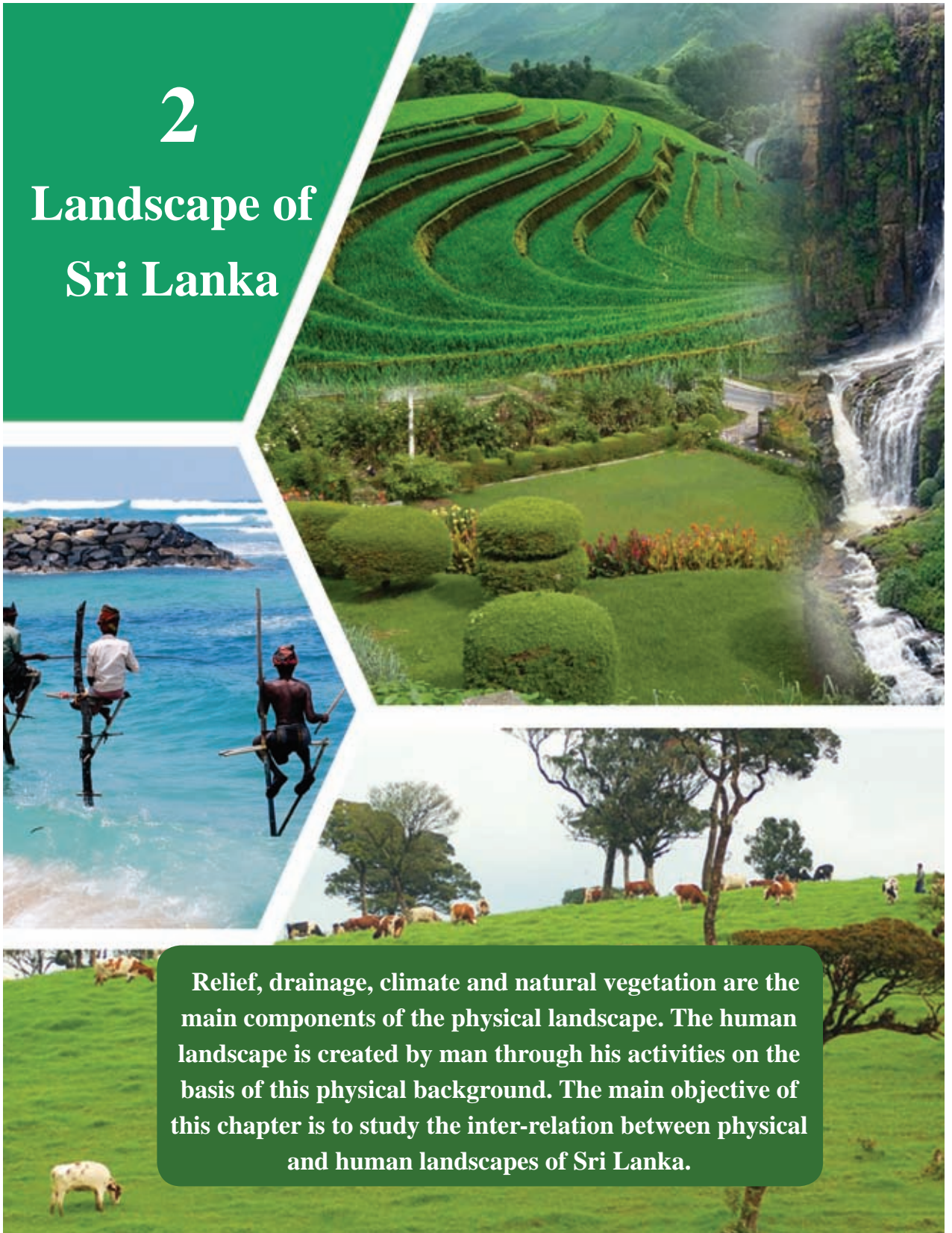


2

Landscape of Sri Lanka



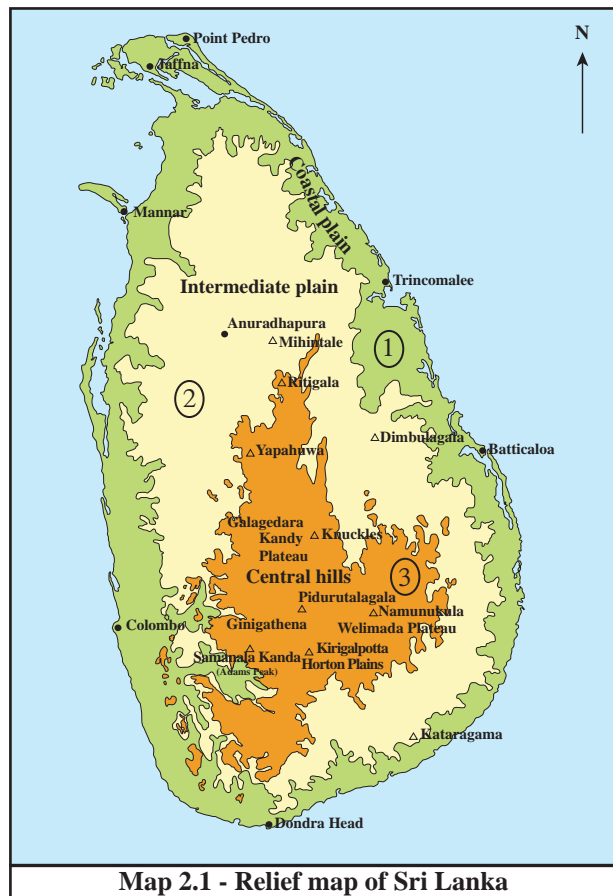
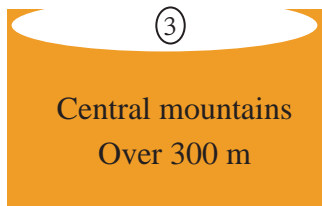
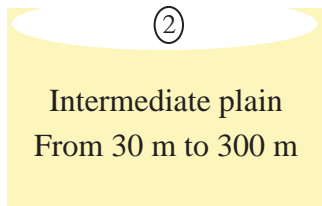
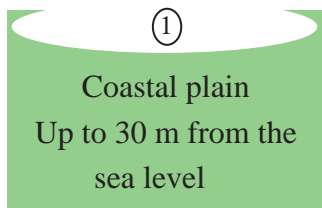
Relief, drainage, climate and natural vegetation are the main components of the physical landscape. The human landscape is created by man through his activities on the basis of this physical background. The main objective of this chapter is to study the inter-relation between physical and human landscapes of Sri Lanka.

Physical Landscape

Sri Lanka is an island with a beautiful landscape located in the Indian Ocean. The island consists of mountains, plains, rivers, waterfalls, beaches and various types of vegetation as well as buildings, roads, tanks, industries and croplands built by man on this physical environment.

Relief

The land of Sri Lanka consists of complex physical features as a result of geo-activities that occurred during a long period in the geo history. Among them, a salient feature is the central mountains located in the center of the country and the plain that extends towards the coastal belt from there. The island can be divided into three zones on the basis of relief. Identify it by studying Map 2.1



Coastal Plain

The region from sea level up to the 30m contour line along the coast belongs to the coastal plain. In the South in certain places, the coastal plain is about 3 km narrow and in the North it is about 32 km wide. The coastal plain consists of various relief features. The lower areas of river valleys and the river mouth regions belong to this. The coastal plain has several special features such as flat land, points, lagoons, sand dunes as well as the features like braided rivers, marshy lands and deltas.



Fig 2.1 - Coastal plain

Marshes - Marshes are formed when the sediments brought by rivers are deposited as sand banks and blocking the estuaries or water remaining in lowlands due to overflowing of rivers. Examples of marshes are Muthurajawela, Bundala, Kalametiya, Somawathiya, Anawilundawa and Kirala kele.

Bays - A bay has a wider opening of the sea protruding towards the land filled with saline water. Many such bays are located along side the coastal line in Sri Lanka. Some of them are Koddियar Bay, Arugam Bay and Weligama Bay.

Lagoons - A lagoon is a lengthy stretch of an area filled with brackish water, separated from the sea by sand bars which have narrow outlets to the sea only during a certain period of the year. Negombo, Jaffna, Puttlam, Chillaw and Batticaloa are examples.

Points or Headlands - A land area with hard stone that protrudes towards sea is called a point. Dondra head, Fowl Point, Sangamankanda Point and Point Pedro are examples.

Islands - Small land areas completely covered with water are called islands.

Sea Cliffs - A sea cliff is a land area composed of hard rocks standing at an edge of the coast with a steep slope. Trincomallee, Kirinda and Rumassala are examples.



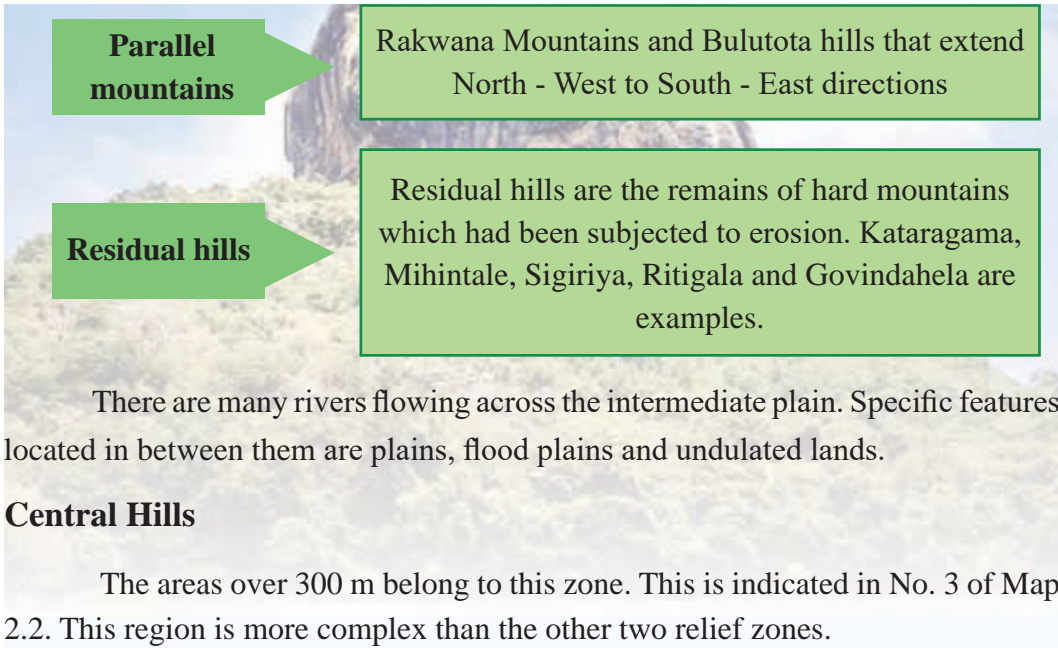
Fig 2.2 - Blow hole at Kudawella

Delta - Delta is a land area formed with the deposit of sediments carried by a river close to river mouths with a shape of a triangle. Deltas can be seen close to the river mouths of Mahaweli Ganga, Mee oya and Kala oya.

There are attractive places located close to the coastal line. Blow hole is such a feature. This name has been given as a result of splashing water up through a cave making a sound.

Intermediate plain

The intermediate plain is 30-300 m in altitude. According to the Map 2.1, the plain is wider in the North and becomes narrower towards the South. The features that can be mostly seen are contour hedges, residual hills, rivers, flood plains and plains.



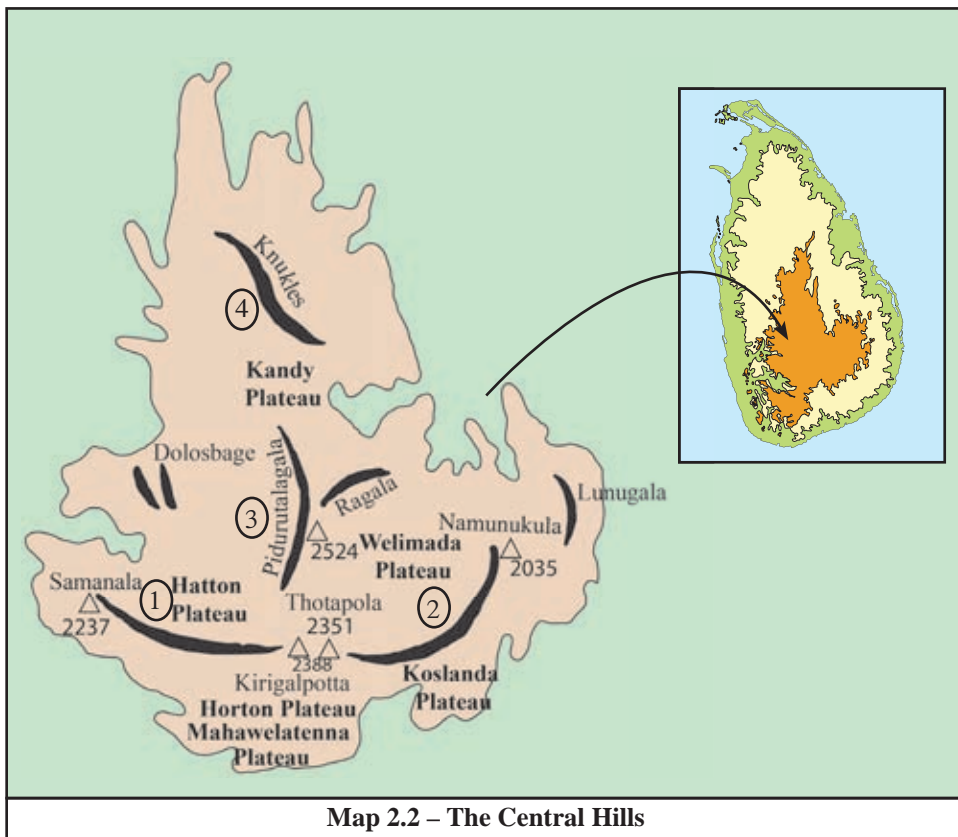
Parallel mountains → Rakwana Mountains and Bulutota hills that extend North - West to South - East directions

Residual hills → Residual hills are the remains of hard mountains which had been subjected to erosion. Kataragama, Mihintale, Sigiriya, Ritigala and Govindahela are examples.

There are many rivers flowing across the intermediate plain. Specific features located in between them are plains, flood plains and undulated lands.

Central Hills

The areas over 300 m belong to this zone. This is indicated in No. 3 of Map 2.2. This region is more complex than the other two relief zones.



There are four principal mountain ranges in the Central Hills with higher peaks;

1. Samanala Mountain Range
2. Namunukula Mountain Range
3. Pidurutalagal Kirigalpotta Mountain Range
4. Knuckles Mountain Range (Map 2.2)

Plateaus - A plateau is an area of flat land at a high elevation. There are five Plateaus in the Central Hills. (Map 2.2)

- Kandy Plateau
- Hatton Plateau
- Welimada Plateau
- Mahawelatenna Plateau
- Koslanda Plateau

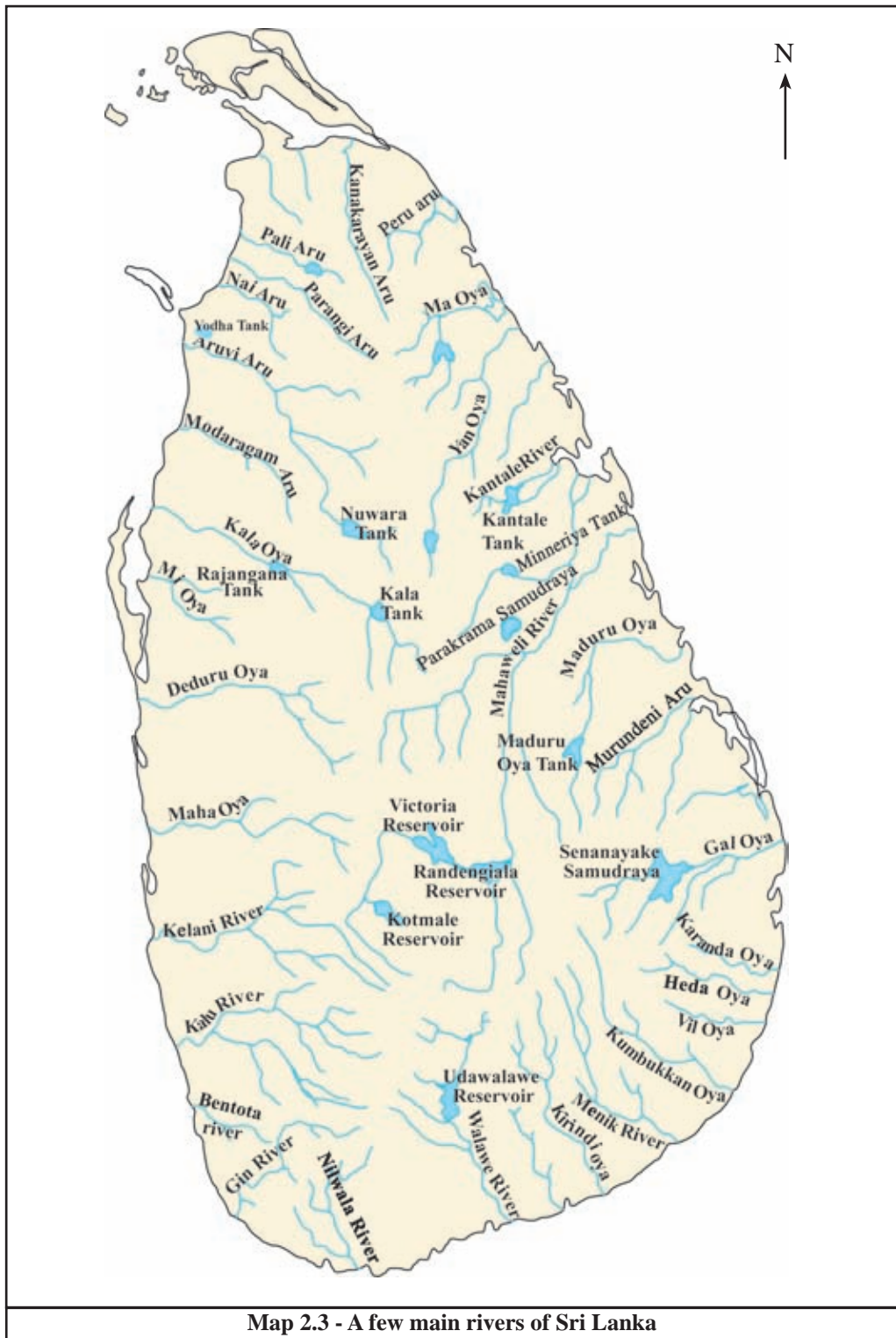
Gaps or Passes - A pass is a low area located between two mountains. Haputale, Balana, Galagedara and Ginigathena are examples.

Waterfalls - The plateaus which are located in the central hills are of different heights and rivers flow across steep slopes or escarpments forming waterfalls. Bambarakanda, Dunhinda, Luxapana, Diyaluma and Ramboda are examples.

Drainage

Sri Lanka which is rich in water resources contains main 103 river valleys. Out of them, 34 rivers starting from hill country, flow in different directions in an aerial pattern. These rivers are known as **permanent rivers** since they are abundant with water through out the year. Some rivers that are starting from undulated lands in dry zone, flow during rainy season and become dry during dry season. These are known as **seasonal rivers**.

Details of a few major rivers in Sri Lanka are stated in Map 2.3 and Table 2.1



Map 2.3 - A few main rivers of Sri Lanka

Table 2.1 – Details of a few major rivers in Sri Lanka

River	Length km	Catchment area (km ²)
1. Mahaweli Ganga	335	10,327
2. Malwatu Oya	164	3246
3. Kala Oya	148	2772
4. Kelani Ganga	145	2278
5. Yan Oya	142	1520
6. Deduru Oya	142	2616
7. Walawe Ganga	138	2442
8. Kalu Ganga	129	2688

80% of the rivers located in Sri Lanka flow across the dry zone. Mahaweli is the longest river as well and has the largest river basin. Out of the total land area in Sri Lanka 1/6 belongs to this.

When we consider the total drainage pattern, Sri Lanka has a radial pattern. However, various drainage patterns are formed when tributaries are added to main rivers. Among them, Dendritic and Trellis drainage patterns are important. When we compare River Mahaweli with Kalu Ganga, Kelani Ganga and Gin Ganga, they flow through a shorter area and the catchment area is also smaller. During the rainy seasons floods occur in abundance close to these rivers.

Activities

1. Mention the difference between relief and landscape.

I. Complete the following table in association with the characteristics and examples of main relief zones in Sri Lanka.

Coastal plan	Intermediate plain	Central mountains
1	1	1
2	2	2
3	3	3
4	4	4

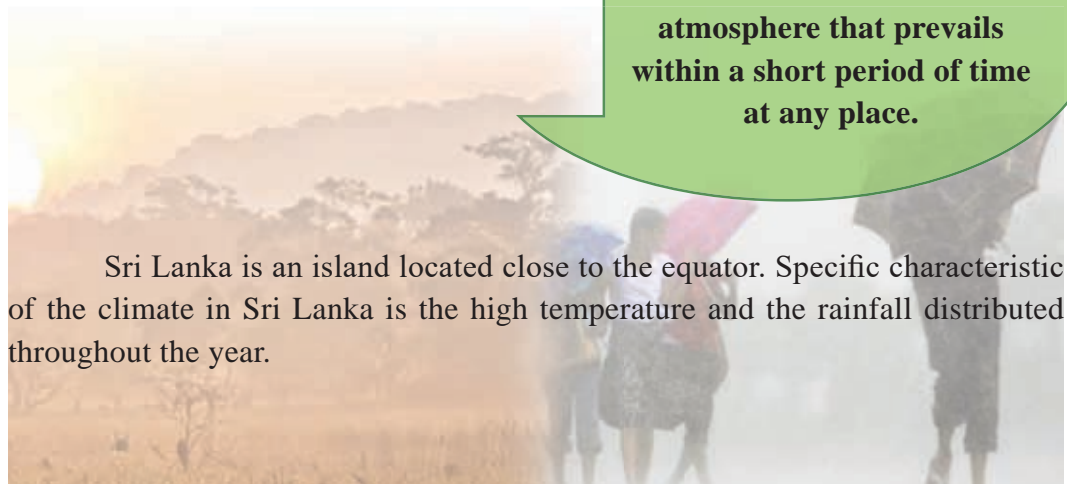
II. Mark the following in a model of Sri Lanka map

- Mahaweli river
- Kelani river
- Malwathu oya
- Walawe river
- Menik river
- Piduruthalagala mountain
- Knuckles mountain range
- Sigiriya
- Katharagama mountain
- Govinda hela
- Batticaloa
- Puttalam lagoon
- Jaffna lagoon
- Ritigala
- Dondra head
- Point Pedro
- Mannar islands
- Delft

Climate

Climate of a particular place is the general condition of the atmosphere which is determined by analysing and concluding on weather for a long time.

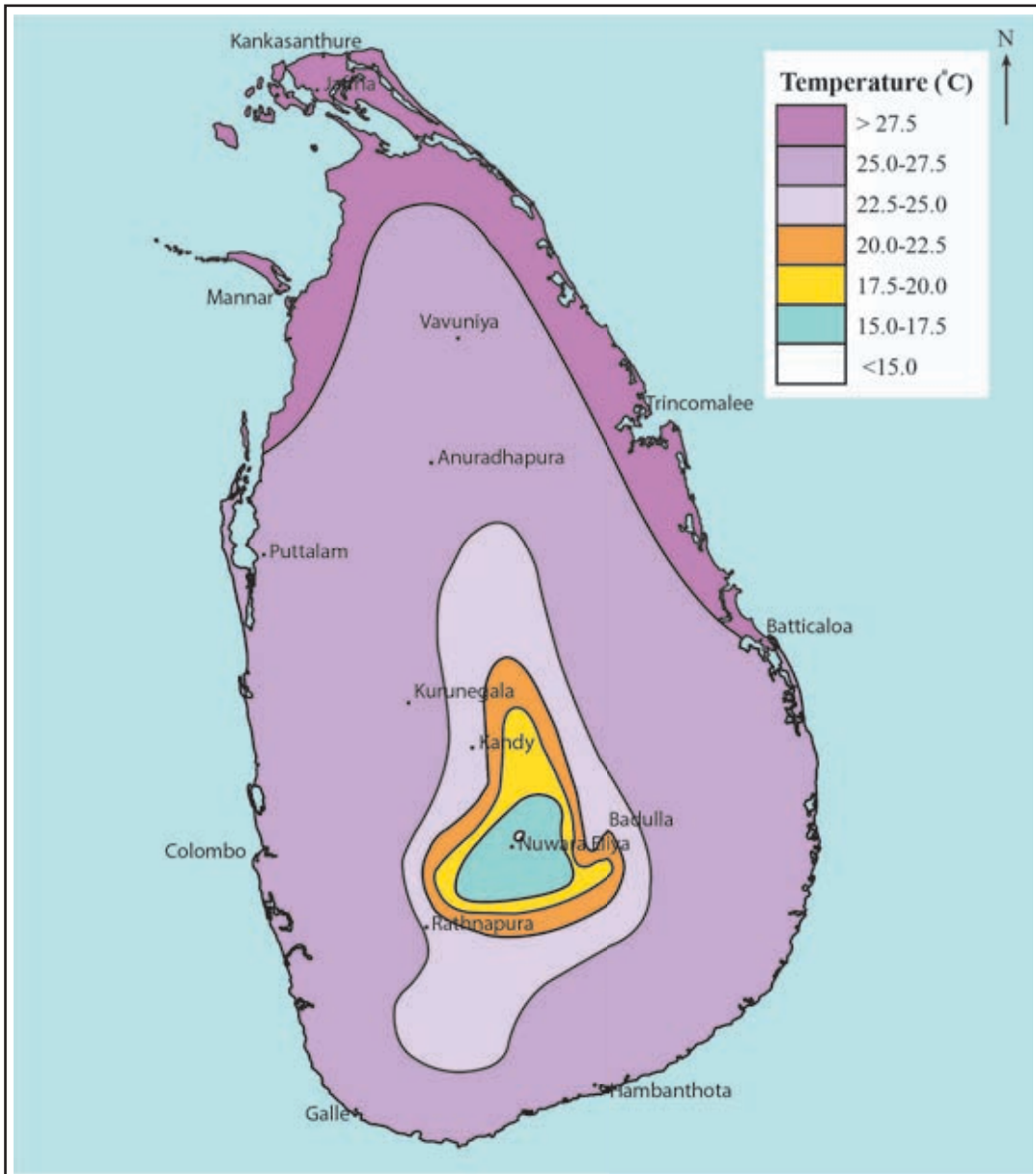
Weather is the state of atmosphere that prevails within a short period of time at any place.



Sri Lanka is an island located close to the equator. Specific characteristic of the climate in Sri Lanka is the high temperature and the rainfall distributed throughout the year.

Temperature

Average annual temperature in Sri Lanka is 27°C. Yet there are small regional variations. Map 2.4 clearly shows this.



Map 2.4 - Distribution of Annual Temperature of Sri Lanka

Several factors influence the variation of temperature in Sri Lanka.

- Proximity to the Indian subcontinent
- Altitude (height of land)
- Distance from the sea
- Changing wind pattern

According to the Map 2.4, the Northern part of Sri Lanka has a high temperature while Eastern, Southern and South-Western low lands experience low temperature. The reason for high temperature in the Northern part of Sri Lanka is its proximity to the Indian sub continent. Areas like Jaffna, Anuradhapura and Mannar are subjected to high temperature when temperature increases in India.

When you go to Kandy, Nuwaraeliya or Sri pada you would feel that the temperature is very low in these areas. The reason for this is the decrease of temperature according to altitude. (Table 2.2)

Table 2.2 - Decrease of temperature according to the altitude

	Height (m)	temperature
Kandy	447	24.4 °C
Nuwaraeliya	1882	15.4 °C
Piduruthalagala	2524	11.5 °C

The decrease of the temperature according to altitude is called the lapse rate.

Although Sri Lanka has a high temperature due to its location close to the equator, the temperature decreases as it is surrounded by the ocean. But high temperature prevails in the regions of the interior plains in the country due to the low influence of the ocean.

Seasonal winds also influence the decrease of temperature in Sri Lanka. The temperature becomes balanced according to the seasonal monsoons and cyclones.

Rainfall

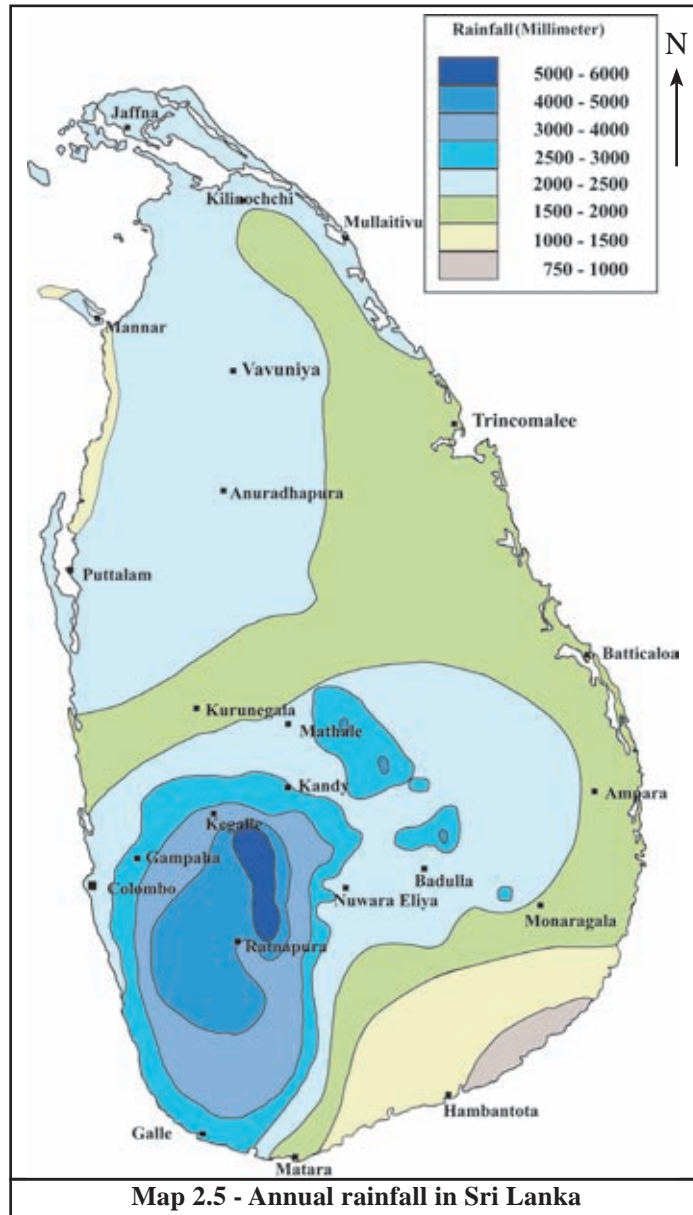
Rainfall is the total quantity of rain received at a place within a specified period of time.

Map 2.5 indicates the annual rainfall in Sri Lanka. Accordingly, a clear feature shown by this map is the regional change of rainfall. Also it can be clearly seen that there is less rainfall is received in the Northern, Eastern and the South-Eastern parts of Sri Lanka while central mountains receive more rainfall. Sri Lanka receives rain in three ways.

1. Convictional rain
2. Monsoon rain
3. Cyclonic rain

Convictional rain

Since Sri Lanka is situated close to the equator, convictional process occurs throughout the year. However this process is subdued in certain periods due to the process of



Map 2.5 - Annual rainfall in Sri Lanka

monsoons and cyclones. When monsoons and cyclones are over, convectional process re-appears. According to that, the convectional rain is experience in Sri Lanka prominently during two periods.

1. The first inter monsoon period is between the months of March and April.
2. The second inter monsoon period is between the months of October and November

As Sri Lanka is situated close to the equator, it has a high temperature throughout the year. During the months of April and September, the sun is overhead in Sri Lanka and the air near the surface of the earth gets heated and begins to rise. They are called convectional air currents. The air that has risen up, gets cooled and the water vapour is condensed to form clouds and bring rain thereafter. Here, a special feature is that the rainfalls in the evenings. During the morning period a clear sky is visible and more heat is received. In the afternoon, the sky is covered by clouds and it brings rain in the evenings. These are known as convectional rain, thunder showers or evening showers.

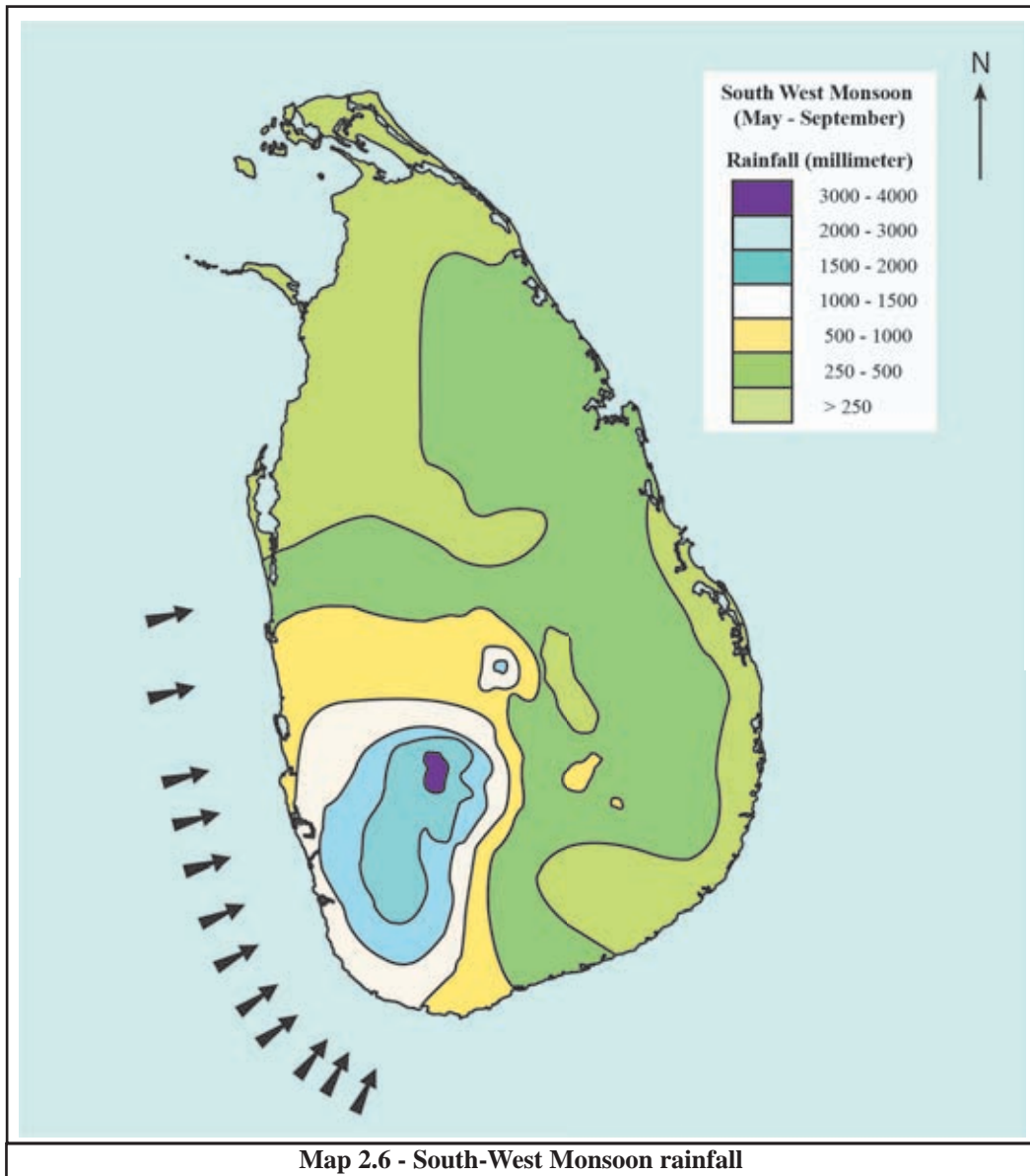
Monsoon rain

Monsoon is a specific type of winds that blow during a definite time period of a year across the land. Monsoon means blowing during a particular time period only. Sri Lanka receives monsoon rain during two time periods namely.

1. The South West monsoon (From May to September)
2. The North East monsoon (From December to February)

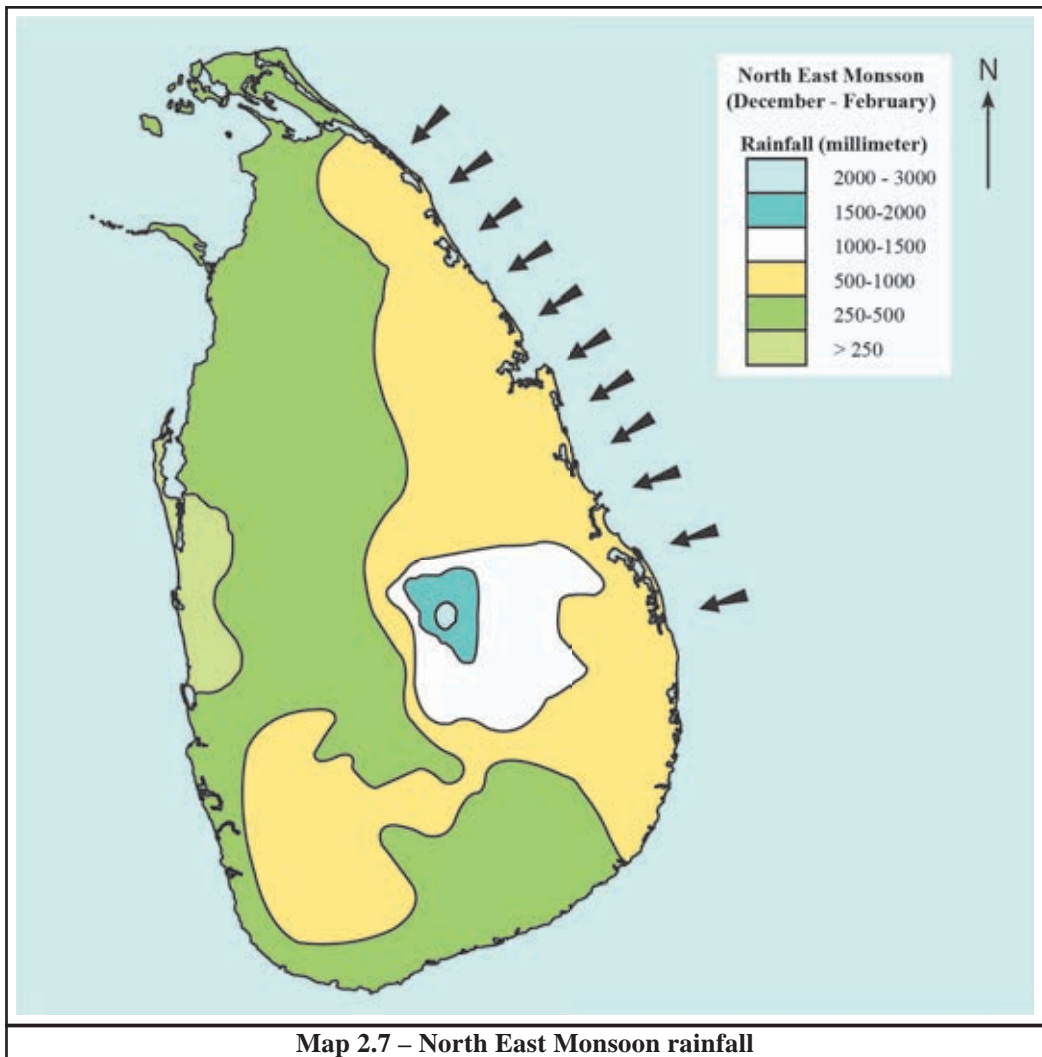
South West Monsoon rain

The wind that blows across the Indian Ocean towards Sri Lanka from the South West includes much water vapour. When these winds with water vapour reach the Central Hills and rise up, they bring heavy rains to the Western and South Western parts of the country. The Eastern and the Northern areas located in the leeward areas of the central hills do not receive rain from these winds because they blow as dry winds. These dry winds are called 'kachchan' in the areas of Batticaloa.



North East Monsoon rain

As the North East Monsoon winds blow in the direction of North-East it is called North-East Monsoon. Water vapour carried by these monsoonal winds is very low as they blow across a small water area of the Bay of Bengal from India. Therefore, much rainfall is not received as during South-West Monsoon. More rainfall is received in the North falls in Eastern parts of Sri Lanka.



Cyclones

Cyclones that affect Sri Lanka mostly occur in the area of the Bay of Bengal. Cyclones mostly occur in the months of November and December. But, cyclones may occur at any time of the year. More areas in the North and East receive rainfall from cyclones. These cyclones enter the island from the Eastern coast of Sri Lanka and pass over the South Eastern coast. Whenever there are cyclones a large area throughout Sri Lanka receives rain. Cyclones may occur during the period of monsoonal winds. On such occasions, heavy rainfall is experienced and floods occur. Strength of these winds is introduced as whirlwinds, depressions or storms.

Activities

1. Define weather and climate.
2. Name three factors that influence the distribution of temperature in Sri Lanka.
3. Complete the following table with reference to rainfall in Sri Lanka.

Method of rainfall	Duration	Areas receiving rainfall

Assignment

Collect pictures and diagrams about disastrous conditions related to rainfall in Sri Lanka and prepare a wall-paper article.

Climatic zones of Sri Lanka

An area where similar climatic features are seen is identified as a climatic zone. According to the factors such as temperature and rainfall, Sri Lanka can be divided into five climatic zones.

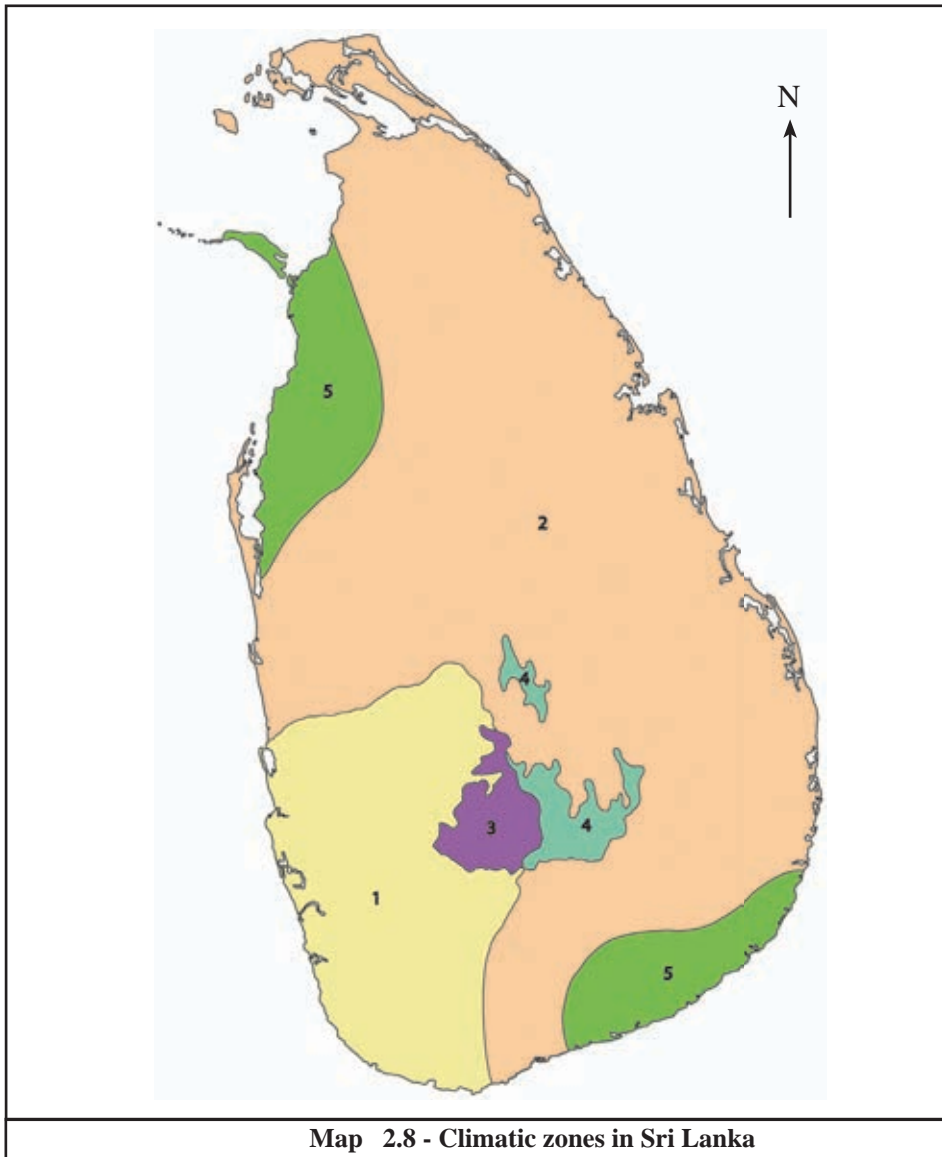
1. Low country wet zone

2. Low country dry zone

3. Hill country wet zone

4. Hill country dry zone

5. Semi-arid zone



Low country wet zone

- The areas of the South Western flat lands of Sri Lanka belong to this zone.
- The average annual rainfall in this area is 2000 mm.
- The average annual temperature is about 27°C.
- Though this area receives rain throughout the year, South West Monsoon period is the main rainy season that prevails from May to September.

- The months of February and March are dry to some extent, but there is almost no definite dry season.

Low country dry zone

- The areas of the North and Eastern flat lands of Sri Lanka belong to this zone.
- The average annual rainfall is between 1250 mm-2000 mm.
- Presence of a dry and wet period of time.
- During the period of December to February, this area receives rain from the North-East Monsoon. During this period cyclones too may bring rain.
- During some periods, rain is impermanent. High evaporation prevails.

Hill country wet zone

- The western part of this is formed when a line joining the cities of Matale, Kandy, Nuwaraeliya and Haputale of the Central Hills is drawn.
- This area receives rain throughout the year.
- The average annual rainfall is about 3000 mm.
- Maliboda, Watawala and Kenilwerth that receive the highest rainfall in Sri Lanka are located in this zone.
- Dry winds occur from December to February.

Hill country dry zone

- The Eastern part of the hill country belongs to this zone.
- The average annual rainfall is between 1750 mm-2000 mm.
- More rain is received from the North East monsoon, but this area does not receive rain from the South West Monsoon as a result of the location being on the leeward side.
- Dry winds occur during a long period of the year.

Semi-arid zone

- This area is consisted of Mannar and the surrounding areas located in the North Western part as well as in Hambantota area located in the South Western part of Sri Lanka.
- The average annual rainfall is between 650 mm - 1250 mm.
- Rainfall is less and it is limited to 3 or 4 months.
- Convectional rains are in operation.
- Evaporation is high.

Natural vegetation in Sri Lanka

Trees, plants and creepers that grow without the intervention of man are defined as natural vegetation. The factors that influence the growth of natural vegetation are temperature, rainfall and soil. Vegetation of Sri Lanka is classified mainly on the basis of the factors of temperature and rainfall. Accordingly, there are seven vegetation zones identified in Sri Lanka.





- Tropical wet forests
- Hill country wet zone forests
- Low country dry mixed evergreen
- Mountainous dry zone forests (patanas)
- Intermediate evergreen forests
- Thorny and scrub lands
- Mangroves

Map 2.9 - Natural vegetation zones in Sri Lanka

Tropical wet forests (Wet evergreen forests/ Tropical rain forests)

Areas distributed / expanded

Western and South Western parts of Sri Lanka

- Sinharaja
- Kanneliya
- Dediyaigala
- Nakiyadeniya
- Morapitiya
- Bambarabotuwa

Main trees

- Hora
- Keena
- Na
- Godapara
- Milla
- Midella
- Kithul
- Nedun

Features of vegetation

- Height of the trees is between 30-40 meters.
- There are several layers.
- Trees grow throughout the year.
- Colour of the trees is dark green.
- There is a canopy formed at the top and there is no light inside the forest.
- Plants growth is dense.
- Under growth is abundant. There are plenty of creepers, ferns, lichens and orchids here.
- Higher bio diversity.



Figure 2.3 - Tropical wet forests

Dry mixed evergreen forests

Main Areas of Distribution

These forests are distributed throughout the low country dry zone.

- Somawathiya
- Wilpattu
- Maduru oya
- Udawalawa
- Wasgomuwa
- Floodplains of river Mahaweli
- Yala

Trees

- Satinwood
- Ebony
- Margosa
- Weera
- Teak
- Suriyamara
- Milla
- Palu

Features of vegetation

- Height of the trees is between 20 m -30 m.
- Trees grow during the rainy season and growth rate is less during the dry season.
- Bushes of 2 m - 3 m in height could be seen.
- They do not grow densely and there are tall trees at intervals.
- The forests are light green in colour and there are hardwood trees.



Figure 2.4 - Dry Mixed evergreen forests

Intermediate Evergreen Forests

Areas of distribution

These forests can be seen in the transitional zone that separates the wet zone and dry zone.

- Kurunegala
- Badulla
- Matale
- Tangalle

Main trees

- Jak
- Pihimbiya
- Lunumidella
- Mahogany
- Sapu

Features of vegetation

- These forests have trees that grow in the wet and dry zones as it changes to the dry zone from the wet zone.
- The trees that grow in wet and dry zones are mixed.
- Height of the trees is 10 m - 25 m.



Figure 2.5 - Intermediate evergreen forests

Hill country wet zone forests

Areas of Distribution

They are found in areas over 1200 m in the Western slopes of the Central hills.

- Samanalakanda
- Pidurutalagala
- Knuckles
- Horton plain

Main trees

- Walsapu
- Keena
- Mihiriya
- Dawata
- Beraliya
- Mora
- Hulanheek

Features of the vegetation

- Average height of the trees is 8 m - 10 m.
- With the increase in the altitude, height of the trees gets reduced gradually.
- Trees grow as a canopy. Colourful leaves can be seen.
- Epiphytes and undergrowth are in abundance.



Figure 2.6 - Hill country wet zone forests

Hill country dry zone forests

Areas of distribution

They are found in areas over 1400m in the Eastern part of the Central Hills

- Horton plains
- Sandatenna
- Sitaeliya
- Ambewela
- Kandapola

Main trees

- Maharathmal
- Aralu
- Bulu
- Nelli
- Domba
- Kahata

Features of vegetation

- Grasslands are distributed with different types of patanas. (Patana, Talawa, Damana, Villu)
- Isolated trees can be seen here and there.
- Trees have grown so as to resist the winds. The trees are short and they resist the cold and winds. Trees are twisted by nature.
- These forests are called cloud forests. It is because the canopy is seen as clouds when is seen from above.
- Leaves are small and looks folded.
- Trees do not grow well as there is a thin layer of soil.



Figure 2.7 - Hill country dry zone forests

Thorny bushes and shrub lands

Areas of Distribution

These forests are distributed in the North Western and South Eastern parts of Sri Lanka.

- Areas in the Hambantota district.
- Areas in the Mannar district.

Main trees

- Eraminia
- Cactus
- Palu

Features of vegetation

- Leaves of the trees are thick, scanty and thorny.
- Leaves are small.
It is because they have adapted to the dry climate.
- There are trees that get adapted to resist a long dry period.



Figure 2.8 - Thorny bushes and shrub lands

Mangroves

Areas of Distribution

Mangroves are found near estuaries and around lagoons in the coastal areas.

- Kalametiya
- Bundala
- Muthurajawela
- Anavilundawa
- Trincomalee

Main plants

- Kirala
- Ginpol
- Katu Ikili
- Kadol
- Diyakanduru
- Wal Anoda

Features of vegetation

- Plants have many roots ; Prop roots and stilt roots
- Roots spread above water. They are known as respiratory roots.
- Those plants have adapted to brackish water



Figure 2.9 - Mangroves

According to the facts mentioned above, it is clear that there is a physical diversity in Sri Lanka. Even in a small land, this diversity could be seen in relief, climate, vegetation and drainage. It is because Sri Lanka is a small island.

In Sri Lanka, there is a climatic condition that one can experience from dry climate to cold climate. This scenic beauty can be experienced when one travels from Hambantota to Nuwaraeliya. We are able to see the diversity in climate, drainage and vegetation in a few hours. This physical diversity has contributed to the sustainability of the environment as well as to the constant sustainability of man. Physical diversity of Sri Lanka is a tourist attraction to locals and foreigners.

Assignment

Plan an educational trip to identify relief, climate and vegetation in Sri Lanka. Prepare a brochure to include the features such as relief, climate vegetation.

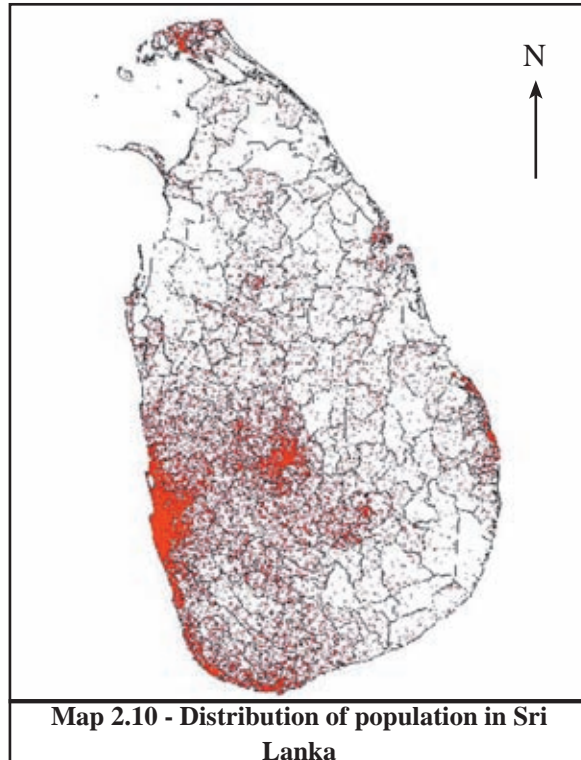
Human landscape

Population and human activities are the main factors affecting in creation of human landscape.

Population of Sri Lanka is 20.2 million. It increases every year. Information on population is obtained from the census conducted by the Department of Population and Census once in ten years.

Distribution of population

Population of Sri Lanka has spread unevenly. The Majority of population lives in the wet zone. In comparison, less population is distributed in the dry zone. (Map 2.10) From the total population,



¼ is accumulated in the Western Province and the least distribution is shown in the Northern Province. The reasons for the increase of population in the vicinity of Colombo are the location of the administrative and the commercial city and the abundance of service facilities such as health, education, transportation and industries in the province. A low population distribution is shown in the districts of Moneragala, Vauniya, Mannar and Mullatiu. The reasons are less physical, infrastructure facilities and unavailability of economic opportunities in these areas. These changes in the population distribution can be shown through the density quantitatively. It is depicted by Map 2.11.

This uneven distribution can be explained according to the districts and provinces. These quantitative changes can be shown though population density. According to the population census 2012, density of population was 323 per square kilometre in Sri Lanka. This does not mean that the population is distributed in every region equally. It is clearly indicated in Map 2.11.

Regional changes of population distribution in several selected districts can be identified according to the population density as shown in table 2.3.

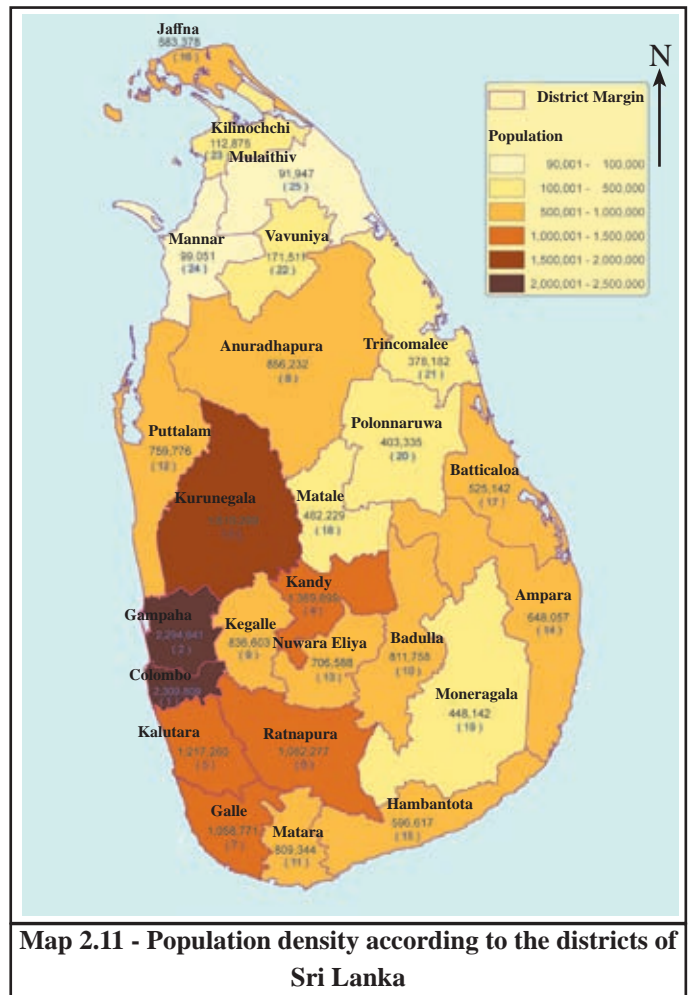


Table 2.3 - Population Density in a few districts of Sri Lanka

District	Population density
Colombo	3305 km ²
Gampaha	1541 km ²
Kandy	664 km ²
Hambantota	210 km ²
Moneragala	72 km ²

Composition of Population

Composition of the population in Sri Lanka can be expressed in various ways such as distribution by gender, age, ethnicity and religion.

Distribution by sex

According to the population census 2012, out of the total population, 51.5% are females while 48.5% are males. It is clear from the data that the percentage of the males is gradually decreasing. This can be clearly expressed by sex ratio. The number of males for 100 females in the population is called the sex ratio. The following table indicates how sex ratio has changed according to the census reports of 1981 and 2012.

Table 2.4 - Sex ratio in Sri Lanka

Year	Sex ratio
1981	104.0
2012	94.3

Source: Reports of the census and statistics

Age structure

According to the age structure in Sri Lanka the aging population has increased to a certain amount. It is expressed in the following table.

Table 2.5 - Population according to age structure

Age	Census % (1981)	Census % (2012)
Below 14 years	35.2	25.3
Between 15-59 years	58.2	62.3
Above 60 years	06.6	12.4

Source : Reports of the census and statistics

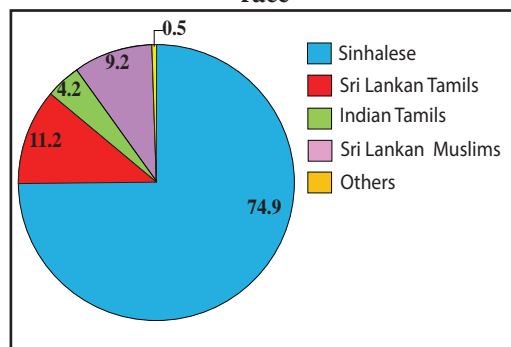
Population structure according to the race

According to the races, ethnic structure is shown as given below;

Table 2.6 - Population structure according to race

Race	Percentage (2012)
Sinhalese	74.9
Sri Lankan Tamils	11.2
Sri Lankan Muslims	9.2
Indian Tamils	4.3
Others	0.5

Graph 2.1 - Population structure according to race



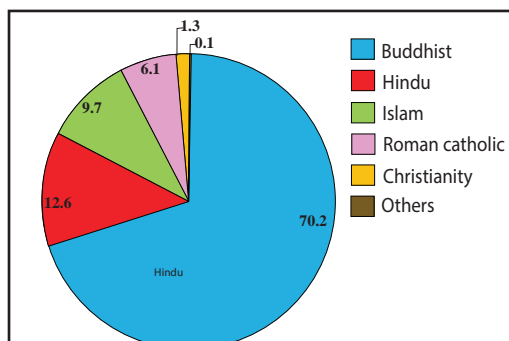
Population structure according to the religion

Population structure according to the religion is given below;

Table 2.7 - Population structure according to the religion

Religion	Percentage (2012)
Buddhist	70.2
Hindu	12.6
Islam	9.7
Roman catholic	6.1
Christianity	1.3
Others	0.1

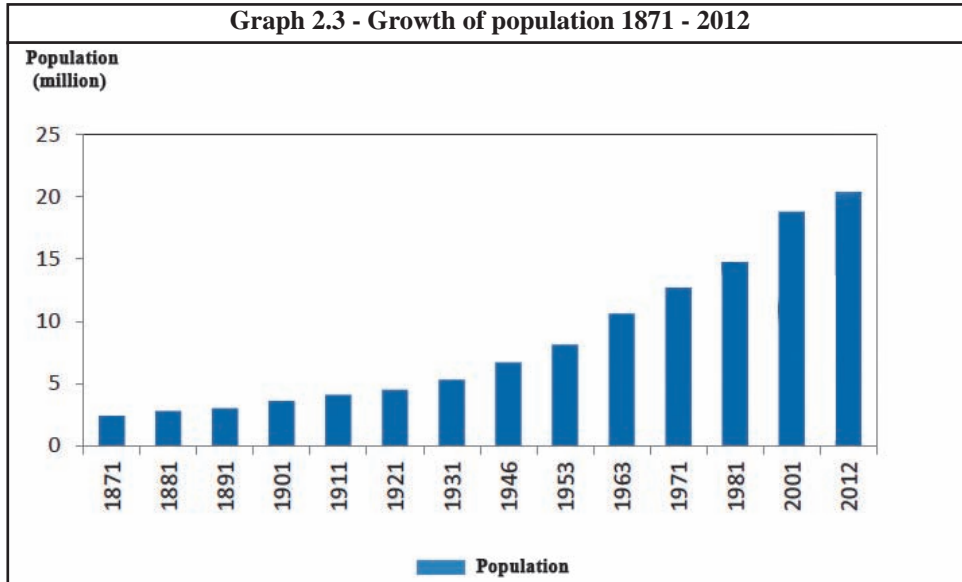
Graph 2.2 - Population structure according to the religion



Growth of population

The difference between the crude birth rate and the crude death rate is called the natural growth of population in a particular country. When it is added to the net migration (the difference between in and out migration of the country) it is called the growth of the total population. Graph 2.3 indicates how the population increased in Sri Lanka from 1871 to 2012.

Graph 2.3 - Growth of population 1871 - 2012

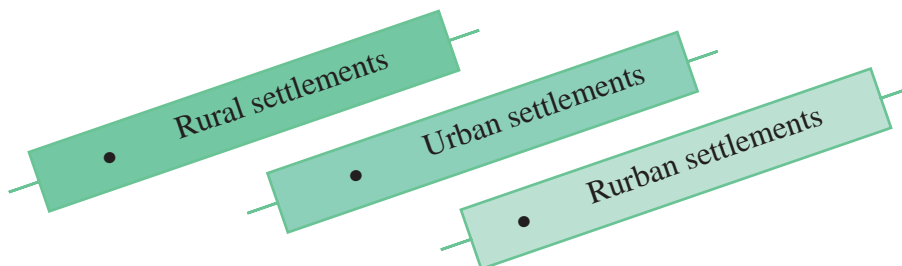


Settlements

Settlements are established by groups of people to live together with co-operation to be protected from enemies and wild animals and to avoid a harsh environment.

A settlement cannot be considered a mere habitat only. Settlement is a unit which consists of various institutions of economic, social and cultural activities of man and religious places, buildings, gardens, agricultural lands as well as infrastructure facilities.

Settlements can mainly be categorized into three groups.



Rural settlements

The settlements which are based on agriculture and fisheries industry, paying more attention on primary economic activities when using resources, are called rural settlements. The villages located close to tanks in the dry zone and fishing villages are examples.



Fig 2.10 - A few rural settlements

Urban settlements

Urban settlements are areas with higher density of population concentrated in a limited land area, centred on non agricultural activities. Colombo, Gampaha, Kandy, Jaffna and Matara are examples.



Fig.2.11 - Urban settlements

Rurban settlements

The settlements which have both rural and urban features are called rurban settlements. In these areas, rural features disappear and Urban features are being emerged. Urban areas of cities can be cited as examples.



Fig. 2.12 - Rurban settlements

Activities

1. Name the two districts that have the highest and the least population density in Sri Lanka.
2. Mention 4 reasons as to what the increment in population in Western province.
3. What are the reasons for the increment of elderly population in Sri Lanka.
4. Mention in short what a settlement is.

Economic Activities

Economic activities of Sri Lanka can be divided mainly into three sections.

- Agricultural sector
- Industrial sector
- Service sector

Agricultural sector

There are various agricultural activities seen in Sri Lanka. Examples are paddy cultivation, gardening and chena cultivation in the dry zone and also tea, coconut, paddy, rubber and vegetables are cultivated in the wet zone while tea is cultivated in mountainous areas. Fisheries industry and livestock farming too belong to the agricultural sector. For example, fishing industry is carried out in the coastal areas and in inland reservoirs. Livestock farming is done in the areas of Ambewela, Pattipola, Polonnaruwa and Hambantota.

Industrial sector

Most of the industries in Sri Lanka are located in the Western Province. There are various types of industries. Among such, main industries are assembling industries, plastic, tyre, textiles, confectionery and handicrafts. The government has also established Industrial Zones in Sitawaka, Polonnaruwa, Ratmalana and

Minuwangoda and Free Trade Zones in Biyagama, Katunayaka and Koggala.



Agricultural sector



Industrial sector



Fig 2.13 - Service sector

Service sector

Service sector is important for the improvement of living standards of people in a country. Service sector includes various services such as education, health, transportation, electricity, water supplies, security, sanitary and communications. Contribution of the service sector is increasing with reference to employment in Sri Lanka. Service facilities are mostly expanded in urban areas.

Infrastructure facilities

During the recent times, special attention has been focused to develop the infrastructure facilities to promote the living standards facilities of people. Among them, building roads, providing electricity and water are major.

When developing infrastructure facilities, a prominent place has been given to the road development and transportation. This field is developing at a rate between 5% - 6% annually. The road system has spread in every region so that there are facilities for anyone to reach any place in the country within a day. In urban areas, although the road system is developed, the congestion is still there. Recent governments have taken various steps to develop the field of road transportation like;

- Widening roads
- Building roads in the rural sector
- Building fly-overs
- Building express ways



Fig 2.14 - An express way in Sri Lanka

Electricity

Almost all the regions in Sri Lanka have been provided with electricity facilities. Electricity is generated from the electricity projects constructed, in association with the major rivers of Mahaweli, Kalu, Kelani and Walawe. Hydro electricity and thermal power are major ways of providing electricity in Sri Lanka. In addition, the use of regenerative energy sources like solar power is increasing.

Water

Sri Lanka is a country rich with the water resource. Water sources like rivers, streams, wells, ponds, tap water and ground water are used to fulfil the needs of water of the people. Water taken from these sources is used for different simple purposes like cooking, drinking, sanitary needs and also for complex necessities such as agriculture, industry, and generation of electricity. Economic affairs and living needs of people depend on water.

Water sources which are used to fulfil these needs are getting polluted at present. In urban areas, tap water is important for drinking purposes. Wells, ponds and tanks are important in rural areas in this regard. Importance of water sources has been decided depending on particular areas.

Water and electricity are limited resources not only for us but for many countries in the world. It is our duty and responsibility to get the maximum use of this resource, without wasting to protect it for the future generations.

Activities

1. Mention three main sections of economic activities in Sri Lanka
2. Water and electricity should be used sparingly. State three reasons for this.

Influence of physical landscape of Sri Lanka on human activities

Physical landscape of Sri Lanka influences human activities decisively. There are regional changes in the physical landscape and accordingly, regional changes too can be seen in the human landscape.

Coastal plain



Fig 2.15 - Coastal landscape

Several human activities in the coastal plain are indicated in figure 2.15. The fisheries industry, coir industry, excavating limestone and the tourist industry have emerged using the physical environment.

Activities

1. What are the human activities which are common to the coastal plain indicated by the above diagram?
2. What are the other human activities in the coastal plain which are not shown in the diagram?
3. State the physical facilities available in the coastal plain for human activities mentioned by you.

The wet zone



Fig 2.16 - The wet zone landscape

In the wet zone, there is a suitable physical environment for various human activities. Various types of cultivation, distribution of high population and a developed road system can be seen here. Several human activities which are carried out in the wet zone are indicated in figure 2.16.

Activities

1. What are the human activities shown by the Fig. 2.16? Form a table to include them.
2. Name several crops grown in this area.
3. State the physical factors necessary that are affected for growing these crops.
4. Name the services and employment that can be seen in abundance in this area.
5. Mention two factors that caused this area to become high populated.

The dry zone

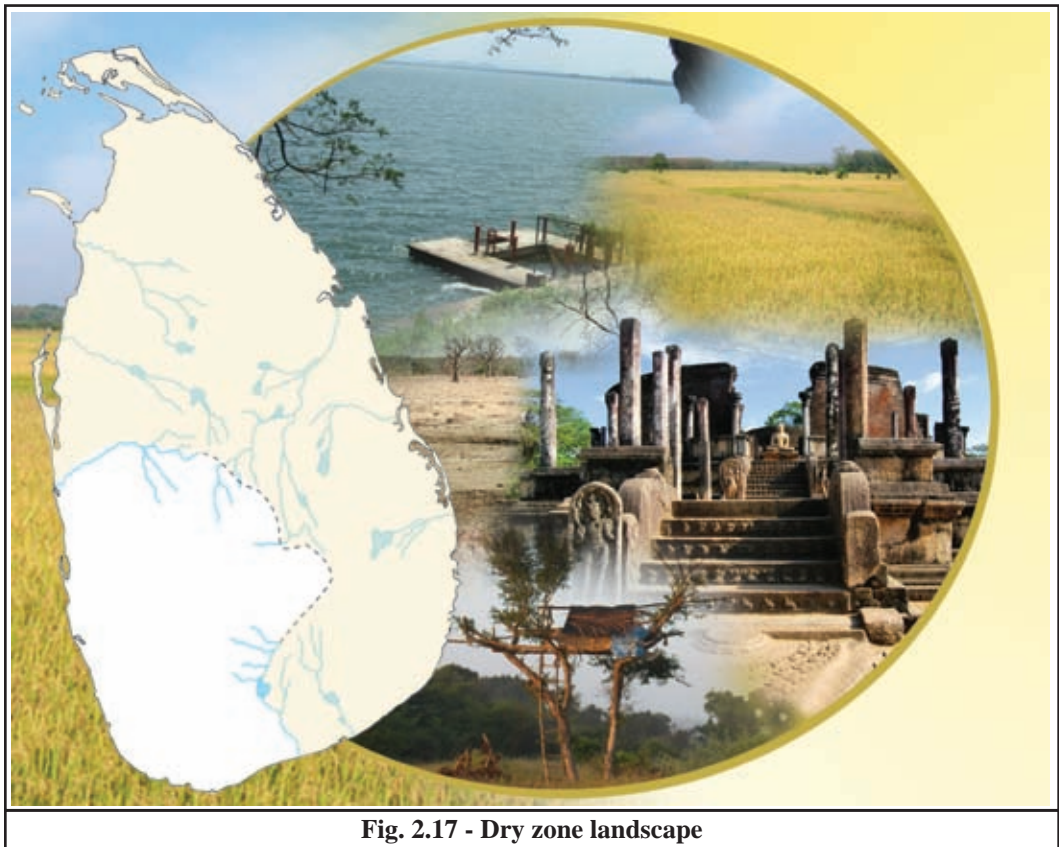


Fig. 2.17 - Dry zone landscape

Tank system is an outstanding feature in the dry zone landscape. The tank system has been constructed according to the relief and is connected the irrigation system. It is a specific feature in this area.

Paddy cultivation, chena cultivation, villages established in association with tanks, ancient cities and various types of cultivation too can be seen in the dry zone landscape.

Activities

1. According to Fig. 2.17, what are the human activities that can be seen in the dry zone?
2. What are the major physical factors that influence the development of paddy cultivation in this zone?

Hill country landscape

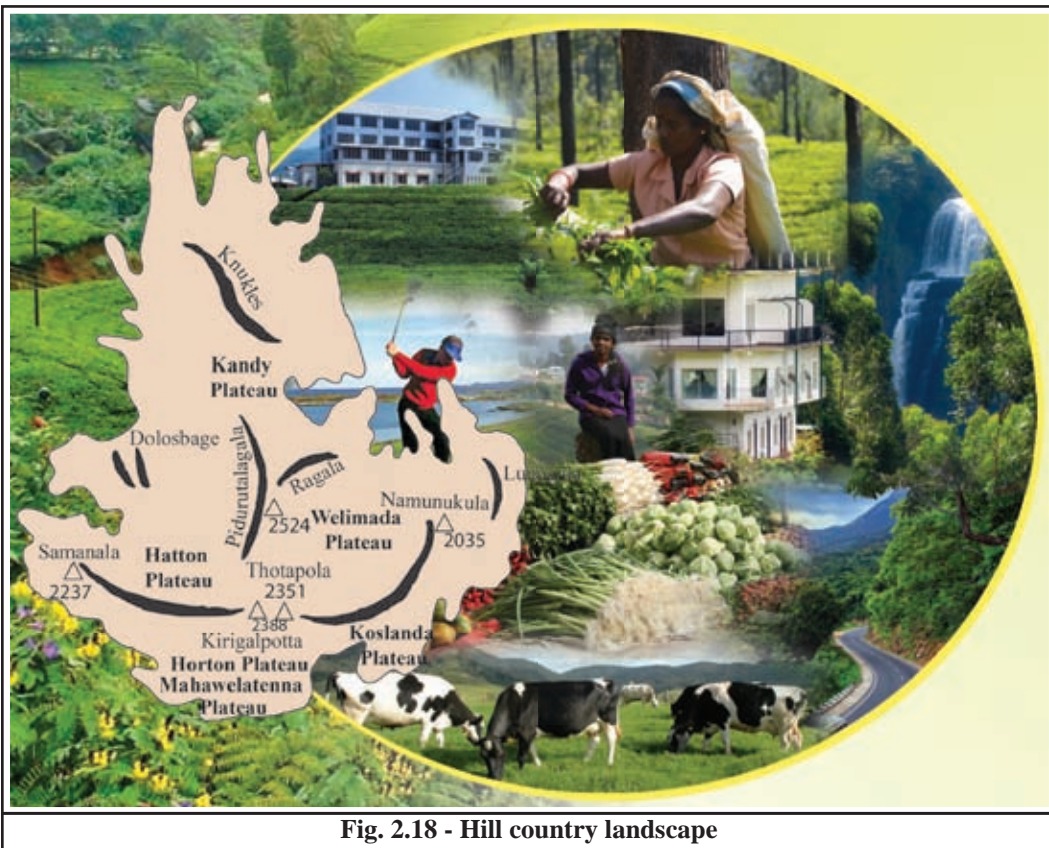


Fig. 2.18 - Hill country landscape

A specific relief and climatic condition exist in the hill country landscape and the human activities have been adjusted accordingly.

Activities

1. What are the specific human activities in the hill country landscape?
2. State the specific crops grown in this zone.
3. What are the physical factors that influence growing each of the crops?
4. Hill country roads have bends. Why is it?
5. What are the reasons in making roofs with less height and in colour green?
6. What are the factors that influence tourist attractions in the hill country?
7. Why do the people living here use warm clothes?

Jaffna Peninsula

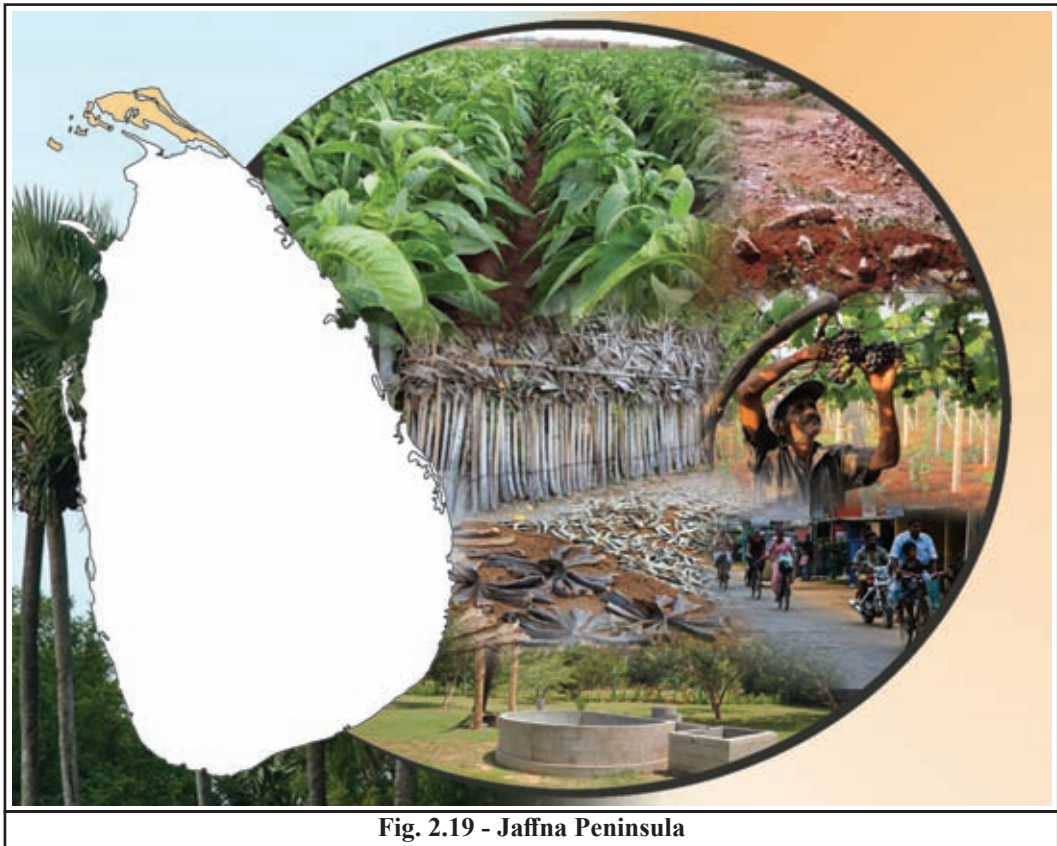


Fig. 2.19 - Jaffna Peninsula

There is a specific landscape in the Jaffna Peninsula in the Northern part of Sri Lanka. In this zone, limestone is in abundance and the climate is arid. The people who live here have developed agriculture using the ground water and the red soil. Several features found in this landscape are indicated in figure 2.19

Activities

1. According to the Figure 2.18, what are the human activities found in Jaffna Peninsula?
2. What are the methods used by the people in this area to get ground water?
3. What are the specific crops cultivated and industries that can be seen in this area?
4. There are many islands located in the Jaffna region. What are the human activities that have been established in association with them.
5. Write few products related to Palmyrah tree?

Influence of human activities on the physical landscape of Sri Lanka

In the above lesson, we studied that human activities are determined according to different types of environments. With the increase of population, the uses of physical environment and resources too increase. Accordingly, influences that affect the physical environment too increase. Human activities influence the physical environment in Sri Lanka.



Fig. 2.20 - The influence of human activities on physical landscape of Sri Lanka

Study the above pictures well and identify several environmental problems related to various landscapes in Sri Lanka.

Activities

1. Name a few instances where man uses the physical environment in the areas of the dry zone.
2. What are the impacts that affect man due to loss of habitats of wild animals?
3. Prepare a list of human activities that destroy physical environment in these areas.

Assignment

1. Prepare a brochure including pictures of human activities that could be identified in various landscapes.
2. Name one environmental problem that prevails in your area and explain how human activities have contributed for causing it.

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Glossary

• Landscape	- භූ දර්ශනය	- நிலத்தோற்றம்
• Relief	- භූ විෂමතාව	- தரைத்தோற்றம்
• Braided river	- නැව්පලු ගංගාව	- பின்னிய ஆறு
• Marsh	- වගුරු බිම	- சதுப்பு

• Point	- තුඩුව	- முனை
• Bay	- බොක්ක	- குடா
• Lagoon	- කලපුව	- கடனீரேரி
• Gap	- කපොල්ල	- கணவாய்
• Radial drainage pattern	- අරීය ජලවහන රටාව	- ஆரைவடிகால் பாங்கு
• Dendritic drainage pattern	- ශාඛීය ජලවහන රටාව	- மரநிகர் வடிகால் பாங்கு
• Trellised drainage pattern	- ජාලාකාර ජලවහන රටාව	- அறியடைப்பு வடிகால் பாங்கு
• Elevation	- උන්නතාංශය	- தரை உயர்ச்சி
• Lapse rate	- පතන ශීඝ්‍රතාව	- நழுவு வீதம்
• Convectional rain	- සංවහන වර්ෂාව	- மேற்காவுகை மழை
• Monsoon rain	- මෝසම් වර්ෂාව	- பருவக்காற்று மழை
• Cyclone rain	- වාසුලි වර්ෂාව	- சூறாவளி மழை
• Condensation	- සනීහවනය	- ஒடுங்கல்
• Evergreen forests	- සදාහරිත වනාන්තර	- என்றும் பசுமையான காடு
• Mangrove	- කඩොලාන	- கண்டல்
• Population distribution	- ජන ව්‍යාප්තිය	- சனத் தொகை
• Population composition	- ජන සංයුතිය	- சனத்தொகை சேர்க்கை
• Sex ratio	- පුමිතිරි අනුපාතය	- பால் வீதம்
• Crude birth rate	- දළ උපන් අනුපාතය	- பிறப்பு வீதம்
• Crude death rate	- දළ මරණ අනුපාතය	- இறப்பு வீதம்
• Rural settlements	- ග්‍රාමීය ජනාවාස	- கிராமியக் குடியிருப்பு
• Urban settlements	- නාගරික ජනාවාස	- நகரக் குடியிருப்பு
• Rurban settlements	- ගැමි නාගරික ජනාවාස	- கிராமநகர் குடியிருப்பு
• Infrastructure facilities	- යටිතල පහසුකම්	- உட்கட்டமைப்பு வசதிகள்
• Water sources	- ජල මූලාශ්‍ර	- நீர் மூலாதாரம்
• Environmental Pollution	- පරිසර දූෂණය	- சூழல் மாசடைதல்