valour like ('*Manji  
Virattu*'). They commence with  
the play of drums. Ovens with  
'Pongal' brighten those temples.  
Young maidens dance to the  
rhythm of hand-claps. They  
play also 'Kolattam' in which





to the verity of special tunes called 'Kavadi Chindu'. The orchestra is "Naiyandi Melam" consisting of Nadaswaram Taval, Pambai and Thambku.

Thousands of Kavadis form in groups and commence the dance to the rhythm of music, which will reverberate the whole atmosphere. The songs of ecstasy have endless form and innumerable variations. The Kavadi style songs are most attractive with alluring and captivating tunes in countless rhythms, while thousands of Kavadis which are decorated with peacock feathers move on the hills which will create an illusion that the whole Hilllock is moving like a peacock.

Some resort to 'Karagam' dance in obeisance to the Divine Mother. The 'Karagam' dance is a tireless feast for the eyes. Its music abounds with divine ecstasy. The songs are sung in praise of the 'Divine' Mother' (Goddess of rain Mariamman) entreating her mercy for seasonal rains and for bestowing prosperity and also for warding off epidemics and evils.

During Car festivals, the Dummy Horse Dance is common sight. In the Dummy Horse Dance or Puravi Attam, the dummy horse is lavishly decorated so as to resemble a well-bred palace-horse or war horse. In this, the dancer appears as if he is riding on the horse and he dances to the tune of orchestral music. The dancer will attach himself to an artificially made horse of light wood.

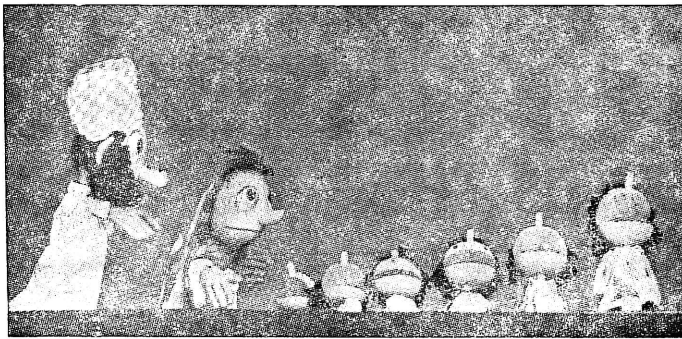
Similarly, Bull Dance, Peacock Dance and other dances find a place in every village festival.

One sometimes comes across another type of dance called 'Oyil Attam'. Oyil Attam is a major folk dance of men and the village people take keen interest in it. Normally the group consists of 15 to 20 men including the teacher and the accompanists. The dance is performed during village temple festivals. The dancers wear gaudy coloured trousers, matched with a suitable shirt a shoulder scraf, a towel, ankle bells and staff, similar to



instead of clapping their hands, they use short painted sticks to indicate the rhythm, beating them together in a scissor-like shape. Though the music and dance may appear simple, their execution is found to be refined and graceful with many an attractive variation in tune, foot-work, post and movement.

After Kolattam, the middle-aged folk will take 'Kavadi' as offering to the Lord Muruga, the Lord of 'Kurinji' land (Hilly region). The 'Kavadi Nadanam' is a well known and very ancient form of folk-dance. The Kavadi is swung round to the tune of music, with dance-movements. The dance is performed according



the one carried by military officers. One man begins the song and it is responded in chours by the rest of the group.

The youth will play sometimes to 'Silambattam'. This is a rare feat, performed in rhythmic movements and the performer swings the stick with dexterity of hand and at a very high speed at the climax.

'Lavani' is another type of folk-art wherein a controversial theme is taken for argument by two sides of singers. Generally "Burning of Manmatha" (Conquering the Fairy of Love-Cupid) form is the main theme. One side asserts that Manmatha was; other asserts that he was not. Arguments are advanced and met in songs style and the audience enjoy for hours together this endless treat of entertainment.

"Villupattu" is another type of folk music of 6 to 8 artistes using a long bow-like instrument with tinkling bells attached to the thick string of the bow. A mud pot gently is beaten in the mouth by the leather piece and an Udukk is also used. The themes centre round the meritorious deeds of Gods and Goddesses, heros and heroines. Kattu Bomman and

Sudalai Madan are some of the favourite themes of this of this folk music. The leader of the group narrates stage by stage in music and the rest will punctuate it by refrains.

This art of Villupattu is performed often throughout the night, as it keeps the thousands of audience spell bound.

"Bommallattam" is also performed at the village festivals. In the Bommallattam, the characters of drama are represented by decorated little dolls and their movements are manipulated by black strings held in the hands of experienced craftsmen standing behind the screen.

The village folk have their own rich dramatic talents. During village festivals, street folk-plays called "Therukkoothus" are performed. Theirs is the old form of the dramatic art. They do not need mike, loudspeaker or play-back voice, to aid them. They will sing themselves. Their voice will be heard to a radius and even a mile. With their powerful voice, they will sing to a mammoth audience with clear intonation of words, at the same time, attuned to the basic sruti. The play will be held throughout

the night, sometimes up to the day-dawn. They have the traditional training to portray exactly their emotions in every movement of their limbs and every phase of their acting.

Themes from puranic dramas like Harichandra and Rukmangada are generally depicted in a opera style. The music of such dances is not only contain a high order and rythmic sense of classical type, but also very appealing.

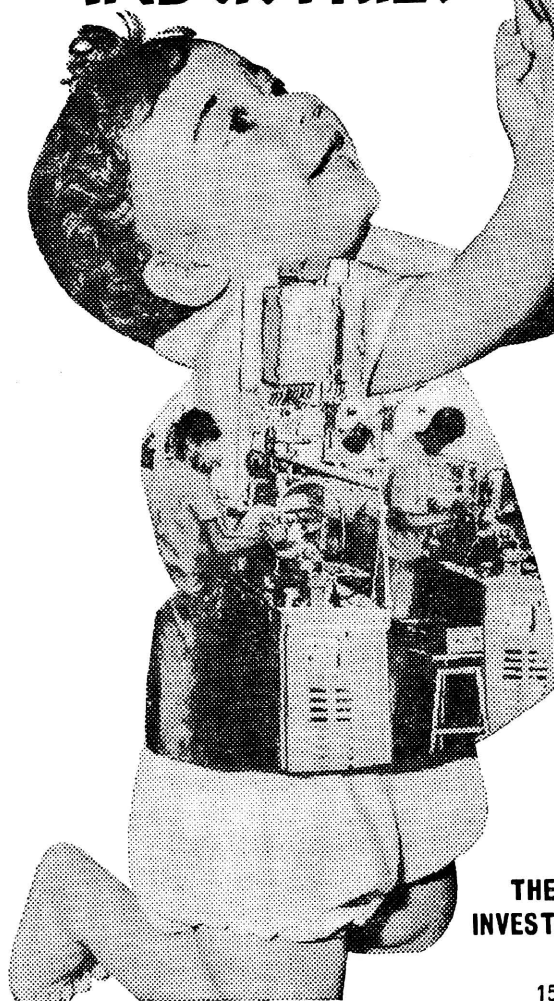
The greatness of the folk arts is as boundless as the arts themselves. All arts patronised by the urban people can trace their origin in these folk arts. Folk arts reflect the real life of the village tradition. It is the duty of everyone of us to help, preserve and promote this Divine Form of the Peoples' Art, which richly deserves all the help and encouragement of a Welfare State interested in rural reconstruction.

No description about the earlier forms of the folk arts will help sufficient appreciation of their evolution, unless one listens and enjoys these art forms in their proper perspective and background. A research through a hundred pages of description about sweetness cannot equal the taste of a drop of honey, and the joy it gives.

Hence, let us try to have a glimpse and first-hand information of the folk forms themselves to understand their real worth which will automatically educate people in the evolution of these forms.



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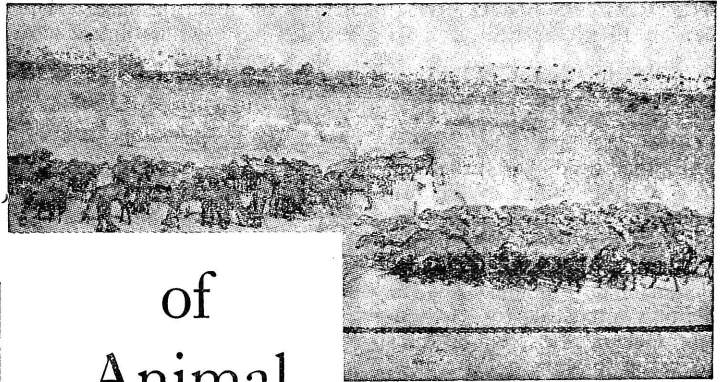
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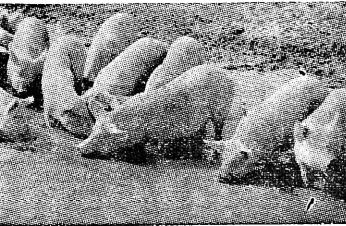
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# Strengthening



## of Animal Husbandry

## Department



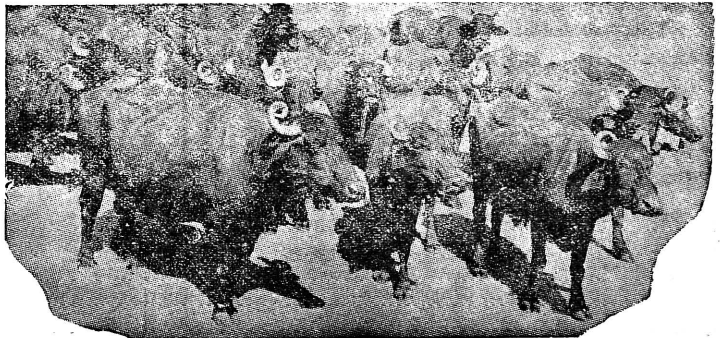
breeding work and control of diseases in the villages.

Ninety additional posts of Veterinary Assistant Surgeons have been created at a total cost of Rs. 3 lakhs per annum in order to strengthen the technical personnel in the field to provide efficient veterinary service. This is the first occasion of this type in the annals of the Animal Husbandry Department.

(Continued on Page No. 41.)

During December 1969 the department of Animal Husbandry was reorganised with a view to achieving greater decentralisation, cohesion and uniformity of control over the various activities of the Animal Husbandry Department. As a result of the reorganisation, the department has been divided on a territorial basis with six Regional Deputy Directors assisted by 3 subject matter Specialists (excepting for Deputy Director, Madras Region). Under the new set up 2 Veterinary Assistant Surgeons will be allotted for each Community Development block. One will attend to disease treatment work and the other will attend to the

Animal Husbandry and extension work. Under each Extension Veterinary Assistant Surgeon, there will be a number of subcentres manned by Livestock Assistants. The Extension staff will attend to all aspects of



## NUTRITIOUS FOOD FOR PRISONERS.

### INTRODUCTION IN CENTRAL JAIL, MADRAS.

The Government have examined the need for providing more nutritious diet to the prisoners in jails as it had been observed that the present diet is somewhat deficient in calories, calcium and Vitamin-A. The Dietitian attached to Government General Hospital, Madras was asked to work out a revised scale of diet to 'C' class prisoners in the Jails. As per the revised diet proposed by the Dietitian, the ration of food grains and articles now allowed to the prisoners has been increased.

The Government have decided that the new scale of diet may be introduced on a phased programme starting with one general

Jail in the first instance. The new diet has been first introduced in the Central Jail, Madras for a period of one year.

### ANOTHER HEAVY WATER PLANT FOR TAMIL NADU.

The Kalpakkam Atomic Energy Centre near Madras will soon have a second heavy water plant with French collaboration.

The French Ambassador told correspondents that France would provide a loan of about Rs. 5 crores to India for the construction of the heavy water plant.

France, he said, was negotiating for closer collaboration with India for the manufacture of a radar by Bharat Electronics but the negotiations had not yet been finalized.

He said France would collaborate with India for the production of a new type of helicopter suited to Indian conditions with Hindustan Aeronautics Limited, Bangalore.

### THE TUTICORIN BOAT VICTIMS.

#### RELIEF PAYMENT TO DEPENDANTS.

The Government of Tamil Nadu have sanctioned payment of Rs. 1,000 each to the legal heirs of the sixteen persons who were drowned in a boat tragedy off Tuticorin in July last. This payment will be met from the Chief Minister's Relief Fund. The Government of India have also sanctioned an amount of Rs. 1,000 as a matching grant to the legal heirs of the sixteen deceased persons from the P.M.'s Relief Fund.

### Distinguishing Consideration !

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My Dear Doctor Chinnappar,

I remained in hospital for 7 days and all checks and tests were carried over. No sugar in blood or urine was found. My diabetes is completely under control now.

Since then there is no further deterioration of the condition. I am keeping good health. I regularly check my urine and there is no trace of sugar.

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With a view to continue the intensified work of the special schemes like Key Village Centres and Intensive Cattle Development Projects in the reorganised set up 21 additional Veterinary Dispensaries have been sanctioned and in all 116 Veterinary Dispensaries-cum-Key Village Centres have been organised. 158 additional Posts of Livestock Assistants have also been sanctioned to strengthen the above institutions.

To intensify the activities of the Rinderpest eradication scheme 3 more check posts and 2 Vigilance units have been sanctioned for location in the border areas to prevent the ingress of the disease, at the cost of Rs. 7.72 lakhs for a period of 3½ years.

**Cattle development.**—There are 6 Livestock Farms and one Salvage of Dry Cows Farm. Up to the end of August 1970, in the Livestock Farms of the

State 5,65,440 Kg. of milk was, produced. At the Salvage of Dry Cows Farm, Alamadhi, 155 Cows were salvaged. Two Goshas sanctioned during 1969-70 are taken up for implementation.

**Sheep development.**—There are 2 Sheep Farms, 9 Sheep breeding Co-operative Societies and 7 Sheep breeding and Cumbly Weaving Co-operative Societies. Up to the end of September 1970, a total of 877 Lambs were raised, 27 Rams were released for breeding and 383 Sheep were culled and sold for table.

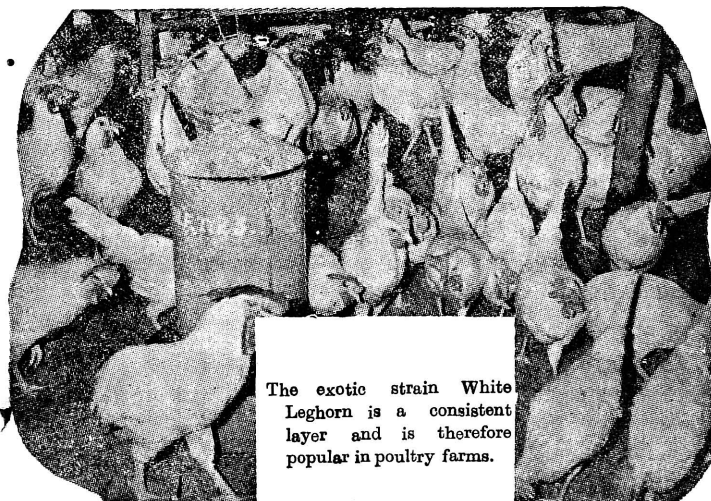
**Poultry development.**—There are 39 Poultry Extension Centres including those in the farms, 9 Intensive Poultry Development Blocks, 3 Chick Hatcheries and 2 Poultry Feed Mixing Units and 1 Poultry Farm. Up to September 1970, in the Poultry Extension Centres, 1,20,119 Chicks were raised of which 31,522 Chicks were sold for breeding and 31,134 for table. 18,03,111 eggs were produced of

which 39,712 were sold for hatching and 8,30,831 for table. In the Chick hatcheries 83,186 Chicks were raised of which 19,253 were sold for breeding and 1,182 for table. During the same period 979 tonnes of ready mixed feed was prepared for sale for poultry breeders.

**Piggery.**—The Pigs of exotic breeds are maintained in all in Livestock Farms of the State. Up to the end of August 1970, 685 Piglets were raised and 243 released for table. The strength of the pigs at the end of the period was 1,383.

**Animal Health Service.**—During the year there were 35 Veterinary Hospitals, 466 Veterinary Dispensaries and 13 Clinical Laboratories. Up to September 1970, 10,59,478 cases were treated. In the Clinical Laboratories 41,298 materials were examined. 85,725 Castrations were also performed. 9,99,232 vaccinations against Rinderpest and 17,84,066 vaccinations against other contagious diseases were conducted.

During 1969, the hybrids between Australian Friesians and Sahiwal cows calved and the hybrid cows are giving on an average 20 Kg. milk per head per day with 4.5 per cent butter fat content. These results suggest that an intensive search and collection of European breeds which had undergone natural and human selection under tropical and sub tropical conditions for a few centuries and their use in cross-breeding programmes in our country would be highly rewarding.



The exotic strain White Leghorn is a consistent layer and is therefore popular in poultry farms.



# I REQUEST STUDENTS TO CONCENTRATE ON STUDIES



“The Committee appointed by the Government of Tamil Nadu under the Chairmanship of Dr. A. Lakshmanaswamy Mudaliar has forwarded certain interim recommendations to Government. The Government will take necessary steps to implement these recommendations from the next academic year. The Government consider that these recommendations of the expert committee will set at rest any misgivings and apprehensions that may have been there among a section of the students and the public.

“Parents and students have expressed their anxiety that colleges should re-open early and function normally to enable students to prepare for the coming examinations. Now that the recommendations of the expert committee are to be implemented by Government, I would request the students to concentrate on their studies without any anxiety,” says Chief Minister Karunanidhi in a Statement to the Press.

The following are the recommendations (interim) of the Committee.

In the Madras and Madurai University areas, there are a total number of 43 Government colleges and 117 non-Government colleges.

## **P.U.C.**

Out of the 43 Government colleges, 41 have P.U.C. classes and 2 have only Degree classes.

Twenty-eight out of these 41 colleges offer instruction in the P.U.C. in both English and Tamil. The remaining 13 offer instruction only in Tamil.

As regards non-Governmental colleges, in 82 of the 117 colleges, there is some provision for students to study in the Tamil medium in the P.U.C.

Thus in 1970-71 out of a total number of 70,058 students studying in the P.U.C. 20,638 are studying in the Tamil medium (12,756 in Government colleges and 7,882 in non-Governmental colleges). Forty-nine thousand four hundred and twenty P.U.C. students are studying in the English medium (4,515 in Government colleges and 44,905 in non-Governmental colleges).

## **B.A.**

There are 35 Government colleges affiliated in the B.A. degree classes. Twelve of these colleges teach through both the media ; 22 exclusively in Tamil and one exclusively in English.

In 26 of the non-Governmental colleges offering the B.A. degree course, Tamil is an alternative medium in the humanities in one subject or other.

Out of a total number of 18,608 students studying in the B.A. classes, 4,027 are studying in the Tamil medium (2,713 in Government colleges and 1,314 in non-Governmental colleges). Four-

teen thousand, five hundred and eighty-one B.A. students are studying in the English medium (1,532 in Government colleges and 13,049 in non-Governmental Colleges).

## **B.Sc.**

There are 30 Government colleges affiliated in the B.Sc. degree courses. Twenty-two of them offer instruction exclusively in Tamil and 8 teach through both the media.

In all non-Governmental colleges, subjects for the B.Sc. are taught only in English.

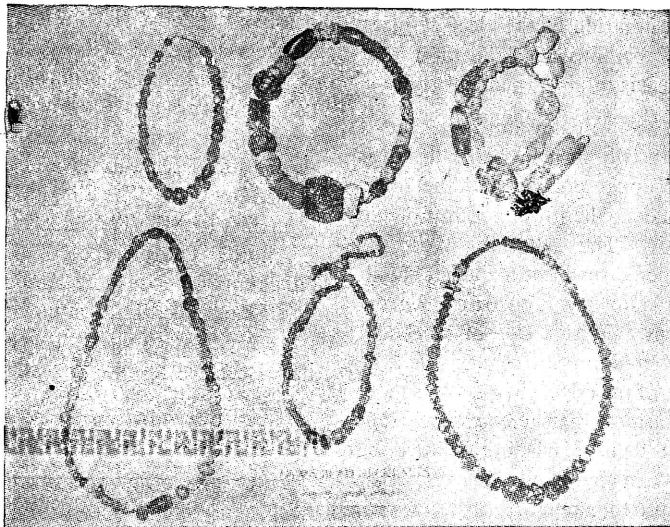
Out of a total of 14,737 students studying in the B.Sc. classes, 2,282 are studying in the Tamil medium, all of them in Government colleges. Twelve thousand, four hundred and fifty-five B.Sc. students are studying in the English medium (747 in Government colleges and 11,708 in non-Governmental colleges).

The Committee took note of the above statistics and resolved to forward the following recommendations :—

(1) The Committee is of the opinion that opportunity to choose the medium of instruction should be available to the students.

(2) In Government colleges where there is provision to study only through the Tamil medium, Government should provide facilities for students who desire to study through the English medium.

(3) In non-Governmental Colleges where there are no facilities for teaching in the Tamil medium, the managements may be requested to consider the steps to be taken to have such a provision if there is a demand for it.



Typical necklaces of old on display at Madras museum.

Men and women throughout the world, and through the ages, have been devoting much attention in making themselves appear much more handsome and beautiful. It is not strange therefore that we come across variety in costume and ornaments.

In the beginning, human beings must have thought of dressing themselves only as a protection from the warmth and chill weather during day and night. It must have been only when man became more civilized, and began to lead a settled life that attempts should have been made to make the costume attractive and varied. Only then the idea of adorning one's self with ornaments must have also come to the fore.

BY

MT. S. RAJALAKSHMI,

M.A., M.Litt.,

Department of Tamil,  
Queen Mary's College, Madras.

In ancient times people all over the world dressed themselves in the skins of animals hunted by them and in barks and leaves of the trees. This must have been true of the Tamil country also. The ancient classics of the Tamils, the Sangam literature, abound in references to the dress and decorations of the ancient Tamils. It looks as though the Tamils were accustomed to the use of leaf-garments. Even when cotton and silk clothing came into use the leaf-garment seems to have been popular with the Tamils. This must have been due perhaps to the use of the leaf-garment for a long period. In the Sangam classics we come across lovers presenting leaf-garments to their lady-love. This practice should have been fairly common among all classes of the Tamils. The leaf-garment should have been considered as the traditional dress. A stanza in the Ahananuru implies that the leaf-garment was usually worn by the

## DRESS AND DECORATIONS OF THE ANCIENT TAMILS

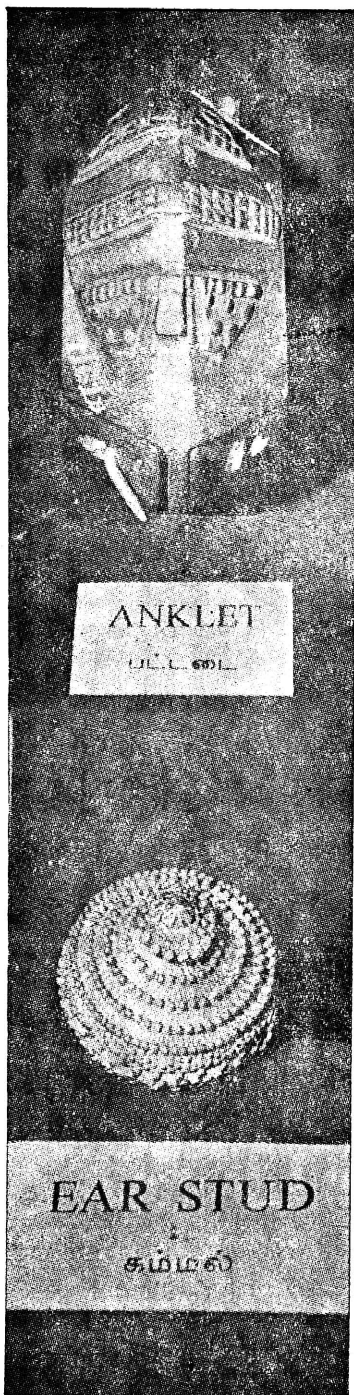


maiden (Ahananuru, stanza 7). The wearing of the leaf-garment was perhaps an indication that one has attained maidenhood.

The ancient Tamils in general wore two garments, one to cover the upper portion and the other to cover the lower portion of the body. The menfolk wore the upper garment over the left shoulder, allowing it to dangle on the front and back side of the body. It would appear from this that the use of the upper garment was more a fashion than a necessity. It is not definite whether it was the custom among all classes of people to use the upper garment. It can, however, be stated that the poorer classes such as the shepherds and fisherfolk used only lower garment.

The Silappadikaram and the Manimekalai mention that the courtiers, or the royal servants wore a kind of garment called the Kanjugam. The Mullaipattu mentions that the Yavanas, by which term the foreigners were meant, wore the Meippai. The Kanjugam and the Meippai appear to have been similar to the coat of the present day. It is apparent from the references that the wearing of the Meippai and the Kanjugam was in vogue only among the royal servants and the foreigners who were employed as palace guards. It is then, needless to point out that the Kanjugam and the Meippai were worn by the warrior class. It is not definite whether they were made of cotton, or whether they were made of leather as in the case of the shields used by the warriors. The Kanjugam and the Meippai appear to

have been worn to cover the upper portion of the body. The warrior class seems to have used the Kachu or Kachai, which was nothing but a belt either worn across the breast or around the waist. The sword and the quiver seem to have been fastened to them. The Silappadikaram mentions the Tunnakkarakar, the tailors. The presence of the Tunnakkarakar implies the use of stitched garments. The Kanjugam, or the Meippai could have been stitched garments.

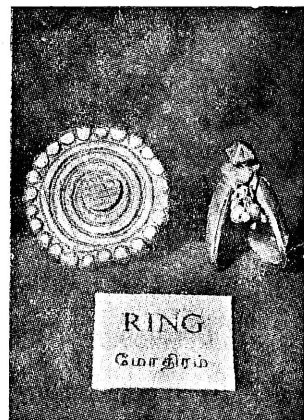


ANKLET

கூகல்

EAR STUD

கும்மல்



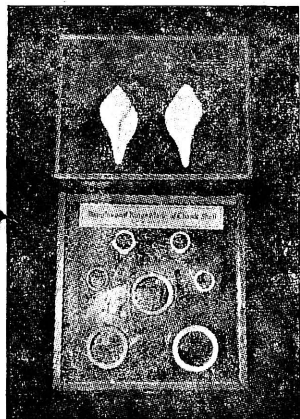
RING

கோதிரம்



The ladies also seem to have used two garments. A poem in the Ahananuru mentions that the bride had covered herself completely in her garments and that the bridegroom had to lift the garment falling on the forehead (Ahananuru poem, 136). The women in ancient times perhaps covered their heads and to some extent the faces also with the garment. This garment could not be anything, but the saree, which

is worn even today, especially in this part of the country. The Kambaramayanam and certain other later works make it clear that the women were clad in sarees. There is reference to another garment that was used by the ladies. That is usually referred to as the Vambu and appears to have been a kind of brassiere (Nedunalvadai, line 150). The Thirumurugatrupadai confirms the wearing of two garments when it mentions that the Kurumagal was clad in contrasting garments both in shape



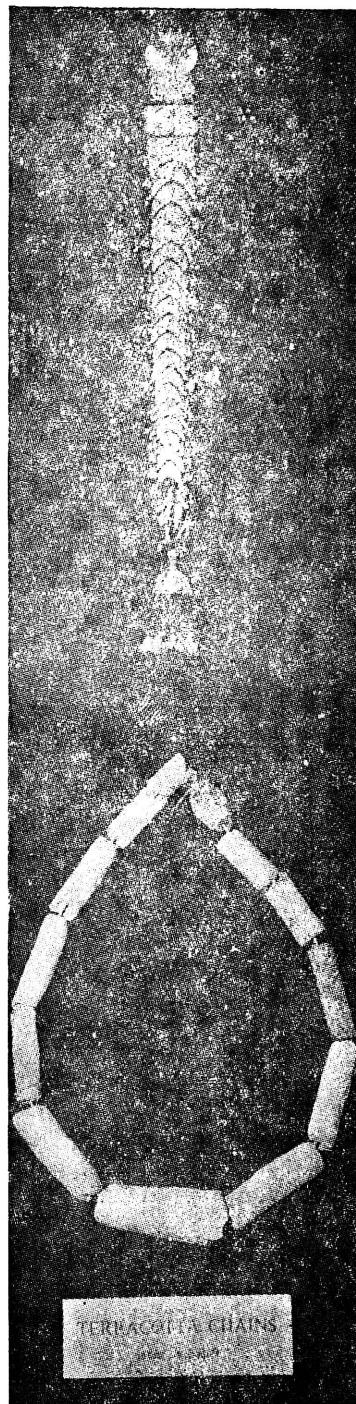
and colour. The Sangam works in particular and literature in general describe the ladies shy and modest and it is therefore natural to find that they took care to cover their body almost completely.

The garments used by the ancient Tamils were mostly made of cotton; but silk garments were also used, probably on occasions, and by the richer classes. There are references to very fine garments with the floral designs. They were

so fine as to be compared with the vapour of boiling milk (Perumpattanruppadai, line 382) and the slough of the snakes. Such references to fine clothing imply that the people living in a hot climate preferred such clothing. The clothes were put to wash and it was the work of the Pulaithi to wash them. The Pulaithi is said to have starched the clothing, and perhaps also ironed it as in modern days. A paste of cooked rice seems to have been used as the starching material (Maduraikanchi, line 721).

Cotton yarn was spun by the ladies mostly and they were known as Paruthippendu. It is seen from the Natrinai anthology that the widows generally engaged themselves in spinning cotton yarn. The cloth was referred to in general as Aruvai. It only implies that the cloth was woven in long pieces and it was cut to the required size. The terms Tuni meaning to cut and Tundu meaning a small piece of cloth, indicate that the cloth was woven in long pieces.

Both men and women in general were fond of adorning themselves in a variety of ornaments. The Tamils were skilled not only in manufacturing fine clothes but also in making ornaments of beauty. The Tamils made use of two metals, gold and silver, chiefly in making ornaments. The Silappadikaram mentions gold of four different standards, namely, Sambunatham, Satarupam, Atakam, and Kili-chhirai. Out of these Sambunatham was of highest purity and it was generally used for ornaments. Strings of pearls were popular



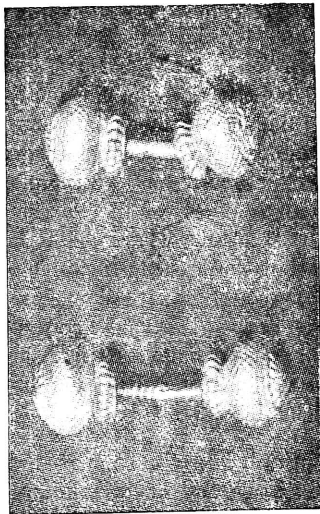


among people of higher classes. Precious stones such as diamond sapphire, etc., were set in gold ornaments. Even gold coins were strung together and worn around the neck (Kurunthogai, 67).

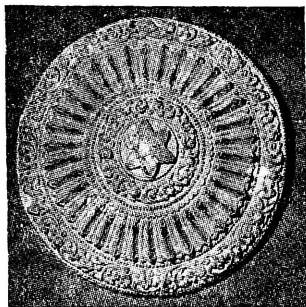
In Sangam literature we come across a variety of ornaments. Children wore around the neck, the Iympadaithali and the Pulipalthali. The ladies decked themselves with the Pulippalthali. Likewise the anklet variously called as the kinkini or the Silambu was worn by children as well as ladies. Even now when the children begin to learn walking they are adorned with the anklet. The kings and warriors also were accustomed to wearing anklets, called the Kazhal (Purananuru, 40) which was also known as Virakkazhal. The anklets were filled with either pearls or precious stones, such as the carbuncle. In the Ahananuru there is reference to a practice among the Tamils called the Silambu Kazhi Nonbu. According to it, the lady to be married discarded the anklet worn by her and took a new anklet. Perhaps, there was some difference in the shape of the anklets worn by the women, before and after marriage.

The Mekhalai was another popular ornament. It was nothing but a metallic-belt with loops, worn around the waist. In the Kambaramayanam, we come across another kind of waist-belt called the Kalabam. The Kalabam is said to have consisted of 16 loops, whereas the Mekhalai consisted of 7 loops. Ear-rings were as common as they are today. There seems to have been a great variety in ear-rings.

சிலம்பு கழி நெய்



சிலம்பு கழி நெய்



சிலம்பு கழி நெய்

Some of them were so shaped as to resemble the fish. Certain others perhaps, looked like the rings which have become very popular in recent times. Gold bangles and bangles made of shell were worn by the ladies on the wrist. It is interesting to note that the ancient Tamils were not accustomed to wearing the nose-stud. It is not possible to explain how and when the ladies

among the Tamils came to adorn themselves with the nose-studs. In the Silappadikaram, Madavi is seen decked in a variety of ornaments from head to foot. Deivavuththi, Toyyagam and Pullagam adorned her head. There is no means of knowing the exact shape of those jewels. Of these Pullagam adorned the front side of the head. In addition to the head decoration, Madavi appeared with strings of pearls, etc., around the neck, rings on fingers, bangles on the wrist, Mekhalai around the waist and anklets. In Sangam literature the ladies are referred to as Seyizhai, Nerizhai and Ayizhai indicating that they were decked in choice ornaments. They also indicate the love of ornaments among the ladies.

From all these it could very well be said, that the people were full of aesthetic sense. They must have also been fond of gaiety and pleasure. We may not be far from the truth, if we say that the ancient Tamils believed, in making the most of their lives.

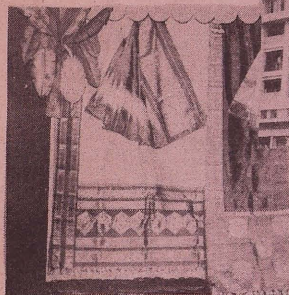
Ornaments in clay, silver and gold were profusely used by the people. In the Tamil Nadu the art of jewellery had attained a high degree of excellence and the Sangam literature which is assigned to the first three centuries of Christian Era throws a good deal of information of the ornaments.

The excavation of Amaravati have yielded terracotta chains decorated glass bangles, besides a large number of beads of semi-precious stones.

Some of these ornaments of historical, tribal and modern styles are being displayed by the Government Museum, Madras.

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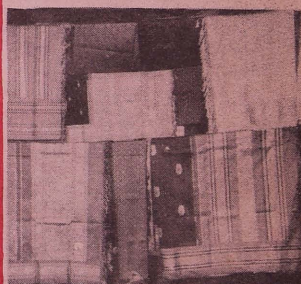
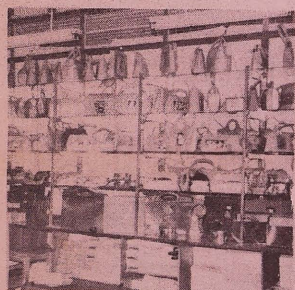
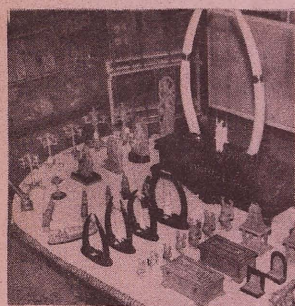
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