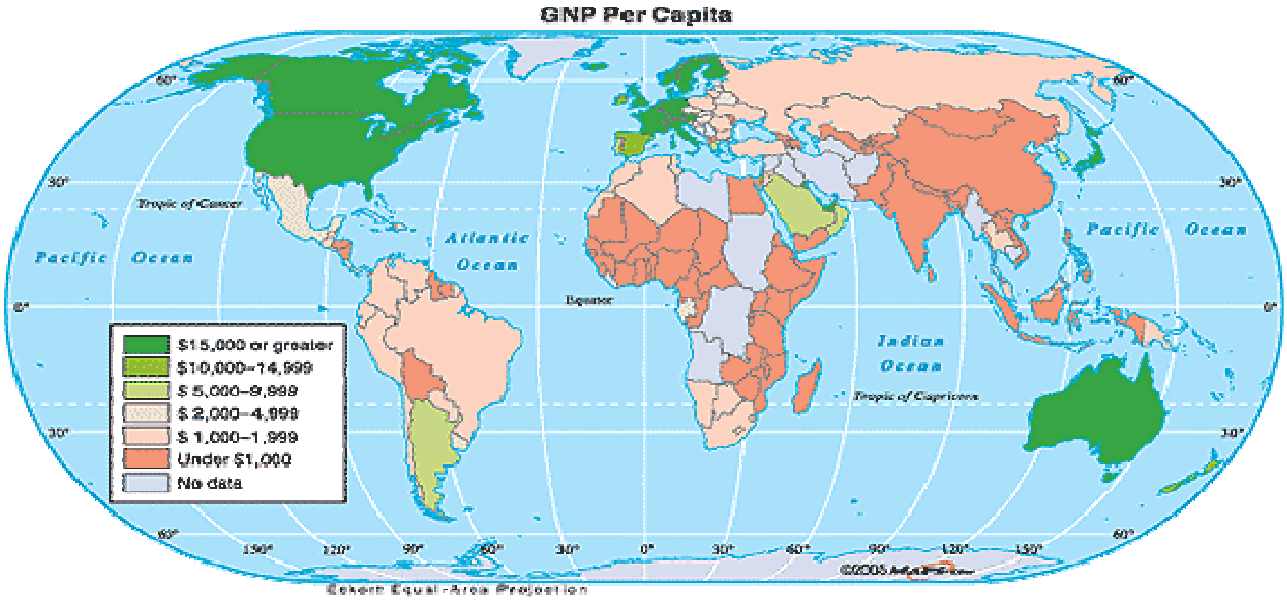
An Outline of Regional Economic Geography



Sketches by Varga B. Imre

Bevezetés

Tanácsok a jegyzet használatához

1. A jegyzet nem tankönyv, nem helyettesíti azt, de megkönnyíti a gazdasági folyamatok megértését, könnyebbséget nyújt a gazdasági irányban továbbtanulóknak.

2. Sok ábrát tartalmaz, amelyből saját magadnak, vagy magyarázat közben, de otthon is átnézve kell megérteni a gazdasági folyamatokat, az egyes országok közötti kapcsolatokat és a globális világ formálódását. Ehhez természetesen meglévő történelmi tanulmányaidra, ismereteidre is szükség van.

3. A tanuláshoz feltétlenül használj atlaszt, mert nélküle térben és időben nem tudsz tájékozódni. Ezért az atlasz használata minden órán kifejezetten ajánlott, sőt kötelező.

4. Az adatok tájékoztató jellegűek, megtanulni azokat nem kell, de az adatokból levont következtetések lényegesek.

5. A jegyzet munkafüzet is egyúttal, sokszor a feladatokat vagy az órán közösen vagy otthon, házi feladat formájában kell megoldani.

6. A jegyzet nem tesz különbséget a közép és emeltszint között, mivel segítséget szeretne azoknak nyújtani, akik a későbbiek folyamán szeretnék a földrajzot felvételi tárgyuknak tekinteni.

7. A jegyzetet rövid kislexikon egészíti ki.

8. A jegyzetben megtalálható az érettségire kötelező topográfia angolul.

Varga B. Imre

Terminology

GDP : gross domestic product, the total market value of commodities (goods and services) produced in a country in a given period of time , usually a year. (*A GDP az egy területen adott idő alatt előállított javak (termékek és szolgáltatások) összességnek értéke*)
GNP : gross national product, a measure of the total flow of output in an economy during any specified period of time (excluding goods and services used as an inputs in the production of further goods or services) *A **bruttó nemzeti termék** a bruttó hazai termékhez (GDP) hasonló mutató, de annál ritkábban használják, és egyfajta korrekciójának tekinthető. A bruttó hazai összterméket úgy kapjuk meg a bruttó hazai termékből egy adott országban, előállított termékek és szolgáltatások bruttó értéke, amiből levonva a hazai devizakülföldiek teljesítményét, és hozzáadva a hazai állampolgárok és vállalatok külföldön szerzett jövedelmét. A bruttó hazai össztermék tehát a jövedelem-transzferekkel korrigált bruttó hazai jövedelem*
Population density: The population density of a country is how crowded it is.. You can work out the population density of an area by dividing the number of people living there by the area of the land (in square kilometers).
Life expectancy:
Crude Birth rate: The crude birth rate is the number of births per 1000 people in a year.
Crude Death rate: The crude death rate is the number of deaths per 1000 people in a year.
Infant mortality rate: The infant mortality rate is the annual number of deaths of infants less than one year old per 1, 000 live births.
Natural increase: The natural increase is the number of extra people (birth rate minus the death rate). This is usually given as a percentage.
FAO: Food and **A**griculture **O**rganization. Az ENSZ Mezőgazdaság és Élelmezésügyi Szervezete.
NATO: North Atlantic Treaty Organization. Hungary has been a member since 2000.
COMECON: (KGST) (Kölcsönös **G**azdasági **S**egítség **T**anácsa**)**
OPEC: The Organization of Petroleum Exporting countries.
EFTA: European Free Trade Association.
Returned Territories: a region of the territory of the Third Reich which was annexed by Poland after the second world war by right of the decision of the Potsdam Conference.
Commonwealth of Independent States (CIS) (Független Államok Közössége) was created in December 1991. In the adopted Declaration the participants of the Commonwealth declared their interaction on the basis of sovereign equality. At present the CIS unites: Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine.
NAFTA: North American Free Trade Association. (Mexico, the USA, Canada)
Arab League: The League of Arab States, or Arab League, is a voluntary association of countries whose peoples are mainly Arabic speaking. It aims to strengthen ties among member states, coordinate their policies and direct them towards the common good. It has 22 members, including Palestine, which the league regards as an independent state.

Economic north and south division

The **North-South Divide** is the socio-economic and political division that exists between the wealthy developed countries, known collectively as "the North", and the poorer developing countries (least developed countries), or "the South." Although most nations comprising the "North" are in fact located in the Northern Hemisphere, the divide is not primarily defined by geography. The North is home to four out of five permanent members of the United Nations Security Council and all members of the G8. "The North" mostly covers the West and the First World, with much of the Second World. The expression "North-South divide" is still in common use, but the terms "North" and "South" are already somewhat outdated. As nations become economically developed, they may become part of the "North", regardless of geographical location, while any other nations which do not qualify for "developed" status are in effect deemed to be part of the "South."

Indicators of development

Many different indicators can be used to assess the development of a country. Some of the most common are listed here:

● **Infant mortality rate (per 1000):** The number of children who die before they are 1 year old, measured per 1000 born. You would expect a less developed country to have a high rate due to poorer diet and health care. **Example countries:** UK = 6; Mozambique = 123)

● **Life expectancy (years):** The average age that someone living in that country will live to. You would expect it to be highest in the more developed countries, where there is better access to health care and a better diet. **Example countries:** UK: Male = 74, Female = 79; Mozambique: Male = 44, Female = 46)

● **Daily calorie intake:** The amount of food eaten by a single person on average. There is a recommended daily calorie intake for an adult which is not reached by many developing countries, especially in rural areas.

● **Population per doctor:** The total population divided by the number of doctors in the country. **Example countries:** UK = 300; Mozambique = 33,333)

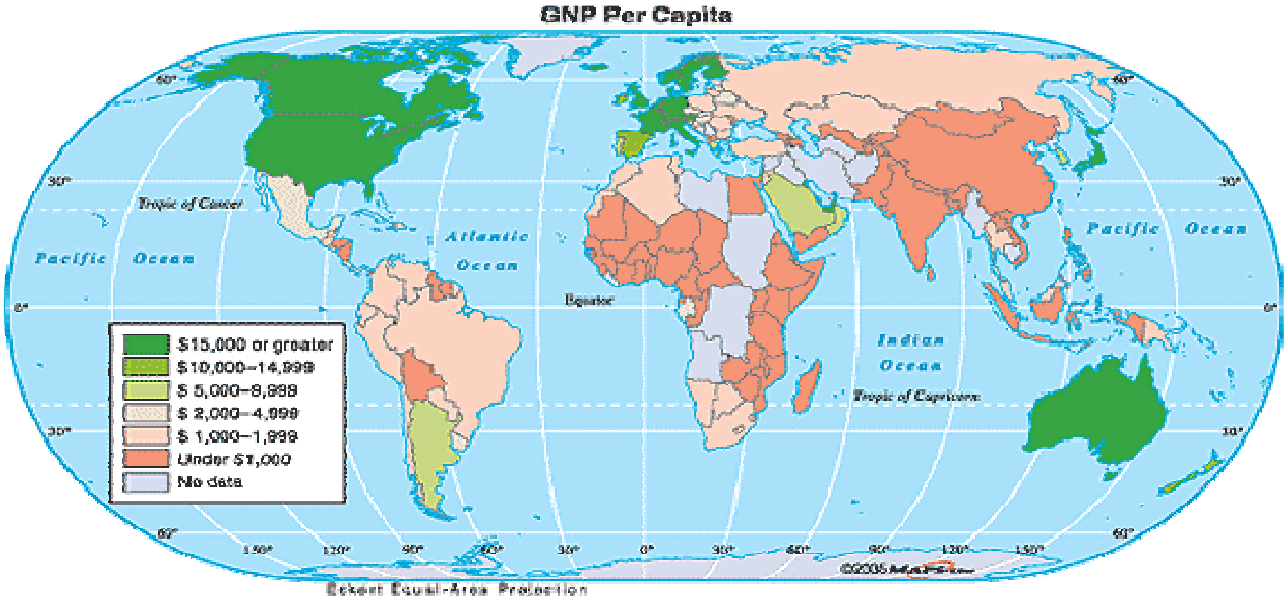
● **Adult literacy (%):** The percentage of the population who are literate (in other words they can read and write). **Example countries:** UK = 99%; Mozambique = 37%)

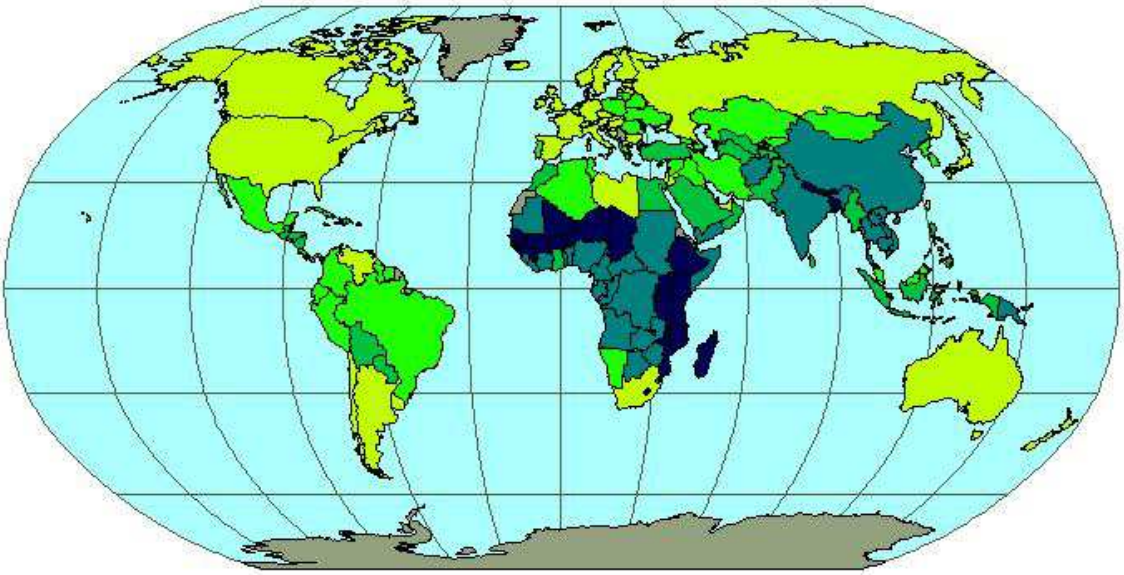
● **Percentage of GNP spent on education (%):** The amount of money spent each year on education, as a percentage of the total wealth of the country. This can be sometimes a rather mis-leading figure though, as you can see from the example. The amount of money spent on education is this country is far more than that spent in Mozambique, however it is a smaller percentage of the overall wealth of the country. **Example countries:** UK = 5.3%; Mozambique = 6.3%)

● **Percentage working in agriculture (%):** A less developed country would be expected to have a far higher percentage of people still working in agriculture, mainly as subsistence farmers, growing only enough for them and their family. A more developed country would have far more technology in farming, and therefore less workers, as well as having far more people working in the manufacturing and service industries. **Example countries:** UK = 2%; Mozambique = 85%)

● **Percentage living in urban areas (%):** As countries develop, there tends to be a mass in-migration into the cities, causing rapid urban growth. Therefore you would expect a more developed country to have a higher percentage of people living in the urban areas. **Example countries:** UK = 90%; Mozambique = 32%)

● **Access to clean water (%):** In Britain, we take clean, safe water for granted, but that is not the case in many of the less developed countries of the world. This can lead to outbreaks of diseases such as cholera, dysentery and typhoid.





% of Labor in Agriculture

- No Data
- 0 - 16
- 16 - 36
- 36 - 56
- 56 - 72
- 72 - 92
- Ocean

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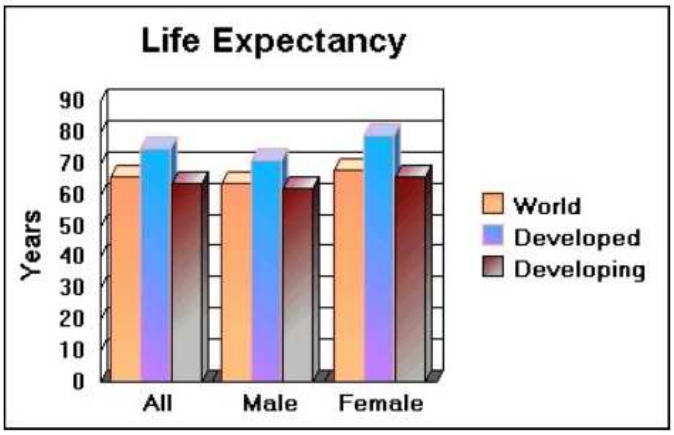
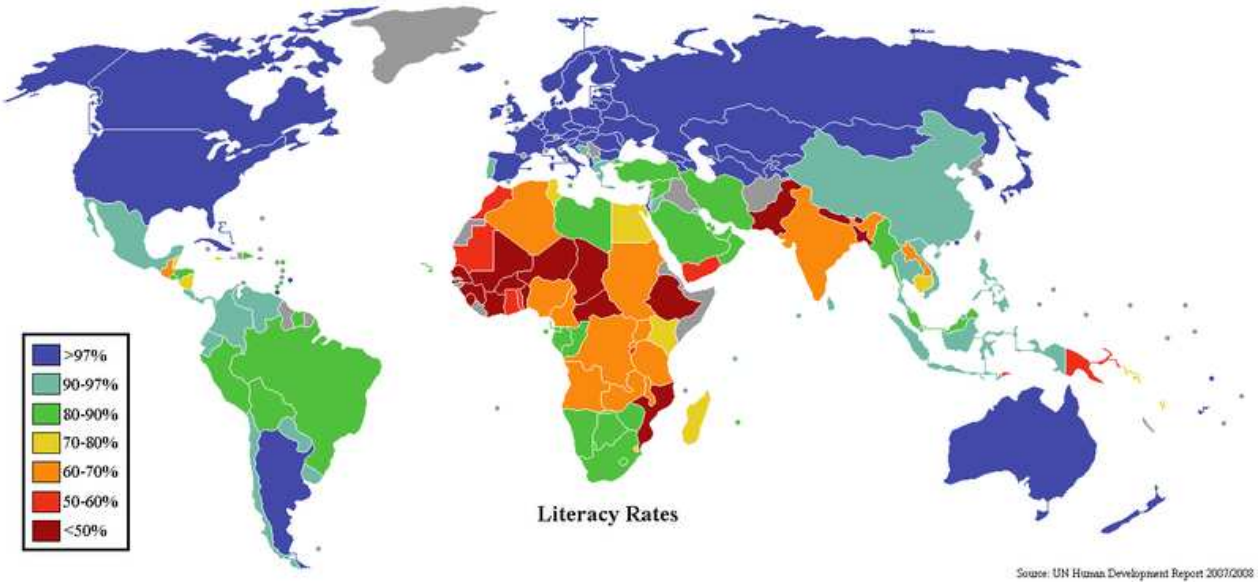
The graph below shows that women in the developed world have the longest life expectancy, and men in the developing world the shortest.

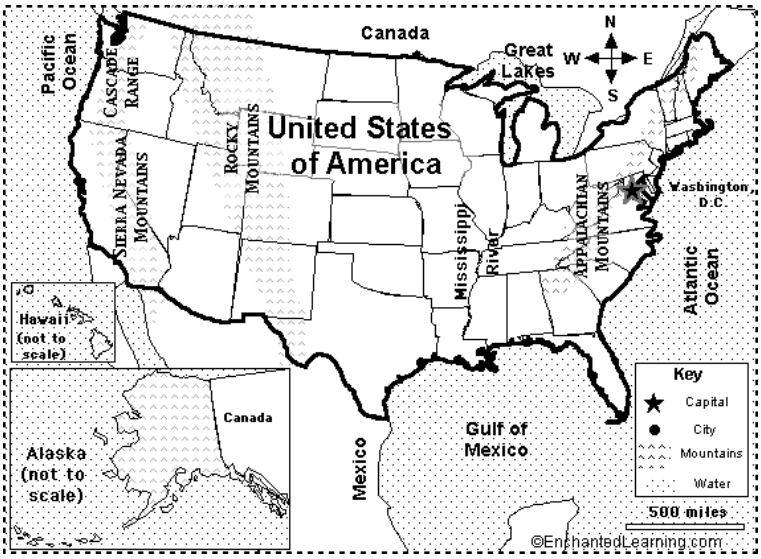


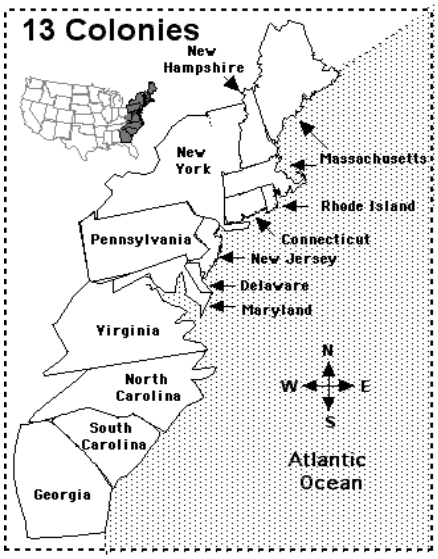


Literacy rates around the world

THE USA

Area: 9.3 million sq km
Population: 285 million
Population density: 30 inhabitants per sq km
GDP: 46 000 dollar per capita

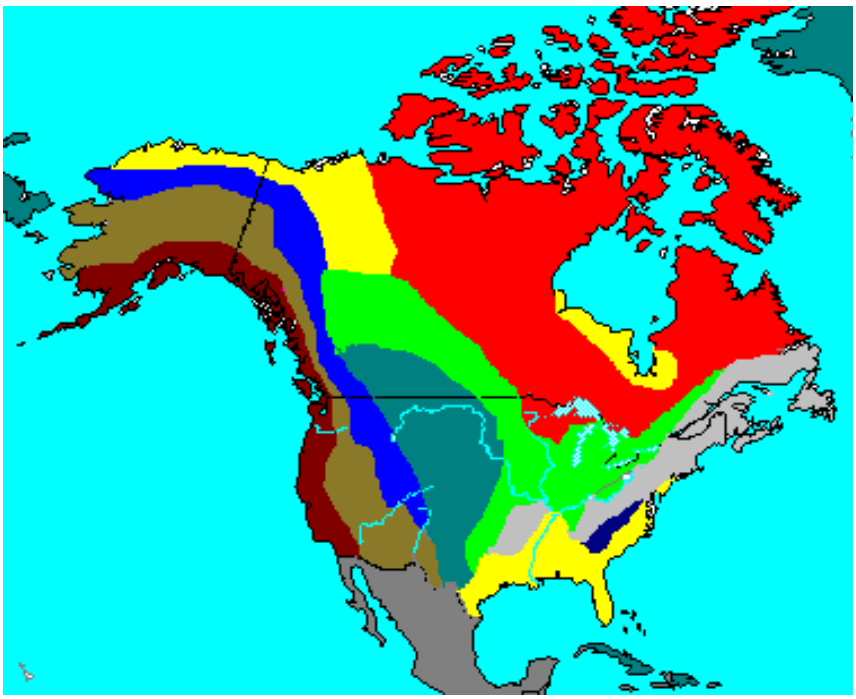


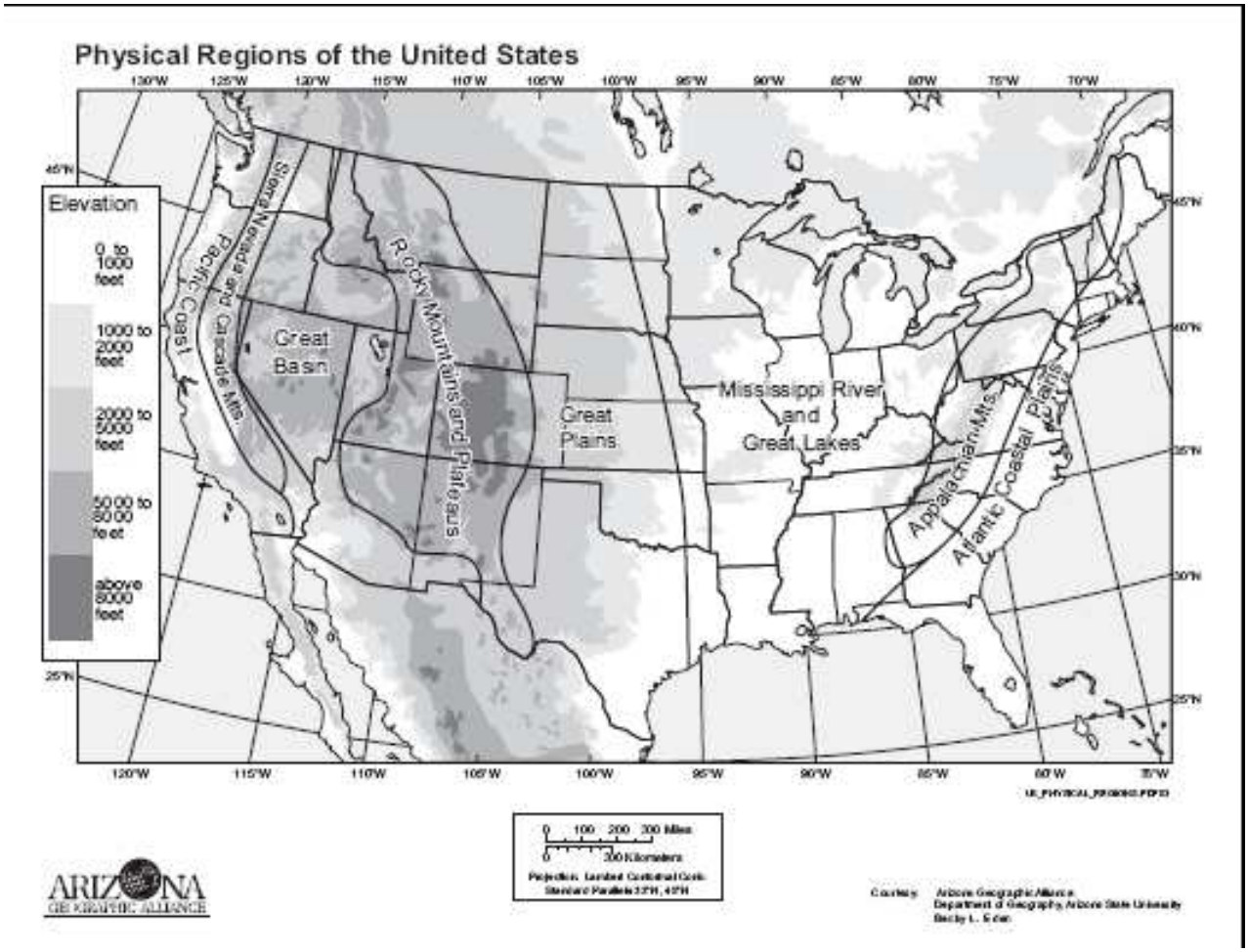


Physical geography:

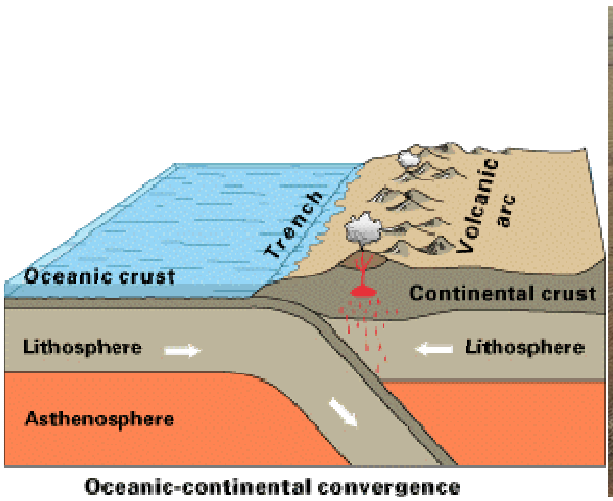
Regions:

1) **Coastal Plains**
2) Piedmont
3) **Appalachian Highlands**
4) Interior Lowlands
5) Interior Highlands
6) **Canadian Shield**
7) **Great Plains**
8) **Rocky Mountains**
9) Intermountain Basins and Plateaus
10) **Pacific Mountains and Valleys**

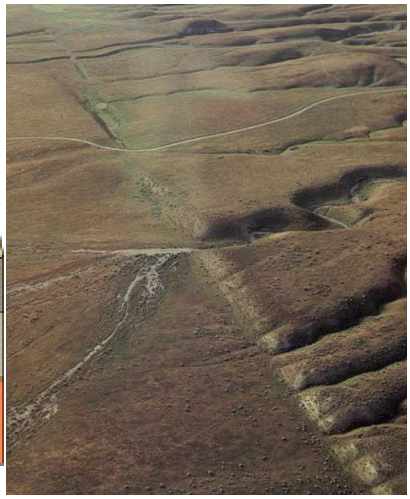




Formation of the Rocky mountains



Oceanic-continental convergence



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San Andreas fault line **Mt. St. Helen volcano**

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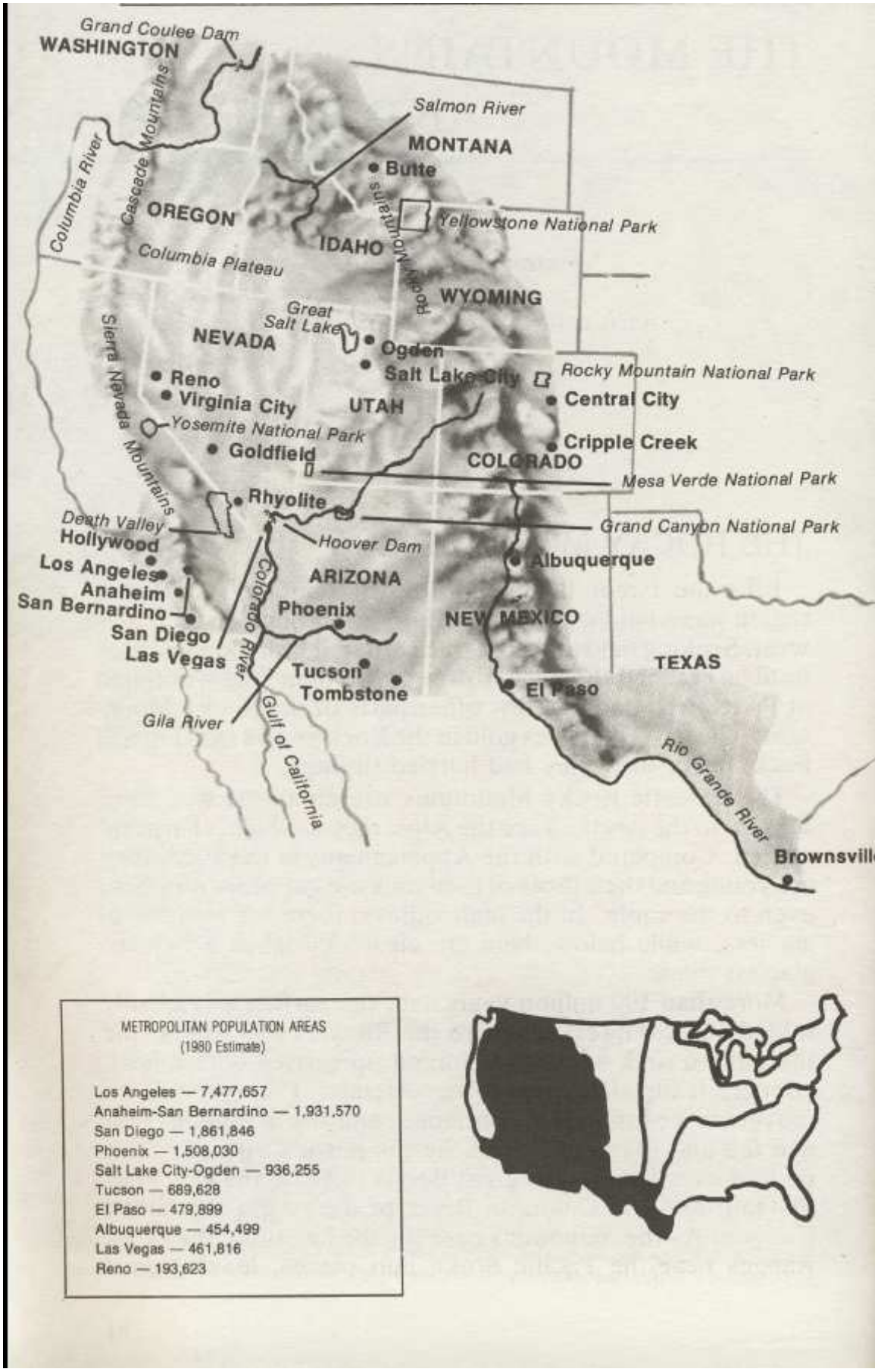
Agriculture in California:

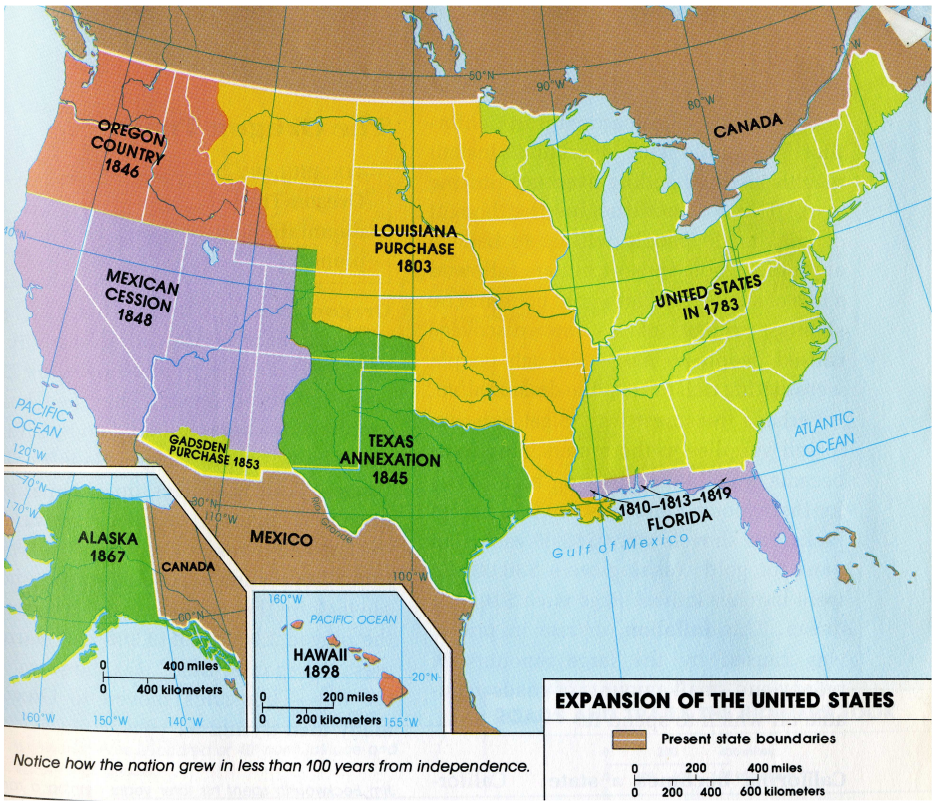
Pacific ocean	**Coastal ranges**	**Californian basin**	**Sierra Nevada**
Mediterranean climate (winter rains)			**Humid mountain climate (highland)**
Abundant precipitation		**Drought (leeward side of the mountain) Three quarters of the farms are irrigated**	**Water delivery (pipelines, rivers, canals)**
Extensive cattle farming		**The orchard of the west**	**Extensive cattle farming**



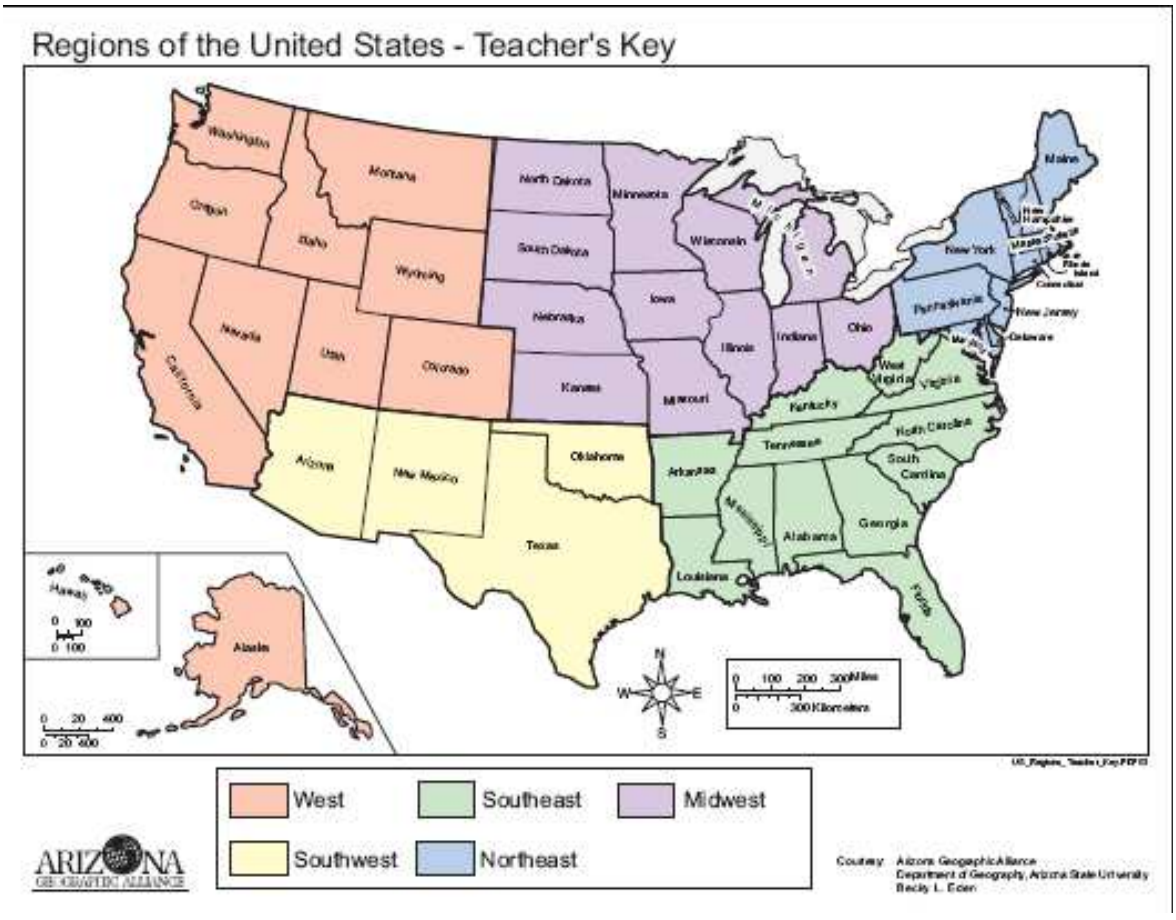
METROPOLITAN POPULATION AREAS
(1980 Estimate)

Los Angeles — 7,477,657
Anaheim-San Bernardino — 1,931,570
San Diego — 1,861,846
Phoenix — 1,508,030
Salt Lake City-Ogden — 936,255
Tucson — 689,628
El Paso — 479,899
Albuquerque — 454,499
Las Vegas — 461,816
Reno — 193,623

Territorial expansion of the USA

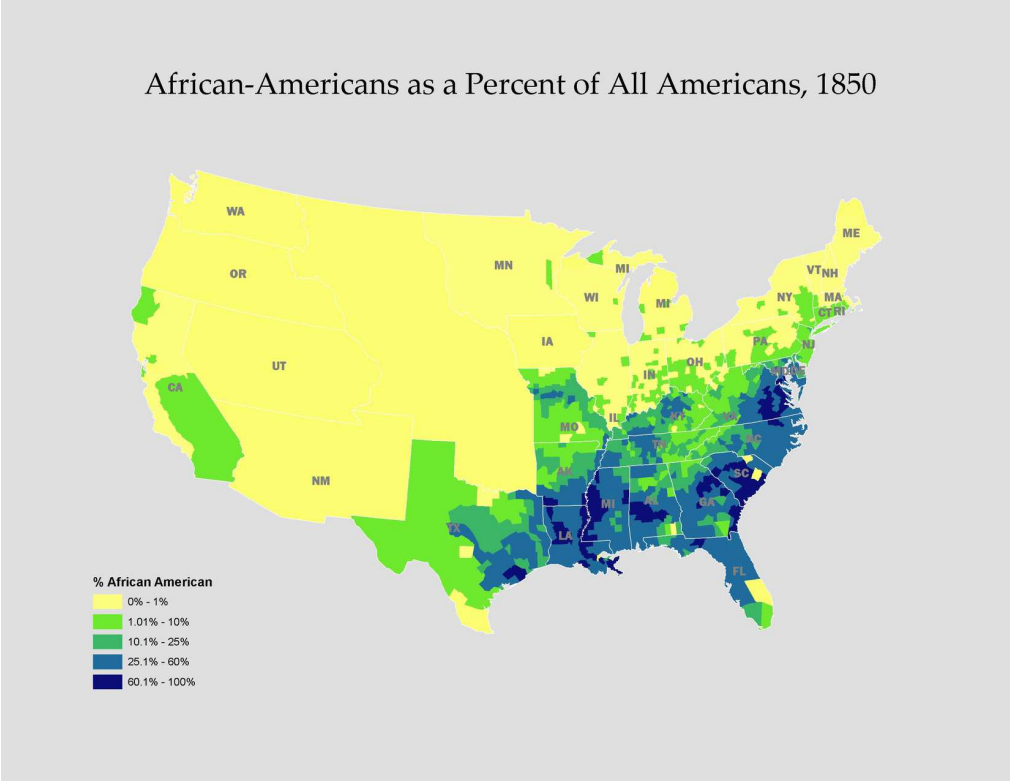


Economic regions of the USA



Factors of development:

- the country is rich in natural resources (mineral resources, energy resources, abundant free land)
- 19th century → lack of manpower → immigrants, skilled working power
- as the population of the country grows the market grows too
- up to date technology, developed research network of universities (Harvard, Yale, Stanford)
- the production experience and professional training of the European workers greatly contributed to the formation of modern industry
- agricultural raw materials were abundantly available
- the gold rush attracted the first wave of settlers to the Rocky mountain.
- high productivity, high technology and biotechnology → genetically modified seeds)



Where did the black population come from ? Where are the recent immigrants from ?

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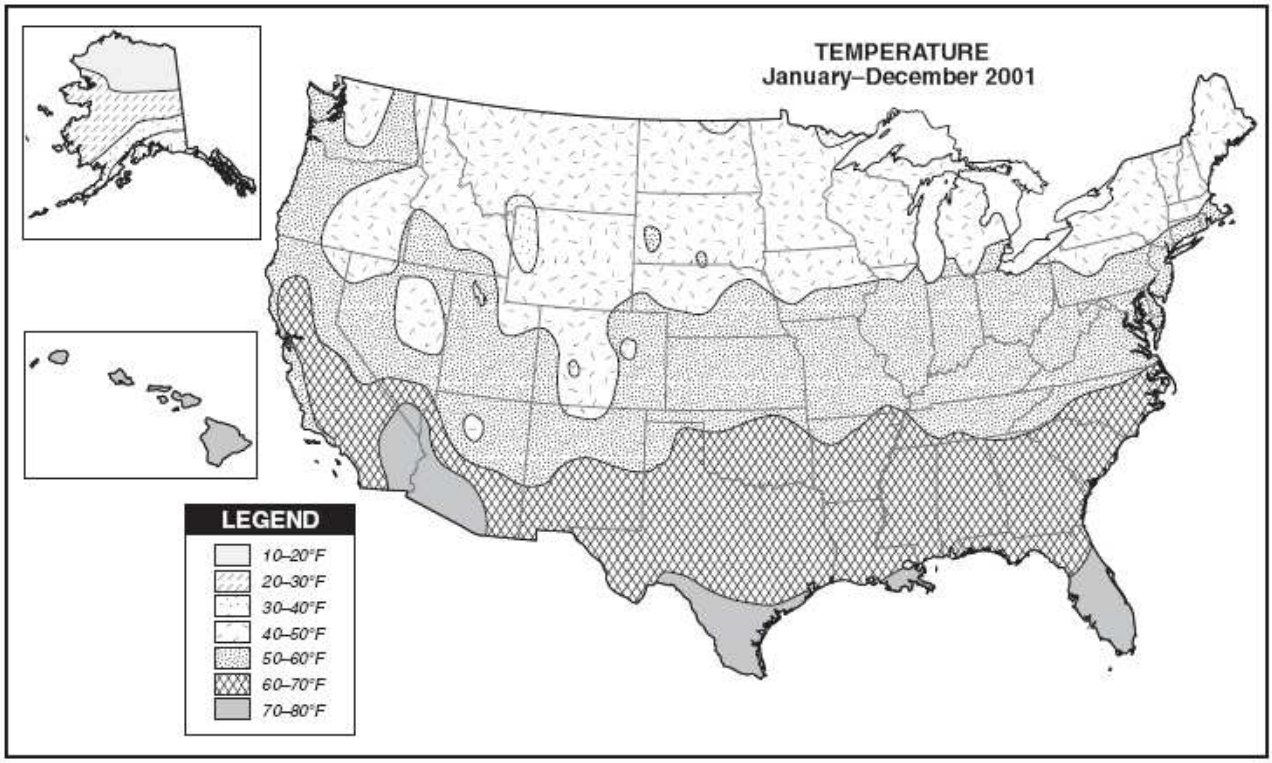
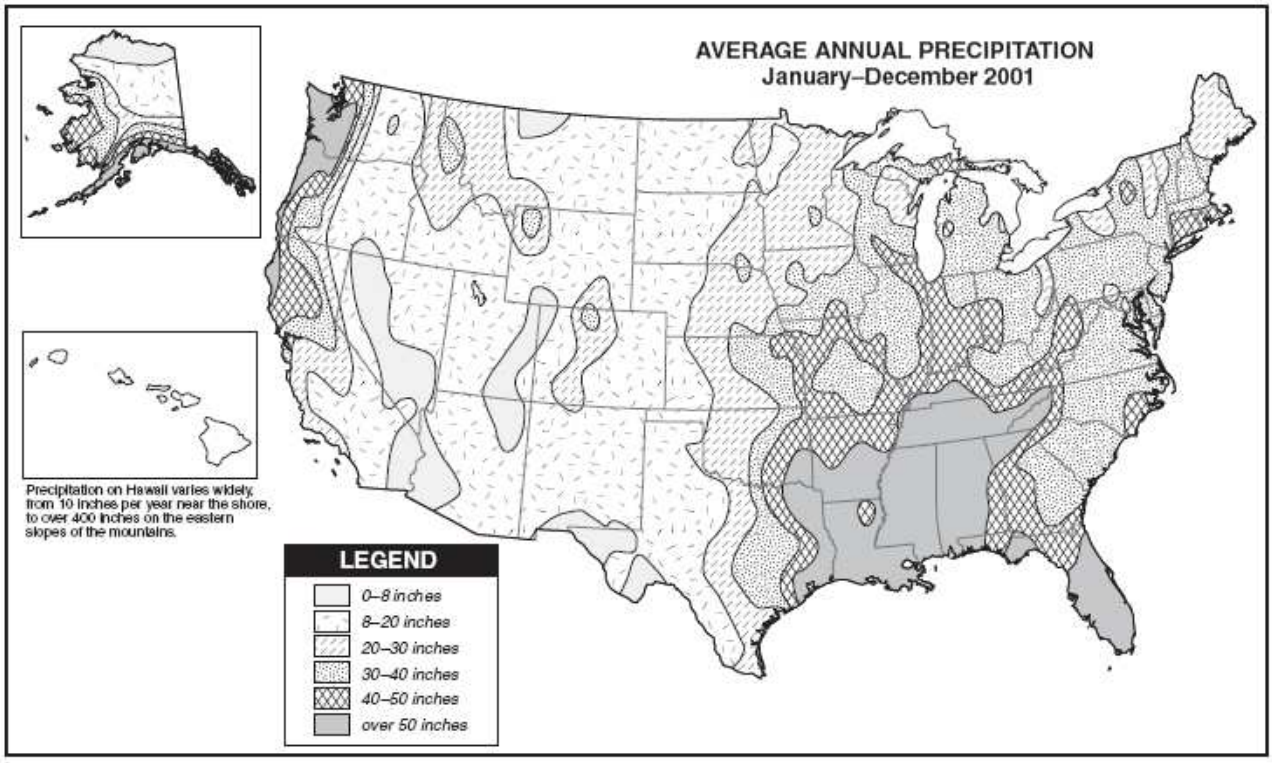
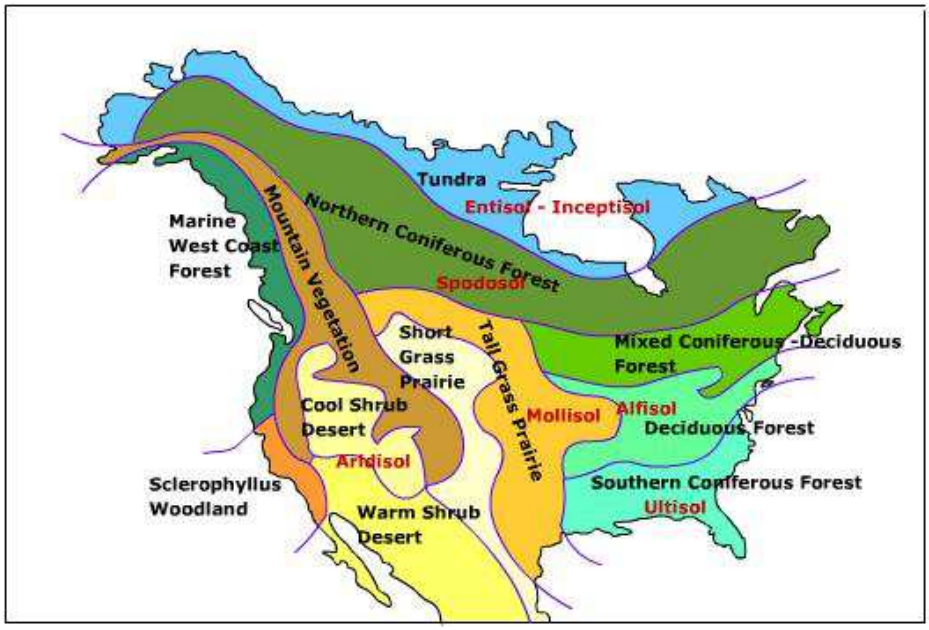
USA: Average Precipitation and Temperature

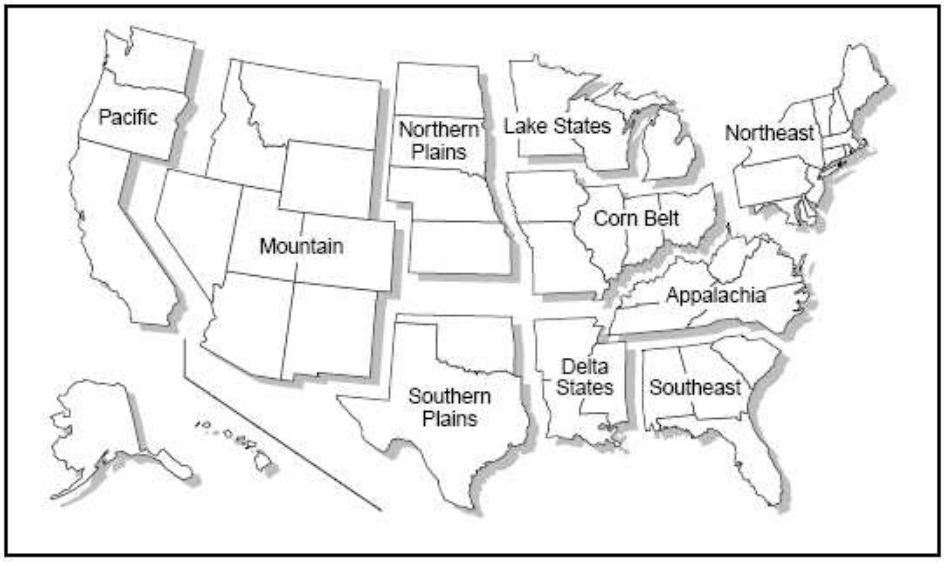




Climate of the USA

Task 1. Use your atlas and compare with this diagram with the one in it.





Task 1. Make important notes on these regions.

Regions in the USA:

North East……

Lake states (Lake district)…….

Corn belt……..

Northern Plains……

Southern Plains……

Delta states……..

Appalachia……

South East…….

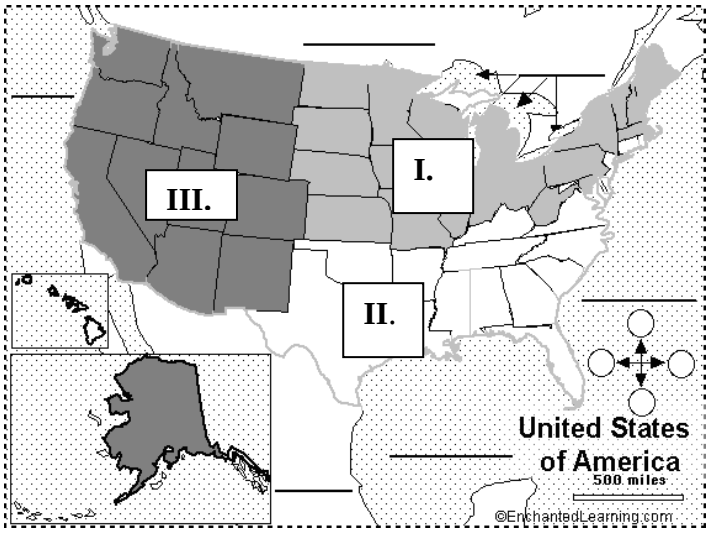
Mountain……..

Pacific……

Alaska ……

Hawaii…….

Regions of the USA



Regions	Subregions	Main characteristic of the regions
North	North Atlantic	
	Great lakes	
	Midwest	
South		
West		

I. Northern Region

1. The northern region plays a prominent role in the economy of the United States. **The North Atlantic coastal region** and the vicinity of the Great Lakes are the workshop of the country as half of the industrial production of the country still comes from these areas. The first immigrants landed in the harbors of this region, so there was plenty of manpower for industrialization. The forests of the Appalachians, its rivers and coal fields provided the energy, and the raw materials arrived mostly by sea.

At the present time from **Boston** to **Washington** a 600-km-long **urban agglomeration** occupies the coast. 45 million people live in this megapolis. The place of the once significant textile industry has been occupied by **electrotechnics**, **electronics**, **nuclear industry** and **precision machine and instrument manufacturing**. These branches make good use of the professional training of manpower. Although Washington is the capital, the threads of the commercial and financial life come together in **New York**. The agriculture of this region has almost completely wasted away. There are farms producing only fresh milk, egg flowers as vegetables and fruits arrive from areas with more favourable natural conditions.

2. The industrial cities in the **Great Lake district** are the most important centers of **ferrous metallurgy** in the USA. Metallurgy developed at first near the fields of coal in the Appalachians, e.g. in **Pittsburgh**. In the mining region, **coal chemistry** and **glass making** also developed rapidly. Along the transportation routes of iron ore were established the **smelting-furnaces** of **Buffalo**, Detroit and Chicago. Since the depletion of the iron ore deposits around Lake Superior, the metallurgy of the region has been increasingly based on the iron ore of the Labrador Peninsula that arrives on the *Saint Lawrence Seaway*. Cities of the Lake district are remarkable for their many-sided machine industry. The grates steel consumer is the **car industry**, concentrated in **Detroit**. The metropolis of **Chicago** is the most important junction point of the country's railway and air transportation system. The agriculture of this district is not significant, mainly green fodder is grown for the great dairy-farms.

3. In the plough lands of the **Midwest** **maize** and **soybeans** alternate. The main income source of farmers is the **breeding of pigs** and **cattle**. The **milling** and **meat industries** of the great cities, like **Kansas City**, are known all over the country.

II. Southern Region

The southern states of the country, after the defeat of the Civil War were unable to compete with the strong, industrialized North. The South is still relatively poor and underdeveloped compared to other regions, but in the last few decades a rapid industrial development can be experienced. The richest **oil and gas fields** of the country were discovered in **Texas** and **Louisiana**. On these foundations **petrochemical industry** has been built. The **rock-salt** and **sulphur** mined in the coastal region of Texas, and the huge **phosphate** deposits of Florida provide the basis for the **inorganic chemical industry**. The abundance of energy has led to the development of **aluminum metallurgy** and **nuclear industry**, and also to the building of a **hydroelectric power plant system** in the valley of the Tennessee River. The inexpensive electric power attracted the first big **uranium enrichment plants** to this area. Ores imported from Latin America, and agricultural products feed mainly the industry of the busiest southern seaport, **New Orleans**. **Houston**, the headquarters of the national **space research program** also can be found in this region. New factories of the **textile industry** were opened in the South, so it moved closer to its raw material source. Lying in the heart of the southern states, **Atlanta** is the biggest commercial and financial center. Another many-sided metropolis is **Dallas**, that owes its prosperity to oil.

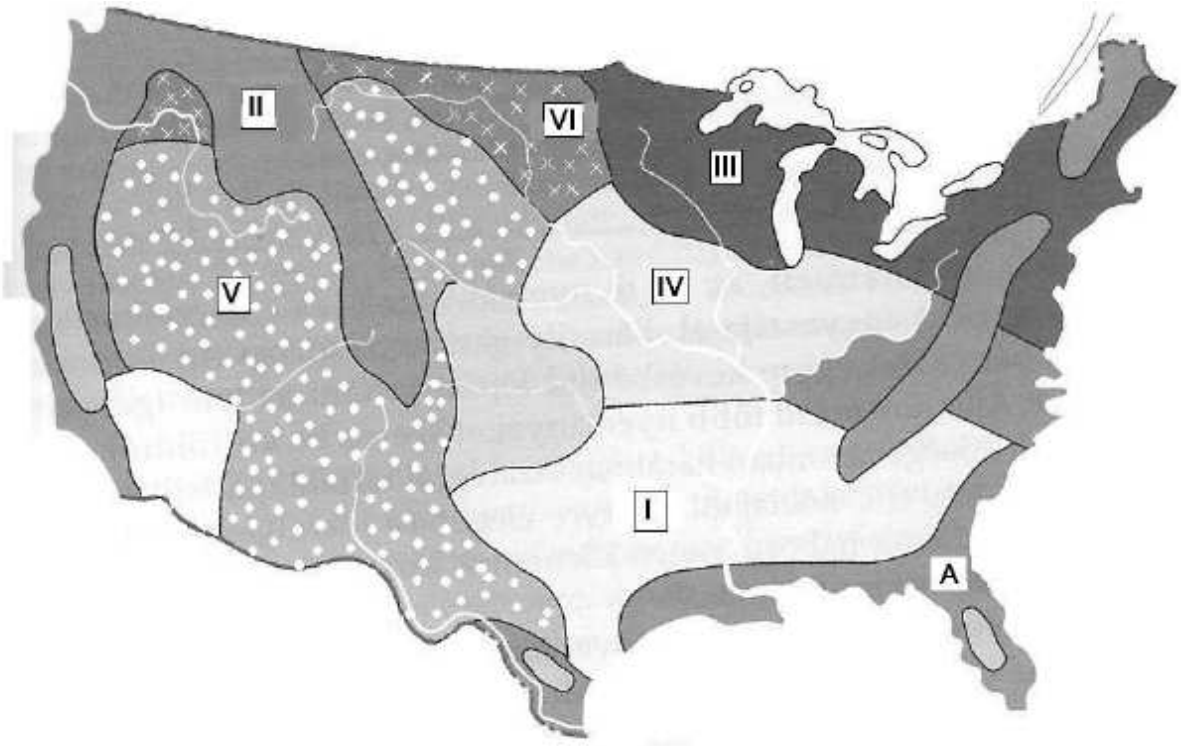
The agriculture of the southern region has always been considerably transformed. The old monoculture of the 'Cotton Belt' has been replaced by a more mixed agriculture, the growing of **soybeans** and **peanuts**, and factory-like **poultry** and **cattle breeding**. From the wood of the pine forests **cellulose** and **paper** are made. The center of cotton growing has moved to the west, to Texas from the 'Cotton Belt'. The rural black population has been moving from the states of the 'Cotton Belt' to the large northern cities for decades. On the other hand, southern factories attract more and more skilled manpower from the North. In the agriculture of the South there are areas specialized in growing particular crops. Virginia is famous for her **tobacco-growing**. In the vicinity of the Mississippi River giant **rice-fields** extend and in the Delta region **sugar plantations** can be found. The huge vegetable and citrus-producing estates of Florida deliver their goods to every part of the country.

III. Western region

The western part of the United States is rather sparsely populated and rich in natural resources. The dynamic economic development and the higher income level attract many immigrants from the other regions. The biggest **non-ferrous ore** and **uranium** deposits of the USA can be found in the Rocky Mountains. The development of **aluminum and non-ferrous metallurgy** was supported by the gigantic **hydroelectric power plants** on the Colorado and Columbia Rivers. On the **oil and gas fields** of California **petrochemical industry** has been built. As the Pacific coast played the role of the hinterland in the Second World War, the most important plants of **rocket and aircraft manufacturing** and **nuclear industry** are concentrated in this region. This military-industrial complex played an important role in the development of the big seaports, like **San Diego**, **Los Angeles** and **Seattle**. Scientists of the famous universities developed the 'Silicon Valley' near **San Francisco** the world-famous center of **microelectronics**.

The western part of the USA is very rich in natural beauty. The first **national park** in the world – Yellowstone – was founded in the Rocky Mountains. Most of the **Indian reservations** can also be found in the western region.
The agriculture of the western region and especially of California is very important since the whole country is supplied with **temperate-zone fruits** from here. In the southern part of California **vegetables**, **tropical fruits** and **cotton** are grown. Here agriculture employs large numbers of Mexican seasonal workers. In the mountainous districts and dry basins **husbandry of horned cattle and sheep** is characteristic.

US agricultural zonality



What do the Roman numbers and A indicate in this map ?

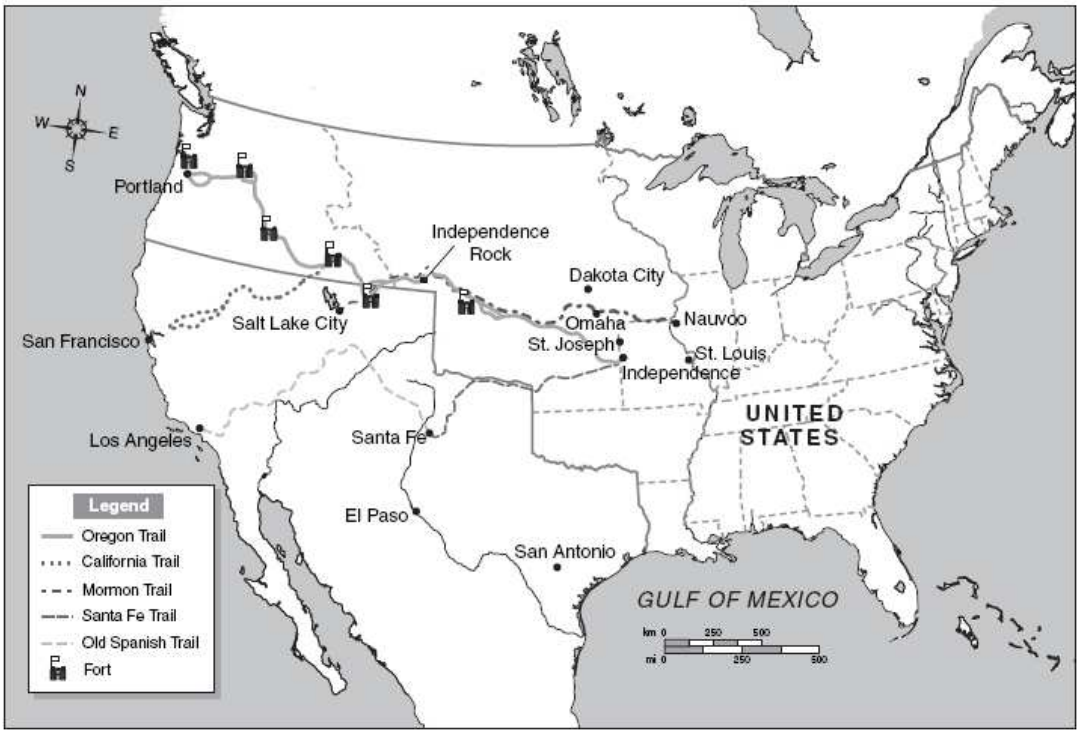
agricultural zones	crops
I. One time cotton belt	
II. Forest	
III. Fodder growing, dairy farming	
IV. Corn belt pig-breading	
V. Grazing lands, stock raising	
VI. Spring wheat	
A Tropical and subtropical plants	

Farms:

American agriculture employs scarcely 2 per cent of the population. Farms are highly mechanized and based on one or two crops (wheat, corn, tobacco, soybeans, peanut etc.) and rarely employ

paid labour (except California → Mexican workers). Today the average size of farms approached 200 hectares. One American farmer supplied 7 people in 1900 but 80 in 1980.

Trails West



Question : Why is the air transportation very important in the USA ?

Largest passenger airports of the world

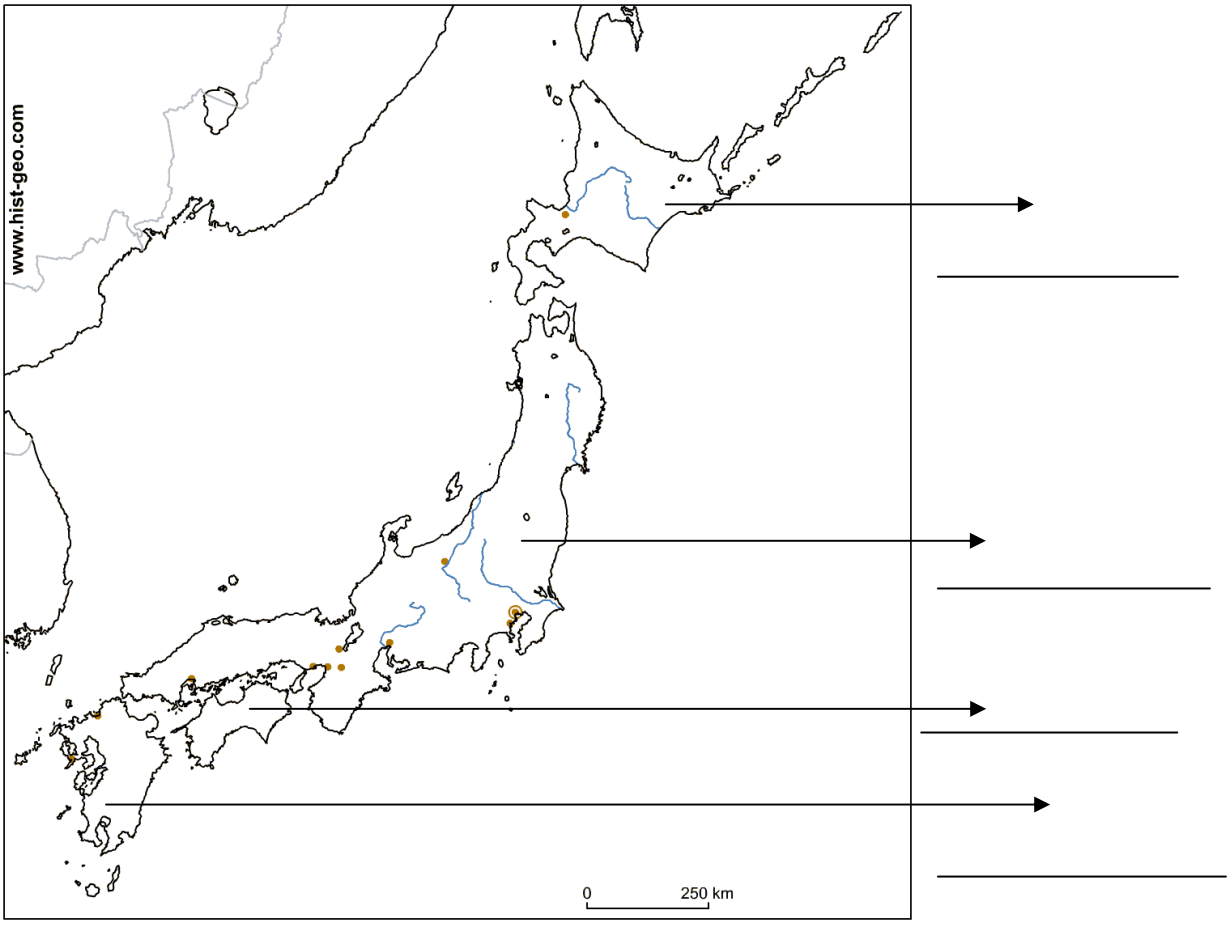
rank	city [airport code]	country	passengers 2005	passengers 2006
1.	Atlanta [ATL], Hartsfield-Jackson Atlanta IAP	**USA**	85,907,423	84,846,639
2.	Chicago [ORD], O'Hare IAP	**USA**	76,510,003	77,028,134
3.	London [LHR], Heathrow Airport	UK	67,915,403	67,530,197
4.	Tokyo [HND], Tokyo IAP (Haneda Airport)	Japan	63,282,219	65,810,672
5.	Los Angeles [LAX], Los Angeles IAP	**USA**	61,489,398	61,041,066
6.	Dallas [DFW], Dallas/Fort Worth IAP	**USA**	59,176,265	60,226,138
7.	Paris [CDG], Aéroport de Paris Charles de Gaulle	France	53,798,308	56,849,567
8.	Frankfurt [FRA], Frankfurt Airport	Germany	52,219,412	52,810,683
9.	Beijing [PEK], Beijing Capital IAP	China	41,004,008	48,654,770
10.	Denver [DEN], Denver IAP	**USA**	43,387,513	47,325,016
11.	Las Vegas [LAS], McCarran IAP	**USA**	43,989,982	46,193,329
12.	Amsterdam [AMS], Amsterdam Airport Schiphol	Neth.	44,163,098	46,065,719
13.	Madrid [MAD], Aeropuerto de Madrid-Barajas	Spain	41,940,059	45,501,168
14.	Hong Kong [HKG], Hong Kong IAP	China	40,269,847	43,857,908
15.	New York [JFK], John F. Kennedy IAP	**USA**	41,885,104	43,762,282

Japan

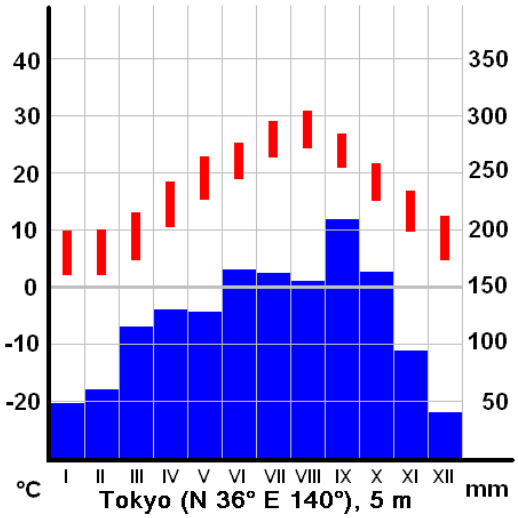
Area : 372 000 sq km
Population: 122 000 000 million
Population density : 329 per sq km
GDP: 33 500 dollar per capita
Physical Features: Japan is made up of four main islands: Honshu, Hokkaido, Shikoku and Kyushu.

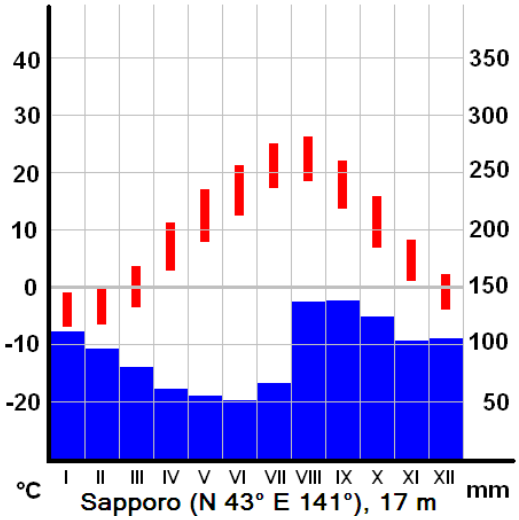
Climate:
Japan has a monsoon type of climate, and winds blow from the east in the summer and from the west in the winter. The sea of Japan separates the islands of Japan from the main land of Asia and has a moderating effect on the climate of Japan. Conditions are not as hot in summer or as cold in winter as those experienced in China or Korea. Rainfall is mainly during summer months in eastern parts but the north west has winter rain brought by winds blowing out from the continent across the sea of Japan. The mountains are very wet and receive heavy falls of rain, with snow in winter. Typhoons bring occasional heavy outbursts of rain in the late summer and early autumn. Hakodate in the north has January has average temperatures of -3 C and a July average of 19 C, with 120mm of rainfall, more in summer than winter. Tokyo has corresponding figures of 3 C, 25 C and 150mm of rain which mainly falls between April and October. Nagasaki on Kyushu has figures of 5 C, 26 C and about 190mm, including 30mm in the month of June.

Task 1.
Label in the map the four main islands: Hokkaido, Honshu, Kyushu and Shikoku.



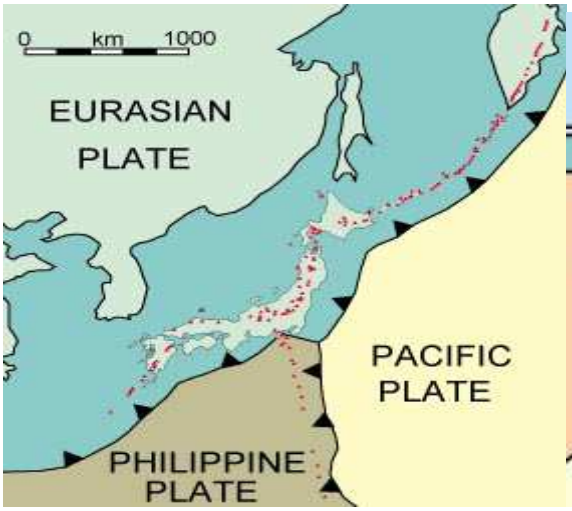
Annual Climatology: Tokyo and Sapporo Japan

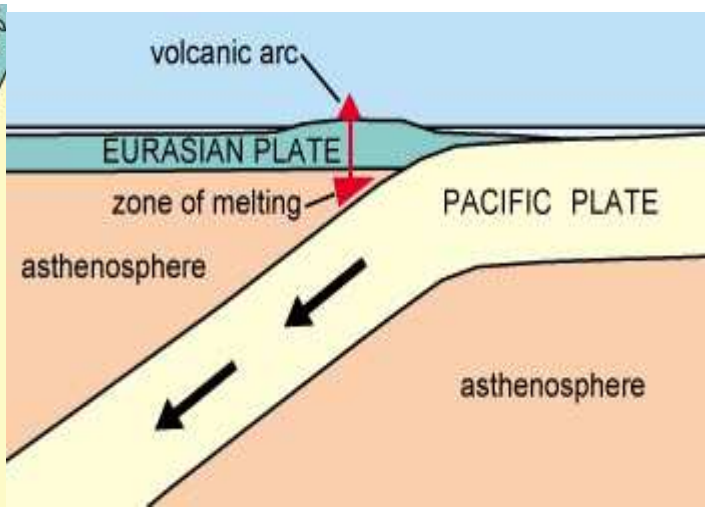




Task 2

How were the Japanese islands formed? Analyse the following diagram and revise 1st year material.





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Geography of Japan

Japan lies off the Pacific coast of East Asia. It is made up of four large islands and three thousand smaller ones. The four 'home' islands are Hokkaido, Honshu, Shikoku and Kyushu. The largest and most populated of them is Honshu.

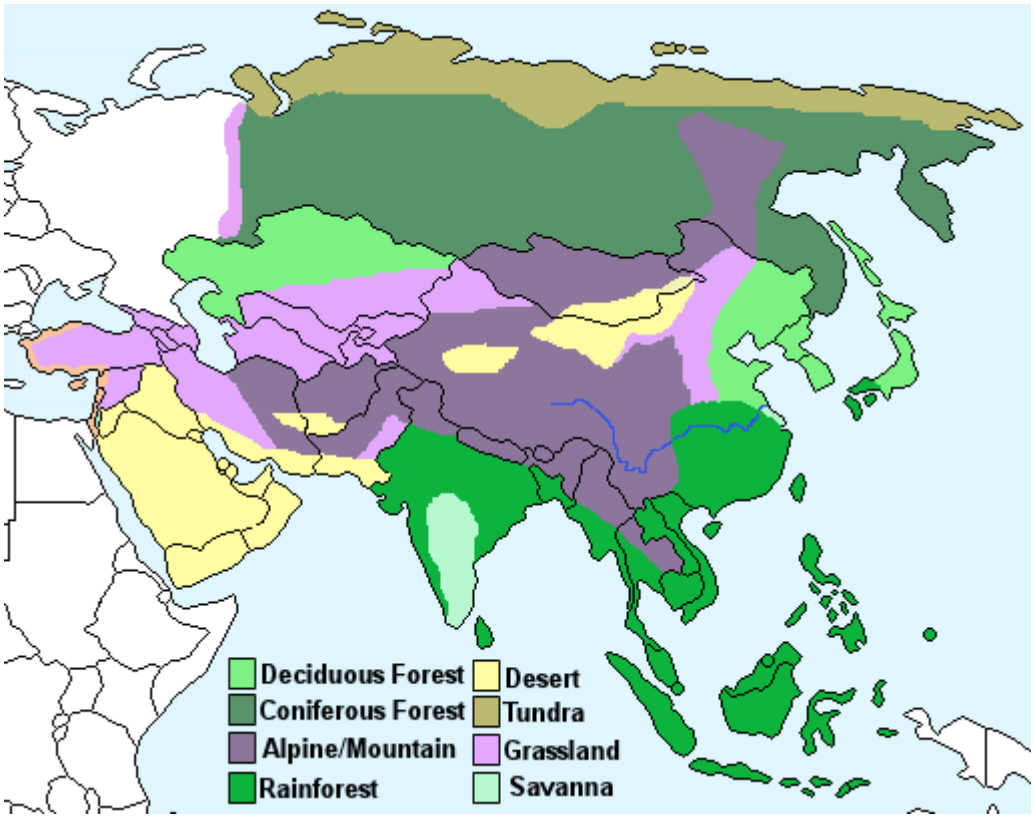
From among the Asian countries only Japan escaped from colonial or semi-colonial oppression. The feudal insular country rigidly cut herself off from the outside world. In the middle of the last century American battleships forced the opening of her harbours. After this the capitalist social system developed at breakneck speed and in a few decades Japan became a colonizing power.

In the first decades of industrialization the bulk of state revenue was used for building of factories and plants. The government took on a great role in the rapid organization of public education and professional training. At the end of World War II, Japan lost all her colonies and one-third of her industrial stock was destroyed. The country managed to get back on her feet again and she achieved rapid economic development. The island country with a population of 130 million, has become the second industrial and the third trading power in the world. This could happen because the **relatively low standard of living of Japanese people** made it possible to apply a considerable part of the national income to huge new industrial investments. For the transformation of the industrial structure they purchased the most up-to-date factory facilities and technical procedures, for which disciplined and well-trained labour force was necessary. The dynamic expansion of foreign trade solved the supply of raw materials for the industry and the sale of its products. Japan is an extremely densely populated country, and she is poor in energy sources and raw materials. Hydroelectric power plants built on the short and rapid rivers satisfy only a small part of the energy demand. The role of nuclear power plants is more significant. For the thermal stations, for the **metallurgy** and for the **chemical industry** immerse quantities of **oil**, **coal** and **ores** have to be imported. These are carried by the Japanese **merchant fleet** to the domestic harbours. As Japan is forced to rely on the development of foreign trade by her shortage of raw materials, the productivity of its industry is outstanding. The structure of Japanese industry adapts itself flexibly to the requirements of the world market. That is why, **machine production** and **chemical industry** develops rapidly. Japan's **ferrous metallurgy** and **shipbuilding** occupy first place in the world, and also her **car industry** outpaced all of its competitors in the last decade. The Japanese factories are pioneers in the **robotics** which is one of the industrial branches of the future. The most important centers of industry came into being in the southern part of the Island of Honshu, because the majority of the population is also concentrated here. The capital of Japan is **Tokyo**, the agglomeration of which is today the largest in the world with its 25 million people. From here the industrial axis run through **Nagoya** and **Osaka**.

Since Japan is mountainous, less than one-fifth of the land is suitable for agriculture. In addition, only about 15 percent of the Japanese people are farmers. The reason for Japanese agricultural success is an intensive method of cultivation. In the far south, where the growing season is long, two **rice** crops are grown each year. Almost half of Japan's farmland is used to grow ice. The warmer climate areas in the south also produce **tea**, **soybeans** and a variety of **fruits** and **vegetables**, while in northern Japan **wheat**, **barley** and **potatoes** are grown.

Climatic variation of Asia

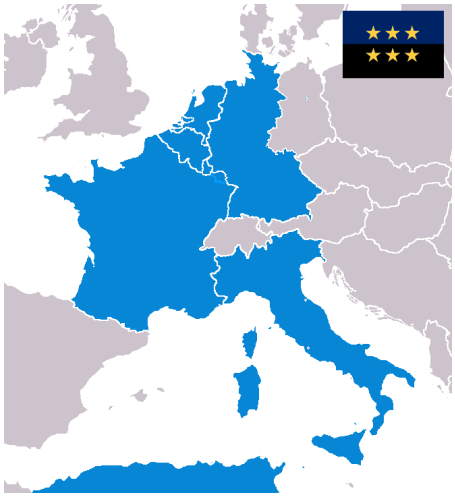
Regions	Climate	Vegetation	Agriculture
Hokkaido and North Honshu			
South Honshu and Kyushu and Shikoku			



Bioms in Asia

European Union

Brief history:



European Coal and Steel Community

EU before 2004 **EU after 2008**

The beginning:

The founding fathers of the Union were Jean Monnet and Robert Schuman. They proposed the **creation of a European economic alliance**. The first step towards unification came with the decision by six countries (Belgium, Germany, France, Italy, Luxembourg and the Nederlands) to pool their coal and steel reserves. The **European Coal and Steel Community** (ECSC) was founded in 1951 in Paris.

This was a political act to ensure that no one country had control of the essential raw materials needed for waging a war.

This economic cooperation rapidly spread to other areas. Just seven years later, in 1957, "the Six" gathered in Rome to sign the treaties establishing the **European Economic Community** (EEC) and the **European Atomic Energy Community** (Euratom). Their aim at this stage was to merge the economies of Europe.

Nineteen European countries have subsequently joined the original six founding members, in five successive waves:

- Denmark, Ireland and the United Kingdom in 1973;
- Greece in 1981;
- Spain and Portugal in 1986;
- Finland, Sweden and Austria in 1995;
- Cyprus, Estonia, **Hungary**, Latvia, Lithuania, Malta, Poland, Slovenia, Slovakia and the Czech Republic in 2004.
- Bulgaria and Romania became members in 2007

Several candidate countries (Croatia, Turkey and the former Yugoslav Republic of Macedonia) have already applied for membership of the European Union. The accession negotiations with Croatia and Turkey began in October 2005 but have not yet been concluded.

Community Institutions

1. European Commission, this is the civil service of the EU.
2. Council of Ministers from different countries make decisions on policy.
3. European Council. Meets twice a year to make decisions which fundamentally alter EU policy.
4. European Parliament directly elected body of 626 members.
5. The Court OF Justice. Is based in Luxembourg.

Disadvantages of EU (Eastern European countries)

1. Structural change as the economy adjusts to new trade patterns. E.g. many industries will not be able to compete with lower costs in the West

2. With free movement of labour and capital, the most skilled and mobile workers may go from East to West to take advantage of higher benefits and wages. This could weaken the economy.

3. Agriculture may need to be reformed because the EU will not want to give large subsidies to inefficient farmers in the East. This could cause problems in rural areas.

4. Difficulty of extending single currency as economies are not close enough

5. Loss of independence in many areas

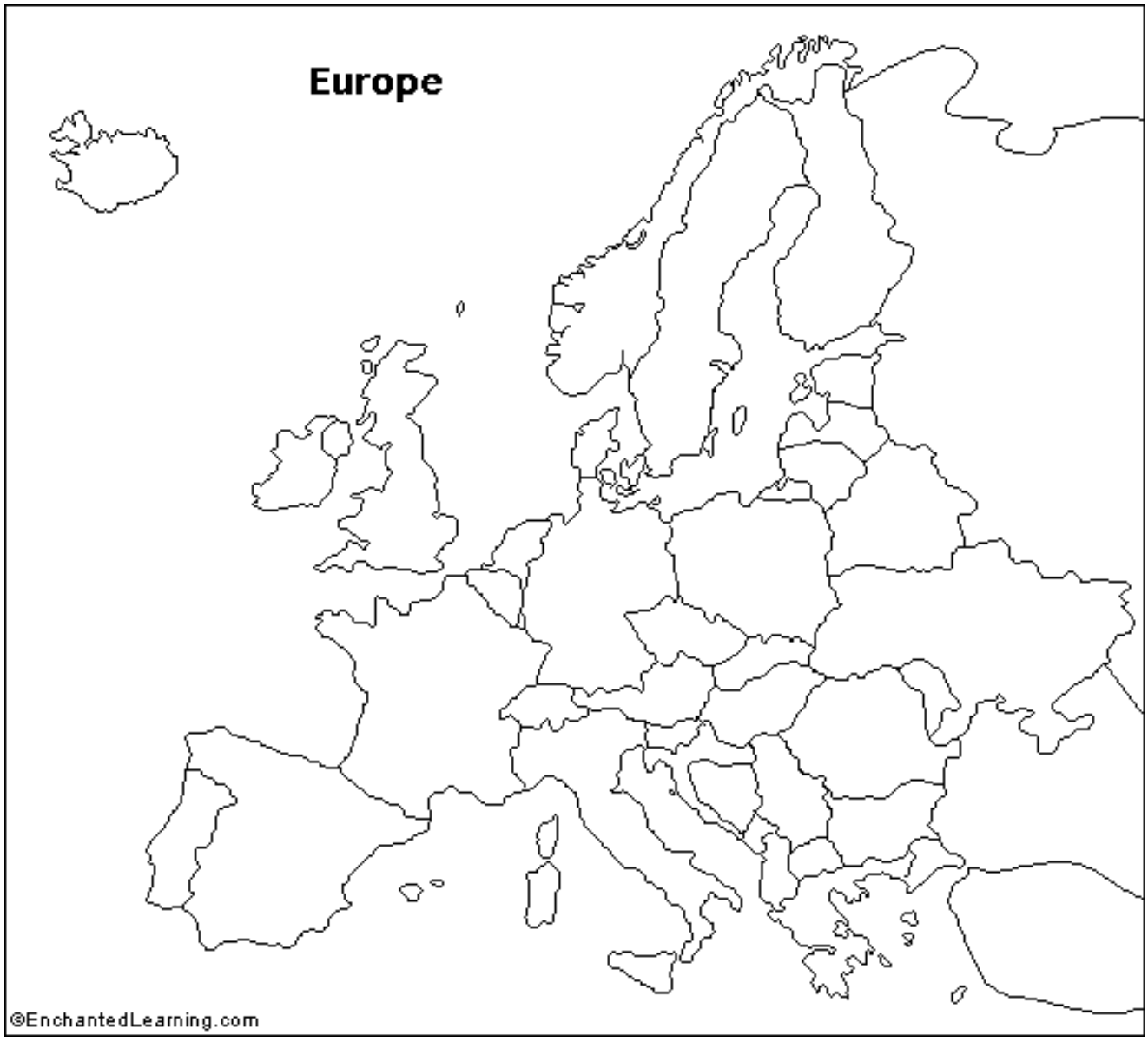
6. The legal and economic framework of the former command economies lag behind many EU countries however this is not an insurmountable problem.

From other points of view:

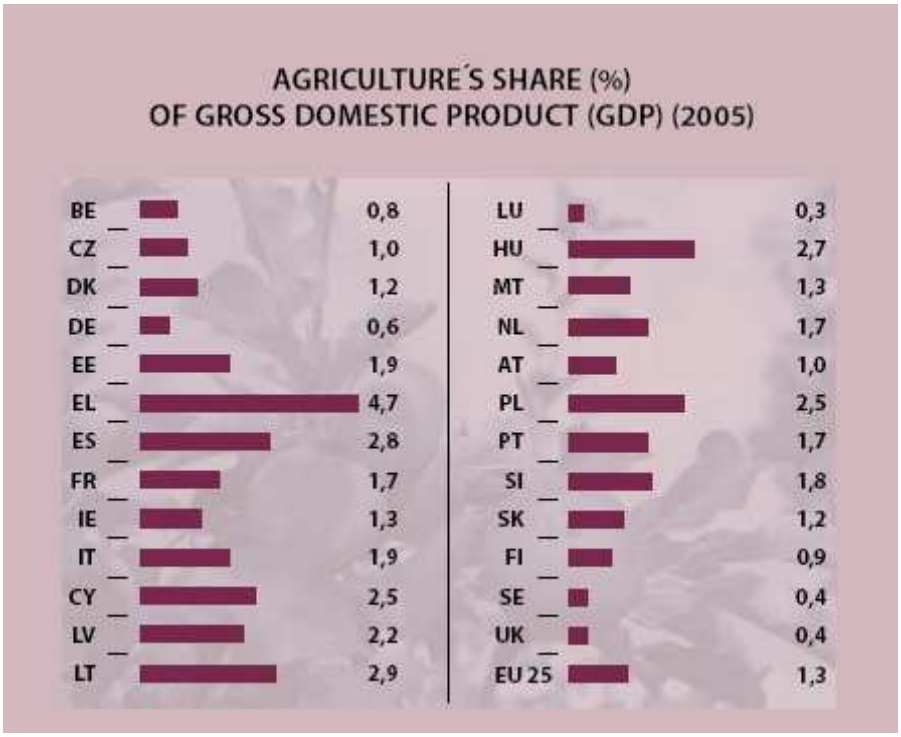
People who are in favour of the EU put forward the following advantages.

- Free trade (no tariffs or quotas) benefits industries as they have larger market to sell their goods to
- Greater cooperation between countries should prevent the outbreak of war between members
- Greater cultural understanding results from freedom to travel within EU.
- The EU has a greater influence on world events than the individual countries could have.
- European Union regional developement funding has improved conditions in poorer countries ad areas.

Task 1.
Identify the members of EU countries in the map. Name their capitals, too.



Common Agricultural Policy (CAP) : policy of the European Union which, among other things, supports agriculture through the payment of subsidies for growing crops. The aim of the common agricultural policy (CAP) is to provide farmers with a reasonable standard of living, consumers with quality food at fair prices and to preserve rural heritage. The policy has evolved to meet society's changing needs, so that food safety, preservation of the environment, value for money and agriculture as a source of crops to convert to fuel have acquired steadily growing importance.



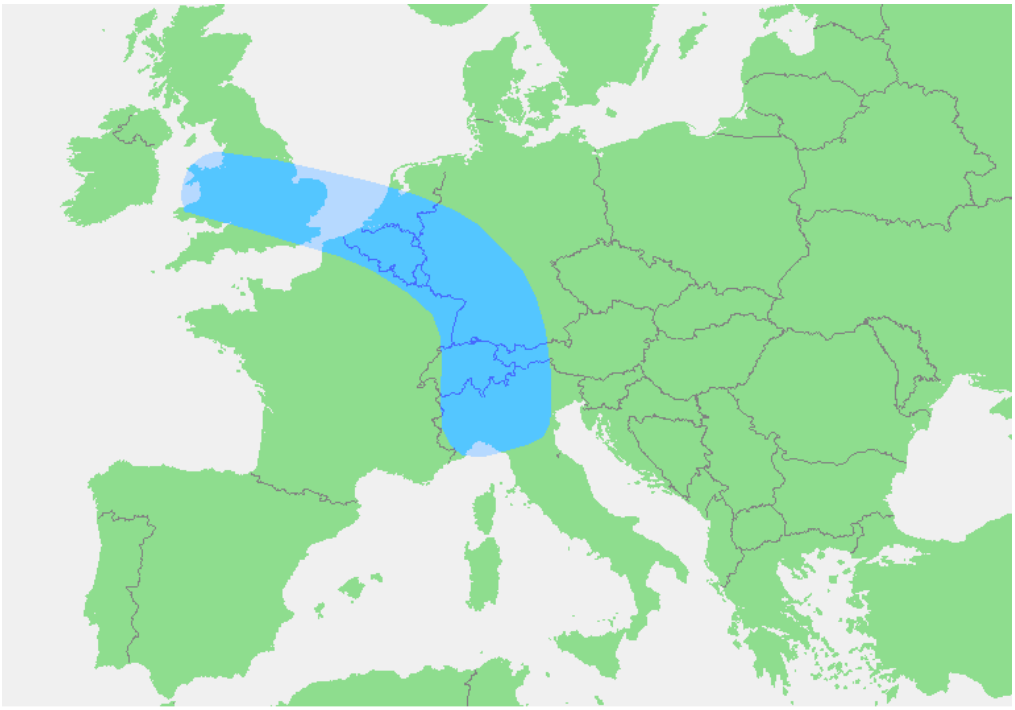
The EU's role in agriculture has always been to help in:

- **Ensuring a stable supply of affordable and safe food for its population;**
- **Providing a reasonable standard of living for EU farmers, while allowing the agriculture sector to modernise and develop;**
- **Enabling that farming could continue in all regions of the EU.**

As the CAP has developed, in line with the requirements of EU citizens, the following factors take on a greater importance:

- **Improving the quality of Europe's food;**
- **Guaranteeing food safety;**
- **Looking after the well-being of rural society;**
- **Ensuring that the environment is protected for future generations;**
- **Providing better animal health and welfare conditions;**
- **Doing all this at minimal cost to the EU budget (which is funded mainly by taxpayers, i.e. ordinary citizens).**

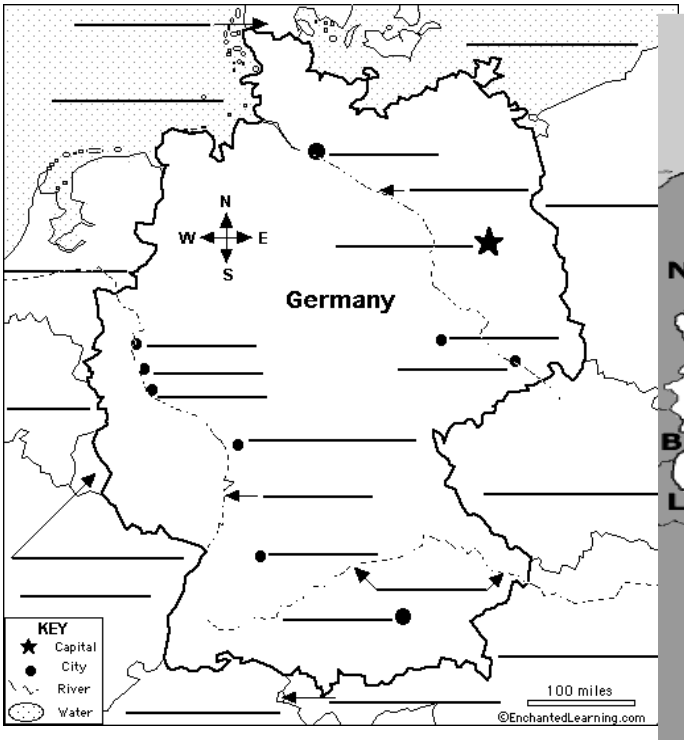
The **Blue Banana** (also known as the **Hot Banana, European Megalopolis** or **European Backbone**) is a discontinuous corridor of urbanisation in Western Europe. It stretches approximately from North West England in the north to Milan in the south. The curvature of this corridor (hence the "banana" in the name) takes in cities such as Brussels, Amsterdam, Cologne, Frankfurt, London, Manchester, Basel, Turin, Milan and Zurich, and covers one of the world's highest concentrations of people, money, and industry. The concept was developed in 1989 by RECLUS, a group of French geographers managed by Roger Brunet. **Around 90 million people live within the Blue Banana.**

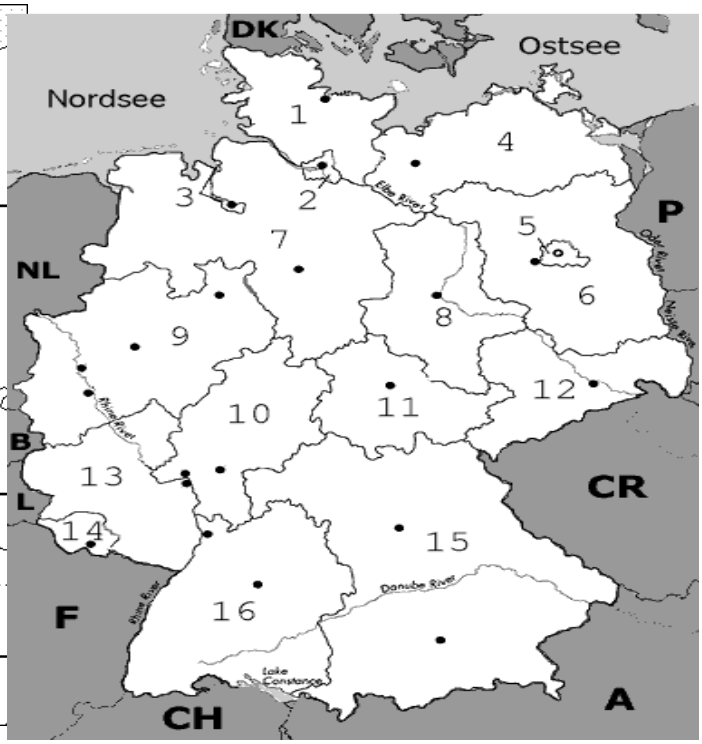


The blue banana

Germany 

Area: 357 000 sq km
Population: 82. 369 500 million
Population density: 231 people per sq km
GDP per capita: 34.200 dollar per capita
Task 1
Label the neighbours, the main towns and rivers of Germany. Use your atlas. Name the German Bundeslaender, too





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Germany

Germany is divided into 15 federal states, each of these has a local government with a wide range of competence:

Federal states with centers:
Berlin is the capital.

1. Bremen
2. Hamburg
3. Saarland: Saarbrücken
4. Schleswigholstein: Kiel
5. Mecklenburg-Vorpommern: Schwerin
6. Niedersachsen: Hannover
7. Brandenburg: Potsdam
8. Sachsenanhalt: Magdeburg
9. Northein Westfalen: Düsseldorf
10. Hessen: Wiesbaden
11. Thuringen: Erfurt
12. Rheinlandplatz: Mainz
13. Baden-Württenburg: Stuttgart
14. Bayern: Munich
15. Sachsen

History:

After the IInd World War Germany is divided into 4 zones of occupation. FRG (Federal Republic of Germany) was brought into being from the American, British and the French zones in 1949, and GDR (German Democratic Republic) was formed out of the Soviet zone. Germany was also divided: the eastern part of Berlin became the capital of GDR and Bonn became the capital of FRG.

Landscape:

The German Plain occupies the northern one-third of Germany. In the last million of the Earth's history ice covered the German Plain several times. The slowly moving ice brought moraine material from Scandinavia.

The Mecklenburg Lakeland:
It bears marks of the last great glaciations. Agriculture has just adjusted itself to the soil quality and climate. Rough and succulent fodders, barley, rye and potatoes are harvested from the plough-lands in the northwestern part of the German Plain. Farms are dealing mainly with milk production, horned cattle- and pig-breeding. At the southern edge of the plain (loess region) wheat and sugar beet growing are of high level.

The German Middle Ranges:
Relicts of the Variscan mountain system developed at the end of Paleozoic era, lie in the central part of the country.

The Upper Rhine Graben:
Is 20-30 km wide and 300 km long. This region has the sunniest and warmest climate in the country, where large orchast and vegetable gardens can be found. The vineyards penetrate high northward in the valleys of the Rhine and Mosel.

Swabian Bavarian Basin:
Is closed at the southern border of the country by the limestone chains of the Alps. The foothills of the Alps are remarkable for their meadow and pasture farming and cattle breeding. The internal parts of the drier climate in the basin are occupied by ploughlands, mainly wheat, sugar, beet and malting barley are grown. The largest growing area of hop which is used in beer growing lies north of Munich. The West German agriculture is based on family farms of 10-20 hectares.

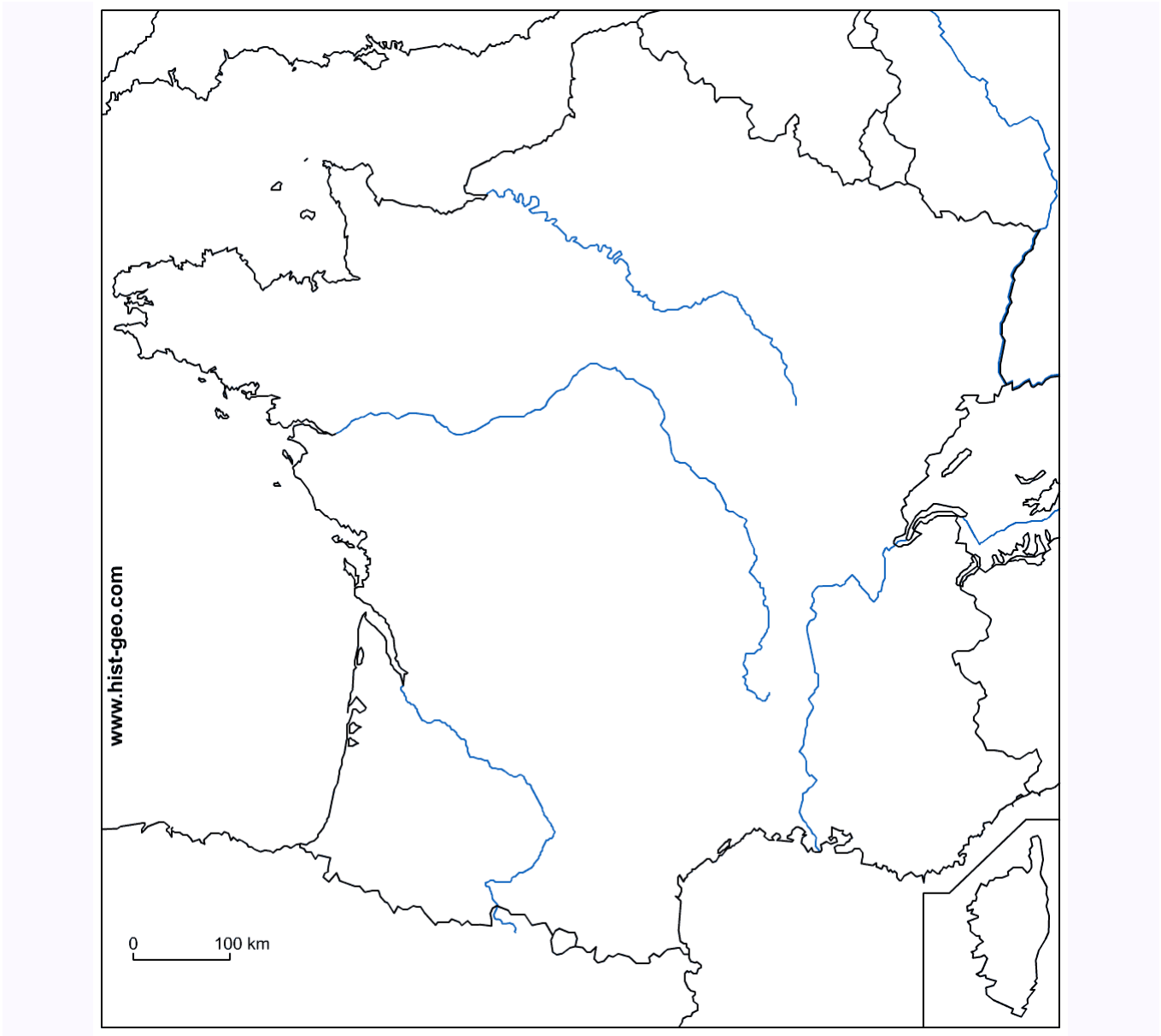
Land regions	**Cities**	**Industry**
Seaside	Hamburg	It's industry processes the non-ferrous ores, iron ore, crude oil, arriving from over the sea. It's shipbuilding, aircraft production and electrotechnical industry are also significant.
	Bremen	It's able to accept the modern ships no longer; this task has been taken over by its outports.
	Lübeck, Rostock	They are important ports.
German Plain	Berlin	In the scarce network of cities in the German Plain Berlin is the most outstanding one, and also the largest metropolis in Central Europe.
	Hannover	Many-sided city that stands preeminent among the numerous smaller and larger industrial cities.
Rhine Ruhr urban agglomeration	Cologne (Köln)	Köln is the city of German Ford car and chemical factories.
	Mannheim	Famous for its many-sided machine production.
	Ludwigshafen	Makes a home for the town-sized industrial plant of the BASF Chemical Works.
	Frankfurt	Frankfurt is the centre of urban agglomeration and famous for its international fairs, the German bank system, the commercial and financial life.

German middle ranges	Leipzig	Leipzig rests upon its trade and international fairs, and its industry embraces almost all branches.
	Dresden	Dresden has precision mechanics, electrotechnics and electronics.
	Chemnitz	Famous for its textile industry and for its machine production.
	Halle	In the neighbourhood of Halle there are rock and potassium salt deposits in the Harz Mountains and the chemical factories are based on brown coal and the oil arriving on pipeline.

Bavaria and Baden Württemberg	Stuttgart Munich	The Daimler-Benz and the Bosh, an electrotechnical enterprise of international reputation hallmark its name. Munich is rich in historical monuments and has a lively cultural and scientific life (car: BMW, electrotechnics, telecommunication: Siemens, the armament industry and aircraft production: Messerschmitt)

France 

Area: 643 427 sqkm
Population: 65 million
Population density: 107 people per sq km
GDP: 33 200 dollar per capita



Task 1.
Label the different landregions of France

- **Coastal region (Artois, Normandy and Bretagne)**
- **Chain mountains: Pyrenees and Alps**
- **Fault block mountains: French midmountains, Ardennek, Vogezek**
- **Parisian basin il de France**

Rivers: Rhone, Seine, Garonne, Loire

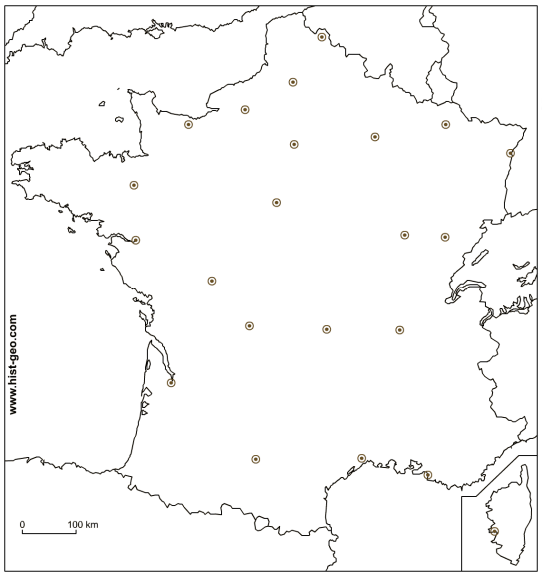
Climate:

- mediterranean
- oceanic (marine west coast)
- humid continental
- highland

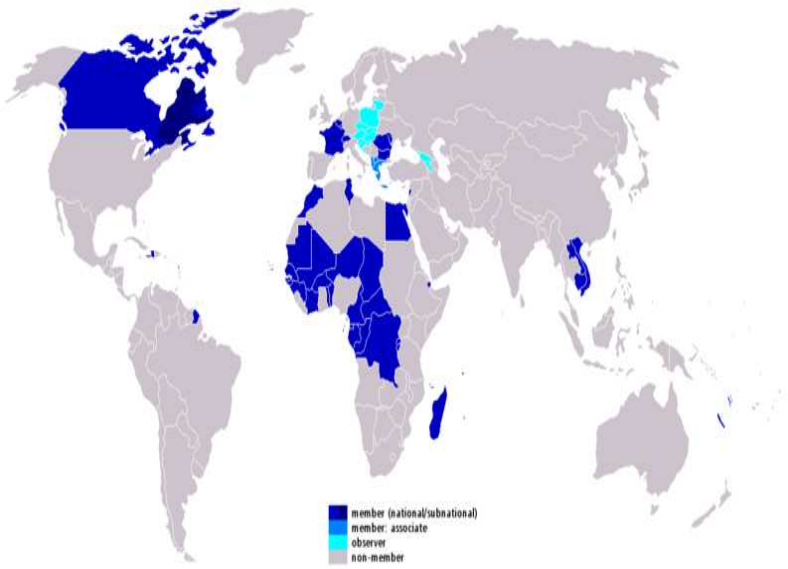
Economy:

- The country lost its large colony → Africa francophone countries such as Algeria, Mali, Chad, Burkina Faso etc.
- Lots of immigrants from the former colonies Morocco, Tunisia Algeria
- Mining is not significant
- Ferrous metallurgy is based on import iron ore.
- Car industry : Renault, Citroen, Peugeot
- Airplane industry : Mirage, Airbus **Paris and Toulouse**
- Chemical industry : oil refinery → **Marseilles**
- Textile industry: fashion is well known all over the world → **Paris and Lyon**

Label the towns



Francophone countries



Agriculture:

The largest agricultural producer of Western Europe.

- cattle herds → Bretagne
- wheat → Parisian Basin
- wine and grape → Rhone river valley
- Mediterranean region → vegetable, orange, lemon,

Great Britain or United Kingdom 

Area: 244 820 sq km
Population: 60 943 000 people
Population density: 246 people per sq km
GDP per capita: 35 100 dollar per capita

The United Kingdom consists of four countries.

Capital: London
UK:
consists of 4 countries (England, Scotland, Wales, Northern Ireland)

Introduction:

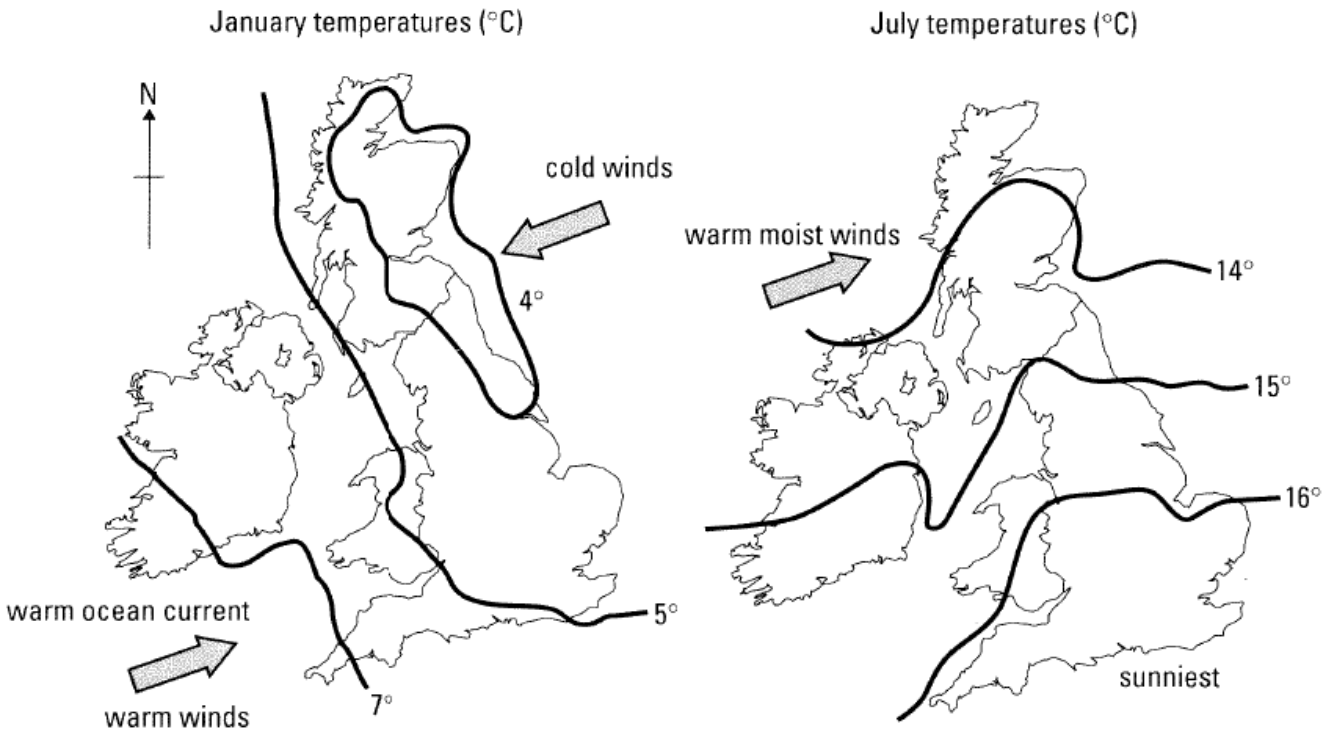
Great Britain, the dominant industrial and maritime power of the 19th century, played a leading role in developing parliamentary democracy and in advancing literature and science. At its zenith, the British Empire stretched over one-fourth of the earth's surface. The first half of the 20th century saw the UK's strength seriously depleted in two World Wars. The second half witnessed the dismantling of the Empire and the UK rebuilding itself into a modern and prosperous European nation. As one of five permanent members of the UN Security Council, a founding member of NATO, and of the Commonwealth, the UK pursues a global approach to foreign policy; it currently is weighing the degree of its integration with continental Europe. A member of the EU, it chose to remain outside the European Monetary Union for the time being. Constitutional reform is also a significant issue in the UK. The Scottish Parliament, the National Assembly for Wales, and the Northern Ireland Assembly were established in 1999, but the latter is suspended due to bickering over the peace process.

Climate:

- Maritime climate
- Atlantic ocean – significant effect due to the Gulf current (warm current)
- Prevailing southwesterly winds bring moisture and moderate temperatures

- Cool winters, mild summers
- Western coast is warmer than the Eastern
- Southern regions are warmer than Northern
- frost is rare (snow falls only in the Northern territories)
- Winds blowing off the Atlantic Ocean bring clouds and large amount of precipitation
- Average annual precipitation: more than 1000 mm
- It is said that UK has rather weather than climate

CLIMATE OF THE BRITISH ISLES



Task 1. Compare the January and July temperatures. What is the climate like in Britain ?

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Economy:

The UK, a leading trading power and financial center, is one of the quartet of trillion dollar economies of Western Europe. Over the past two decades the government has greatly reduced public ownership and contained the growth of social welfare programs. Agriculture is intensive, highly mechanized, and efficient by European standards, producing about 60% of food needs with only 1% of the labor force. The UK has large coal, natural gas, and oil reserves.

Agriculture:

- Green England and yellow England
- Farming was significant but by now it has reached an all time economic low.
- Less than 1% of UK's GNP is earned by farming and fewer than 1% of the country's workforce are farmers.
- Increased use of machinery→fewer workers are needed→many people left rural areas
- Farming has faced tough competition from abroad (e.g.: food income)
- Sheep and cattle farming are characteristic

Industry:

Industrial regions in the UK:

1. Scotland:
- Most important cities: Glasgow, Edinburgh, Aberdeen
- Mining
- Crude oil and natural gas channels
- Hydroelectric power plants
- Aluminum furnace

2. Northeastern England:
- Mining and metallurgy of carbon
- Sheffield: machinery
- Newcastle: metallurgy, chemical industry
- Leeds: clothing industry

3. Northwestern England:
- Liverpool, Manchester: leading importer cities

4. Midlands
- ”Black Country”
- Hard coal and iron ore deposits
- Birmingham is the centre: metal works (machine tool industry, car, aeroplanes, army needs industry)
- Coventry: vehicle industry
- Stoke-on-Trent: ceramic and porcelain industry

5. South Wales
- Hydroelectric power plants→metallurgy
- Cardiff, Swansea: refining crude oil

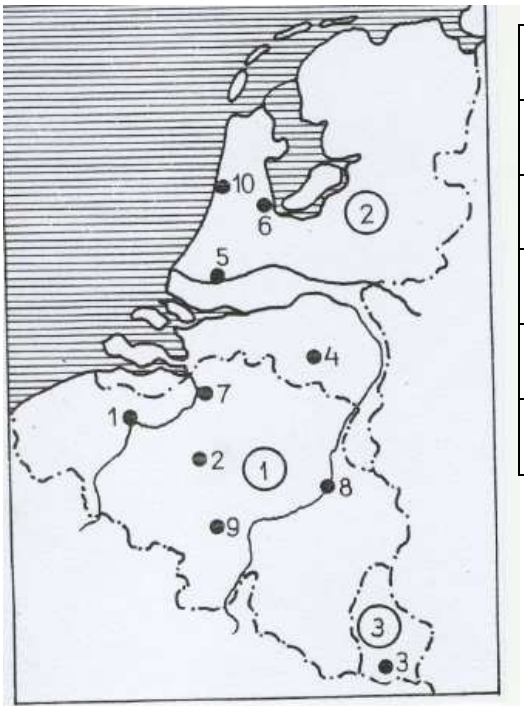
6. South and Southeastern England:
- Trading to Europe
- Oxford, Cambridge: famous universities
- London: commercional city, centre of international trade and monatery

Benelux countries

Belgium Holland Luxembourg

country	area	population	population density	GDP $ per capita
Belgium	**30 528 sq. km**	**10 493 000**	**339 people per sq. km**	**36200**
The Netherlands	**41 526 sq. km**	**16 645 000**	**395 people per sq. km**	**39 000**
Luxembourg	**2 586 sq. km**	**486 000**	**181 people per sq. km**	**79 400**

Task 1. Identify the towns in The Netherlands, Belgium and Luxembourg.



1. Belgium	2. The Netherlands	3. Luxembourg
1.	4.	3.
2.	5.	
7.	6.	
8.	10.	
9.		

The Netherlands

Land below sea level. Netherland means „low lands". Today one-third lies below sea level. These low lying lands were once covered by lakes, swamps, or the North sea. These lowlands are called polders. Originally these lands were reclaimed for farmland. Today the polders are also sites of cities, factories even airports. There are three landform regions in the Netherlands. Along the north sea coast are high dunes which form barriers to the sea. Grasses are planted to stabilize this narrow wall of sand from storm waves. The chain of sandy offshore islands is a continuation of sand dune zone. Inland from the narrow dune region are the low coastal plain and the polders. They constitute the largest region covering about two-third of the nation. It is crossed by number of major rivers, including the Rhine. Finally in the very southern interior of the country, there is a higher area of hills covered with forest and pasture.

Randstad (Patkóváros)

The **Randstad** (Edge City, i.e. a city at the edge of a circle, with empty space in the centre) is a conurbation in the Netherlands. It consists of the four largest Dutch cities (Amsterdam, Rotterdam, The Hague and Utrecht), and the surrounding areas. With its 7.5 million inhabitants (almost half of the population of the Netherlands; when other conurbations connected to this area are also taken into consideration, it would have a population a little over 10 million, almost 2/3 of the entire Dutch population) it is one of the largest conurbations in Europe.

The cities of the Randstad more or less form a crescent or chain. This shape has given the Randstad its name (*rand* means rim or edge and *stad* means city or town).

Agriculture

The country is known for its agriculture. Dairy products are major exports. Main crops include potatoes, sugarbeets, and flowers (tulips).

Industry

The major industries are chemicals, petroleum, and metals. In fact one of the world's largest oil refineries and the headquarters for major world oil company are located in the Netherlands. Also important are food processing, especially the processing of dairy products and chocolate and breweries.
One of the world's largest natural gas fields is in the northern eastern Netherlands.

Belgium

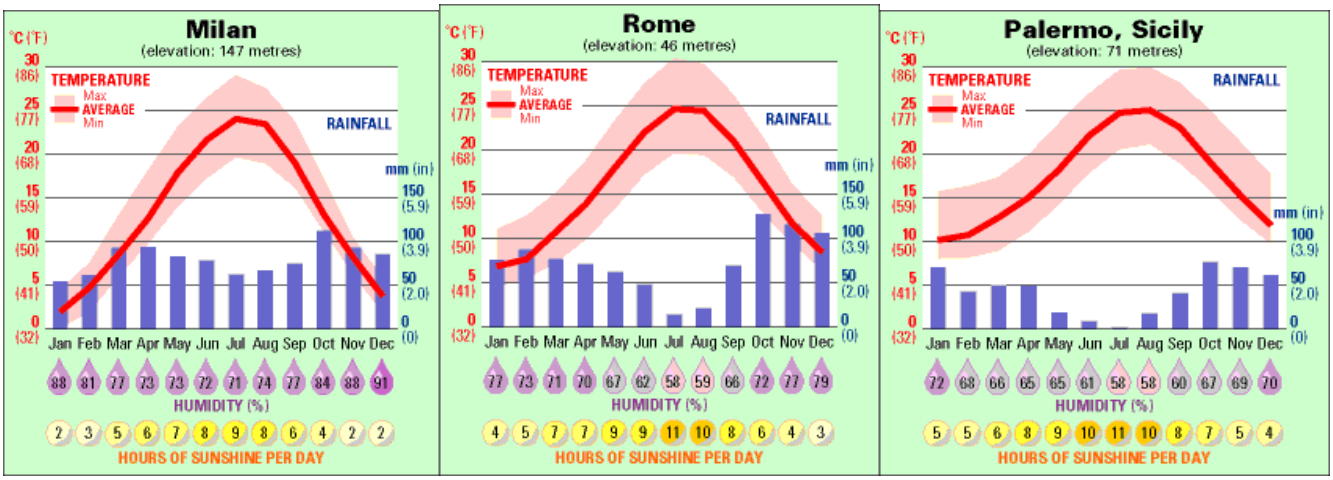
Belgium is located to the south of the Netherlands. It can be divided into three landform regions: coastal region, a central plain region, and the Ardennes Plateau. Belgium's coastal region is a plain similar to that of the Netherlands. The central plain between Schelde and Meuse rivers contains Belgium's most fertile and productive soils. In the south is the Ardennes where forested hills reach to 696 meters.
The northern coastal region is known Flanders and contains 60% of the country's population. Flamish is closely related to Dutch. It is Belgium's most prosperous region. In the southern part of the country the French speaking people called Walloons, make up the other 40 % of the population. This region is known Wallonia.
Politically Belgium is constitutional monarchy united by a king. (1830)

Luxembourg

Luxembourg's iron and steel industry is located near in the south near iron-ore mines.
Many people are trilingual: German, French and Luxembourgian (local language)

Italy

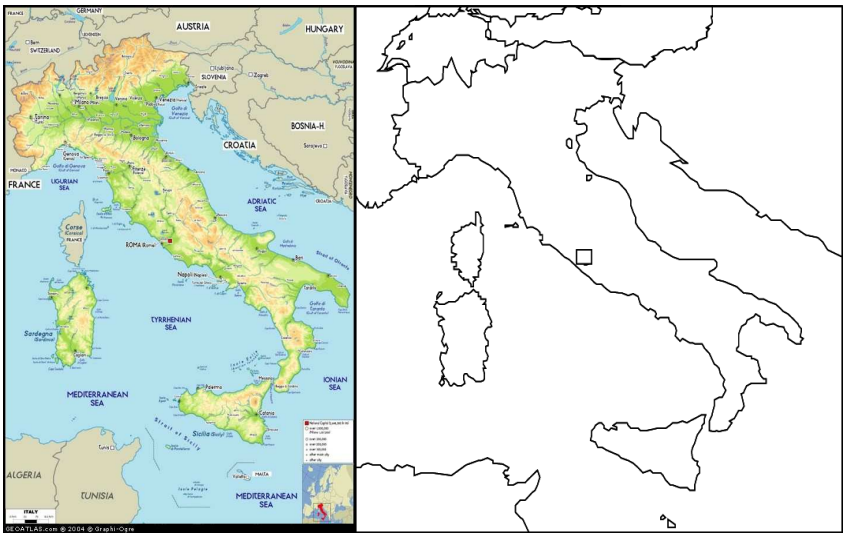
Area: 301 230 sq km
Population: 58 145 000 million
Population density: 192 people per sq. km
GDP per capita: 30 400 dollar per capita
Climate: north: continental and highland in the Alps, south: mediterranean



Climate varies with elevation and region. Generally, however, Italy is included between the annual isotherms of 11°C and 19°C . The coldest period occurs in December and January, the hottest in July and August. In the Po Plain, the average annual temperature is about 13°C ; in Sicily, about 18°C ; and in the coastal lowlands, about 14°C . The climate of the Po Valley and the Alps is characterized by cold winters, warm summers, and considerable rain, falling mostly in spring and autumn, with snow accumulating heavily in the mountains. The climate of the peninsula and of the islands is Mediterranean, with cool, rainy winters and hot, dry summers. Mean annual rainfall varies from about 50 cm per year, on the southeast coast and in Sicily and Sardinia, to over 200 cm , in the Alps and on some westerly slopes of the Apennines. Frosts are rare in the sheltered western coastal areas, but severe winters are common in the Apennine and Alpine uplands.

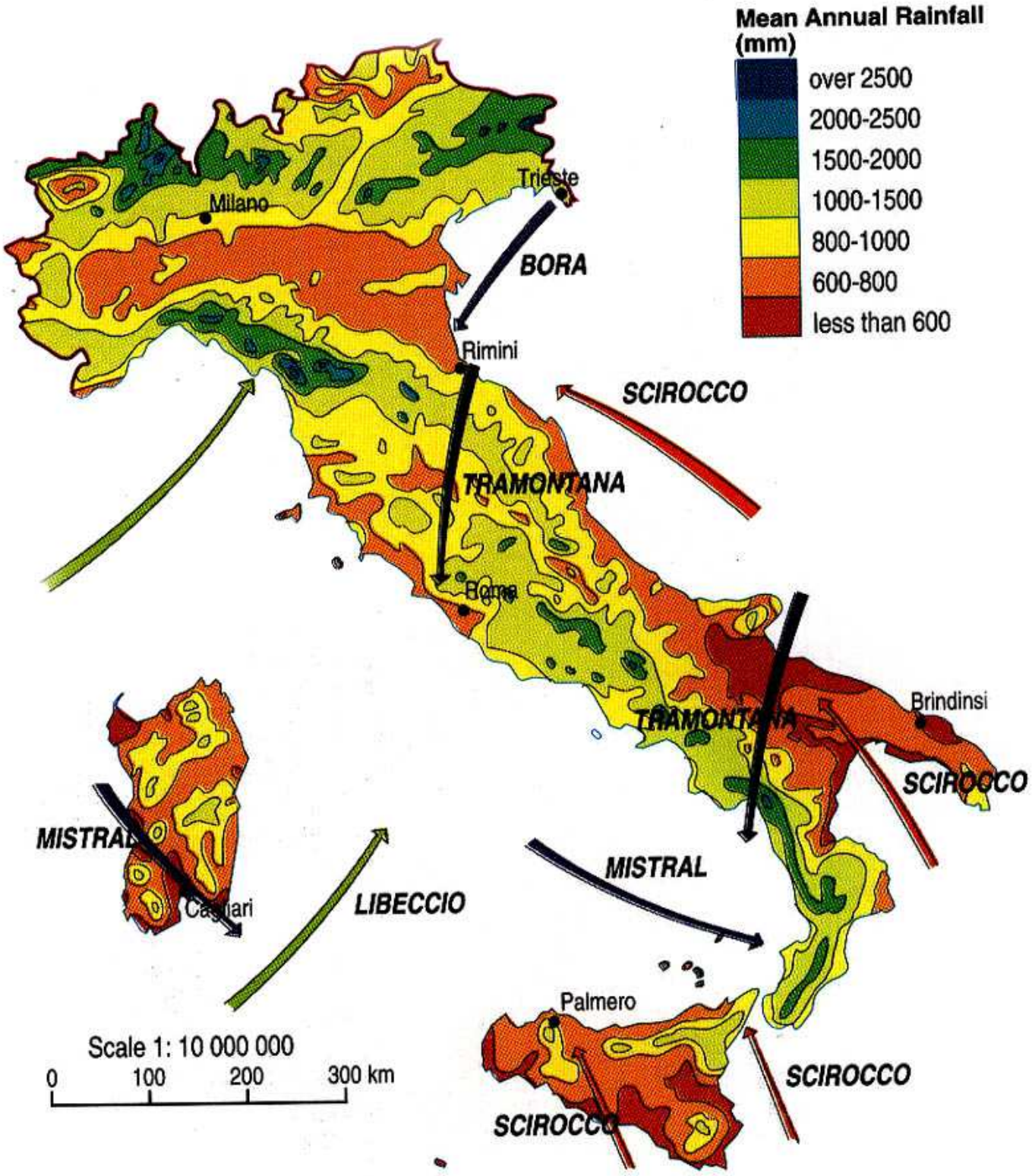
Task 1.

Identify the different parts of Italy and put in the blank map.



Task 2.

Analyse the map below



The North and South of Italy – Worlds apart?

The North

The industrial triangle is located at the western end of Italy's largest area of lowland, the North Italian Plain. The region is the richest area in Italy. The cities of Milan, Turin and Genoa are at the three corners of the triangle.

In the last 50 years industrial growth has been very rapid. Italy is now one of the seven richest nations in the world and the industrial triangle is has become the wealthiest region in the whole country.

Why is the industrial triangle the richest region in Italy?

Italy is located near to the main European markets of France, Germany and the UK. Goods that have been produced can be easily exported and sold in these countries. Also, road and rail tunnels provide good links (communications) through the Alps to the European markets.

There is plenty of flat land available for large factories. The large population in the area (10 million) provides a large local labour force and market (to sell goods to).

The flat land is also ideal for the large-scale farms. This also provides many jobs. The good weather also provides ideal conditions for farming.

Export (moving goods to other countries to sell) markets are available through port of Genoa and several airports.

Although this is the richest part of Italy with most of the better-paid and skilled jobs, it still has problems. As more and more land is being built upon there is less for farming and recreation.

The South

The south of Italy is the poorest region in Italy. One area has the lowest standard of living in the EC. Most people still live in hilltop villages in rural areas. The few towns, which are on the coast, have little industry to attract people. Many people from the south migrate to the North, or to other European countries or even North America or Australia to find work.

Farming

Agriculture is still the main type of land use. Most farms are small in size. Farming is at a subsistence level which mean farmers grow just enough food for their own needs and have very little left over to sell. Because farmers make very little money they cannot afford fertilizer.

Much of the land in the south is high and steep. Therefore it is difficult to farm. Also, most rain falls in the winter. In summer there is usually a drought.

The farmers are far away from European markets. Therefore they have no one to sell their produce to.

There are few local farming collages, which means that farming methods are still traditional. Animals are often used instead of machinery.

Industry

The South of Italy has never been important industrial region. It is isolated from the rest of Europe by poor transport links. The area has very few natural resources, little money and limited skills. The high birth rate means there are too many people looking for the few available jobs.

Despite these problems the South is slowly becoming better off. Marshy areas have been drained and trees planted. New dams, irrigation schemes and motorways have been built. The hot, dry summers and the sandy beaches are attracting more tourists. Some of the earlier migrants to the North have returned with the money which they earned there. Even so, the gap between the North and the South of Italy continues to grow.

Task 3.
Why is the North of Italy significantly richer than the South of Italy? Is this the result of their

geographical locations?

The North of Italy is significantly richer than the South of Italy. The reasons for these differences are both human and physical.

The North of Italy is rich because of a number of human reasons. For instance, …….

(Insert the text which you have underlined for the **North of Italy**)

There are also a number of physical factors explaining the North of Italy's wealth. For example…….

(Insert the text which you have put in bold for the **North of Italy**)

The South of Italy is poor because of a number of human reasons. For instance, …….

(Insert the text which you have underlined for the **South of Italy**)

There are also a number of physical factors explaining the South of Italy's lack of economic success. For example…….

(Insert the text which you have put in bold for the **South of Italy**)

The location of the North and South of Italy plays an important role in the differences in wealth. For example, the South is poor because……

(Insert the text which you have put in italics for the **South of Italy**)

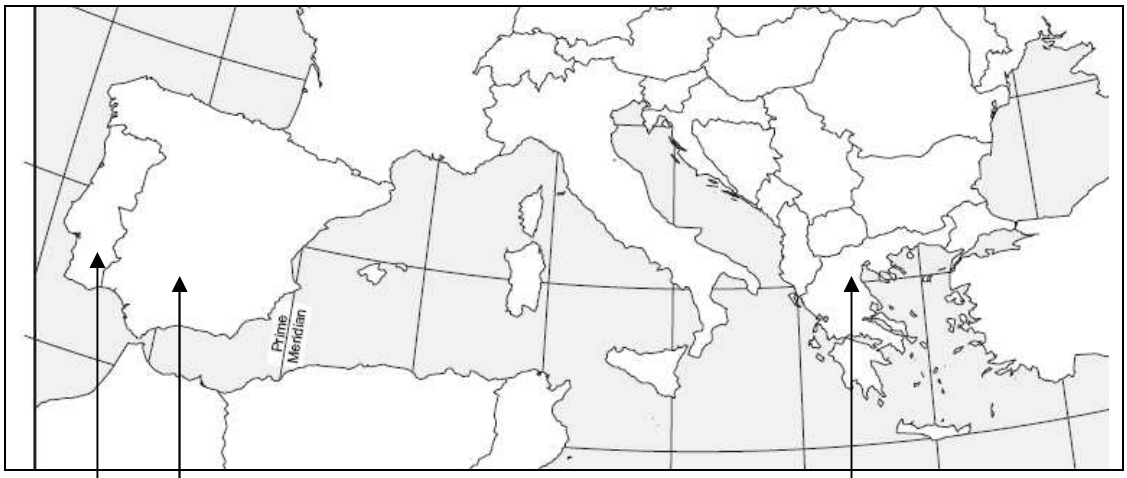
The North, on the other hand is rich because……

(Insert the text which you have put in italics for the **North of Italy**)

So, in conclusion, we can say that the North of Italy is richer than the South of Italy for a range of human and physical factors. Relief (shape of the land), climate, and distance to and from markets, all factors of location, explain the differences very well.

Spain Portugal and Greece

Country	Area	Population million	Population density	GDP per capita
Spain	504782 sqkm	40 491 000	91 people per sq km	33600 dollar
Portugal	92391 sqkm	10 671 000	114 people per sq km	21800 dollar
Greece	131940 sqkm	10 722 000	84 people per sq km	30600 dollar



……

……..

……..

Short description of relief agriculture and economy

Country	Relief	Agriculture	Industry
Spain (Madrid)	Spain covers about four-fifth of the Iberian peninsula. The bay of Biscay's forms the north coast of Spain. France borders the country northeast. Two small enclaves on the coast of North Africa are also claimed by Spain.(Ceuta and Meilla) the interior of Spain is covered by a high plateau called Meseta. There are three climate types: maritime, mediterranean and	Much of the country is too rugged and dry to be good farmland. Spain is not self-sufficient in food production. Spain is a world leader in olive, citrus-fruit, and wine export. There are three agricultural regions. ● In the maritime northwest the major agricultural activities are the raising of dairy and beef cattle as well as growing corn, potatoes, beans and fruit.	Spain is rich some minerals but lacks adequate amounts of coal and oil. The country is a world major supplier of mercury and also has good supplies of uranium, copper, zinc, lead and tungsten. Hydroelectric poer has been developed, its rate is lower during dry years. As western

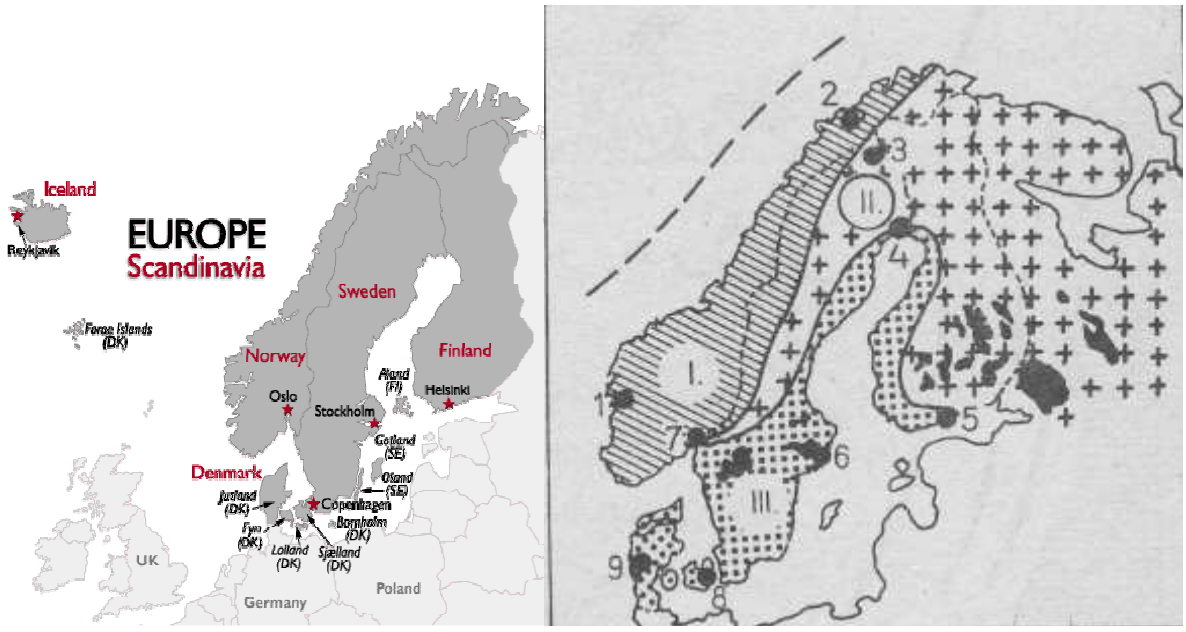
	dry continental steppe. The Meseta of central Spain has dry continental steppe climate. Summers are very hot winters are very cold.	● The Mediterranean region olives, sunflowers, almonds, citrus fruit, grapes vegetables are the most important products. ● The high and dry Meseta is not as productive, although grains, olives, and grapes can be grown where irrigation and good soils are found.	Europe's leading tourist destination, Spain has one of the world's largest tourist industries. This expanding tourist industry has led to construction boom along the Mediterranean coast.
Portugal (Lisbon)	Portugal occupies the western portion of the Iberian peninsula. Portugal also includes the Azores and Madeira islands. Portugal has a Mediterranean climate but north is cooler.	Portugal's grapes and wines are major sources of income. The major grape-growing valley is along the Douro River valley. The Madeira islands are also a major wine exporter. In the south the climate is drier and warmer. Fruits and olives grown in this region. The world's leading of cork, Portugal supplies more than 70 % of the world's natural cork.	Portugal is an energy-poor nation. Most of its energy must be imported. Although Portugal is western Europe's poorest nation, its entry to EC may help boost economic potential.
Greece (Athens)	Greece is located on the Balkan peninsula, which extends to the Mediterranean sea. The coastline of Greece is formed by many island and inlets. Except for in the high mountains, Greece has Mediterranean climate. **Greece:** ● Southern Greece → Peloponnesian peninsula. ● Central Greece → mountainous with plateaus and coastal plains. ● Northern Greece → The Rhodope mountains.	Agriculture is limited in Greece because of the dry climate and mountainous terrain, yet it supports about 20 percent of the work force. Greek agricultural products are olives, tobacco, grapes and citrus fruits.	Although Greece has some mineral deposits, it must import almost all of its oil. Tourism is very important in the country especially the ancient ruins, beautiful beaches and sunny climate.

Northern Europe

Finland Sweden Norway Denmark Iceland

Countries	Area	Population	Population density	GDP per capita
Finland	338145 sqkm	5.2 million	15 people per sq. km	35300$
Sweden	449964sqkm	8.9 million	20 people per sq. km	36500$
Norway	323878sqkm	4.4 million	14 people per sq. km	53000$
Denmark	43093sqkm	5.4 million	126 people per sq. km	37400$
Iceland	102819sqkm	0.27 million	2.88 people per sq. km	38800$

Relief of Scandinavia:
Task 1. Label the following geomorphological structures of Scandinavia.



Geomorphology

I. ……II. ……III. ……..

Towns:

1…….2……..3…….4…….5……..

6…….7……..8…….9……..

Agriculture of Northern Europe

Norway

While there is some farming in southern Norway, only about 3 percent of the land can be farmed. Infertile soil, steep slopes, and cool weather limit agriculture to grazing and dairy farming. Norway has become self-sufficient in meat and dairy products.

Sweden

The richest farmland in Sweden in the southern region called **Skane**. Here, the soil is fertile and the climate is mild. Wheat rye and potatoes, sugar beets, cattle and dairy products are source of income. Only 5 % of the Swedes are farmers, yet these farmers grow 90 % of Sweden's needed food. Being surrounded by the sea, the Swedes have traditional maritime industries such as fishing, shipbuilding, and merchant marine fleet.

Denmark

70% of Denmark's land is used for agriculture. The nation's mild climate and rich pastureland have made dairy farming and hog raising the major agriculture. The Danes are famous for their fine butter, cheese, and ham.

More than 90% of the farm income is from the dairy and meat products.

Iceland

Less than 1% of Iceland supports trees. The ground is mainly barren volcanic lava or covered with grasses. Hay and potatoes are grown on the grassland. Sheep and cattle are also grazed here. Iceland 's most important natural resource is the rich fishing waters that surrounds the island.

Finland

Finland can be divided into three major climate regions.

In the far south of the country is humid continental climate. The central part of the country has *subarctic climate*. *To the far north is a tundra climate.* In the humid continental climate the growing season is very short. Despite this, the Finns grow some crops. The subarctic region is mostly covered by evergreen forests. In the far north there is the sparse tundra the main activity is reindeer herding, which is done by the people known as Lapps.


Europe
Arctic Circle
Norwegian Sea
Atlantic Ocean
0 350 Miles
0 350 Kilometers
Stockholm
Moscow
Baltic Sea
North Sea
Berlin
London
Paris
Bay of Biscay
Caspian Sea
Black Sea
ASIA
Rome
Madrid
Mediterranean Sea
AFRICA
Semiarid
Subtropical dry summer
Humid subtropical
Humid oceanic
Humid continental
Subarctic
Tundra
Highland

Economy of Northern Europe

The industry of this area is remarkable for its high technical level and quality products. The most important branches of industry produce for export, since the internal markets of the individual countries are only of moderate size. Northern European economic structures differ strongly from others. Specialization in production conforms to their special natural endowments.
Sweden and Finland belong to the country's richest in forest in Europe. Pine forests of the boreal belt provide soft wood which is extremely suitable for cellulose and paper manufacturing. Wood of the mixed and deciduous forests in Southern Sweden is used by match and furniture factories.
In Finland industrial chemical processing of wood, cellulose and paper industries became the backbone of economic life. Wood products make up close to half the exports of our northern relatives. Finnish manufacture of saws and equipment for the paper industry is also world famous. This region supplies more than 50 percent of world cellulose exports, and about 25 percent of world paper exports.
Shipbuilding, in which every northern country has achieved a good reputation.
Up to the end of the last century wood and charcoal were the most important energy sources in the Northern European countries. Lack of coal deposits.
Hydroelectric power plants have built development of energy-intensive industrial branches immediately became favorable.
Norway and Sweden are the countries richest in hydraulic power in Europe.
Norway is first in the world in electric power generation per capita.

The characteristic industrial branches are:

- fish-processing (Iceland)
- building and mounting marine drilling rigs, oil production platforms and storage tanks (Norway)
- aluminum
- production of ferro-alloys
- non-ferrous metallurgy
- electrochemical industry (manufacturing of various nitrogen fertilizers and explosives)
- production of high quality steel
- nuclear power plants
- manufacturing of ball bearings, weapons, precision instruments, machine tools, vehicles
- Swedish machine industry (**Stockholm, Göteborg and Malmö**)
- giant corporations (the ball bearing manufacturer SKF, the leader in producing electrotechnical and nuclear power plant systems, ASEA, the car-producing Volvo, and Ericsson, which is in the van in communications technology and electronics)

Austria 

Area: 83 870 sq km
Population: 8. 205 533
Population density: 99 inhabitants per sq km
GDP : 38 400 dollar per capita

Physical geography:

Austria is a **landlocked** country with a great variety of different landscapes: It has access to the largest Lake of Europe **(Lake Constance or Bodensee)**, some of the highest mountain ranges of the Alps, hilly areas north and south of the Alps and extensive plains and the large steppe lake of **Lake Neusiedler See**.

This is particularly surprising if you consider Austria's size: It measures approximately **600 kilometers** in its longest, East-West extension. The country is often divided into **three major areas**. The **Alps** themselves and their wider extensions into North, East and South, covering some **62 percent** of the country (I find that number suspicious – I think you have to be fairly generous with that measure, or use purely geological criteria).

The **Alpine Foreland** and the Austrian part of the Pannonian Plain, including some smoothly hilly areas (about **28 percent** of the country). And finally the area **North of the Danube ("Böhmerwald")** stretching towards the Czech Republic and Slovakia; the ground here is derived from a granite mountain range (makes the remaining **10 percent** of Austria.

The Alps: Structure, Subdivision, Usage

The **Alps** can be divided into **three mountain ranges** that differ geologically and in other features. Running in an East-West orientation, these ranges are the **Northern Calcareous Alps, the Central Alps** (granite base, the highest mountains of Austria are part of this range) and **the Southern Calcareous Alps**. With the Central Alps being the highest range, the altitude of mountains decreases the further South or North you go from the centre. The Alps also "flatten" out from the West (where they are higher) to the East.

Essentially, the Alps explain the low population density on the national average and why the crowds settled North-East of the mountains or along valleys (especially in Vorarlberg, Tyrol and Salzburg). About **10 percent** of the entire nation is either **extreme alpine terrain, or beyond the tree line** and therefore, unsuitable for agriculture. **Forests cover another 40 percent** of Austria. Crossing the Alps has been achieved at **mountain passes** for centuries.

The most important passes are the **Semmering Pass** connecting the region of Vienna with the Mürz and Mur valleys (access to the South). The **Pyrhn Pass** between Upper Austria and Styria, the **Tauern Pass** in Salzburg and the **Brenner Pass** in Tyrol cut through the Alps along a North-South axis.

Major highways follow each of them, making them important transit routes for both domestic and international traffic. The non-alpine regions of Austria are divided into the **Northern Alpine Foreland**; the hills of **Northeastern Austria**; and the **Southeastern Alpine Foreland**. The Northern Alpine Foreland is characterised by the Danube Valley.

The Danube & other Rivers

The **Danube** (in German "**Donau**") is the biggest river of Austria and runs across the country from West to East. It is the only major river in Europe that follows this direction. The Alps act as a **watershed** and all major rivers North of the central mountains contribute to the Danube. This includes the Tyrolian **Inn**, the **Salzach** in Salzburg, and the **Enns** in Upper Austria.

Rivers south of the central mountain range contribute to the River **Drau**, which flows independently to Serbia, where it finally empties into the Danube. The economic role of the Danube as a waterway has increased in recent years mostly through the **opening of Eastern Europe** after the end of communism, partly due to the **Rhine-Main-Danube Canal** in Bavaria, which allows direct traffic anywhere between the North Sea and the Black Sea.

Task 1.

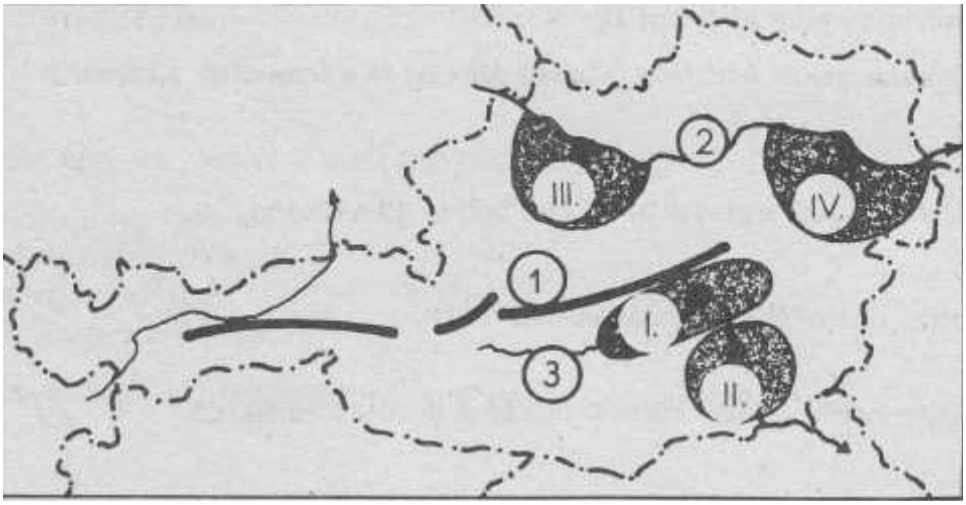
Identify the following elements and industrial regions of Austria

● The Alps → High Tauern (……) and Low Tauern (……..)

● Wiena (…….) Graz (…….) Linz (……..) Mur river valley (….) basin

● River Danube, Mur, and Inn

● Czech massivum : xxxxxxxx

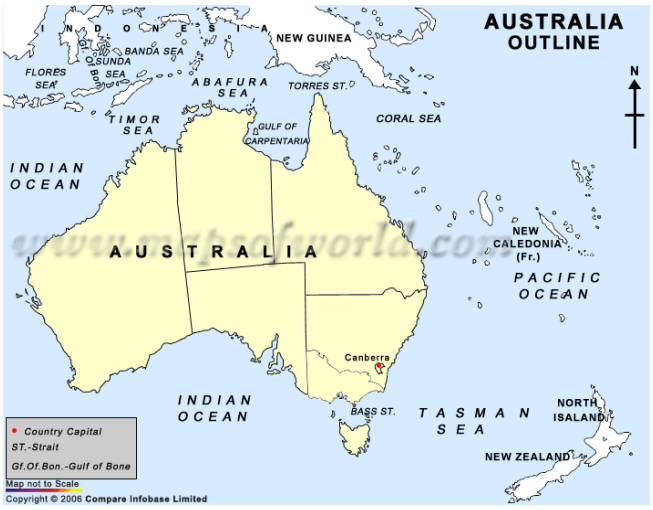


Provinces, cities, industrial regions

Provinces, cities, regions	Main characteristic
Vienna	
Lower Austria	
Upper Austria	
Styria	
Charinthia	
Salzburg	
Tirol	
Voralberg	
Burgenland	

Australia 

Area: 7 686 850 sq. km
Population: 21 million
Population density: 2. 61 people per sq. km
GDP : 37 300 dollar per capita
The region of Australia, Oceania, and Antarctica is one of the most diverse in the world. It spans the tropical islands of the Pacific, the deserts and reefs of Australia, the mountains, lush valleys, and beaches of New Zealand, and the ice and snow of Antarctica.

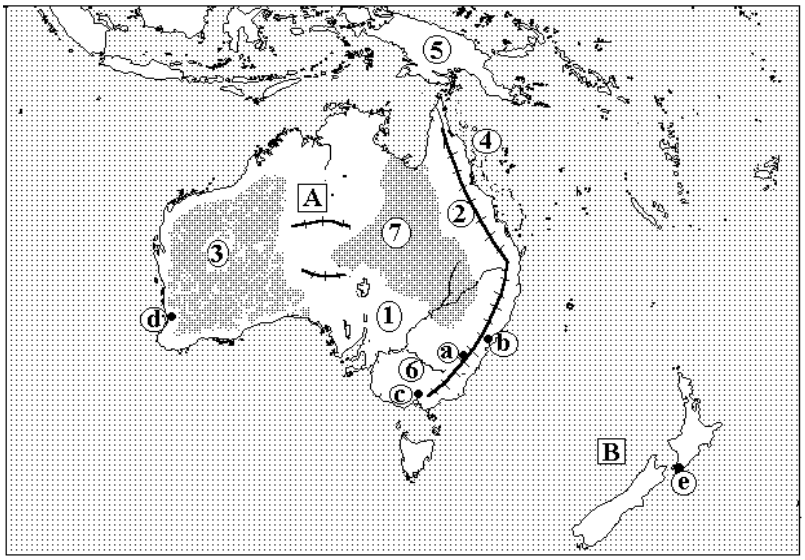


The Land Australia, both a country and a continent, is dominated by the flat, dry interior. The Great Dividing Range separates this "outback" from the fertile east coast. Along the northeastern shore lies the Great Barrier Reef. Australia has rich mineral resources and a thriving agriculture despite limited land use. The island lands of Oceania are divided into three clusters—Melanesia, Micronesia, and Polynesia. High islands still experience active volcanoes and earthquakes, while low islands are atolls shaped by the buildup of coral reefs on the rims of submerged volcanoes. Most of the large islands of Oceania are continental islands. New Zealand's two main islands have beaches, ancient forests, snow-tipped mountains, and lowlands and plateaus that support crops and livestock. By international agreement, activity on Antarctica is limited to scientific research.

Task 1.

Identify the numbers and letters in the map

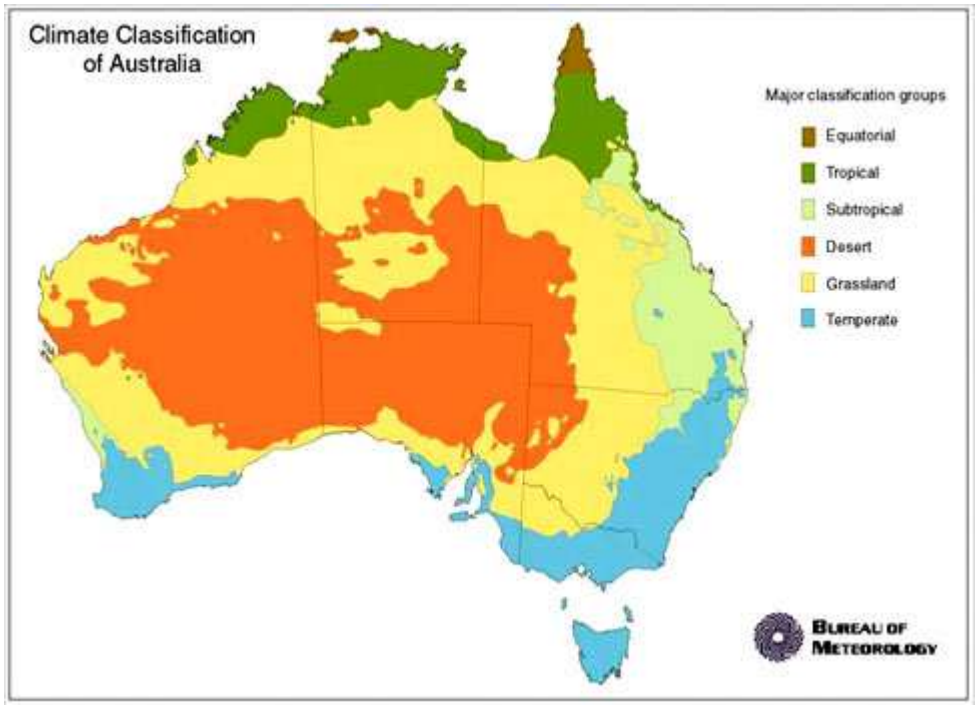
1=	A=
2= Great Watershed Mountains	B= New Zealand
3=	a= Canberra
4= Great Barrier Reef	b= Sydney
5= Papua New Guinea	c= Melbourne
6=	d= Perth
7=	e= Wellington



Climate : (Koeppen)

1. equatorial 2. tropical 3. subtropical 4. desert 5. grassland 6. temperate

Climate and Vegetation Australia is a land of vast differences in climate and vegetation. Moisture is blocked from reaching the Western Plateau and the surrounding areas, where desert and steppe climates are found. The coastal areas have a variety of moister climates and support most of the country's agriculture. Most of Oceania has a tropical rain forest climate, but low islands get little rainfall and have only shrubs and grasses. Although most of New Zealand has a marine west coast climate, mountains can experience fierce winds and blizzards year-round. The country's geographic isolation has led to unique plants such as kauri trees and manuka. Antarctica is the earth's highest, driest, windiest, and coldest continent, but some species of mosses, algae, and lichens thrive along the coasts.



Agriculture

Wool is one of Australia's major export. Australia produces 35 % of the world's wool supply. In the wetter eastern portions of Australia, sheep are raised for mutton and lamb, which are meat products. Australia's cattle industry also very important. Most dairy farms are located in wetter regions. Because of its dry climate only 6 % of Australia's land is suitable for farming. However, Australian farmers are quite efficient. Only 6% of the population actually farms, yet the country ranks among the world's leading wheat export. The wheat belt is on the plains west of the Great Dividing Range in Victoria and New South Wales.

Industry

● minerals

A treasure chest of mineral deposits, Australia is a world leader in iron ore exports. It is also leader in the mining and exporting of bauxite and aluminum ore. Australia is a major exporter of coal, especially to Japan and south Korea. Nickel and gold are mined in Western Australia.

● manufacturing and industry

Although it has a small consumer population and small labour force, Australia is an industrial nation. Many industries such as iron and steel manufacturing are based on rich mineral resources.

Economy

→ densely populated areas: sugarbeets, fruit, vegetable, rice
→ near the coasts: cattle, pig, sheep breeding and poultry
→ north east: sugarbeets
→ interior, dry areas: wheat and barley
→ the driest areas: sheep and cow
→ coastal regions are famous for pearls

Transportation (railway network of Australia)

Task 1. Why are the railway lines are denser in the south-west region of the country ?

……

……

……

Canada

Area: 9. 97 million sqkm
Population: 32 million
Population density: 3. 21 inhabitants per sq. km
GDP per capita: 38 600 dollar per capita

Task 1. Study the location of Canada and its climate.

Relief
Canada can be divided into six landform regions: The Appalachian Mountains, St Lawrence and The Great Lakes Lowlands, The Canadian Interior Plains, The Canadian Shield and The mountains of Canadian Pacific coast, and Mountains of northeast Arctic.

Agriculture
Canada has a limited amount of suitable farmland. Canadians specialize in producing wheat, food crops for animals dairy products and fruit. The Canadian prairie which extends from Manitoba to central Alberta is the centre of the rich wheat belt. The soil is fertile there is enough rainfall, and the level land has encouraged the use of large scale farming. On the drier parts of the prairie, cattle and sheep grazing are important occupations.

Industry
Minerals are the most valuable of Canada's resources. The Canadian shield as to be a wasteland has proved to be a source of mineral deposits such as coal, mineral oil natural gas. Canada is leading source of world's nickel, copper, zinc and uranium, gold, silver, lead. Valuable iron ore deposits are found on Labrador peninsula. Canada is a large scale producer of petroleum. Hydroelectric power plant generate two-thirds of Canada's electricity. Many Canadian manufacturing plants are closely linked to industries in the USA.

Poland 

Area: 312 679 sq. km
Population: 38 500 000 people
Population density: 123 people per sq. km
GDP: 16 200 dollar per capita

Geographical location:

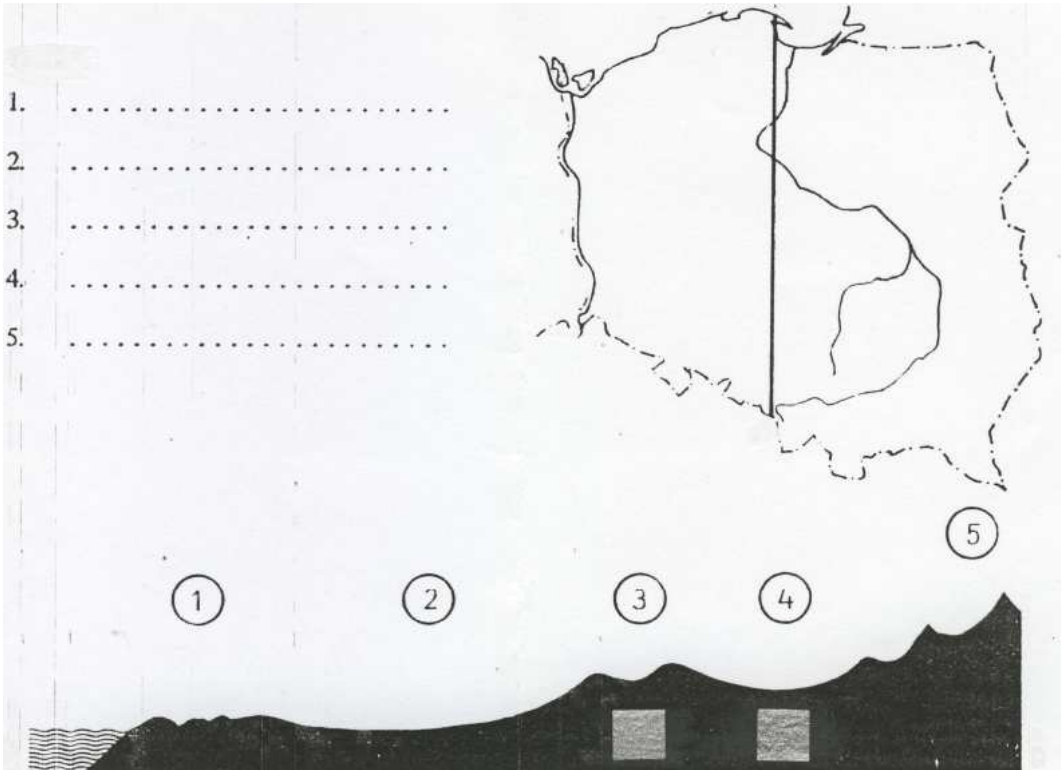
Poland is to be found at the center of the European continent, with an area of 312. 683 sq/km. It has a frontier of 3,582 km, including 528 km of coastline. To the west, the Polish/German border runs along the Oder and Neisse rivers. To the north, Poland is bordered by the Baltic Sea and by Russia. Poland is separated from the Czech Republic and Slovakia to the south by the Sudeten and Carpathian Mountains, whilst its eastern neighbors are Lithuania, Belarus and the Ukraine. In general, Poland is a flat country with an average height above sea level of 173 in (568 ft). Over 75% of the country lies below 200 m (650 ft).

Climate:

Poland's climate is greatly influenced by oceanic air currents from the west, cold polar air from Scandinavia and Russia, as well as warmer, sub-tropical air from the south. In winter, polar-continental fronts dominate, bringing crisp, frosty weather. The late summer and autumn months enjoy plenty of warm days, thanks to the influence of the dry, sub-tropical, continental air mass. The greatest amount of sunshine in summer is to be found on the Baltic coast, whilst in winter this is true of the Carpathian Mountains. In the mountains, at any time of year, the climate is dependent on the altitude. In Warsaw, temperatures range from between 200 to 250C (680 to 77'F) during the summer months and O' to -50C (320 to 23''F) in winter.

Task 1. Label the different landregions of Poland along the vertical line such as :

1. Lakeland, 2. Polish plain, 3. Polish midmountain, 4. Silesia, 5. Carpathians



Industry:
The most important mineral resource of the Central European countries is the coal deposited at the foot of the block mountains. Poland occupies a high ranking place in the exports of hard coal. From among the raw materials of the inorganic chemical industry rock salt and potassium salt found in Central Poland and sulphur that can be found along the Vistula River. The base metal ores of the block mountains have diminished as a consequence of many centuries of mining, only the copper and zinc ores are worth mentioning. The hydrocarbon and iron ore reserves are very limited. The location of the mineral resources has played dominant role in the establishment of the densely populated great industrial regions at the foot of the block mountains. From among them Upper Silesia which lies in the eastern foreground of the Sudeten at the Polish- Czech border. Large power plants have been built here on the abundant hard coal deposits, and coking plants supply the chemical works and powerful blast furnaces. Heavy machine production is concentrated in the vicinity of sites of ferrous metallurgy. Light industry in the smaller or larger towns in the mountains keeps several – century – old handicraft traditions of flax spinning and weaving alive. In Poland **Lodz** is the stronghold of textile industry, it stands out also in the production of spinning machinery and looms. **Warsaw** is the centre of state administration and culture together with the merged satellite towns grew richer in a wide range of industries. Many branches of metallurgy, heavy machinery production and of chemical and light industries are concentrated in the neighbourhood of block mountains. Important ferrous metallurgy centre is **Cracow-Nowa Huta** and oil refinery is **Plock**. Remarkable progress has taken place along the seacoast too. The ports of Szczecin and **Gdansk** in Poland handle busting traffic.

Agriculture:
The climate of Polish Plain is of a transitional character: oceanic and continental features are mixed in it. The summer is cooler tan here at home, and because of lower evaporation the precipitation is abundantly sufficient.

In the moraine regions in the central and northern parts of the Polish Plain, leached pods soils have been formed. Because of the cool climate mainly rye and potatoes are grown, the latter are used as feedstuff for pigs and distillation as well. Among fiber plants flax is the most important. Meadow and pasture grazing, and growing of fodder on the plough land are favorable for daira cattle husbandry. In many places in the southern part of the plain a loess layer has been formed, which is covered by fertile brown forest soil. In the warmer climate sugar beets and wheat produce heavy yields. In some places the cultivation of malting barley and hops is wide-spread. On the other hand there are not enough orchards, and thermophil vegetables (eg. tomatoes, green paprika) have to be mostly imported. The leading branch of agriculture is animal husbandry.

Agriculture employs almost one third of the total Polish work force but contributes less than 4% to the gross domestic product (GDP). Productivity is on the whole not high. There are over 2 million private farms in Poland. Most of which are small - 8 hectares (ha) on average. These farms are often made up of separate pieces of land spead over some area. Over half of all farming households in Poland produce only for their own needs with little, if any, commercial sales. As a result traditional, family-based small farm are under threat as the younger generation drift from the countryside toward the cities.

Czech and Slovak Republics

Czech Republic	Slovak republics
Area: 78 886 sq. km	**Area: 48 845 sq. km**
Population: 10 220 000 people	**Population: 5 445 000 people**
Population density: 129 people per sq. km	**Population density: 110 people per sq. km**
GDP: 24 500 dollar per capita	**GDP: 20 200 dollar per capita**

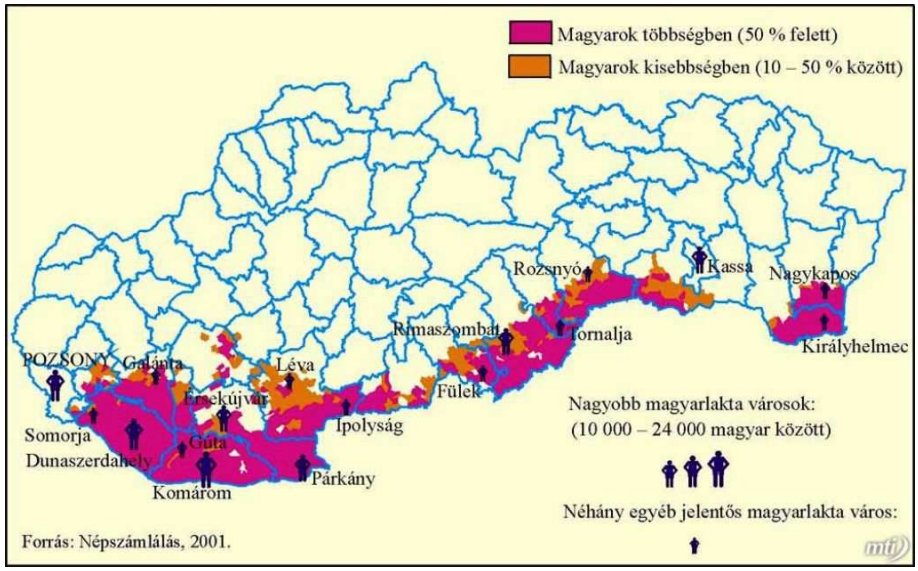
Short history

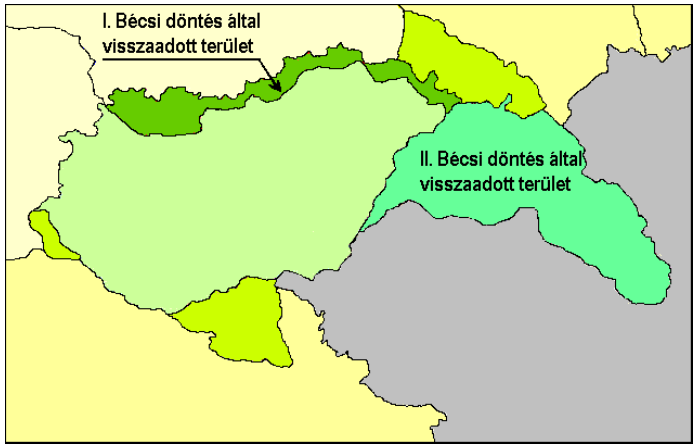
After the second world war Czechoslovakia became a federal state of two republics nominally having equal rights. After the fall of communist regime (1989) the economically stronger Czech Republic did not oppose the separation and on January 1, 1993 Czechoslovakia split into two separate states.

Relief and landscape	
The **Bohemian basin** which is surrounded by 800 to 1500m high wooded mountains occupies the larger western part of Czech land. The climate of bohemian basin is moderately continental. The mean temperature in winter month equal that of our country, the summer however 3-4 degrees cooler. The Elbe river collects the surface waters. On its southern tributary, the Vltava (Moldva) many small hydroelectric power plants have been built. At the southern foot of the **Ore mountains** (Most and Sokolov) thick soft coal deposits have been formed. In the vicinity of Karlovy Vary kaoline of excellent quality to the south of Ceske Budejovice graphite is mined. The large **Moravian basin** lies in the eastern part of Czech Republic and in the north at the foot of the **Sudeten mountains**, the **Upper Silesian basin** famous for its antrachitedeposits.	In the greater part of Slovakia, tower of chains of the young **North Western Carpathians** of folded structure the most beautiful member of the ranges with a different structure is the **High Tatra**. Its wild ridges, glacier-deepened valleys and sparkling mountain lakes formed in the Ice Age, constitute a protected national park. The famous ore mining gin the mountains around (Selmecbánya) Banska Stavnica and Körmöcbánya (Kremnica) Is largely a thing of the past. In between the ranges of the Carpathians the rapid rivers (Vág- Vah, Nyitra-Nitra, Garam-Hron) cut alongated basins. Many hydroelectric power plants have been built on the (Vah) Vág. The wide fertile plain along the Danube is the twin of our Kisalföld. (Slovak Plain). The largest island on the Danube is Csallóköz (Zitny ostrov), which lies on an alluvial fan. On the Danube river it was built the Bős dam system in 1992.

Industry and agriculture	
The basis for the country's energy economy is still coal. The nuclear power plants have significance, too. (**Temelin**) The vicinity of **Ostrava** has a leading role in iron and steel production. The metallurgy of **Plzen** and **Kladno** in the Bohemian Basin processes scrap metal , and it produces quality steel goods. **Mlada Boleslav** is the centre of car industry. A famous market town in the Moravian basin is **Bruno**, Zetor tractors come	The outstanding centre of the political, economic and cultural life has been the capital Pozsony (Bratislava). The great wave of industrialization has attracted and made dominant the present Slovak inhabitants of the city that was trilingual at the turn of the century. The northern continuation of our Kisalföld (Lesser Plain) is the granary of Slovakia: in addition to wheat the thermophil maize, many different fruits

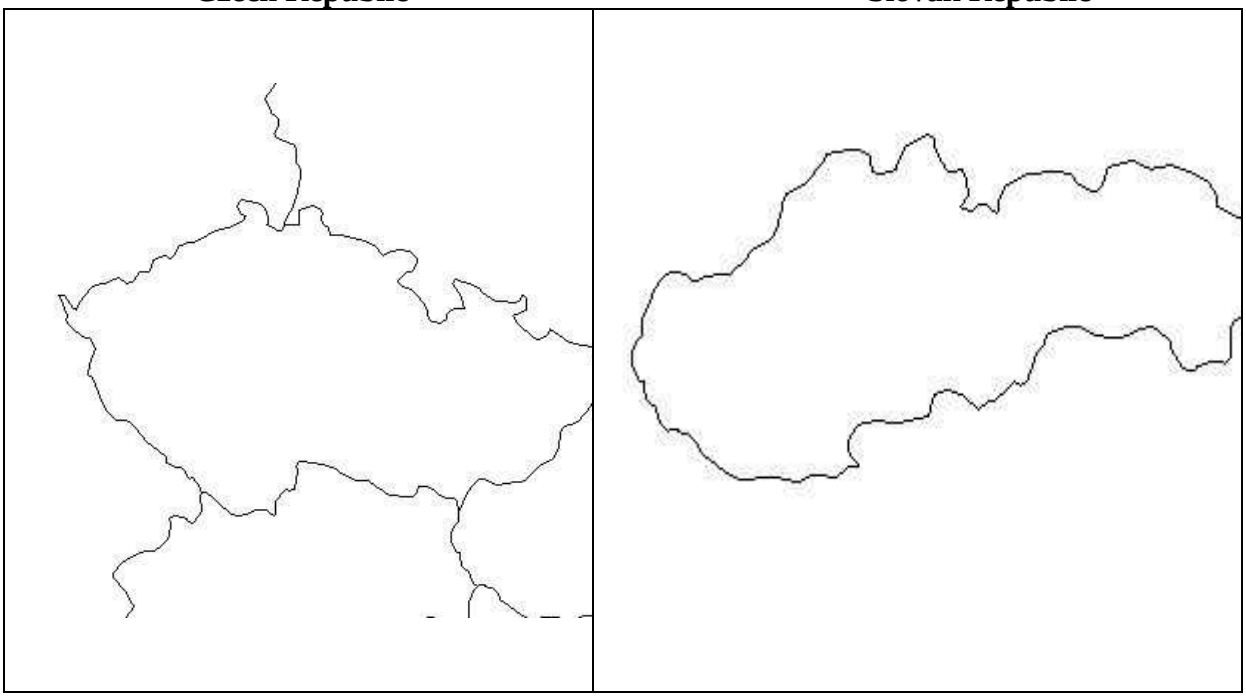
here. The centre of shoe industry is **Zlin**, porcelan and ceramic industry is **Karlovy Vary**, manufacture of glass and jewelry **Jablonec**, and **Ceske Budejovice** is famous for pencil-making and brewery. The granaries of the country are the basins and wide river valleys where fertile brown soil and chernozhem have been formed. Mainly wheat and sugar beets are grown in the Czech and Moravian basins. Malting barley and hops occupy a large area. Many potatoes and both rough and succulent fodders grow in the cooler mountains. Fruit and vegetable growing is concentrated in the heart of Czech basin.	and vegetables grow here as well. The pig, pultry and cattle breeding are supported by the abundant cereal fodder. The second city of port at the Danube in Slovakia is Komárom (Komarno) which is the cultural centre of the mainly Hungarian inhabited region. From the towns lining up along the northern edge of the plain Nagyszombat (Trnava) gave home in the 17th and 18th centuries to the first Hungarian university established by Pázmány Peter. The outstanding economic centre of Eastern Slovakia is Kassa (Kosice). The city lying at the foot of Slovakian ore mountains and on the banks of Hernád was chosen for site of country's largest iron combinate in 1960s. In the wooded mountains occupying a large part of the country tillage is losing out, in the cool basins potatoes and green fodders are grown. Recently machine factories, chemical and wool industry, sawmills and papermills in the smaller and larger towns located along the rivers (Túrócszentmárton / Martin, Besztercebánya, Zsolna / Zilina.





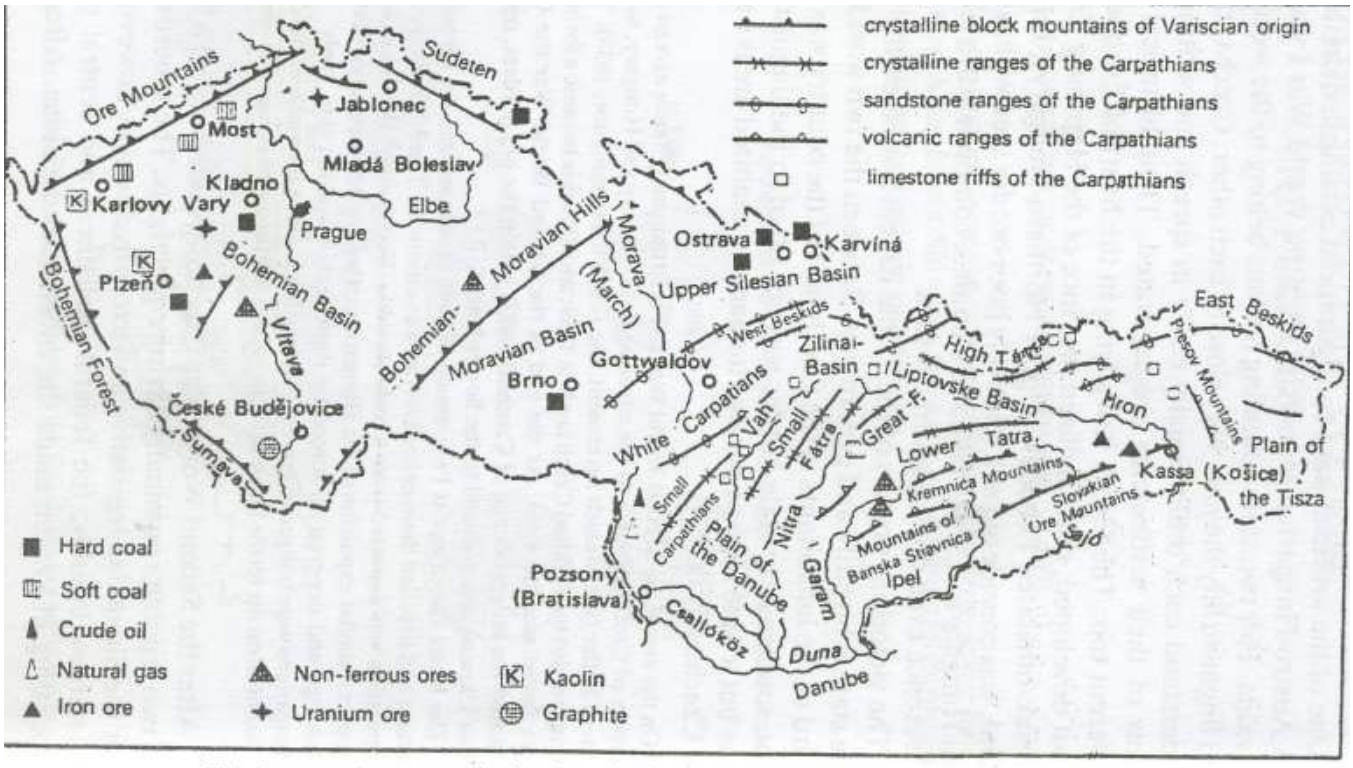
Task 1. Label the different parts of Czech and Slovak Republics. Use your symbol system.

Czech Republic **Slovak Republic**



(not to scale !!!)

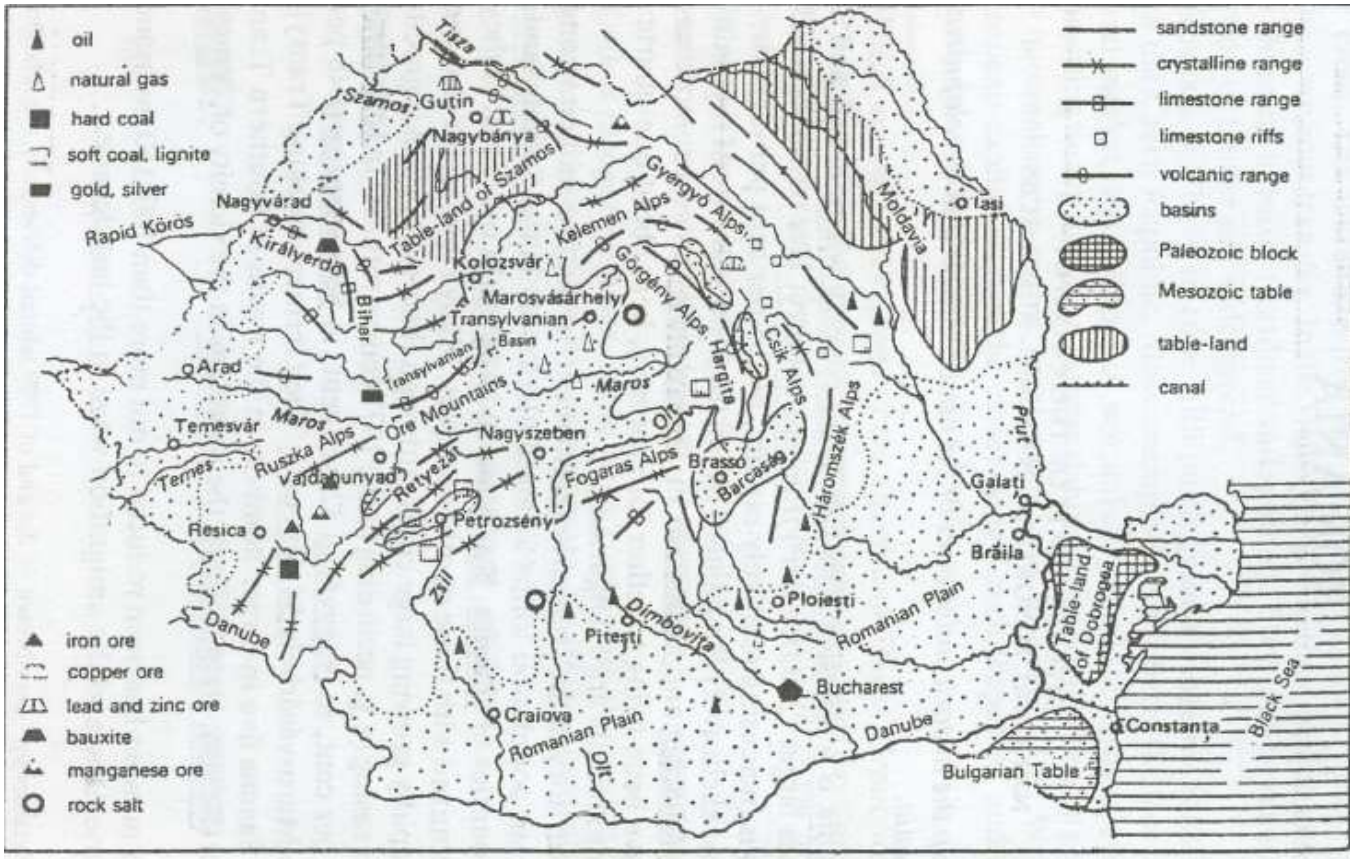
Relief and mineral resources



106. Structural-topographic sketch and mineral resources of the Czech and Slovak Republics

Romania

Area: 237 500 sq. km
Population: 22 246 000 people
Population density: 94 people per sq. km
GDP: 11 100 dollar per capita



107. Structural–topographic sketch and mineral resources of Romania

Landscape

The Carpathians:

Eastern Carpathians: Outer arch is built up of sandstone, inner ranges are volcanic origin. Volcanic activity has left behind lead, zinc, copper ores. Volcanoes of Hargita were still active some hundred thousand years ago. Signs of post volcanic activity are the overrated sprongs and sulphuric exhalations.
Székely land: along the upper reaches of Olt and Maros: cool climate, potatoes, fodder, sheep textile and machine industries
Southern Carpathians: Crystalline rocks, highest mountains of Romania, is cut through by Olt

Transylvania and western borderland:

Physical features and economic life are extremely varied. It abounds in natural resources and has rich traditions in terms of industry. Transylvanian Basin lies at an elevation of 500 to 600m and is cut by deep river valleys. Its climate is cooler than that of the Plain. Its outer edges abundant in precipitation, but the central part is drier. One time oak forests, or archs of early vegetables are characteristic.
This is a chemical industry region. From rock salt-mined at the edge of the basin-inorganic chemical industry produces caustic soda. There are huge quantities of natural gas almost absolutely pure methane. Its processing is coming to the fore in the centres (Marosvásárhely, Torda). Kolozsvár has developed into the capital of Transylvania. It has varied industry.
Segesvár, Nagyszeben, Brassó: machine building industry, textile, leather and timber-processing industries.
Brassó the largest provincial city and industrial centre
Southwestern part of Transylvania.: coal iron ore, ferrous metallurgy
Transylvanian border range rising above 1800m separates the Transylvanian Basin and the Hungarian Plain. It has several parts:
Southren-Transylvanian Ore mountains, gold, silver
Western: bauxit, lignite deposits
Grape and fruit are grown. The old market towns are important industrial centres. **Nagyvárad**-aluminia, chemical industry, **Arad**-machine tool and wagon factories. Diverse industrial and cultural centre is **Temesvár.**

Granary of Romania: Wallachia:

Sub-Carpathian Hills, Romanian Plain

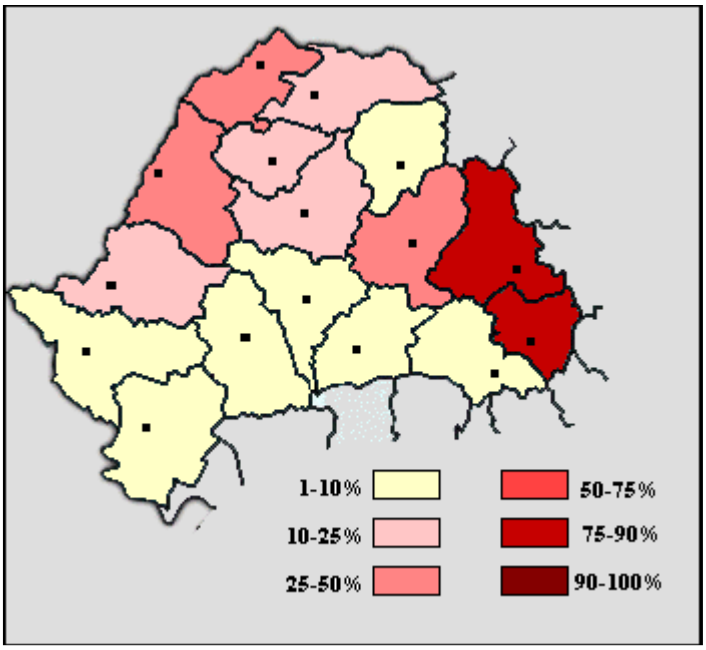
Climate: continental

Precipitation: below 500mm
Fertile black soil
Maize, wheat, sunflowers, fruit, grape, pig stock
Rock salt, petroleum, natural gas, lignite
Romanian-Serbian power plants at Iron Gates / Vaskapu szoros
Petrochemical plants, drilling machine production
Machine industry
Bucharest: most diverse set of roles

Moldavia, Dobrogea:

Moldavia is covered by loess.
Rock salt, oil, natural gas
Chemical industry, furniture, cellulose and paper making
Many hydroelectric power plants
Iasi: centre of economic and cultural life
Galac, Braila: cities on the Danube
Dobrogea: between Danube and Black Sea
Only Romanian seaports: **Constanta**
Holiday and bathing resorts at the Black sea

Population is increasing by 0.5% per year. Almost exclusively Romanians live in Wallachia and Moldavia. In Transylvania many of the inhabitants are Hungarian.
Hungarian population forms a closed block only in the Székely land-counties of **Hargita, Kovászna** and **Maros**. Many Hungarians also live in the rapidly growing large cities. The German-speaking Transylvanian Saxons live in the Brassó and Nagyszeben, the Swabians in the vicinity of Temesvár.
Dobrogea, the Danube delta and the Carpathian mountains are sparsely populated. Half of the population are urban dwellers.
The country abounds in arable land and forests. She is richer in mineral resources and ores than any Eastern- Central European country. Due to crude oil, natural gas, rock salt chemical industry is significant. Mining of coal and lignite is increased.



Hungarians in Transylvania

Former Yugoslavia

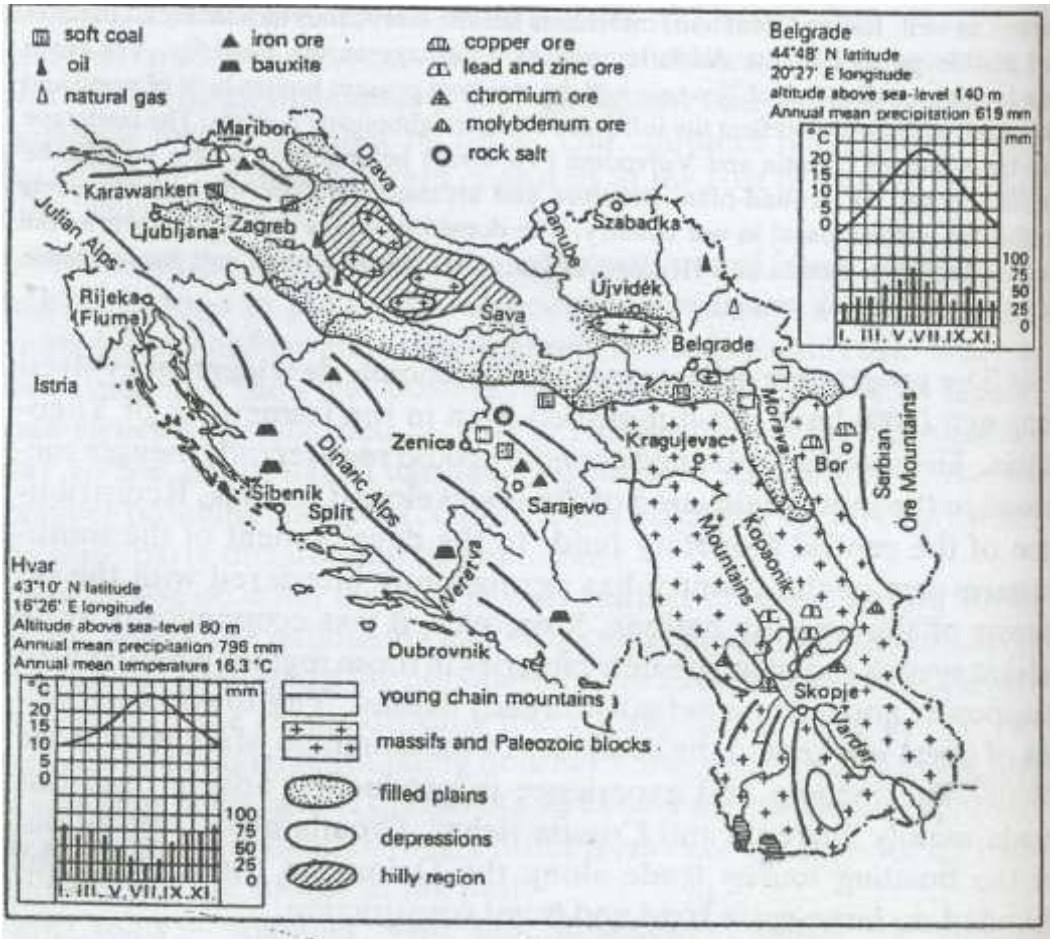
Serbia **Montenegro** **Kosovo** **Slovenia** **Croatia**

Bosnia and Hercegovina Macedonia

Country	Area	Population	GDP per capita
Slovenia	20253 sqkm	1 929593	$27,300 (2007 est.)
Serbia	77 474 sqkm	10 159000	$7,700 for Serbia (includes Kosovo) (2007 est.)
Croatia	56538 sqkm	4 282216	$15,500 (2007 est.)
Bosnia and Hercegovina	51129 sqkm	3 835777	$6,600 (2007 est.)
Montenegro	14026 sqkm	678177	$3,800 (2005 est.)
Macedonia	25333 sqkm	2 041467	$8,400 (2007 est.)
Kosovo	10887 sqkm	2 126000	$1,500

Political map of former Yugoslavia:

Task 1. Identify the different mineral resources of Former Yugoslav states.



108. Structural–topographic sketch, mineral resources and major climatic types of former Yugoslavia

Task 2. Fill in the chart[1]

Country	Mineral resource	Industrial centres
Serbia		
Montenegro		
Bosnia and Hercegovina		
Croatia		
Slovenia		
Macedonia		
Kosovo		

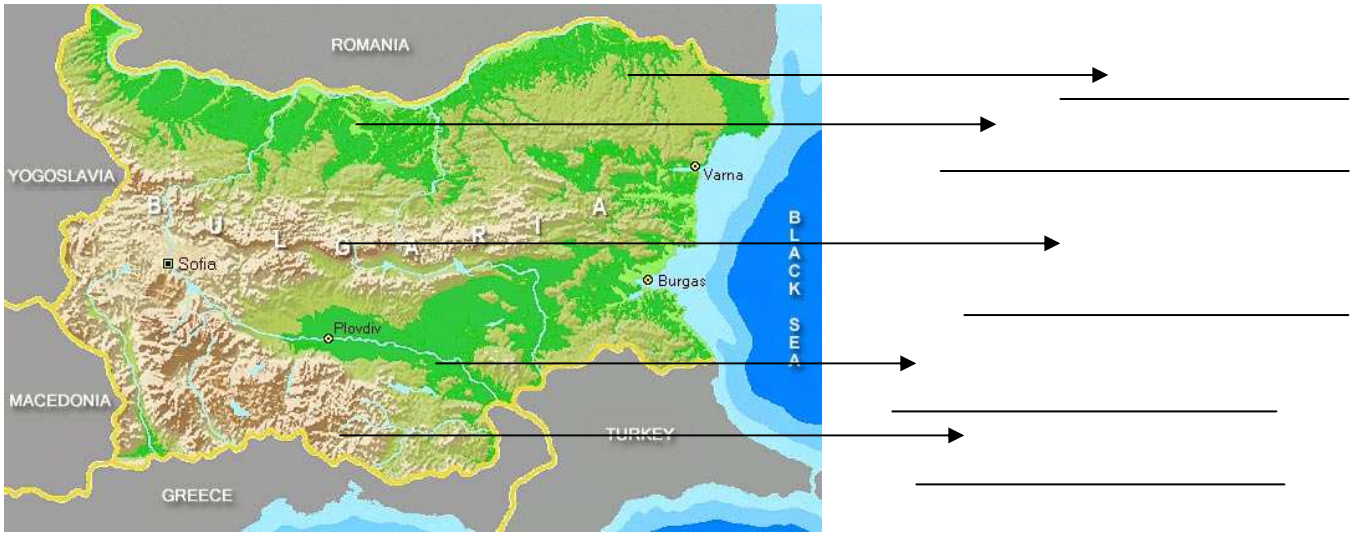
[1]Probald Ferenc Geography 2 pp 253-255

Bulgaria

Area: 110 910 sq. km
Population: 7 262 000 people
Population density: 67 people per sq. km
GDP: 11800 dollar per capita

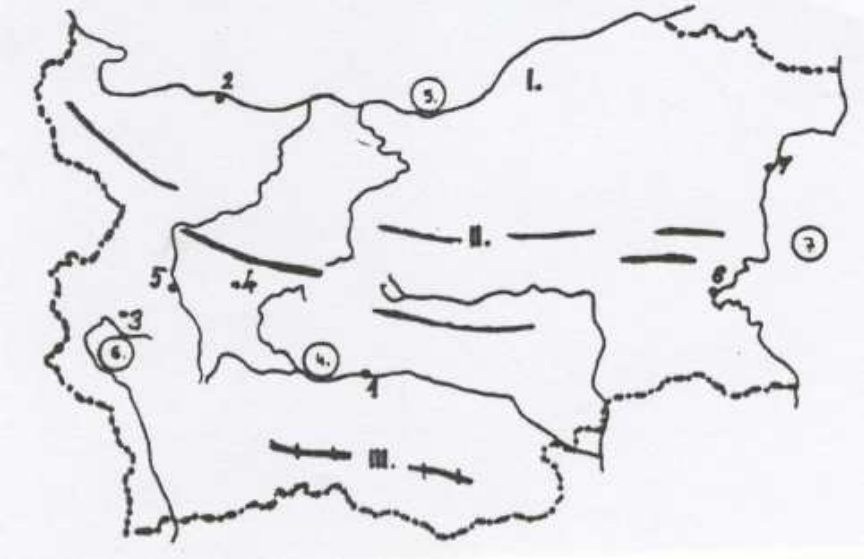
Bulgarialies in southeast Europe, in the Balkan peninsula, her area somewhat larger than that of our country. The roads connecting with Asia via turkey run-through here, their important junction is the Bulgarian capital Sofia. The Danube flowing along her northern border and the Black Sea ensure waterway connection with more distant countries.

Task 1. Label the different landregions of Bulgaria



The **North Bulgarian Tableland** is the granary of the country: large wheat, maize and sunflower fields on its fertile chernozem soil. Hot, frequently dry summer and precipitation of capricious distribution characteristic of continental climate, however, strongly influence the yields. Recently many vineyards and orchards have been planted on the higher hill ridges. In the driest part in the South Dobrogea flocks of sheep graze in the grassy plain.
The **Balkan Mountains** form a dividing line in climate: to the south of them winter is much milder and the Mediterranean effect makes itself felt. In the mountain meadows cows and a much higher number of sheep and goats graze. The small basins fitting to the foot of the mountains are famous for their rose gardens: valuable aromatic oil is extracted from the petals.
In the **Plain of Maritsa** the sunny, hot summer ripens cotton and rice however fields must be irrigated. Greenhouses seem to form towns in some places, early tomato, paprika and cucumber are grown in them. Between the irrigated truck gardens plantations provide apricots, peaches, cherries, apples, and grapes. The greatest centre of food industry is **Plovdiv**.
In the southern part of the country small basins are hidden in the wooded block mountains. Fine tobacco in demand from abroad as well comes from the Rhodope region and from the valley of the Struma.

Task 1. Label the different geographical structures of Bulgaria



Mountains, towns and rivers

I. …… II. ……. III. ……

1. …….. 2. ……. 3. …… 4. …….

5. ……..

Circled

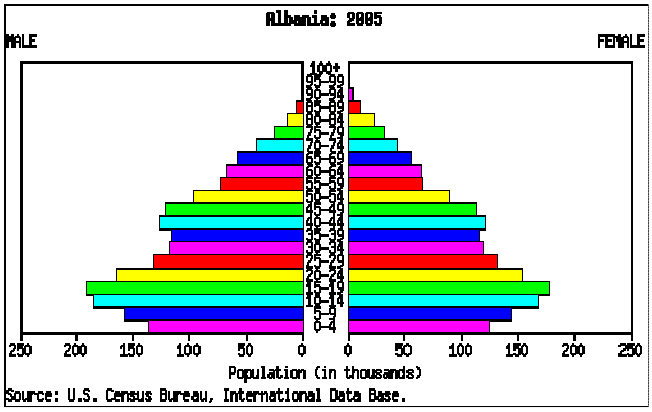
4. ……. 5. …….. 6. …….. 7. ……

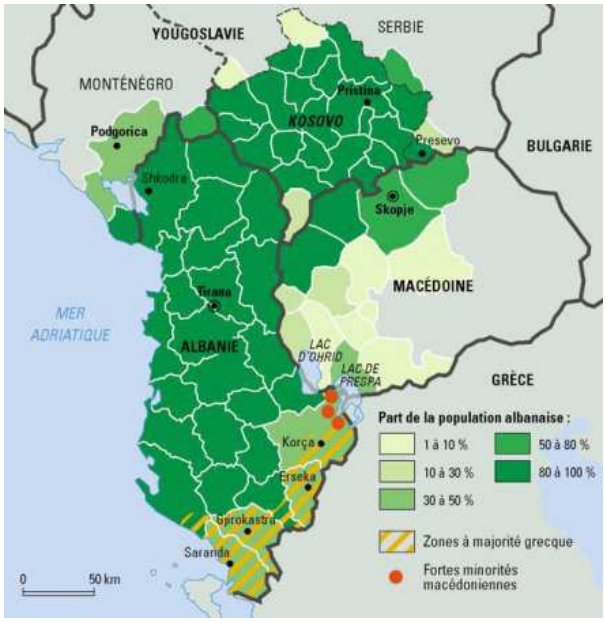
Industry

Bulgaria is very poor in energy resources. For metallurgy large quantities of hard coal, for chemical industry natural gas and crude oil are imported from the CIS. In the plain of Maritsa huge open pit mines pour lighnite for firing the local thermal power plants. Small power plants on the rivers with fluctuating rate of flow provide one-sixth of the electric energy. There is a nuclear power plant at Kozloduy at the Danube build by the Sovietunion but under a 1993 agreement between the European Commission and the Bulgarian government, Units 1 and 2 were taken off-line at the end of 2003. Units 3 and 4 were taken off-line at the end of 2006, immediately prior to the Bulgaria's accession to the European Union. Centres of ferrous metallurgy have been established near the ore mines of the Sofia Basin (**Kremikovtsi** and **Pernik**). Centre of copper ore processing is pirdop, lead and zinc metallurgy is concentrated in **Plovdiv**. Stronghold of oil refining and ptrochemistry is **Burgas**. Close to the great port city **Varna** a huge inorganic chemical industrial combine has been built. The tourism is significant at the Black Sea.

Albania 

Area: 28 748 sq km
Population: 3 619 778 inhabitants
Population density: 124 people per sq. km
GDP: 5800 dollar per capita





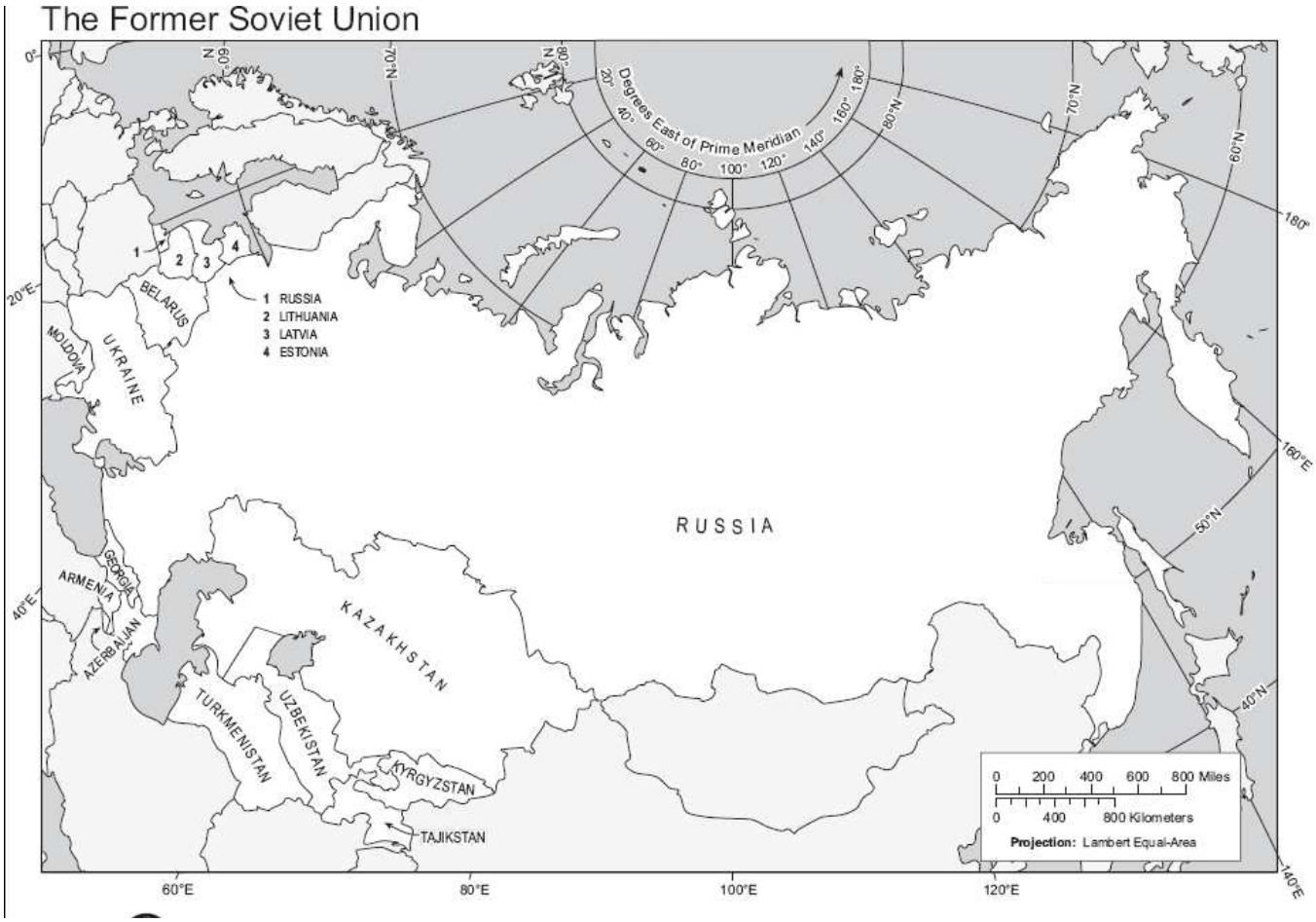
The Albanian population is dispersed among three different states: Albania, Macedonia Montenegro and Kosovo.

History, relief, agriculture and economy

Albania is the smallest and even today economically least developed European country. The carefully cultivated Mediterranean coastal plain provides food for the population, the Albanian mountains give timber, ores and electric energy generated in hydroelectric plants for industry. The small country ranks four-third in world's chromium ore production, in addition to that she exports crude oil, electric energy and southern fruit.

Former USSR

Russia



Group of the former Soviet States as

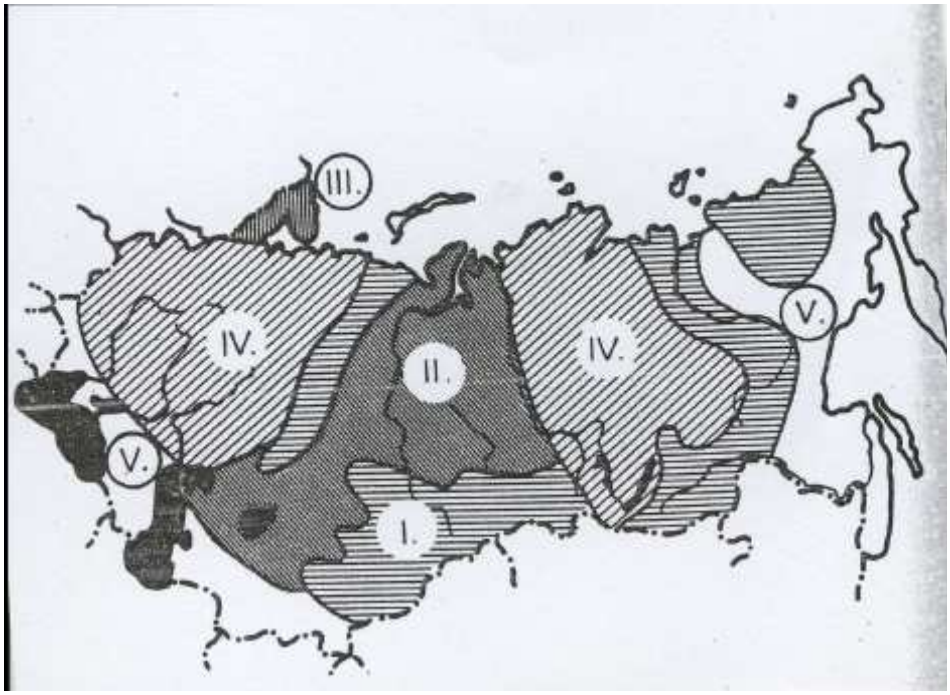
European states	Capital city	Caucasian states	Capital city	Central Asian states	Capital states
Estonia[1]		Georgia		Kazakhstan	
Latvia[2]		Armenia		Kyrgyzistan	
Lithuania[3]		Azerbaijan		Turkmenistan	
Ukraine				Uzbekistan	
Moldova				Turkmenistan	
Russia					

1-2-3 members of the EU

Short history

Commonwealth of Independent States (CIS) was created in December 1991. In the adopted Declaration the participants of the Commonwealth declared their interaction on the basis of sovereign equality. At present the CIS unites: Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan and Ukraine.

Geological structure



I. …… II. …… III. …….

IV. …….. V. ……..

Industrial regions

North-West II. Central III. Ukrainian (Donetsk) IV. Pre-Ural V. Ural VI. Kuznetsk

I. North-West

The coastal region of the Baltic sea came into Russia's possession at the beginning of the 18th century. Sankt Petersburg, Petrograd, Leningrad and since the political changes
Sankt Petersburg again was founded by Peter the Great and together with **Tallinn** and **Riga** were gateways to the world. Many production and technical achievements of capitalist manufacturing first took root here. The economic linkages of ports brought into being the developed versatile industry of the region and it is characterized by moderately energy and material-intensive branches that require high technical skills and experience. The mineral resources of **Kola peninsula** and the **Pechora Basin** have been exploited only since the 1930's and 1940's (Gulag camps) and this has hardly changed the structure of industry. From among the branches of industry relying upon local natural resources only conversion of timber and paper manufacturing have achieved national rank. The great export of timber and paper industry is **Arkhangelsk** while apatite from **Kola peninsula** is shipped from **Murmansk**.

II. Central

The vicinity of Moscow has a tradition of several centuries in the spinning and weving of flax as handicraft. Traditions in production, inexpensive manpower and the central location of the region induced capitalist manufacturing industry to settle here in the last century. Moscow and its wider vicinity – **Ivanovo**, **Yaroslavl** – remains the largest concentration of textile industry to the present day. In the last half century, the central industrial region has developed into the most varied industrial zone in the country. Several branches of the expanding machine manufacturing and chemical industry are still directly connected to the textile industry, but most branches of the industry (manufacturing of electronic equipment, instruments, machine tools, printing machines, vehicles) are built upon the professional training of the manpower. The soft coal in vicinity of Moscow by no means covers the energy demand of the great cities and factories, so the industrial region receives crude oil, natural gas and electric poer from the Volga region, and hard coal from the Donetsk basin.

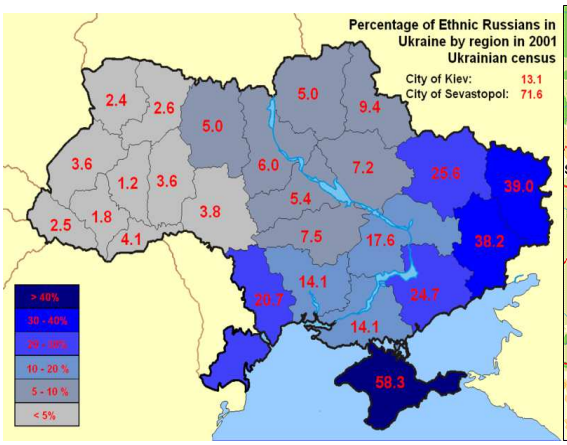
Ukraine 

Area: 603 700 sq.km
Population: 48 000 000 people
Population density: 78 people per sq. km
GDP: 7000 dollar per capita

III. Ukrainean (Ukraine)

The heart of the Ukrainean industrial region is **Donetsk Coal Basin** lying in the Eastern Ukraine which together with the iron ore of **Krivoy Rog** and **Kerch** supports the largest ferrous metallurgical region of the country. The chemical industry originally based on coal is supplied mainly by natural oil abd gas arriving in pipelines. Heavy machine manufacturing factories have been established close to large iron and steel works and these factories produce among other things machinery for mining ab metallurgy, and locomotives. The less intensive machine industry is concentrated in the great cities of most distant area, **Kiev** and **Kharkov** and in the greatest port on the Black Sea, **Odessa**.

Donetsk city, the center of the **Donetsk region** has a population of **1, 092. 7** thousand people. **Donetsk oblast** makes up 4. 4% of the territory of Ukraine. **Donetsk oblast** population constitutes 10% of the whole Ukraine, including 4, 136 thousand urban people and 444 thousand rural people (9. 7%). The density of the population is more than **174** people per sq. km.



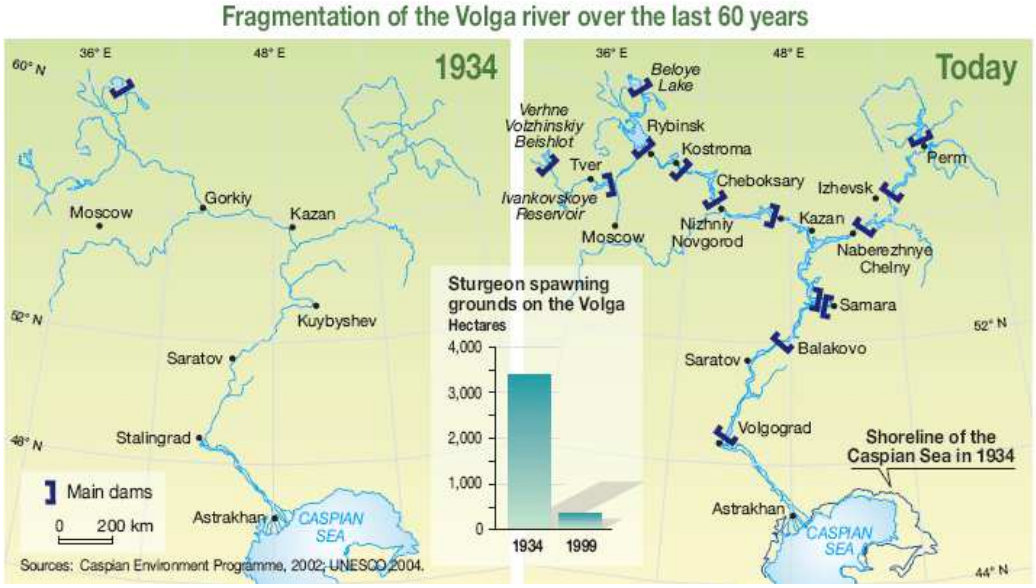
Percentage of Ethnic Russians in Ukraine **Physical map of Ukraine**

IV. Ural-Volga

The Volga had already been an important artery of transportation before the era of railway building It was connected with many other rivers by canals through the low watershed. At the fords of the Volga commercial cities with bustling traffic had been built, they developed into centres of industry such as **Nizhni Novgorod**, **Samara**, **Saratov** and **Volgograd**. The main factor in the industrialization has been the exploitation of huge crude oil, natural gas and potassium salt fields extending between the Volga and the Urals and plus building of gigantic hydroelectric power plants.

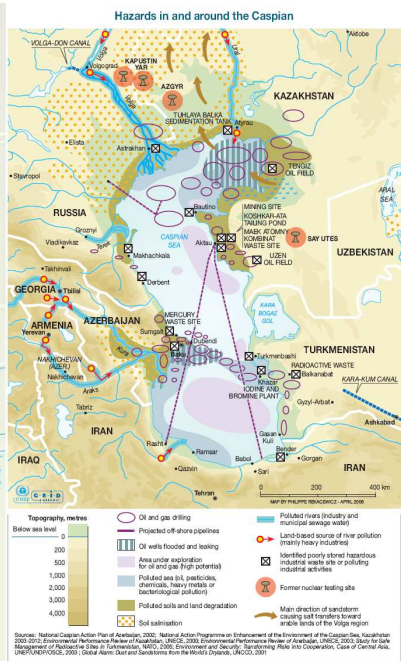
In conformance with this, oil refining and fertilizer production have become national importance. The aluminum smelter of **Volgograd** uses inexpensive electric energy generated in the hydroelectric power plant. The construction of nuclear reactors and car and tractor production arise out of machine industry. The lorry factory at the Kama river and Lada factory are the largest and most up to date of their kind.

The Volga and Caspean sea problem
(Case Study)



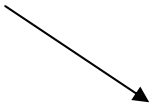
Human activities can have a powerful influence on the local climate. Widespread irrigation networks and dams are depleting the soil, exposing it to erosion. Ground water supplies are thereby reduced, which can cause the whole water regime to change. This can influence local temperatures and consequently the evaporation potential.

The construction of a large number of dams and industrial facilities on the rivers feeding the Caspian has caused a significant change in the quantity of water inflow. The creation of a succession of large reservoirs, especially on the lower and middle Volga, has led to significant losses in flow rate due to additional evaporation from the surface of the water.



Other problems

- **climate change**
- **drought in Central and Southwest Asia**
- **fishing problems (text for reading)**



The Caspian area is the world's main producer of wild caviar (83% in 2003) and supplies the three largest markets, the European Union, Japan and the United States. The construction of several hydroelectric power plants and dams along the Volga river significantly altered the flow of water into the delta and destroyed about 90% of the sturgeon's spawning grounds, which can be as far as several hundreds of kilometres upstream. With high levels of water pollution, sturgeon also suffer from various diseases. According to the survey of the Food and Agriculture Organization, reported data from Caspian states excluding Iran indicate that the sturgeon catch has dropped from an average of about 22,000 tonnes a year in the 1970s to about 1,500 tonnes a year since 2002.

- **ecosystem is in danger**
- **population and health problems**

V. Ural

The basis for heavy industry in the Urals is the unrivalled richness in ores of gently sloping block mountains. The lack of coking coal has hindered the development of metallurgy for a long time, which the Soviet planned economy solved by railway transportation of coal first from **Kuznetsk** then from **Karaganda**. Because of the depletion of the iron ore deposit at **Magnitogorsk** the powerful iron and steel industry of the region now receives the raw material from western Kazakhstan. Copper and aluminum metallurgy processes salt mined at the western foot of the Urals, as well as sulphuric acid considered as a by-product of base metallurgy, are utilized by the versatile chemical industry above all in the production of fertilizers. The great centers of the machine industry **Yekaterinburg**, **Chelyabinsk** are notable for their production of factory equipment and military devices.

VI. Kuznetsk

The first great industrial region took shape on the eve of the WW2 in the Kuznetsk Coal Basin, where, in addition to ferrous metallurgy, machine building and several branches of the chemical industry have also settled. In the wake of the discovery of petroleum and natural gas deposits in Western Siberia huge petrochemical combines were built. (**Omsk** and **Tomsk**). Gigantic hydroelectric power plants built on the Angara an Yenisey and bituminous coal from the Kansk-Achinsk Basin have provided a basis for the industrialization of Eastern Siberia. Nationally important centres of the energy-intensive aluminum and base metal metallurgy have grown up here. The increasing logging activity of the taiga has called huge wood working combines into being (**Ust' Ilimsk** and **Bratsk**). In addition to older versatile centres of the machine production (**Krasnoyarsk** and **Irkutsk**) a new industrial centre has formed around the hydroelectric power plant at Say an: Abakan has become known for its wagon work and Minusinsk for its machinery

factories for electric power industry. The largest Siberian city **Novosibirsk**, is the stronghold of scientific research and economic organization. The Baikal-Amur Railway Line gave further impetus to the economic development of the Far East at the beginning of the 1980s.

Central Asian Republics

Kazakhstan **Uzbekistan** **Turkmenistan** **Tajikistan** **Kyrgysistan**

Physical map **Political map**

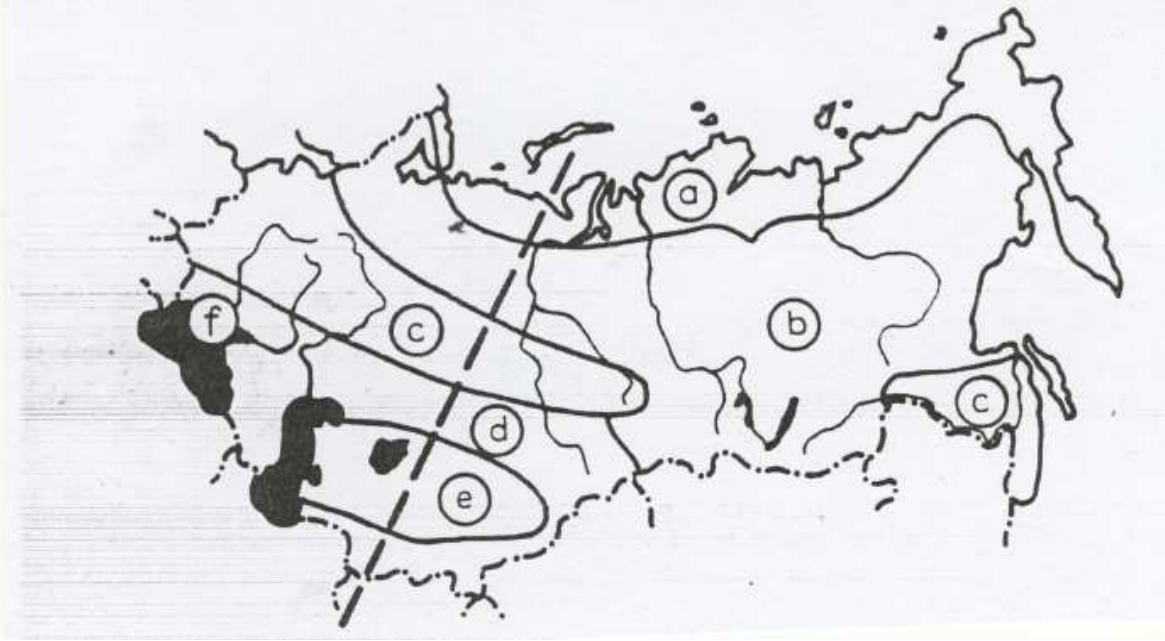
Geography

Central Asia is an extremely large region of varied geography, including high passes and mountains (Tian Shan), vast deserts (Kara Kum, Kyzyl Kum, Taklamakan), and especially treeless, grassy steppes. The vast steppe areas of Central Asia are considered together with the steppes of Eastern Europe as a homogenous geographical zone known as the Euro-Asian Steppe. Major rivers of the region include the Amu Darya, the Syr Darya and the Hari River. Major bodies of water include the Aral Sea and Lake Balkhash, both of which are part of the huge west/central Asian endorheic basin that also includes the Caspian Sea. Both of these bodies of water have shrunk significantly in recent decades due to diversion of water from rivers that feed them for irrigation and industrial purposes. Water is an extremely valuable resource in arid Central Asia, and can lead to rather significant international disputes.

Economy

Country	Economy
Kazakstan	
Uzbekistan	
Tajikistan	
Turkmenistan	
Kyrgysistan	

Climate and agriculture



a. In the vast areas of tundra **reindeer husbandry** represents the agriculture.

b. Cutting of valuable coniferous trees in **taiga region** might be considerably increased in the eastern part of the country. We find farming in the river valleys or in the vicinities of towns. The hunting of fur animals has been pushed into the background by planned breeding.

c. In the zone of mixed and deciduous forest which narrows toward the east **potatoes**, **rye**, and **flax** dominate . fodder growing in the plough land find favorable condition are here , therefore the zone spreading from the Baltic countries to Western Siberia is the major area for raising **dairy cattle**.

d. In the transitional zone of the wooded steppe and in the western part of the continental steppe area, which receives more precipitation, mixed farming enjoys most favorable natural conditions. The black soil (chernozem) found here is deservedly called the king of soils.

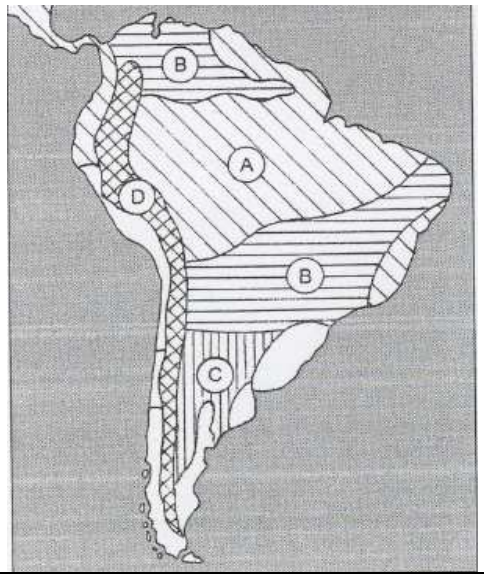
e. In the oasis of semiarid temperate zone **cotton, rice** and **many kinds of fruits** flourish, **silkworm breeding** is widespread.

f. The subtropical zone appearing to the south of Caucasus has become renowned for grapes and in Georgia tea. In some places lemons and tangerines are grown as well.

Latin America

Area: 20 million sq.km
Population: 500 million people
Population density: coastal region is densely populated interior spase population

Relief – climate – population density



A: Amazon river basin

B1: Orinoco river basin

B2: Brasilian highland

C: Patagonia

D: Andes mountains

Task 1. Identify the countries of Latin America. Use your atlas.

Latin America comprises of Mexico, the Central America isthmus, the archipelago of the Antilles and South America. Its area is 20million km2. Its population 500 million people. The natural increase 2.5 % per annum.

The population shows a many- colored picture because many immigrants have arrived from other European countries since the middle of the 19th century: they settled mainly in Argentina, Brazil and Chile. Just a few original Indian population has survived.

Population density in Latin America is still very low. The population is concentrated near the seacoast, in the mountains and highlands. The interior of South America is practically uninhabitant. Here the development of the transportation system has only recently started. A great part of the natural resources is still unexplored or unexploited. Trans-Amazonas Highway many big cattle ranches and rubber plantations have been established. The numerous self- supporting peasant farms produce cassava, sweet potatoes and maize. Their future is threatened by rapid soil erosion.

The center of the Brazilian state administration was moved from Rio de Janeiro to Brasilia whose already counts more than 1million and a half inhabitants.
Tropical plantation farming is carried on in a relatively small area, but its products play an important in exports The growing of sugar cane goes back to the 16th and 17th centuries in Brazil and the Antilles. At present Brazil is the leading sugar cane producer in the world. Coffee is the most important plant of the tropical mountains. Brazil and Columbia lead in its production. The banana plantation of Ecuador and Central America manly supply the market of the US. The cocoa production of Brazil is notable and a very widespread industrial plant is

cotton. The extensive cattle-breeding serves the export of frozen meat and hides. In Argentina wheat and maize are produced for the market. And the sheep-breeding and fishing are important as well.

Latin America has abundance of natural resources. Copper ore mining in Chile and Peru, tin production in Bolivia and silver production in Mexico are of outstanding importance Brazil and Venezuela possess considerable iron ore resources. Brazil, Surinam and Jamaica are registered among the biggest bauxite producers of the world. And there are huge oil fields. Since the Second World War, rapid development has begun in the processing industry. Its leading branches are the textile and food industries. One-third of the processing industry in Latin America is concentrated in 3urban centres, in Sau Paulo, Buenos Aires and Mexico City. Brazil is the largest and most populous country in Latin America with a population of 160 millions. And the Brazilians built the largest hydroelectric power plant in the world in the 1980s.

Latin America takes part in the international division of labour by delivering agricultural products and mineral raw materials. The USA is the principal trading partner of most countries.

BRAZIL 

Area: 8, 500, 000 sq. km
Population: 144 500 000
Population Density: 17 per sq. km
GDP:

Climate:

Northern Brazil is crossed by the equator making it hot and rainy. In these areas temperature is constant throughout the year, (26 - 28 °C) with variable rainfall, (249mm in January and 58mm in July). Over the year 2, 102mm of rainfall falls on this reason, although some areas have been known to receive 5000mm / year. This hot and wet climate gives rise to the rainforests of the Amazon Basin. Southern Brazil becomes drier towards the Tropic of Capricorn.

Energy:

Has small reserves of coal around Porto Alegre and Sao Paulo, (Southern Brazil). South America produces about 11.9% of the total world oil reserves and Brazil contributes much to this. Most power goes to urban areas and industry, but many thousands are still without electricity.

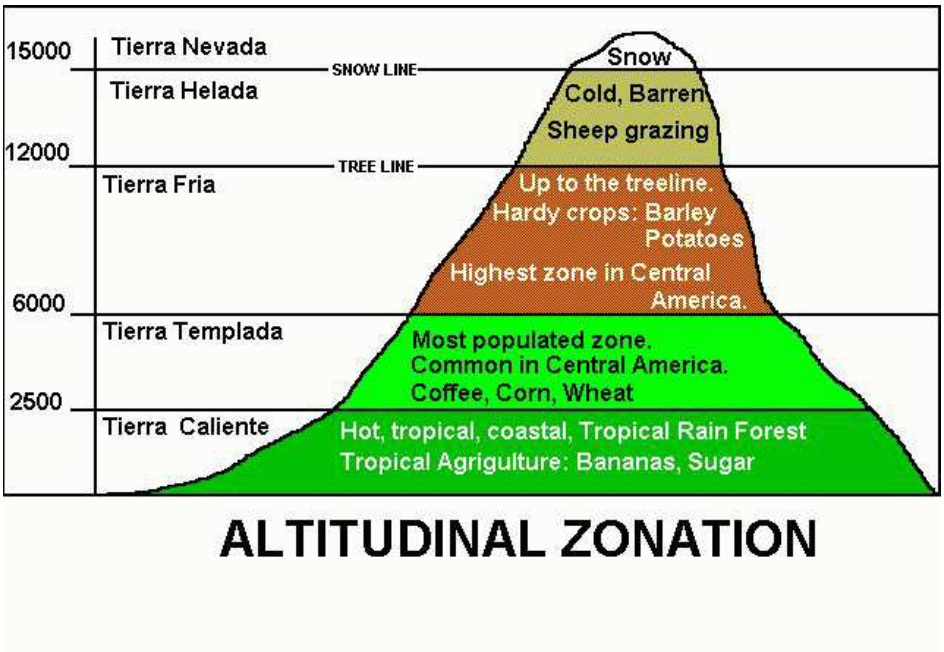
Transport:

Due to its colonial background, major transport routes lead to coastal areas, (both road and rail), where colonial powers built ports to transport raw materials extracted in the colony. These were bound for the manufacturing industries in the mother countries. Hence, the routes also go through areas of importance for the extraction of raw materials. Routes have also been cut through the Tropical Rainforest, notably the Trans - Amazonian Highway.

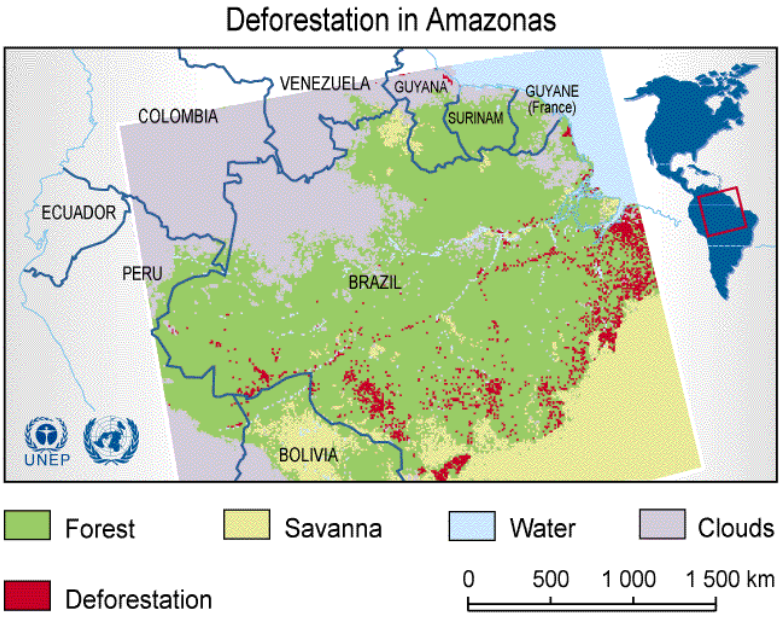
Economy:

Main crops of its agriculture → coffee, sugar cane, banana, orange, cocoa, soybeans, cotton. Brazil has the largest plantations in the world. There are a lots of cows but pig breeding is also important. Lumbering in the tropical rainforest is significant.

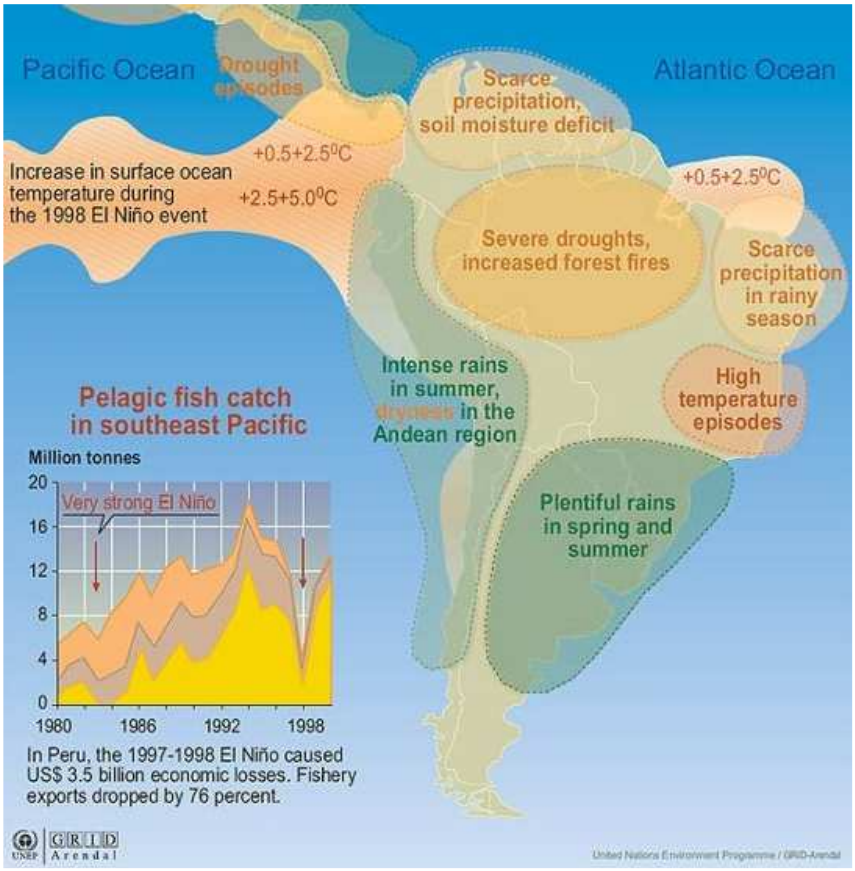
Agriculture and altitudinal zonality in Latin America



Problems in Latin America



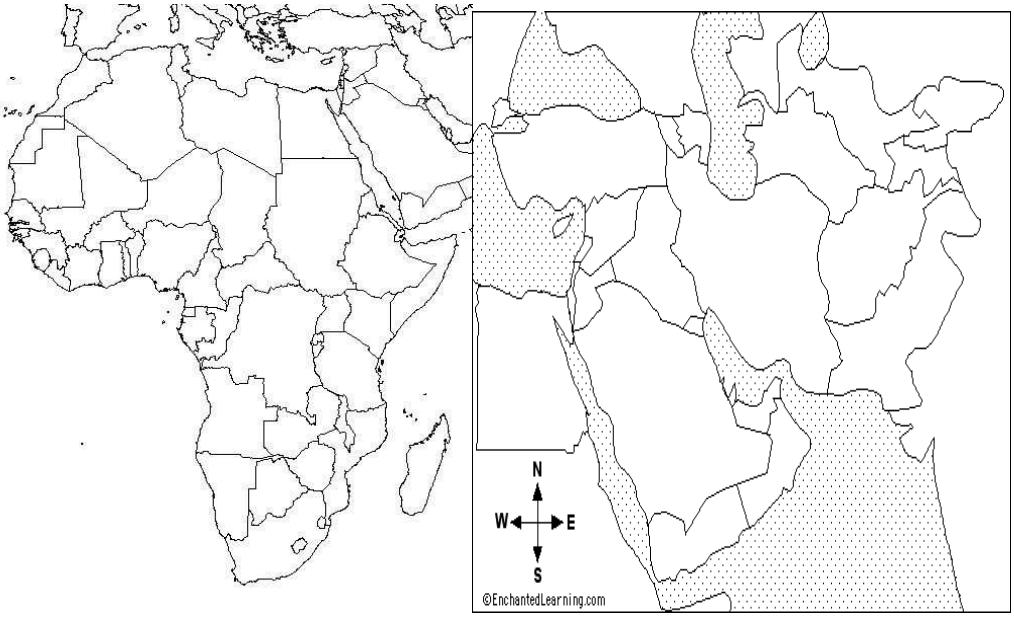
Climate impacts on Latin America

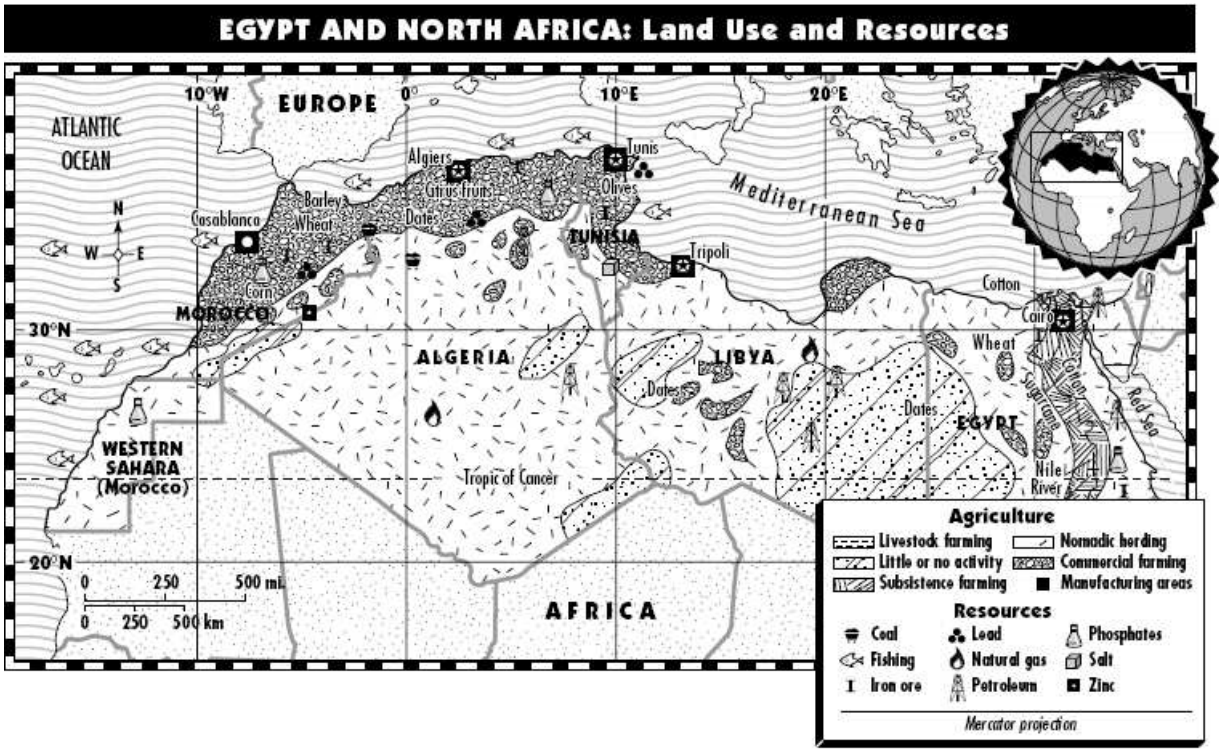


Arab World

Area: Middle East and North Africa (Maghreb countries)
Population: circa 325 million in 22 countries
Population density: The concept of average population density has little meaning when applied to the Arab world. Since significant human settlement is found only where water supplies are adequate, the overwhelming majority of Arabs live in relatively high concentrations along coastal areas and major river valleys. The most striking example of this phenomenon is in Egypt where more than ninety percent of the population lives on less than five percent of the land.

Task 1. Identify and name the Arab countries.

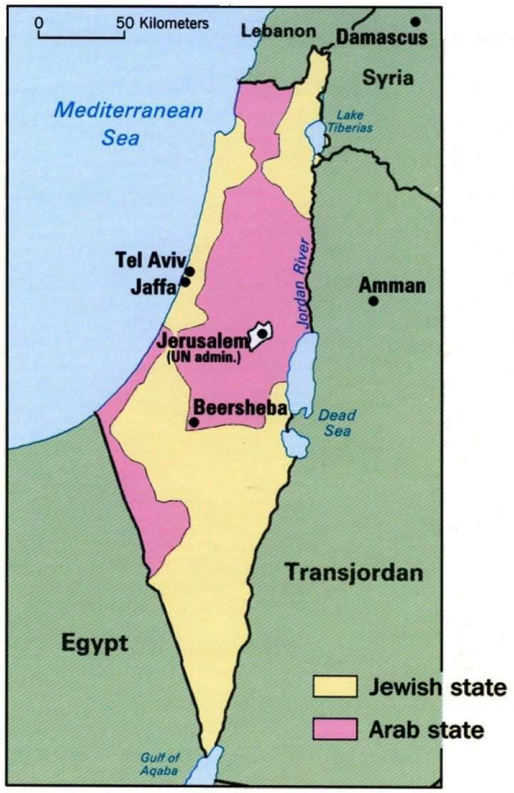




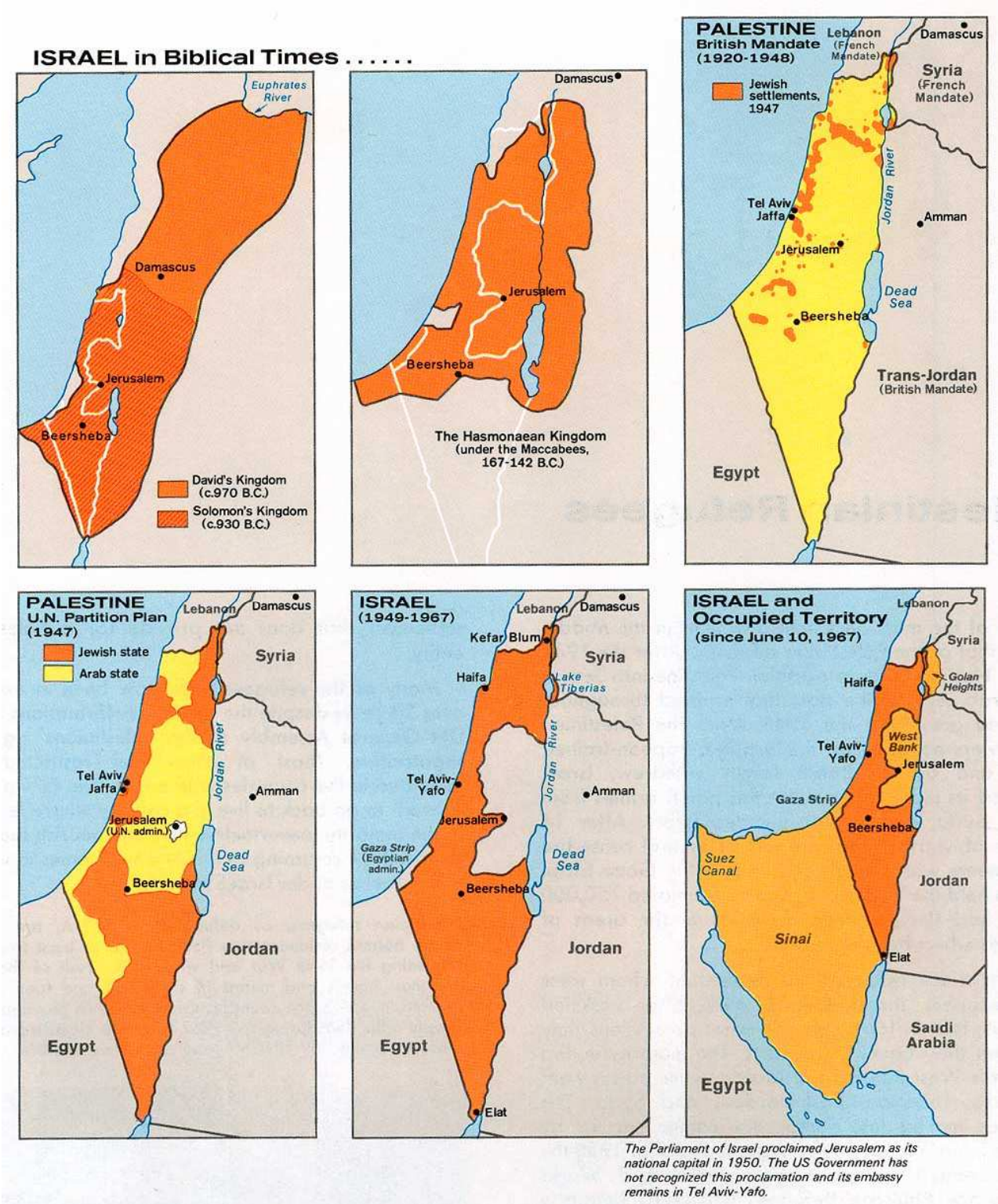
Short history of Arab World

A common cultural heritage, the Arabic language and the Islamic religion join the Arab countries into one unit.

To reinforce their mutual relations they established a political organization, the Arab League. The Arab League is a culturally and ethnically diverse association of 22 member states. As of January 1, 2007, about 314,000,000 people live in the states of the Arab League. Its population grows faster than in most other global regions.



The ancient Jewish population of the land of Israel was dispersed by the whirlwinds of history. In the middle of the last century, almost exclusively Arabs (Palestinians) lived in this area. Jewish immigration quickened at the turn of the century, Jewish organizations bought more and more land and new villages and towns were established. In 1948 the religion-based Israel was proclaimed. With the help of the immigrants arriving all parts of the world and the flow of foreign mainly American capital up-to-date industry and highly-developed economy were created. Israel has occupied and held significant areas in the four wars against her Arab neighbours. Israeli expansion has deprived the Palestinian people of their home a fraction of them lives in the occupied territories, but the majority vegetates as refugees in different Arab countries. (see maps)



The Parliament of Israel proclaimed Jerusalem as its national capital in 1950. The US Government has not recognized this proclamation and its embassy remains in Tel Aviv-Yafo.

Agriculture

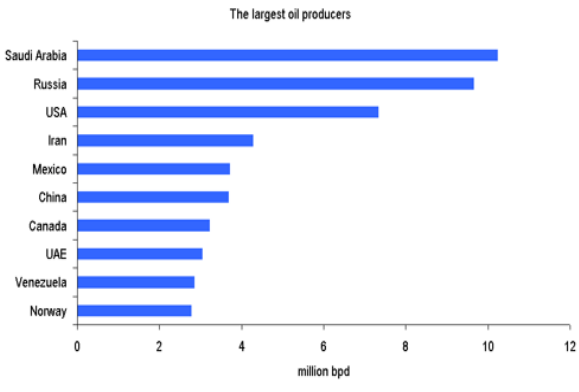
The agriculture of the Arab countries adjusts itself to the climate. In the arid and semi-arid regions where the annual rainfall is less than 250-300mm agriculture is restricted to the **irrigated oases**. (1) The poor grazing lands of the enormous desert regions on the margins of the Sahara in the interior of the Arabian peninsula and on the Syrian-Arab Tableland are utilized by **pastoral nomads**. (2) In the sparsely populated semi-arid zone **the large oasis areas along the rivers** show extremely dense population. (3) The 55 million inhabitants of Egypt are crowded, for instance, into a narrow belt along the Nile with an area equal to that of Transdanubia. In winter, wheat, in summer rice, cotton dominate in the fields. To control the water level fluctuation in the Nile, the English had already begun smaller barrages at the beginning of the century, but the problem finally was solved by Soviet assistance in 1960s.

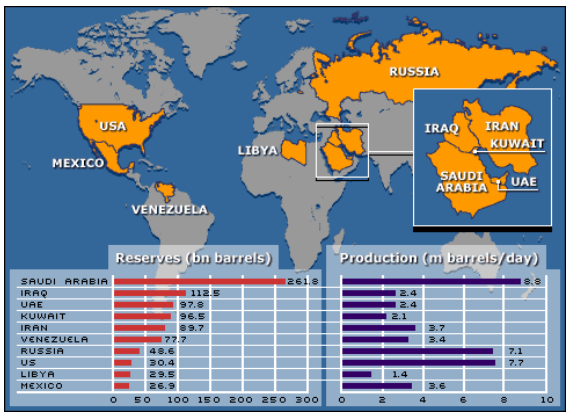
Advantages of Aswan dam	Disadvantages of Aswan dam
● **Helping Egypt to develop** ● **Fish stocks in Nasser lake** ● **Water is made available for home and industries** ● **Electricity for homes and farms** ● **Electricity for new industry** ● **Flooding on surrounding farmland is controlled** ● **New farmland is created** ● **Irrigation water for nearby farms**	● **Natural flooding is stopped, affecting farmland fertility** ● **Silt built up in Nasser lake** ● **Water-borne diseases (such as Bilharzia) increase** ● **Evaporation from Nasser lake is very high** ● **High set-up costs of building the dam** ● **Irrigated farmland suffers from salination** ● **No fertile silt moves down the river** ● **Land lost from the formation of Lake Nasser**

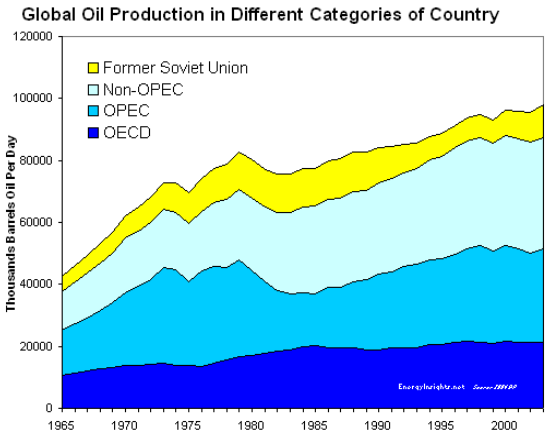
The Tigris and Euphrates region is less densely populated. Between the wheat and barley and cotton fields appears the green of date-palm. (4)
Agriculture along the shore of the Mediterranean sea shows orange, grapefruit, lemon plantations, vineyards and truck farms produce mainly for the European market. (5)

Economy and industry

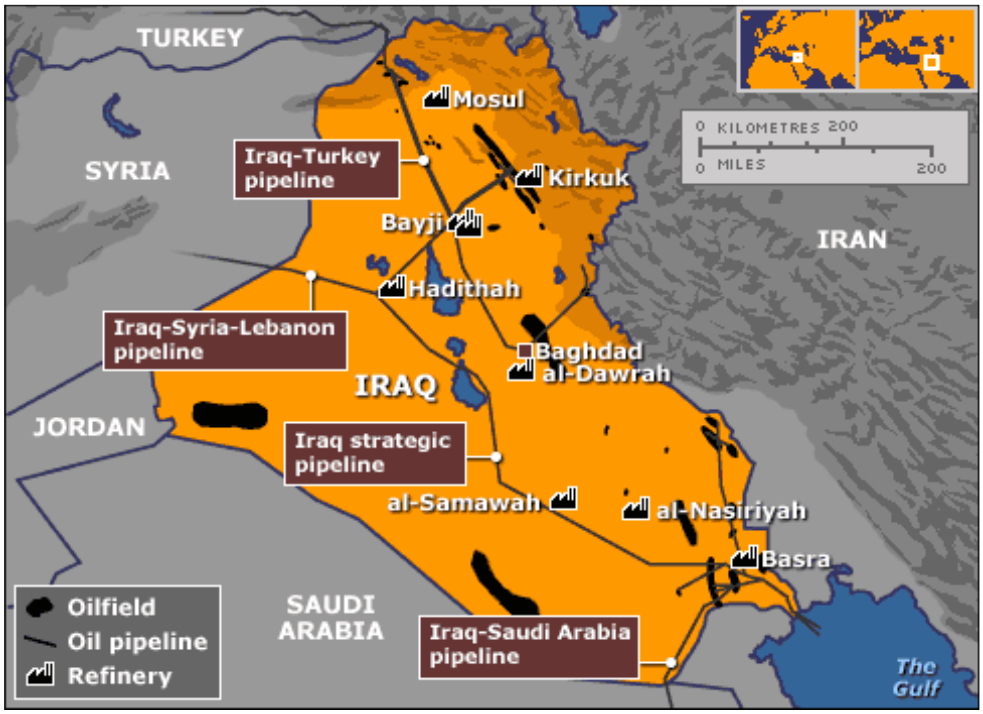
Task 1. Study the following diagrams







Khurais oil field Saudi Arabia

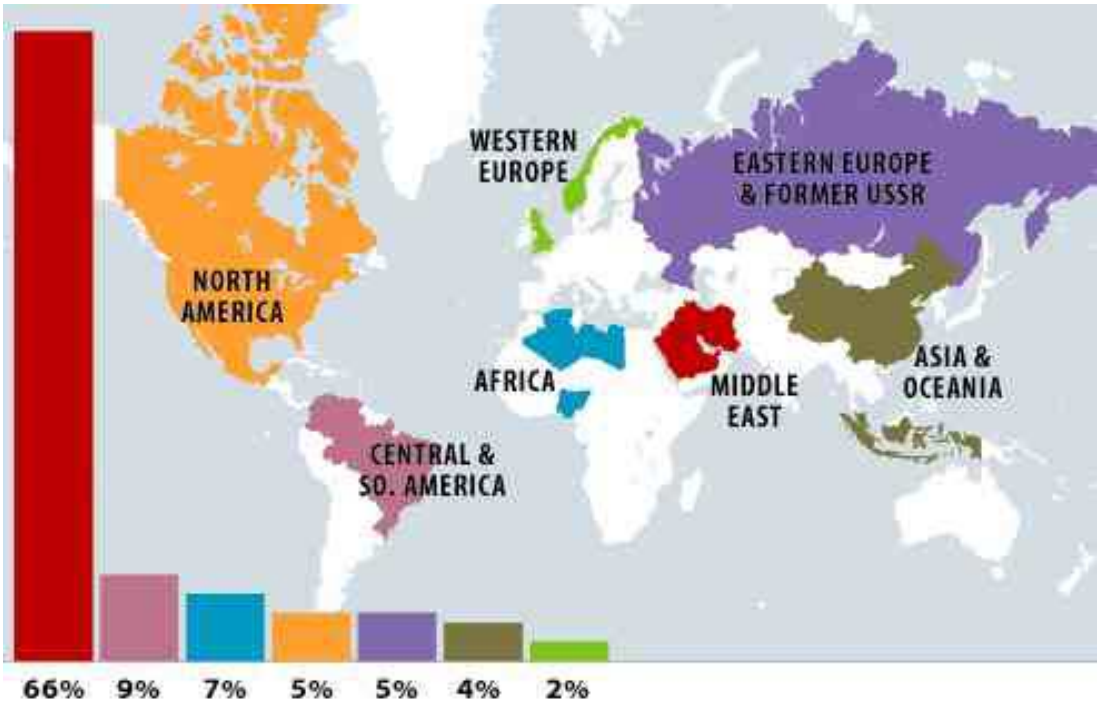


Iraq's proven oil reserves of 112 million barrels[2] are the world second largest, behind Saudi Arabia

The Arab world has an abundant supply of minerals. Rich iron and base metal ore, and phosphate deposits, have been discovered in the Atlas region. Morocco is first in the world in exports of phosphate, which is used for manufacturing chemical fertilizers, and large quantities of iron ore arrive at Western European blast furnaces from Mauritania.
The most valuable treasure of the Arab world, oil, accumulates in porous marine sediment. A considerable amount of natural gas accompanies the oil. The exploitation of oil around the Persian Gulf dates back to the first decades of our century, but the discovery of the largest field and the rapid growth of production date only from the 1950s.

[2] Angol-amerikai űrmérték, a szó jelentése: hordó. Egy amerikai **barrel** 1, 59 hektoliternek felel meg. A **barrel** mértékegységét manapság leginkább az olajpiacon használják.

Concessions were granted to the major American and Western European oligopolistic producers. In the 1970s the Arab countries either nationalized or took into state control the mining companies, but the transportation, processing and sale of petroleum are still in the hands of the oligopolistic companies.



The world's oil reserves

The oil producing countries have established an international organization for protecting their rights.
The largest hydrocarbon deposits in the Arab world can be found under the Persian gulf and along its shore. A great part of oil is transported from here in huge tankers. They sail to Western Europe around Africa because only medium sized ships can pass through Suez Canal. The oil of Iraq and Saudi Arabia is partly moved in pipelines to the ports on the shore of the Mediterranean and the Red Sea.
The oil of Algeria and Libya also reaches the seacoast by pipelines. The industry of Western Europe and Japan refines the bulk of Arab oil. The large scale industrialization which began in the 1970s relies on natural resources and capital, application of most up-to-date technology, as well as employment of professionals and guest workers who came here from distant countries in great numbers.

Rank order GDP per capita

Country	GDP per capita
1. Qatar	87600 dollar
5. Kuwait	55900 dollar
25. UAE	37000 dollar
32. Bahrein	32000 dollar

Guest workers in the Arab world

13 million foreign workers in the Saudi Arabia, Kuwait, Bahrain, Qatar, UAE and Oman - about 37% of the population.
In Dubai, in the UAE there are 1 million migrant workers comprise and 250, 000 citizens.
Majority of foreign workers are Asian.

Republic of South Africa 

Area: 1 229 912 sq. km
Population: 48 000 000 (ethnic groups : **black African 79%, white 9.6%, colored 8.9%, Indian/Asian 2.5%)**
Population density: 36 people per sq. km
GDP: 9700 dollar per capita

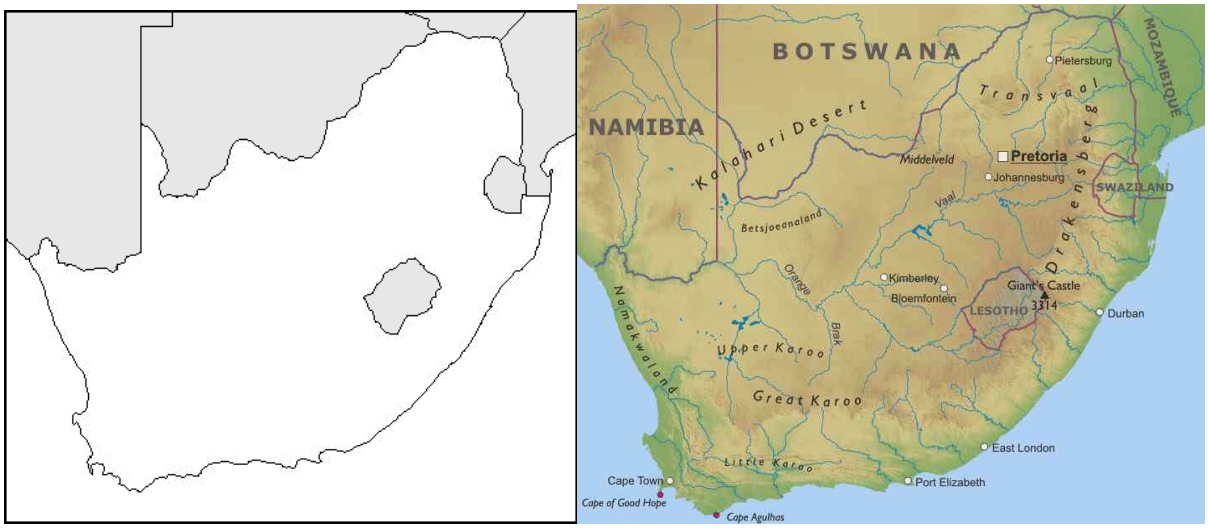
Short history

After the British seized the Cape of Good Hope area in 1806, many of the Dutch settlers (the Boers) trekked north to found their own republics. The discovery of diamonds (1867) and gold (1886) spurred wealth and immigration and intensified the subjugation of the native inhabitants. The Boers resisted British encroachments, but were defeated in the Boer War (1899-1902). The resulting Union of South Africa operated under a policy of apartheid - the separate development of the races. The 1990s brought an end to apartheid politically and ushered in black majority rule.

Landscape

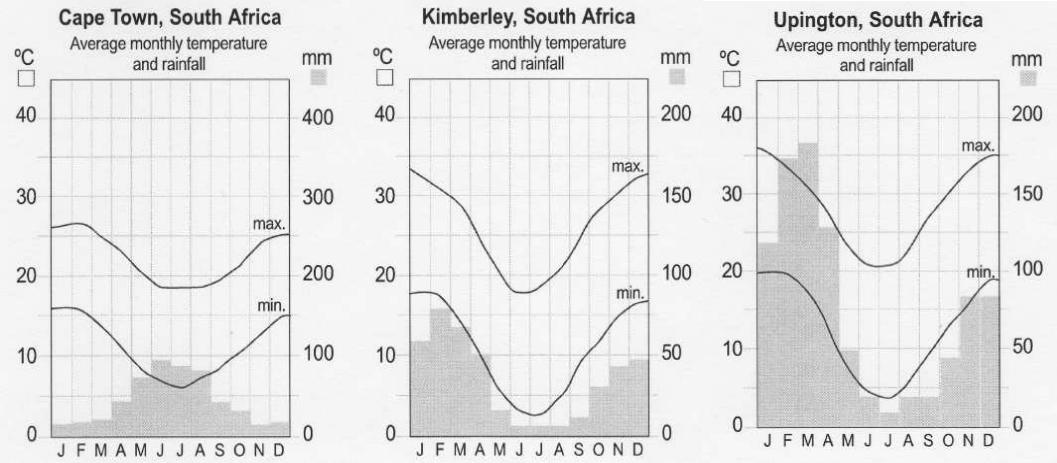
Task 1. Label the following geographical features in the blank map.

- **Orange river**
- **Drakenberg**
- **Pretoria**
- **Johannesburg**
- **Kimberly**



Climate

Task 1. Analyse the following diagrams and explain the different climates of South Africa



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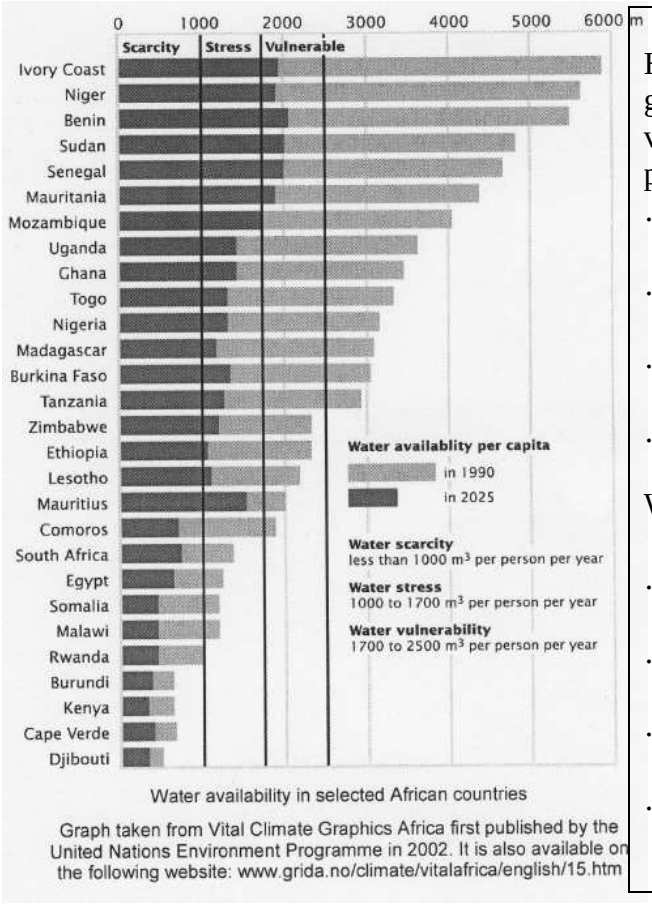
Task 2. Answer the questions after analyzing the graph.



Water availability in selected African countries

Graph taken from Vital Climate Graphics Africa first published by the United Nations Environment Programme in 2002. It is also available on the following website: www.grida.no/climate/vitalafrica/english/15.htm

How many of the African countries listed in the graph had water availability levels below the vulnerable level in 1990 and how many are predicted in 2025 ?

……

……

……

……

Why do you think this trend is occurring ?

……

……

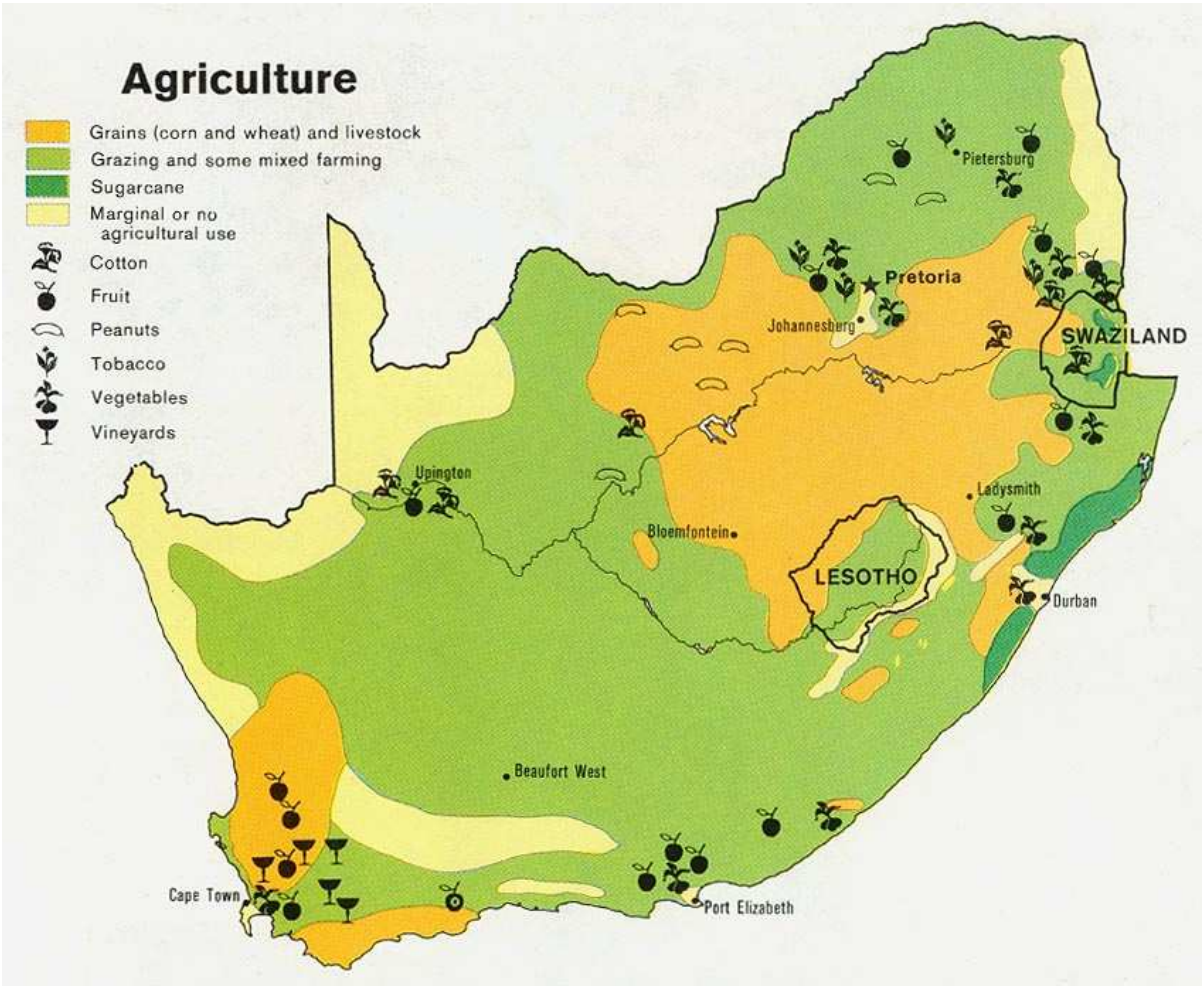
……

……

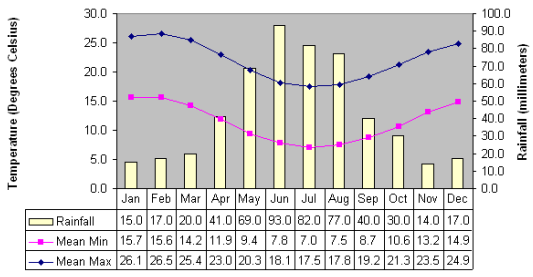
Industry

South Africa is the Continent's most economically developed country. It has more than half of Africa's industrial firms, but it has only 6 percent of Africa's population. The basis for Africa's wealth is its minerals, which are exported throughout the world. Mineral resources include gold, uranium, copper, phosphates, nickel platinium, iron ore, coal, chromium, and diamonds. Main towns are **Johannesburg**, **Cape Town** and **Pretoria**.
South Africa also has well developed tourist industry, there are many resorts and game reserves.

Agriculture

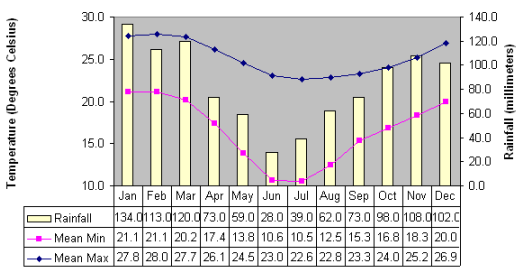


Long Term Climate Data for Cape Town, S.Africa (1961-1990)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall	15.0	17.0	20.0	41.0	69.0	93.0	82.0	77.0	40.0	30.0	14.0	17.0
Mean Min	15.7	15.6	14.2	11.9	9.4	7.8	7.0	7.5	8.7	10.6	13.2	14.9
Mean Max	26.1	26.5	25.4	23.0	20.3	18.1	17.5	17.8	19.2	21.3	23.5	24.9

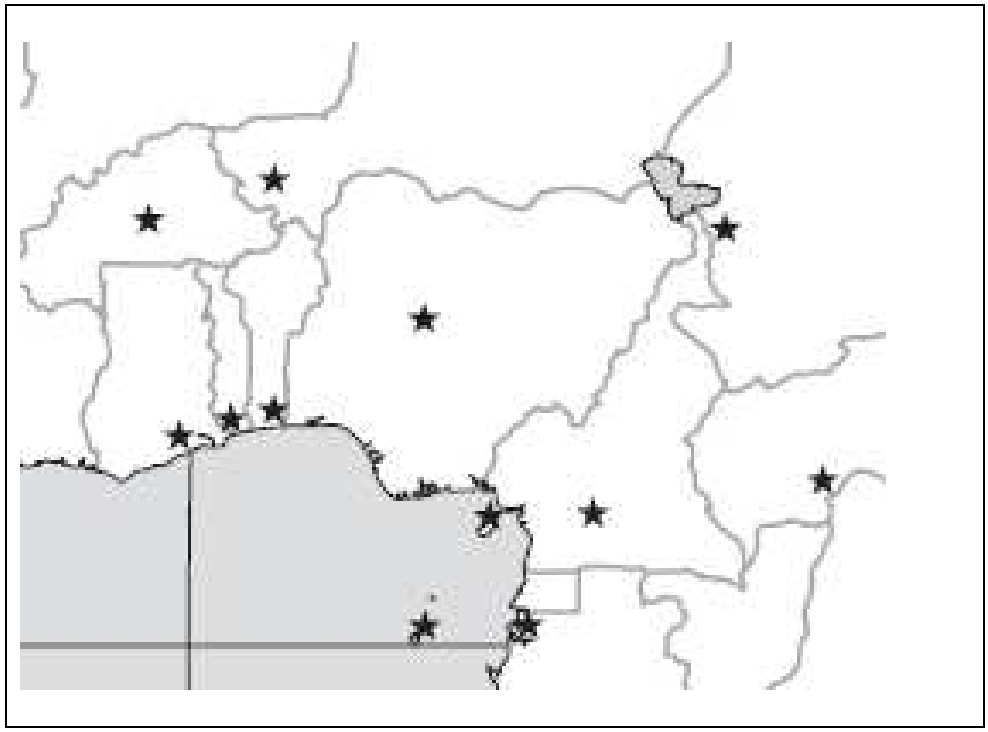
Long Term Climate Data for Durban, South Africa (1961-1990)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall	134.0	113.0	120.0	73.0	59.0	28.0	39.0	62.0	73.0	98.0	108.0	102.0
Mean Min	21.1	21.1	20.2	17.4	13.8	10.6	10.5	12.5	15.3	16.8	18.3	20.0
Mean Max	27.8	28.0	27.7	26.1	24.5	23.0	22.6	22.8	23.3	24.0	25.2	26.9

Nigeria

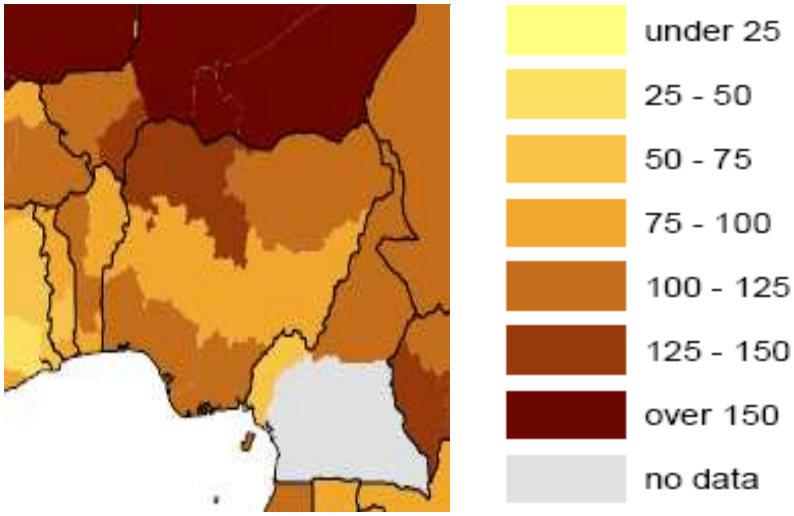
Area: 923 768 sq. km
Population: 146 million
Population density: 145 people per sq. km
GDP: 2100 dollar per capita



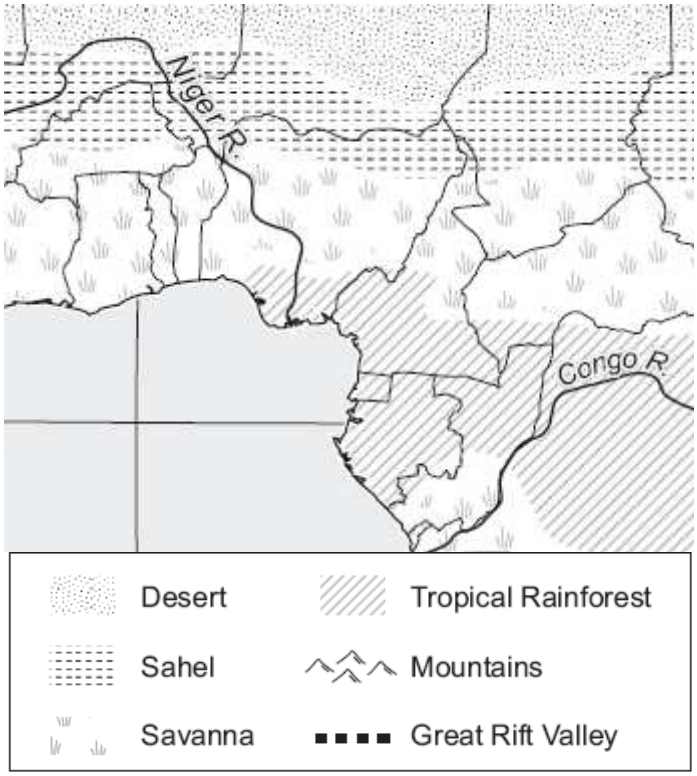
Main characteristic	North	South
Ethnic groups	hausa, fulani	joruba ibo
Religion	muslim	christianity
Vegetation	savanna	tropical rainforest
Agriculture	tillage	tropical fruits
Industry	Sparse population new capital: Abuja	Oil refineries and petrochemical industry

Population:

Infant mortality in Nigeria



Bioms in Nigeria



Nigeria lies in West Africa on the shore of the Gulf of Guinea. Her area is ten times that of Hungary. Every sixth African lives in Nigeria and two-thirds of her population are illiterate. The historical fate of the country, the life of her peoples and the problems of development are characteristic of many other African countries as well.

From the second half of the 19th century Nigeria was the colony of England until 1960.
Along the seacoast the English established tropical agriculture producing for export. Nigeria, similarly to other African countries, inherited the artificial boundaries drawn by the colonizing powers when they divided the continent. In Nigeria about 270 more or less different languages are spoken. Two-thirds of the population belong to four big ethnic groups comprising 10 to 20 million people each. The northern part of the country is the home of the Muslim *Hausa-Fulanis*, while the Christian *Ibos* and *Yorubas* are concentrated in the south. Conflicts of people with different languages and cultures have threatened Nigeria with disintegration and only a bloody civil war could preserve the unity of the state. The population density shows great spatial differences. In the most densely populated agricultural areas more than 300 people live on one km^2, but the middle of the country is only sparsely populated. Three-quarters of the population live in villages.

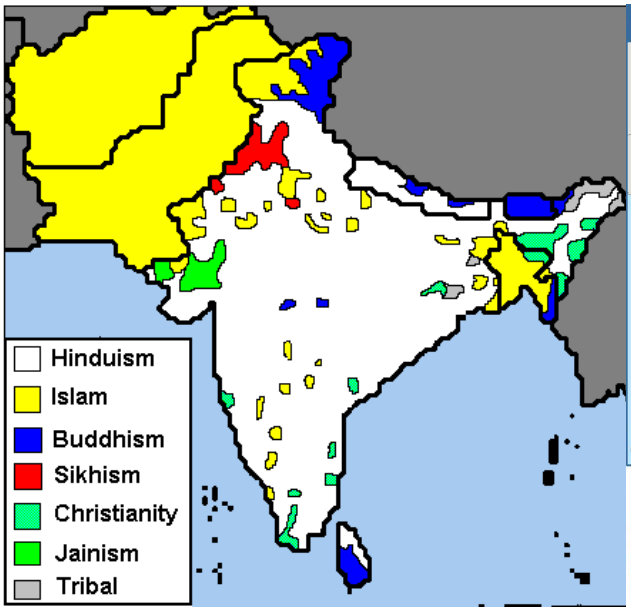
The southern part of Nigeria lies in the equatorial belt. The typical rainforest reaches as far as 80 to 160 km from the coastline, then it gives way to a wooded savanna. In the densely populated areas, because of centuries of slash-and-burn agriculture, secondary forests have replaced the rainforest. In the lands cleared by burning the forest different kind of plants, such as **maize** and **vegetables** are planted mixed. Since colonialization, most of the peasant farms has changed over to production of commodities for export. In the southwest they plant mainly **cacao**, in the southeast **oil-palm**. In the villages of the rainforest animal husbandry is insignificant because of tsetse fly infestation.
In the dry savanna of the northern part of the country farmers grow **millet**, and along the rivers, **rice**. They put **cotton** and **groundnuts** on the market for the domestic processing industry and for export. Here the major form of animal husbandry is **nomadic herding**.

Most of Nigeria's crystalline rocks belonging to the ancient African Shield are on the surface. Many different kinds of ores occur here, but the bult of them still lies untouched in the depth of the Earth. In the delta of the Niger huge **oil and natural gas** deposits have been discovered and Nigeria has become the largest oil producer in the continent. **Petroleum** represents 90 per cent of her exports. The earnings originating from oil offer Nigeria a chance to emerge from poverty, to develop the economy rapidly and to establish an up-to-date industry. Nigeria has century-long traditions in **handicrafts**. Even today these branches employ many people. The industrialization of Nigeria would require the solving of several interrelated tasks. Among these, a broader utilization of the abundant natural resources would be necessary, the sparsely-populated centre of the country should be populated, a skilled working class should be developed, and the construction of the railway and road network should be sped up.

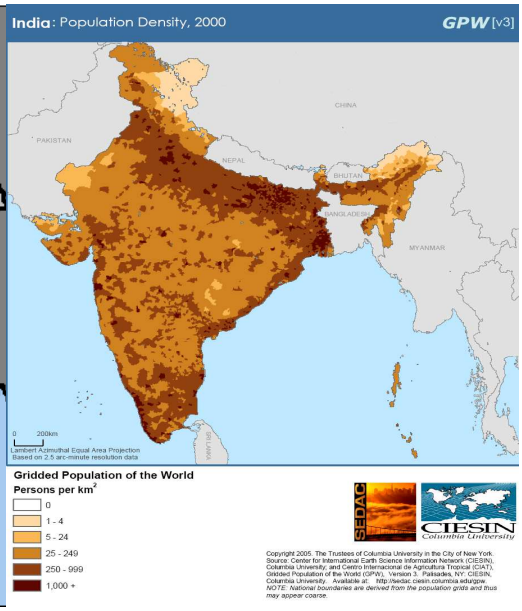
India 

Area : 3,287,590 sq km
Population : 1,014,003,817 (July 2000 est.)
Population density: 328 people per sq. km
GDP: 2600 dollar per capita

Different religions in India



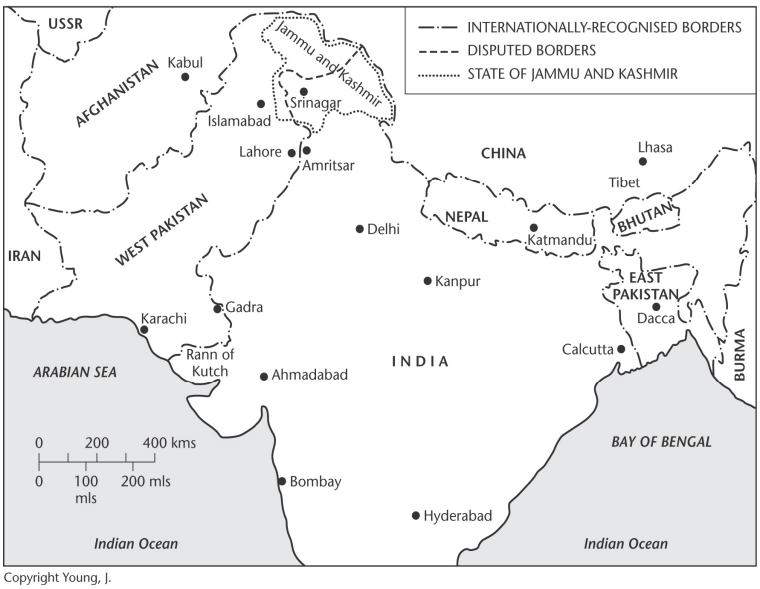
Population density in India



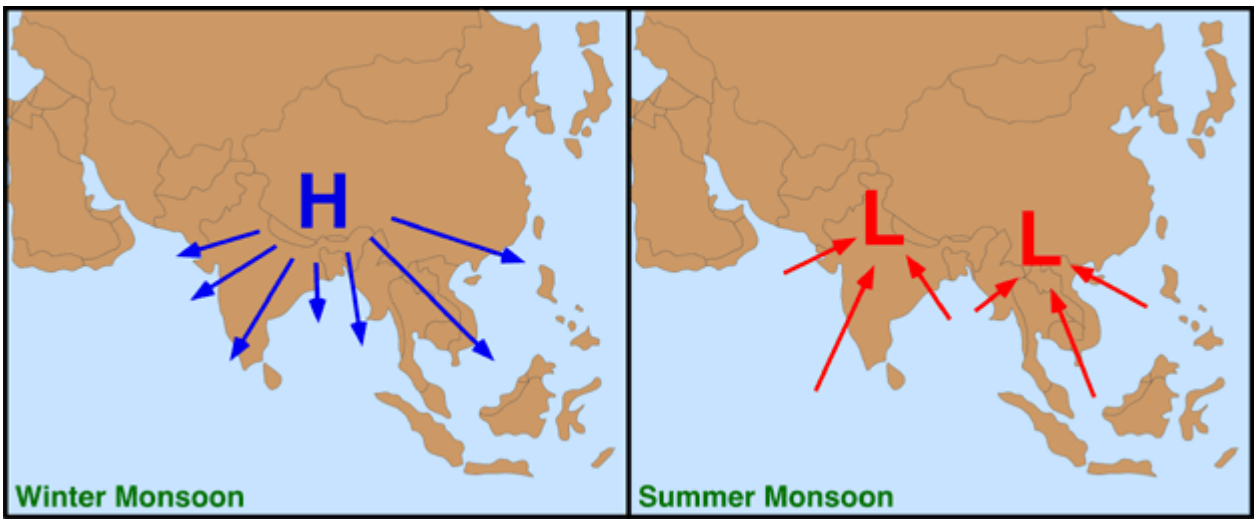
Short history of India

The Indian subcontinent was the most valuable colony of Great Britain for two centuries. The English tried to prolong their rule by stirring up religious conflicts between **Hindus** and **Muslims**. When they had to grant independence to the colony, its area was partitioned on a religious basis. (1947) India was established in areas populated mainly by Hindus. The island of **Ceylon** (famous for tea and rubber plantations), became an independent state. Pakistan came into existence in the districts of Muslims. East Pakistan became independent country under the name of Bangladesh in 1971. When the border was drawn between Pakistan and India the situation of state Kashmir remained unsettled.(see map)

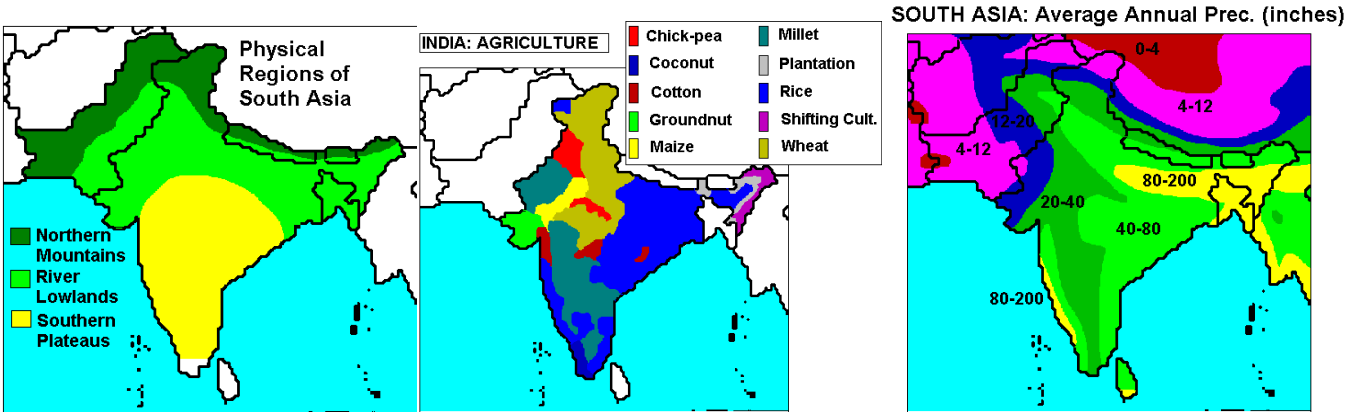
INDIA AND PAKISTAN



Task 1. Revise the climate of India. What do you know about the monsoon ?



Physical regions of India Pakistan and Bangladesh



Agriculture of India

It has always been India's most important economic sector. The 1970s saw a huge increase in India's wheat production that heralded the **Green Revolution** in the country. The increase has been brought by bringing additional area under cultivation, extension of irrigation facilities, use of better seeds, better techniques, water management, and plant protection. Dependence on India agricultural imports in the early 1960s convinced planners that India's growing population, as well as concerns about national independence, security, and political stability, required self-sufficiency in food production. This perception led to a program of agricultural improvement called the Green Revolution, to a public distribution system, and to price supports for farmers. The growth in food-grain production is a result of concentrated efforts to increase all the Green Revolution inputs needed for higher yields: better seed, more fertilizer, improved irrigation, and education of farmers. Although increased irrigation has helped to lessen year-to-year fluctuations in farm production resulting from the vagaries of the monsoons, it has not eliminated those fluctuations. Nontraditional crops of India, such as summer mung (a variety of lentil, part of the pulse family), soybeans, peanuts, and sunflowers, were gradually gaining importance. Steps have been taken to ensure an increase in the supply of non-chemical fertilizers at reasonable prices. The monsoons, however, play a critical role in Indian agriculture in determining whether the harvest will be bountiful, average, or poor in any given year. One of the objectives of government policy in the early 1990s was to find methods of reducing this dependence on the monsoons.

Rice is the most important food grain. In feeding the people, the wheat grown in the drier regions, millet, groundnuts for cooking oil, and sugar cane play important role. The northwestern part of decanis covered by a basaltic overburden out of which fertile soil has developed. Here much short stapled cotton is grown. The neighbourhood of Calcutta, the delta of Ganges is the world's leading jute-growing region. India possesses the largest horned cattle stock in the world.

A sacred cow in Agra India

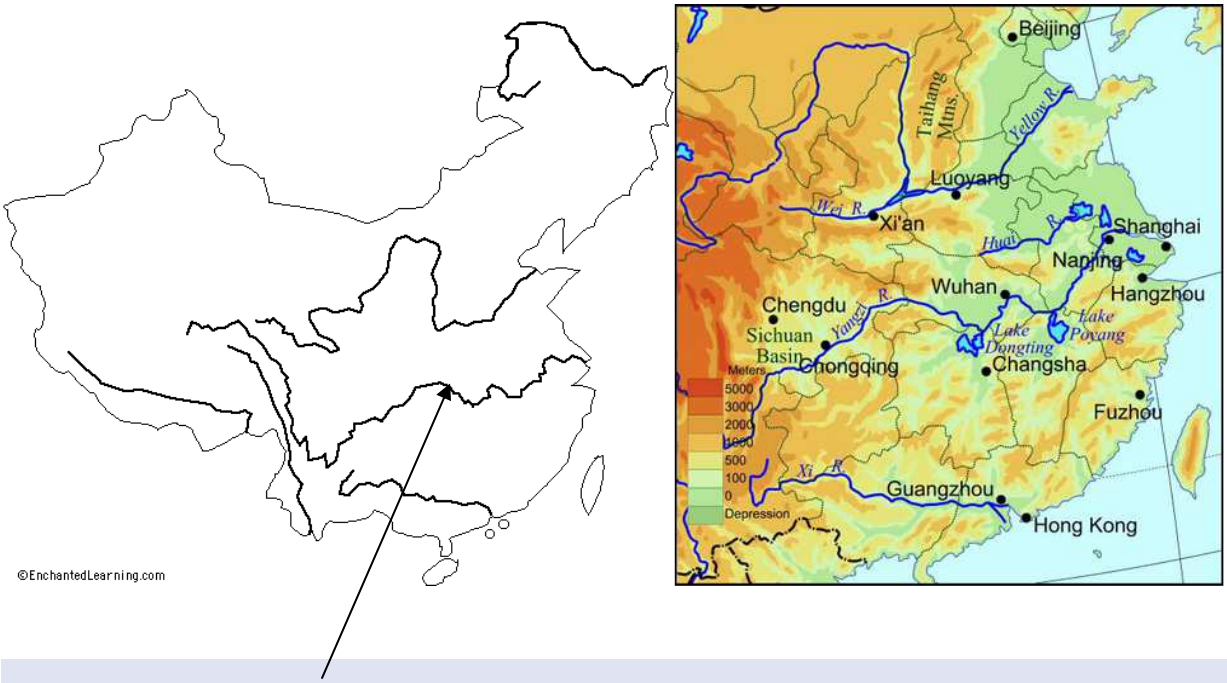
Industry of India

Indian industry enjoyed a large demand also in Europe in the 17th and 18th centuries. The main region of heavy industry has takes shape along the **Damodar river**, where huge hard coal and iron manganese ore deposits lie near each other. The oldest centre of iron metallurgy and machine production is Jamshedpur. Devevelopement of machine production and the chemical industry has been particularly rapid. India's leading industrial branch is the processing of cotton and jute. The centres of textile industry are **Bombay (Mumbai)** and **Calcutta**. **New Delhi** is the capital of India.

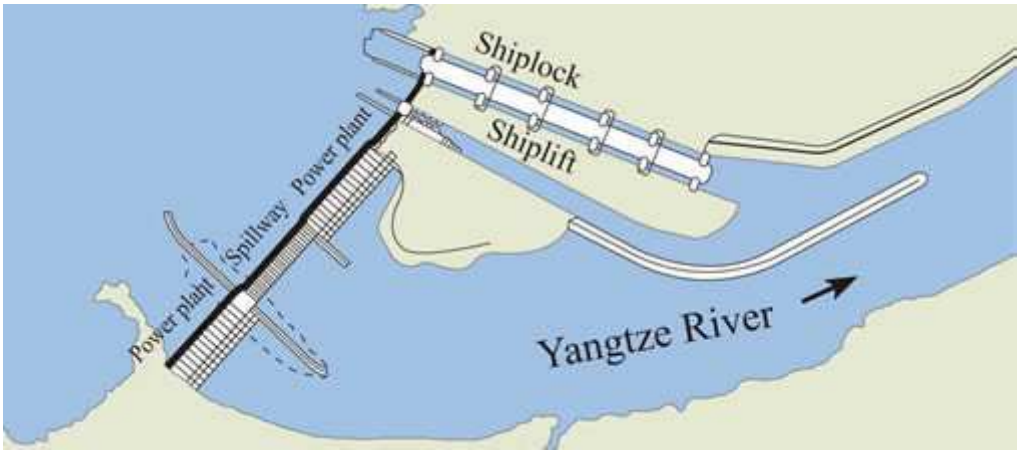
China 

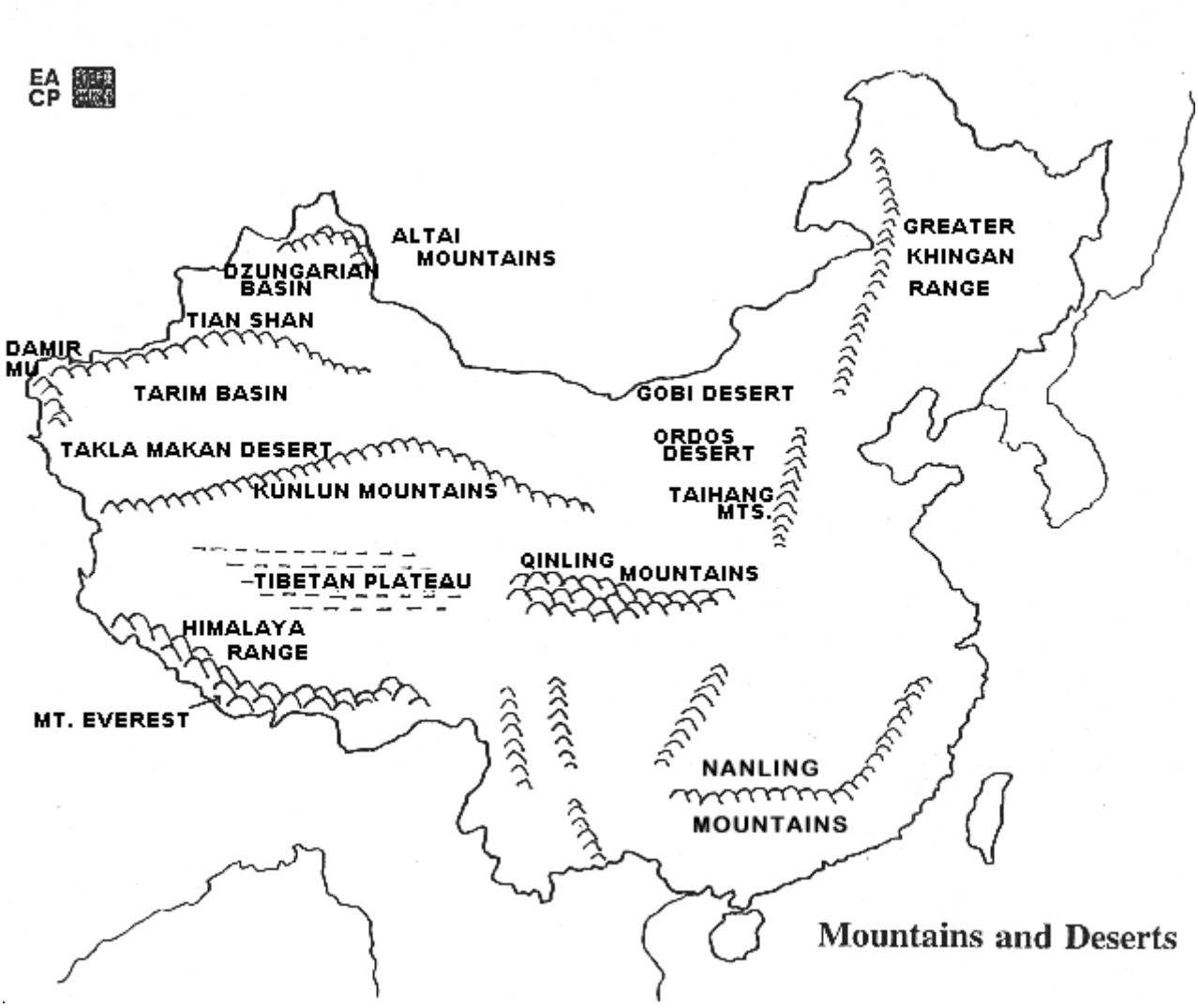
Area: 9. 6 million sq km
Population: 1.2 billion
Population density: 136 people per sq. km
GDP: 5000 dollar per capita

Task 1. Identify the different rivers of China



The Three Gorges Dam is the world's most notorious dam. The massive project sets records for number of people displaced (at least 1.3 million), number of cities and towns flooded (13 cities, 140 towns, 1,350 villages), and length of reservoir (more than 600 kilometers). Yet this once glittering monument to China's might is fast becoming a symbol of government folly. The project has been beset by corruption, human rights violations and spiraling costs, and the environmental impacts are rapidly escalating.





The world's most populous country:

China (Zhonghua Renmin Gongheguo) is as large as Europe. She sank to the level of a semi- colony of the imperialist powers in the 19th century but the popular revolution (led by the Communist party) won out in 1949 and she set out on the road of socialist progress following the Stalinist Soviet Pattern. The relations with other countries of the 'socialist world system' have become looser after 1958. For two decades they attempted to solve their economic tasks relying on their own resources. Education and science were neglected. So economic growth slowed down and became uneven. The economic reform

(at the end of the 1970s) has emphasized the modernization of the industry, agriculture, science and the army.
2/3 of the population work in agriculture. They have to ensure the food supply for the permanently growing population.
Since the beginning of the 1800s crowds of people fell victim to famine, flooding or drought.
Since the 1960s the food supply situation has been improved by the development of the agriculture and the imports of grain.
Since the 1970s the Chinese population policy encourages delayed marriages and smaller- size families.
Now the natural increase is slower than in most countries of Asia. They tried to spread of one child family model.

Agriculture:

China can be divided into **4 belts in terms of climate**:

a) **continental desert**
b) **humid continental**
c) **highland**
d) **subtropical monsoon**

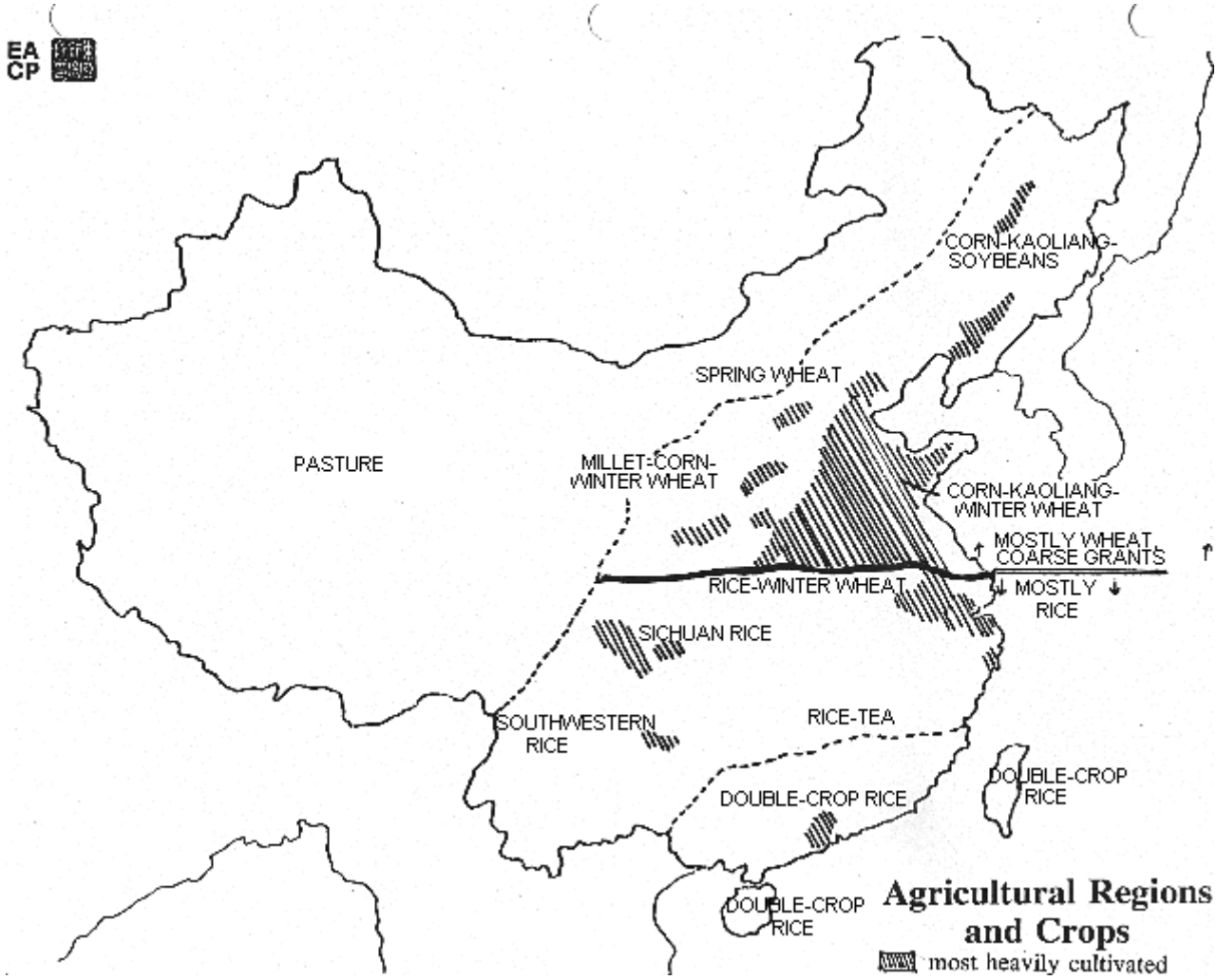
Barely 1/10 of China's area is under cultivation. The inhabitants concentrate in the fertile plain: the population density exceeds 1000 persons/ square km in many places. The sown area can be expanded by multiple utilization of the tillable land. Irrigation is very important in the development of the agriculture. The most significant grain, rice , requires flooding for 3 months. In the last century the ancient irrigation systems of the country were neglected, while the labour power was largely under- utilized. The peasant masses were mobilized for large- scale flood control and canalization works. In the 1950s the expansion of irrigable land doubled. Nowadays irrigation water reaches nearly half of the ploughlands. The lifting of water is performed by animal or human energy. From the beginning of 1960s China has rapidly increased the production and import of fertilizers. The development of agriculture technology, better fertilization and individual interest of the peasants have brought extraordinary successes in the last 1980s. Average yields have doubled.

a) **continental desert:**
-sparse population
-oasis
-drought

b) **humid continental:**
- yellowish- brown soil: loess (Yellow River)
- rice, wheat, corn, soybeans
- goat, cattle, pig, sheep

c) **highland*:***
- too dry, high, cold to support large population
- nomadic shepherding, sweet potato, millet, maize

d) **subtropical monsoon:**
- frost is unknown
- rice- 2 crops/ year
- tea, cotton, sugarcane, sweet potato, tobacco, peanut, silk
- pig, cattle, goat, sheep, yaks



Industry:

In 1984 the join declaration signed by GB and China agreed that the sovererquity of Hong- Kong would revert back to China in 1977. Hong- Kong will become a **S**pecial **A**dministrative **R**egion. The join declaration also provides that for 50 years after 1977 Hong- Kong's life style will remain unchanged. The territory will enjoy a high degree of autonomy except in foreign and defense affairs and China1s socialist system and policies will not be practiced in the SAR.

Mineral resources:

China has huge **anthracite reserves** and she is **the first in coal mining** in the world. The most important mining region: Manchurian basin (coal seams 120- 130 m thick; open cast mining**). Iron ore, coking coal**: Manchuria, North China, along Yangtze (**ferrous metallurgy**). ***Steel***: large quantities are exported.
Electric power is provided mainly by **coal- fired power plants**. 1960s- Northeast China: major **oil** resources were discovered on the continental shelf of the Yellow Sea.

Industrial centres:

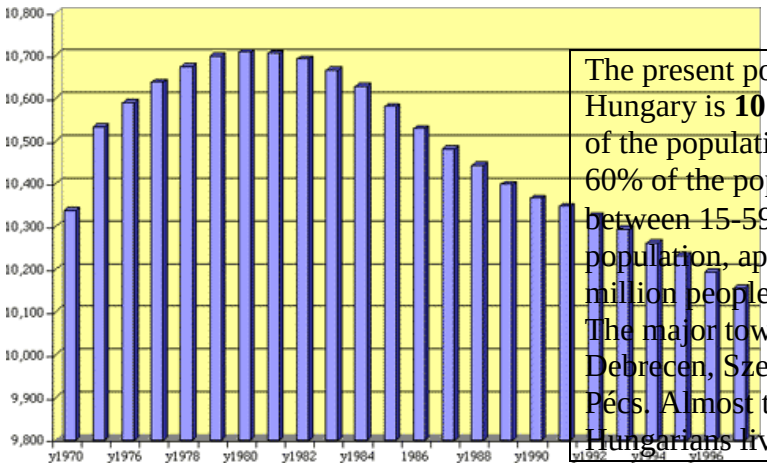
Before the revolution the only significant branch of industry was textile production. Its plants were set up mainly by foreign capitalists to exploit the inexpensive manpower. In the beginning, cotton manufacturing industry processed imported raw materials and sold its products partly abroad, so the

factories were established in the great seaports (**Shanghai**, **Tientsin**, **Canton**). Nowadays they produce mainly for the domestic market.
Manchuria is the major region of heavy industry. In the 1930s, Japanese colonizers promoted ferrous metallurgy. The development of steel production and the introduction of most branches of the machine industry took place only in the 1950s.
New centres of heavy industry: in North China- **Beijing**, **Tangshan**, **Paotow**; along the Yangtze – **Chungking**, **Wuhan**.
In the last 4 decades Chinese industry has become more even; development of the central territories has been based on large- scale railway and road construction.
Long distance transportation is still very difficult. There are numerous small plants working with simple techniques, which play a major role in the employment and in supplying it with consumer goods, tools and fertilizers.
The foreign trade turnover of China is small. In the 1960s and 1970s she attempted to develop her economy mostly with her own resources. She purchases the most important machines and modern production equipment from abroad (Japan, Western Europe). Her exports: agricultural products, cotton & silk clothes, articles of clothing and mineral raw materials.
In the trade between the capitalist countries and China, Hong- Kong has a significant role. (Population: 5.5 million). There are good use of the cheapness of the cheapness of labour, and sends textiles, articles of clothing, electronic home appliances, jewelry, feature films to the world market because of diverse industry. Its foreign trade turnover is greater than that of China as whole.
In recent decades special economic zones have been set up. The plants operating produce mainly for export and they can import the necessary machinery, parts and raw materials, duty free.

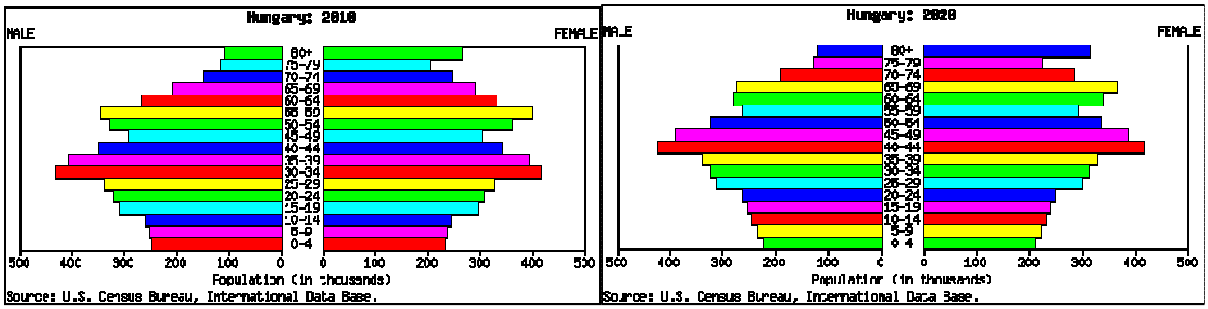
Hungary

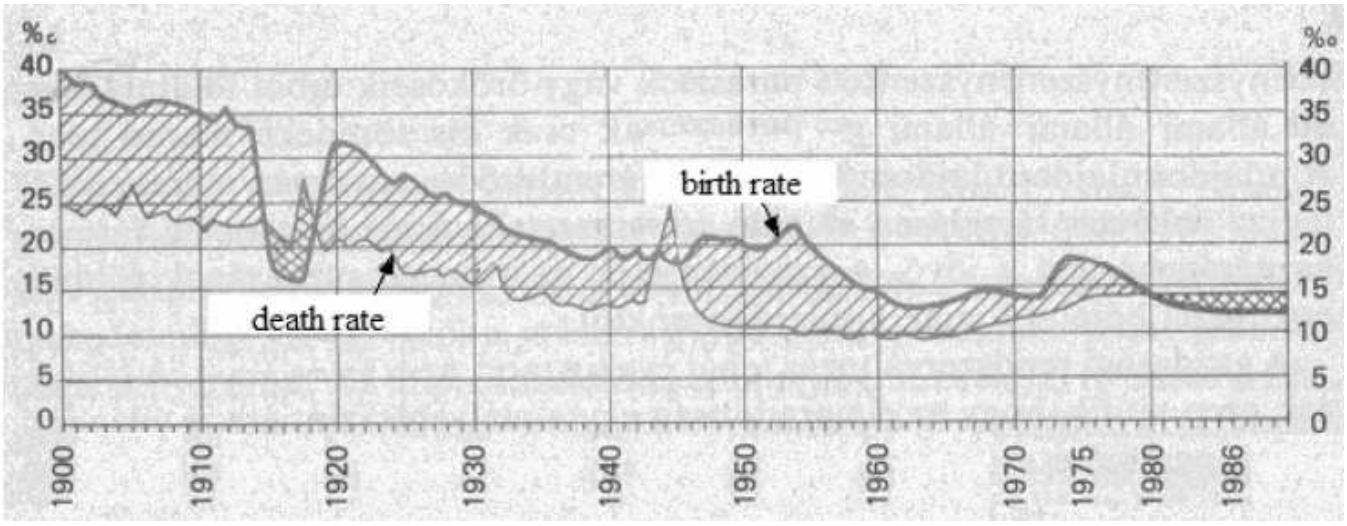
Area: 93 030 sq.km
Population: 10 050 000 people (estimated)
Population density : 108 people per sq. km
GDP:

Population of Hungary



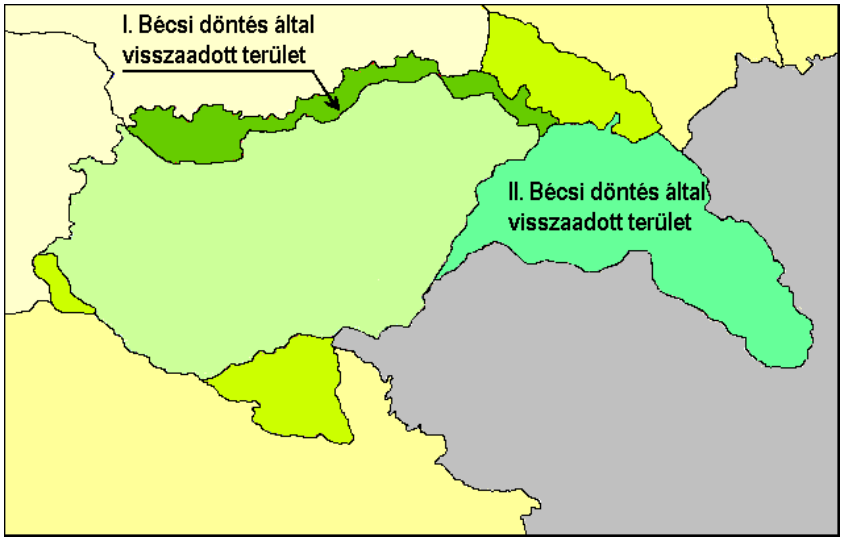
The present population of Hungary is **10 050 000**, with 21% of the population under 14, while 60% of the population is aged between 15-59. It is a decreasing population, approximately 1.6 million people live in Budapest. The major towns are: Győr, Debrecen, Szeged, Miskolc and Pécs. Almost two-thirds of all Hungarians live in cities.



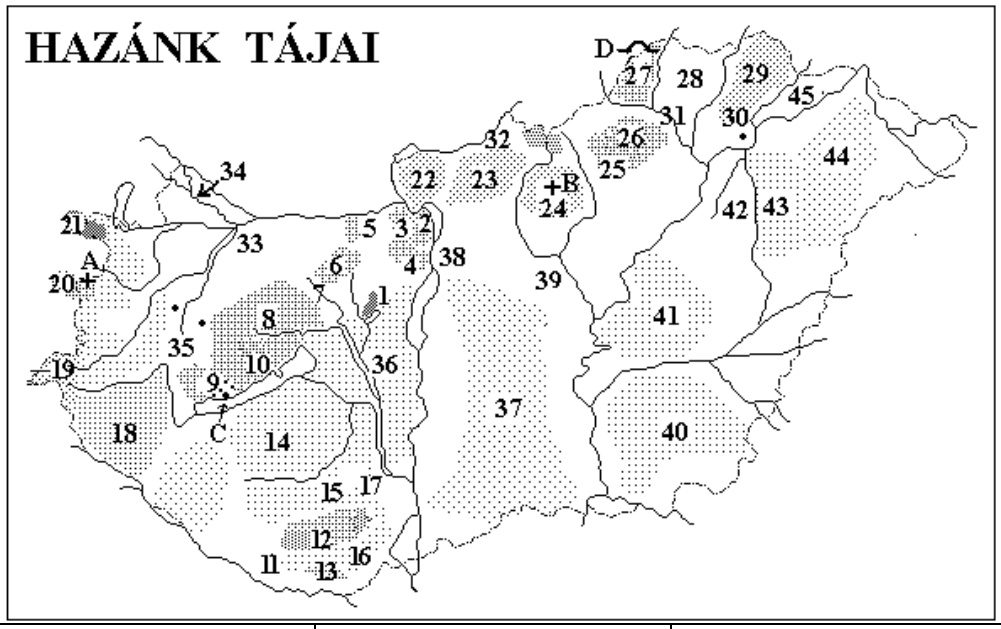


Demographic Transition Model for Hungary

Short history



Landscape and landregions



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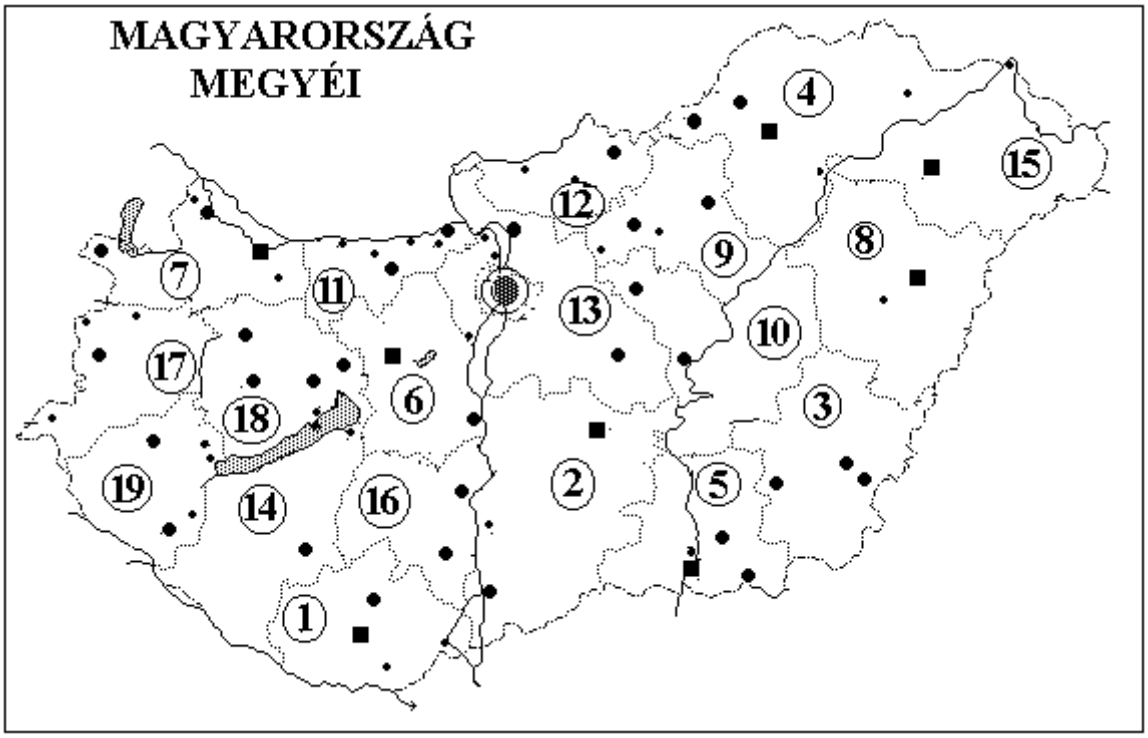

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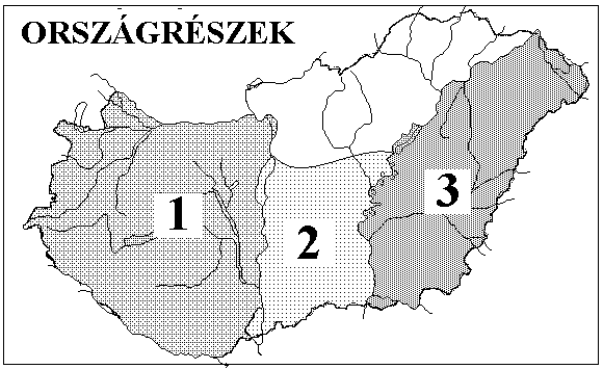

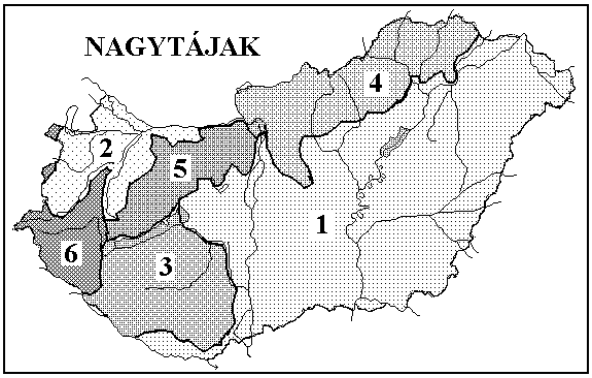

Parts of the Country	Great parts of Hungary
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3=	3=
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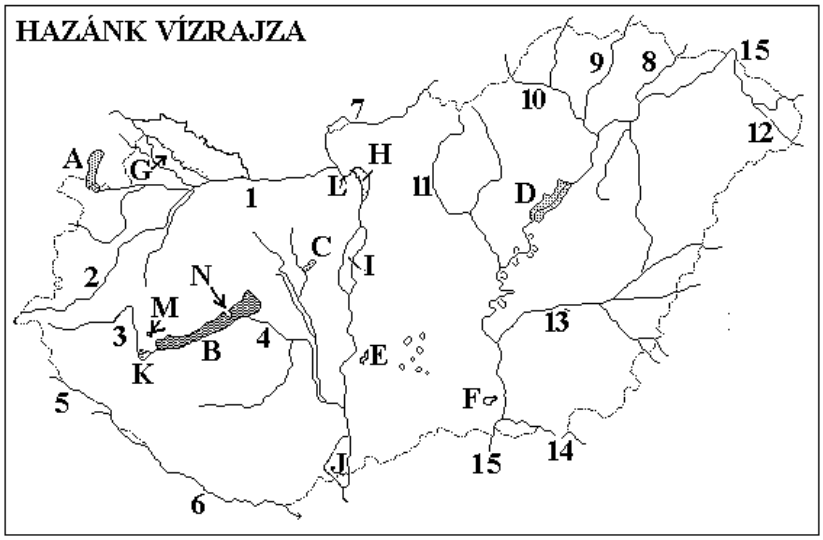
	6=

River system and lakes in Hungary



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1=	6=	11=
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3=	8=	13=
4=	9=	14=
5=	10=	15=

National parks and world heritage

National parks in our country	
1=	6=
2=	7=
3=	8=
4=	9=
5=	10=

World heritage
A=
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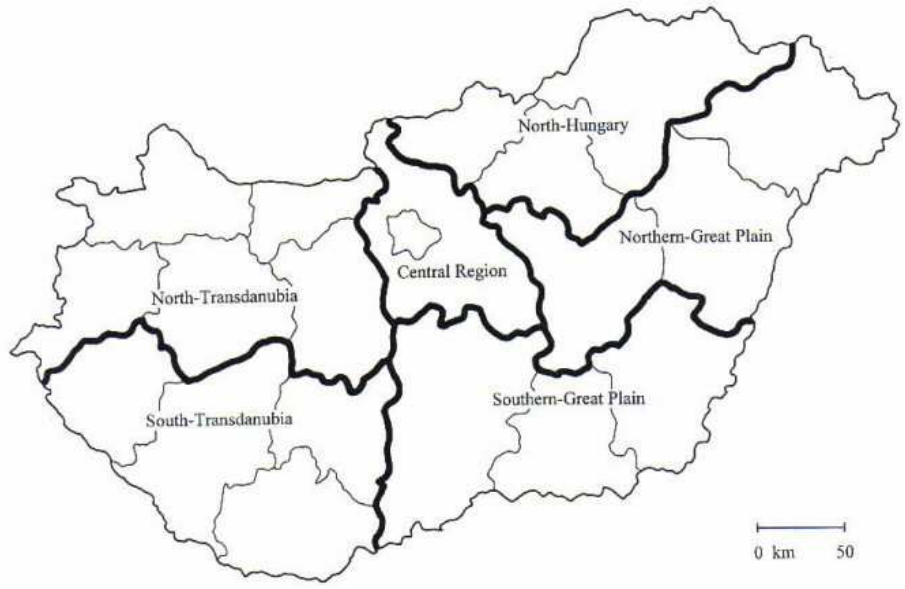
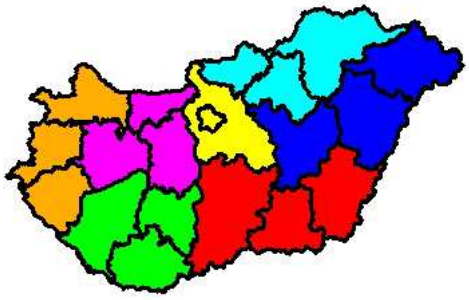
Economic and Statistic Regions in Hungary



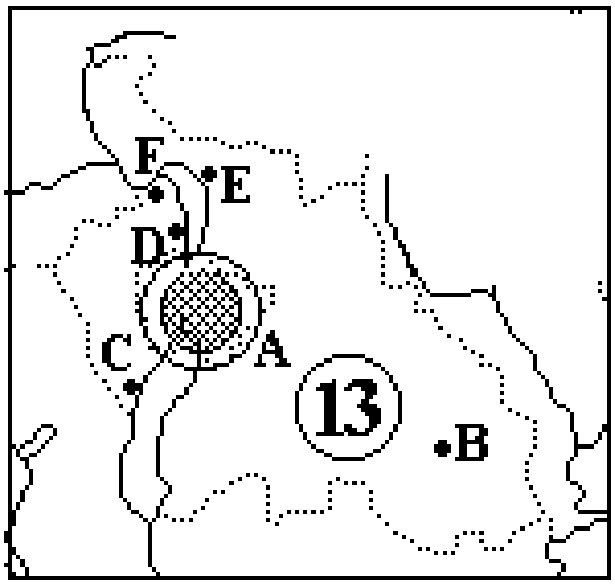
New version of regions in Hungary



An old version of regions in Hungary

I.

CENTRAL HUNGARY THE MOST ADVANCED REGION



13=
13A=
13B=
13C=
13D=
13E=
13F=

Parliament approved late last year the inclusion of seven regions as a planning-statistical unit in Hungary's administrative system composed of Budapest and 19 counties. Plans are for a new regional system to replace the county-based regime by 2005 – a condition for creating an EU-conform settlement structure and winning Union funds designed to help the integration of less developed regions (see also the 29th bulletin). A detailed description of the regions will follow in our next editions.

Central Hungary, comprising the capital, its agglomerations and Pest County, is the most advanced of the seven regions that make up the country. It covers an area of 6,900 square kilometers, with a population of 2.8 million, of which 1.81 million live in Budapest. Per capita GDP in the region, where the density of population is 411/sq. km, was 86pc above the national average in 1998. Budapest's contribution to GDP exceeded the national average by 86pc, while that of Pest County lagged 22pc behind the average.

This region has been a centre for the population and economic activity in the Carpathian Basin for several centuries, although its natural endowments for farming are not better than elsewhere in the country. Urbanisation was prompted by the Danube River, which offered a convenient waterway for European commercial cities. Industrial development gathered momentum after Chain Bridge, the first permanent bridge over the Danube, was opened for traffic in 1849. Hungary's first railway line was built in 1846 between Pest and Vác (30 km to the north). In the era of the Austro-Hungarian Monarchy (1867-1918), Budapest grew into a metropolis of one million residents and became the country's innovation centre in competition with Vienna. (Pest, Buda and Óbuda, lying on the two sides of the Danube, were united into Budapest in 1872.)

During the course of development, first the railway lines and surfaced highways branched out radially from Budapest, parallel to a rapid growth in handicraft capacities, retail and wholesale outlets, banks and insurance companies. The commodity and stock exchange opened here in 1864. The capital excelled

with its advanced communications system, urban transportation and city lifestyles. The surrounding settlements started emerging in the first half of the 20th century, along with the agricultural environment that fed the capital.

Although the first two decades of the state-socialist system (1948-1968) isolated Budapest from the rest of the world, mainly the West, multifarious relations came about between Budapest and several other parts of the country. The new wave of industrialization imposed a commuting lifestyle on workers going to work to Budapest within a range of 80 to 100 kilometers. The opening of units in the countryside by a large number of Budapest companies, and the creation of vertically structured, superimposed production chains between factories had strengthened relations between the capital and the provinces. And as the agglomerations around Budapest swelled, moving to Budapest was restricted for a while. In the meantime, the circle of settlements linked to Budapest by daily bounds of production, consumption, commerce and transport expanded by tens of kilometers.

Regional policy-makers attempted to reduce the central role of Budapest since the start of the 1970s, regrouping a greater part of investment funds to areas outside the capital, given that the central industry development projects mainly affected rural settlements. Decentralization

attempts yielded major results in a number of areas, such as culture and sport, between 1970 and 1990. Experts note it as counterproductive that Budapest became the main destination for rapid capital flows during the process of successful reintegration into the European economic mainstream starting in 1989.

According to a 1998 survey conducted by Budapest's GKI Economic Research Rt. among foreign investors, productivity rates were higher in and around Budapest at similar wage levels than elsewhere in the country. The companies questioned in the poll, commissioned by the Munich-based IFO Economic Research Institute, were satisfied with financial services, energy costs, transport and the telecommunications infrastructure. Some firms were glad to be able to establish training contacts with local education institutions. The study also reveals that it was easier to find subcontractors and set up new plants near Budapest than in other regions.

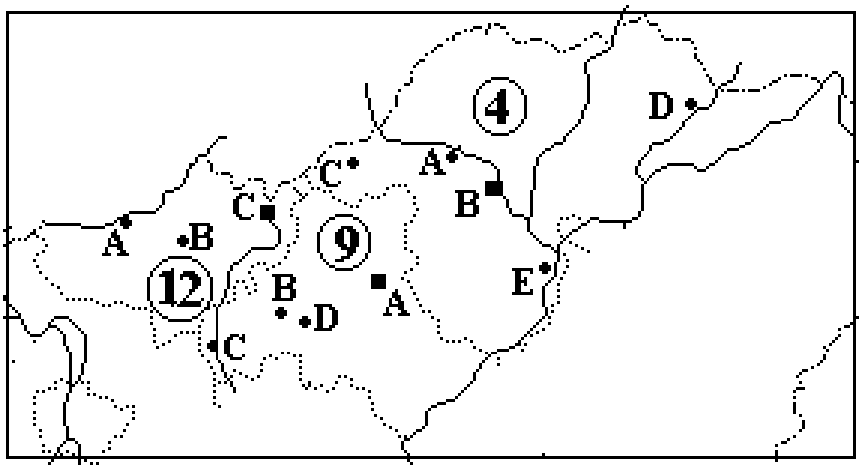
Currently Budapest has two-fifths of foreign direct investments of over USD 20bn invested in the country in the last 10 years, and it contributes a third of GDP amounting to USD 50bn a year. Budapest leads the field in the number of businesses per 1,000 inhabitants, especially in the corporate venture category, with Pest County ranking fourth nationwide, but first if measured by other indices, such as value of foreign capital, GDP ratio, rate of unemployment, average wages and infrastructure. In per capita GDP, central Hungary exceeds the national average by 48pc and Budapest within this by 86pc, while Pest County is lagging 22pc behind. The region is at the top regarding industrial production, commerce and services, and its agricultural performance matches the national average. Budapest and Pest County have been developing at a faster pace than the national average for several years.

Districts in the region outside the capital have begun catching up in recent years and over a third of the 22 towns were given municipality status in the last one and a half decades. The region of Vác, for instance, owes its advancement to its industry, go-between trade and flourishing tourism. The fastest-growing area is Gödöllő and its vicinity, some 20 km northeast of Budapest, due to its favorable transport infrastructure and many-sided relations with the capital. Central Hungary includes parts of the subregions around Esztergom (40 km to the northeast), Dabas (40 km to the southeast) and Szolnok (90 km to the east). Esztergom lies on the Danube Bend, one of the country's most popular tourist attractions, and Dabas belongs to the agglomeration ring.

The government's medium-term regional development plan seeks to narrow the production and lifestyle gap dividing Budapest from the rest of the region. The leading opposition Socialist Party's draft programme calls for extending the central region's borders to north and east, whereby its territory would increase from the present 6,900 sq. km to 16,700 sq. km, and its population swell from 2.8m to 3.9m.

II.

North Hungary begins to catch up



North Hungarian region		
4=	9=	12=
4A=	9A=	12A=
4B=	9B=	12B=
4C=	9C=	12C=
4D=	9D=	
4E=		

In the first part in our series focusing on Hungary's regions we looked at central Pest County, including Budapest. Now we move north.

The three counties in the north occupy 13,400 square kilometers of the country's north east, bordering Slovakia, and share a total population of 1,270,000. The region still forms part of what has come to be known as the 'eastern crisis zone', an area targeted for economic regeneration. This has led to the construction of further stretches of the M3 motorway, investments in tourism, quality wine production and foreign direct investments.

The southwest-northeast range of the Cserhát, Mátra, Bükk and Zemplén mountains dominate, embracing Borsod-Abaúj-Zemplén, Heves and Nógrád counties. The Danube River links the region to the Great Plain and hills in the South. Its exquisite wines, such as the wine of Tokaj (180 kilometers northeast of Budapest), were transported through the river valleys, mainly those of the Hernád, toward the passes of the Carpathian Mountains that border the region to the northeast. Nógrád was a major transit route for trade between Gömör-Szepes Mountain (today Slovakia) and the Danube and Tisza rivers.

The decades of the 19th-century industrial revolution linked up the mining and mining products processing capacities within the region, that already existed, but were not adequately utilized. Nógrád county's brown coal mines, the lignite mines in the Cserhát and Mátra mountains and copper mining

(formerly gold) in Recsk, 90 kilometers northeast of Budapest, picked up at the same time as the iron, steel and chemical industries in and around Miskolc, 150 kilometers northeast of Budapest. Other major industrial towns include Ózd and Diósgyőr (both 120-125 kilometers northeast), Kazincbarcika (140 kilometers northeast), and Tiszaújváros (160 kilometers east). The region contributed two-thirds of the country's pig iron output, over 50pc of steel, nearly half of nitrogen fertilizer, three-quarters of caustic soda, and the total quantity of PVC, ethylene and polyethylene yet in the second half of the 1980s.

From the late 1980s onwards, as the state-socialist systems and Comecon collapsed, iron and steel production in the northern region was almost completely scrapped, along with much of the heavy chemical industry, in the midst of world market competition. There were radical cutbacks in mining and many small plants formerly relocated from the capital went bankrupt. Wine remained the region's only exportable farm product that retained its Eastern markets. The once profitable large-scale farms dissolved and the thin-strip estate structure, created on mostly medium or poor quality land, was unable to absorb the surplus labour.

Central Statistical Office figures for 1999 show a slight, but continuous, decline in the region's population, especially in Borsod-Abaúj-Zemplén County. There are today 1,270,000 people living in the region over an area of 13,400 kilometers. Its per capita GDP makes up 68pc of the national average, putting it second-to-bottom among the seven regions, preceding only the northern part of the Great Plain. Heves county ranks 13th among the 19 counties with 73pc, Borsod-Abaúj-Zemplén is 17th with 69pc, while Nógrád comes last with 57pc.

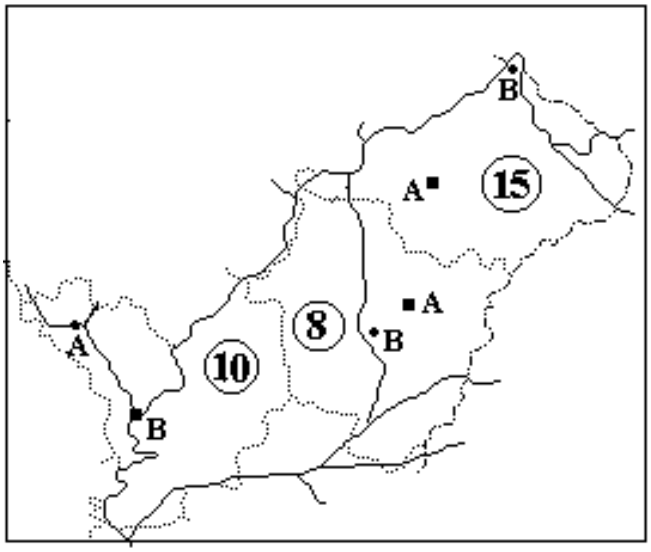
North Hungary has the highest jobless rate in the country - 11.5pc, with Borsod-Abaúj-Zemplén topping the county list for unemployment (13.1pc). Based on wages and salaries, the region is in the midfield. (Gross earnings there come to a monthly average of HUF 58,700, or USD 273.) According to the statistics, livestock numbers per 1,000 inhabitants are lower in north Hungary than the national average, as are the average crops, except for rye. There were 69,800 regions operating in the region last year, of which 835 were in foreign ownership, 3pc of foreign-owned companies in Hungary. International investors have put HUF 168.5bn in the region's industry so far, 7pc of all industrial investments in Hungary.

Regional exports totalled USD 1.35bn last year, with Borsod-Abaúj-Zemplén accounting for 740m, Heves for 330m and Nógrád for 280m. Key items for sale abroad come from Miskolc and its vicinity, such as chemicals, machinery and equipment, and various metal goods, each contributing over USD 100m to the region's exports. Textiles, ceramics and glassware also figure prominently in the list of export commodities.

A crucial role in regional development is assigned to 11 industrial parks and the new Ózd-Putnok-North-Heves Enterprise Zone, in which 80 settlements await entrepreneurs with tax allowances, preferential plot purchase options and investment support. (See article on Hungarian industrial parks in our 42nd edition.) The region has shared USD 25m of EU PHARE support in recent years. The Borsod industrial belt has been the main beneficiary, alongside two cross-border euro-regions, which includes Nógrád County. One is Neogradiensis Euro Region linking Salgótarján (85 kilometers northeast of Budapest) and Lucenec in Slovakia, where infrastructure projects are supported. PHARE funds granted to the Ipoly Euro Region, comprising Balassagyarmat (60 kilometers north of Budapest) and Sahy (Ipolyság) in Slovakia, finance a joint environment protection scheme centered round the development of the Danube-Ipoly National Park.

III.

Northern Part of Great Hungarian Plain



North Great Plain
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15A=
15B=

The third part of our series introduces the northern part of the Great Hungarian Plain, comprising three northeastern counties: Jász-Nagykun-Szolnok, Szabolcs-Szatmár-Bereg and Hajdú-Bihar. Occupying an area of 17,700 square kilometers, the region is inhabited by about 1.52m people. Its biggest city, Debrecen, is located 200 km east of Budapest and has 207,000 inhabitants. The per capita GDP in the region is lower and the unemployment rate higher than the national average. Over the past few years the extension of motorway M3, improvements in communication links and flow of state subsidies for investment projects have contributed to encouraging investor interest in the region.

The three counties in question rely on favorable agricultural conditions, and their natural beauty spots and thermal spas attract many tourists. The neighbourhood of Slovakia, Ukraine and Romania is remarkable from the aspect of transit traffic and economic cooperation. Efforts to exploit the potentials of the region are but in an initial stage.

After the 19th-century regulation on the Tisza river, the predominantly farming population turned the sandy riparian region into fertile land. The Trianon Peace Treaty, it is worth mentioning, did not only deprive Hungary of two thirds of its territory, it also cut the traditional trade links of the area. Short of industrial raw materials, the region failed to benefit from the post-WWII industrialization process while its agriculture greatly suffered from the forceful collectivization. Industrialization, however, started in three or four major cities of the region in the 1960s with light and food industry units designed originally to meet the demand of the eastern neighbours. The loss of these markets and the structural crisis following the collapse of the communist regime had caused more difficulties for the region than elsewhere in Hungary, and widened its lag behind mainstream Hungary.

Central Statistical Office figures show that the density of the population in the three countries falls 20pc short of the national average. Emigration is a long-term process characterized by moderate pace. In 1998 the region's per capita GDP corresponded to two thirds of the national average and one third of the EU

average. In Szabolcs-Szatmár-Bereg, for instance, the per capita figure made up 57pc of the national average, along with that of the North Hungarian Nógrád, the other bottom-placed county (see Weekly Bulletin No. 45/2000).

The unemployment rate is 10.1pc, higher than the national average (10.9pc in Jász-Nagykun-Szolnok, 8.8pc in Hajdú-Bihar and 11pc in Szabolcs-Szatmár-Bereg). In 1998, the average monthly earning was HUF 55,500 (USD 185), the lowest in the country.

The animal stock per 1,000 inhabitants is higher than the average (primarily sheep, pig and cattle are raised). Although the region produces the biggest amounts of rice, sugar beet, potato, apple, plum and nut, the yields still fall short of the national average (with the exception of apple and grape).

Last year the region exported USD 1.65bn worth of commodities, primarily farm produce, food and light manufactures. Chemicals and machinery also represent a significant value. Seventy per cent of exports go to the EU countries, and 10pc to the eastern markets, including neighbouring Slovakia, Ukraine and Romania.

Last year 90,500 businesses operated in the northern part of the Great Hungarian Plain, 1,300 of them were in foreign ownership. To date, foreign direct investment in the region's industry totaled HUF 102.4bn (approx. USD 430m), making up hardly 4pc of all investment in Hungary. Seventy per cent of this amount landed in Hajdú-Bihar county. Foreign investors are mainly attracted by the skilled work force, which is 10-20pc cheaper there than the national average, by the vicinity of the Romanian, Slovak and Ukrainian markets, and by the central and local tax allowances offered to them.

Investors are also attracted by tourism facilities (thermal spas in Hajdú-Bihar county, nature reserves in Szabolcs-Szatmár-Bereg county, water tourism facilities on the upper reach of the Tisza), ten industrial parks (partly under construction) and three entrepreneurial zones. (See article on industrial parks in Weekly Bulletin No. 42/2000.) The Swedish Saab Group is organizing investment in the industrial park of Nyíregyháza (210 km east of Budapest). Nyírbátor, a town located 30 km farther east, attracted 21 timber and food processing businesses as well as trading companies. Mátészalka (260 km east of Budapest) has become a site of optical and furniture industry firms. In Tuzsér (255 km east of Budapest), machine engineering and timber processing facilities were established. The industrial park of Csenger accommodates smaller companies specialising in vegetable and fruit drying, and shoe-making.

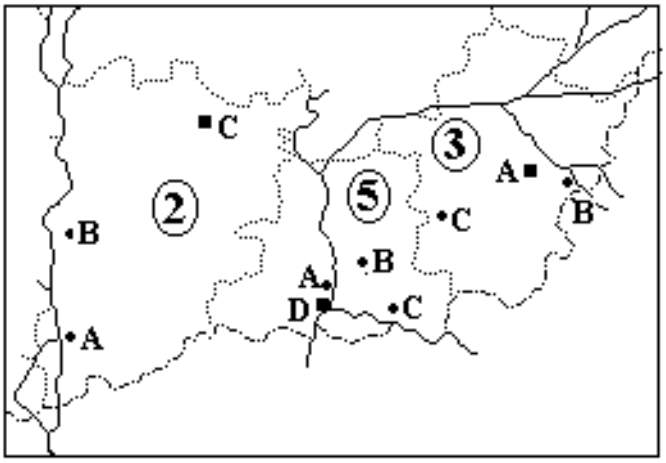
The Záhony industrial zone located along the Ukrainian border, and the Bihar entrepreneurial zone headquartered in Berettyóújfalu near the Romanian border offer advantages in border cooperation, transit services, warehousing and transshipment, mainly to foreign companies.

The two multi-functional cities in the region, Debrecen and Szolnok (90 km east of Budapest), are major traffic hubs, with good railway, road and air connections. Debrecen's biggest industrial plants include the Korean-owned Hungarian Roll-Bearing Works, the German-owned Biogal pharmaceutical factory and the Dutch-owned Debrecen Tobacco Factory. Szolnok has two large factories, the Tisza Chemical Works and the farm machinery manufacturing Mezőgép Rt. Foreign capital has gained a foothold in both cities and their vicinity.

Extending the network of industrial parks and entrepreneurial zones is a priority of regional development plans. The transport infrastructure, in the meantime, is upgraded with the extension of motorway M3, the construction of by-pass roads, the electrification of railways, increasing transit services and the modernization of civilian airports. The local authorities are promoting conference tourism. Plans are afoot to eliminate, in the medium term, the region's lag in telephony, waste management and sewage disposal.

IV.

Southern Great Plain Needs More International Routes to Develop



North Great Plain
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Hungary's Southern Great Plain, the region to be introduced in this part of our series, lies on an area of 18,300 square kilometers east of the Danube, along the borders with Yugoslavia and Romania. The three counties within its area - Békés, Csongrád and Bács-Kiskun - have a total population of 1.34m. The region is noted for its advanced agriculture and food industry, alongside having two-thirds of Hungary's natural gas deposits. Moreover, thermal springs and nature reserves make it a popular tourist destination, although it develops at a lower rate than the central and western parts of the country and its per capita GDP is 75pc of the national average. Statistics show the region was left by 0.5pc of its residents in the past one year, while migration from Békés County reached 2.5pc.

The region owes its fertile and diverse farming profile to the regulation of the Tisza River in the last century and the reclamation of sandy areas. Local industry, transport and service capacities developed through projects carried out in farming, light industry, culture and tourism in the 1960s, as well as industrial and infrastructure investments of the past decade.

The traditional structure of market towns and large villages surrounded by farmsteads has changed, with major towns upgraded to act as regional centres. Sustained modernization has been hindered by the country's central transport structure linking the region mainly to the capital and its surroundings. Meanwhile, the previous flourishing crossborder business contacts of the Southern Great Plain have narrowed with Arad and Timisoara in Romania, and Subotica and Novi Sad in Yugoslavia. Poor transport links with the west of the country are seen as another barrier for regional advancement. Local agriculture and food industry suffered tangible losses from the collapse of eastern markets after the political and economic changes in 1989 and 1990, added to that closure of loss-making companies, massive unemployment and migration. Central Statistical Office figures show that Békés County lost 2.5pc of its population last year, and the entire region was abandoned by 0.5pc of its residents.

The three counties together, however still, contribute 76pc of the country's gross domestic product. The income level of employees is close to the national average, while the 5.7pc jobless rate is the third lowest among the regions after Central Hungary and Western Transdanubia. Grain, maize, sugar beet and potato crops are above the national average in all three counties, whose farmers look after 18pc of the country's cattle stock, 27pc of pigs and 26pc of sheep.

Last year 94,200 ventures operated in the Southern Great Plain, of which 2,300 were in foreign ownership, over 9pc of the country's all foreign-owned businesses. Foreign direct investment (FDI) flows to the region have totalled HUF 111bn (USD 470m) so far, barely more than the amount received by the bottom-placed Northern Hungarian Plain (see Weekly Bulletin 46/2000). Csongrád County alone has 58pc of foreign capital invested in the region. Regional exports, mainly machines, foodstuffs and light industry products, came to USD 1.4bn in 1999, with Bács-Kiskun sharing 633m, Békés 391m and Csongrád 382m. The bulk of the region exports - some 62pc - go to EU markets, within this two-thirds to Germany, and a mere 15pc to neighboring countries.

Csongrád is the most heavily industrialised county in the region, and provides two-thirds of the national gas output. It has 1,700 foreign ventures, which represent almost half of all FDI invested in the region. It sets a model for the least developed county of the region, Békés, in integrated agricultural-industrial cooperation. The region's main city, Szeged (pop. 175,000), can also be found in Csongrád, 160 kilometers southeast of Budapest, standing out nationwide with its major food industry capacities, university education and research work, high-level cultural institutions and events.

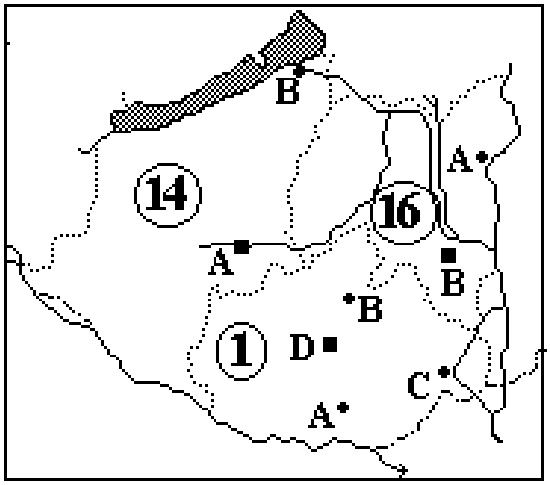
The region's advancement heavily depends on the pace at which international routes are being set up. Experts see a need for constructing modern public roads in east-west direction between the regions and in southwest-northeast direction within Békés County. Plans include building two Danube bridges, improving river navigation, continuing work on the M5 motorway towards the Ukrainian and Romanian border, and building bypasses around cities.

Both the network of industrial parks, which is currently being set up, and the entrepreneurial zones are aimed at basing industrial, commercial and transport investments on local products and the infrastructure needs of transit traffic. Békés receives significant state and Union funds designed to finance the development of towns and villages. State support for the County rose to HUF 1bn (USD 3.3m) last year, and Békés benefited from some half of the HUF 1bn worth of PHARE support awarded to the region. Medicinal and water sport tourism and the integration of agricultural and industrial production are priority areas of the county development.

In Bács-Kiskun County, the industrial park at Kecskemét (80 kilometers southeast of Budapest), one of the county's four similar facilities, is a popular destination for international investors. A promising future lies in store for the economic zone Baja Port and its vicinity. Baja, 140 kilometers south of the capital, is the most important transport junction in south Hungary and serves as a logistics centre for border-zone areas of Yugoslavia, Croatia and Hungary. Besides its railway bridge, the city has one of the country's best-equipped ports. The Southern Great Plain is expecting a boom from consolidation in the Balkans, particularly for its waterside towns near the border: Szeged, Baja, Szentes and Csongrád.

V.

Tourism and Industrial Parks - A Boost for Southern Trans -Danubian Region



South Trans-Danubia region
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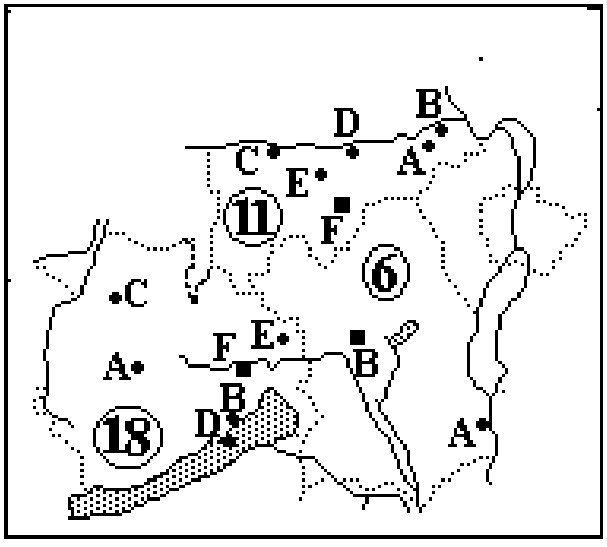
The southern Trans-Danubian region is situated on 14,200 square kilometres west of the Danube River and north of the Dráva River, along the Croatian border, and has 975,000 residents, including a significant German and Croatian minority. The country's most sparsely populated region, with 69 residents per square kilometre, includes Somogy, Tolna and Baranya counties. Due to livelihood difficulties, migration from the region has been steady, albeit on a small scale. The region also includes Central Europe's largest lake, Lake Balaton, and its developed holiday zone. Tolna County boasts tourism in wine cultures and game reservations, while southern Baranya County has considerable medicinal tourism, in view of its thermal waters. The town of Pécs, 160 kilometres southwest of the capital, is the major regional centre, a popular tourism venue with many educational and cultural institutions. However, its industry is declining.

The two major traffic routes of the region run along its outer areas, along Lake Balaton and the waterways and roads that follow the line of the Danube River. The Lake Balaton holiday zone situated 80 to 160 kilometres southwest of the capital emerged already between the two World Wars. A medicinal spa network was created in Harkány, near Pécs. The Villány and Siklós, and the Szekszárd (130 km south of Budapest) wine regions have been known for decades. Coal sites are becoming exhausted in the vicinity of Pécs, and the uranium mines have also been closed. One of the most important facilities of the region is the Paks Nuclear Power Plant, situated 100 kilometres south of Budapest, which today accounts for nearly half of the country's electricity production. The region's economy continues to be predominantly agrarian-industrial, with the exception of a few strongly industrialised districts. Today, the region's production shares 16pc of the country's energy sector, 12pc from food industry and 10pc from clothing industry. Eight percent of the country's industrial investments were realised in the region in 1999. According to 1999 figures released by the Central Statistical Office, the per capita GDP generated in the region is 77pc of the national average. Employees in the region have average incomes lower than the national average. Within this, workers in Somogy County are ranked among the three poorest counties, based on their earnings. The unemployment rate in southern Trans-Danubia is around the national average of 6.5pc. Agricultural average yields are regularly higher than the national average for cereals, maize, sugar beet and – due to its internationally renowned wine regions – good quality grapes. Animal breeding records average yields, with the exception of the forest hill regions in Somogy County that are suitable for pig breeding. Just one-sixth of the population makes a living from agriculture, and only one-fifth of its exports are natural or processed

agricultural products. Of the more than 81,000 ventures working in the three counties, some 1,700 have foreign stakes, accounting for some 7pc of all foreign ventures in Hungary. The investments realised by these firms were valued at USD 270m in 1999. Among the companies found in the region are Philips, Henkel and Sanyo. One-third of products manufactured in the region are sold abroad, with the value of exports standing at USD 1.64bn last year. The region's economic and infrastructure levels are currently unevenly spread. The less developed inner Somogy villages provide the background for the developed small regions along Lake Balaton. A similar difference can be seen between Pécs and its direct neighbour, the traditionally poor areas of Barcs, 200 km south west of Budapest, along the Dráva River. The rapidly developing network of industrial parks is a significant contribution to the development of the region. The Pécs industrial park is located on a 100-hectare site, along four major roads, in the vicinity of a shunting depot, with full utilities and an industrial rail track. It now houses many foreign and domestic companies. The industrial park will shortly be expanded with a customs and a logistics centre, a technological transfer institution and an entrepreneurial incubator house. The industrial park in Mohács (160 km south of Budapest) is being developed with a HUF 1bn project intended to modernise the Danube harbour. Logistics centres are being built in near-by Baja and Mohács. Of the six industrial parks being developed in Tolna County, a high-capacity harbour on the Danube River is being developed in Paks. Development of the local industrial park is related to this: the area has been furnished with full utilities from state support. An incubator house and educational base, and an innovation and technological centre are being built with support from the European Union's Phare fund in Dunaföldvár and Tamási (80 and 120 kilometres south of the capital, respectively).

VI.

Central Trans-Danubia Undergoes Radical Character Change



Central Trans-Danubia region	
6= **Fejér county**	
6A=	6B=
11= **Komárom-Esztergom county**	
11A=	11D=
11B=	11E=
11C=	11F=
18= **Veszprém county**	
18A=	18D=
18B=	18E=
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The region of Central Transdanubia lies in the west of the country covering an area of 11,300 square kilometers and includes Fejér, Komárom-Esztergom and Veszprém counties, home to 1.1m people. It accounts for more than one fifth of Hungary's industrial production and exports. In 1999, this region contributed 15pc of GDP and 28pc of the country's exports, and its per capita GDP was 10pc above the national average. Partly or wholly foreign-owned companies, which provide four-fifths of the region's products, have significantly changed the region's economic structure, with machine engineering taking the lead from mining.

During medieval times there were several royal seats in Central Transdanubia. Esztergom, 40 kilometers northwest of Budapest, was once a royal base and for the last 1,000 years it served as a centre for Catholic primates. The nearby town of Visegrád was the seat of Hungary's monarchs in the 14th and 15th centuries, while Székesfehérvár (60 kilometers southwest of Budapest) was a coronation site and royal burial place over several centuries.

The region of Central Transdanubia was noted for its farm trade since the 17th-18th centuries and its industry began to flourish from the second half of the 19th century, along with mining, transport, commerce and medicinal tourism. Brown coal and lignite mines were opened in its northern part, near the capital, before the First World War, at the same time as exploration of coal deposits started in the Bakony Hill. Veszprém County joined the region's mining sector with its rich manganese and bauxite reserves between the two world wars. Local electricity generation and energy-intensive processing industry was based on mining and the Zala oil fields further to the south. The steel works of Dunaújváros, in the south of Fejér County and 60 kilometers south of Budapest, was built after the Second World War, and there was an upswing in the partly military branches of bauxite mining, aluminum industry, electrical engineering and road vehicle production.

Diverse agriculture, cultivation of maize and wheat, industrial plants such as sugar beet, beer barley, flax, hops and sunflower, fodder plants, vegetables and grapes, creates the basis for a many-sided food industry. Old centres of plant improvement and animal breeding have made a name abroad over the past decades. The research institute in Martonvásár, 40 kilometers west of Budapest, earned world fame for its maize and wheat varieties. Bábolna (85 kilometers west) won international fame as a regional centre of large-scale systems for maize production and broiler chicken breeding, alongside its 150-year-old stud. Due mainly to the loss of eastern markets, the erstwhile flagship of Hungarian agriculture has been struggling with difficulties since the early 1990s. The region's mining, heavy industry and vehicle manufacture, meanwhile, have also become loss-making.

On the other hand, multi-functional tourism (recreation, culture, medical treatment, conference), centred on Lake Balaton and Lake Fertő, 180 kilometers west of Budapest, has dynamically grown into major income-generating sectors.

Foreign investors in the region can rely on good transport routes, highly qualified mining workforce and a special urbanisation process creating not only new agglomerations around the main towns of Székesfehérvár and Veszprém (100 kilometers southwest of Budapest but also groups of urbanized settlement with advanced infrastructure over the last decades. These include the town compound formed by Tatabánya, Tata and Oroszlány, 50-60 kilometers west of the capital, and the industrial and tourist zone of Komárom and Esztergom by the Danube River, 40-60 kilometers northwest of Budapest.

In 1999, 89,000 businesses operated in the region, or 10pc of the country's total. Of these, 1,700 were partly and wholly foreign-owned. Foreign direct investment (FDI) in the region totaled HUF 177bn (USD 745m). Moreover, the region accounted for 22pc of the country's industrial output, 31pc of machine engineering goods, 24pc of mining products and 13.5pc of new investments, four-fifths of which were in the machine industry. Per capita GDP was 10pc above the national average in 1999, according to the Central Statistical Office.

The region's livestock number per unit population by far exceeds the national average. Its 6pc rate of unemployment is slightly below the national average, while the average wage surpasses it. The average earnings in Fejér County only compare to those of Budapest.

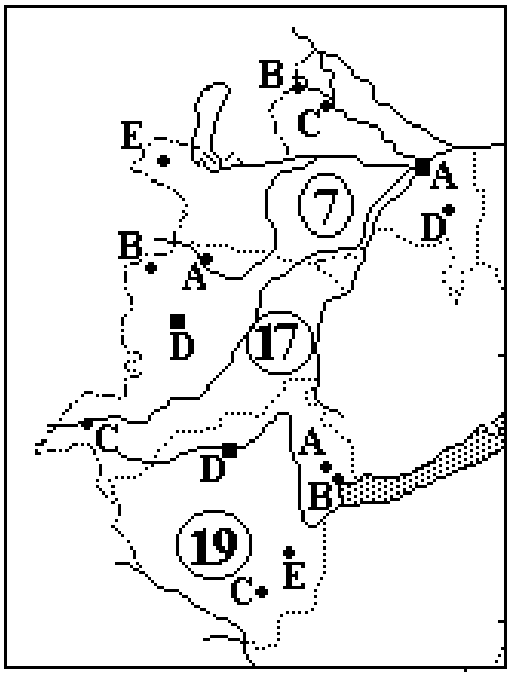
Two-thirds of the region's industrial output goes abroad. Exports in 1999 amounted to USD 5.69bn, or over one third of the total. Machines, installations and finished products made up four-fifths of exports. Seventy-four per cent went to the European Union and 14pc to other advanced countries, including the U.S., Japan, Singapore and Switzerland.

FDI input in the region so far, mainly from 20 European countries, the U.S., Japan, Canada and China, has been over USD 3bn, or nearly one seventh of all FDI inflows. Hungary's first industrial park opened in Székesfehérvár in the early 1990s, setting a model for other towns of how the settlement benefits related to the industrial parks are connected with the upswing of the town and its agglomeration and the creation of a competitive economy. Veszprém, Tatabánya (50 km, west), Mór (65 km, west) and Dunaújváros underwent major advances following the establishment of industrial parks there. Similar prosperity was brought to Esztergom by the settlement of the Suzuki company in 1992.

Central Transdanubia is one of Hungary's large regions marked by a dynamic growth of infrastructure projects based on local cooperation between settlements and small regions. For example, 23 settlements in two small-region associations joined forces in October 2000 to get involved in part of the regional development of the EU's SAPARD programme. Support awarded through competitive bidding will help finance a 10-kilometre-long cycle track between Veszprém and Balatonalmádi, as well as speeding up work on an industrial-logistic centre under construction in Szentkirályszabadja, 80 kilometers west of Budapest.

A Hungarian-Slovak-Finnish regional cooperation project will be launched within the European Partnership Programme in the first weeks of 2001. Hungarian and Slovak entrepreneurs will be received at the business college of the Finnish partner town to study economic theory and practice in the European Union. The information system of the region will be modernised. The most ambitious joint project involves developing the Danube ports of Komárno in Slovakia and Komárom in Hungary, and rebuilding the Danube bridge linking Esztergom in north Hungary and Sturovó in south Slovakia.

VII.
Western Trans-Danubia: The Most Rapidly Growing Region



Western Trans-Danubia Region
7= **Győr-Moson-Sopron**
7A=
7B=
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17= **Vas county**
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19= **Zala county**
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Western Trans-Danubia is one of the most advanced of Hungary's seven regions and also is the most dynamic in overall growth of both production and exports. The region includes the entire length of the western border, covers 11,200 sq. km, and has a population of nearly one million. Made up of three counties, Gyõr-Moson-Sopron, Vas and Zala, it borders on Slovakia, Austria, Slovenia and Croatia. Its rapid development is an offshoot of its location, placed as it is along the axis of the Danube-Budapest-Lake Balaton, sitting at the apex of the Vienna-Bratislava-Gyõr triangle, and connected to the fast-growing Graz-Ljubljana-Trieste line. Foreign capital has been flowing in, thanks to a developed infrastructure, proximity to markets, qualified but inexpensive labour, and a chance to quickly build an outsourcing network with other regions of Hungary. This article on Western Trans-Danubia is the seventh and last in our series on the regions of Hungary.

Looking at per capita GDP, Western Trans-Danubia has worked itself up to second place among Hungary's regions in the decade following the change in political system, and is second only to Central Hungary, the region that includes Budapest. According to 1999 data, per capita GDP in Western Trans-Danubia is 10pc over the nationwide average of USD 4,800/annum. There are over 100,000 businesses situated in the region, about 2pc of which are internationally owned in whole or in part. Average earnings are 10-15pc higher than the nationwide average and the unemployment rate, at 4.4pc, is the lowest in the entire country. In fact, there is even a labour shortage in some areas, which has touched off the beginnings of an industrial migration to the major towns in the region, principally to Gyõr (105 km W of Budapest).

The two main factors triggering development have been industry and services, including a major growth in health and recreational tourism. The region also incorporates several centres of higher education. They include a mechanical and motor vehicle engineering college in Gyõr, and a timber industry college in Sopron (190 km W of Budapest, on the Austrian border).

As far as overall agriculture is concerned, the region is roughly on a par with the rest of the country. Yields are about average, and the only portion of the sector that has been doing better has been in cattle farming.

About two-thirds of its manufactured goods are exported.

Gyõr-Moson-Sopron County is the most advanced of the three counties comprising the region. Industry is the primary source of income here, employing 40pc of the workforce. Gyõr, the largest municipality in the region, is home to several major engineering and motor vehicle industry production facilities including the Rába Railcar and Machine Factory and an Audi production plant. Vehicles and vehicle subassemblies make up the bulk of their production. In a few short years Audi Hungaria, which is wholly German-owned, has grown to become the region's second largest revenue producer. The county is also home to significant food industry and chemical industry facilities. In 1999 USD 4.5bn of the region's overall USD 7bn exports came from Gyõr-Moson-Sopron County. Machinery and installations made up USD 2.4bn of that, while vehicles and subassemblies accounted for USD 1.4bn.

With its proximity to the Danube, a fully electric rail line and motorways M1 and M15 connecting it to Austria and Slovakia, shipping from and through the region is easy. Advanced utilities, information technology (IT), and telecom facilities are attractive to companies wanting to ship products through the area as well as to those who want to settle their businesses in it. Meanwhile, the hills along the western border, Lake Fertõ, which shares a shoreline with Austria, and several health spas, have boosted tourism.

This county has the fastest production growth in the country, and the second highest rate of investment a year, following only Budapest and its agglomeration. As part of a Phare project, a major Danube port and transfer station is under construction at Gönyû, 130 km W. of Budapest. Three European Union supported projects involving an investment of USD 15-20m are currently underway at Mosonmagyaróvár, some 20km from the Austrian border. One is an industrial park able to meet all

logistic needs, the second is a sports and leisure centre, and the third is a thermal bathing and swimming complex and recreation area.

Vas County is both an east-west and north-south transit opportunity. An electric railway line connects it with Budapest. Szombathely, the county seat, which is just inside the Austrian border, will soon have a direct rail link with Slovenia. Also under construction is a limited access highway that will link the town to Austria's A2 motorway. It also has an airport equipped to receive smaller commercial craft. Its utilities, landlines, and cellular telecom capacities are on par with Austria, analysts say. Tourism has been growing fast, spurred on by diverse opportunities. It has enjoyed expanding numbers of business and conference tourists, historically-inspired tourism drawn to the medieval sections of Kõszeg, another town on the Austrian border, and health tourism attracted by facilities at Sárvár and Bük, in roughly the same region, the latter among rolling high hills. It has two nature conservation areas, one at Õrség and the other at Kõszeg, which are also tourist draws.

About one-third of the region's industrial output comes from Vas County. International capital has particularly focused its technology on the processing industries. Some 700 international investors have set up completely new production lines in areas such as car engine production, computer subassembly and cable packet manufacture (Opel, Phillips, Hewlett-Packard), and several international firms have also made significant investments in the garment and shoe-manufacturing trades (MARC Shoes, STYL Garments). One of Hungary's first and best industrial parks is located in Szombathely. The industrial and innovation centre enlarged with Phare support now produces two-thirds of the county's GDP. USD 1.6bn of its total USD 2.3bn export is made up of machinery and installations, and vehicles and vehicle subassemblies.

The European Union's Phare fund has also been used to promote interregional cooperation between different countries. In early December it was announced that Vas and Zala counties had applied for Phare funding for five regional development projects encompassing both Hungarian and Slovenian areas, hoping to receive some of Phare's EUR 2m, earmarked for projects that transcend national boundaries. The project complex, on which a Phare decision will come in the spring, includes a recreation centre at Szentgotthárd, near the Slovenian border, two sewage treatment facilities in nearby settlements, and an interregional economic project at Rédics, which is situated right on the Hungarian-Slovenian border.

Zala County is the most agriculturally profiled part of the region. For instance, it produces one-eighth of the country's total pear crop. It also has substantial beekeeping, which accounts for one-quarter of national honey exports. Most recently, international private capital has boosted the machine and electronics industries, which are now about even with its traditional food processing, its cut-make-and-trim (CMT) facilities for western European garment manufacturers, and its woodworking and furniture industries. Oil industry installations are also produced in the county, not surprising since Zala County is the centre of Hungary's own hydrocarbon extraction. Two production facilities in Zala owned by General Electric/Tungsram produce lamps and lighting fixtures. Aluminum processing is also on the upswing. The county exports about USD 300m in products ranging from livestock to textiles to wooden and wicker products.

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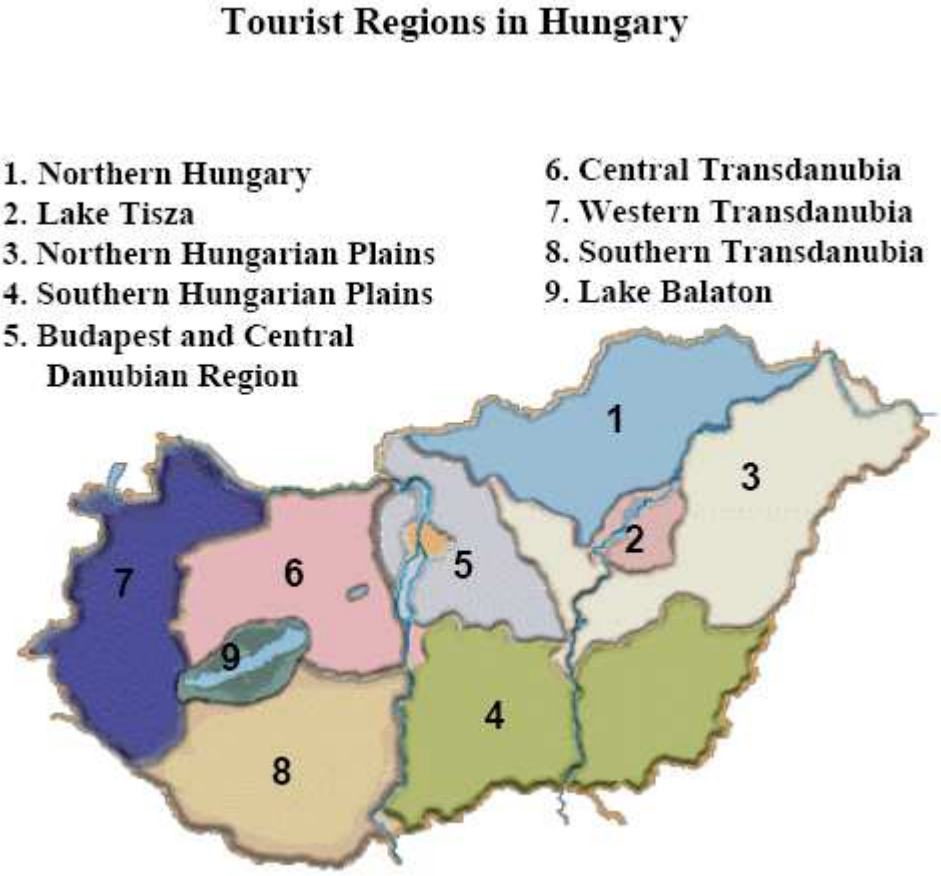
Tourism in Hungary[3]

Regions

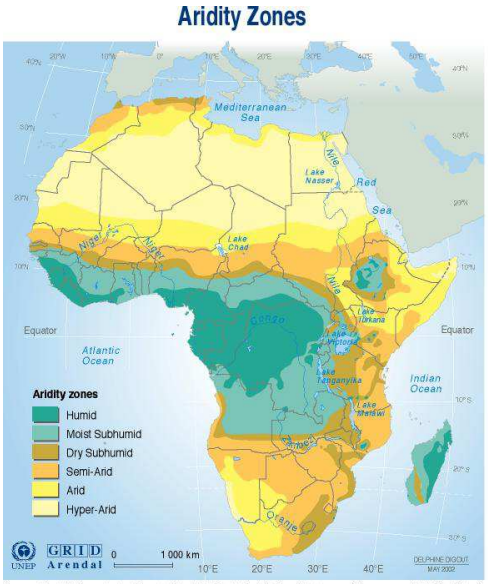


In Hungary, the direct role of tourism in the economy – both the contribution to GDP and on the basis of the proportion of those employed – is greater than either worldwide or in the European Union. In 2002 in Hungary the tourist sector provided 4.9% (796.0 bn HUF) of GDP in Hungary, and 6.2% of those employed (241.8 thousand people) worked in tourism, according to WTTC data.

[3] More info http://www.hungary.com/main.php?folderID=1062 07 Tourism regions of Hungary

Global Problems

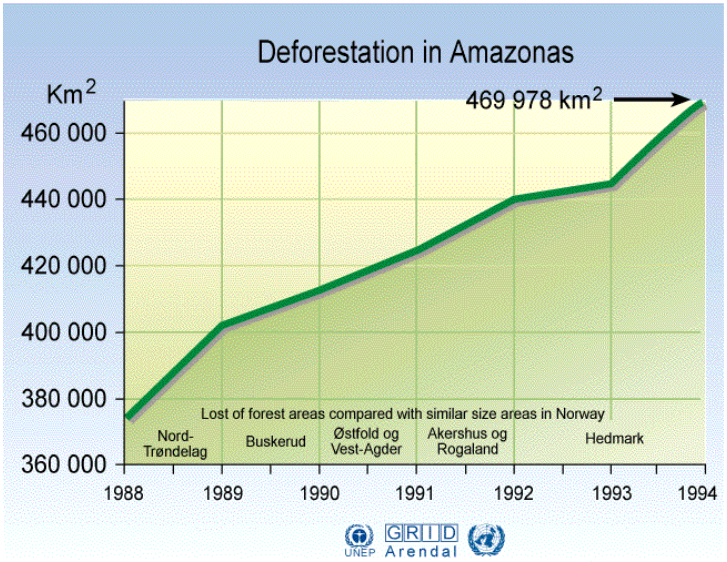
1. Desertification: The loss of the land's biological productivity in arid, semi-arid and dry sub-humid areas is one of the most serious threats facing humanity. It is a global problem, affecting one fifth of the world's population in more than 100 countries. It leads to forced migration from rural areas to cities. Current trends suggest that by 2020 an estimated 60 million people could move from desertified areas of sub-Saharan Africa towards North Africa and Europe, and that worldwide, 135 million people could be placed at risk of being uprooted.



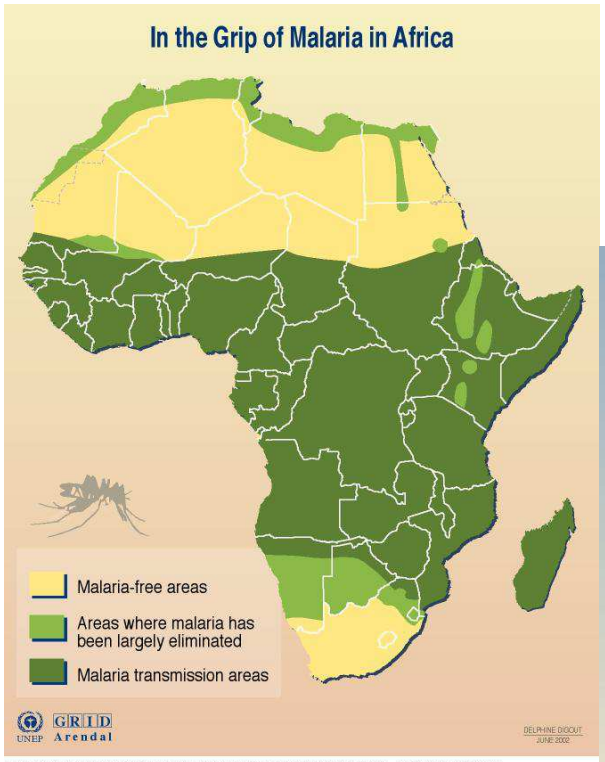
Source: World Meteorological Organization (WMO), United Nations Environment Programme (UNEP), *Climate Change 2001: Impacts, Adaptation, and Vulnerability*, Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

2. Deforestation: Forests cover around a quarter to a third of the total land surface of the Earth. The reduction in area of this valuable environmental, social and economic resource through deforestation has the potential to cause problems on a global scale. Climate models have demonstrated a clear link between deforestation and climate change. Deforestation is the process of changing land use from forestry to a non-forest use. Western Europe has already lost over 99% of its primary forest. Today, deforestation programmes focus on the major rainforests of the tropics. In the 1980s global deforestation was estimated at 17 to 20 million hectares per year, equivalent to the size of Britain. Current tropical tree planting programmes are not keeping pace with this rate of deforestation. Countries in these areas are often under-developed and striving for improved economies. Deforestation for wood and agricultural land can provide numerous economic benefits, but can have damaging environmental impacts on forest ecosystems and can affect local and regional climate. Forests absorb a lot of sunlight for photosynthesis, and only about 12 to 15% is reflected. The large amounts of energy absorbed by forests acts to stimulate convection currents in air which enhance the production of rainfall. Tropical rainforests in particular are very wet and humid places. Deforested areas, by contrast, reflect about 20% of incoming sunlight. Deforested areas consequently, can become drier as a result of the loss of vegetation, increasing the risk of desertification. As the area of deforestation increases, so the impact on climate grows. Trees also absorb carbon dioxide from the atmosphere for photosynthesis, and therefore help to regulate the natural greenhouse effect. Deforestation takes away a potential sink for the carbon dioxide mankind is pumping

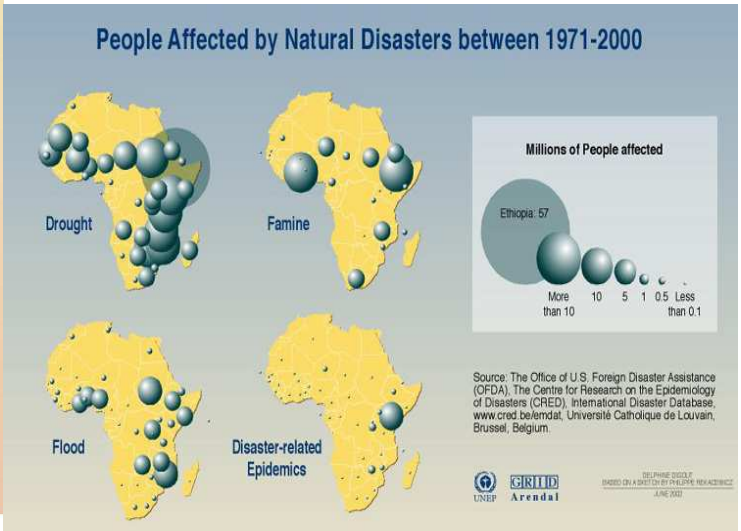
into the atmosphere. In addition, if forests are removed by burning, a lot of extra carbon dioxide locked up in tree wood is returned to the atmosphere.



3. Disease: It can be expected that small changes in temperature and precipitation will support malaria epidemics at current altitudinal and latitudinal limits of transmission. Furthermore, flooding could facilitate breeding of malaria vectors and consequently malaria transmission in arid areas. The Sahel region, which has suffered from drought in the past 30 years, has experienced a reduction in malaria transmission following the disappearance of suitable breeding habitats. Yet, there are risks of epidemics if flooding occurs.



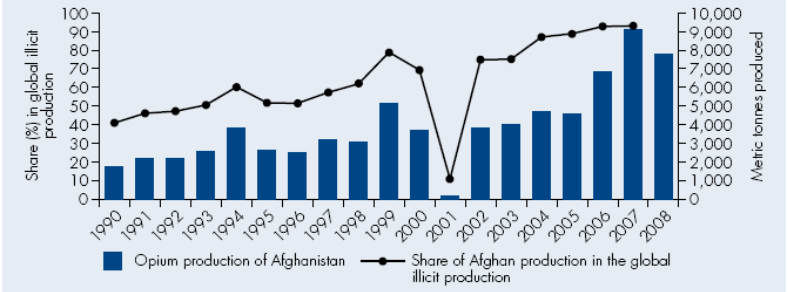
Sources: A. Platt McGinn, *Malaria, Mosquitoes, and DDT*, World Watch, Vol.15. No.3, May-June 2002.



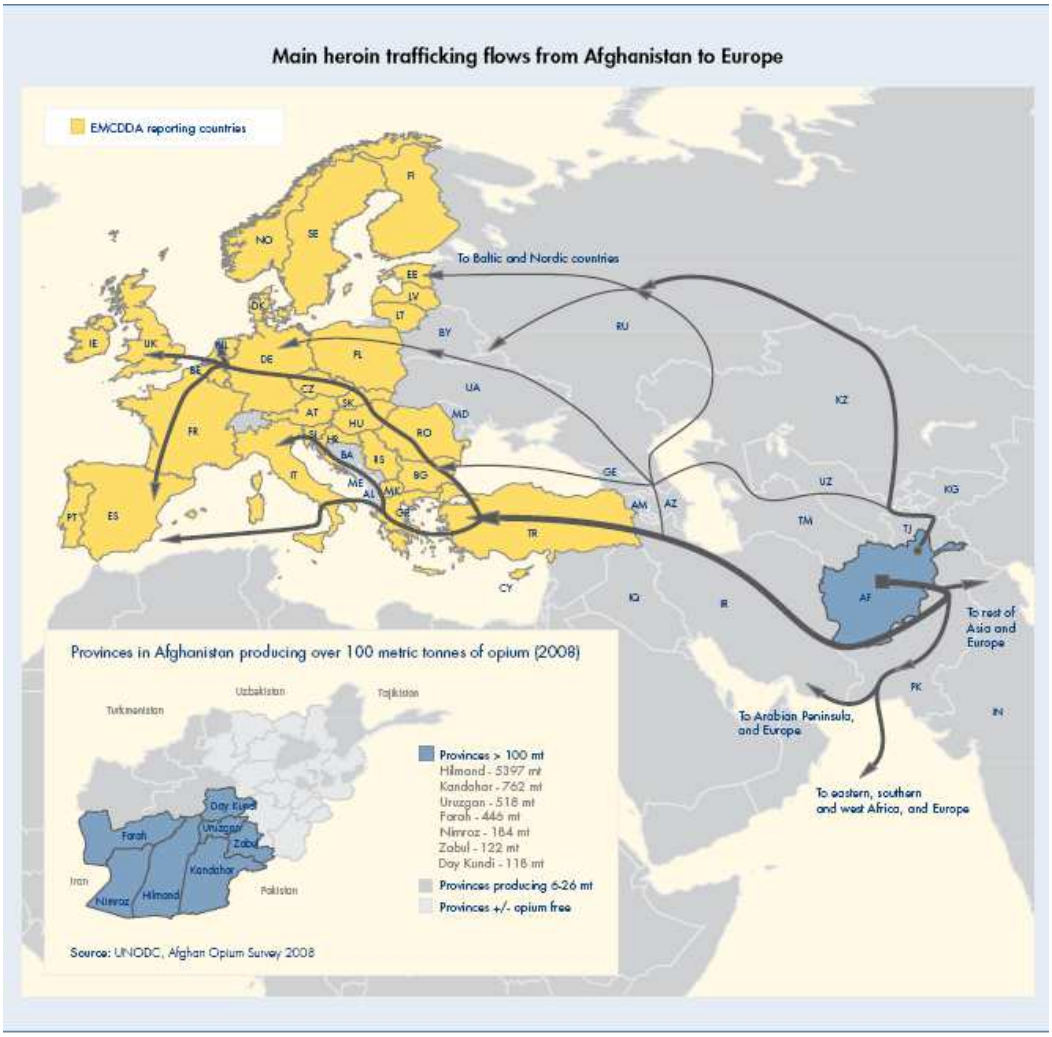
Source: www.grida.no

4. Drug: The world's biggest drug producing centres are in regions beyond the control of the central government, like South Afghanistan, South-West Colombia and East Myanmar.

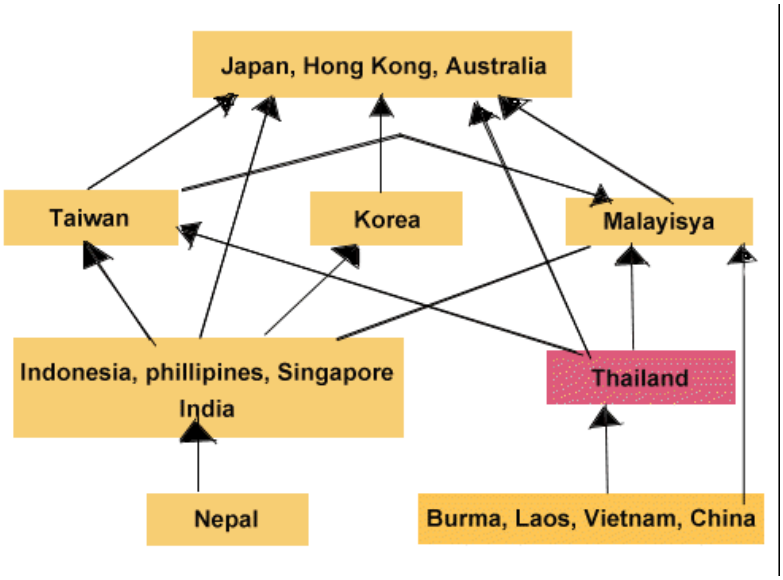
Figure 1. **Afghanistan — Estimated opium production and share in global detected illicit production, 1990–2007**



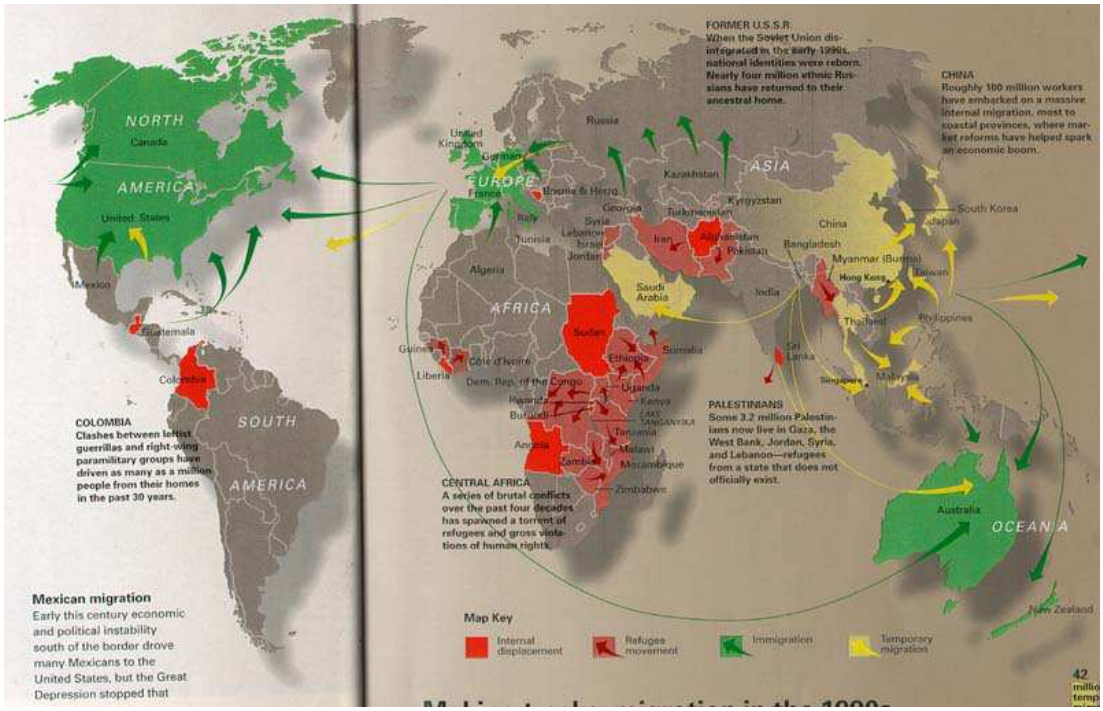
Source: UNODC (2007a); UNODC (2008c).

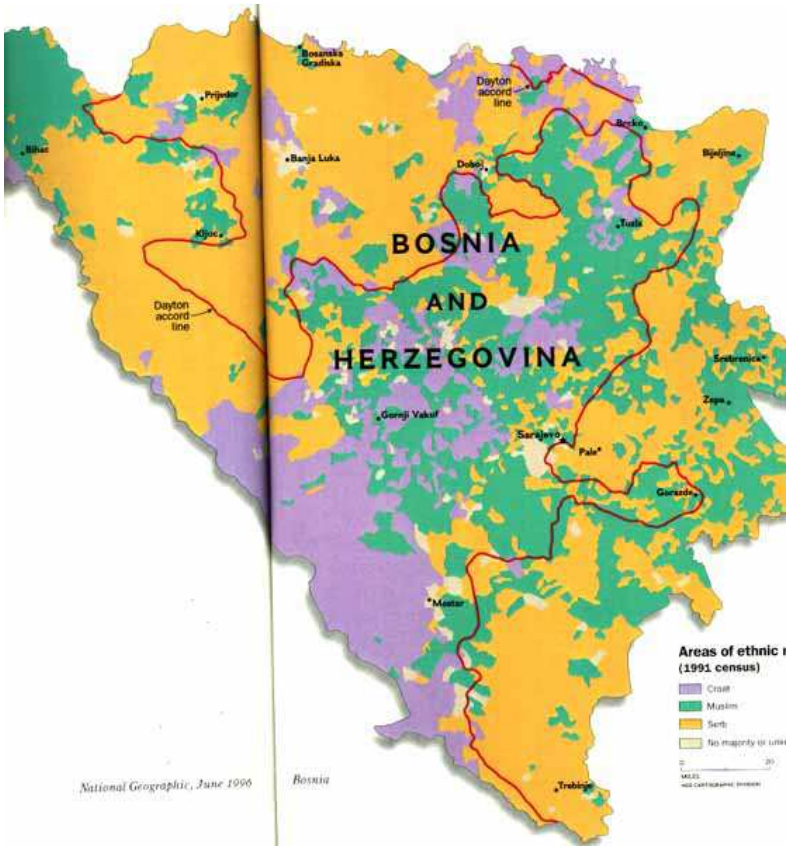


5. Trafficking : Human trafficking is the recruitment, transportation, harboring, or receipt of people for the purposes of slavery, forced labor and servitude. The total annual revenue for trafficking in persons is estimated to be between $5 billion and $9 billion.



6. Ethnic Conflicts: An **ethnic conflict** or **ethnic war** is a war between ethnic groups often as a result of ethnic nationalism. They are of interest because of the apparent prevalence since the Cold War and because they frequently result in war crimes such as genocide. Ethnic conflicts are in Europe eg. Serbia-Kosovo, Armenia- Kara bah- Azerbaijan, Moldova-Transistria. Also Hutu and Tutsi in Africa, and Israeli and Palestinian conflict.

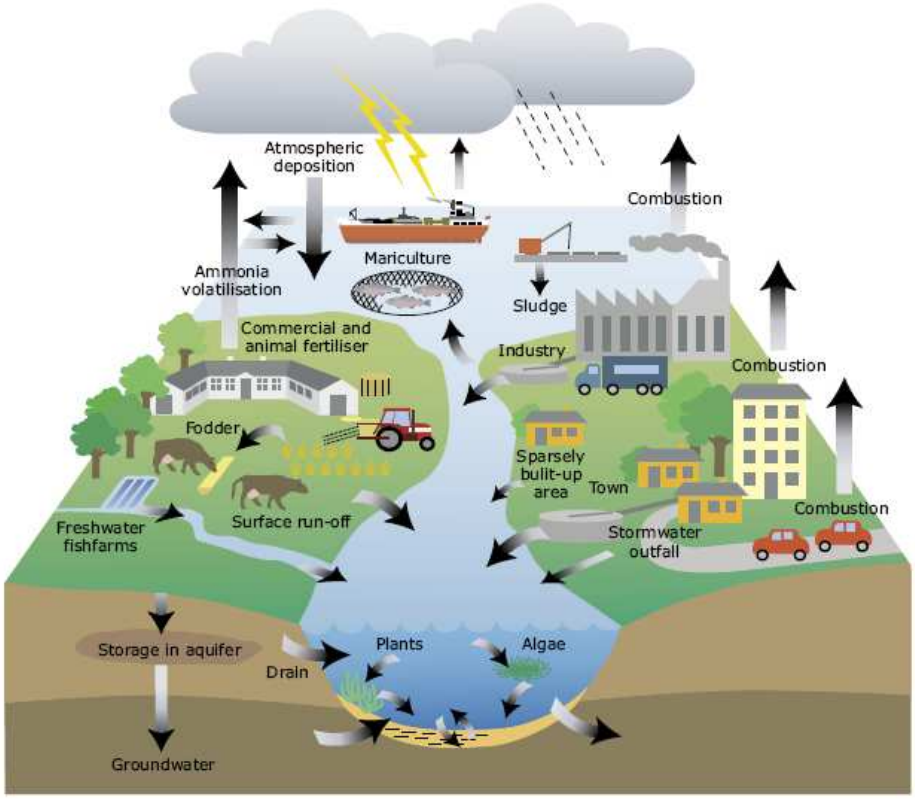




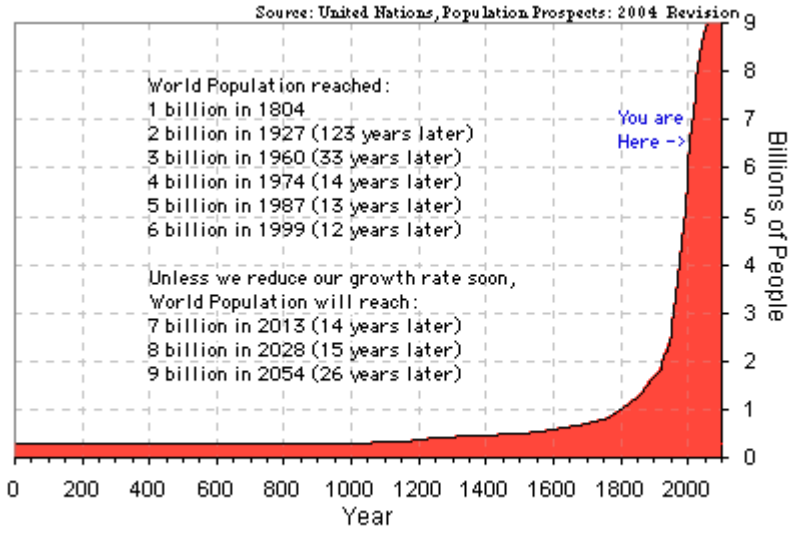
Ethnic groups in Bosnia and Herzegovina in 1991

7. Pollution:

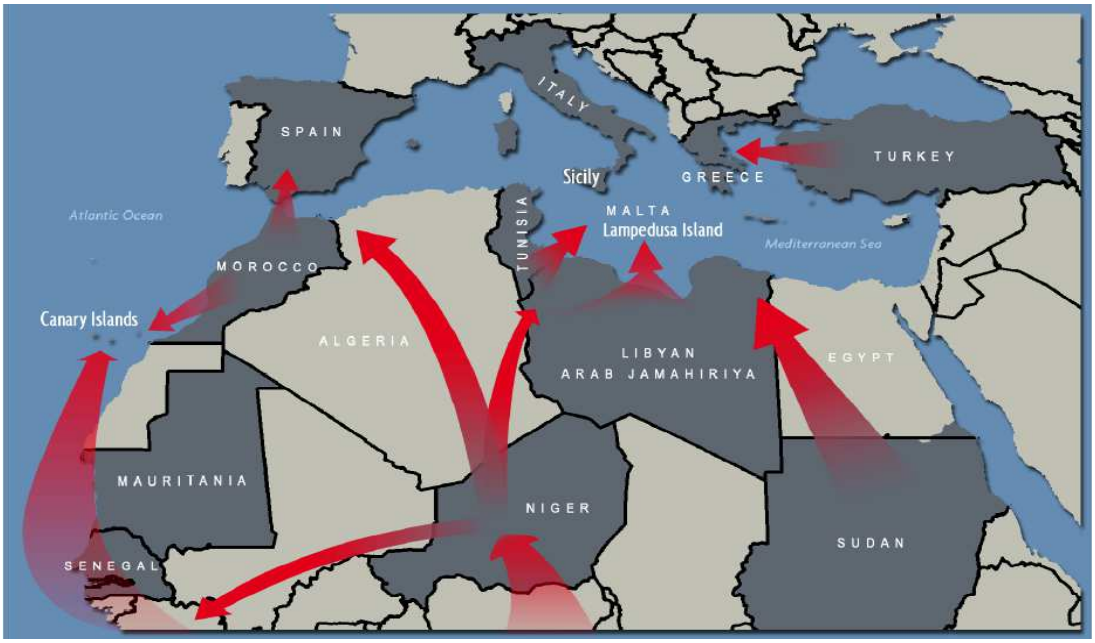
Figure 2.1 Overview of the aquatic nitrogen cycle and sources of pollution with nitrogen



8. Overpopulation: The world's population has been booming for years. The population is now threatening to reach the stage where there are simply too many people for the planet to support. Around 1850, the world population reached one billion. By 1987, it was at five billion and still rising rapidly. Third World nations are responsible for a great deal of the population growth. In 1989, about 90% of the people being born were in developing countries. The populations of Third World countries are expected to continue to boom. The United Nations Population Fund predicts that by the middle of the next century, the world's population will stabilize at about 14 million people. If fertility rates were decreased to 2.1 births per woman, population stabilization could be achieved sooner. Overpopulation has been disastrous for the planet. Greater populations have polluted and consumed more, ruining the environment and creating or intensifying a variety of problems. Also, with the food supply limited, increases in population make shortages in many parts of the world even worse.



9. Refugees: Taking their chances on fishing boats, dinghies and canoes, every year thousands of men, women and children drown in a desperate bid to reach Europe from Africa. They cross from West Africa to the Spanish Canary Islands; from Morocco to southern Spain; from Libya to Malta and the Italian islands of Sicily and Lampedusa; and from Turkey to the islands of Greece. Many more enter the European Union by land, via Turkey and the Balkans or from Ukraine and Belarus. People entering Europe irregularly – without passports or visas – do so for a variety of reasons. In some cases they are fleeing persecution, human rights violations and armed conflict and can, therefore, be considered as refugees who need special protection. More often, they are migrants trying to escape poverty and unemployment. In order to help governments respond to some of the challenges posed by mixed movements of refugees and migrants in a coherent and practical way, the UN refugee agency has started implementing a 10-point plan which sets out key areas in which action is required in countries of origin, transit and destination.


ITALY
SPAIN
Sicily
GREECE
TURKEY
Atlantic Ocean
MALTA
Lampedusa Island
TUNISIA
Mediterranean Sea
MOROCCO
Canary Islands
ALGERIA
LIBYAN
ARAB JAMAHIRIYA
EGYPT
MAURITANIA
NIGER
SUDAN
SENEGAL

Global warming

Heat waves and periods of unusually warm weather

Frequent and severe heat waves lead to increases in heat-related illness and death, especially in urban areas and among the elderly, the young, the ill, and the poor.

Central England

Cold days declining, hot days increasing, 1772 to present. 1995 brought 26 days above 68°F (20°C) versus an average of 4 days per year since 1772.

Ocean warming, sea-level rise and coastal flooding

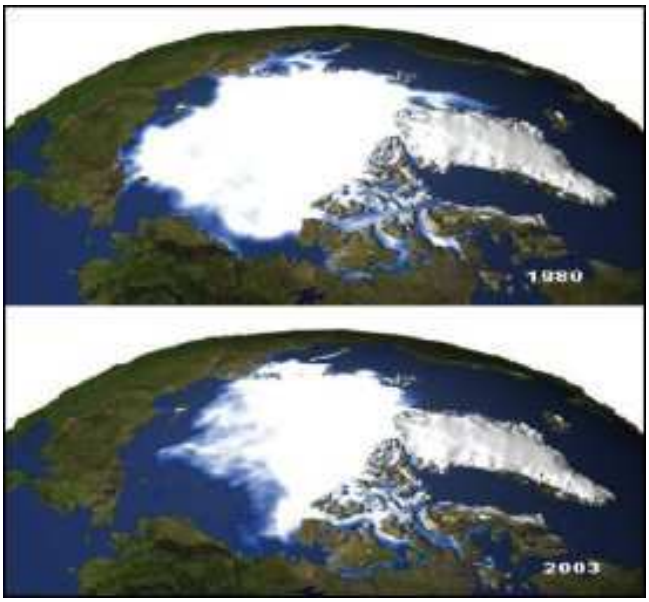
Warmer temperatures increase melting of mountain glaciers, increase ocean heat content, and cause ocean water to expand. Largely as a result of these effects, global sea level has risen 4 to 10 inches (10-25 cm) over the past 100 years. With additional warming, sea level is projected to rise from half a foot to 3 feet (15-92 cm) more during the next 100 years. On average, 50 to 100 feet (15-30 meters) of beach are lost for every foot (0.3 meters) of sea-level rise. Local land subsidence (sinking) and/or uplift due to geologic forces and coastal development will also affect the rate of coastal land loss.

Glaciers melting

Over the past 150 years, the majority of mountain glaciers monitored have been shrinking. Many glaciers at lower latitudes are now disappearing, and scientists predict that, under some plausible warming scenarios, the majority of glaciers will be gone by the year 2100. As glaciers continue to shrink, summer water flows will drop sharply, disrupting an important source of water for irrigation and power in many areas that rely on mountain watersheds.

Arctic and Antarctic warming

Parts of Canada, Alaska, Siberia, and the Antarctic have been experiencing warming well above the global average for the past few decades. This trend fits climate model predictions for a world with increasing levels of greenhouse gases. Melting permafrost is forcing the reconstruction of roads, airports, and buildings and is increasing erosion and the frequency of landslides. Reduced sea ice and ice shelves, changes in snowfall, and pest infestations have affected native plants and animals that provide food and resources to many people.



Spreading disease

Warmer temperatures allow mosquitoes that transmit diseases such as malaria and dengue fever to extend their ranges and increase both their biting rate and their ability to infect humans. The map highlights locations of mosquito-borne disease outbreaks in previously unexposed highland communities where temperatures have risen during the past century, and other indicators of health impacts.

Earlier spring arrival

Spring now arrives earlier in many parts of the world. Evidence of this comes from earlier thaw dates for rivers and lakes; earlier dates for plant blooming and leafing; and earlier animal egg-laying, spawning and migration. An earlier spring may disrupt animal migrations, alter competitive balances among species, and cause other unforeseen problems.

Plant and animal range shifts and population changes

Plants and animals generally react to consistently warmer temperatures by moving to higher latitudes and elevations. Recent studies reveal that some species have already started to shift their ranges, consistent with warming trends. Many populations and species may become more vulnerable to declining numbers or extinction if warming occurs faster than they can respond or if human development presents barriers to their migration.

Coral reef bleaching

Reefs in 32 countries experienced dramatic bleaching in 1997-98. Bleaching results from the loss of microscopic algae that both color and nourish living corals. Water that is warmer than normal by only 2 to 3°F (1.1-1.6°C) has been linked to bleaching. Other factors that contribute to coral reef bleaching include nutrient and sediment runoff, pollution, coastal development, dynamiting of reefs, and natural storm damage.

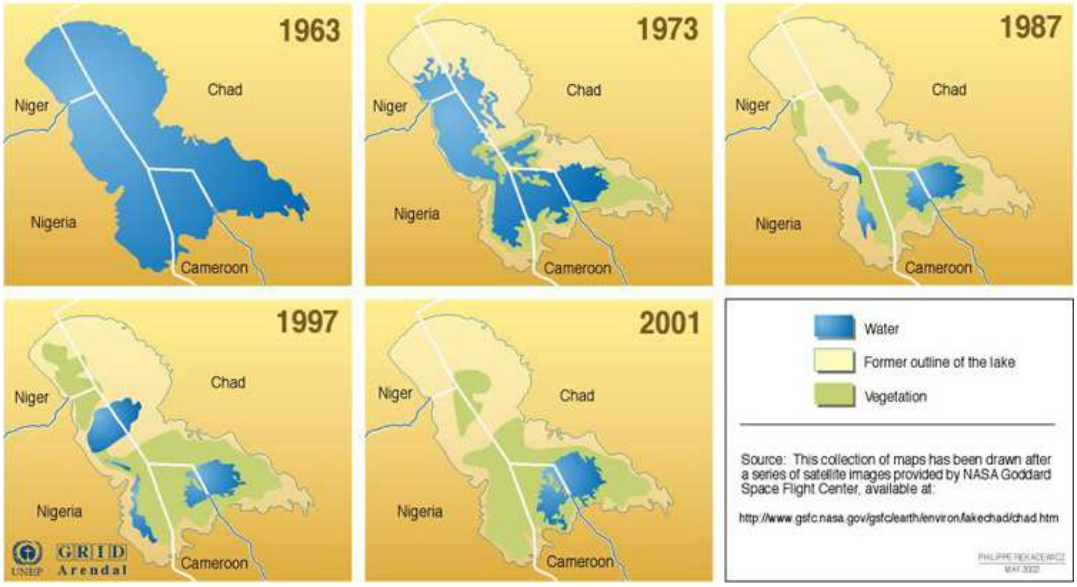
Downpours, heavy snowfalls, and flooding

A warmer climate will bring an increase in precipitation worldwide, especially during winter and in mid- to high latitudes, according to climate model projections. In addition, more precipitation is expected to fall in downpours and heavy snowstorms leading to increased flooding and damages. The area of the U.S. affected by extreme rainfall has increased significantly since 1910. Heavy rainfalls have also increased in Japan, the former Soviet Union, China, and Australia. As climate change increases the risk of flooding, human changes in land use and land cover can also contribute to the growing risk of flooding.

Droughts and fires

As the climate heats up, droughts are expected to become more frequent and severe in some locations. Sustained drought makes wildfires more likely, and crops and trees more vulnerable to pest infestations and disease. Generally, local land use and land cover changes can exacerbate the climate change-driven increase in drought risk. For example, in the tropics, "slash-and-burn" land clearing practices can trigger large fires during extended droughts.

The Disappearance of Lake Chad in Africa



Globalization

What is Globalization?

The increasing interdependence and interconnectedness of places globally.

Implications of Globalization

- The *stretching* of global connections, relations and networks
- Making them faster and more intense.
- Increasing *awareness* about the world.

Interdependence of Places

- Place have become increasingly *interdependent*.
- Caused by a set of interrelated forces or processes that we call *globalization*.
- Globalization helps to *extend and deepen linkages* between sets of places (and peoples)

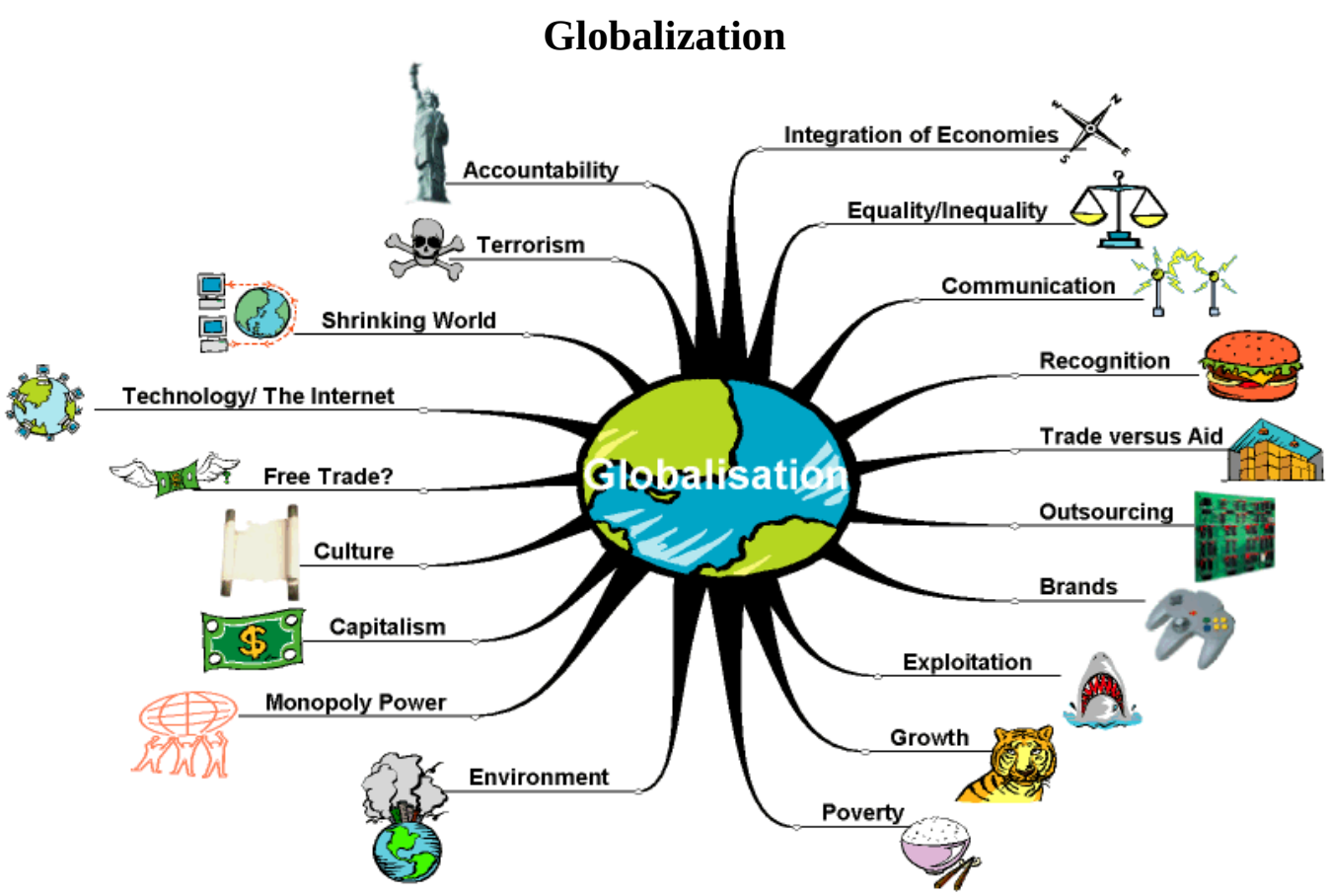
Areas of globalization

Economic globalization means the greater global connectedness of economic activities, through transnational trade, capital flows and migration.

Environmental globalization could include the increasingly global effects of human activity on the environment.

Cultural globalization may highlight the connections among languages, ways of living, and fears of global homogeneity through the spread of North American and European languages and culture.

Political globalization may include wider acceptance of global political standards such as human rights, democracy, labor standards, environmental standards, as well as the greater coordination of actions by governments and other institutions across the globe.



Positive aspects	Negative aspects
● Increased free trade between nations ● Increased liquidity of capital allowing investors in developed nations to invest in developing nations ● Corporations have greater flexibility to operate across borders ● Global mass media ties the world together ● Increased flow of communications allows vital information to be shared between individuals and corporations around the world ● Greater ease and speed of transportation for goods and people ● Reduction of cultural barriers increases the global village effect ● Spread of democratic ideals to developed nations ● Greater interdependence of nation-states ● Reduction of likelihood of war between developed nations ● Increases in environmental protection in developed nations	● Increased flow of skilled and non-skilled jobs from developed to developing nations as corporations seek out the cheapest labor ● Increased likelihood of economic disruptions in one nation effecting all nations ● Corporate influence of nation-states far exceeds that of civil society organizations and average individuals ● Threat that control of world media by a handful of corporations will limit cultural expression ● Greater chance of reactions for globalization being violent in an attempt to preserve cultural heritage ● Greater risk of diseases being transported unintentionally between nations ● Spread of a materialistic lifestyle and attitude that sees consumption as the path to prosperity ● International bodies like the World Trade Organization infringe on national and individual sovereignty ● Increase in the chances of civil war within developing countries and open war between developing countries as they vie for resources ● Decreases in environmental integrity as polluting corporations take advantage of weak regulatory rules in developing countries

World topography

America

Parts of the continent: North America, Central America, South America, Latin America

Geographical regions: Alaska, Amazon Basin, Andes, Antilles, Appalache, Atacama Desert, Bahamas, Brazilian Highlands, Floridian Peninsula, Greenland, Guyana Highlands, Hawaiian Islands, Californian Peninsula, Canadian Shield, Cordilleras, Labrador Peninsula, Mexican Highlands, Mississippi River Basin, Mt. Pelée, Mt. St. Helens, Paraná Basin, Popocatépetl, Great Plains, Rocky Mountains, Silicon Valley

Hydrogeology: Amazon, Colorado, Caribbean Sea, La Plata, Gulf of Mexico, Mississippi, Great Lakes (L. Erie, L. Superior, L. Huron, L. Michigan, L. Ontario), Niagara Falls, Panama Canal, Paraná, St. Lawrence River

Countries: United States of America, Argentina, Bolivia, Chile, Brazil, Dominica, Canada, Cuba, Mexico, Nicaragua, Panama, Venezuela

Cities: Atlanta, Brasilia, Buenos Aires, Caracas, Dallas, Havanna, Houston, Los Angeles, Mexico City, Montréal, New Orleans, New York, Ottawa, Rio de Janiero, San Francisco, São Paulo, Seattle, Washington

Australia and Oceania

Geographical regions: Australian Lowland, Great Artesian Basin, Great Barrier Reef, Great Dividing Range, Great Western Plateau, New Guinea

Hydrogeology: Murray

Countries: Australia, New Zealand

Cities: Canberra, Melbourne, Perth, Sydney, Wellington

Asia

Parts of the continent: South Asia, Southeast Asia, Southwest Asia, North Asia, East Asia, Central Asia

Geographical regions: Angara Shield, Arabian Peninsula, Arabian Shield, Bali, Deccan Shield, Southeast Chinese Mountains, Fuji, Philippines, Gobi, Himalayas, Hindustan Lowlands, Hindustan Peninsula, Indochinese Peninsula, Islands of Indonesia, Iranian Plateau, Japanese Islands, Caspian Depression, Causcasus, North China Plain, Minor Asia, Korean Peninsula, Central Siberian Plateau, Krakatoa, Kuznetsk Basin, Mesopotamia, West Siberian Plain, Pamir Mountains, Siberia, Taiwan, Taklamakan, Tibetan Plateau, Tien-San, Turan Plain

Hydrogeology: Aral Sea, Lake Baikal, Bering Strait, Bosporus, Brahmaputra, Eufrates, Dead Sea, Indus, Yangtze, Sea of Japan, Arctic Ocean, Yenisey, Ganges, Caspian Sea, Lena, Mekong, Ob, Arabian Sea/Persian Gulf, Yellow River, Tigris

Countries: United Arab Emirates, South Korea, Philippines, India, Indonesia, Iraq, Iran, Israel, Japan, Kazakhstan, China, Kuwait, Malaysia, Saudi Arabia, Thailand, Turkey

Cities: Ankara, Baghdad, Bangkok, Mumbai, Calcutta, Chelyabinsk, Haifa, Hongkong, Istambul, Jakarta, Yekaterinburg, Jerusalem, Kanton, Kobe, Krasnoyarsk, Kyoto, Manila, Mecca, Novosibirsk, Osaka, Beijing, Riyadh, Shanghai, Singapore, Seoul, Teheran, Tel-Aviv-Jaffa, Tokyo, Delhi, Ust-Ilimsk, Vladivostok

Europe

Parts of the continent: Southern Europe, Northern Europe, Eastern Europe, East Central Europe, Central Europe, Western Europe

Geographical regions: Alps, Apennines, Azores, Balkan Peninsula, Balkan Mountains, Baltic Shield, British Isles, Cyprus, Dalmatia, Dinaric Alps, Mount Etna, Finnish Lakeland, Massif Central, Dutch Lowlands, Iceland, Carpathian Mountains, East European Plain, Crete, London Basin, Mont Blanc, Paris Basin, Pennine, Iberian Peninsula, Pyrenees, Scandinavian Peninsula, Scandinavian Mountains, Sicily, Ural, Mount Vesuvius

Hydrogeology: Adriatic Sea, Baltic Sea, Dnieper, Don, Danube, Ebro, Elbe, North Sea, Black Sea, Mediterranean Sea, IJssel Lake, English Channel, Lake Ladoga, Po, Rhine, Rhône, Seine, Thames, Ural, Volga, Waddenzee