

= Kerala =

Kerala ( / ˈkərəˈlɑː / ), historically known as Keralam , is an Indian state in South India on the Malabar coast . It was formed on 1 November 1956 following the States Reorganisation Act by combining Malayalam @-@ speaking regions . Spread over 38 @,@ 863 km2 ( 15 @,@ 005 sq mi ) , it is bordered by Karnataka to the north and northeast , Tamil Nadu to the east and south , and the Lakshadweep Sea to the west . With 33 @,@ 387 @,@ 677 inhabitants as per the 2011 Census , Kerala is the thirteenth largest state by population and is divided into 14 districts with the capital being Thiruvananthapuram . Malayalam is the most widely spoken language and is also the official language of the state .

The region has been a prominent spice exporter since 3000 BCE . The Chera Dynasty was the first prominent kingdom based in Kerala , though it frequently struggled against attacks by the neighbouring Cholas and Pandyas . In the 15th century , the spice trade attracted Portuguese traders to Kerala , and paved the way for the European colonisation of India . After independence , Travancore and Cochin joined the Republic of India and Travancore @-@ Cochin was given the status of a state in 1949 . In 1956 , Kerala state was formed by merging Malabar district , Travancore @-@ Cochin ( excluding four southern taluks ) , and the taluk of Kasargod , South Kanara .

Kerala has the lowest positive population growth rate in India , 3 @.@ 44 % ; highest Human Development Index ( HDI ) , 0 @.@ 790 in 2011 ; the highest literacy rate , 93 @.@ 91 % in the 2011 census ; the highest life expectancy , 77 years ; and the highest sex ratio , 1 @,@ 084 women per 1000 men . The state has witnessed significant emigration , especially to Arab states of the Persian Gulf during the Gulf Boom of the 1970s and early 1980s , and its economy depends significantly on remittances from a large Malayali expatriate community . Hinduism is practised by more than half of the population , followed by Islam and Christianity . The culture is a synthesis of Aryan and Dravidian cultures , developed over millennia , under influences from other parts of India and abroad .

The production of pepper and natural rubber contributes significantly to the total national output . In the agricultural sector , coconut , tea , coffee , cashew and spices are important . The state 's coastline extends for 595 kilometres ( 370 mi ) , and around 1 @.@ 1 million people in the state are dependent on the fishery industry which contributes 3 % to the state 's income . The state has the highest media exposure in India with newspapers publishing in nine languages , mainly English and Malayalam . Kerala is one of the prominent tourist destinations of India , with backwaters , beaches , Ayurvedic tourism and tropical greenery as its major attractions .

= = Etymology = =

The name Kerala has an uncertain etymology . " Keralam " may stem from the Classical Tamil cherive @-@ alam ( " declivity of a hill or a mountain slope " ) or chera alam ( " Land of the Cheras " ) . While " Kerala " may represent an imperfect Malayalam portmanteau fusing kera ( " coconut palm tree " ) and alam ( " land " or " location " ) . " Kerala " can also be derived from the word " Cheral " that refers to the oldest known dynasty of Kerala kings . The word " Cheral " is derived from the Proto @-@ Tamil @-@ Malayalam word for " lake " .

The earliest Sanskrit text to mention Kerala is the Aitareya Aranyaka of the Rigveda . It is also mentioned in the Ramayana and the Mahabharata , the two Hindu epics . The word Kerala is first recorded ( as Keralaputra , meaning Cherathala makan or Cheraman ) in a 3rd @-@ century BCE rock inscription ( Rock Edict 2 ) left by the Maurya emperor Ashoka ( 274 ? 237 BCE ) . The inscription refers to the local ruler as Keralaputra ( Sanskrit for " son of Kerala " ) ; or " son of Chera [ s ] " . This contradicts a popular theory that its etymology derives " Kerala " from " Kera " ( coconut tree in Malayalam ) . At that time , one of three states in the region was called Cheralam in Classical Tamil : Chera and Kera are variants of the same word . The Greco @-@ Roman trade map Periplus Maris Erythraei refers to Keralaputra as Celobotra .

= = History = =

= = = Mythology = = =

According to Hindu mythology , the lands of Kerala were recovered from the sea by the axe @-@ wielding warrior sage Parasurama , the sixth avatar of Vishnu , hence Kerala is also called Parasurama Kshetram ( " The Land of Parasurama " ) . Parasurama threw his axe across the sea , and the water receded as far as it reached . According to legend , this new area of land extended from Gokarna to Kanyakumari . The land which rose from sea was filled with salt and unsuitable for habitation ; so Parasurama invoked the Snake King Vasuki , who spat holy poison and converted the soil into fertile lush green land . Out of respect , Vasuki and all snakes were appointed as protectors and guardians of the land . The legend was later expanded , and found literary expression in the 17th or 18th century with Keralolpathi , which traces the origin of aspects of early Kerala society , such as land tenure and administration , to the story of Parasurama . In medieval times Kuttuvan may have emulated the Parasurama tradition by throwing his spear into the sea to symbolise his lordship over it .

Another much earlier Puranic character associated with Kerala is Mahabali , an Asura and a prototypical just king , who ruled the earth from Kerala . He won the war against the Devas , driving them into exile . The Devas pleaded before Lord Vishnu , who took his fifth incarnation as Vamana and pushed Mahabali down to Patala ( the netherworld ) to placate the Devas . There is a belief that , once a year during the Onam festival , Mahabali returns to Kerala . The Matsya Purana , among the oldest of the 18 Puranas , uses the Malaya Mountains of Kerala ( and Tamil Nadu ) as the setting for the story of Matsya , the first incarnation of Vishnu , and Manu , the first man and the king of the region .

= = = Pre @-@ history = = =

A substantial portion of Kerala may have been under the sea in ancient times . Marine fossils have been found in an area near Changanacherry , thus supporting the hypothesis . Pre @-@ historical archaeological findings include dolmens of the Neolithic era in the Marayur area of the Idukki district . They are locally known as " muniyara " , derived from muni ( hermit or sage ) and ara ( dolmen ) . Rock engravings in the Edakkal Caves , in Wayanad date back to the Neolithic era around 6000 BCE . Archaeological studies have identified Mesolithic , Neolithic and Megalithic sites in Kerala . The studies point to the development of ancient Kerala society and its culture beginning from the Paleolithic Age , through the Mesolithic , Neolithic and Megalithic Ages . Foreign cultural contacts have assisted this cultural formation ; historians suggest a possible relationship with Indus Valley Civilization during the late Bronze Age and early Iron Age .

= = = Ancient period = = =

Kerala has been a major spice exporter since 3000 BCE , according to Sumerian records and it is still referred to as the " Garden of Spices " or as the " Spice Garden of India " . Kerala 's spices attracted ancient Babylonians , Assyrians and Egyptians to the Malabar Coast in the 3rd and 2nd millennia BCE . Arabs and Phoenicians established trade with Kerala during this period . The Land of Keralaputra was one of the four independent kingdoms in southern India during Ashoka 's time , the others being Chola , Pandya , and Satiyaputra . Scholars hold that Keralaputra is an alternate name of the Cheras , the first dominant dynasty based in Kerala . These territories once shared a common language and culture , within an area known as Tamilakam . While the Cheras ruled most of modern Kerala , its southern tip was in the kingdom of Pandyas , which had a trading port sometimes identified in ancient Western sources as Nelcynda ( or Neacyndi ) in Quilon . Later , the region fell under the control of the Pandyas , Cheras , and Cholas . Ays and Mushikas were two other dynasties of ancient Kerala , whose kingdoms lay to the south and north of Cheras

respectively .

In the last centuries BCE the coast became important to the Greeks and Romans for its spices , especially black pepper . The Cheras had trading links with China , West Asia , Egypt , Greece , and the Roman Empire . In foreign @-@ trade circles the region was known as Male or Malabar . Muziris , Berkarai , and Nelcynda were among the principal ports at that time . The value of Rome 's annual trade with the region was estimated at around 50 @,@ 000 @,@ 000 sesterces ; contemporary Sangam literature describes Roman ships coming to Muziris in Kerala , laden with gold to exchange for pepper . One of the earliest western traders to use the monsoon winds to reach Kerala was Eudoxus of Cyzicus , around 118 or 166 BCE , under the patronage of Ptolemy VIII , king of the Hellenistic Ptolemaic dynasty in Egypt . Roman establishments in the port cities of the region , such as a temple of Augustus and barracks for garrisoned Roman soldiers , are marked in the Tabula Peutingeriana ; the only surviving map of the Roman cursus publicus .

Merchants from West Asia and Southern Europe established coastal posts and settlements in Kerala . The Jewish connection with Kerala started in 573 BCE . Arabs also had trade links with Kerala , starting before the 4th century BCE , as Herodotus ( 484 ? 413 BCE ) noted that goods brought by Arabs from Kerala were sold to the Jews at Eden . They intermarried with local people , resulting in formation of the Muslim Mappila community . In the 4th century , some Christians also migrated from Persia and joined the early Syrian Christian community who trace their origins to the evangelistic activity of Thomas the Apostle in the 1st century . Mappila was an honorific title that had been assigned to respected visitors from abroad ; Jewish , Syrian Christian , and Muslim immigration account for later names of the respective communities : Juda Mappilas , Nasrani Mappilas , and Muslim Mappilas . The earliest Saint Thomas Christian Churches , Cheraman Juma Masjid ( 629 CE ) ? the first mosque of India ? and Paradesi Synagogue ( 1568 CE ) ? the oldest active synagogue in the Commonwealth of Nations ? were built in Kerala .

= = = Early medieval period = = =

A second Chera Kingdom ( c . 800 ? 1102 ) , also known as Kulasekhara dynasty of Mahodayapuram , was established by Kulasekhara Varman , which ruled over a territory comprising the whole of modern Kerala and a smaller part of modern Tamil Nadu . During the early part of the Kulasekhara period , the southern region from Nagerkovil to Thiruvalla was ruled by Ay kings , who lost their power in the 10th century , making the region a part of the Kulasekhara empire . Under Kulasekhara rule , Kerala witnessed a developing period of art , literature , trade and the Bhakti movement of Hinduism . A Keralite identity , distinct from the Tamils , became linguistically separate during this period . For local administration , the empire was divided into provinces under the rule of Naduvazhis , with each province comprising a number of Desams under the control of chieftains , called as Desavazhis .

The inhibitions , caused by a series of Chera @-@ Chola wars in the 11th century , resulted in the decline of foreign trade in Kerala ports . Buddhism and Jainism disappeared from the land . The social system became fractured with divisions on caste lines . Finally , the Kulasekhara dynasty was subjugated in 1102 by the combined attack of Later Pandyas and Later Cholas . However , in the 14th century , Ravi Varma Kulasekhara ( 1299 ? 1314 ) of the southern Venad kingdom was able to establish a short @-@ lived supremacy over southern India . After his death , in the absence of a strong central power , the state was divided into thirty small warring principalities ; the most powerful of them were the kingdom of Samuthiri in the north , Venad in the south and Kochi in the middle . In the 18th Century , Travancore King Sree Anizham Thirunal Marthanda Varma annexed all the kingdoms up to Northern Kerala through military conquests , resulting in the rise of Travancore to pre @-@ eminence in Kerala . The Kochi ruler sued for peace with Anizham Thirunal and Malabar came under direct British rule until India became independent .

= = = Colonial era = = =

The maritime spice trade monopoly in the Indian Ocean stayed with Arabs during the High and Late

Middle Ages . However , the dominance of Middle East traders was challenged in the European Age of Discovery during which the spice trade , particularly in black pepper , became an influential activity for European traders . Around the 15th century , the Portuguese began to dominate eastern shipping , and the spice @-@ trade in particular , culminating in Vasco Da Gama 's arrival in Kappad Kozhikode in 1498 . The Zamorin of Kozhikode permitted the new visitors to trade with his subjects such that Portuguese trade in Kozhikode prospered with the establishment of a factory and a fort . However , Portuguese attacks on Arab properties in his jurisdiction provoked the Zamorin and led to conflicts between them . The Portuguese took advantage of the rivalry between the Zamorin and the King of Kochi allied with Kochi . When Francisco de Almeida was appointed as Viceroy of Portuguese India in 1505 , his headquarters was established at Fort Kochi ( Fort Emmanuel ) rather than in Kozhikode . During his reign , the Portuguese managed to dominate relations with Kochi and established a few fortresses on the Malabar coast . However , the Portuguese suffered setbacks from attacks by Zamorin forces ; especially from naval attacks under the leadership Kozhikode admirals known as Kunjali Marakkars , which compelled them to seek a treaty . In 1571 , the Portuguese were defeated by the Zamorin forces in the battle at Chaliyam fort .

The Portuguese were ousted by the Dutch East India Company , who during the conflicts between the Kozhikode and the Kochi , gained control of the trade . The Dutch in turn were weakened by constant battles with Marthanda Varma of the Travancore Royal Family , and were defeated at the Battle of Colachel in 1741 . An agreement , known as " Treaty of Mavelikkara " , was signed by the Dutch and Travancore in 1753 , according to which the Dutch were compelled to detach from all political involvement in the region . Marthanda Varma annexed northern kingdoms through military conquests , resulting in the rise of Travancore to a position of preeminence in Kerala .

In 1766 , Hyder Ali , the ruler of Mysore invaded northern Kerala . His son and successor , Tipu Sultan , launched campaigns against the expanding British East India Company , resulting in two of the four Anglo @-@ Mysore Wars . Tipu ultimately ceded the Malabar District and South Kanara to the Company in the 1790s ; both were annexed to the Madras Presidency of British India in 1792 . The Company forged tributary alliances with Kochi in 1791 and Travancore in 1795 . By the end of 18th century , the whole of Kerala fell under the control of the British , either administered directly or under suzerainty . There were major revolts in Kerala during the independence movement in the 20th century ; most notable among them is the 1921 Malabar Rebellion and the social struggles in Travancore . In the Malabar Rebellion , Mappila Muslims of Malabar rioted against Hindu zamindars and the British Raj . Some social struggles against caste inequalities also erupted in the early decades of 20th century , leading to the 1936 Temple Entry Proclamation that opened Hindu temples in Travancore to all castes .

= = = Post colonial period = = =

After British India was partitioned in 1947 into India and Pakistan , Travancore and Kochi , part of the Union of India were merged on 1 July 1949 to form Travancore @-@ Cochin . On 1 November 1956 , the taluk of Kasargod in the South Kanara district of Madras , the Malabar district of Madras , and Travancore @-@ Cochin , without four southern taluks ( which joined Tamil Nadu ) , merged to form the state of Kerala under the States Reorganisation Act . A Communist @-@ led government under E. M. S. Namboodiripad resulted from the first elections for the new Kerala Legislative Assembly in 1957 . It was one of the earliest elected Communist governments , after Communist success in the 1945 elections in the Republic of San Marino .

= = Geography = =

The state is wedged between the Lakshadweep Sea and the Western Ghats . Lying between northern latitudes 8 ° 18 ' and 12 ° 48 ' and eastern longitudes 74 ° 52 ' and 77 ° 22 ' , Kerala experiences the humid equatorial tropic climate . The state has a coast of 590 km ( 370 mi ) and the width of the state varies between 11 and 121 kilometres ( 7 and 75 mi ) . Geographically , Kerala

can be divided into three climatically distinct regions : the eastern highlands ; rugged and cool mountainous terrain , the central mid @-@ lands ; rolling hills , and the western lowlands ; coastal plains . Pre @-@ Cambrian and Pleistocene geological formations compose the bulk of Kerala 's terrain . A catastrophic flood in Kerala in 1341 CE drastically modified its terrain and consequently affected its history ; it also created a natural harbour for spice transport . The eastern region of Kerala consists of high mountains , gorges and deep @-@ cut valleys immediately west of the Western Ghats ' rain shadow . 41 of Kerala 's west @-@ flowing rivers , and 3 of its east @-@ flowing ones originate in this region . The Western Ghats form a wall of mountains interrupted only near Palakkad ; hence also known Palghat , where the Palakkad Gap breaks . The Western Ghats rise on average to 1 @,@ 500 m ( 4920 ft ) above sea level , while the highest peaks reach around 2 @,@ 500 m ( 8200 ft ) . Anamudi , the highest peak in south India , is at an elevation of 2 @,@ 695 metres ( 8 @,@ 842 ft ) .

Kerala 's western coastal belt is relatively flat compared to the eastern region , and is criss @-@ crossed by a network of interconnected brackish canals , lakes , estuaries , and rivers known as the Kerala Backwaters . The state 's largest lake Vembanad , dominates the backwaters ; it lies between Alappuzha and Kochi and is about 200 km<sup>2</sup> ( 77 sq mi ) in area . Around eight percent of India 's waterways are found in Kerala . Kerala 's 44 rivers include the Periyar ; 244 kilometres ( 152 mi ) , Bharathapuzha ; 209 kilometres ( 130 mi ) , Pamba ; 176 kilometres ( 109 mi ) , Chaliyar ; 169 kilometres ( 105 mi ) , Kadalundipuzha ; 130 kilometres ( 81 mi ) , Chalakudipuzha ; 130 kilometres ( 81 mi ) , Valapattanam ; 129 kilometres ( 80 mi ) and the Achankovil River ; 128 kilometres ( 80 mi ) . The average length of the rivers is 64 kilometres ( 40 mi ) . Many of the rivers are small and entirely fed by monsoon rain . As Kerala 's rivers are small and lacking in delta , they are more prone to environmental effects . The rivers face problems such as sand mining and pollution . The state experiences several natural hazards like landslides , floods and droughts . The state was also affected by the 2004 Indian Ocean Tsunami .

= = = Climate = = =

With around 120 ? 140 rainy days per year , Kerala has a wet and maritime tropical climate influenced by the seasonal heavy rains of the southwest summer monsoon and northeast winter monsoon . Around 65 % of the rainfall occurs from June to August corresponding to the Southwest monsoon , and the rest from September to December corresponding to Northeast monsoon . The moisture @-@ laden winds of the Southwest monsoon , on reaching the southernmost point of the Indian Peninsula , because of its topography , divides into two branches ; the " Arabian Sea Branch " and the " Bay of Bengal Branch " . The " Arabian Sea Branch " of the Southwest monsoon first hits the Western Ghats , making Kerala the first state in India to receive rain from the Southwest monsoon . The distribution of pressure patterns is reversed in the Northeast monsoon , during this season the cold winds from North India pick up moisture from the Bay of Bengal and precipitate it on the east coast of peninsular India . In Kerala , the influence of the Northeast monsoon is seen in southern districts only . Kerala 's rainfall averages 2 @,@ 923 mm ( 115 in ) annually . Some of Kerala 's drier lowland regions average only 1 @,@ 250 mm ( 49 in ) ; the mountains of the eastern Idukki district receive more than 5 @,@ 000 mm ( 197 in ) of orographic precipitation : the highest in the state . In eastern Kerala , a drier tropical wet and dry climate prevails . During the summer , the state is prone to gale force winds , storm surges , cyclone @-@ related torrential downpours , occasional droughts , and rises in sea level . The mean daily temperature ranges from 19 @.@ 8 ° C to 36 @.@ 7 ° C . Mean annual temperatures range from 25 @.@ 0 ? 27 @.@ 5 ° C in the coastal lowlands to 20 @.@ 0 ? 22 @.@ 5 ° C in the eastern highlands .

= = Flora and fauna = =

Most of the biodiversity is concentrated and protected in the Western Ghats . Three quarters of the land area of Kerala was under thick forest up to 18th century . As of 2004 , over 25 % of India 's 15 @,@ 000 plant species are in Kerala . Out of the 4 @,@ 000 flowering plant species ; 1 @,@ 272 of

which are endemic to Kerala , 900 are medicinal , and 159 are threatened . Its 9 @, @ 400 km<sup>2</sup> of forests include tropical wet evergreen and semi @-@ evergreen forests ( lower and middle elevations ? 3 @, @ 470 km<sup>2</sup> ) , tropical moist and dry deciduous forests ( mid @-@ elevations ? 4 @, @ 100 km<sup>2</sup> and 100 km<sup>2</sup> , respectively ) , and montane subtropical and temperate ( shola ) forests ( highest elevations ? 100 km<sup>2</sup> ) . Altogether , 24 % of Kerala is forested . Three of the world 's Ramsar Convention listed wetlands ? Lake Sasthamkotta , Ashtamudi Lake and the Vembanad @-@ Kol wetlands ? are in Kerala , as well as 1455 @. @ 4 km<sup>2</sup> of the vast Nilgiri Biosphere Reserve . Subjected to extensive clearing for cultivation in the 20th century , much of the remaining forest cover is now protected from clearfelling . Eastern Kerala 's windward mountains shelter tropical moist forests and tropical dry forests , which are common in the Western Ghats . The world 's oldest teak plantation ' Conolly 's Plot ' is in Nilambur .

Kerala 's fauna are notable for their diversity and high rates of endemism : it includes 102 species of mammals ( 56 of which are endemic ) , 476 species of birds , 202 species of freshwater fish , 169 species of reptiles ( 139 of them endemic ) , and 89 species of amphibians ( 86 endemic ) . These are threatened by extensive habitat destruction , including soil erosion , landslides , salinisation , and resource extraction . In the forests , sonokeling , *Dalbergia latifolia* , anjili , mullumurikku , *Erythrina* , and *Cassia* number among the more than 1 @, @ 000 species of trees in Kerala . Other plants include bamboo , wild black pepper , wild cardamom , the calamus rattan palm , and aromatic vetiver grass , *Vetiveria zizanioides* . Indian elephant , Bengal tiger , Indian leopard , Nilgiri tahr , common palm civet , and grizzled giant squirrels are also found in the forests . Reptiles include the king cobra , viper , python , and mugger crocodile . Kerala 's birds include the Malabar trogon , the great hornbill , Kerala laughingthrush , darter and southern hill myna . In the lakes , wetlands , and waterways , fish such as kadu ; stinging catfish and choottachi ; orange chromide ? *Eetroplus maculatus* are found .

= = Subdivisions = =

The state 's 14 districts are distributed among six regions : North Malabar ( far @-@ north Kerala ) , South Malabar ( northern Kerala ) , Kochi ( central Kerala ) , Northern Travancore , Central Travancore ( southern Kerala ) and Southern Travancore ( far @-@ south Kerala ) . The districts which serve as administrative regions for taxation purposes are further subdivided into 75 taluks , which have fiscal and administrative powers over settlements within their borders , including maintenance of local land records . Kerala 's taluks are further sub @-@ divided into 1 @, @ 453 revenue villages . Since the 73rd and 74th amendments to the Constitution of India , the local government institutions function as the third tier of government , which constitutes 14 District Panchayats , 152 Block Panchayats , 978 Grama Panchayats , 60 Municipalities , six Corporations and one Township . Mahé , a part of the Indian union territory of Puducherry , though 647 kilometres ( 402 mi ) away from it , is a coastal exclave surrounded by Kerala on all of its landward approaches . The Kannur District surrounds Mahé on three sides with the Kozhikode District on the fourth .

There are six Municipal corporations in Kerala that govern Thiruvananthapuram , Kollam , Kochi , Thrissur , Kozhikode and Kannur . The Thiruvananthapuram Municipal Corporation is the largest corporation in Kerala while Kochi metropolitan area named Kochi UA is the largest urban agglomeration . According to a survey by economics research firm Indicis Analytivs in 2007 , Thiruvananthapuram , Kozhikode , Thrissur , Kochi and Kannur are among the " best cities in India to live " ; the survey used parameters such as health , education , environment , safety , public facilities and entertainment to rank the cities .

= = Government and administration = =

Kerala hosts two major political alliances : the United Democratic Front ( UDF ) , led by the Indian National Congress ; and the Left Democratic Front ( LDF ) , led by the Communist Party of India ( Marxist ) ( CPI ( M ) ) . As of 2016 , the LDF is the ruling coalition ; Pinarayi Vijayan of the Communist Party of India ( Marxist ) is the Chief Minister , while Ramesh Chennithala of the UDF is

the Leader of Opposition . Strikes , protests and marches are ubiquitous in Kerala because of the comparatively strong presence of labour unions . According to the Constitution of India , Kerala has a parliamentary system of representative democracy ; universal suffrage is granted to residents . The government is organised into the three branches :

**Legislature :** The unicameral legislature , the Kerala Legislative Assembly popularly known as Niyamasabha , comprises elected members and special office bearers ; the Speaker and Deputy Speaker elected by the members from among themselves . Assembly meetings are presided over by the Speaker and in the Speaker 's absence , by the Deputy Speaker . The state has 140 assembly constituencies . The state elects 20 and 9 members for representation in the Lok Sabha and the Rajya Sabha respectively .

**Executive :** The Governor of Kerala is the constitutional head of state , and is appointed by the President of India . P Sathasivam is the Governor of Kerala . The executive authority is headed by the Chief Minister of Kerala , who is the head of government and is vested with extensive executive powers ; the head of the majority party in the Legislative Assembly is appointed to the post by the Governor . The Council of Ministers has its members appointed by the Governor , taking the advice of the Chief Minister . The executive administration is based in Thiruvananthapuram at State Secretariat complex . Each district has a district administrator appointed by government called District collector for executive administration . Auxiliary authorities known as panchayats , for which local body elections are regularly held , govern local affairs .

**Judiciary :** The judiciary consists of the Kerala High Court and a system of lower courts . The High Court , located in Kochi , has a Chief Justice along with 23 permanent and seven additional pro tempore justices as of 2012 . The high court also hears cases from the Union Territory of Lakshadweep .

The local government bodies ; Panchayat , Municipalities and Corporations have existed in Kerala since 1959 , however , the major initiative to decentralise the governance was started in 1993 , conforming to the constitutional amendments of central government in this direction . With the enactment of Kerala Panchayati Raj Act and Kerala Municipality Act in 1994 , the state implemented reforms in local self @-@ governance . The Kerala Panchayati Raj Act envisages a 3 @-@ tier system of local government with Gram panchayat , Block panchayat and District Panchayat forming a hierarchy . The acts ensure a clear demarcation of power among these institutions . However , the Kerala Municipality Act envisages a single @-@ tier system for urban areas , with the institution of municipality designed to par with the Gram panchayat of the former system . Substantial administrative , legal and financial powers are delegated to these bodies to ensure efficient decentralisation . As per the present norms , the state government devolves about 40 per cent of the state plan outlay to the local government .

= = Economy = =

After independence , the state was managed as a democratic socialist welfare economy . From the 1990s , liberalisation of the mixed economy allowed onerous Licence Raj restrictions against capitalism and foreign direct investment to be lightened , leading to economic expansion and an increase in employment . In the fiscal year 2007 ? 2008 , the nominal gross state domestic product ( GSDP ) was ? 1 @, @ 624 billion ( US \$ 24 billion ) . GSDP growth ; 9 @. @ 2 % in 2004 ? 2005 and 7 @. @ 4 % in 2003 ? 2004 had been high compared to an average of 2 @. @ 3 % annually in the 1980s and between 5 @. @ 1 % and 5 @. @ 99 % in the 1990s . The state recorded 8 @. @ 93 % growth in enterprises from 1998 to 2005 , higher than the national rate of 4 @. @ 80 % . The Human Development Index rating of Kerala is the highest in India at 0 @. @ 790 . The " Kerala phenomenon " or " Kerala model of development " of very high human development and in comparison low economic development has resulted from a strong service sector .

Kerala 's economy depends on emigrants working in foreign countries , mainly in Arab states of the Persian Gulf , and remittances annually contribute more than a fifth of GSDP . In 2008 , the Persian Gulf countries together had a Keralite population of more than 2 @. @ 5 million , who sent home annually a sum of US \$ 6 @. @ 81 billion , which is the highest among Indian states and more than

15 @. @ 13 % of remittances to India in 2008 . In 2012 , Kerala still received the highest remittances of all states : US \$ 11 @. @ 3 billion , which was nearly 16 % of the US \$ 71 billion remittances to the country . In 2015 , NRI deposits in Kerala have soared to over ? 1 lakh crore ( US \$ 15 billion ) , amounting to one @-@ sixth of all the money deposited in NRI accounts , which comes to about ? 7 lakh crore ( US \$ 100 billion ) . However , a study commissioned by the Kerala State Planning Board , suggested that the state look for other reliable sources of income , instead of relying on remittances to finance its expenditure . According to a study done in 2013 , Kerala loses about ? 17 @, @ 500 crore ( US \$ 2 @. @ 6 billion ) every year , through the sizeable population of migrant labourers in Kerala .

The tertiary sector comprises services such as transport , storage , communications , tourism , banking , insurance and real estate . In 2011 ? 2012 , it contributed 63 @. @ 22 % of the state 's GDP , agriculture and allied sectors contributed 15 @. @ 73 % , while manufacturing , construction and utilities contributed 21 @. @ 05 % . Nearly half of Kerala 's people depend on agriculture alone for income . Around 600 varieties of rice , which is Kerala 's most used staple and cereal crop , are harvested from 3105 @. @ 21 km<sup>2</sup> ; a decline from 5883 @. @ 4 km<sup>2</sup> in 1990 . 688 @, @ 859 tonnes of rice are produced per year . Other key crops include coconut ; 899 @, @ 198 ha , tea , coffee ; 23 % of Indian production , or 57 @, @ 000 tonnes , rubber , cashews , and spices ? including pepper , cardamom , vanilla , cinnamon , and nutmeg .

Traditional industries manufacturing items ; coir , handlooms , and handicrafts employ around one million people . Kerala supplies 60 % of the total global produce of white coir fibre . India 's first coir factory was set up in Alleppey in 1859 ? 60 . The Central Coir Research Institute was established there in 1959 . As per the 2006 ? 2007 census by SIDBI , there are 1 @, @ 468 @, @ 104 micro , small and medium enterprises in Kerala employing 3 @, @ 031 @, @ 272 people . The KSIDC has promoted more than 650 medium and large manufacturing firms in Kerala , creating employment for 72 @, @ 500 people . A mining sector of 0 @. @ 3 % of GSDP involves extraction of ilmenite , kaolin , bauxite , silica , quartz , rutile , zircon , and sillimanite . Other major sectors are tourism , manufacturing , home gardens , animal husbandry and business process outsourcing .

As of March 2002 , Kerala 's banking sector comprised 3341 local branches : each branch served 10 @, @ 000 people , lower than the national average of 16 @, @ 000 ; the state has the third @-@ highest bank penetration among Indian states . On 1 October 2011 , Kerala became the first state in the country to have at least one banking facility in every village . Unemployment in 2007 was estimated at 9 @. @ 4 % ; chronic issues are underemployment , low employability of youth , and a low female labour participation rate of only 13 @. @ 5 % , as is the practice of Nokku kooli , " wages for looking on " . By 1999 ? 2000 , the rural and urban poverty rates dropped to 10 @. @ 0 % and 9 @. @ 6 % respectively .

Kerala has focused more attention towards growth of Information Technology sector with formation of Technopark , Thiruvananthapuram which is one of the largest IT employer in Kerala . It was the first technology park in India and with the inauguration of the Thejaswini complex on 22 February 2007 , Technopark became the largest IT Park in India . Software giants like Infosys , Oracle , Tata Consultancy Services , Capgemini , HCL , UST Global , Nest and Suntec have offices in the state . The state has a second major IT hub , the Infopark centred in Kochi with " spokes " ( it acts as the " hub " ) in Thrissur and Alleppy . As of 2014 , Infopark generates one @-@ third of total IT Revenues of the state with key offices of IT majors like Tata Consultancy Services , Cognizant , Wipro , UST Global , IBS Software Services etc. and Multinational corporations like KPMG , Ernst & Young , EXL Services , Etisalat DB Telecom , Nielsen Audio , Xerox ACS , Tata ELXSI etc . Kochi also has another major project SmartCity under construction , built in partnership with Dubai Government . A third major IT Hub is under construction centred around Kozhikode known as Cyberpark .

The Grand Kerala Shopping Festival ( GKSF ) was started in 2007 , covering more than 3000 outlets across the nine cities of Kerala with huge tax discounts , VAT refunds and huge array of prizes .

The state 's budget of 2012 ? 2013 was ? 481 @. @ 42 billion ( US \$ 7 @. @ 2 billion ) . The state government 's tax revenues ( excluding the shares from Union tax pool ) amounted to ? 217 @. @ 22 billion ( US \$ 3 @. @ 2 billion ) in 2010 ? 2011 ; up from ? 176 @. @ 25 billion ( US \$ 2 @. @ 6



billion ) in 2009 ? 2010 . Its non @-@ tax revenues ( excluding the shares from Union tax pool ) of the Government of Kerala reached ? 19 @,@ 308 million ( US \$ 290 million ) in 2010 ? 2011 . However , Kerala 's high ratio of taxation to GSDP has not alleviated chronic budget deficits and unsustainable levels of government debt , which have impacted social services . A record total of 223 hartals were observed in 2006 , resulting in a revenue loss of over ? 20 billion ( US \$ 300 million ) . Kerala 's 10 % rise in GDP is 3 % more than the national GDP . In 2013 , capital expenditure rose 30 % compared to the national average of 5 % , owners of two @-@ wheelers rose by 35 % compared to the national rate of 15 % , and the teacher @-@ pupil ratio rose 50 % from 2 : 100 to 4 : 100 .

In November 2015 , the Ministry of Urban Development selected seven cities of Kerala for a comprehensive development program known as the Atal Mission for Rejuvenation and Urban Transformation ( AMRUT ) . A package of ? 25 lakh ( US \$ 37 @,@ 000 ) was declared for each of the cities to develop service level improvement plan ( SLIP ) , a plan for better functioning of the local urban bodies in the cities of Thiruvananthapuram , Kollam , Alappuzha , Kochi , Thrissur , Kozhikode , and Palakkad .

### = = = Agriculture = = =

The major change in agriculture in Kerala occurred in the 1970s when production of rice fell due to increased availability of rice all over India and decreased availability of labour . Consequently , investment in rice production decreased and a major portion of the land shifted to the cultivation of perennial tree crops and seasonal crops . Profitability of crops fell due to a shortage of farm labour , the high price of land , and the uneconomic size of operational holdings .

Kerala produces 97 % of the national output of black pepper and accounts for 85 % of the natural rubber in the country . Coconut , tea , coffee , cashew , and spices ? including cardamom , vanilla , cinnamon , and nutmeg are the main agricultural products . 80 % of India 's export quality cashew kernels are prepared in Kollam . The key agricultural staple is rice , with varieties grown in extensive paddy fields . Home gardens made up a significant portion of the agricultural sector . Related animal husbandry is touted by proponents as a means of alleviating rural poverty and unemployment among women , the marginalised , and the landless . The state government promotes these activities via educational campaigns and the development of new cattle breeds such as the Sunandini .

Though the contribution of agricultural sector to the state economy was on the decline in 2012 ? 13 , through the strength of the allied livestock sector , it has picked up from 7 @.@ 03 % ( 2011 ? 12 ) to 7 @.@ 2 % . In the 2013 ? 14 fiscal period , the contribution has been estimated at a high of 7 @.@ 75 % . The total growth of the farm sector has recorded a 4 @.@ 39 % increase in 2012 ? 13 , over a paltry 1 @.@ 3 % growth in the previous fiscal year . The agricultural sector has a share of 9 @.@ 34 % in the sectoral distribution of Gross State Domestic Product at Constant Price , while the secondary and tertiary sectors has contributed 23 @.@ 94 % and 66 @.@ 72 % respectively .

There is a preference for organic products and home farming compared to synthetic fertilizers and pesticides . Entekrishi.com is Kerala 's first online open market for consumers / farmers to connect directly with each other . It provides a platform or rather a virtual market for farmers and end consumers where the farmers can display their crops , mention the quantity , specify the method of cultivation , expected price for the commodity and contact details . Farmers can post their products in any quantity ranging from 1 kilogram ( 2 @.@ 2 lb ) to 1 @,@ 000 kilograms ( 2 @,@ 200 lb ) which means even a person having a kitchen farm may find a buyer .

### = = = Fisheries = = =

With a 590 km of coastal belt , 400 @,@ 000 hectares of inland water resources and approximately 220 @,@ 000 active fishermen , Kerala is one of the leading producers of fish in India . According to 2003 ? 04 reports , about 1 @.@ 1 million people earn their livelihood from fishing and allied activities such as drying , processing , packaging , exporting and transporting fisheries . The annual

yield of the sector was estimated as 608 @, @ 000 tons in 2003 ? 04 . This contributes to about 3 % of the total economy of the state . In 2006 , around 22 % of the total Indian marine fishery yield was from Kerala . During the southwest monsoon , a suspended mud bank develops along the shore , which in turn leads to calm ocean water , peaking the output of the fishing industry . This phenomenon is locally called chakara . The waters provide a large variety of fish : pelagic species ; 59 % , demersal species ; 23 % , crustaceans , molluscs and others for 18 % . Around 1 @. @ 050 million fishermen haul an annual catch of 668 @, @ 000 tonnes as of a 1999 ? 2000 estimate ; 222 fishing villages are strung along the 590 km coast . Another 113 fishing villages dot the hinterland . Kerala 's coastal belt of Karunagappally is known for high background radiation from thorium @-@ containing monazite sand . In some coastal panchayats , median outdoor radiation levels are more than 4 mGy / yr and , in certain locations on the coast , it is as high as 70 mGy / yr .

= = Transport = =

= = = Roads = = =

Kerala has 145 @, @ 704 kilometres ( 90 @, @ 536 mi ) of roads , which accounts for 4 @. @ 2 % of India 's total . This translates to about 4 @. @ 62 kilometres ( 2 @. @ 87 mi ) of road per thousand population , compared to an average of 2 @. @ 59 kilometres ( 1 @. @ 61 mi ) in the country . Roads in Kerala include 1 @, @ 524 kilometres ( 947 mi ) of national highway ; 2 @. @ 6 % of the nation 's total , 4 @, @ 341 @. @ 6 kilometres ( 2 @, @ 697 @. @ 7 mi ) of state highway and 18 @, @ 900 kilometres ( 11 @, @ 700 mi ) of district roads . Most of Kerala 's west coast is accessible through two national highways , NH 47 and NH 17 ; and the eastern side is accessible through state highways . There is also a hill highway proposed , to provide access to the eastern hills . National Highway 17 , with the longest stretch of road ( 421 kilometres ( 262 mi ) ) connects Edappally to Panvel ; it starts from Kochi and passes through Kozhikode , Kannur , Kanhangad , Kasaragod and Uppala before entering Karnataka . NH 47 runs from Salem to Kanniyakumari via Coimbatore , Palakkad , Thrissur , Ernakulam , Kochi , Alapuzha , Kollam , Thiruvananthapuram , and Nagercoil , connecting Kerala 's political capital ( Thiruvananthapuram ) to its commercial capital ( Kochi ) . Palakkad district is generally referred to as the Gateway of Kerala , due to the presence of the Palakkad Gap , in the Western Ghats , through which the northern ( Malabar ) and southern ( Travancore ) parts of Kerala are connected to the rest of India via road and rail . There is the state 's largest checkpoint , Walayar , the border town between Kerala and Tamilnadu , through which a large amount of public and commercial transportation reaches the northern and central districts of Kerala .

The Department of Public Works is responsible for maintaining and expanding the state highways system and major district roads . The Kerala State Transport Project ( KSTP ) , which includes the GIS @-@ based Road Information and Management Project ( RIMS ) , is responsible for maintaining and expanding the state highways in Kerala ; it also oversees a few major district roads . Traffic in Kerala has been growing at a rate of 10 ? 11 % every year , resulting in high traffic and pressure on the roads . Traffic density is nearly four times the national average , reflecting the state 's high population . Kerala 's annual total of road accidents is among the nation 's highest . The accidents are mainly the result of the narrow roads and irresponsible driving . National Highways in Kerala are among the narrowest in the country and will remain so for the foreseeable future , as the state government has received an exemption that allows narrow national highways . In Kerala , highways are 45 meters wide . In other states National Highways are grade separated highways 60 meters wide with a minimum of four lanes , as well as 6 or 8 lane access @-@ controlled expressways . National Highways Authority of India ( NHAI ) has threatened the Kerala state government that it will give high priority to other states in highway development as political commitment to better highways has been lacking . As of 2013 , the state had the highest road accident rate in the country , with most fatal accidents taking place along the state 's National Highways .

### == Railways ==

The Indian Railways ' Southern Railway line runs through the state connecting most of the major towns and cities except those in the highland districts of Idukki and Wayanad . The railway network in the state is controlled by two out of six divisions of the Southern Railway ; Thiruvananthapuram Railway division and Palakkad Railway Division . Thiruvananthapuram Central ( TVC ) is the largest railway station in the state . Kerala 's major railway stations are TVC , Ernakulam Junction ( South ) ( ERS ) , Kozhikode ( CLT ) , Shornur Junction ( SRR ) , Palakkad Junction ( PGT ) , Kollam Junction ( QLN ) , Kannur ( CAN ) , Thrissur Railway Station ( TCR ) , Ernakulam Town ( North ) ( ERN ) , Alappuzha railway station ( ALLP ) , Kottayam ( KTYM ) Kayamkulam Junction ( KYJ ) and Chengannur ( CNGR ) . Major railway transport between Beypore ? Tirur began on 12 March 1861 , from Shoranur ? Cochin Harbour section in 1902 , from Kollam ? Shenkottai on 1 July 1904 , Kollam ? Thiruvananthapuram on 4 January 1918 , from Nilambur @-@ Shoranur in 1927 , from Ernakulam ? Kottayam in 1956 , from Kottayam ? Kollam in 1958 , from Thiruvananthapuram ? Kanyakumari in 1979 and from the Thrissur @-@ Guruvayur Section in 1994 .

Kochi Metro is an under @-@ construction metro system for the city of Kochi . The construction began in 2012 and the first phase is being set up at an estimated cost of ? 5181 crore ( US \$ 770 million ) .

### == Airports ==

Kerala has three international airports : Trivandrum International Airport , Cochin International Airport and Calicut International Airport . All civilian airports functioning in the state are international airports , a feature which is unique to Kerala . Upon completion of the Kannur International Airport , Kerala will join Tamil Nadu as the state with the most international airports . Unlike in other states where the capital city has the highest air traffic , in Kerala , air traffic is distributed evenly over Kochi , Thiruvananthapuram and Kozhikode . Despite this , all these three airports are among the top 15 busiest airports in India .

Kollam Airport , established under the Madras Presidency and closed before the inauguration of Trivandrum International Airport in the capital , was the first airport in Kerala . Trivandrum International Airport , managed by the Airport Authority of India , is among the oldest existing airports in South India . Cochin International Airport is the busiest in the state and the seventh @-@ busiest in the country . It was the first Indian airport to be incorporated as a public limited company ; it was funded by nearly 10 @,@ 000 non @-@ resident Indians from 30 countries . Cochin Airport is the primary hub of Air India Express and the secondary hub of Air Asia India .

Other than civilian airports , Kochi has a naval airport named INS Garuda . Thiruvananthapuram airport shares civilian facilities with the Southern Air Command of the Indian Air Force . These facilities are used mostly by Central Government VIPs visiting Kerala .

### == Water transport ==

Kerala has one major port , 17 minor ports and a few mini ports . The state has numerous backwaters , which are used for commercial inland navigation . Transport services are mainly provided by country craft and passenger vessels . There are 67 navigable rivers in the state while the total length of inland waterways is 1 @,@ 687 kilometres ( 1 @,@ 048 mi ) . The main constraints to the expansion of inland navigation are ; lack of depth in waterways caused by silting , lack of maintenance of navigation systems and bank protection , accelerated growth of the water hyacinth , lack of modern inland craft terminals , and lack of a cargo handling system . A canal 205 kilometres ( 127 mi ) long , National Waterway 3 , runs between Kottapuram and Kollam , which is included in the East @-@ Coast Canal .

### == Demographics ==

Kerala is home to 2 @. @ 76 % of India 's population ; 859 persons per km<sup>2</sup> , its land is nearly three times as densely settled as the rest of India , which is at a population density of 370 persons per km<sup>2</sup> . As of 2011 , Thiruvananthapuram is the most populous city in Kerala . In the state , the rate of population growth is India 's lowest , and the decadal growth of 4 @. @ 9 % in 2011 is less than one third of the all @- @ India average of 17 @. @ 64 % . Kerala 's population more than doubled between 1951 and 1991 by adding 15 @. @ 6 million people to reach 29 @. @ 1 million residents in 1991 ; the population stood at 33 @. @ 3 million by 2011 . Kerala 's coastal regions are the most densely settled with population of 2022 persons per km<sup>2</sup> , 2 @. @ 5 times the overall population density of the state , 859 persons per km<sup>2</sup> , leaving the eastern hills and mountains comparatively sparsely populated . Around 31 @. @ 8 million Keralites are predominantly Malayali . The state 's 321 @, @ 000 indigenous tribal Adivasis , 1 @. @ 10 % of the population , are concentrated in the east . Malayalam , one of the classical languages in India , is Kerala 's official language . Tamil , Kannada , Tulu , Hindi , Bengali , Mahl and Adivasi ( tribal ) languages are also spoken . As of early 2013 , there are close to 2 @. @ 5 million ( 7 @. @ 5 % of the state population ) migrant labourers in Kerala from other parts of India .

= = = Gender = = =

The democratic rise of the Communist Party of India in the state , culminating in the chief ministership of EMS Namboodiripad and his government , helped to distribute land and implement educational reforms . There is the tradition of matrilineal inheritance in Kerala , where the mother is the head of the household . As a result , women in Kerala have had a much higher standing and influence in the society . This was common among certain influential castes and is a factor in the value placed on daughters . Christian missionaries also influenced Malayali women in that they started schools for girls from poor families . Opportunities for women such as education and gainful employment often translate into a lower birth rate , which in turn , make education and employment more likely to be accessible and more beneficial for women . This creates an upward spiral for both the women and children of the community that is passed on to future generations . According to the Human Development Report of 1996 , Kerala 's Gender Development Index was 597 ; higher than any other state of India . Factors , such as high rates of female literacy , education , work participation and life expectancy , along with favourable sex ratio , contributed to it .

Kerala 's sex ratio of 1 @. @ 084 is higher than that of the rest of India and is the only state where women outnumber men . While having the opportunities that education affords them , such as political participation , keeping up to date with current events , reading religious texts etc . , these tools have still not translated into full , equal rights for the women of Kerala . There is a general attitude that women must be restricted for their own benefit . In the state , despite the social progress , gender still influences social mobility .

= = = Human Development Index = = =

As of 2014 , Kerala has a Human Development Index ( HDI ) of 0 @. @ 790 which comes under the " high " category and it is the highest in the country and a consumption @- @ based HDI of 0 @. @ 920 , which is better than that of many developed countries . Comparatively higher spending by the government on primary level education , health care and the elimination of poverty from the 19th century onward has helped the state maintain an exceptionally high HDI ; the report was prepared by the central government 's Institute of Applied Manpower Research . However , the Human Development Report 2005 , prepared by Centre for Development Studies envisages a virtuous phase of inclusive development for the state since the advancement in human development had already started aiding the economic development of the state . Kerala is also widely regarded as the cleanest and healthiest state in India .

According to the 2011 census , Kerala has the highest literacy rate ( 93 @. @ 91 ) among Indian states . The life expectancy in Kerala is 74 years , among the highest in India as of 2011 . Kerala 's

rural poverty rate fell from 59 % ( 1973 ? 1974 ) to 12 % ( 1999 ? 2010 ) ; the overall ( urban and rural ) rate fell 47 % between the 1970s and 2000s against the 29 % fall in overall poverty rate in India . By 1999 ? 2000 , the rural and urban poverty rates dropped to 10 @. @ 0 % and 9 @. @ 6 % respectively . These changes stem largely from efforts begun in the late 19th century by the kingdoms of Cochin and Travancore to boost social welfare . This focus was maintained by Kerala 's post @-@ independence government .

Kerala has undergone a " demographic transition " characteristic of such developed nations as Canada , Japan , and Norway ; . as 11 @. @ 2 % of people are over the age of 60 , and due to the low birthrate of 18 per 1 @, @ 000 . In 1991 , Kerala 's total fertility rate ( TFR ) was the lowest in India . Hindus had a TFR of 1 @. @ 66 , Christians ; 1 @. @ 78 , and Muslims ; 2 @. @ 97 . The state also is regarded as the " least corrupt Indian state " according to the surveys conducted by Transparency International ( 2005 ) and India Today ( 1997 ) . Kerala has the lowest homicide rate among Indian states , with 1 @. @ 1 per 100 @, @ 000 in 2011 . In respect of female empowerment , some negative factors such as higher suicide rate , lower share of earned income , child marriage , complaints of sexual harassment and limited freedom are reported .

In 2015 , Kerala had the highest conviction rate of any state , over 77 % . Kerala has the lowest proportion of homeless people in rural India - 0 @. @ 04 % , and the state is attempting to reach the goal of becoming the first " Zero Homeless State " , in addition to its acclaimed " Zero landless project " , with private organisations and the expatriate Malayali community funding projects for building homes for the homeless . The state was also among the lowest in the India State Hunger Index next only to Punjab . In 2015 Kerala became the first " complete digital state " by implementing e @-@ governance initiatives .

== = Healthcare == =

Kerala , considered as being healthier than many states of the United States , is a pioneer in implementing the Universal health care programme . The sub @-@ replacement fertility level and infant mortality rate are lower compared to those of other states ; estimated from 12 to 14 deaths per 1 @, @ 000 live births . However , Kerala 's morbidity rate is higher than that of any other Indian state ? 118 ( rural ) and 88 ( urban ) per 1 @, @ 000 people . The corresponding figures for all India were 55 and 54 per 1 @, @ 000 respectively as of 2005 . Kerala 's 13 @. @ 3 % prevalence of low birth weight is higher than that of many first world nations . Outbreaks of water @-@ borne diseases such as diarrhoea , dysentery , hepatitis , and typhoid among the more than 50 % of people who rely on 3 million water wells is an issue worsened by the lack of sewers . According to a study commissioned by Lien Foundation , a Singapore @-@ based philanthropic organisation , Kerala is considered to be the best place to die in India based on the state 's provision of palliative care for patients with serious illnesses .

The United Nations Children 's Fund ( UNICEF ) and the World Health Organisation designated Kerala the world 's first " baby @-@ friendly state " because of its effective promotion of breast @-@ feeding over formulas . Over 95 % of Keralite births are hospital delivered and the state also has the lowest Infant mortality rate in the country . The third National Family Health Survey ranks Kerala first in " Institutional Delivery " with 100 % births in medical facilities . Ayurveda , siddha , and endangered and endemic modes of traditional medicine , including kalari , marmachikitsa and vishavaidyam , are practised . Some occupational communities such as Kaniyar were known as native medicine men in relation to the practice of such streams of medical systems , apart from their traditional vocation . These propagate via gurukula discipleship , and comprise a fusion of both medicinal and alternative treatments .

In 2014 , Kerala became the first state in India to offer free cancer treatment to the poor , via a program called Sukrutham . People in Kerala experience elevated incidence of cancers , liver and kidney diseases . In April 2016 , the Economic Times reported that 250 @, @ 000 residents undergo treatment for cancer . It also reported that approximately 150 to 200 liver transplants are conducted in the region 's hospitals annually . Approximately 42 @, @ 000 cancer cases are reported in the region annually . This is believed to be an underestimate due as private hospitals may not be

reporting their figures . Long waiting lists for kidney donations has stimulated illegal trade in human kidneys , and prompted the establishment of the Kidney Federation of India which aims to support financially disadvantaged patients .

= = Religion = =

In comparison with the rest of India , Kerala experiences relatively little sectarianism . According to 2011 Census of India figures , 54 % of Kerala 's residents are Hindus , 26 % are Muslims , 18 % are Christians , and the remaining 2 % follow another or have no religious affiliation . Hindus constitute the majority in all districts except Malappuram , where they are outnumbered by Muslims .

The mythological legends regarding origin of Kerala are Hindu in nature . Kerala produced several saints and movements . Adi Shankara was a religious philosopher who contributed to Hinduism and propagated the philosophy of Advaita . He was instrumental in establishing four mathas at Sringeri , Dwarka , Puri and Jyotirmath . Melpathur Narayana Bhattathiri was another religious figure who composed Narayaniyam , a collection of verses in praise of the Hindu God Krishna .

Islam arrived in Kerala through Arab traders in the seventh century CE . Muslims of Kerala , generally referred to as Mappila , mostly follow the Shafi 'i Madh 'hab under Sunni Islam . The major Muslim organisations are Sunni , Mujahid and Jama 'at Islami .

Ancient Christian tradition says that Christianity reached the shores of Kerala in AD 52 with the arrival of Thomas the Apostle , one of the Twelve Apostles of Jesus Christ . Saint Thomas Christians include Syro Malabar Catholic , Syro Malankara Catholic , Malankara Orthodox Syrian , Jacobite Syrian , Marthoma Syrian , the Syrian Anglicans in the CSI and several Pentecostal and evangelical denominations . The origin of the Latin Catholic Christians in Kerala is the result of the missionary endeavours of the Portuguese Padroado in the 16th century . Judaism reached Kerala in the 10th century BC during the time of King Solomon . They are called Cochin Jews or Malabar Jews and are the oldest group of Jews in India . There was a significant Jewish community which existed in Kerala until the 20th century , when most of them migrated to Israel . The Paradesi Synagogue at Kochi is the oldest synagogue in the Commonwealth . Jainism has a considerable following in the Wayanad district .

Buddhism was popular in the time of Ashoka the Great but vanished by the 12th century CE . Certain Hindu communities such as the Kshatriyas , Nairs , Tiyyas and the Muslims around North Malabar used to follow a traditional matrilineal system known as marumakkathayam , although this practice ended in the years after Indian independence . Other Muslims , Christians , and some Hindu castes such as the Namboothiris and the Ezhavas followed makkathayam , a patrilineal system . Owing to the former matrilineal system , women in Kerala enjoy a high social status . However , gender inequality among low caste men and women is reportedly higher compared to that in other castes .

= = Education = =

The Kerala school of astronomy and mathematics flourished between the 14th and 16th centuries . In attempting to solve astronomical problems , the Kerala school independently created a number of important mathematics concepts , including series expansion for trigonometric functions . Following the instructions of the Wood 's despatch of 1854 , both the princely states , Travancore and Cochin , launched mass education drives with support from agencies , mainly based on castes and communities and introduced a system of grant-in-aid to attract more private initiatives . The efforts by leaders , Vaikunda Swami , Narayana Guru and Ayyankali , towards aiding the socially discriminated castes in the state , with the help of community based organisations like Nair Service Society , SNDP , Muslim Mahajana Sabha , Yoga Kshema Sabha ( of Nambudiris ) and congregations of Christian churches , led to the development of mass education in Kerala .

In 1991 , Kerala became the first state in India to be recognised as a completely literate state , though the effective literacy rate at that time was only 90 % . As of 2007 , the net enrolment in

elementary education was almost 100 % and was almost balanced among sexes , social groups and regions , unlike other states in India . The state topped the Education Development Index ( EDI ) among 21 major states in India in the year 2006 ? 2007 . According to the first Economic Census , conducted in 1977 , 99 @. @ 7 % of the villages in Kerala had a primary school within 2 kilometres ( 1 @. @ 2 mi ) , 98 @. @ 6 % had a middle school within 2 kilometres ( 1 @. @ 2 mi ) and 96 @. @ 7 % had a high school or higher secondary school within 5 kilometres ( 3 @. @ 1 mi ) . According to the 2011 census , Kerala has 93 @. @ 91 % literacy compared to the national literacy rate of 74 @. @ 04 % . In January 2016 , Kerala became the first Indian state to achieve 100 % primary education through its literacy programme Athulyam .

The educational system prevailing in the state 's schools is made up of 10 years , which are streamlined into lower primary , upper primary and secondary school stages with a 4 + 3 + 3 pattern . After 10 years of schooling , students typically enroll in Higher Secondary Schooling in one of the three major streams ? liberal arts , commerce or science . Upon completing the required coursework , students can enroll in general or professional under @-@ graduate ( UG ) programmes . The majority of public schools are affiliated with the Kerala State Education Board . Other educational boards are the Indian Certificate of Secondary Education ( ICSE ) , the Central Board for Secondary Education ( CBSE ) , and the National Institute of Open Schooling ( NIOS ) . English is the language of instruction in most self @-@ financing schools , while government and government @-@ aided schools offer English or Malayalam . Though the cost of education is generally considered low in Kerala , according to the 61st round of the National Sample Survey ( 2004 ? 2005 ) , per capita spending on education by the rural households was reported to be ? 41 ( 61 ¢ US ) for Kerala , more than twice the national average . The survey also revealed that the rural @-@ urban difference in household expenditure on education was much less in Kerala than in the rest of India .

= = Culture = =

The culture of Kerala is composite and cosmopolitan in nature and it is an integral part of Indian culture . It is synthesis of Aryan and Dravidian cultures , defined by its antiquity and the organic continuity sustained by the Malayali people . It has been elaborated through centuries of contact with neighbouring and overseas cultures . However , the geographical insularity of Kerala from the rest of the country has resulted in the development of a distinctive lifestyle , art , architecture , language , literature and social institutions . Over 10 @, @ 000 festivals are celebrated in the state every year . The Malayalam calendar , a solar calendar started from 825 CE in Kerala , finds common usage in planning agricultural and religious activities .

= = = Festivals = = =

Many of the temples in Kerala hold festivals on specific days of the year . A common characteristic of these festivals is the hoisting of a holy flag which is brought down on the final day of the festival after immersing the deity . Some festivals include Poorams , the best known of these being the Thrissur Pooram . " Elephants , firework displays and huge crowds " are the major attractions of Thrissur Pooram . Other known festivals are Makaravilakku , Nenmara Vallangi Vela and Utsavam . Temples that can afford it will usually involve at least one richly caparisoned elephant as part of the festivities . The idol in the temple is taken out on a procession around the countryside atop this elephant . When the procession visits homes around the temple , people will usually present rice , coconuts , and other offerings to it . Processions often include traditional music such as Panchari melam or Panchavadyam .

= = = = Onam = = = =

Onam is a harvest festival celebrated by the people of Kerala and is a reminiscent of the state 's agrarian past . It is also the State festival of Kerala with public holidays for four days from Onam Eve ( Uthradom ) to the fourth Onam Day . Onam falls in the Malayalam month of Chingam ( August ?

September ) and marks the commemoration of the Vamana avatara of Vishnu and the subsequent homecoming of King Mahabali . It is one of the festivals celebrated with cultural elements such as Vallam Kali , Pulikali , Pookkalam , Thumbi Thullal and Onavillu .

= = = Dance = = =

Kerala is home to a number of performance arts . These include five classical dance forms : Kathakali , Mohiniyattam , Koodiyattom , Thullal and Krishnanattam , which originated and developed in the temple theatres during the classical period under the patronage of royal houses . Kerala natanam , Thirayattam , Kaliyattam , Theyyam , Koothu and Padayani are other dance forms associated with the temple culture of the region . Some traditional dance forms such as Margamkali and Parichamuttukali are popular among the Syrian Christians and Chavittu nadakom is popular among the Latin Christians , while Oppana and Duffmuttu are popular among the Muslims of the state .

= = = Music = = =

The development of classical music in Kerala is attributed to the contributions it received from the traditional performance arts associated with the temple culture of Kerala . The development of the indigenous classical music form , Sopana Sangeetham , illustrates the rich contribution that temple culture has made to the arts of Kerala . Carnatic music dominates Keralite traditional music . This was the result of Swathi Thirunal Rama Varma 's popularisation of the genre in the 19th century . Raga @-@ based renditions known as sopanam accompany kathakali performances . Melam ; including the paandi and panchari variants , is a more percussive style of music : it is performed at Kshetram @-@ centered festivals using the chenda . Panchavadyam is a form of percussion ensemble , in which artists use five types of percussion instrument . Kerala 's visual arts range from traditional murals to the works of Raja Ravi Varma , the state 's most renowned painter . Most of the castes and communities in Kerala have rich collections of folk songs and ballads associated with a variety of themes ; Vadakkan Pattukal ( Northern Ballads ) , Thekkan pattukal ( Southern Ballads ) , Vanchi pattukal ( Boat Songs ) , Mappila Pattukal ( Muslim songs ) and Pallipattukal ( Church songs ) are a few of them .

= = = Cinema = = =

Malayalam films carved a niche for themselves in the Indian film industry with the presentation of social themes . Directors from Kerala , like Adoor Gopalakrishnan , John Abraham , P. Padmarajan , G. Aravindan and Shaji N Karun have made a considerable contribution to the Indian parallel cinema . Kerala has also given birth to numerous actors , such as Satyan , Prem Nazir , Jayan , Adoor Bhasi , Bharath Gopi , Mammooty , Mohanlal , Suresh Gopi , Sreenivasan , Jayaram , Murali , Dileep , Oduvil Unnikrishnan , Thilakan , Jagathy Sreekumar , Nedumudi Venu , KPAC Lalitha , Nivin Pauly . Late Malayalam actor Prem Nazir holds the world record for having acted as the protagonist of over 720 movies . Since the 1980s , actors Mammooty and Mohanlal have dominated the movie industry ; Mammooty has won three National Awards for best actor while Mohanlal has two to his credit . Malayalam Cinema has produced a few more notable personalities such as K.J. Yesudas , K.S. Chitra , Vayalar Rama Varma , M.T. Vasudevan Nair and O.N.V. Kurup , the last two mentioned being recipients of Jnanpith award , the highest literary award in India .

= = = Literature = = =

Malayalam literature starts from the late medieval period and includes such notable writers as the 14th @-@ century Niranam poets ( Madhava Panikkar , Sankara Panikkar and Rama Panikkar ) , and the 17th @-@ century poet Thunchaththu Ezhuthachan , whose works mark the dawn of both the modern Malayalam language and its poetry . Paremmakkal Thoma Kathanar and Kerala Varma



Valiakoi Thampuran are noted for their contribution to Malayalam prose . The " triumvirate of poets " ( Kavithrayam ) : Kumaran Asan , Vallathol Narayana Menon , and Ulloor S. Parameswara Iyer , are recognised for moving Keralite poetry away from archaic sophistry and metaphysics , and towards a more lyrical mode . In the second half of the 20th century , Jnanpith winning poets and writers like G. Sankara Kurup , S. K. Pottekkatt , Thakazhi Sivasankara Pillai , M. T. Vasudevan Nair and O. N. V. Kurup had made valuable contributions to the modern Malayalam literature . Later , writers like O. V. Vijayan , Kamaladas , M. Mukundan , Arundhati Roy , Vaikom Muhammed Basheer , have gained international recognition .

= = = Cuisine = = =

Kerala cuisine has a multitude of both vegetarian and non @-@ vegetarian dishes prepared using fish , poultry , and meat . Culinary spices have been cultivated in Kerala for millennia and they are characteristic of its cuisine . Rice is a dominant staple that is eaten at all times of day . A majority of the breakfast foods in Kerala are made out of rice , in one form or the other ( idli , puttu , appam , or idiyappam ) , tapioca preparations , or pulse @-@ based vada . These may be accompanied by chutney , kadala , payasam , payar pappadam , appam , chicken curry , beef fry , egg masala and fish curry . Lunch dishes include rice and curry along with rasam , pulisherry and sambar . Sadhya is a vegetarian meal , which is served on a banana leaf and followed with a cup of payasam . Popular snacks include banana chips , yam crisps , tapioca chips , unniyappam and kuzhalappam . Seafood specialties include karimeen , prawns , shrimp and other crustacean dishes . Kerala also has large variety of vegetarian and non @-@ vegetarian achar ( pickles ) ranging from manga ( mango ) , white lemon , fish , beef and seafood pickles .

= = = Elephants = = =

Elephants have been an integral part of the culture of the state . Kerala is home to the largest domesticated population of elephants in India ? about 700 Indian elephants , owned by temples as well as individuals . These elephants are mainly employed for the processions and displays associated with festivals celebrated all around the state . More than 10 @,@ 000 festivals are celebrated in the state annually and some animal lovers have sometimes raised concerns regarding the overwork of domesticated elephants during them . In Malayalam literature , elephants are referred to as the ' sons of the sahya . The elephant is the state animal of Kerala and is featured on the emblem of the Government of Kerala .

= = Media = =

The media , telecommunications , broadcasting and cable services are regulated by the Telecom Regulatory Authority of India ( TRAI ) . The National Family Health Survey ? 3 , conducted in 2007 , ranked Kerala as the state with the highest media exposure in India . Dozens of newspapers are published in Kerala , in nine major languages , but principally Malayalam and English . The most widely circulated Malayalam @-@ language newspapers are Malayala Manorama , Mathrubhumi , Madhyamam , Deshabhimani , Mangalam , Kerala Kaumudi , Chandrika , Thejas , Janayugam , Janmabhumi , Deepika and Siraj Daily . Major Malayalam periodicals include Mathrubhumi , India Today Malayalam , Madhyamam Weekly , Grihalakshmi , Vanitha , Dhanam , Chithrabhumi , and Bhashaposhini . The Hindu is the most read English language newspaper in the state , followed by The New Indian Express . Other dailies include Deccan Chronicle , The Times of India , DNA , The Economic Times , and The Financial Express .

Doordarshan is the state @-@ owned television broadcaster . Multi system operators provide a mix of Malayalam , English and international channels via cable television . Some of the popular Malayalam television channels are Asianet , Surya TV , Kiran TV , Mazhavil Manorama , Manorama News , Indiavision , Kairali TV , Kairali WE , Kairali People , Yes Indiavision Kappa TV , Asianet News , Asianet Plus , Asianet Movies , Amrita TV , Reporter , Jaihind , Jeevan TV , Mathrubhumi

News , Kaumudi , Shalom TV , and Media One TV . Television serials , reality shows and the Internet have become major sources of entertainment and information for the people of Kerala . A Malayalam version of Google News was launched in September 2008 . A sizeable " people 's science " movement has taken root in the state , and such activities as writers ' cooperatives are becoming increasingly common . BSNL , Reliance Infocomm , Airtel , Vodafone , Idea , Tata Docomo and Aircel are the major cell phone service providers . Broadband Internet services are widely available throughout the state ; some of the major ISPs are BSNL , Asianet Satellite communications , Reliance Communications , Airtel , Idea , MTS and VSNL . According to a TRAI report , as of January 2012 the total number of wireless phone subscribers in Kerala is about 34 @. @ 3 million and the wireline subscriber base is at 3 @. @ 2 million , accounting for the telephone density of 107 @. @ 77 . Unlike in many other states , the urban @-@ rural divide is not visible in Kerala with respect to mobile phone penetration .

= = Sports = =

By the 21st century , almost all of the native sports and games from Kerala have either disappeared or become just an art form performed during local festivals ; including Poorakkali , Padayani , Thalappandukali , Onathallu , Parichamuttukali , Velakali , and Kilithattukali . However , Kalaripayattu , regarded as " the mother of all martial arts in the world " , is an exception and is practised as the indigenous martial sport . Another traditional sport of Kerala is the boat race , especially the race of Snake boats .

Cricket and football became popular in the state ; both were introduced in Malabar during the British colonial period in the 19th century . Cricketers , like Tinu Yohannan , Abey Kuruvilla , Sreesanth and Sanju Samson , found places in the national cricket team . However , the Kerala cricket team has never won or performed well at the Ranji Trophy . A cricket club from Kerala , the Kochi Tuskers , played in the Indian Premier League 's fourth season . However , the team was disbanded after the season because of conflicts of interest among its franchises . Football is one of the most widely played and watched sports with huge support for club and district level matches . In the Indian Super League the official team of Kerala is the Kerala Blasters . Kozhikode in Kerala hosts the Sait Nagjee Football Tournament . Kerala is one of the major footballing states in India along with West Bengal and Goa and has produced national players like I. M. Vijayan , C. V. Pappachan , V. P. Sathyan , Jo Paul Ancheri , and Pappachen Pradeep . The Kerala state football team has won the Santhosh Trophy five times ; in 1973 , 1992 , 1993 , 2001 and 2004 . They were also the runners @-@ up eight times .

Among the prominent athletes hailing from the state are P. T. Usha , Shiny Wilson and M.D. Valsamma , all three of whom are recipients of the Padma Shri as well as Arjuna Award , while K. M. Beenamol and Anju Bobby George are Rajiv Gandhi Khel Ratna and Arjuna Award winners . T. C. Yohannan , Suresh Babu , Sinimol Paulose , Angel Mary Joseph , Mercy Kuttan , K. Saramma , K. C. Rosakutty and Padmini Selvan are the other Arjuna Award winners from Kerala . Volleyball is another popular sport and is often played on makeshift courts on sandy beaches along the coast . Jimmy George was a notable Indian volleyball player , rated in his prime as among the world 's ten best players . Other popular sports include badminton , basketball and kabaddi .

For the 2017 FIFA U @-@ 17 World Cup in India , the Jawaharlal Nehru Stadium ( Kochi ) , was chosen as one of the six venues where the game would be hosted in India .

= = Tourism = =

Kerala 's culture and traditions , coupled with its varied demographics , have made the state one of the most popular tourist destinations in India . In 2012 , National Geographic 's Traveller magazine named Kerala as one of the " ten paradises of the world " and " 50 must see destinations of a lifetime " . Travel and Leisure also described Kerala as " One of the 100 great trips for the 21st century " . In 2012 , it overtook the Taj Mahal to be the number one travel destination in Google 's search trends for India . Kerala 's beaches , backwaters , lakes , mountain ranges , waterfalls ,

ancient ports , palaces , religious institutions and wildlife sanctuaries are major attractions for both domestic and international tourists . The city of Kochi ranks first in the total number of international and domestic tourists in Kerala . Until the early 1980s , Kerala was a relatively unknown destination compared to other states in the country . In 1986 the government of Kerala declared tourism an important industry and it was the first state in India to do so . Marketing campaigns launched by the Kerala Tourism Development Corporation , the government agency that oversees the tourism prospects of the state , resulted in the growth of the tourism industry . Many advertisements branded Kerala with the tagline Kerala , God 's Own Country . Kerala tourism is a global brand and regarded as one of the destinations with highest recall . In 2006 , Kerala attracted 8 @. @ 5 million tourists , an increase of 23 @. @ 68 % over the previous year , making the state one of the fastest @- @ growing popular destinations in the world . In 2011 , tourist inflow to Kerala crossed the 10 @- @ million mark .

Ayurvedic tourism has become very popular since the 1990s , and private agencies have played a notable role in tandem with the initiatives of the Tourism Department . Kerala is known for its ecotourism initiatives which include mountaineering , trekking and bird @- @ watching programmes in the Western Ghats as the major activities . As of 2005 , the state 's tourism industry was a major contributor to the state 's economy , growing at the rate of 13 @. @ 31 % . The revenue from tourism increased five @- @ fold between 2001 and 2011 and crossed the ? 190 billion mark in 2011 . Moreover , the industry provides employment to approximately 1 @. @ 2 million people .

Asia 's largest , and the world 's third largest , Naval Academy @- @ Ezhimala Naval Academy @- @ at Kannur is in Kerala . Idukki arch dam , the world 's second , and Asia 's first arch dam is in Kerala . The major beaches are at Kovalam , Varkala , Fort Kochi , Cherai , Payyambalam , Kappad , Muzhappilangad ( South India 's only drive @- @ in beach ) , Bekal , and Gavi . Popular hill stations are at Munnar , Wayanad , Wagamon , Peermade , Paithalmala , Nelliampathi and Ponmudi . Munnar is 4500 feet above sea level and is known for tea plantations , and a variety of flora and fauna . Kerala 's ecotourism destinations include 12 wildlife sanctuaries and two national parks : Periyar Tiger Reserve , Parambikulam Wildlife Sanctuary , Chinnar Wildlife Sanctuary , Thattekad Bird Sanctuary , Wayanad Wildlife Sanctuary , Muthanga Wildlife Sanctuary , Aralam Wildlife Sanctuary , Eravikulam National Park , and Silent Valley National Park are the most popular among them . The Kerala backwaters are an extensive network of interlocking rivers ( 41 west @- @ flowing rivers ) , lakes , and canals that centre around Alleppey , Kumarakom and Punnamada ( where the annual Nehru Trophy Boat Race is held in August ) . Padmanabhapuram Palace and the Mattancherry Palace are two notable heritage sites .