

Tamil Arasu

Publication of Information & Public Relations Department



JANUARY - FEBRUARY - MARCH - 2011

Rs.15/-



TAMIL NADU ASSEMBLY CONSTITUENCIES 2011

Assembly Constituency No. []

Tiruvallur District

1	Gummidipoondi	[1]
2	Ponneri (R)	[2]
3	Tiruttani	[3]
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9	Madhavaram	[9]
10	Tiruvottiyur	[10]

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16	Egmore (R)	[16]
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Kancheepuram District

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28	Alandur	[28]
29	Sriperumbudur (R)	[29]
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Vellore District

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Tamil Arasu

Publication of Information &
Public Relations Department

Quarterly Magazine

Thiruvalluvar Year 2042
January-February-March 2011

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தொட்டனைத்து ஊறும் மணற்கேணி மாந்தர்க்குக்
கற்றனைத்து ஊறும் அறிவு.

*Water will flow from a well in the sand in proportion
to the depth to which it is dug, and knowledge will
flow from a man in proportion to his learning.*

Thirukkural 396

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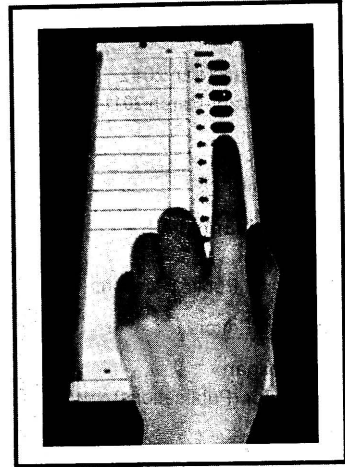
Tamil Nadu Assembly Elections - 2011

The Election Commission of India has announced on 1.3.2011 the poll schedule for Assembly Elections 2011 in Tamil Nadu as follows:

Sl.No.	Happenings	Date
		(Single phase poll on April 13 for all 234 Assembly seats)
1.	Issue of Notification	19.03.2011 (Saturday)
2.	Last date for Nomination	26.03.2011 (Saturday)
3.	Scrutiny of Nominations	28.03.2011 (Monday)
4.	Last date for withdrawal	30.03.2011 (Wednesday)
5.	Date of Poll	13.04.2011 (Wednesday)
6.	Counting of Votes	13.05.2011 (Friday)
7.	Completion of Election Process	16.05.2011 (Monday)

Tamil Nadu has a total of 234 Assembly seats in 32 districts. As per the voter list issued on 10.01.2011 in 234 Assembly Constituencies the particulars of voters are as follows:

Male voters - 2,30,86,295



Female voters - 2,28,63,481
Other voters - 844
Total voters - 4,59,50,620

The biggest and smallest constituencies in Tamil Nadu are as follows:

Name of the Constituency	No. of voters
27 Sholinganallur (Kancheepuram district)	- 3,40,615
164 Kilvelur (Reserved, Nagapattinam district)	- 1,40,181

There are 54,016 booths in 28,909 places in Tamil Nadu. 19,560 booths in urban areas and 36,456 booths in rural areas.

Voters List with Photo identity - 99.85%
Percentage of Epic Coverage - 99.90%

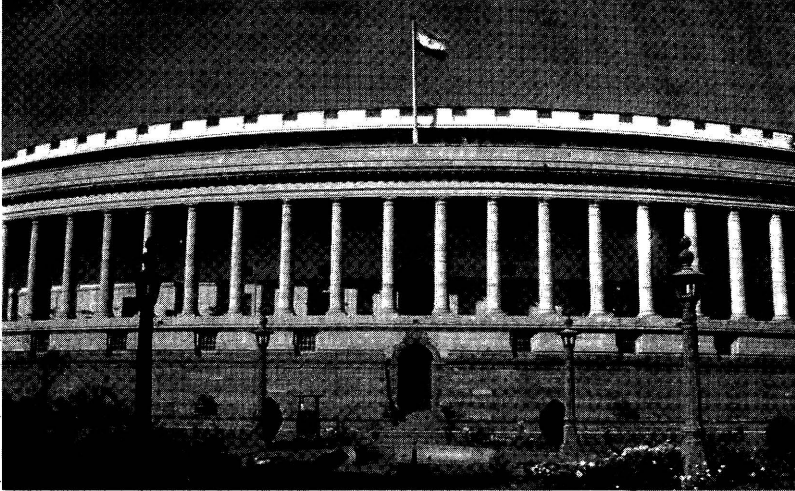
In the coming 2011, Tamil Nadu Legislative Assembly Elections 2,76,519 Government employees will be deployed. The Electronic Voting Machines will be used and 70,004 controlling machines and 98,000 voting machines are ready for use.



CONSTITUTION OF INDIA

FUNDAMENTAL DUTIES

ARTICLE 51A



Fundamental Duties-

It shall be the duty of every citizen of India-

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wild life and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

Epilogue

A great deal of institutional investment and special efforts are called for in education and schooling to disseminate, inculcate and nurture citizenship values so that Indian citizens play their full part in building the nation and enriching the country.

The preceding 19 chapters of this study seek to analyse all the relevant constitutional provisions chapter by chapter and to deduce and distil therefrom the citizenship values enshrined therein. Apart from the conceptual first chapter and the second chapter devoted to indentifying the objectives of Constitution and the basic citizenship values, seven chapters discuss in depth the fundamental values of Sovereignty, Socialism, Secularism, Democracy, Republicanism, Justice—social, economic and political. Liberty, Equality and Fraternity assuring the Dignity of individual citizens as also the Unity the Integrity of the nation.

Separate chapters are devoted to obligations of citizens functioning as rulers viz., as President, Prime Minister, ministers, administrators, legislators and judges; relationship between the Union, the States and the Panchayats; control over State Finance; Trade, Commerce and Intercourse; Public Services; Adult Suffrage and Elections; Emergency provisions; Constitutional Amendments; role of education and Fundamental Citizenship Duties.

The privilege of being citizens of the Republic of India makes adherence to citizenship values a categorical imperative for all of us in whatever position. These values are rooted not merely in our legal status as citizens but in some foundational norms which permeate the provisions of the Constitution. Citizens must respect citizenship values as these bring valuable rights and at the same time ordain required duties.

Many problems in human relations have their source in the desire of one person to dominate over the others. Every citizen must accept the right of every other citizen to govern himself or herself and to decide what is best for him or her. No one, howsoever good or capable, has any right to rule over another person without his or her consent.

Every citizen must accept the position that as citizens all are equal, have the same rights and responsibilities and are entitled to equality before law without any discrimination. Everyone of us must treat all our fellow citizens as equals and must not discriminate between them on any grounds of sex, religion, caste, etc.

Every citizen enjoys the same Fundamental Rights of freedom of thought and expression, freedom of religion, freedom from exploitation, etc. It follows that we must respect the freedom of all our fellow citizens and must do nothing which may result in exploitation of anyone. Where a citizen or a group of citizens are

too weak to protect themselves, it is the duty of fellow citizens to defend their interests through positive social, political, economic or legal action.

Exercise of the rights and responsibilities of freedom also involves a certain degree of tolerance of others and their opinions even when they strongly differ from ours. It requires acceptance of even unpalatable decisions taken democratically. Of course, democracy allows dissent and protests and decisions can be changed through democratic processes.

Violence and conflict are incompatible with the democratic way of life. We must, therefore, try to solve all our problems with fellow citizens through discussion, arguments and persuasion. Societal changes can also be best brought about through peaceful means rather than through compulsion or armed struggle. Democratic method inevitably implies trying to understand each other's opinion, a certain give and take and a certain mutual adjustment.

Citizens voted to be in positions of power and governance must never forget that they are citizens first and always accountable, answerable and responsible to their fellow citizens at large. They must respect dissent, listen to complaints and never try to gag opposition.

Certain standards of behaviour and discipline and a sense of responsibility are essential to democratic ethos. Each citizen must therefore imbibe a spirit of self-discipline and a sense of his or her responsibilities to his fellow citizens and society.

Right to vote under universal adult franchise gives to every citizen an opportunity to participate in the democratic process and to select the government. This right must be used not only to operate and defend democracy but also to make it more effective and meaningful. This is a tremendous responsibility. This right has to be exercised with meticulous care and careful thought, without fear or favour. Also, the more competent ones willing and in a position to be able to rise above petty self-interests and with a desire to serve must come forward to more actively participate in the process as candidates and political activists. A full recognition of our democratic rights and responsibilities as citizens at election time will automatically rid the system of corruption, criminalization, money and muscle power and the like ills.

In a democracy, the tasks of nation-building and economic development cannot succeed unless the citizens at large feel intimately involved, responsible and committed to contribute their mite in every



the ultimate analysis, it is for we, the citizens to awaken to our obligations and responsibilities to ushering in an era of justice. The categorical imperative today is the need of a new moral initiative and a renaissance of values all round. To do this again, we the citizens have to stand up.

The most essential prerequisites for the success of any democratic polity are the willing interest, cooperation and participation of the politically aware, conscientious and intelligent citizenry in the affairs of the State, total respect for citizenship values, spirit of public service and dedication to the cause of democracy and freedom, protection of the civil and economic rights of fellow citizens and the full discharge of their duties and responsibilities by all citizens in whatever position.

way. To give votes and leave everything else to look after itself can be most suicidal for ourselves. Responsibility is cast upon citizens to also exercise constant and organised vigilance over the conduct and activities of those elected to public offices.

As proud citizens we must realise that democratic way of life is the most civilized way because it is based on the dignity of every individual citizen. This also means that every citizen has to respect and protect the individual dignity of every other citizen.

Democracy and citizenship duties are both in a state of perpetual becoming. They keep growing and evolving with the changing societal ethos and needs. They depend, live and thrive on each other. In

An attempt may be made to tabulate the basic values of democratic citizenship as they emerge from provisions of the Constitution. Their quintessence may be put in capsule form or in the form of *Sutras* with some inevitable overlapping here and there.

- * Sovereignty vests in the collectivity of citizens.
- * Citizenship is indivisible.
- * Unity and integrity of the nation constitute a sacred trust.
- * All citizens are equal.

-
- * Citizenship identity overrides all other identities.
 - * Respect freedom of faith and religion, profession, thought and expression, assembly and association and residence and movement for all citizens.
 - * Cultivate mutual regard for all the Indian languages, scripts and rich heritage of our composite culture.
 - * Franchise is both a right and duty: full participation in democratic processes is an obligation to fellow citizens.
 - * Elimination of illiteracy and promotion of education are essential ingredients of citizenship duties.
 - * Respect the Constitution, the National Flag, the National Anthem and the ideals of the freedom struggle.

Citizens and the Constitution

- * Citizens in positions of power must conform to citizenship values in the discharge of their responsibilities.
- * Fraternity provides basis for a democratic way of life – abjuring violence and ensuring mutual respect, accommodation and cooperation.
- * Self-discipline and democratic ethos go hand in hand.
- * Develop scientific temper and cultivate humanism.
- * Respect environment.
- * Protect public property.
- * Strive for excellence.

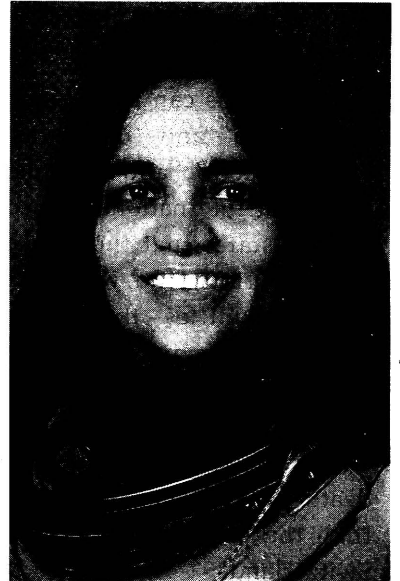
- Subhash C Kashyap

Courtesy : Citizens & the Constitution

Published by Govt. of India.

‘...Do something, because you really want to do it. So even if it is a goal which is not necessarily within reach it may be something which only a handful can do, but if you really like what you do, then you’ve never really lost anything. But if you are doing it just for the goal, and don’t enjoy the path, then I think you’re cheating yourself.’

- NASA Cosmonaut **Kalpana Chawla**
in a, ‘message for all women’



LET US JOIN HANDS TO FIGHT CANCER

★ Each year 127 lakh people discover that they have cancer and of them, 76 lakh die. Two-thirds of these distressing deaths occur in low and middle income countries.

The World Health Organization projects that unless immediate action is taken, deaths from cancer will increase by nearly 80 percent by 2030; most of them occurring in low and middle income countries. That translates to nearly 260 lakh newly diagnosed cases and about 170 lakh deaths every year! In fact, cancer kills more people than do AIDS, malaria and tuberculosis combined.

Research suggests that "one-third of cancer deaths can be avoided through prevention" and "one-third through early detection and treatment". The Union for International Cancer Control (UICC) states that the world's cancer burden is rising and, without action, the poorest countries - those currently least equipped to cope - will witness the largest increases in mortality by 2015. As per the UICC, whose headquarters is in Geneva, Switzerland, the number of deaths due to cancer every year is more than the population of the whole of Switzerland.

There are so many known causes acting directly or indirectly on the systems to produce cancer. Many of them are related to "lifestyle" and avoiding these can prevent or protect against cancer.

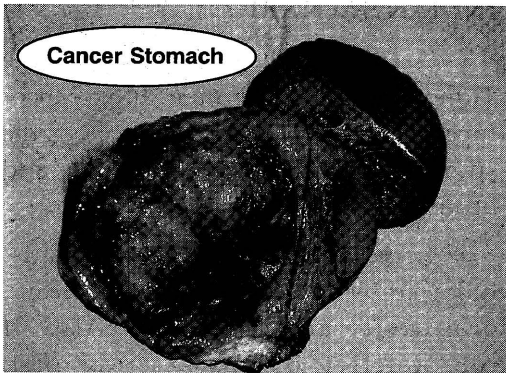
Measures to prevent cancer include eschewing tobacco, having good dietary habits, physical activity, maintaining a healthy diet, environmental health, prevention of cancer causing infections and limiting alcohol intake.

TOBACCO

Many people relate tobacco to cardiac and respiratory diseases. But beyond that, smoking is the single biggest cause of cancer in the world. It is responsible for more than 25 percent of all cancer deaths; it kills one person every six seconds.

It also accounts for one in 10 adult deaths and kills more than 50 lakh people every year.

Smoking not only affects the person who smokes but also people around him through second-hand smoke. Children born to mothers who smoke are also affected.



The risk of oral cancer increases 27 fold in men and six fold in women who smoke. Laryngeal cancer is 10 times more common in men and eight times more common in women. There is an eight to 10 fold increase in oesophageal cancer and 50 percent increase in gastric cancer in tobacco users compared to non-smokers.

It has been noticed that there is a two-fold increase in pancreatic cancer among smokers. If they smoke more than 40 cigarettes a day, there is a five-fold increase.

The risk increases significantly if the individual has the habit of drinking also.

In many situations we find that many cancer patients have been smoking and drinking for years.

DIET

This is a factor that concerns everyone. Diet plays a significant role in the prevention of certain cancers, not necessarily in the Gastro-Intestinal system.

A "Healthy Diet" can prevent many cancers, more so if it is combined with physical activity. Many medical societies fighting cancer recommend the following:

- Be as lean as possible without becoming underweight.
- Be physically active for at least 30 minutes every day.
- Avoid sugary drinks.
- Eat plenty of vegetables, fruits, whole grains and pulses.
- Limit consumption of red meat and avoid processed meat.
- Limit consumption of alcohol.
- Limit salty food.

It is also better to avoid reheated oil for cooking.

CANCER-CAUSING INFECTIONS

An estimated 22 percent of cancer deaths in the developing world and six percent of deaths in industrialised countries are related to cancer-causing infections.

Significant among these are Human Papilloma Virus causing cancer of the cervix and Hepatitis B and C causing liver cancer.

ENVIRONMENTAL CARCINOGENS

Environmental factors do play a role in certain cancers; poor air quality indoors and chemical pollutants can cause lung cancer. Similarly, food chemicals can be responsible for gastrointestinal cancers.

Research done by the Department of Surgical Gastroenterology,

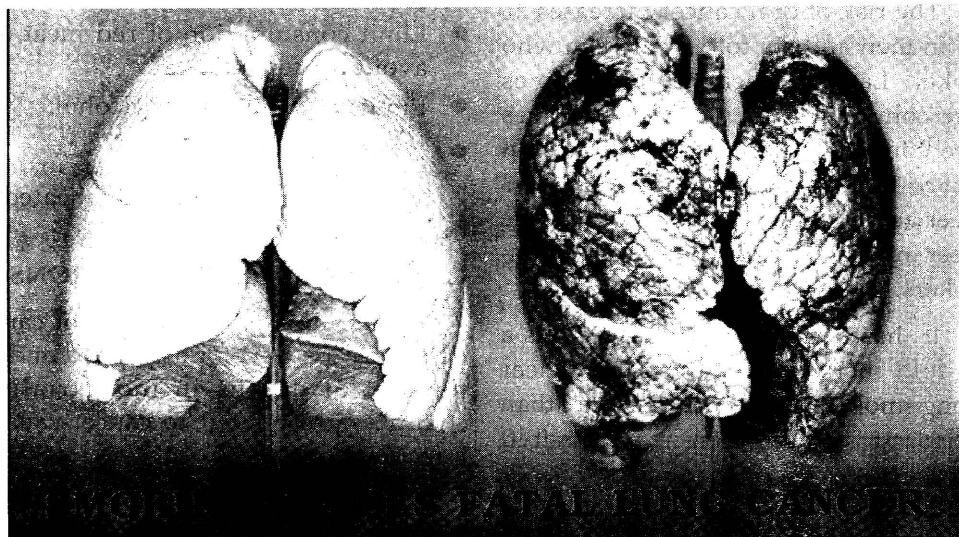
Rajiv Gandhi Government General Hospital, alongwith the Department of Clinical Nutrition, Ethiraj College for Women, on gastric cancer produced revealing insights.

Of 100 patients analysed, 98 had thge habit of consuming preserved food in the form of leftover rice, dried fish, pickle or - for a majority - a combination of leftover rice and pickle. Moreover, 97 patients had the habit of reusing oil - 77

INDIAN SCENARIO

As per results published by the Tumour Registry, in men, lung cancer tops the list followed by cancers of the stomach, oral cavity, oesophagus and oro-pharynx.

In women, breast cancer leads, followed by cancer of the cervix, ovary, oral cavity and stomach. Also, if reproductive organs are excluded, stomach cancer is the second most

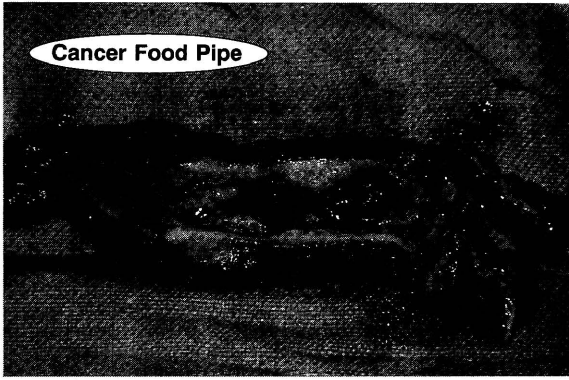


people reused oil more than three times; 88 were non-vegetarians; 78 consumed 25-30 grams of salt per day; and 74 consumed about 20 grams of chilli in their meal every day. In addition, 73 were smokers, 37 had the habit of tobacco chewing, 33 consumed alcohol every day, only 21 had the habit of exercising, and only two out of 100 consumed fresh fruits and vegetables regularly.

common cancer affecting people living in Tamil Nadu.

Similary, oesophageal cancer is the fourth most common in men and in women (third if reproductive organs are excluded). As per a publication by the Registry in 2010, cancers from the oral cavity to the stomach constitute 25.4 per cent of all cancers in men and 14.4 per cent in women.

Cancer Food Pipe



Of these "Tobacco Related Cancers" - namely cancers of the oral cavity, oesopharynx larynx, lung oesophagus, pancreas and urinary bladder - constitute 44 percent of all cancers in men and 16 percent in women.

What is being done?

The Union for International Cancer Control is aiming for a "World Cancer Declaration". The declaration outlines 11 targets to be achieved by 2020, which include:

- Significant drop in global tobacco consumption, obesity and alcohol intake.
- Universal vaccination programmes for Hepatitis B and Human Papilloma Virus to prevent liver and cervical cancer.
- Dispelling myths and misconceptions about cancer.

Every year February 4 is observed with a focus and for 2011 it is "teach children and teenagers to avoid UV exposure by being "Sun Smart".

What do we have to do?

It is a common observation that many people in our society present cancer at an advanced stage. Various studies done across India shows that 60-70 percent of the patients present at an advanced stage where cure may be impossible.

The main factors which contribute to this include: Myths and misconception about cancer, lack of awareness, negligence and dietary and lifestyle modifications including tobacco use and regular consumption of preserved foods.

The major task before the health authorities is to create awareness, dispel myths and misconceptions and provide the best advice to people on healthy lifestyle, eating habits and the need for exercise. More importantly, people should not "ignore the symptoms" and must consult a doctor to get the appropriate treatment without delay. All of us can play a role to create a cancer-free world. You need not to be a doctor to spread this message. Let us all join hands to fight against cancer.

- Prof. Dr. S.M. Chandramohan

(The writer is Head of the Department of Surgical Gastroenterology, Centre of Excellence for Upper GI Surgery, Rajiv Gandhi General Hospital and Madras Medical College, Chennai.)

WHAT ARE HUMAN RIGHTS

Human rights may be generally defined as those rights, which are inherent in our nature and without which we cannot live as human beings. They aim at providing us life with freedom and dignity.

Though the history of mankind is the history of struggle for human rights, they received focussed attention with the setting up of United Nations in 1945. The United Nations Charter not only reaffirms "faith in fundamental human rights" but also aims at promoting "higher standard of living, full employment and conditions of economic and social progress and development."

On the 10th of December 1948, the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights. It set out a list of basic rights - a "common standard of achievement" for everyone in the world, whatever be their race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Considering the worldwide historic significance of this Declaration, 10th of December is observed as the *World Human Rights Day* every year.

In terms of Section-2 of Protection of Human Rights Act, 1993, human rights are rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the international covenants on civil and political rights and economic, social and cultural rights, adopted by the General Assembly of the United Nations on 16th of December, 1966. These covenants, along with the Universal Declaration of Human Rights, set a common standard of achievement for all peoples and all nations.

There are many similarities between the provisions of Universal Declaration and that of Constitution of India. Like Constitution of India, UNO's formula of Universal Declaration also recognizes that all human beings are born free and equal in dignity and rights and that everyone is entitled to these rights without distinction of any kind such as race, colour, sex, language, religion, etc. Central government of India has the distinction of being a proud signatory of most of the international covenants and conventions on human rights. It has also constituted National Human Rights Commission to safeguard human rights of its citizens.

Unversality of Human Rights

Human Rights belong to all people, and all people have equal status with respect to these rights. Failure to respect one individual's human rights has the same weight as failure to respect the right of any other - it is not better or worse depending on the person's age, gender, race, ethnicity, nationality or any other distinction. They are also inalienable. They cannot be taken away by others, nor can they be given up voluntarily.

Human Rights and Responsibilities

Human rights are correlated with duties and responsibilities. While we are entitled to protect our own human rights, we also have the responsibility to respect and protect human rights of others, with whom we interact. We also have duties towards our community. Therefore, whenever we see any violation of human rights, we should help stop that and prevent any violations in future. If that is not possible, we should at least raise our voices against it.

UNIVERSAL DECLARATION OF HUMAN RIGHTS

- ★ All human beings are born free and equal in dignity and rights.
- ★ Everyone has the right to life, liberty and security of person.

- ★ No one shall be held in slavery or servitude.
- ★ No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.
- ★ All are equal before the law.
- ★ No one shall be subjected to arbitrary arrest, detention or exile.
- ★ Everyone has the right to freedom of movement and the right to a nationality,
- ★ Marriage shall be entered into only with the free and full consent of the intending spouses.
- ★ Everyone has the right to freedom of thought, conscience and religion.
- ★ Everyone has the right to equal access to public services in his/her country.
- ★ Everyone has the right to work.
- ★ Everyone has the right to a standard of living adequate for the health and well-being of the individual as well as his/her family.
- ★ Motherhood and childhood are entitled to special care and assistance.
- ★ Everyone has the right to education.
- ★ Everyone has duties towards the community in which alone the free and full development of his/her personality is possible.

HUMAN RIGHTS IN INDIAN CONSTITUTION

The principles of human rights are well reflected in the constitution of India which was framed by the Constituent Assembly. The Constituent Assembly began its task in September 1946, much before we got freedom, and completed it on 26th November 1949. The core of our Constitution is its Preamble, the Fundamental Rights of its citizens and Directive Principles of State Policy. Some of the important provisions relating to human rights, enunciated by our Constitution are summed up below.



Preamble

It declares India as a sovereign, socialist, secular and democratic republic and assures its citizens justice, liberty, equality and fraternity.

Fundamental Rights

Every citizen of our country has been provided with the following Fundamental Rights:

1. Right to Equality

- Every one is equal before Law.
- The State shall not discriminate against any citizen on grounds of religion, race, caste, sex or place of birth.
- There shall be equality of opportunity in matters of public employment.
- Untouchability is abolished and its practice in any form is forbidden.
- Citizens are prohibited to accept and use any title from a foreign State and the State is prohibited to confer any title other than of a military or academic distinction.

2. Right to Freedom

- a) All citizens shall have the right
- to freedom of speech and expression;
 - to assemble peaceably and without arms;
 - to form associations or unions;
 - to move freely throughout the territory of India;

- to reside and settle in any part of the territory of India;
 - to practise any profession, or to carry on any occupation, trade or business; and
 - to free and compulsory education to all children in the age group of 6 to 14 years.
- b) No person shall be convicted of any offence except for violation of a law in force.
 - c) No person shall be deprived of his/her life or personal liberty except, according to procedure established by law.
 - d) No person who is arrested shall be detained in custody without being informed of the grounds for the arrest.

3. Right against Exploitation

- a) Traffic in human beings and begar (forced and unfree labour) and other similar forms of forced labour are prohibited.
- b) Employment of a child below the age of fourteen years in household work for gain, in factories whether hazardous or not, agriculture or any other work that results in physical strain to the child, is prohibited.
- c) Parents / guardians shall not deprive a child from access to education by employing him/her in any work.

4. Right to Freedom of Religion

- a) All persons are equally entitled to freedom of conscience and the right to freely profess, practice and propagate religion.
- b) Every religious denomination or any section thereof shall have the right to establish, maintain and administer institutions for religious and charitable purposes in accordance with law.
- c) No person shall be compelled to pay any taxes for the promotion or maintenance of any particular religion or religious denomination.
- d) No religious instruction shall be provided in any educational institution wholly maintained out of State funds.

5. Cultural and Educational Rights

- a) Interests of minorities are fully protected.
- b) All minorities, whether based on religion or language, shall have the right to establish and administer educational institutions of their choice.

6. Right to Constitutional Remedies

Every citizen has a right to move the Supreme Court of India for the enforcement of his/her fundamental rights.

-Jayashree Gupta

Courtesy : My book of Human Rights

Published by Govt. of India



EARLY HISTORY OF POLITICAL & CULTURAL EXPANSION

The spread of Indian culture was an intellectual conquest through peaceful means. It was, to start with, generally a one-way traffic. While many travellers, especially from China, came to India, there never was any attempt on their part to indoctrinate Indians in the philosophy of Confucius or of any other Chinese thinker. On the other hand, Buddhism secured a footing in China as early as the 1st century A.D. Enterprising merchants, adventurous young princes, and scholars like Kumarajiva, Kasyapa Matanga. Padmasambhava and others undertook this task in a selfless spirit. There is, however, no doubt that later India also imbibed foreign culture.

Political expansion in South East Asia was motivated partly by a desire on the part of enterprising princes driven by misfortune to find new homes and kingdoms for themselves and partly to spread Indian culture. A few adventurous men like Kaundinya settled down in the kingdoms explored by them, where they were accepted by the local population as their rulers. These kingdoms also became the repositories of Indian culture in the medieval period when India itself was engulfed in political turmoils. They were not Indian colonies but independent states with little political contact

with the motherland. The long war between the Colas and the Sailendras is a pointer in this direction. In the Western and Central Asian spheres, there was contact and possible influence in the field of religion and philosophy; at the other end in South East Asia it was complete Indianization of the region. Rulers professing Hinduism or Buddhism set up a socio-political structure on the ancient Indian model and patronized Indian learning, art and architecture. Indian culture dominated in every sphere, although the rulers considered themselves as part identified with Fan-Hu-ta, built the temple of Siva at Myson, naming the deity after him. Sri Bhadresvarasvamin. Hindu dynasties and religion (both Hinduism and Buddhism) and Sanskrit language flourished for a long time despite the proximity to and clash with Tonkin then under Chinese occupation. From Sri-Mara of the Vo-can record to Prakasadharma Vikrantavarman in the 7th century A.D., the history of Campa is one of incessant struggles against China. This ruler of Campa was related on his mother's side with the Kambuja royal family. In the last phase of Campa's history, the country came into clash with the Annamites and Kambuja. It also offered strong resistance to Kublai Khan, the great Mongol chief. The struggle

against the Annamites was a prolonged one, causing loss of territory. A portion of the northern tip passed into enemy hands; and the desire for an Annamite princess cost Jayasimhavarman IV two provinces – this event happened in the 14th century. Campa finally fell before the Annamite onslaught, loosing Amaravati in A.D. 1402 and Vijaya in the centre, in 1471. It was thus reduced to a small principality, which was also gone with the ruler seeking refuge in Kambuja.

Early Kingdoms in Indonesia

The Indonesian archipelago containing nearly three thousand islands also came under the influence of Hindu culture. The name Yavadvipa, very probably Java, occurs in Valmiki's *Ramayana*. The four rockcut inscriptions found around Jakarta refer to a king named Purnavarman whose capital was the city of Taruma. His father, Rajadhiraja, constructed a canal named Candrabhaga, connecting the royal city with the sea, and another named Gomati. The Indo-Javanese phase of history in Central Java dates from the 8th century A.D. The Hindus set up kingdoms in Central and Eastern Java, as is evident from the numerous inscriptions and monuments in these regions.

Kingdoms in Java and Sumatra

Besides Java, the neighbouring islands of Sumatra and Borneo were also centres of Hindu settlements. I-tsing refers to the famous kingdom of Sri Vijaya, which in course of time became a great political power in South East Asia. If Po-li of the Chinese text could be identified with Bali, then this small island which has retained its Hindu character

to this day was an early settlement of the Indians. Its ruler's family name was Ca-ri-ya-ka corresponding to Ksatra of Ksatri and the kingdom sent embassies to China from A.D.518 to 630.

Malavarman of Borneo

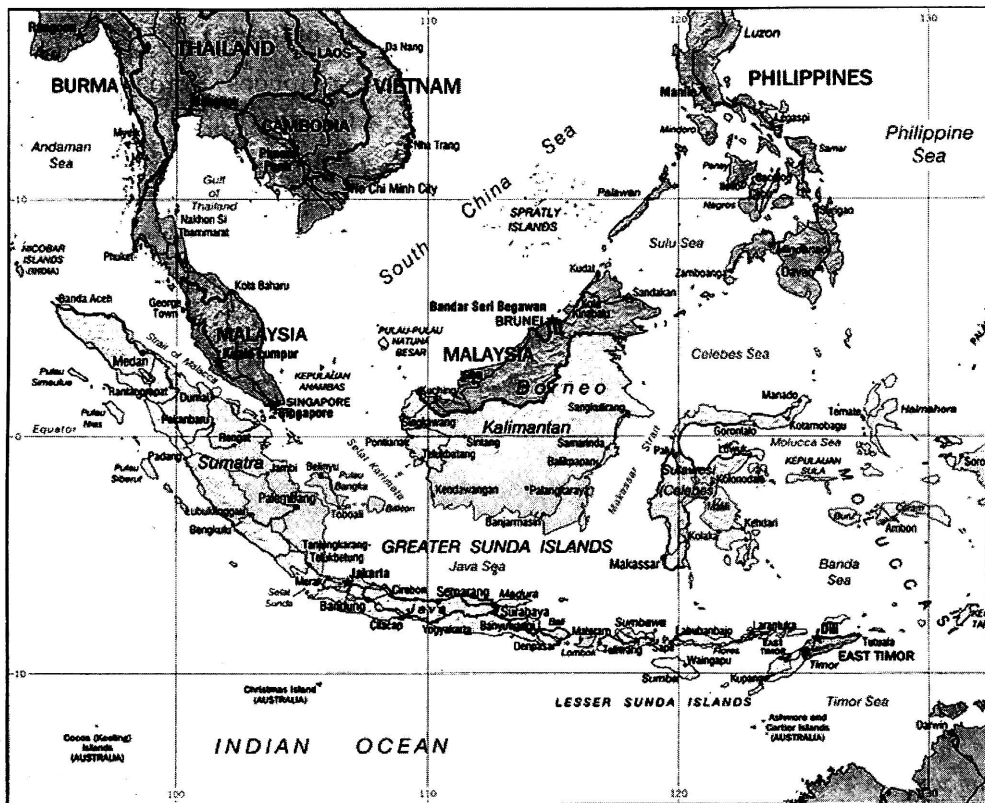
Seven inscriptions recorded on *yupas* and found in the district of Kutei at Muara Kaman, in Borneo, record certain great gifts (*mahadanas*) and religious sacrifices of king Mulavarman, son of Asvavarman, and grandson of Kunduriga. In East Borneo, a large number of images of Hindu gods have been found in the cave of Kombeng, while in West Borneo at various places inscriptions on stone and a number of inscribed gold plates have been found. A Buddha image of the Gupta style and another of the Amaravati style were found at Sambas and at Sempaga in the Celebes respectively. It appears that Borneo had Hindu settlements, and it is tempting to identify it with the Barhina-dvipa of the *Vayu Purana*. These kingdoms in Malaysia, Indonesia, and Indo-China formed the nucleus of the empire of the Sailendras and the Varmans of Kambuja.

Imperial Phase

Sri Vijaya was probably the first Hindu empire in South East Asia. Itsing spent a few years at Palembang, its capital. It was a centre of trade and Buddhist learning. A record dated in the year Saka 606 (A.D.684) mentions Jayanasa or Jayanaga as the ruler of Sri Vijaya. As a leading and powerful state, Sri Vijaya sent several embassies to China between A.D.670 and A.D.741. An inscription dated in the year A.D.775 from

Ligor in the Malaya Peninsula refers to the mighty power of the Buddhist king of that place. Sri Vijaya gained power and influence in Malaya and Indonesia and helped trade between the orient and the Occident.

maintenance of a monastery by Balaputradeva, king of Suvarnadvipa. Sri Cudamanivarman and his son Sri Mara Vijayotturi gavarman, rulers of Kadara of Kataha (Kedda in the Malaya Peninsula) and



The Sailendra Empire

The Sailendras whose origin has been a matter of dispute also ruled in Malaya and Indonesia for nearly five hundred years. The original home of the Sailendras seems to have been in Java where the famous monuments of Barabudur and Candi Mendut are fitting memorials of their munificence as patrons of art. The Nalanda record dated in the year 39 or 35 of the time of king Devapala (A.D. 850) records the grant of five villages for the

Sri Vijaya, maintained contacts with the Colas. They were associated with the construction of a Buddhist *Vihdra* at Nagapattana (Nagapattinam) on the east coast of India. Cola conquest of Kataha resulted in the overthrow of the Sailendras some time before A.D.1025. The kingdom of San-fo-tsi as called by the Chinese which took its place continued for more than three hundred years till it was destroyed by Java in the 14th century A.D.

The Hindu Kingdom of Eastern Java

Some Hindu rulers figure prominently in the history of Java. King Airlarigga, son-in-law of a Javanese king, was formally consecrated ruler in East Java and brought the whole of the island under his control. In his records we have reference to the peoples of Kalinga, Simhala, Dravida, Karnataka, Campa and Khmer who had evidently trade relations with Java. Regarded as an incarnation of Visnu, the fine figure of the deity seated in Garuda from Belahan is supposed to be his actual representation. The partition of his kingdom between his two sons was the beginning of the decline of his empire. Kadiri, the capital of one, was conquered by the neighbouring ruler of Singhasari named Rajasa who united the whole of Java under his authority. Krtanagara, well up in art and literature, extended his authority over Bali, Sunda (Western Java), Sumatra, Malaya, Borneo and Madura (another island). His egotism and absorption in religious affairs cost him life and throne. The Mongol ruler Qublai Khan conquered the kingdom in A.D.1293 but the Mongols did not stay there.

Majapahit

Vijaya, the son-in-law of Krtanagara, founded a new kingdom with Majapahit as his capital, and was known as Krtarajasa Jayavardhana. During the reign of Rajasanagara, who ascended the throne in A.D.1350, the Majapahit empire included large parts of Malaya and Indonesia. It had contacts with Thailand, Kalinga, Campa and Dharmanagari and other neighbouring places, and trade relations with Jambudvipa

(India), Cina, Karnataka and Gauda. His death in A.D.1389 precipitated internal dissensions. Although the kingdom of Majapahit continued for another century, it was of little importance. The influx of Muslim traders, giving Islam a footing in the island, paved the way for its gradual expansion in Indonesia, ultimately enveloping it completely. Only Bali escaped and preserved its old tradition to this day.

Varman Empire in Kambuja desa

The empire of the Varmans in Kambuja lasted for nearly five centuries. Bhavavarman and his successors Mahendravarman and Isanavarman had carved out a big kingdom and in the 7th century A.D. it extended upto Dangrek mountains in the north, comprising Cochin-China and Cambodia. After a dark period of over a hundred years, when probably the Sailendras dominated there, Jayavarman-II ascended the throne in A.D.802 and founded a new dynasty. The kingdom ruled by him and his successor, Jayavarman-III, was vast, reaching the frontiers of Yunnan in southern China. Indravarman succeeded him and founded a new royal dynasty. He boasted of his commands being obeyed by rulers of Campa, Cina and Yavadvipa. Yasovarman, who ascended the throne in A.D.889, enhanced the power, prestige and glory of his empire and his family. A distinguished man of letters, he was also a patron of art, and built many temples and his capital at Yasodharapura. During the time of Rajendravarman (A.D.944-68) the empire comprised the vast region to the south of China and east of Burma.

A period of internal trouble soon followed. It was only in the time of Suryavarman-II that the dissenting forces were overcome, to rise again after his death in or after A.D.1145. The invasion by the king of Campa, and the sacking of the Kambuja capital shattered its prestige. It was, however, regained by Jayavarman-VII who defeated the Chams in a naval engagement in 1190. In the prolonged struggle fortune favoured the Kambuja ruler and the whole of Campa came under his sway. This was the peak period with the Kambuja empire extending from the sea of China to the Bay of Bengal. The city of Angkor Thom was well fortified and well laid out with its enormous buildings and palaces, and the famous temple of Bayon occupying the central portion of the city is regarded as the masterpiece of Kambuja architecture. The last important ruler was Jayavarman-VIII whose abdication in A.D.1295 was followed by internal troubles; and the aggression of the Thais which had begun in the 13th century brought about the downfall of the empire of the Hindu rulers in Indo-China, though the petty kingdom of Cambodia continues till today.

Thailand

Thailand was colonized by the Hindus in the first two centuries of the Christian era. Excavations at Pong Tuk, 32 km. from Pra Pathom, the discovery of a Sanskrit inscription of the 4th century A.D. near Pechaburi and Saiva and Vaisnava sculptures point to this part being a centre of Hindu culture. After the decline of Funan, of which Thailand had been a part, the Dvaravati kingdom rose into importance. The Hinduized Mons who dominated this kingdom extended their influence in the north as far as Haripunjaya or Lamphun. In the 10th century A.D. the Kambuja empire extended over this region.

Culture Impact

The Indian immigrants in South East Asia, while setting up their kingdoms, tried to build a social structure on the orthodox Indian model with the traditional four castes (*caturvarnya*) and the supremacy of the *Brahmanas* and the *Ksatriyas*. The distinction between *Brahmanas* and the *Ksatriyas* was more apparent than real. Inter-marriage between the two was not unknown. Agastya, a Brahmana immigrant, married a princess named Yasomati, and Divakara from Vrndavana in India took the hand of Indralaksmi, daughter of emperor Rajendravarman. Jayavarman-VIII's queen hailed from the respectable family of Brahmana Hrsikesa of the Bharadvaja group. In Campa, Rudravarman's father was a famous Brahmana, while his mother was a Ksatriya. So also Prakasadharmas's sister married a Brahmana named Satyakausika Syamin and their son Bhadresvaravarman was a Brahma-Ksatriya. This caste is mentioned in several inscriptions in Kambuja and Campa, The *caturvarnya* also figures in Java and we find a reference to the emergence of caste from Brahma. But the caste system in these regions was not as rigid as in India. The aristocracy and the common people had a sharp line of distinction, specially noticed in their dress, which was scanty in the case of ordinary people but gorgeous and ornamented for the aristocrats. Caste did not interfere in the choice of the avocation. A Kambuja record refers to the members of a Brahmana family being elephant drivers, artisans and priests. In the time of Jayavarman-V, certain new castes came into existence. The same inscription refers to seven castes (*saptavarnas*).

*Courtesy : Indian Early History
Published by Govt. of India*

History of Madras

(Chennapattanam)

Chennai, earlier known as Madras, a sleepy fishing village, was founded in 1639 by the British East India Company, when the local ruler Damerla Venkatapathy Nayak of the suburb of Vandavasi, granted land to build a trading settlement.

The Portuguese arrived in 1522 and built a port called Santhome (which is now a part of the City) after the Christian apostle, St. Thomas, who is said to have preached in the area between 52 and 70 AD. In 1612, the Dutch established themselves near Pulicat, just north of the city. But they could not sustain to establish rule over the land.

The British built Fort St. George. It was named after the Patron Saint, since it was completed on St. George's day, 23rd April, 1640.



The settlement which had grown up around Fort St. George, was named Chennapattanam, in honour of Chennappa Nayak, father of Venkatapathy Nayak, who controlled the entire coastal country from Pulicat in the north to the Portuguese settlement of Santhome.

In course of time another small village to the south, called *Madraspatnam* also started developing. This small village known as Chennapatnam later merged with Madrasapatnam, and was called Madras in a shortened form.

In 1746, Fort St. George and Madras town and its outlying villages were captured by the French under General La Bourdonnais, the Governor of Mauritius.

The British regained control in 1749 through the Treaty of Aix-la-Chapelle and





by the late eighteenth century, the British established the Madras Presidency conquering most of the regions of the present states of Andhra Pradesh, Karnataka and adjoining Tamil Nadu and made Madras as the capital.

The city developed around the English settlement of Fort St. George, (the area is still known as George Town) and gradually absorbed the surrounding towns and villages.

The British developed the city into a major urban centre and established a naval base. During the World War-I, German cruiser "SMS Emden" shelled an oil depot at Madras, as it raided shipping lanes in the

Indian Ocean, causing disruption to shipping.

Since Chennai lies on the coast and is close to the equator, it does not have variations in seasonal temperature. For most of the year, the weather is hot and humid. The hottest part of the year is during May, June, and July popularly known in Tamil as *Kathiri Veyyil*, with maximum temperatures hovering around 40° C (105° F).

Chennai summers are humid and sultry; so it's advisable to move around during the day with an umbrella, bottled water and have tender coconut water during summer.

Courtesy : A Traveller's Guide...

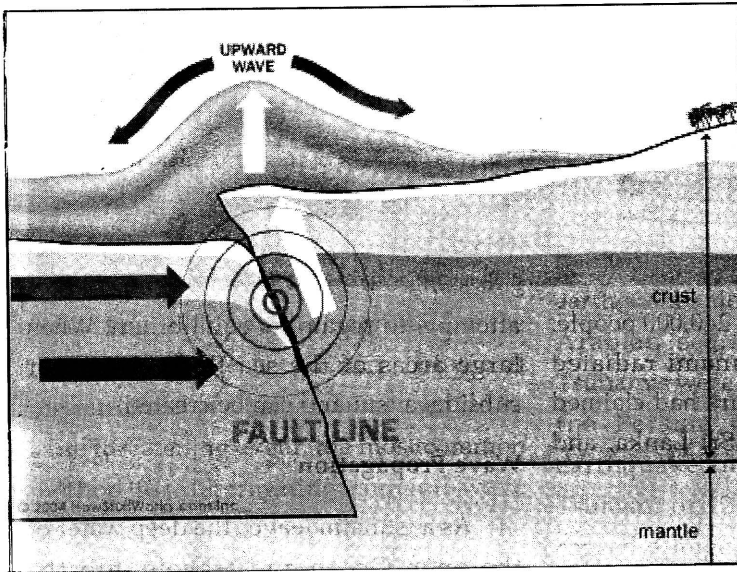
Tsunami

Tsunami is a term for sea waves usually generated by movement of the seafloor. These movements are caused by different types of geophysical phenomena such as earthquakes, Tremors and volcanic eruptions. The word 'tsunami' is a Japanese word, represented by two characters: tsu, meaning, "harbor", and nami meaning, "wave".

waves form only a small hump, barely noticeable and harmless, which generally moves less than a sea mile. The tsunami's speed diminishes as it travels into shallower water to only tens of kilometers an hour, consequently increasing the single wave height. Because of this shoaling effect, a tsunami, imperceptible at sea, may grow to be several meters or more in height

near the coast forming the large destructive waves.

How Tsunamis Work: Tsunamigenesis



Tsunamis are most commonly generated by earthquakes in marine and coastal regions.

Major tsunamis are produced by large (greater than 7 on the Richter scale), shallow focus (< 30km depth in the earth) earthquakes associated with the movement of oceanic and continental plates. They frequently

move at a speed equals to the square root of the product of gravity and the depth of the water. The tsunami waves behave very differently in deep water than in shallow water as their speed is related to the water depth. Tsunami

occur in the Pacific, where dense oceanic plates slide under the lighter continental plates. When these plates fracture they provide a vertical movement of the seafloor that allows a quick and efficient transfer of energy from the solid earth to

the ocean. When a powerful earthquake (magnitude 9.3) struck the coastal region of Indonesia in 2004, the movement of the seafloor produced a tsunami in excess of 30 meters (100 feet) along the adjacent

earthquakes occur beneath the sea, the water above the deformed area is displaced from its equilibrium position. Waves are formed as the displaced water mass, which acts under the influence of gravity,



coastline killing more than 240,000 people. From this source the tsunami radiated outward and within 2 hours had claimed 58,000 lives in Thailand, Sri Lanka, and India.

Generation of Tsunami

Tsunamis can be generated when the sea floor abruptly deforms and vertically displaces the overlying water. Tectonic earthquakes are a particular kind of earthquake that are associated with the earth's crustal deformation; when these

attempts to regain its equilibrium. When large areas of the sea floor elevate or subside, a tsunami can be created.

Wave Propagation

As a tsunami leaves the deep water of the open Ocean and travels into the shallower water near the coast, it transforms. The tsunami's energy flux, which is dependent on both its wave speed and wave height, remains nearly constant. Consequently, as the tsunami's speed diminishes as it travels into shallower

water, its height grows. Because of this shoaling effect, a tsunami, imperceptible at sea, may grow to be several foot or more in height near the coast. When it finally reaches the coast, a tsunami may appear as a rapidly rising or falling tide, a series of breaking waves, or even a bore.

Run-up and Inundation

During the tsunami, maximum vertical height to which the water is observed with reference to sea level (spring tide or Mean sea level) is referred to as run-up. The maximum horizontal distance that is reached by a tsunami is referred to as inundation.

The run-up and horizontal inundation during a tsunami can be highly variable in a local area depending on the underwater topography, orientation to the oncoming wave, tide level, and the magnitude of the tsunami. Because direct physical measurement of a tsunami wave would be a life threatening event, the most common method for determining tsunami wave height is by measuring the run-up, the highest vertical point reached by the wave. Run-up heights are measured by looking at the distance and extent of salt-killed vegetation, and the debris left once the wave has receded. This distance is referenced to a datum level, usually being the mean sea level. A measurement of run-

up level is useful in determining extent of vulnerability of an area to tsunami waves.

Historic Tsunamis in India

The Indian coastal belt has not recorded many Tsunamis in the past. Waves accompanying earthquake activity have been reported over the North Bay of Bengal. During an earthquake in 1881 which had its epicenter near the centre of the Bay of Bengal, Tsunamis were reported. The earthquake of 1941 in Bay of Bengal caused some damage in Andaman region. This was unusual because most Tsunamis are generated by shocks which occur at or near the flanks of continental slopes. During the earthquakes of 1819 and 1845 near the Rann of Kutch, there were rapid movements of water into the sea. There is no mention of waves resulting from these earthquakes along the coast adjacent to the Arabian sea, and it is unlikely that Tsunamis were generated. Further west, in the Persian Gulf, the 1945 Makran earthquake (magnitude 8.1) generated Tsunami of 12 to 15 meters height. This caused a huge deluge, with considerable loss of life and property at Ormara and Pasi. The estimated height of Tsunami at Gulf of Cambay was 15m but no report of damage is available. The estimated height of waves was about 2 meters at Mumbai, where boats were taken away from their moorings and casualties occurred. A list

Date	Cause	Impact
12th April, 1762	Earthquake in Bay of Bengal.	Tsunami wave of 1.8m at Bangladesh coast
31st December, 1881	Magnitude 7.8 earthquake beneath the Car Nicobar	Entire East coast of India including Andaman & Nicobar coast was affected by tsunami
27th August, 1883	Eruption of karkatoa volcano (Sunda Strait) Indonesia	East coast of India was affected and 2m Tsunami was reported at Chennai.
26th June, 1941	A 8.1 Magnitude earthquake in Andaman	East Coast of India was affected by tsunami.
27th November, 1945	27th November, 1945 (21 Hour 56 Min. 50 Sec. UTC) in the Makran subduction zone (Baluchistan, Pakistan) (24.5N & 63.0E) with Mw of 8.1	West coast of India was affected by Tsunami.

showing the Tsunami that affected Indian coast prior to Sumatra Earthquake of December 26, 2004, is given in the below table.

Tsunamigenic Source Identification

The Pacific Rim countries are affected frequently by tsunamis (about 900 events in the 20th century) due to the high seismic activity (75 percent of global activity) in the circum-Pacific belt. The Indian Ocean rim countries are likely to be affected by tsunamis generated in the two known tsunamigenic zones, viz., the Andaman-Nicobar-Sumatra island arc and the Makran subduction zone north of Arabian Sea (about 5 percent or less). These zones have been identified by considering the historical tsunamis and earthquakes, their

magnitudes, location of the area relative to a fault, and also by tsunami modelling. The east and west coasts of India and the island regions are likely to be affected by Tsunamis generated mainly by subduction zone related earthquakes from the two potential source regions, viz., the Andaman-Nicobar-Sumatra Island Arc and the Makran subduction zone north of Arabian Sea. These two possible locations with major plate boundaries are shown in the blue ellipses in the figure below. However, in spite of infrequent occurrence of tsunamis (about 6 events reported in the 20th century) in the Indian Ocean, they could occur at any time and could be very devastating.

TAMIL ART THROUGH AGES

Painting in the Tamil country dates from very early times. Some enthusiastic scholars even trace it back to the prehistoric, almost mythical Lemuria under the sea! Earthen jars and pots with dots and designs in red and white belonging to the Stone Age (10000 BC) have been found in the district of Chengleput and in the deltas of the Kaveri and the Tamraparni. These are the earliest historical evidences on record. The primitive drawings in red ochre and white found in the rock shelters of Dharmapuri and South Arcot districts (Keelavalai and Settavera) are tentatively traced back to the Megalithic Age. But one cannot assess them accurately. Unless one is able to examine their pigments carefully with the help of laboratory tests. Also conclusive evidence confirming their age and authenticity is still awaited.

Painting flourished in the Sangam Age (200 AD). But the evidence available is more literary than historical or archaeological. Unfortunately the ravages of time have taken a heavy toll. There is not a single Sangam painting extant. Apparanly it was a booming art market.

There are any number of literary references to painters and the impact of their work on society. In Chapter 3 of Manimekalai (5th century AD) occur the following lines:

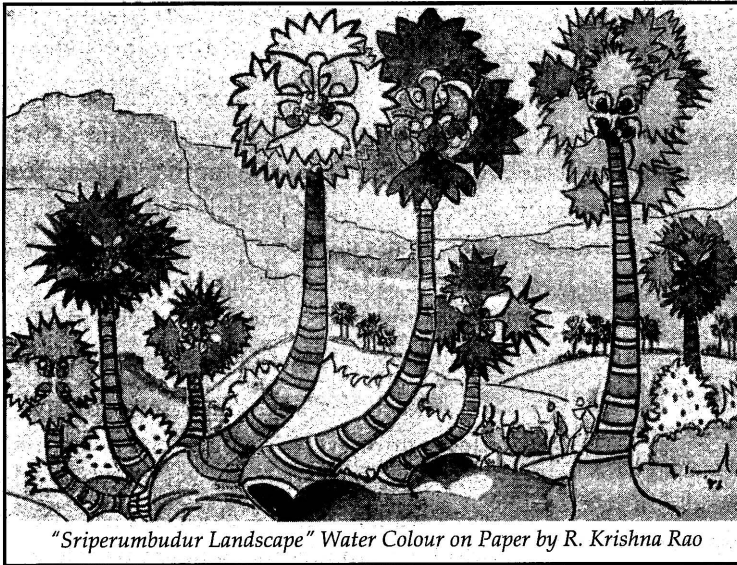
“Each tall, burnt-brick house having large, lofty entrances was painted with faultless images, the motifs varying from celestial beings to all kinds of creatures. The material used was white mortar or lime and the paintings executed were so attractive to the eye that spectators stood spell-bound” (lines 127-131).

Sketches and paintings of every description were in vogue and any surface was considered good enough to paint on - walls, ceilings, cloth, stage curtains, idols, etc. In fact the Sangam people were so art-conscious that young women in love used to draw attractive floral designs on their faces, shoulders and even breasts with sandal or kungumam paste just to entice their lovers. There were manuals on the technique of painting for the guidance of the artists. Painting was considered a valued accomplishment for a girl. The close links between the ancient Tamils and the Greeks and the Romans in those distant days brought about healthy interaction

between two different cultures and resulted in a happy synthesis. The Jains with their passion for proselytisation through art also had a strong influence over the Tamil painters.

Painting in the Sangam Period by all accounts was not the acquired taste of the affluent or the talking point for the elite but the concern of the common man. It was his way of life, his mode of expression. What a heart-warming contrast to the philistine,

believe that there was a spirit of give and take between the Tamils and the others. For example, historians tell us, the Sangam kings patronised, among many others, goldsmiths from Pataliputra, artists from Kerala and painters from Vatsa. It is also on record that the Tamil artists and the Greek sculptors (Ionian), the Avanti smiths, the Magadha jewellers and the Maharashtra artisans worked as a team to make a royal seat.



"Sriperumbudur Landscape" Water Colour on Paper by R. Krishna Rao

In that great Tamil classic, Silappadikaram (2nd century A.D.), there are many statements made on the role of painting and painters in daily life. It refers to painted curtains on the stage and ceilings and canopies with murals in kings' palaces. The Maduraikanchi, another Sangam classic, says that the painters had the necessary elan and expertise to

present-day public! Artists in those days actually hawked their works in open bazaars like household commodities in demand for daily use. A Sangam classic Paripadel, mentions that water colours and oils were equally favoured by painters. Since there was free movement of artists and artisans from one distant part of the country to another, we have reasons to

reproduce in their work any subtle shade of emotion or any dramatic moment in movement. The Pattinaipalai testifies to the immense freedom the painters enjoyed, uninhibited by the compulsions of public taste or royal patronage or market pressures, though they considered it their primary duty to paint pictures only to



"Tender Moments" Acrylic on Canvas by M. Senathipathy

please the eye and not to defend a theory or promote a group cult or strengthen a movement. Only the sheer joy of creation on the part of the painter and sheer joy of seeing his work on the part of the public: Nothing else mattered. Dr. R. Nagaswamy speaks of a cemetery near Kancheepuram with enclosures and eight painted entrances symbolising the seats of the eight dikpalakas. Visually attractive paintings were made to please even the dead, like the ancient Egyptians. We are reminded of the funeral art of the Pharaohs. Indeed, it is most unfortunate that none of the Sangam Period paintings has survived. As VA Smith says, "the statues and pictures apparently were executed in perishable materials and have wholly vanished."

Historically speaking, the earliest paintings extant are at the Kailasanatha temple Kancheepuram-I hope they are still there. When I last saw them, they were nearly gone-and at the Talagiriswara Koil, Panamalai, near Villupuram both built by the Pallava King Rajasimha (8th century AD). The paintings at the Kailasanatha temple appear as embellishments to the sculptures or as independent panels. Among the comparatively little damaged compositions, two on the Siva theme and one on a musical motif are outstanding. One deals with Somaskanda Siva with Parvathi and little Muruga on her lap. Another depicts Siva with Brahma and Vishnu on either side. The third in a small shrine in the northern prakara depicts two kinnara musicians, one on the flute and the

other is a cymbalist. All three panels reveal technical skill of a high order. The drawing is firm and forceful and every nuance of expression is delicately recorded. A fine example of creative communication with expertise, elan and empathy through emotive colour and elegant line.

A still better example of Pallava mural painting is at Panamalai. Here the wall space is comparatively large and there are no sculptures around compelling competitive attention. Naturally the artist could express himself with greater freedom. The composition is taut and compact. It depicts Siva in a state of fury performing the dance of total destruction, as his consort, Parvathi, with a parasol over her head suggesting divinity, watches him gracefully with a soft and serene expression on her face radiant with a smile. A typical example of Saiva art, so dear to the Pallava heart, in all its unselfconscious sublimity. Stylistically close to the Ajanta art in its final phase, this composition has all the linear grace, tonal harmony and structural balance of a crisp and tersely conceived and executed panel. Mahendravarman, the Pallava monarch of the 6th century AD, was also interested in painting, judged by one of his numerous titles Chitrakarappuli ("a tiger among painters"). But sadly there is no trace of either his own paintings or those commissioned by him.

Now we come to the Pandya phase of the Tamil art. Apparently, the 9th century AD murals at Sittannavasala near

Pudukkottai, executed under the patronage of Sri Mara Srivallabha, technically, stylistically and aesthetically have much in common with the Pallava panels. In fact, experts contend, not convincingly though, that these may be even Pallava art as they used to claim till very recently. On closer scrutiny the murals reveal some distinctive features. The Jain monk, I am Gautaman, was the great artist associated with these widely acclaimed paintings which are almost as famous as the Ajanta frescoes. There are paintings on the pillars of the outer mandapa, on the ceilings of the main mandapa as well as those of the inner shrine. The motifs depicted are rich in their range and diversity: Girls dancing, birds, flowers and animals. These panels are hymns to harmony in Nature. Here we have nuances of naturalism in all its subtlety and suavity. No distortion. No exaggeration. No stylisation. A simple and straight forward statement proclaiming the power and beauty of God's creation. A succinct organisation of detail without lapsing into banality. One is struck by the sensuous sweep of line and the subtle thrust of tonal harmony. The lotus panel on the ceiling of the mandapa is the main attraction. Despite details, the impact is overpowering, because of the depth and dimensions of the vision and the intensity of creative expression that externalises it. Painted on a carrier of plaster directly over the hard surface of the naked rock, this panel has remarkable terseness and elegance. The colours used are : Green and black for leaves, red for lotus, yellow for

stems in dark red outline, red and yellow for human figures and predominantly red for background. We do not have any more traces of Pandya painting.

Now we come to the Golden Age of Medieval Tamil Art: The glorious Chola years. At Nartthamalai, ten miles from Pudukkottai, there is a temple of Vijayalayacholeswara, the founder of the Chola dynasty. Built around 860 AD it has badly damaged panels on Siva and Bhairava in dancing poses. There are also other panels with Saivaite themes. The provenance is clearly Chola, but the exact period is uncertain.

The Chola painting can be seen at its best on the inner walls of the narrow circumambulatory passage around the sanctum sanctorum of the world famous Brihadiswara temple at Thanjavur built over 1000 years ago by Raja Raja I, one of the greatest Indians of all time - not only a great monarch of a Pan-Indian, far-flung realm, but a great visionary and even a greater builder - not only of temples but of bridges connecting human hearts with his gestures of compassion, magnanimity and dedication to the concerns of the spirit and the intellect. The chief architect of the temple was Raja Raja himself. His full name was: Raja Raja Peruntaccan. The great temple, the largest in India, represents a unique synthesis of all the arts: Plastic as well as performing. Architecture, sculpture, painting, music, dance, all integrated into the master plan with such finesse and in such harmony that every

detail comes stunningly alive. The paintings are in two layers - reportedly these have been recently separated. The inner panels, coeval with the temple, were painted by the Chola artists in a state of spiritual ecstasy, in soft, delicate pastel tones, while the super-imposed outer ones were painted several centuries later by the down to earth Nayak artists when Thanjavur came under the Nayak rule. The outer panels, the work of the Nayaks, have brighter colours and bolder forms for immediate effect. Many of the Chola paintings have been restored by the Archaeological Department through chemical processes. These are fully visible now on the southern wall, the two wings of the western wall. In one of the panels appears Siva, the Preceptor - Dakshinamurthy - under a big banyan tree, vibrant with animation generated by semians of every description. Other details such as a ferocious-looking white boar, Bhairava with his dog, and a worshipping hero add to the liveliness, plasticity and intensity of the imagery.

The most important panel in the series is the one on the great Nayanmar, Sundaramurti Swamy, whose life story from his marriage to his ascent to Kailas unfolds vividly and evocatively. Narrative art with a telling, irresistible impact. Also a fine example of conceptual perspective. The story begins at the bottom. Preparations for the marriage feast are in progress with men and women busy cooking. Sundaramurti, dressed as a

prince, is surrounded by a group of Brahmans. His sharply drawn features emphasise the fact that he is the central figure, the focal point, in the composition. An old man, bearded and bent with an umbrella in one hand and a palmleaf manuscript in the other, is in front of him. Of course he is Lord Siva Himself come to test Sundaramurti's ultimate interests and intentions. The old man threatens to take the bridegroom away as his slave. A flutter among the frightened Brahmans. Taken aback, Sundaramurti looks intrigued at the demand of the old man. The two chasing each other enter a temple where the old man reveals His true Cosmic Form and vanishes. The upper panel, continuing the story, depicts Sundaramurti at the Chidambaram temple worshipping Nataraja through song in praise of the Supreme Lord. In the panel that follows, Sundaramurti appears seated on Indra's mount, Airavatam, the elephant in white. He can be seen cruising through the clouds serenely across the firmament with his friend, Cheraman, on horseback, in front of him. Celestial artistes -gandharvas and apsaras - fly about joyously singing and dancing, while two saints play on musical instruments. The feel of transcendental evanescence is conveyed through criss-crossing cloud patterns in delicate tonal symphonies. The inclusion of fish, crabs and other aquatic creatures suggests the sea's union with the sky. In a corner, a dancer in a Bharata Natya pose adds to the sensuous symmetry of the composition.

In the final panel, at the top, appear Siva and Parvathi. Two saints praying to the divine couple and two young ladies performing an exquisite dance provide a touch of refinement and sophistication. In style and structure, the Sundaramurti panels have a unique charm. Details follow in a logical sequence consistent with the dynamics of conceptual perspective. The focus is on mundane life at the bottom, on journey through space in the middle panel and on Kailas at the top. There is no division separating one event from another. All the three or four events follow in the correct order. The effect is truly electrifying. Chidambaram with Nataraja dancing, Kali fiercely prancing on human skeleton, Raja Raja Chola himself with his Guru, Karuvur Devar, and Siva in his awesome Tripurantaka form are among the other panels which remain not so damaged. In the Chola art every face is expressive, every line vibrant with verve and every brush-stroke proclaims the artist's creative joy as well as the quality and range of his spiritual vision and aesthetic sensibility. There is no trace of the post-Raja Raja or late Pandya paintings.

The Hoysala paintings can be seen at Srirangam's Venugopala temple built in 1220 AD by Veera Ramanatha. The Krishna legend comes alive through the various decorative panels depicting him on the flute or frolicking with the gopis to the utter delight of the birds and animals. Krishna's headgear and garments point to the Karnataka influence while the gopis are

clearly pre-Lepakshi, particularly in their hair style and sarees.

Most of the other surviving murals were painted under the patronage of either the Vijayanagar rulers or their viceroys, the Nayaks. Krishnadeveraya's influence over the Thiruvannamalai temple is very strong. The Nayaks after breaking away from the declining imperial power at Hampi set themselves up as sovereign rulers in their respective areas of influence - Ginjee, Thanjavur and Madurai. They were great patrons of painting. Then came the Marathas who were succeeded by the British.

The Marathas have bequeathed a legacy of distinctive style of painting which eclectic in origin, decorative in conception and execution and visually ornate is strong in impact.

During the British period the influence of the Victorian water colourists and the Royal Academy inevitably changed the indigenous styles and techniques. The artists, with a view to impressing their new patrons, began to paint in what is known as Company style. Reaction against the pseudo-Westernised techniques popularised by Raja Ravi Varma and others, who sincerely believed that they were painting in a truly contemporary Indian style, came under the leadership of the Bengal revivalists such as Abanindranath Tagore, Nandalal Bose, etc. However, by and large, the Tamil artists remained untouched by the Bengal School which had swept across the country. The

revivalists had their strong presence throughout South India, except Tamil Nadu. In Karnataka they were represented by K. Venkatappa, in Kerala, by K. Madhava Menon, and in Andhra Pradesh, by Damerla Rama Rao. But by none in Tamil Nadu where even DP Roy Chowdhuri, the Principal of the Government College of Arts and Crafts, Chennai, a charismatic father figure, as a stalwart of the Bengal School, left his otherwise adoring students unimpressed.

The Tamil Nadu artists have emphatically demonstrated the possibility of a refreshingly new art rooted in their own traditions. Their inspiration, imagery and vocabulary come from sources they know best, sources they are in direct touch with every minute, sources which are perennial.

It is however necessary to remember that regionalism can be strengthened, sustained and spruced up only within the parameters of the national perspective. It can be practised only in the larger context of national identity and international elan. It is easy to talk about globalisation. What precisely does it mean in terms of art and culture? How can one just wish away the millennia old civilisations of Egypt, China and India? The fact is that at a deeper level Kilpling's prophesy still holds good. East is East and West is West. Whatever interaction is supposed to be going on all the time is only self-deception. Basically, each nation remains rigidly committed to what it has inherited down the ages. Which

is too priceless to be thrown away. Thrown away for what in exchange? Whatever, it can only be a very poor substitute. The sharp differences between the East and the West are embedded in their own inherited perceptions, sensitivities, attitudes and ways of looking at things, reacting to them, understanding them and interpreting them. This is as it should be. Why not? Passive conformity is a poor substitute for passionate creativity ignited by one's own living contact with one's heritage. Adaptation that is undiscerning and uncritical of anything Western, that is, mindless modernity, is worse than faceless conformity. It is one thing to interact for enlarging one's own vision and enriching one's own experience and sensibility. Perfectly all right. But it's quite another thing to lose one's sense of belonging, one's independence and identity in the name of spurious, shop-soiled, skin-deep internationalism. It is nice to have a global view of the world, but, unfortunately, more often than not, it turns out to be in effect the domination of the strong over the weak.

However, there is one important fact of history which is positively significant in this context. If there had been no interaction between the East and the West, there would have been no modern art in the sense that impressionists, post-impressionists and all those who came after them owed their inspiration directly to the impact the Eastern art forms had on their vision and sensibility. In the process the art of the world became richer. So the point is

that interaction is beneficial only when it is close, intense and deeply felt. At superficial stylistic level at which most exchanges take place, there can be no worthwhile communication. So it is necessary to step up and pep up the current dialogue between the East and the West, which in principle and spirit is most desirable, so that those at the giving end as well as those at the receiving end work out a mutually honourable equation, without the one talking down to the other. This is possible. The early modern masters have proved it. They have demonstrated the truth that one can feel international without losing one's identity. That is why we find that the works of the modern masters, bearing the strong imprint of their identities, despite their stylistic affinities with Oriental art forms, have stood the test of time.

Tamil Nadu is the home of a several millennia old heritage which has nurtured the concepts and perceptions of artists living in Chennai and other parts of the State. Successive generations over the years have given strong expression to their inherited commitments and convictions. Their works are rich with regional resonances despite the smooth internationalism which show-cases them.

- Excerpts from article by A.S. Raman

Source : The Southern Accent

Published by : Tamil Nadu Ovia

Nunkalai Kuzhu, Chennai-8.

“Karnatak” Music

Broadly speaking, the territory bounded by the *Vindhya*s to the north, the Bay of Bengal to the east and the *Western Ghats* to the west is recognised as ‘Karnatakam’. *Sampradaya* means a tradition of music handed down to us through centuries of experience, research and knowledge. Its glory is extant in set compositions like the *varnums*, *chittai*, *tanams*, *kirtanams* the one hand, and the *manodharmam* of great *vidwans* while rendering *raga*, *alapana*, *tanam*, *neraval*, *pallavi*, *swaram*, etc. on the other. It would seem sufficient for our present purposes to call as the *Karnatak Sampradaya* or *Bani* the traditions in this art as practised in the last 80 to 100 years *Sampradaya* is conditioned by factors like time, region, standards of appreciation among *rasikas* and the capacity of *vidwans*. For instance, I have heard veterans in the field frowning upon a very popular musician years ago for rendering the *gandhara* in the *Kalyani raga* without *gamaka* “in violation of *sampradaya*!”

It is now common knowledge that the same *swaram* is being rendered both ways nowadays. Similarly, several other art forms considered as *sampradaya* 50 or 60 years ago are now accepted: for example, *neraval* and *swaraprastaram* for *kritis*, *trikala*, *anuloma* and *pratiloma* for *pallavis*, etc.

Though changes from time to time are inevitable, the basic structure and pattern

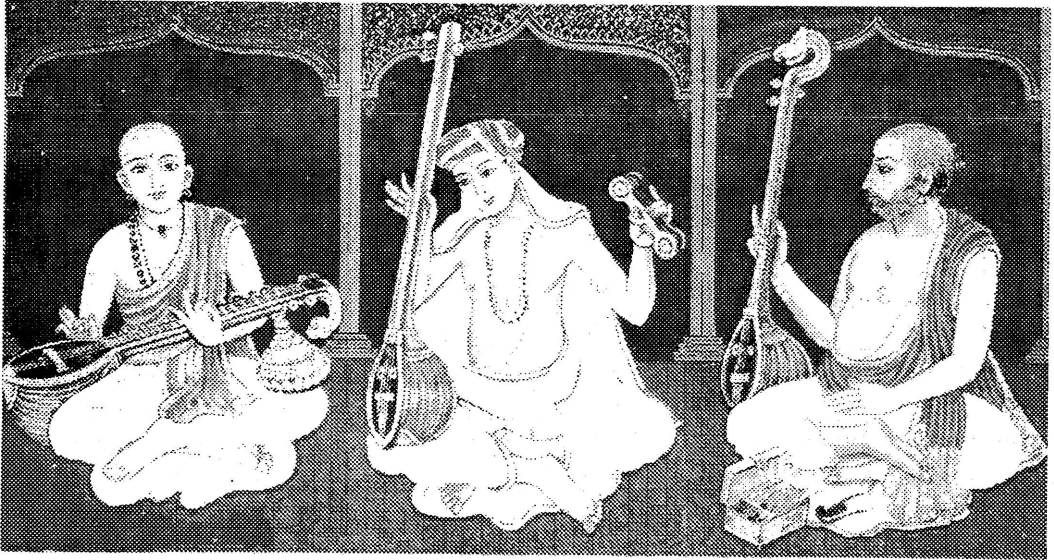
of *Karnatak* music have remained essentially the same. Melodic patterns in *Karnatak* music have an individuality of their own, e.g., the *kriti* or *kirtanam*, *tanam*, *pallavi*, *ragamalikas* with or without *tala*, *talamalikas*, *tevaram*, *tiruttandakam*, *sindu*, *temmangu*, *varham* and so on. These or forms characteristic of and existing solely in the realm of ‘Karnatak’ Music.

Bani in popular parlance would mean path or *marga*. Many *ragas* characteristic of *Hindustani* music have now found their way and established themselves as *ragas* of ‘Karnatak’ music. *Behag*, *Sindubhairavi*, *Kanada*, *Hamir kalyani*, *Khamas*, *Jenihuti*, *Dwijavanti*, *Surati*, *Kafi*, *Atana* and *Bilhari* are instances in point. Differences in nomenclature and articulation there may be, but these *ragas* have been assimilated into our system with advantage by our musicians. Unlike the ‘Karnatak’ system, the *Hindustani* system is more elastic and flexible and comparatively free from inhibitions and restrictions. For instance, in the North there are several *gharanas*, each one handling one and the same *raga* differently. In the South, everywhere every *raga* is rendered alike. Again in the *Hindustani* system, several *ragas* have arisen from a single root with noticeable difference. For instance, *Darbari Kanada*, *Kafi Kanada*, *Adana* and *Nayaki Kanada*. Similarly, *Meghmalthar*, *Sarangmalthar* and *Gaudmalthar* have all sprung from *Malthar*.

The most noteworthy feature of Karnatak music is the *gamaka shuddha*. Our *Sampradaya* recognises the *prayoga* of *gamakar* and *anuswaras* while rendering *ragam*, *swaram* or *tanam*. It is possibly for this reason that *tanavaranas* in quicker tempo and replete with *gamaka shuddha* are given great importance by our *vidwans*. Similarly, it is the *gamaka shuddha* in rendering *tanam* that gives its characteristic individuality to the *Karnatak* style. The *gamakas* of the *Karnatak* system may be said

compartmentalised. We mix all three and introduce *sangats* in all tempi. This is well illustrated in the *sangatis* of many *kirtanams*. The three tempi with four, two and one *kala choukam* is a noteworthy feature of the *Karnatak* style. *Hindustani* musicians do excel in variations of tempo but not perhaps necessarily in the progressive order of our style.

Yet another interesting feature of *Karnatak* music is that while some systems



to be more emphatic. There are some *gamakas* peculiar to this system.

One important and characteristic aspect of *Karnatak* music consists in the tempo of rendering *raga alapanas*. As in the *Hindustani* music, we have the *chouka*, *madhyama* and *drut layas* in our music. But the South Indians feel that long passages of *vilambit* and *drut* are somewhat

of music lend themselves to be easily notated, our scholars have proved the futility of notating our *ragas* and even *kirtanams* in their real and full spirit. For instance, the note *ga* in the *raga* *Sahana* acquires three distinct values in terms of *sthana*, *gamaka* and *shruti* in different contexts. This cannot be studied from a textbook but can be learnt only by listening to a traditional rendering in accordance

with *Sampradaya*. It is for this reason that we consider keyboard instruments like the piano, the *harmonium* and the *jalatarang* unsuited for the reproduction of the *Karnatak* style. It is common knowledge that one and the same note acquires different values and shapes due to *sthai* nyasa, *amsa* bhedas, etc. *Bhairavi* and *Manji* are instances. Similar instances of twin ragas are *Janaranjani* and *Purnachandrika*, *Arabli* and *Devagandhari*.

The ramifications of the *raga* and *tala* in our system are unique. There are hundreds of *raga* and *tala* varieties, but each one of them can acquire an individuality depending upon the genius and *sadhana* of individual *vidwans*. For instance, *Tyagaraja* has composed 26 songs in *Todi*, 20 in *Kalyani*, 14 in *Kamavardhini*, and 13 in *Varali*. Each of the songs in the same *raga* has a separate entity lending itself to the interplay of the *manodharma* of different singers within established bounds. There are, similarly, other great composers like *Dikshitar*, *Shyama Shastri* and *Swati Tirunal*. Again, the *Kirtanam*, a musical form shaped by *Bhadrachalam Ramadas* and perfected by *Tyagaraja*, is a unique feature of our system.

Ragam, *tanam* and *pallavi* is the high watermark of our music. A proper study of this particular aspect of our music would reveal the place of rhythm and tempo, of melody and *ragabhava* and the genius of our master-minds in evolving our system. The order of items for the *kacheri* – starting from the *varnam*, then passing on to *madhyama*

kala kritis (with *raga alapana*, *neraval* and *swara*) then to the *chouka kala* with appropriate proportions of *ragam* and *svaram*, then more *madhyama kala kritis*, and reaching the climax in *ragam-tanam-pallavi* – is significant. The *ragamalika* without the restrictions of *laya* is another peculiar feature. In *viruttam* and *sloka*m, where the accent is on the *sahitya* and the *ragabhava*, the *Sampradaya* has a charm of its own.

In my opinion, it is the *madhyama kala* – and this is an important aspect of the *Karnatak* music – which gives endless scope for Improvisation and *manodharma* to the performer. The *madhyama kala* tempo of so many of our compositions and the style of most of our well-known musicians bear testimony to this fact. This by no means places the *chouka kala* at a discount. Beyond doubt, the *chouka kala* songs and *padams* reflect the soul of our ragas. But experience has shown that *chouka kalam* is best enjoyed by audiences with cultivated taste. Its place is thus the chamber with a limited, discriminating audience. My view is that the true *Karnataka Bani* should adequately provide for the three degrees of speed, the *madhyama kalam* getting the lion's share and the *chouka kalam* having just the minimum that would not tire. It is these aspects when found in the *Hindustani* music that we in the South are able to appreciate most.

- G.N. Balasubramanyam

Courtesy : Aspects of Indian Music

Published by Govt. of India



Fruits Medicinal Properties

The fruits possess a great nutritional value, and also medicinal effect. They are between the therapeutical agent greater of the nature. All the fruits are endowed with medicinal properties. They are astringents, other emollients. Some excite the gastric functions, others activate the functions intestines. Some unpoison the organism, dissolving and expelling the poisons; others supply necessary vitamins and the indispensable ones you leave. The medicinal power of the fruits is characterized for each species. Here it is some experimental constatations:

AVOCADO It is used against the reumatismo, promotes the elimination of the gases, digestive, laxative.

PINEAPPLE It facilitates the digestion, germicida, strong oxidante, desobstruente of the liver, combat the jaundice, combat the artrite, combat swell,

ABIU

PLUM

ALMOND

ARACA

OLIVE

BANANA

combats the diphtheria, good against the afecções of the throat and against arteriosclerosis.

Combats the afecções of the respiratory ways.

It is purgativa, depurative.

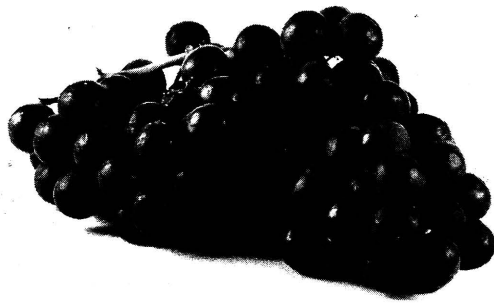
It is efficient against the diseases of the ways respiratory and the irritation of the urinárias ways.

It is calmante.

The green is astringent, to the step that the black color is laxative.

Combats the diarréia, calmante, favors the formation, secretion and excreção of milk, combat the anemia.

CAMBUCA	It is good for the stomach.	GRUMIXAMA	It is stimulant of the appetite, reanimadora.
CAQUI	It is alcalinizante, good for the afecoes of the liver and catarros of the bladder.	JABUTICABA	It is stimulant of the appetite, reanimadora.
CHESTNUT	It is beneficial for the kidneys and the liver, and very useful in the diarréia of the children.	ORANGE	Combats the lack of vitamin C, stimulant of appetite, intestinal, laxative, diuretica regulating, combat the reumatismo, calmante, digestive, antifebrile, anti-hemorrhagic, combat the nevralgia, it restores the flow menstrual, when scarce or absent, combat the nefrite, depurative, against verminose, etc.
CHERRY	It is alcalinizante, remineralizante, combat it would desinteria, and efficient against arteriosclerose.	RASP	It is acalinizante and combat the lack of the vitamin.
COCONUT	It is calmante, combat the fever, combat the worms, useful in the intestinais inflammations.	LEMON	The juice is stimulant of the appetite, diuretico, combat the fever, combat the reumatismo, combat the lack of vitamin C, anti-septic, astringent, cures wounded and combat the vomit. It dissolves the calculations; combat the afecoes produced for diverse microorganisms (colera, dysentery, tifo, etc.).
FIG	Combats the afecoes of the respiratory ways, laxative, it has the property of amolecer fabrics, attenuating the inflammations, the swells the burnings, and to alliviate pains and to cure wounded.	APPLE	Combats the diarreja, stomachal, combat the afecoes of the respiratory ways. Food for the brain.
FRUTA-DE CONDE	It is stimulant of the appetite.		
JENIPAPO	It is indicated in the bad digestion and the afecoes of liver and of baco.		
GOIABA	Combats the diarreja and the tumors.		



PAPAYA	It is laxative, diuretico, it has the property of amolecer the fabrics, to attenuate the inflammations, the swells and the burnings, and to alliviate wounded pains and cure, cooling.	CANTALOUPS	It is calmante and diuretico.
SLEEVE	It is anticatarral, combat the lack of vitamin C, depurative, cooling, has the property to make to sweat, digestive.	STRAWBERRY	It is diuretico, anti-rheumatic, alcalinizante, combat the fever, eliminates toxins of the liver, laxative, facilitates the digestion, tonic for the nerves.
MANGABA	It is digestive.	NUT	It is good remedy for the brain and the nervous system in general.
MARACUJA	It is calmante and it has the property of amolecer fabrics, to attenuate the inflammations, the swells and the burnings, and to alliviate wounded pains and cure. Very used in coqueluche.	PEAR	It is diuretica and it lowers the pressure.
QUINCE	It is astringent, fortificante of the device digestive.	PEACH	It is a balsam for the stomach and a precious one food for the diabetic ones.
WATERMELON	It is calmante, diuretica, cooling.	PITANGA	It is cooling and antiberiberica. The leves they fight the fever, exactly in the rebellious maleitas.
		ROMA	The raizes are used to banish the tenia (or tapeworm).
		SAPOTI	It is cooling.
		TAMARINDO	It is laxative and until purgativo.
		GRAPE	It is vitalizadora, alcalinizante, anti-rheumatic, depurative, diuretica, laxative, tonic for the nervous system.

PALLAVA

7th-9th Centuries A.D.

The Pallavas, from their capital at Kanchi, ruled a large kingdom, which extended in the North to the Krishna valley, and in the South to the Kaveri at Tiruchirapalli. Vishnugopa, ruler of Kanchi, was among the kings who fought valiantly against Samudragupta, and were vanquished. Simhavishnu, in the 6th century, was a great king of this dynasty, who had a powerful matrimonial alliance with the Vishnukundi king in the region of the Krishna. Simhavishnu's son, Mahendravarman-I, was the first of this dynasty to introduce rock-cut architecture into the Tamil area. Mahendravarman was descended from the Vishnukundins, rulers in the Krishna valley, through his mother. The art of the Vishnukundins at Vijayavada had impressed the young Pallava prince and there is a great similarity between the rock-cut temples at MogaIrajapuram and those of Mahendravarman in the Tamil country. His famous inscription at Mandagapattu: *etadanishtakam adrumam alauham asudham vichitrachittena nirmapitam nripena brahmesvaravishnulakshitayatanam*. 'This temple for Brahma Isvara and Vishnu has been created by the curious-minded king without the use of bricks, wood, metal or mortar' introduced as an innovation among the structural temples of usual materials. Mahendravarman bore such titles as *Vichitrachitta*, the curious art-minded one;

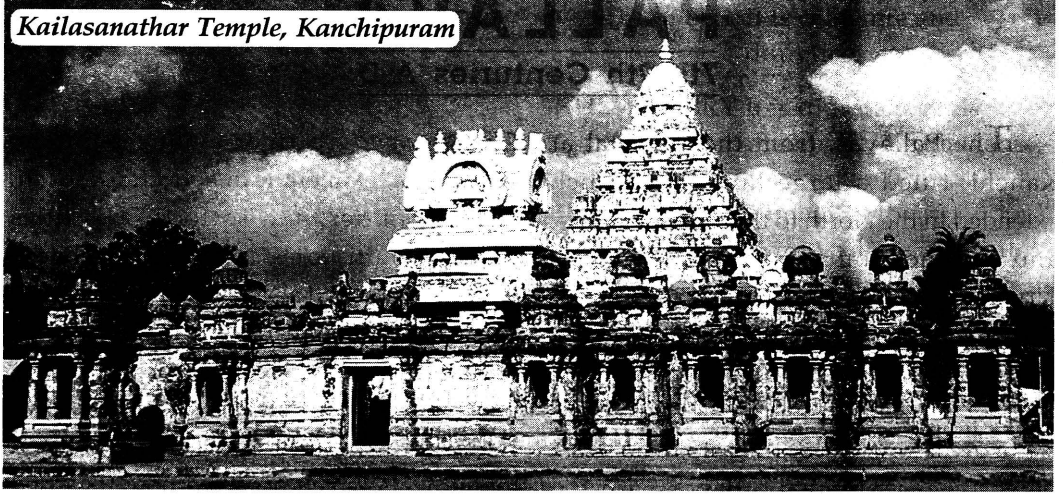
Chitrakarapuli, a tiger among painters: *Mattavilasa*, exuberant in sport: *Chaityakari*, temple-builder, and so forth. His titles suggest his artistic taste. He was an architect, engineer, poet and artist—all in one. His son, Narasimhavarman-I, who was probably amongst the greatest conquerors of his day, and ranked with Pulakesi and Harsha, his two great contemporaries, created monuments which are even now regarded with wonder by connoisseurs. Towards the end of the 7th century, the Kailasanatha Temple at Kanchipuram was constructed by another great Pallava king, Rajasimha, who was aided in this task by his art-minded queen, Rangapataka. The rare surviving fragments in the monuments of this king give us a very few splendid examples of the Pallava phase of painting.

Traces of line and colour in cave temples, as at Mamandur, indicate how great was this lost period of painting.

In the structural Pallava temples at Panamalai and Kanchipuram there are other fragments which give us a glimpse of the development of painting a few decades later.

The beautiful goddess, with a crown on her head and an umbrella held over her, from Panamalai, is Parvati watching the dance of her lord, Siva. She stands gracefully with one leg bent in exactly the same manner as the princess is represented in sculpture of the

Kailasanathar Temple, Kanchipuram



2nd century at Amaravati and in Vakataka painting of the 5th century at Ajanta. This favourite pose continues even into later times and one of the masterpieces of sculpture in the Chola period at Tribhuvanam is a magnificent maiden or *surasundari* (celestial nymph) in an identical posture. Parvati at Pana-malai, in this painting, is very close to a large painting of Siva dancing in the *lalatatilaka* (foot touching forehead) pose, multiarmed, exactly as he is portrayed in the relief to the right of the entrance of the main cell of the Kailasanatha shrine at Kanchi. Unfortunately in this painting the form is almost completely faded out, though with great difficulty it can be made out by close examination. No photograph gives a good idea of the lines composing this pleasing figure, which is a masterpiece of Pallava workmanship. These two paintings in an outer cell, to the left of the shrine, are exposed not only to the ravages of weather but also to indiscriminate vandalism.

This painting along with the charming remains of a princely figure and a Somaskanda, from two of the cloistered cells surrounding the courtyard of the Kailasanatha Temple at Kanchipuram, illustrate the painter's art of Rajasimha's time. The paintings here in this temple were the discovery of Jouveau Dubreuil, who had earlier noticed such remains in Sittannavasal.

As one proceeds clockwise, peering into the small cells in the *pradakshinapatha* (perambulatory passage) and examining their walls, daubs of paint and traces of line are discerned and suggest what a pageant of colour they once were. Most of the walls are now a dull white or blank. In cell No. 9, fragments of painting portray the upper and lower right arms of Siva, the rest being lost. In the 11th small cell can be seen a fragment of a beautiful Pallava face of Siva, with only a part of the left eye, nose, lip, cheek, the *kundala* on the ear and *yajnopavita* (sacred



thread) on the shoulder preserved. In No. 12 there is just a portion of a beautiful face and the right side of the body. The *jata* is arranged almost as in the Badami Cave. In cell No. 23 is a painting of Siva, with the sacred thread running over his right arm, and with a single string issuing from the *brahmagranthi* (knot) which is lost, holding a *sula* (trident) in his lower right arm, with its prongs lost; and to the left is another four-armed figure, with only a portion of two right arms, and the sacred thread running over the right arm preserved. In the cell No. 34 is a beautiful line drawing in red of a *mahapurusha*, whose *kirita* (crown) left shoulder and a portion of

torso and left thigh are all that remain. The *kirita* is a precursor of the ornate but delightful headgear characteristic of Chola art. In cell No.46, a portion of the lower layer, which lies exposed, shows a beautiful sketch with red wash, all that is left of a once colourful painting of a four-armed deity; it reveals the portion near the waist with the *katisutra* (waist-band), the right hand resting on the knot of the *katisutra*, the fingers of the upper right hand against the chest.

Probably the most important painting here, though only a drawing in red, for all the colour has vanished, is the one representing Somaskanda on the back wall of cell No. 41. Though there is little of paint left here, yet the vermilion aureole around the child's head suggests the intention of the painter in use of colour.

Though fragmentary, the painting representing Somaskanda indicates the wonderful flow of the lines composing the figures of seated Siva and Parvati, with baby Skanda in the centre and the *gana*, the follower of Siva, on one side, at his feet, and a charming attendant of Parvati beside her, at the edge of her seat. When we recall that the Somaskanda theme was a great favourite in Pallava art and that this is the only representation of it in a painting of this period, preserved for us, we may very well appreciate how important this is in the study of Pallava painting. It is a lovely theme of fond parents and a frolicsome child, of the ideal mates and the object of their love, of

the philosophy of affection which, though lavished on the off-spring, increase a thousandfold: *ratahaganamnoriva bhava bandhanam babhuva yat prema parasparasrayam vibhaktamapyekasutena tat tayoh parasparasyopari paryachlyata*: 'their mutual love, intense like that of the *chakravanka* birds, though shared by their only child, increased mutually a thousandfold, (*Raghuvamasa*-iii, 24).

The lines composing these figures are fragmentary but there remains enough to make out the Somaskanda group. Siva is seated, his right leg lowered and the left bent on the seat. The *jatamakuta* (crown of locks of hair) is lost. The curve of the face and earlobes suggests what a beautiful portion has been lost. The torso shows the perfection of the contour at its best, the upper hands are more suggested than complete, but the lovely palm of the lower left, nestling on the lap, makes up for all that is lost of the lower right of which the fingers alone remain. The *yajnopavita*, flowing in a curve and hanging in tassels, is matched only by the elaborate girdle and pleasing folds of the silken garments. *Keyuras* (bracelets) and *udarabandha* complete a most pleasing arrangement of jewellery. The baby beside him, Skanda, is a noble representation of the age of innocence. A tiny coronet adorns the juvenile head. From his mother's lap, he looks at his father meaningfully. The mother of this pretty child is a painter's dream, a marvel of brush work, a delicate subject, treated tenderly. She is seated on a couch,

with her right leg on her seat and the left hanging down to rest on a cushioned footstool which is lost. The face of Uma is obliterated and we can imagine its beauty, with gem-decked crown and flower-filled braid, the right hand caresses the child, the left rests on the seat. The full breasts, the attenuated waist and the broad hips supply a fullness to the form that idealises feminine grace. The pendant, which is all that is left of a necklace, is in a place where beauty of form enhances the beauty of ornaments. The armlets and various types of bracelets are present. The elaborate girdle with its multiple tassels flowing down the sides of the couch, like a tiny silver streamlet descending in little cascades, is a piece of work of which any master should be proud. The silken garment worn by the goddess is worked with a pleasing pattern. At the couple's feet on either side, the two attendants are *uddhata*, or foreceful, beside Siva and *lalita*, or the soft-type near Uma. There is a strange tinge of intelligence and calm in the *gana* beside Siva and a soft look may be seen in the sweet face of the one near the Lord's consort.

The fragment of painting depicting a Kinnara and Kinnari (half man, half bird) as celestial musicians can rank with any of the best of this type at Ajanta.

- C. Sivaramamurthi

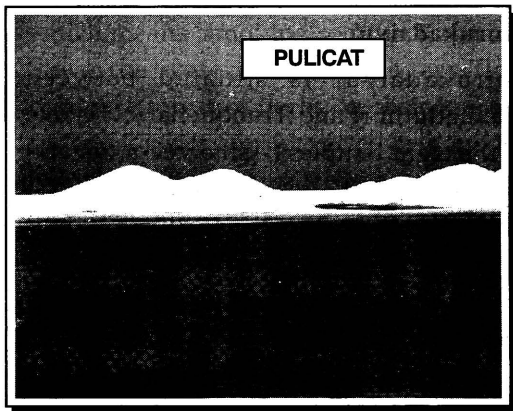
Courtesy : South Indian Paintings

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LESSER KNOWN TOURIST PLACES

Pulicat

Pulicat Lake is India's second largest brackish water lagoon. It is located 40 km north of Chennai. Pulicat lake is a breeding ground for rare birds. It has about 16 Island Villages adjoining the lake. The lake offers a good potential for eco-tourism in Tamil Nadu. The lake supports a rich biodiversity of marine habitats. The principal bird that visits Pulicate lake is flamingo. About 15,000 flamingos visit Pulicat every year.



Elagiri

Elagiri in Jolarpet Panchayat Union in Vellore District is one such lesser known hill station. Elagiri is an isolated, alternative picnic spot in Eastern Ghats at 1,000 meters altitude. It has salubrious climate, scenic surroundings etc., Elagiri is an ideal location for organizing Trekking programme.

Vedaranyam

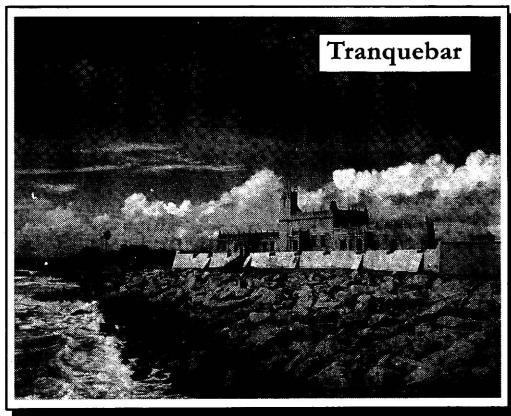
Vedaranyam is renowned for the festivals held on fully moon day in July - August and January - February.

Tranquebar

Tranquebar is 35 km north of Nagapattinam abutting the Bay of Bengal. This is bore out by the temple on the seashore, which is crumbling now due to the sea ingress. The Danish constructed forts on the coast of Tranquebar. This was only busy trade centre on the Coromodal coast of the Danish. This fort was a busy trade centre till 1845 AD when the Danish handed over the fort to the English. This fort was declared as a protected monument.

Periyapalayam

Arulmigu Bhavani Amman Temple at Periyapalayam in Thiruvallur District one



of the most important Pilgrimage Centre in Tamil Nadu. Large number of pilgrims from various parts of Tamil Nadu and Andhra Pradesh are visiting this temple daily.

Thirukadaiyur

Thirukadaiyur is situated between Mayiladuthuri and Tranquebar. It is one of the eight temples (Ashta veera thalam) glorifying the heroic deeds of Lord Siva. Thalapuram (local history) says that Lord Siva exterminated Yama at this place to save the life of Markendeya. It is one of the famous Sakthi thalam.

'Sashtiyappthapurthi' i.e. 60 years of old persons used to tie their holy wedding knot here for their welfare. Tourists / pilgrims, especially NRIs and PIOs from far & near congregate this place regularly.

Thirumanancheri

Arulmigu Oothavaganathaswamy temple is situated at Thirumanancheri 15 kms. from Myladuthurai in Nagapattinam District constricted during 11th century. (The inscriptions on the stones found here indicate that this temple (Rajagopuram) was constructed by Nallappa Naicker. During the 11th century sembian Madeviyar had offered worship at this temple). It is believed that to those whose marriages are delayed will get their marriage and solemnized quickly by worshipping in the temple. As this temple is situated in the midst of Navagraha Temples. It is also believed childless couples are also blessed with issues after offering worship at this temple.



Sithannavasal

It is the best archeological site in Pudukottai. It is famous for its cave paintings which are second only in importance after Ajantha paintings in the art history of India. It is perhaps the only place where you can find inscriptions in Tamil Nadu from the 3rd century BC to the 13th Century AD. Also there are megalithic monuments such as stone - circles, urn and cists burials spread in the plains around the hill.

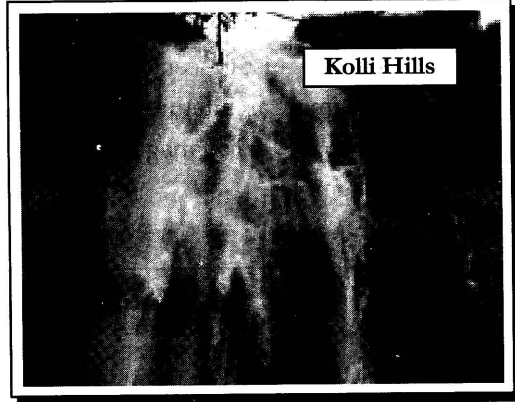
Puliancholai

Puliancholai is 72 kms. from Tiruchirappalli, a place of scenic beauty. This forest area is cool and green with the added attraction of the small waterfalls and a stream. Puliancholai is a beautiful place for one day excursion.

Tharamangalam

Tharamangalam in Salem District is famous for Sri Kailasanathar Temple. Figures of tortoise, fish, monkey, crocodile are carved out on the walls and granite roofs. The gopuram is bedecked with

stucco figures. Statues of Rathi - Manmatha, Vali - Sugriva of the epic Ramanaya and Yali with rotating stone ball in its mouth and the rotating lotus flowers in the ceiling are some of the beautiful sculptures. It is at a distance of 33 kms. from Salem.



Kolli Hills

Kolli Hills is situated in Eastern Ghats at Namakkal District. It is 78 kms. from Salem and 40 kms. from Namakkal. It is a lesser known Tourist Centre. There are number of tourism potentials such as Arabaleeswarar Temple, Ettukai Amman Temple, Agaya Gangai Water Falls, beautiful view points, herbal production and Sales Centre. This hill region is famous for meditation for quite a long period and also potential centre for Eco-tourism.

Hogenakkal

Watered by the Cauvery, this green belt is known for its natural beauty and bracing climate. Hogenakkal, Hosur and Krishnagiri are some of the beautiful

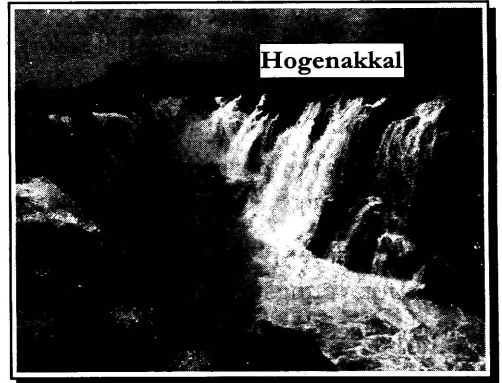
places here. Situated on the Karnataka - Tamil Nadu border. Hogenakkal is undoubtedly one of the most beautiful places in the state. The fine spray that rises as the water hits the rocks below have given these rocks the name Hogenakkal which means 'smoking rock' in Kannada. Since the waters of the Cauvery flow though a forest of herbs on their journey to the falls it is considered to be good for health. The magnificent, rugged mountainous scenery around the falls can be better enjoyed by long walks and treks.

Bhavani Kooduthurai

This is place where rivers Bhavani, Cauvery and Amudha confluence. It attracts large number of tourists because of its scenic beauty. Sangameswarar Temple is situated here.

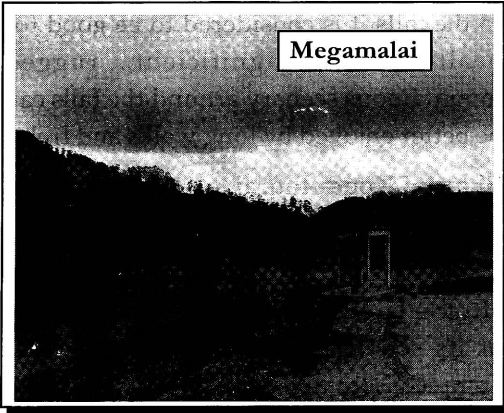
Valparai

Valparai Municipality is a hill station, amidst tea gardens. It has a population of 95,107 people and covers an area of 217.87 sq.m. Tea, Coffee, Cardamom are the main



cultivation. In the foot hills of Valparai is the monkey falls where people come in hundreds. From here one can view the water falls in the forest area. Solayar Dam is 15 kms from here which is the second biggest Dam in Asia.

Megamalai



Megamalai is a scenic place dotted with tea estates and cardamom plantations. Situated at an elevation of 1,500 mts. above sea level, the place is rich in flora and fauna.

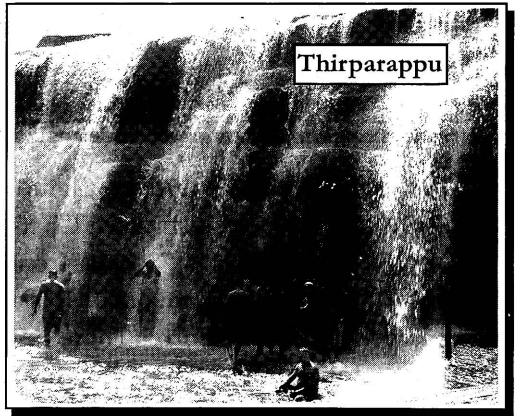
Sirumalai

Sirumalai is a second rung hill resort in 40 kms. from Dindigul District. The climate is stable and salubrious without any extremity in temperature. The height ranging from 800 ft. to 1,200 ft. is modest enough to be acceptable to elders and high enough for youngsters. Rich vegetarians such as coffee, jackfruit, banana, lemon, etc. are an added attraction to the tourists.

Agasthiyarpuram and Thenmalai are the notable tourist spots in Sirumalai. Sirumalai is good enough for winter-holidaying too.

Thirupudaimaruthur

40 kms. from Tirunelveli. Athalanathar temple is at Narumpoo Nathar Temple on the banks of river Thamiraparani attracts tourists mainly because of scenic beauty. The four styles of temple architecture viz. Pandya, Chera, Chozha and Vijayanagara beautify the glorious temple.



Thirparappu

Thirparappu means "a pavilion of beauty and sacredness". The panoramic view of the shrine with green hills and the perennial river Kodayur, running in front of the shrine, is really fascinating and attracting. The sparkling waterfalls is a rich feast for the eyes. A bath is most refreshing. This place is 70 kms. from Kanniyakumari.

Kalvarayan Hills

Kalvarayan Hills is spread over an area of 600 sq.kms. to 1,190 mts., these hills offer a temperate climate and quiet solitude. There is a botanical garden on the hills besides two waterfalls here. The area is ideal for trekking.

Pollachi

Pollachi is a town and a municipality in the Coimbatore District. It is located 40 kms. south of Coimbatore. It is an important commercial area in the region and has a big market for agricultural products. Pollachi is the nearest town to the Indira Gandhi National Park. Due to its proximity to the Western Ghats, Pollachi has a pleasant climate throughout the year.

Ambal Temple at Koothanur is a one of its kind temple dedicated exclusively to the "Goddess of Learning" Saraswathi.

Kurangani

Kurangani in Theni District is known for the large scale trading of cardamom, cotton, chilli, etc., This place identified for promotion of Rural Tourism project in Tamil Nadu.

Srivilliputhur

Srivilliputhur is a municipality in Virudhunagar district in the Indian state of Tamil Nadu. It is on the Virudhunagar - Tenkasi line of the Southern Railway, about 74 km south of Madurai and well connected by road and rail with Madurai, Tenkasi, Tirunelveli and Sattur.

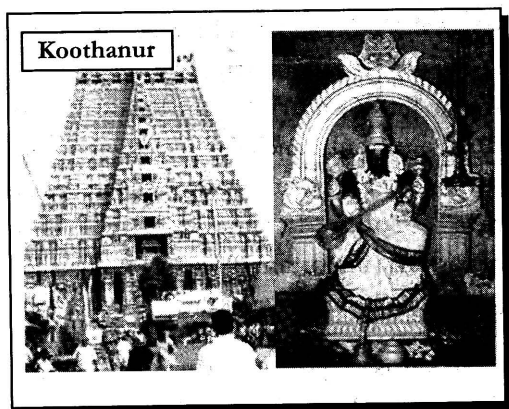
The primary landmark of Srivilliputhur is 12-tiered tower structure dedicated to the lord of Srivilliputhur. This Temple Gopuram is the official symbol of Tamil Nadu Government.

Tiruchengodu

Tiruchengodu Mountain means "Holy red Peak". The legends have spawned a multitude of name for the hill such as Aravagiri, Brahmagiri, Bogimalai, Chakkiri Meru, Dhenugiri.

Thali

Thali is 25 kms. from Hosur situated near the Karnataka State. The area is covered by a number of hills. The climate is chill round the year. It is called Little



Koothanur

Koothanur is situated 22 kms from Tiruvarur. The name Koothanur derives from the poet's name Ottakoothar. Sri Saraswathi Temple is ancient Saraswathi

England. The taluk headquarters is Denkanikottai. The fort at Denkanikottai was built by Palayakarar in 1530 AD.

Kodiveri

Kodiveri is 10 kms. from Gobichetti-palayam and 55 kms from Erode. The entrance to the anicut at Kodiveri is a study in stunning contrast. On one side of the bridge, water flows without as much as

'*Pachai*' means Green and '*Malai*' means mountain. Pachamalai spread with a few ranges, is a heaven of the tribal of this region, with unique culture and way of life. It's a good hills range for trekking to enjoy nature and the animal life.

Vaigai Dam

Vaigai Dam is one of tourist attraction in Theni District. Vaigai Dam is constructed across the river of Mullai from Vaigai near Andipatti in Madurai District. The Children Park, Zoo, etc. are fast developing areas at the dam site.

Kattabomman Fort

Kattabomman Memorial Fort in Panchalankurichi is situated in Thoothukudi district. Veerapandiaya Kattabomman also

known as Kattabomman or "*Katta Bommu*" was a 18th Century Indian Palaiyakkarar Chieftain from Panchalankurichi and who was one of the earliest to oppose the British rule. Today Panchalankurichi is a historically important place in Tamil Nadu.

Sikkal

Sikkal is a beautiful Murugan Temple dedicated to Lord Singaravelar is housed in a large complex in Nagapattinam District. The pillars of this temple are adorned with intricate and exquisite carvings.



ripple. The other side, it gushes with bottled fury. This unique feature attracts large number of tourists / visitors.

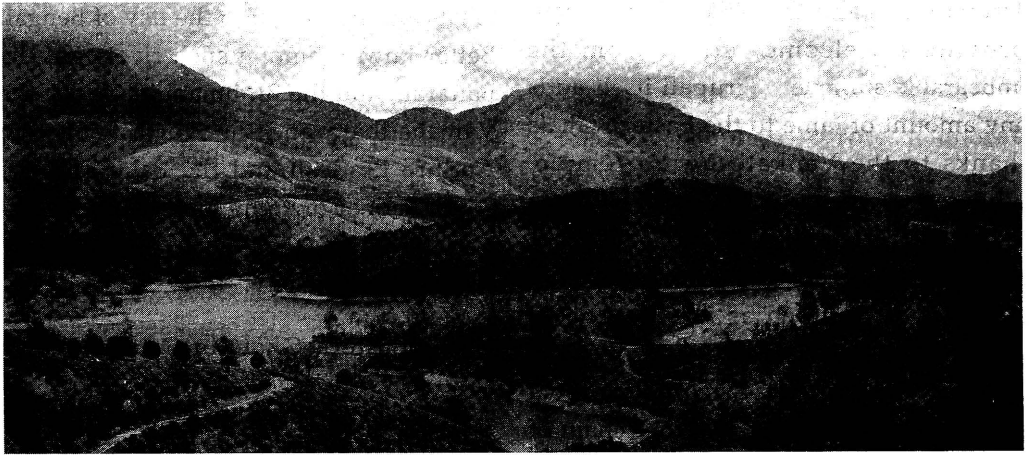
Pichavaram

Pichavaram is 16 kms. from Chidambaram. A unique natural phenomenon in the form of mangrove forests which sprawl over 11,000 hectares of backwaters is the tourist attractions here. It is an ideal place for fishing and boating.

Pachamalai

Pachamalai is a green hill range, just 80 kms north of Tiruchirapalli via Thuraiyur.

The EASTERN GHATS



Eastern Ghats flank our east coast from Tamil Nadu to Orissa. The Eastern Ghats are altogether lower than the Western Ghats and generally situated at a considerable distance from the Bay of Bengal. This results in any number of wide sandy beaches along our east coast which over serval stretches is lined with elegant casuarina grooves.

Though much lower than the Western Ghats, the Eastern Ghats are considerably longer, being over 2,100 kms. in extent. Unlike the Western Ghats, the Eastern Ghats have numerous gaps here and there. However, starting in Orissa, the range is reasonably continuous without too many gaps right through Orissa and Andhra Pradesh and into north Tamil Nadu. Beyond the Javadi hills in north Tamil Nadu one observes a wide gap in the

Cauvery Basin area. Thus, Tamil Nadu's Thanjavur and Tiruchirapalli districts on the Cauvery basin are flat and almost completely in the plains. Further south another chain of Eastern Ghats runs almost up to Cape Comorin; the hills are mostly very low except in Ramanathapuram district.

There are of course two separate chains of Eastern Ghats that lead away from the east coast right across the Deccan. One chain starts with the Tirupati hills in the east, leading across Chittooor district in the Rayalaseema region of Andhra Pradesh, and further on to the Nandi hills in Karnataka about 50 kms. north-east of Bangalore. It is this chain that includes the Eastern Ghat's highest hills. The highest hill in Andhra Pradesh, in fact in the entire Eastern Ghats is Horseley hill (nearly

5,000 ft.) near Madanpalli in Chittoor district. In Chittoor district itself while the plains are burning hot in summer the Tirupati hills and the hills of Madanpalli provide a welcome retreat from the unbearable summer. Tirupati itself adds any amount of fame to the Eastern Ghats thanks to the Venkateshwara temple, whose exact location is at Tirumala (3,000 ft.). Tirumala indeed had every potential to be a charming princess of hill stations, surrounded as it is by thickly wooded hills. Of course it has over the centuries grown up as a major temple town and pilgrimage centre. Another chain of the Eastern Ghats leads westwards from the Javadi hills of Tamil Nadu's South Arcot and North Arcot districts across Dharmapuri, Salem and Coimbatore districts towards the Nilgiris. It is perhaps this which leads some observers like Bill Aikten to regard the Nilgiris as the watershed separating the Western and Eastern Ghats. The Bangalore-Mysore plateau of the Deccan lies between these two sections of the Eastern Ghats. Both of these chains of the Eastern Ghat leading westwards across the Deccan have any number of hills above 3,000 ft. with some even higher than 4,000 ft. Otherwise most of the Eastern Ghats comprise hills well below 3,000 ft.

With the Eastern Ghats much lower than the Western Ghats and the Deccan itself generally sloping eastwards, it is naturally impossible to have any river rising in the

Eastern Ghats and flowing into the Arabian Sea. However, there are a number of lesser known rivers rising in the Eastern Ghats and flowing into the Bay of Bengal. Better known among such rivers are the Baitarani and the Brahmani in Orissa, the Vamshadhara and the North Pennar in Andhra Pradesh and the Palar and the South Pennar in Tamil Nadu. In Chennai itself we have the Adyar watering the south end of the city.

The Eastern Ghats in Orissa, rich in natural beauty as well as tribal cultural life, can be such a delight to the adventurous traveller. The Simlipal Tiger Reserve in Mayurbhanj District is a shining example. This national park is all famous as a tiger reserve set up under our Project Tiger and has nearly 100 tigers. Situated amidst vast hill forests, Simlipal boasts of scenic beauty with a rich variety of flora and fauna. The Meghasani peak here is 1,158 m. (over 3,760 ft.), while the Barehipani waterfall 399 m. (nearly 1,300 ft.) high and the Joranda Falls 150 m. (1,950 ft.) high are the other major attractions.

We have already referred to the numerous isolated mountain ranges spread over the heart of the country. Before concluding, it is worth mentioning the Hazaribagh hills on the northern fringe of the Chhota Nagpur Plateau. The famous Hazaribagh National Park is situated here.

Dravidian Languages

After the decline of the Cholas and the Pandyas, the glorious epoch of Tamil literature came to an end. While Sanskrit, Kannada and Telugu made great progress, the standard of Tamil literature deteriorated though it received local patronage. None the less, this period has made its own contribution to Tamil literature and it has given us a large number of philosophical works, commentaries, Puranas, and Prabandhas. The numerous authors belong mostly to the Vaisnava or Saiva sects, though some Jaina writers continued to write also.

Early in the first half of the 13th century, Meykandar formulated the tenets of Saiva-siddhanta in his *Siva-Jnana-Bodam*, a short treatise of a dozen sutras, perhaps translated from a Sanskrit original. His disciple Arunandi wrote the *Siva-Jnana-Sittiyar* which gives an authoritative explanation of the *Bodam*. These, together with the works of Umapati Sivacarya, are looked upon as the fountain-head of the dogmatics of the system.

Arunagirinatha, a devout Muruga devotee, composed in the fifteenth century the *Tiruppugal* consisting of over 1,360 songs in various metres handled with the utmost skill and characterized by a unique lilt. The *Prabodhacandrodaya* of Krsnamisra was translated into Tamil by Madai

Tiruvengadanathar. Also, in this period, the Vaisnava scholars wrote elaborate commentaries on the *Nalayiram* of their canon. Of these Pillai Lokacarya, Vedanta Desika and Manavala Mahamuni who flourished under the discerning patronage of Tirumala Nayaka of Madurai deserve special notice. This was also the period during which great scholars like Ilampuranar, Perasiriyar, Parimelalagar and Naccinarkkiniyar wrote their brilliant commentaries on the *Tolkappiyam*, the *Kural* and a few other Sangam works. These commentaries are models of medieval prose noted alike for brevity and clarity. But for them, many ancient texts like the *Tolkappiyam* would be mostly unintelligible today.

The *Tanjai Vanan Kovai* of Poyyamoli of Vanji is in praise of Bana, general of the Pandya king Maravarman Kulasekhara (A.D. 1260-1308). Pugalendi's *Nalavenba*, though short, is brilliant. The *Bharatam* of Villiputturar (c. A.D. 1400), which is not a full translation of the original by any means, established the tradition of using Sanskrit words and expressions freely in Tamil verse.

Ativirarama Pandya, who ruled from Tenkasi, was a royal poet of no mean order and his *Naidadam* has special literary merit. Kumaraguruparasvami, the reputed founder

of the Saiva mat ha at Varanasi, was patronized by Tirumala Nayaka of Madurai; his works on Goddess Minaksi and Muttukumarasvami are some of the best illustrations of the Pillaittamil type of Prabandha. Sivaprakasarsvami of the 17th century refuted the Christi doctrines in a short work which is no longer extant. He also translated into Tamil the Prabhulinga-lilai from the Kannada original.

Vaidyanatha Desikar (the author of the Ilakkanavilakkan which tried to supersede the Nannul) and his disciples started new literary school in the early 17th century. Kalamegham Andakakkavi Viraraghava Mudaliyar and Padikkasi Pulavar were few exceptional men of letters whose stray and

occasional poem have become bywords among the Tamils. Early in the 18th century the Sirappuranam, a life of Prophet Muhammad in verse was written by Umaru Pulavar, who was patronized by Sadakkad Etappa Nayaka and 'Abdul Kasim, Rajappa Kavirayar's Kutta/a-tala-puranam is a masterpiece though his other work, the Kurralak-kuravanci, is more popular. The middle of the 18th century the publication of a great commentary on the *Siva-Jnana-Bodam*, known as the Mapadiyam, by Sivajnana Munivar, a veteran poet and scholar. That was the period when Christian missionaries like Father Beschi introduced modern prose as a form of literature in Tamil language.

Courtesy : India -Society, Religion & Literature in Ancient and Medieval Periods

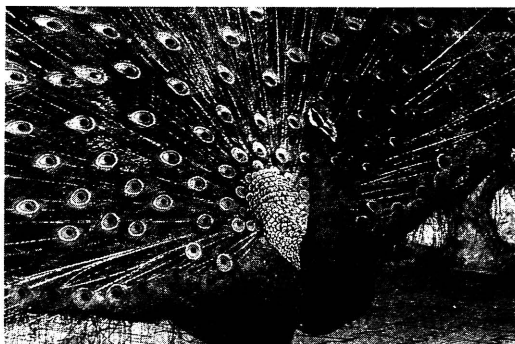
NATIONAL ANIMAL

The magnificent tiger, *Panthera tigris*, a striped animal is the national animal of India, it has a thick yellow coat of fur with dark stripes. The combination of grace, strength, ability and enormous power has earned the tiger its pride of place as the national animal of India. Out of eight races of the species known, the Indian race, the Royal Bengal Tiger, is found throughout the country except in the north-western region and also in the neighbouring countries, Nepal, Bhutan and Bangladesh.



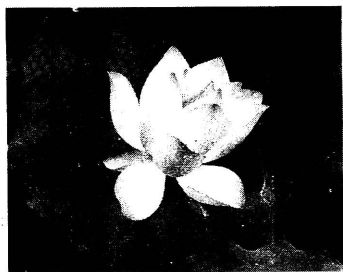
NATIONAL BIRD

The Indian peacock, *Pavo cristatus*, the national bird of India, is a colourful, swan-sized bird, with a fan-shaped crest of feathers, a white patch under the eye and a long, slender neck. The male of the species is more colourful than the female, with a glistening blue breast and neck and a spectacular bronze-green trail of around 200 elongated feathers. The female is brownish, slightly smaller than the male and lacks the trail. The elaborate courtship dance of the male, fanning out the tail and preening its feathers is a gorgeous sight.



NATIONAL FLOWER

Lotus (*Nelumbo Nudpera Gaertn*) is the National Flower" of India. It is a sacred flower and occupies a unique position in the art and mythology of ancient India and has been an auspicious symbol of Indian culture since time immemorial.

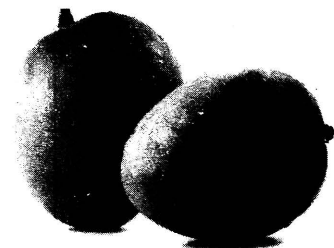


NATIONAL TREE

The Banyan Tree (*Ficus benghelensis*) is the National Tree of India. This huge tree towers over its neighbours and has the widest reaching roots of all known trees, easily covering several acres. It sends off new shoots from its roots, so that one tree is really a tangle of branches, roots, and trunks.



NATIONAL FRUIT



Mango (*Manigifera Mica*) is the National fruit of India. Mango is one of the most widely grown fruits of the tropical countries. In India, mango is cultivated almost in all parts, with the exception of hilly areas. Mango is a rich source of Vitamins A, C and D. In India, we have hundreds of varieties of mangoes. They are of different sizes, shapes and colours. Mangoes have been cultivated in India since time immemorial.

Source : India 2011

LAND AND THE PEOPLE

"India is the cradle of the human race, the birth place of human speech, the mother of history, the grandmother of legend and the great grandmother of tradition. Our most valuable and most instructive materials in the history of man are treasured up in India only." — Mark Twain

India has a unique culture and is one of the oldest and greatest civilizations of the world. It stretches from the snow-capped Himalayas in the North to sun-drenched coastal villages of the South, the humid tropical forests on the south-west coast, the fertile Brahmaputra valley on its





PHYSICAL BACKGROUND

Countries having a common border with India are Afghanistan and Pakistan to the north-west, China, Bhutan and Nepal to the north, Myanmar to the far east and Bangladesh to the east of West Bengal. Sri Lanka is separated from India by a narrow channel of sea formed by the Palk Strait and the Gulf of

East to the Thar desert in the West. It covers an area of 32,87,263 sq. km. It has achieved all-round socio-economic progress during the last 63 years of its Independence. India is the seventh largest country in the world and ranks second in population. The country stands apart from the rest of Asia, marked off as it is by mountains and the sea, which give her a distinct geographical entity. Bounded by the Great Himalayas in the north, it stretches southwards and at the Tropic of Cancer, tapers off into the Indian Ocean between the Bay of Bengal on the east and the Arabian Sea on the west.

Lying entirely in the northern hemisphere, the mainland extends between latitudes $8^{\circ}4'$ and $37^{\circ}6'$ north, longitudes $68^{\circ}7'$ and $97^{\circ}25'$ east and measures about 3,214 km from north to south between the extreme latitudes and about 2,933 km from east to west between the extreme longitudes. It has a land frontier of about 15,200 km. The total length of the coastline of the mainland, Lakshadweep Islands and Andaman & Nicobar Islands is 7,516.6 km.

Mannar. The country can be divided into six zones mainly North, South, East, West, Central and North-east zone. It has 28 states and seven union territories.

PHYSICAL FEATURES

The mainland comprises four regions, namely, the great mountain zone, plains of the Ganga and the Indus, the desert region and the southern peninsula.

The Himalayas comprise three almost parallel ranges interspersed with large plateaus and valleys, some of which, like the Kashmir and Kullu valleys, are fertile, extensive and of great scenic beauty. Some of the highest peaks in the world are found in these ranges. The high altitudes admit travel only to a few passes, notably the Jelep La and Nathu La on the main Indo Tibet trade route through the Chumbi Valley, north-east of Darjeeling and Shipki La in the Satluj valley, north-east of Kalpa (Kinnaur). The mountain wall extends over a distance of about 2,400 km with a varying depth of 240 to 320 km. In the east, between India and Myanmar and India and

Bangladesh, hill ranges are much lower. Garo, Khasi, Jaintia and Naga Hills.

The plains of the Ganga and the Indus, about 2,400 km long and 240 to 320 km broad, are formed by basins of three distinct river systems - the Indus, the Ganga and the Brahmaputra. They are one of the world's greatest stretches of flat alluvium and also one of the most densely populated areas on the earth. Between the Yamuna at Delhi and the Bay of Bengal, nearly 1,600 km away, there is a drop of only 200 metres in elevation.

The desert region can be divided into two parts - the great desert and the little desert. The great desert extends from the edge of the Rann of Kutch beyond the Luni river northward. The whole of the Rajasthan-Sind frontier runs through this. The little desert extends from the Luni between Jaisalmer and Jodhpur up to the northern wastes. Between the great and the little deserts lies a zone of absolutely sterile country, consisting of rocky land, cut up by limestone ridges.

The Peninsular Plateau is marked off from the plains of the Ganga and the Indus by a mass of mountain and hill ranges varying from 460 to 1,220 metres in height. Prominent among these are the Aravalli, Vindhya, Satpura, Maikala and Ajanta. The Peninsula is flanked on the one side by the Eastern Ghats where average elevation is about 610 metres and on the other by the Western Ghats where it is generally from 915 to 1,220 metres, rising in places to over 2,440 metres. Between the Western Ghats and the Arabian Sea lies a narrow coastal strip, while between Eastern Ghats and the

Bay of Bengal, there is a broader coastal area. The southern point of plateau is formed by the Nilgiri Hills where the Eastern and the Western Ghats meet. The Cardamom Hills lying beyond may be regarded as a continuation of the Western Ghats.

GEOLOGICAL STRUCTURE

The geological regions broadly follow the physical features and may be grouped into three regions: the Himalayas and their associated group of mountains, the Indo-Ganga Plain and the Peninsular Shield.

The Himalayan mountain belt to the north and the Naga-Lushai mountain in the east, are the regions of mountain-building movement. Most of this area, now presenting some of the most magnificent mountain scenery in the world, was under marine conditions about 60 crore years ago. In a series of mountain-building movements commencing about seven crore years ago, the sediments and the basement rocks rose to great heights. The weathering and erosive agencies worked on these to produce the relief seen today. The Indo-Ganga plains are a great alluvial tract that separate the Himalayas in the north from the Peninsula in the south.

The Peninsula is a region of relative stability and occasional seismic disturbances. Highly metamorphosed rocks of the earliest periods, dating back as far as 380 crore years, occur in the area; the rest being covered by the coastal-bearing Gondwana formations, lava flows belonging to the Deccan Trap formation and younger sediments.

RIVER SYSTEMS

The river systems of India can be classified into four groups viz., (i) Himalayan rivers, (ii) Deccan rivers, (iii) Coastal rivers, and (iv) Rivers of the inland drainage basin. The Himalayan rivers are formed by melting snow and glaciers and therefore, continuously flow throughout the year. During the monsoon months, Himalayas Land and the People receive very heavy rainfall and rivers swell, causing frequent floods. The Deccan rivers on the other hand are rainfed and therefore fluctuate in volume. Many of these are non-perenniaj. The Coastal streams, especially on the west coast are short in length and have limited catchment areas. Most of them are non-perennial. The streams of inland drainage basin of western Rajasthan are few and far apart. Most of them are of an ephemeral character.

The main Himalayan river systems are those of the Indus and the Ganga-Brahmaputra-Meghna system. The Indus, which is one of the great rivers of the world, rises near Mansarovar in Tibet and flows through India and thereafter through Pakistan and finally falls into the Arabian sea near Karachi. Its important tributaries flowing in Indian territory are the Sutlej (originating in Tibet), the Beas, the Ravi, the Chenab and the Jhelum. The Ganga-Brahmaputra-Meghna is another important system of which the principal sub-basins are those of Bhagirathi and the Alaknanda, which join at Dev Prayag to form the Ganga. It traverses through Uttarakhand, Uttar Pradesh, Bihar and West Bengal states. Below Rajmahal hills, the Bhagirathi, which used to be the main

course in the past, takes off, while the Padma continues eastward and enters Bangladesh. The Yamuna, the Ramganga, the Ghaghra, the Gandak, the Kosi, the Mahananda and the Sone are the important tributaries of the Ganga. Rivers Chambal and Betwa are the important sub-tributaries, which pin Yamuna before it meets the Ganga. The Padma and the Brahmaputra join at Bangladesh and continue to flow as the Padma or Ganga. The Brahmaputra rises in Tibet, where it is known as Tsangpo and runs a long distance till it crosses over into India in Arunachal Pradesh under the name of Dihang. Near Passighat, the Debang and Lohit join the river Brahmaputra and the combined river runs all along the Assam in a narrow valley. It crosses into Bangladesh downstream of Dhubri.

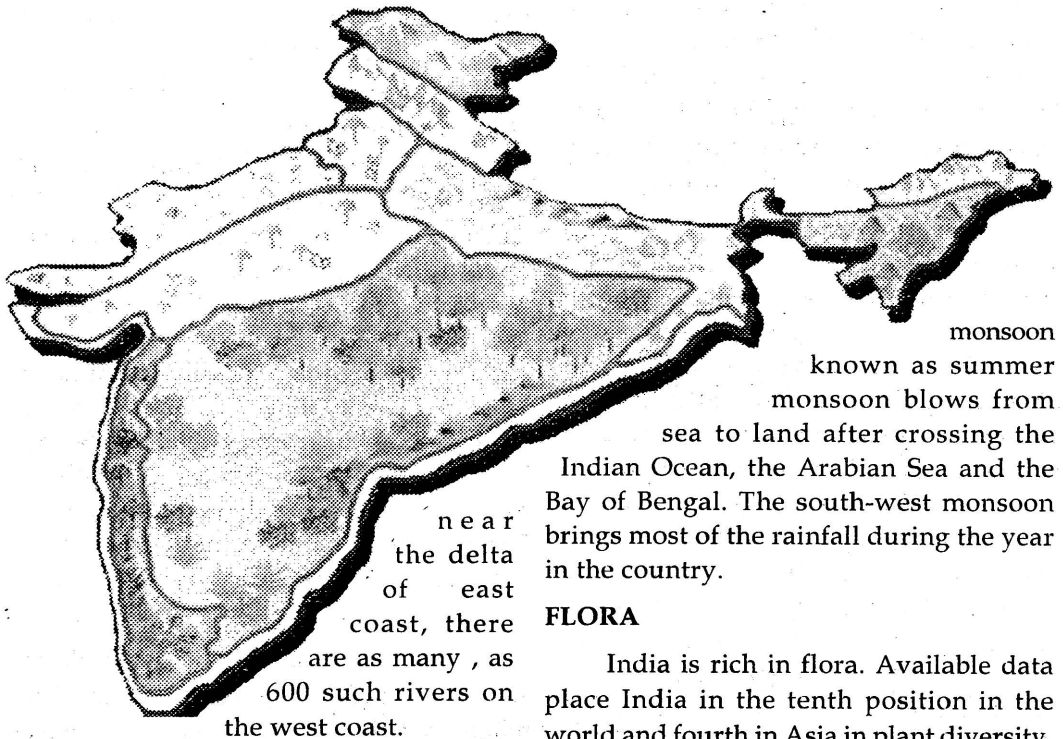
The principal tributaries of Brahmaputra in India are the Subansiri, Jia Bhareli, Dhansiri, Puthimari, Pagladiya and the Manas. The Brahmaputra in Bangladesh fed by Tista, etc., finally falls into Ganga. The Barak river, the head stream of Meghna, rises in the hills in Manipur. The important tributaries of the river are Makku, Trang, Tuivai, Jiri, Sonai, Rukni, Katakhal, Dhaleswari, Langachini, Maduva and Jatinga. Barak continues in Bangladesh till the combined Ganga-Brahmaputra join it near Bhairab Bazar.

In the Deccan region, most of the major river systems flowing generally in east direction fall into Bay of Bengal. The major east flowing rivers are Godavari, Krishna, Cauvery, Mahanadi, etc. Narmada and Tapi are major West flowing rivers.

The Godavari in the southern Peninsula has the second largest river basin covering 10 percent of the area of India. Next to it is the Krishna basin in the region, while the Mahanadi has the third largest basin. The basin of the Narmada in the uplands of the Deccan, flowing to the Arabian Sea and of the Kaveri in the south, falling into the Bay of Bengal are about the same size, though with different character and shape.

There are numerous coastal rivers, which are comparatively small. While only handful of such rivers drain into the sea

Besides these there are the desert rivers. The climate of India may be broadly described as tropical monsoon type. There are four seasons: (i) winter (January-February), (ii) hot weather summer (March-May); (iii) rainy south-western monsoon (June-September) and (iv) post-monsoon, also known as north east monsoon in there southern Peninsula (October-December). India's climate is affected by two seasonal winds - the north-east monsoon and the south-west monsoon. The north-east monsoon commonly known as winter monsoon blows from land to sea whereas south-west



FLORA

India is rich in flora. Available data place India in the tenth position in the world and fourth in Asia in plant diversity. From about 70 per cent geographical area surveyed so far, over 46,000 species of plants have been described by the Botanical

A few rivers in Rajasthan do not drain into the sea. They drain into salt lakes and get lost in sand with no outlet to sea

Survey of India (BSI, Kolkata. The vascular flora, which forms the conspicuous vegetation cover, comprises 15,000 species.

With a wide range of climatic conditions from the torrid to the arctic, India has a rich and varied vegetation, which only a few countries of comparable size possess. India can be divided into eight distinct-floristic-regions, namely, the western Himalayas, the eastern Himalayas, Assam, the Indus plain, the Ganga plain, the Deccan, Malabar and the Andamans.

The Western Himalayan region extends from Kashmir to Kumaon. It's temperate zone is rich in forests of chir, pine, other conifers and broad-leaved temperate trees. Higher up, forests of *deodar*, blue pine, spruce and silver fir occur. The alpine zone extends from the upper limit of the temperate zone of about 4,750 metres or even higher. The characteristic trees of this zone are high-level silver fir, silver birch and junipers. The eastern Himalayan region extends from Sikkim eastwards and embraces Darjeeling, Kurseong and the adjacent tract. The temperate zone has forests of oaks, laurels, maples, rhododendrons, alder and birch. Many conifers, junipers and dwarf willows also grow here. The Assam region comprises the Brahmaputra and the Surma valleys with evergreen forests, occasional thick clumps of bamboos and tall grasses. The Indus plain region comprises the plains of Punjab, western Rajasthan and northern Gujarat. It is dry, hot and supports natural vegetation. The Ganga plain region covers the area which is alluvial plain and is under

cultivation for wheat, sugarcane and rice. Only small areas support forests of widely differing types. The Deccan region comprises the entire table land of the Indian Peninsula and supports vegetation of various kinds from scrub jungles to mixed deciduous forests. The Malabar region covers the excessively humid belt of mountain country parallel to the west coast of the Peninsula. Besides being rich in forest vegetation, this region produces important commercial crops, such as coconut, betelnut, pepper, coffee, tea, rubber and cashewnut. The Andaman region abounds in evergreen, mangrove, beach and diluvial forests. The Himalayan region extending from Kashmir to Arunachal Pradesh through Sikkim, Meghalaya and Nagaland and the Deccan Peninsula is rich in endemic flora, with a large number of plants which are not found elsewhere.

The flora of the country is being studied by BSI and its nine circle/field offices, located throughout the country along with certain universities and research institutions.

Ethno-botanical study deals with the utilisation of plants and plant products by ethnic races. A scientific study of such plants has been made by BSI. A number of detailed ethno-botanical explorations have been conducted in different tribal areas of the country. More than 800 plant species of ethno-botanical interest have been collected and identified at different centres.

Owing to destruction of forests for agricultural, industrial and urban development, several Indian plants are

facing extinction. About 1,336 plant species are considered vulnerable and endangered. About 20 species of higher plants are categorised as possibly extinct as these have not been sighted during the last 6-10 decades. BSI brings out an inventory of endangered plants in the form of a publication titled **Red Data Book**.

FAUNA

The Zoological Survey of India (ZSI), with its headquarters in Kolkata and 16 regional stations is responsible for surveying the faunal resources of India. Possessing a tremendous diversity of climate and physical conditions, India has great variety of fauna numbering over 90,000 species. Of these, protista number 2,577, mollusca 5,072, anthropoda 69,903, amphibia 240, mammalia 397, reptilia 460, members of protochordata 119, pisces 2,546, aves 1,232 and other invertebrates 8,329.

The mammals include the majestic elephant, the *gaur* or Indian bison-the largest of existing bovines, the great Indian rhinoceros, the gigantic wild sheep of the Himalayas, the swamp deer, the thamin spotted deer, *nilgai*, the four-homed antelope, the Indian antelope or black-buck - the only representatives of these genera. Among the cats, the tiger and lion are the most magnificent of all; other splendid creatures such as the clouded leopard, the snow leopard, the marbled cat, etc., are also found. Many other species of mammals are remarkable for their beauty, colouring, grace and uniqueness. Several birds, like pheasants, geese, ducks, *myanahs*,

parakeets, pigeons, cranes, hornbills and sunbirds inhabit forests and wetlands.

Amongst the crocodiles and *gharials*, the salt water crocodile is found along the eastern coast and in the Andaman and Nicobar Islands. A project for breeding crocodiles which started in 1974, has been instrumental in saving the crocodile from extinction.

The great Himalayan range has a very interesting variety of fauna that includes the wild sheep and goats, markhor, ibex, shrew and tapir. The panda and the snow leopard are found in the upper reaches of the mountains.

Depletion of forest cover due to expansion of agriculture, habitat destruction, over-exploitation, pollution, introduction of toxic imbalance in community structure, epidemics, floods, droughts and cyclones, contribute to the loss of flora and fauna.

DEMOGRAPHIC BACKGROUND CENSUS

The Census of India 2001, is historic and epoch making, being the first census of the twenty first century and the third millennium. It reveals benchmark data on the state and economic structure at a juncture, which marks a centennial and millennial transition.

The population enumeration of 2011 census was undertaken from 9 to 28 February 2001 with a revisional round from 1 to 5 March 2001. The census moment, the referral time at which the

snapshot of the population is taken was 00.00 hours of 1 March 2001. Until the 1991 Census, the sunrise of 1 March was taken to be the census moment. The houseless population, as has been the usual practice, was enumerated on the night of 28 February 2001.

POPULATION

India's population as on 1 March 2001 stood at 1,028 million (532.1 million males and 496.4 million females). India accounts for a meagre 2.4 percent of the world surface area of 135.79 million sq. km. Yet, it supports and sustains a whopping 16.7 per cent of the world population.

The population of India, which at the turn of the twentieth century was around 238.4 million, increased to reach 1,028 million at the dawn of the twenty-first century. The population of India as recorded at each decennial census from 1901 has grown steadily except for a decrease during 1911-21.

The percent decadal growth of population in the inter-censal period 1991-2001 varies from a low of 9.43 in Kerala to a very high 64.53 in Nagaland. Delhi with 47.02 per cent, Chandigarh with 40.28 per cent and Sikkim with 33.06 per cent registering very high growth rates. In addition to Kerala, Tamil Nadu and Andhra Pradesh registered low growth rates during 1991-2001.

POPULATION DENSITY

One of the important indices of population concentration is the density of

popula-tion. It is defined as the number of persons per sq. km. The population density of India in 2001 was 324 per sq. km.

The density of population increased in all States and Union Territories between 1991 and 2001. Among major states, West Bengal is still the most thickly populated state with a population density of 903 in 2001. Bihar is now the second highest densely populated state pushing Kerala to the third place.

SEX RATIO

Sex ratio, defined as the number of females per thousand males is an important social indicator to measure the extent of prevailing equality between males and females in a society at a given point of time. The sex ratio in the country had always remained unfavourable to females. It was 972 at the beginning of the 20th century and thereafter showed continuous decline until 1941.

LITERACY

For the purpose of census 2001, a person aged seven and above, who can both read and write with understanding in any language, is treated as literate. A person, who can only read but cannot write, is not literate. In the censuses prior to 1991, children below five years of age were necessarily treated as illiterates.

- Source : India 2011

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அன்போடு அரவணையுங்கள்



ஒன்று போந்து விளையாடுவது



கை குலுக்க்வது மற்றும்
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குழந்தைக்குப் பரவ வாய்ப்பு உள்ளது.



கிரமீ தொற்றுள்ள கத்தம்
செய்யப்பட்டாத ரிசைடுகளை,
ஊசிவளை பரிந்துகொள்வதால்
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எச்.ஐ.வி. / எய்ட்ஸை
எவ்வாறு தடுக்கலாம்?



திருமணத்திற்கு முன் உடனடி
தனித்தன்மை
திருமணத்திற்கு
முன் தாய்ப்பால் தராத ஒழுக்கமாயிருத்தல்.



பாலுபயோகம் உடனடி
ஆணையுறையை பயன்படுத்துதல்.



பரிசோதிக்கப்பட்ட இரத்தத்தையே
பயன்படுத்துதல். இரத்த தானம்
செய்யப்படுவதற்கு முன் பெயர்வோடு இரத்தம்
எய்ட்ஸ் (எச்.ஐ.வி) கிருமியால்
பாதிக்கப்பட்டதா என பரிசோதித்து உறுதி
பெய்தல் வேண்டும்.



எச்.ஐ.வி. பாதிக்கப்பட்ட நபரிடமிருந்து
பிறக்கும் குழந்தையை எச்.ஐ.வி.இனி
தாக்காமல் பிழைத்தல் முன் ஒருவருக்கு
மூலம் கருக்கலை. பிழைத்திருந்த பின்னால்
உரிய சிகிச்சை மேற்கொண்டால்
காய்மிருந்து எச்.ஐ.வி. குழந்தைக்கு
பரவாமல் தடுக்கலாம்.



இரத்தம் மற்றும் மனித உடல்செய்கைகள்
தொடர்பாக பயன்படுத்தப்படும்
ஊசிகள், ரிசைடுகள் மற்றும் பிற
உபகரணங்களை ஒரு குறைந்த
பயன்படுத்தி அழித்து விட
வேண்டும். இந்த உபகரணங்களை
மற்றவர்களுடன் பகிர்ந்து கொள்வதை
கண்டிப்பாக தவிர்க்க வேண்டும்



சென்னை மாநகராட்சி எய்ட்ஸ் தடுப்பு மற்றும் கட்டுப்பாடு சங்கம்
82, திருவி.க. சாலை, ஸென்னை - 4.
இலவச தொலைபேசி: 1913

