



Case studies Geography IGCSE

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CONTENTS

Theme 1:

- Nigeria -overpopulation
- Australia-underpopulation
- Russia-population decline
- Niger-population growth
- Singapore, China
- Namibia-low population density
- Japan-high population density
- Qatar - international migration
- Italy-old dependents

Theme 2:

- Haiti - earthquake
- Indonesia - volcano
- Germany and Czech - river flooding
- Mauritius - coastline
- Ecuador - rainforest
- Sahara and Mali - a hot desert

Theme 3:

- Nike - NIC
- England-Arable farm
- Sudan-food shortage
- Pakistan-steel industry
- Iceland-energy source
- UAE-tourism is important
- Lesotho
- USA-fracking



West Africa



Traffic

Nigerian overpopulation

- Nigeria is a LEDC
- 175M population in 2013
- Occupies 3% of the land of Africa and 15% of people
- +60% of population living on less than \$1 a day

Benefits:

- Enough workforce
- Enough army force

Problems:

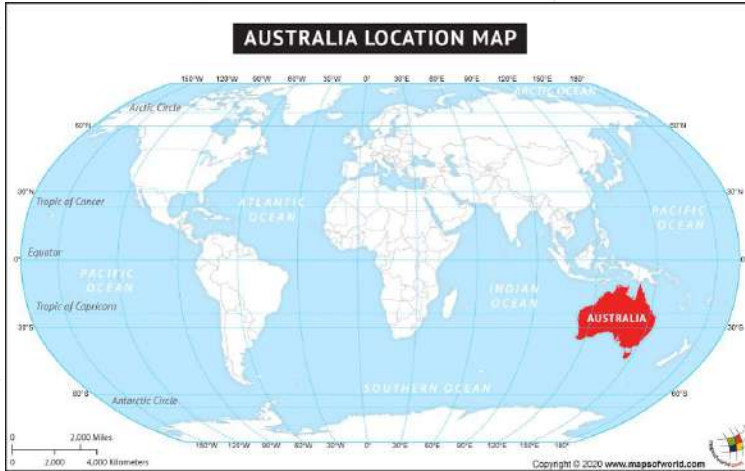
- Shortage of food and water
- Pollution
- Not enough housing
- Not enough schools and health care
- High crime rates
- Congested roads
- High disease level

Reasons:

- Vaccination
- Better health care
- No family planning



Australia - underpopulation

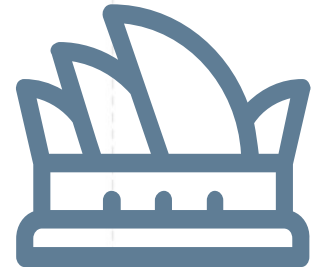


Southern hemisphere in Oceania



No buildings and people

- 23.3M people in 2013
- 7.7M km² area
- 13th largest economy
- Benefits:**
- Not much pressure on jobs, health care and education
- 5th highest per capita income
- Less pollution
- Enough water and food sources
- Problems:**
- Small workforce
- More taxes
- Ageing population
- Not full use of resources
- Can't get a big army
- Lack of workforce
- Reasons:**
- Few people in large area





Eastern Europe and northern Asia



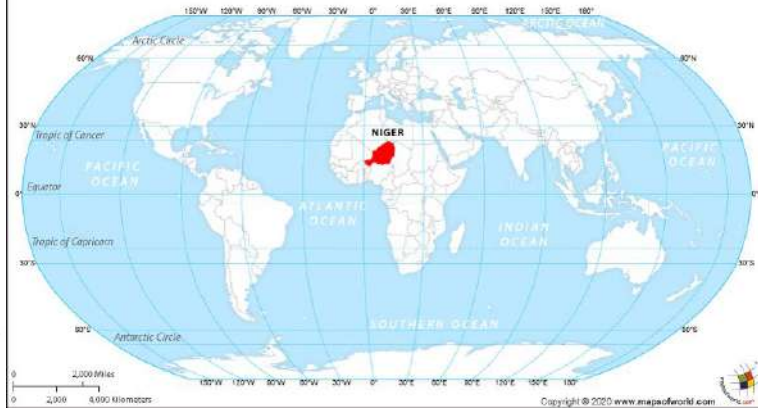
Vladimir Putin

Population decline in Russia



- 143M people in 2013
- Life expectancy - 64
- From 1944, death rate increased
- Benefits:**
 - No lack of housing, healthcare and education
 - No lack of food and water source
 - Less pollution
- Problems:**
 - Less birth rate
 - Many old people will be left alone
- Reasons:**
 - Few people in large area
 - Alcohol related deaths
 - HIV and AIDS
 - Women are educated
- Solutions:**
 - 1500 roubles for child support
 - 250000 roubles for women who choose to have a second baby

NIGER LOCATION MAP



Land locked country in west Africa



High birth rate

Niger - population growth

- 17M people in 2013
- Expected to reach 56M in 2050
- Growth rate = 3.4%
- Life expectancy = 54.3

Benefits:

- Enough workforce
- Enough army

Problems:

- Shortage of food and water
- Pollution
- Not enough housing
- Not enough schools and health care
- High crime rates
- Congested roads
- High disease level

Reasons:

- (death rate falling) Vaccination, clear water, better living condition
- No family planning
- Use children to make money



East Asia - China



South east Asia - Singapore

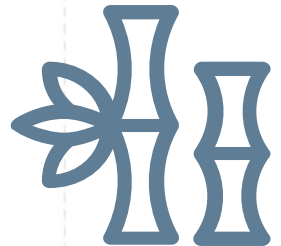
Population policies - China, Singapore

→ China:

- ◆ 1.4B people in 2018
- ◆ 1979 - 'one family, one child policy
- ◆ Fertility rate reduced (5.8 to 1.7)
- ◆ Stopped in 2014
- ◆ Because of increasing number of old people and shrinking number of workforce

→ Singapore:

- ◆ Less space and housing
- ◆ Expensive land and living cost
- ◆ Stop at two campaign in 1960s
- ◆ Extra taxes for 3rd child
- ◆ No paid maternity leave for 3rd child
- ◆ Children per woman decreased to 6.4 to 1.2





NAMIBIA LOCATION MAP



South-west Africa



Landscape of Namibia

Namibia - Low population density

- Low GDP per person of USD\$7900
- Gained independence in 1990
- Capital city - Windhoek
- Population density - $2.6/\text{km}^2$
- 2.5M in 2017
- Economy depends on the extraction and processing of minerals such as diamond and uranium

Benefits:

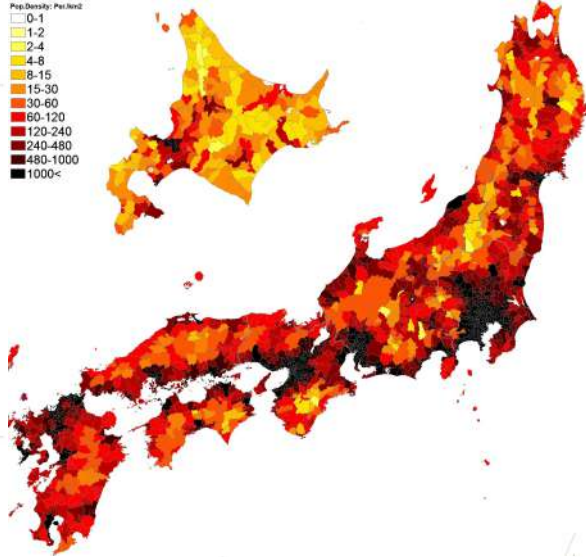
- Less pollution
- No lack of housing and land

Problems:

- Lack of workforce
- Dry climate can be infertile

Reasons:

- Hot & dry climate



East Asian country



Cross-road in Japan

High population density - Japan



- 350/km² density
- 126M in 2019
- Lots of people living near the coast
- Few people live in the mountainous area
- 4 main islands

Benefits:

- Less pollution
- No lack of housing and land

Problems:

- Pressure on natural resources
- Not enough housing
- Pressure on services
- Expensive lands

Reasons:

- Attracts tourists
- Mountainous areas are cold or infertile
- Coastal areas can be used for fishing, travel, transportation and domestic water supply



South-western Asia



Qatar

Qatar - international migration



- Covers 11586 km²
- 2.5M people in 2015
- Oil production started in 1935
- Employed foreign migrants for constructing
- Hot and dry climate
- A lot of male workers (several times more than women)

- Most migrants came from India in 2013

Benefits:

- Migrants are workforce
- High GDP

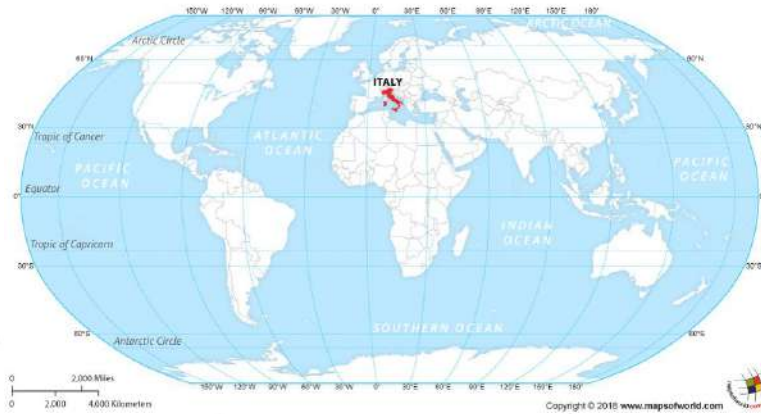
Problems:

- Oil extraction is not good for the environment
- Economy depends on oil production
- Too many foreigners
- Globalization
- Few women

Reasons:

- Second highest per capita in the world = \$92501

ITALY LOCATION MAP



Southern Europe



Old dependents

Italy - old dependents

- More than 60M population in 2013
- Density of 201/km² (high in Europe)
- Death rate is higher than the birth rate

- Many migrants

Benefits:

- Migrants are workforce
- High GDP

Problems:

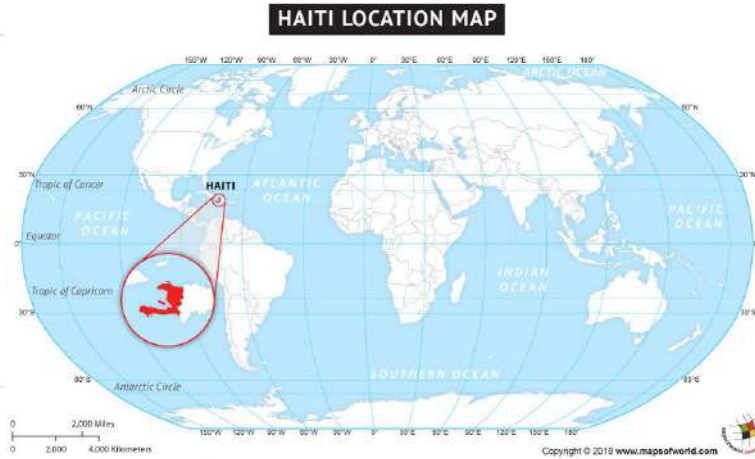
- Schools are not full
- Old people need to be cared (money)
- Few working force in future
- 25% of women have no child
- Need to raise retirement age to 77

Reasons:

- Better healthcare and living conditions
- Vaccination
- Family planning and educated women



Haiti - An earthquake



South of North America



Earthquake

- Lies on North American and Caribbean plate - conservative movement /zuruh/
- 200 years - no disaster
- On 12 Jan 2010, 5 p.m
- Focus = 10km under ground
- Epicentre - 16 km from capital city - Port au Prince
- 7.0 magnitude earthquake
- Benefits:**
- Provides workplaces
- Got help from other countries
- Problems:**
- Over 220'000 people killed
- Houses, airports, roads and schools destroyed
- dirty water causing cholera
- Public telephone was not working



south -east Asia



Mount Sinabung North of Sumatra

Indonesia - A volcano

- has more than 17000 islands
- Volcano was dormant over 400 years
- September 2013
- February 2014
- Last time, toxic gas and ash came out
- EuroAsian and Indonesian plate - convergent movement
- Island spread over the ring of fire
- Advantages:**
 - Plants coffee, rice, chili, cocoa in volcanic area
- Problems:**
 - Hazardous zone
 - 16 people killed on Feb 2014
 - 70500 evacuees



Central Europe - Germany and Czech

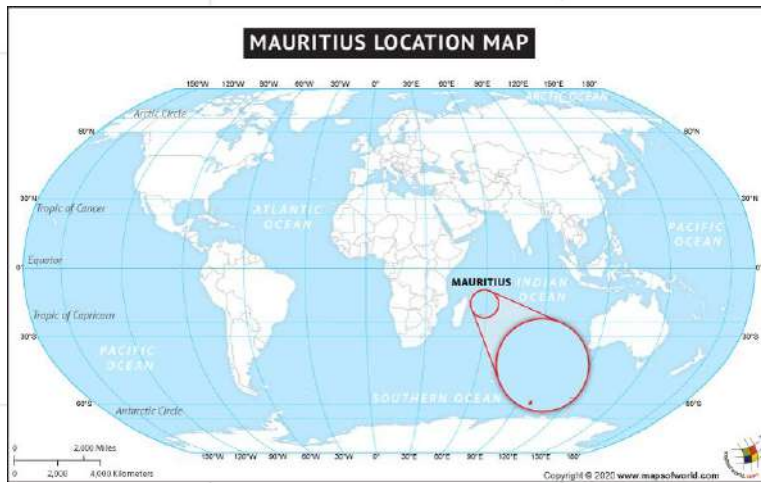


flooding

Elbe river - Flooding

- One of the major waterways in Europe
- Drainage basin = 50000 km² (4th largest)
- Over 24M people lives in drainage basin
- Total length = 1094 km
- Czech -> Germany
- Heavy rainfall until 2 June 2013 14:00 up to 250mm (72 hours)
- Used sandbags and flood barriers
- Opened dams
- Benefits:**
 - River transport
 - Water supply
 - Hydroelectric Power
 - Fertile soils
- Problems:**
 - 25 dead and thousand homeless
 - Over 50000 people evacuated





Island country in east Africa



coastline

Mauritius -An area of coastline

- Coastline is 322 km long
- Surrounded by coral reefs
- Economy developed since 1970s
- Increase in sugar export earnings
- Tourists in 2013 = 950'000
- Established industries and financial services
- Coastline mainly used for vegetation in 2000

Benefits:

- Transport
- Tourism
- Fishing
- Can be used for leisure activities

Problems:

- Coastal erosion and flooding
- Sea walls collapsed
- Roads eroded
- Tropical storm (cyclone) Bejisa - Jan 2014 - 166 km/h wind





Northwestern South America



Rainforest

Ecuador - The tropical rainforest



- Has approximately 280'000 km²
- Second smallest country in South America
- Rainforest in east side - Oriente
- A city in Oriente, Puyo, has 25000 population
- Equatorial climate (hot and wet) Average temperature 19-30 C and 80% humidity
- Annual rainfall 3411 mm (convictional rainfall)
- Plants (thick and big leaves, buttress roots, tall)
- Yasuni national park established in 1979 (1 million hectares) NE of Ecuador
- Small part of rainforest was sold by \$18 billion

Benefits:

- Defeat poverty
- Food source and fuel source
- Fertile (vegetation grows well)

Problems:

- Oil drillers might want more forest
- It might be accidentally burned





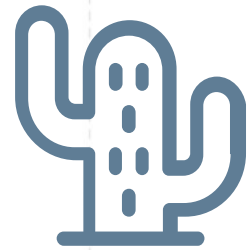
Mali - North west Africa



Sahara desert

A hot desert - Sahara and Mali

- Sahara is largest and hottest desert
 - Lies across north Africa
 - Area is almost equal to USA
 - About a quarter is covered by sand-desert called ergs (rest is rocks)
 - No rain since 1969 in Sahel (300-600 mm annual rainfall) - 90% evaporates
 - Mali's population density is 5/km²
 - 65% of Mali is desert
 - Plants(long roots, small and thick and hairy leaves)
 - Animals (big ear - fennec fox)
 - Mali has small range of temperature (218 mm rainfall)
 - Climate is hot and dry
- Problems:**
- Less supply of water and food
 - Hard to develop tourism





Nike- transnational corporation



Headquarters located in Beaverton ,
Oregon USA



- Established in 1972
- 765 factories in 43 country
- Over 1M workers
- Opened first major market in Japan
- Asian countries have cheap raw materials,labour cost, free trade and expanding market
- CHINA has the most factory which is 206
- Vietnam has 66 factories
- Vietnamese workers have 2 times lower salary than Chinese workers
- In 2001, Nike introduced 'Corporate responsibility report' to reduce greenhouse gas and increase renewable energy usage

Problem:

- Factories causing damage to environment
- So in 1992 nike setup Code of Conduct
- Relocated factories to make more profit but it was not effective because locals buys their goods



Lincolnshire, the UK - Arable farm



- Located in northwestern Europe (island)
- Lincolnshire is located East part of the UK
- In 1973, the UK joined European Union - 28 countries
- Common Agricultural Policy - farmers grow depending on market condition
- Glebe farm, Lincolnshire - 127 hectares
- Every month receives rainfall, +6C
- Need to harvest, fertilise, protect sprouts, ploughs land
- Needed to diversificate because of CAP

Benefits:

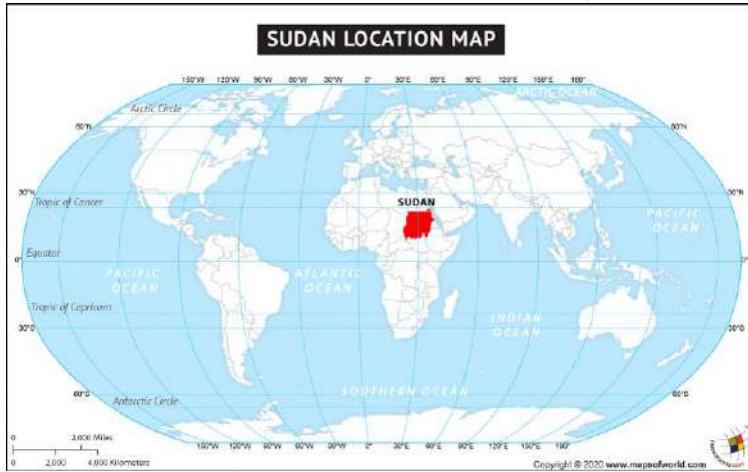
- Eco-friendly
- Keeps farms not being bankrupted
- Stopped overproduction

Disadvantages:

- Farmers cannot plant any plant by the amount they want



SUDAN LOCATION MAP



Sudan - food shortages in Darfur, Sudan

- Sudan was the largest country in North Africa
- Landscape changes from desert to forest
- Nile provides water in the east but many areas receive no rainfall

Problems:

- Reason for separation was the contrast in people caused- the two civil wars since independence in 1956
- During second civil war there were drought and, by 2009, many parts of Sudan required large amount of food.
- Last 10 years, Darfur has seen one of the world's largest concentrations of human suffering and food shortages
- Government does not distribute food or allow agencies to operate there
- Child malnutrition is common
- There is no food, toilets, drainage, or medical facilities in refugee camps

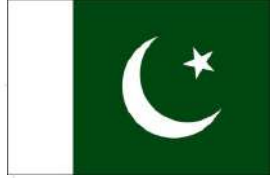


1956- Independence granted to Sudan
 2003- Western region of Sudan rebels, claiming Arabs have been favored.
 2007-peace keeping force provided/ to protect african union and I+UNited Nation
 January 2011- A referendum is held
 9 July 2011- Republic of south Sudan becomes Independent

PAKISTAN LOCATION MAP



Pakistan - Steel complex at Pipri, near Karachi



- Independence from India in 1947
- Located in South Asia
- First steel factories for Pakistan Steel were built in 1973
- The project was so large it took 12 years and it formally opened in 1985.

Advantages:

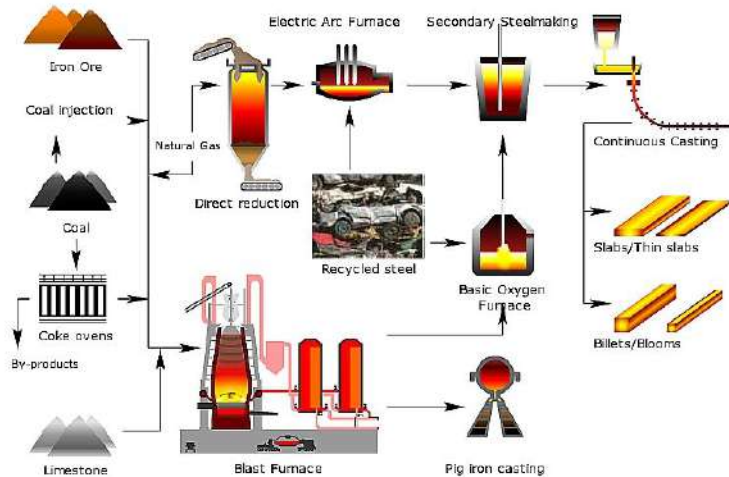
- Today Pakistan Steel produces 1.1 million tonnes of steel and is the country's largest industrial activity. (economy)
- Not reliant on other countries
- This provides for quarter of Pakistan's steel demand.

Pipri:

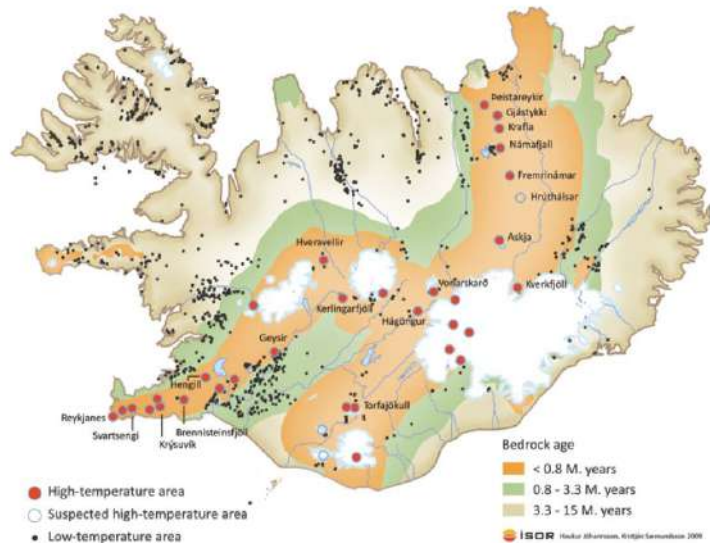
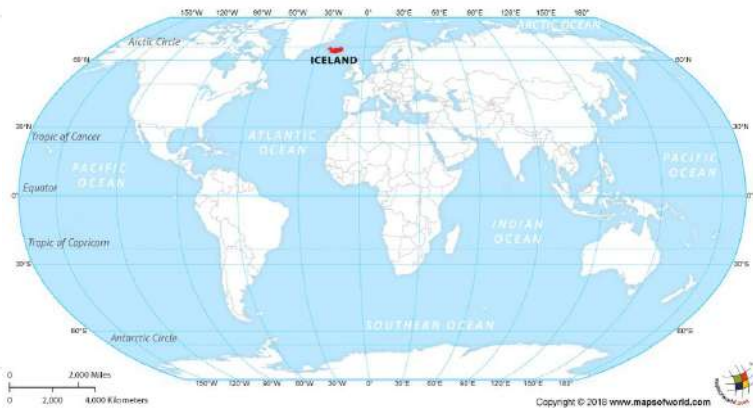
- Transport by sea, main road
- Qasim and Karachi - highest electricity generating capacity in the country
- Cheap labour, flat and cheap land

Process:

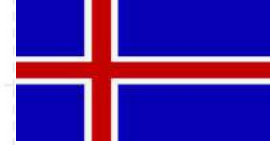
Limestone+iron ore+coke -> oxidise -> roll = steel



ICELAND LOCATION MAP



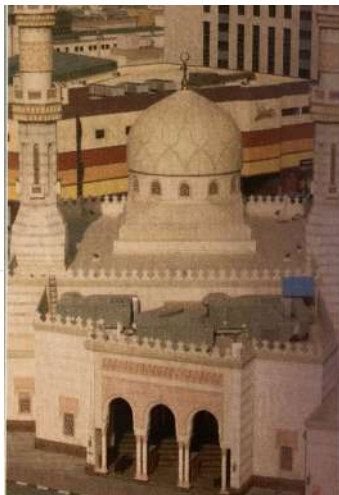
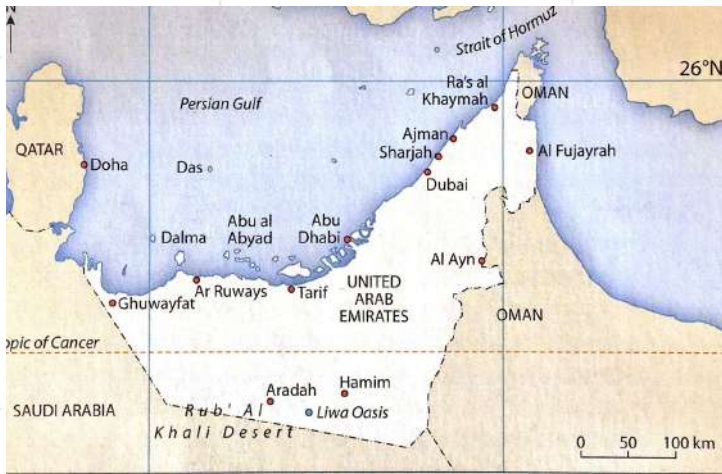
Energy supply in Iceland



- Home for 300'000 people
 - Located on the Mid-Atlantic ridge - constructive boundary between north american and euroasian plate
 - Plates moves 2 cm/year
 - 66% of its energy from geothermal source
 - 15% from HEP (most in South West)
 - 81% renewable source
 - 60% of population lives in the place where geothermal power is produced
 - HEP stations have been built since 1965 - usually on glacial rivers (мөсөн зол)
 - Precipitation is high, +800mm/year
 - Divided into 2 areas - high temperature(200C) rocks and low temperature rocks(50-100C)
- Advantages:**
- Provided 750 jobs
 - Less waste, CO2



Dubai, United Arab Emirates - An area where tourism is important



- Located in UAE on the Arabian Peninsula.
- CBD is dense
- A sub-tropical, arid climate
- Rainfall is infrequently and irregular /about 5 days per year/
- The mean daily temperature maximum is 30C in january, rising over 40C in july.
- In 2014, over 5 million tourists visited.
- Tourist is increased at 10% per year.
- Benefits:
 - Generating revenues of more than US\$4 million. (economy)
- Problems:
 - An impact on the natural environment (pollution, traffic)
 - At risk from flooding as sea levels rise.
 - Areas of coral damaged by sediment deposits.

LESOTHO LOCATION MAP



Country within South Africa



Water dam

Water supply in Lesotho

- Has several rivers across the country
- East part of the country receives heavy rainfalls(highlands)
- Lowlands receive less than 250 mm of rainfall per year
- Average rainfall and temperature is low is low in summer.
- LHWP(Lesotho Highlands Water Power) is the 2nd largest water transfer project (started developing in 1988 and not finished)
- Built along the river Malibamatso and Senqunyane and has 5 water dams

Benefits:

- The objectives of the project are provide water supply for country and earn income by selling water

Problems:

- Some farms are under water
- It might make Lesotho dependent on South Africa
- Changes river flow and ecosystem





Fracking in California, USA

- Can supply energy California for next 21 years
- Uses over 600 mills in 2013
- 65% of USA's oil deposits
- Small holes blasted into the rock - mixture of water sand and chemicals pumped in at high pressure

Benefits:

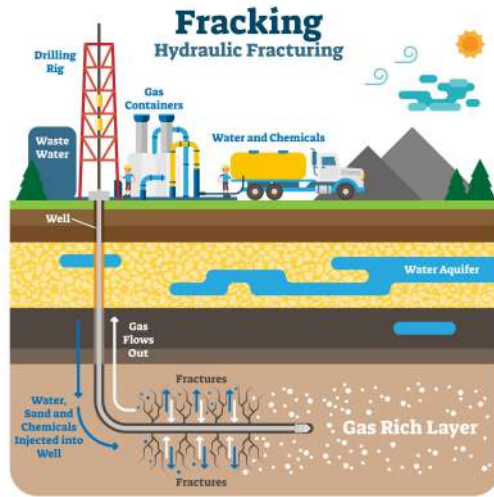
- Economically beneficial
- Does not depend on other countries

Problems:

- Extremely expensive
- May cause global warming (coal)
- Oil damages natural environment
- Need huge amount of water
- If toxic chemicals reach the water aquifer, it may cause severe illness and death
- Earthquakes
- Locals does not like it



USA in North America



Fracking process -extracting oil and gas