

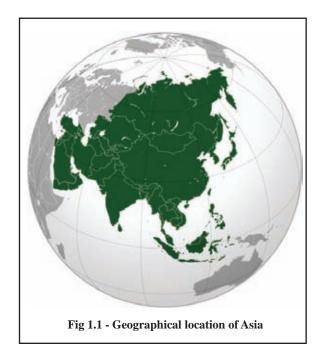
# Geographical location of Asia

### **Relative Location**

The continent of Asia is located in the Eastern part of the Northern Hemisphere of the Earth. Geographically, it is connected to the continent of Europe. Some of the islands that belong to the Asian continent are located in the Southern hemisphere. (Fig.1.1)

The Asian continent is bounded by,

- The Arctic ocean on the North
- The Pacific ocean on the East
- The Indian ocean on the South and,



• The continent of Europe on the West.

In a geographical view, the Continent of Europe and Asia are both located as one landmass called Eurasia. Ural Mountain Range, River Ural, Caspian Sea, Caucasus Mountains, Black Sea, Mediterranean Sea, Suez Canal and Red Sea are the boundaries that separate Asia from Europe and Africa.

There are many islands that belong to the Asian continent. Japanese islands, Indonesian islands, Philippine islands, Sri Lanka and Taiwan are examples for those islands which are larger in extent. Andaman Islands, Nicobar Islands and the Maldives are examples of smaller islands.

### **Absolute Location**

The location of any place or region on the Earth can definitely be shown using geographical coordinates. Accordingly, the absolute location of the Asian region can be shown on the basis of longitudes and latitudes as follows;

The Asian continent is located between 10° Latitude South to 80° Latitude North and between 25° and 180° Longitudes East.

# **Uniqueness of the Asian region**

There are many specific physical and human characteristics in the Asian region.

- The largest continent in the world
- Presence of all the climatic types of the world
- Several unique physical and human characteristics
- Presence of different human races, ethnic groups and languages and cultural diversity
- Birth place of many major religions
- Location of the largest mountain ranges and the highest mountain peak
- The most popular continent

The Asian continent covers an area of 44.6 million km<sup>2</sup> (44,579,000 km<sup>2</sup>). It is about 30% of the land area of the earth and 8.7 % of the entire surface of the Earth.

Source: https://en.wikipedia.org/wiki/Asia 2017.02.05

The largest mountain range in the world, the Himalayas, is located in the continent of Asia. Mount Everest, the highest peak which is 8848 meters in height is located here. The Dead Sea is also located in the Asian land mass, is below the sea level. Cherrapunji in the state of Meghalaya in India receives the highest rainfall and Gobi desert is considered as the area that receives the lowest rainfall in the world. Both areas are located in the continent of Asia.

All types of climates that exist in the world can be found here. Therefore, every type of forest in the world also can be found in the continent of Asia. Therefore, biodiversity which means the diversity of plants and animals is greater in this region.

According to the size of population, more than half or about 60% of the world population lives in the Asian region. It is notable that China and India, the two most populous countries in the world are located in Asia. Indonesia, Pakistan, Bangladesh and Japan that belong to the top ten countries with the highest population of the world are also located in the Asian region. Accordingly, six out of 10 most populous countries are located in the continent of Asia.

The average density of population of the continent of Asia is 87 per kilometer, but there are some regions in Asia with a high population density of more than 3000 people per kilometer. In the Asian region, there are 54 States or independent countries. (https://en.wikipedia.org/wiki/Asia 2017.02.05)

The diversity in the culture, ethnicity and race is a special feature of the population of the Asian region. Existence of various languages is another specific characteristic as various ethnic groups are living there. According to ethnologue, that providing information on languages in the world, 297 living languages are available only in China. (https://en.wikipedia.org/wiki/Asia 2017.02.05)

Asian region has become unique as it is the home to the world's most ancient civilizations such as Mesapothemia, Howang-Ho, and Indus. It is the birth place of major religions like Buddhism, Hinduism, Islam and Christianity. At present, people who follow religions like Buddhism, Hinduism, Islam and Christianity live in this continent.

#### **Activities**

- 1. State the geographical boundaries that would indicate the relative location of the Asian region.
- 2. Mark those boundaries on an outline map of the world and shade the continent of Asia.
- 3. Prepare a list of factors that cause for the Asia to be considered as specific region of the world.
- 4. With reference to a political divisions map of Asia, show the countries that belong to it.

# Physical landscape in Asia

### Relief

The most specific topographic feature in the Asian region is the Mountain Range of Himalaya. This mountain range spreads 2500 kilometers and stretches in a land area of 6.12,000 square kilometers. Due to this large mountain range, India is seen to be separated from



Fig 1.2 - Mount Everest - The highest peak in Himalaya mountain range

Asia and as a result, India is called a sub continent. There are many peaks including Everest located on this mountain range, exceeding 7000 meters in altitude.

Table 1.1 - Highest Peaks in the Himalaya mountain range

Highest peaks	Height in meters
Everest	8848
Kanchenjunga	8586
Makalu	8462
Dhaulagiri	8167
Manaslu	8156
Nanga parbat	8126
Annapurna	8091
Nanda devi	7817

Source: https://en.wikipedia.org/

The other large mountain ranges located in Asia are Altai, Kunlun, Karakorum, Tangshan, Ghats, Sargros and Urals.

Several large plateaus in the world are also located in Asia. Some of them are Tibet, Pamir, Deccan, Central Siberian and Iran plateaus. Tibet plateau is the one that located at the highest elevation in the world. It is located at 5000 meters of altitude and surrounded by the mountain ranges like Himalayas, Karakoram and Pamir. As it is the highest plateau in the world and spread over a very large land area, it is called 'Rooftop of the world'.

North Asia is a large plain. It is known as the Western Siberian Plain. Manchurian plain and the Great Chinese plain are the other large plains located in Asia. Apart from that, large plains are located close to the river valleys of Indus, Ganges and Hwang Ho.

### **Drainage**

The large number of river systems scattered all over the Asian region is the major characteristic of the drainage. These rivers flow into different oceans and seas.

- Ob, Yenisey and Lena to the Arctic Ocean,
- Amur, Hwang Ho and Yangtze to the Pacific Ocean,
- Ganges, Indus, Brahmaputra, Mekong, Irrawaddy and Salvin to the Indian Ocean,
- Euphrates and Tigris flow into the Persian bay.

There are several rivers flowing in to the internal seas.

- Serdaria and Amudaria to the Aral sea,
- Ural flows into the Caspian Sea.



Fig 1.3 - River Hwang Ho (Yellow River) China



Fig 1.4 - River Ganges - India

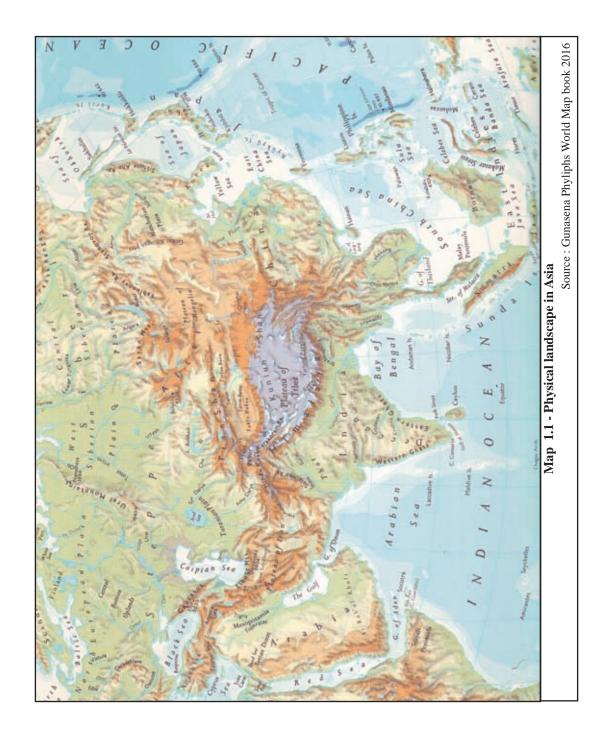


Table 1.2 - Major rivers in Asia

River	Length (km)
Yangtze	6301
Hwang Ho	5464
Mekong	4909
Lena	4400
Yenisei	4088
Ob	3650
Indus	2900
Brahmaputra	2897
Ganges	2510

Compare the length of the rivers in Asia with the length and width of Sri Lanka.



There are several large lakes located in Asia. Among them Baikal and Balkhash are major lakes. Lake Baikal is considered as the deepest lake with fresh water located in the world.

### Activities

- 1. Mention four major mountain ranges located in the Asian continent.
- 2. Name five peaks with their height located on the Himalaya mountain range.
- 3. Write down the largest rivers located in Asia and write the oceans or seas into which they flow.
- 4. Name two large plateaus, one plain and two lakes located in the Asian continent.

### Assignment

Mark and name all the physical features written above in an outline map of Asia.

### **Climate**

The Earth is divided into three main climatic zones according to the variations of the distribution of temperature towards the South Pole and towards the North Pole from the equator.

- Tropical zone (Warm climate)
- Temperate zone (Mild climate)
- Frigid zone (Cold climate) (Refer to the Map 1.3)

The Asian continent spreads over to the North Pole from the equator. Therefore, all types of climate that belong to those three climatic zones are found there.

• Tropical zone (Warm climate)

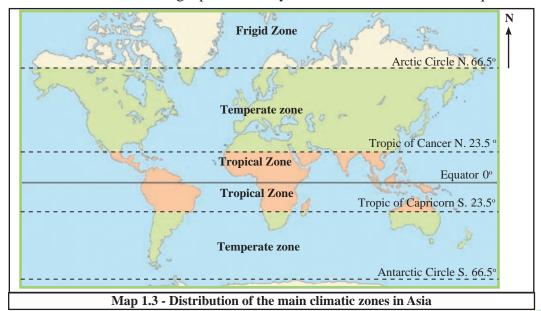
Very high temperature prevails throughout the whole year. The average temperature is more than 18°C. Therefore, a warm climatic condition prevails here.

• Temperate zone (Mild climate)

The average temperature in this zone is lower than the tropical zone. Seasonal variations exist here due to the increase and decrease of temperature from time to time throughout the whole year. A clear warm season and cold season is seen here.

• Frigid zone (Cold climate)

The main feature that can be seen here is the falling snow and land being covered with snow for a longer period of the year due to the lower level of temperature.



In these three climatic zones, several types of sub climates with different features are be seen due to the influence of various factors, such as changes of the rainfall, influence of monsoons and oceans, altitude, location of mountain ranges and continents.

These types of climates and the areas they are distributed are included in the table below;

### The types of climate that exist in the Asian continent

Climatic zone	Climatic type	Distribution Areas/countries
	Tropical rainy climate	Java and Sumatra islands
Tropical	Tropical monsoon climate	India, Sri Lanka, Myanmar
	Tropical savanna climate	North and northeast India, Bangladesh
	Warm desert climate	India, Thar Desert, Middle Est Countries
Temperate	Warm temperate climate	Areas surrounding the
		Mediterranean Sea
	Wet temperate climate	East China, Japanese islands
Frigid	Polar and Tundra climate	Siberian region and the Northern parts of Asia
	Mountain climate	Regions surrounding the mountain
		range of the Himalaya

# Existence of places with very extreme climatic conditions in Asia is a special characteristic

- The lowest temperature in Asia is recorded from the small city of Verkhoyansk located in Russia and its temperature decreases up to -50°C during certain days.
- The highest temperature in Asia is recorded from Jacobabad in Pakistan and it is about 55°C.

### Natural vegetation and wild life

Natural vegetation changes regionally according to the differences of rainfall and temperature. Accordingly, the natural vegetation and the wild life have adapted to the climatic type.

### **Tropical zone – Tropical Rain Forests**

Tropical evergreen forests can be seen in the areas where high temperature and heavy rainfall is experienced throughout the whole year. In these forests, there are various tall trees like Mahogany, Ebony, Rosewood, Kaluwara, Bamboo, Sandalwood, Akeshia are available. The forests consist of different layers. Various types of creepers, moss, lichen as well as epiphytes grow abundantly here. There is also great bio-diversity.

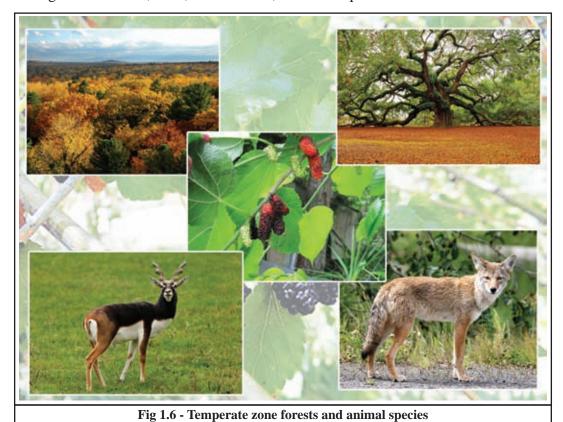
Species of monkeys, reptiles, snakes, fish species and chameleon species are abundantly seen here. Animal species such as tiger, leopard, pig, jackal, deer, and sambar live in large numbers in these areas.



Figure 1.5 - Tropical rain forests and the wild life

### **Temperate zone - Temperate Deciduous Forests**

Deciduous Forests are grown in the temperate zone as a result of the existence of cold and warm seasons during the year. A special characteristic in these forests is falling of leaves from trees annually. Oak, Mulberry, Chestnut, Pine, Eucalyptus, Douglas fir are specific trees grown in these forests. Kinds of animals living here are Wolf, Bear, Sambar deer, and Antelope.



### **Frigid zone - Coniferous forests**

The specific characteristic of this climatic zone with Taiga and Tundra climate is the prevalence of a longer cold season. Coniferous forests are situated in this region. The trees are in a shape of a cone so as to resist snowfall. Leaves are in a shape of needles. The species of trees grown here are pine, spruce, fir, oak and larch.

Reindeer, Polar bear, Snow fox, Snow dog, Sable, and Mink are animal species that can be seen here.



Fig. 1.7 - Frigid zone forests and animal species

# 6

#### **Activities**

- 1. Table three major climatic zones that are seen in the continent of Asia and the types of climate in each of the climatic zones.
- 2. Write down the types of natural vegetation spread out in each of the climatic zones.
- 3. Name the animal and plant species grown in each of the natural vegetation zones you mentioned above.

# **Human landscape of the Asian region**

# **Ancient human civilizations**

Several ancient civilizations had been established close to river valleys in the world according to the information found at present about human history. Among them, Euphrates and Tigris, Hwang Ho, Indus and Nile river valley civilizations are major ones. It is special that except Nile river valley civilization, all the other three are located in the continent of Asia.

River Indus flows across present Pakistan and India and falls into the Arabian Sea close to the city of Karachchi. A developed urban civilization established on the basis of the two ancient cities of Mohenjo-Daro and Harappa close to this river valley.

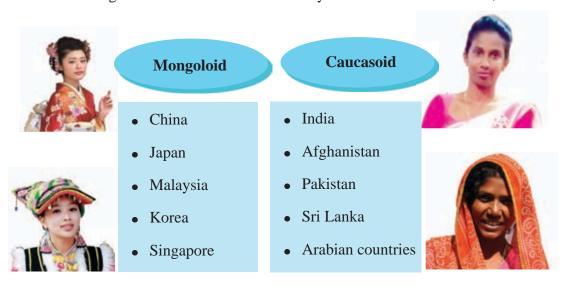
A developed civilization emerged centralizing Anyang city in the river valley of Hwang Ho or Yellow river that flows across China.

The Mesopotamian civilization is the other river valley civilization that was located in the continent of Asia. There are evidences that this civilization had been established between the doab of two rivers, of Euphrates and Tigris that flow across present Iraq.

Systematic town planning, buildings, creation of monuments, agriculture and production of artistic items were specific features that developed in these civilizations.

### **Types of human races**

In the Asian region, different human races as well as many ethnic groups live according to various climatic conditions. Mainly, two types of human races live in the Asian region and the countries where they live are mentioned below;



### **Population distribution**

The present population in Asia is 4.46 billion (4460 million) (*world populationview.com/continents/asia-population* 2017.02.01) Out of this, more than half is distributed in China and India.

This population is unevenly distributed among countries and it varies from region to region. Physical factors have impacted this unequal distribution of population. Relief features, climate, drainage and soil are such physical factors.

When considering the population in Asia, a higher population density can be found close to the river valleys in South, Southeast and East Asian countries. (Over 500 per km²)

- Indo-Gangatic plain in North India.
- Irrawaddy river valley in Myanmar.
- Hwang Ho river valley in China are given as examples.

Central Asia, Mongolia, Northern flat lands Gobi and Thar deserts are sparsely populated areas in Asia.(1.4 map)

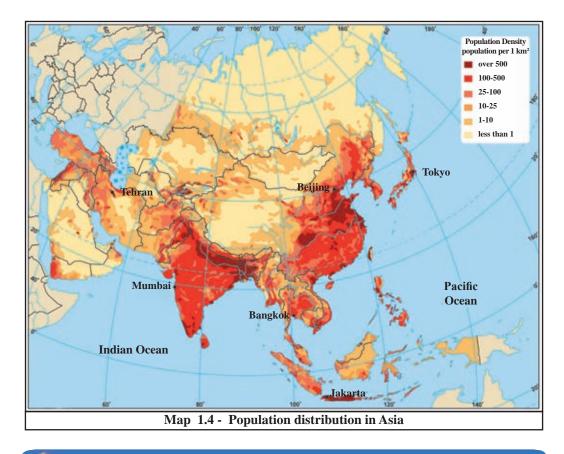
Ten countries with a higher density ofpo pulation by 2017

•	China	1370 millions
•	India	1299 millions
•	Indonesia	255 millions
•	Pakistan	192 millions
•	Bangladesh	159 millions
•	Japan	127 millions
•	Philippine	103 millions
•	Vietnam	92 millions
•	Iran	79 millions
•	Turkey	78 millions

Ten countries with low population by 2017

•	Maldives	345000
•	Brunei	421000
•	Macao	641000
•	Bhutan	760000
•	Timor	1.24 millions
•	Bahrain	1.78 millions
•	Qatar	2.11 millions
•	Armenia	3 millions
•	Mongolia	3.02 millions
•	Georgia	3.73 millions

Source: worldpopulationreview.com/continents/asia-population - 2017.02.01



### **Activities**

- 1. State four factors that influenced the unequal distribution of population in Asia.
- 2. Name five high populated countries, five less populated countries and five high populated cities located in Asia.
- 3. Mark the five high populated countries and cities located in Asia you stated above in a world map.

### **Economic activities**

Various economic activities can be found in the countries located in the Asian region. In this region, economy of the countries is based on agriculture, industry and service.

Here, the attention is paid to three countries which are significant for each of the sectors.

Agriculture - Pakistan
Industries - Japan
Service activities - Dubai

# Pakistan as an agricultural country in Asia

Agriculture is the main economic activity in Pakistan. 25.9% of the Gross Domestic Product in Pakistan is contributed from the agricultural sector. Out of the total labour force, 43% is engaged in agricultural activities. 25% of the land area of the country has been used for agricultural activities.

Pakistan is important as a major country in the world that provides raw cotton. Among the other agricultural products in Pakistan, wheat, rice, sugarcane, mangoes, chick pea, vegetables, milk and dairy products, beef, mutton and eggs are important.

Pakistan is also important as a country with the largest irrigation systems in the world. Water is provided for about 16 millions hectares in the country through the Indus river valley irrigation system.

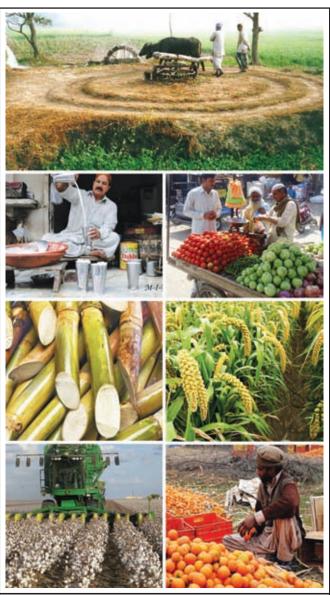


Figure 1.8 - Agricultural activities in Pakistan

There are two main agricultural seasons in Pakistan and they are known as Khariff and Rabi.

According to the ranking system of the World Food and Agriculture Organization, Pakistan has achieved following places as a food producer to the world market.

Table 1.3 - Two crop seasons, duration and the crops grown in Pakistan

Crop season	Duration	Crops grown
Khariff	From April to October	cotton, paddy, millet, maize and sugarcane
Rabi	From November to March	wheat, barley and oats

Table 1.4 - Place achieved by Pakistan in providing Agricultural Products to the world

Market

Type of the product	Place in the world market
Chick pea	3
Apricot	6
Cotton	4
Sugarcane	5
Rice	4
Mango	4

Type of the product	Place in the world market
Dairy products	5
Date palm	5
Onion	7
wheat	7
Types of oranges	6

Source - https://en.wikipedia.org/wiki/Agriculture\_in\_Pakistan//Rankings 21/2/2017

Accordingly, Pakistan has earned a significant place as an exporter of agricultural products in the world.

### Japan as an industrial country

Japan is a major industrial country in Asia as well as in the world. According to the Per capita Gross National Product, Japan is the country that possess the third largest economy in the world. In Japan, 27.5% of the Gross National Product is contributed by the industrial sector. Out of the labour force, 25.2% is engaged in the industrial sector. A specific feature in Japan is maintaining industries on the basis of the import of mineral resources and raw materials completely.

Among the manufacturing industries in Japan, manufacturing automobiles, electronic equipment, machinery, iron and steel, ship-building, chemicals, textiles, computer and computer accessories, robotics technology, pharmaceuticals and processed foods are important.

Manufacturing automobiles is the key field of industry in Japan. Japan has won the sixth place out of the top ten largest automobile manufacturers in the world. Japanese automobiles are in the forefront in the world due to factors of high quality, durability, fuel economy, comfort and inclusion of very modern components and equipment. There are several major automobile manufacturing companies in Japan and some foremost ones are mentioned below.

- Toyota
- Nissan
- Suzuki
- Mazda
- Daihatsu

- Mitsubishi
- Honda
- Isuzu
- Subaru
- Hino



Honda, Yamaha, Suzuki and Kawasaki are major motor cycle producting companies in Japan in the world.

Japan has achieved a rapid development in producing various types of electronic and electrical equipment. For these productions, the companies of Sony, Mitsubishi, Electric, Panasonic, Cannon, Fujitsu, Nikon, Yamaha, Sharp, Nec, Hitachi and Casio are important.

Production of plastic, polystyrene and polypropylene are significant as main petro chemical industries in Japan. The other frontline production industry of Japan is producing computers and computer accessories. Among these companies Nec, Fjitzu, Epson and I.B.M are significant.

Japan has achieved its development with regard to Gene Technology which is considered a very important field at present in the world. Gene Technology is used in various sections such as agriculture, livestock farming, pharmaceuticals, chemicals and food processing.

Japan is in the forefront among the countries where that utilizes nuclear power in abundance, in the world.

#### Dubai as a service center

The United Arab Emirates is a federation of seven states known as Emirates.

Out of them Dubai is a small Emirate state.

The total population of Dubai is 2,502,715 and the population density is 644.2 per km<sup>2</sup>. Accordingly, Dubai is a highly populated country. Dubai known as global city is important as the business hub of middle east.

The base of the economy of Dubai is the production of mineral oil. The large amount of wealth earned from this resource has been invested in other fields in that country. Dubai has been developed as a service center as its physical environment is not suitable for agricultural purposes.

Among major economic sectors in Dubai, the highest percentage value sector is the service sector. This represents around 37.2% out of the total Gross Domestic Product in Dubai. Out of the total employees, 33.0% is engaged in employment related to the service sector. (Emirates NDB Research-Dubai's service sector overview-18 March 2015)

There are many service industries carried out by Dubai as a service center;

- An aviation center of modern crossroads connecting East and West. Accordingly,
   Dubai is important as an intermediate transit center in the world.
- Importance of Port Jabil Ali as the major Middle Eastern export center as well as free trade harbour.
- Center for Tourist attractions and tourist services providing center.
- As a center of providing international communication services Eg CNN, Al Jazeera

- As a center that provides an indoor stadium and day and night cricket stadium for cricket and tennis at international level.
- Establishment of the largest trade center called Dubai Mall.

#### Activities

- 1. State four factors why Pakistan is important as a major agricultural country in Asia.
- 2. Write down the two main agricultural seasons in Pakistan and write the types of crops grown in each of the season.
- 3. State five major agricultural export products in Pakistan
- 4. State four reasons to show how Japan has become a major industrial country in Asia.
- 5. State the major industrial products in Japan
- 6. State which reasons have influenced the importance of Dubai as a service center in Asia.

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# Glossary

• Relative location	- සාපේක්ෂ පිහිටීම	- சாா்பு அமைவிடம்
Absolute location	- නිරපේක්ෂ පිහිටීම	- தனி அமைவிடம்
• Geographical coordinates	- භූගෝලීය ඛණ්ඩාංක	- புவியியல் ஆட்கூறு
• Bio diversity	- මෛජව විවිධත්වය	- உயிர்ப்பல்வகைமை
• Population density	- ජන ඝනත්වය	- சனதொகை அடர்த்தி
• Tropical zone	- නිවර්තන කලාපය	- அயனவலயம்
• Temperate zone	- මසෟමා කලාපය	- இடைவெப்ப வலயம்
• Polar zone	- ධුැව කලාපය	- முனைவு வலயம்
Tropical rainy climate	- නිවර්තන වර්ෂා දේශගුණය	- அயன மழைக் காலநிலை
• Tropical monsoon climate	- නිවර්තන මෝසම් දේශගුණය	- அயன பருவக்காற்று காலநிலை
• Tropical savanna climate	- නිවර්තන සැවනා දේශගුණය	– அயன சவன்னா காலநிலை
Hot desert climate	- උෂ්ණ කාන්තාර දේශගුණය	- வெப்பப் பாலைவன காலநிலை
Warm temperate climate	- උණුසුම් සෞමා දේශගුණය	- இளஞ்சூடான இடை வெப்ப காலநிலை
Wet temperate climate	- තෙත් සෞමා දේශගුණය	- இடைவெப்ப ஈரக் காலநிலை
• Polar and tundra climate	- ධුැව හා තුන්දුා දේශගුණය	- முனைவு மற்றும் துந்திரா காலநிலை
Highland climate	- උස්බිම් දේශගුණය	- உயர்நிலக் காலநிலை
• Tropical rain forests	- නිවර්තන වර්ෂා වනාන්තර	- அயன மழைக் காடுகள்
• Deciduous forestes	- පතනශීල වනාන්තර	- இலையுதிர் காடுகள்
• Coniferous forests	- කේතුධර වනාන්තර	- ஊசியிலைக் காடுகள் பெற்றோல் இரசாயன
Petro chemical industry	- පෙටුො රසායන කර්මාන්ත	- கைத்தொழில் மொத்த உள்நாட்டு
• Gross Domestic Product	- දළ දේශීය නිෂ්පාදිතය	- உற்பத்தி
• Tourist attractions	- සංචාරක ආකර්ෂණ	- சுற்றுலா கவர்ச்சிகள்