



Geography AS/A Level 2017-2018

Information for our new Year 12 Geography students

A warm welcome to all those students planning to start the Geography AS and A Level courses in September this year. Included below is some information about the Geography course for next year. This is an exciting time for Geography with a new specification having started just in 2016 and some really interesting topics. If you would like more information please don't hesitate to come and talk to any of the Geography Department.

Included below is a brief outline of both the one year AS Geography course and the full two year A level course. There are then some suggested summer tasks, including an introductory list of sources of information and four sample articles to read which relate to the first two topic areas you will be studying in the autumn term. This list does not include core textbooks; there is no need for these to be read at this stage.

Geography course overview

We will be following the new Edexcel AS and A Level Geography 2016 specification. You may choose to have a look at Edexcel's website which has a lot of information about the Geography course. If you do, make sure you are looking at information and resources specific to the new 2016 specification (not the old 2008 specification).

AS Geography (one year course)	
Paper 1 Dynamic Landscapes	Paper 2 Dynamic Places
Written examination 1 hour, 45 minutes in May/June 2018 50% of the qualification	Written examination 1 hour, 45 minutes In May/June 2018 50% of the qualification
Topic 1 Tectonic Processes and Hazards	Topic 3 Globalisation
Topic 2 Glaciated Landscapes and Change	Topic 4 Diverse Places (population and places)

Fieldwork is a very important part of the Geography AS/A Level. In Year 12 you will have several days of residential fieldwork out of London in which you will focus on developing the skills to investigate the evidence of Glacial landscapes and the issues within the 'Diverse Places' topic. In the AS course your fieldwork skills will be examined within questions in the above two Papers.



The AS Geography is a stand-alone one year course. However, for those of you planning to do the full two year A level in Geography an outline of the topics is provided below. Again, **Fieldwork** is important for your A Level as you will need the primary data collected in Year 12 and in the Autumn term of Year 13 (along with a possible additional day's fieldwork in London) to complete your Independent Investigation (a 4000 word project). The emphasis for this piece of work is very much on students working independently – from creating your own title, carrying out your own data collection and analysis, to taking responsibility for the writing up and presentation of the final project. Your teachers can support you in developing the appropriate skills for primary data fieldwork and secondary data research.

A Level Geography (two year course)	
Paper 1 Dynamic Landscapes	Paper 2 Dynamic Places
Written examination 2 hours, 15 minutes in May/June 2019 30% of the qualification	Written examination 2 hours, 45 minutes In May/June 2019 30% of the qualification
Topic 1 Tectonic Processes and Hazards	Topic 3 Globalisation
Topic 2 Glaciated Landscapes and Change	Topic 4 Diverse Places
Topic 5 Water Cycle and Water insecurity	Topic 7 Superpowers
Topic 6 The Carbon Cycle and Energy Security	Topic 8 Global Development and Connections
Paper 3: Synoptic Investigation	Coursework: Independent Investigation

Written examination 2 hours, 15 minutes in May/June 2019 20% of qualification	Non Examined Assessment. Submitted in early 2019 20% of the qualification
This paper examines three synoptic themes (Players, Attitudes and actions, Futures and uncertainties) covering content from across all topic areas above. The synoptic investigation is based on a geographical issue within a place based context.	Students choose a question or issue for investigation which relates to one of the above topics. The coursework must then use primary data collected on fieldwork and include analysis, evaluation and presentation of this data. The written coursework will be 3000-4000 words.

Geography summer tasks



Here are some summer tasks that will help you prepare for the Geography course.

1. Read through this hand-out and the course overview above to familiarise yourself with the course.
2. Read the four sample articles included below (relevant to our first two topics): two relate to the Globalisation topic and two are useful for the topic on Tectonic Processes and Hazards.
3. From the suggested sources list below try to select a couple of the 'consistently good Geographically relevant material' sources and do a little extra reading over the summer – this is a very good habit to get into for next year.
4. Keep a record of any 'Geography in the news' stories that crop up in the summer – use the grid below as an outline (or alternatively you can design your own). It would be interesting if you could bring one or two of these 'stories' or news items into the first class in September to share with your new class.

Date	Geographical issue/story	Details	Source of information

5. Lastly, if you go away on holiday (UK or abroad) put your *Geography specs* on. How can you view this place as a Geographer? Consider the social, economic and environmental environment that you see. Write us a geographical postcard and tell us about the geography of the place you are visiting – send it to **The Geography Department, Fortismere School, Tetherdown, Muswell Hill, London N10 1NE**

Some suggested resources	Where you will find
Geography Review (published by Hodder Education Philip Allan). Aimed specifically at AS/A Level students.	School library (reference only) or subscribe. Many back copies available in the library. A reduced school rate will be available to Geography students from September
The Economist	Newsagents or public libraries
New Scientist	Newsagents or public libraries
Economics Review (published by Hodder Education Philip Allan). Some articles may be helpful for Globalisation and Diverse Places topics.	School library (reference only) or subscribe. Many back copies available in the library.
Biological Sciences Review (published by Hodder Education Philip Allan). Some articles may be helpful for Water Cycle and Carbon Cycle topics	School library (reference only) or subscribe. Many back copies available in the library.
National Geographic	Some articles online (www.nationalgeographic.com) or subscription or at newsagents.
Quality newspapers such as The Times, The Guardian (print and online).	Newsagents or public libraries. Many articles online although some require subscription.
Also, The Daily Telegraph (called The Telegraph online) and the <i>i</i> newspapers	Available in the School library (reference only) as well as newsagents, public libraries.
The Independent (online only now)	www.independent.co.uk
Online and TV news: BBC online news, Sky News, ITV News and Channel 4 News	www.bbc.co.uk www.itv.com/news www.channel4.com news.sky.com .
Useful TV programme: Countryfile and Newsnight	Weekly - both on BBC 2 or iPlayer
Radio 4 (& other) news programmes	Many valuable weekly programmes on range of topics as well as daily news.
Or visit: The Royal Geographical Society (exhibitions, resources) or see resources online	www.rgs.org or visit exhibitions at the Society in Kensington Gore, London SW7
Natural History Museum (See Earth Sciences gallery)	www.nhm.ac.uk or visit exhibitions at the museum on Cromwell Road, London SW7

Topic 1: Tectonic Processes and Hazards – sample articles

Article one. Tsunami Protection in Thailand.

Source: Geography Review Sept 2012. Author: Stuart Turner

The Phi Phi islands in Thailand were badly hit by the 2004 tsunami. The tourist industry is now recovering and a tsunami protection scheme is in place. What were the impacts of the tsunami, and how well prepared are the islands for a future event? Tectonic hazards, their causes and impacts, is a popular A-level topic

On 26 December 2004, a tsunami swept through the Indian Ocean triggered by a series of strong undersea earthquakes registering up to 8.9 on the Richter scale. Within minutes, many lives were lost, populations were displaced, livelihoods, homes and infrastructures were destroyed, and development gains were set back. This shocking disaster underscored an important fact: as populations boom in coastal regions worldwide, tsunamis pose a greater risk than ever before. At the same time, this tsunami was the best documented in history, creating an opportunity to learn how to avoid such catastrophes in the future.

Table 1 is a timeline of how the 2004 tsunami impacted upon communities across the Indian Ocean. One such community was

the island of Koh Phi Phi Don (the biggest of the Phi Phi islands) off the southwest coast of Thailand. *Koh* means island in Thai. Today the island has recovered, and again attracts large numbers of tourists. Strategies have been put in place to reduce vulnerability to tsunamis, but total protection remains impossible.

How do tsunamis form?

A tsunami is a secondary hazard consisting of a series of waves caused by the displacement of a large volume of water. Earthquakes, volcanic eruptions, underwater landslides, and the calving of ice from glaciers or ice sheets can all generate a tsunami. As the tsunami waves approach the shoreline they sometimes cause the sea to recede rapidly from the coast. This is known as ocean drawback.



Tsunami evacuation centre



Tsunami evacuation route map which has been vandalised

The size of tsunami waves can be amplified or dampened by the local profile of the seafloor and by the shape of the coastline. As a result, the impacts of an incoming wave can vary along different sections of a coastline. A study published in *Scientific American* on the potential impacts of a tsunami on California's coastline found that bigger waves were likely to hit the crescent-shaped bays of the south-facing northern coast than would affect the north-facing south coast. Thus Santa Cruz would be more seriously affected than Monterey.

Table 2 lists tsunami events since 1950 that have led to over 200 deaths. The table shows that, although the frequency of events is fairly low, the scale and resulting loss of life is devastating. There are difficulties calculating the death toll, as a tsunami is often combined

with an earthquake and the exact cause of death (earthquake or tsunami) may be hard to determine.

The need for protection

Around 3 billion people live in coastal areas around the world. A number of schemes have been used to reduce vulnerability to tsunami events. Some of the most sophisticated methods are in place in Japan where risk levels are high due to regular seismic activity in the Pacific ring of fire. However, many of these defences proved futile in the face of the tsunami which struck following the Sendai earthquake in March 2011. Tsunami protection can be expensive and in Thailand, where gross domestic product per capita stands at \$8,612 a year (compared to \$35,844 in the UK), there is little money to spare.

Predicting tsunamis is difficult, although one of the most effective methods is to measure changes in sea-bed pressure using a series of monitors attached to sea-surface buoys. This system is known as DART or Deep-ocean Assessment and Recording of Tsunamis. There has been a warning system in place in the Pacific since 1965, but the Indian Ocean had no similar system until June 2006. After the 2004 tsunami UNESCO led the development of the Indian Ocean tsunami warning system (Inset 1).

The Asian tsunami and Koh Phi Phi

Impacts

The main population centre on Phi Phi Don is set between two hill tops on an isthmus (Figure 1). The maximum elevation of the land in this area is no more than 2 metres, meaning that it is extremely vulnerable to changes in sea level. When the tsunami struck in 2004, the waves reaching the shoreline varied between 7 and 10 metres in height, according to eye-witnesses. Approximately 70% of the built-up area was destroyed. According to local estimates, up to 4,000 people lost their lives, although the total numbers are hard to tally.

In the aftermath of the 2004 tsunami, the initial concern was whether or not Phi Phi Don would be habitable again. With the help of national and international government aid, NGOs and a multitude of volunteers, the island is once again a sought after and bustling tourist destination.

Local people had to weigh up the risks of remaining on the island against the rewards.

Table 2 Tsunamis with death toll over 200 since 1950

Date	Location	Fatalities (approx)
2011	Japan	25,000
2004	Indian Ocean: Thailand, Sri Lanka, India, Indonesia, Bangladesh, Malaysia	230,000
1998	Papua New Guinea	2,200
1976	Philippines	5,000
1963	Italy (Vajont Dam landslide)	1,900
1960	Chile	6,000 (combined with earthquake)
1952	USSR	2,300
1946	Japan	1,500
1944	Japan	1,200
1933	Japan	3,300 (combined with earthquake)
1908	Italy	70,000



The tsunami exposed the risks, but had to be put in perspective as a rare event. People returned to live on the island because of:

- the tourist revenue
- the beautiful landscape
- an emotional and cultural attachment to their home

Response

The immediate concern was to put in place safeguards that could lessen the impacts of future tsunami events. Hazard managers believed that with improved communications systems a large percentage of the fatalities could have been avoided. Setting up a suitable warning system and evacuation plan was therefore considered to be the primary need. This has had to tie in with the larger Indian Ocean tsunami warning system being developed at an international level (Inset 1).

In 2005 the Thai government recommended that:

- tourist development on the island should be limited to hotels built of stable structures rather than the traditional beach huts
- total tourist accommodation on the island should not exceed 1,500 rooms

This was rejected by local business people who rely on tourism as their main source of income.

Tsunami plans

The precautions and protection schemes on Phi Phi Don are summarised and evaluated in Table 3. There are flaws in the evacuation routes in particular, with several of the paths leading directly into dense vegetation that

Inset 1 The Indian Ocean tsunami warning system

Work on the Indian Ocean Tsunami Warning and Mitigation System (IOTWMS) began in 2005 and, following a successful drill exercise in October 2011, the scheme is now fully functional. It consists of 25 seismographic stations relaying information to 26 national tsunami information centres. Scientists are alerted via text message and e-mail automatically within 2 minutes of significant seismic activity.

UNESCO warned that the following are required to make the system effective:

- further coordination between governments of the countries with coastline on the Indian Ocean
- methods of relaying information quickly to the civilians at risk

would be difficult to negotiate in extreme conditions. In addition some of the routes are obstructed by the overflow of waste from shops and homes. With so little available space on the island, it is difficult to maintain the emergency pathways.

Education is key in reducing the vulnerability of the local population because actions must be swift during a tsunami event. If a tsunami occurs, there are several strategies people can use to increase their chances of survival. Which one is taken depends on how much time is available to react:

- Move to higher ground.
- Move out to sea in a stable vessel.
- Move to the tsunami shelter.
- Move to the upper level of a stable building.

The events of 2004 are still fresh in the memory for the local population, who understand the actions they must take should another tsunami strike. However, there are

Table 3 Evaluation of tsunami protection on Phi Phi Don

Tsunami protection measure	Strength	Weakness
Indian Ocean warning system	Allows results of seismic activity to be relayed continuously so that evacuation can begin if necessary	Relies heavily upon communication networks working swiftly. Mobile phone reception is patchy away from the main tourist centre
Tsunami warning signs	Bilingual signs including graphics to aid understanding are widely distributed around the island	Some of the signs are vandalised or in a poor condition, making them difficult to follow
Evacuation routes	Routes leading to higher ground are well signposted	Some of the paths are overgrown or strewn with obstructions
Evacuation boats	There are numerous boats available for evacuation	Most of the boats are small and would not withstand the force of a significant tsunami wave close to the shore
Tsunami shelter	A stable raised structure has been built to offer sanctuary	The shelter is relatively small for the population of the area
Communications	Communication networks and emergency signals are in place	Some may be severely damaged by a tsunami event
Improved medical facilities	A new hospital building has strong foundations and the capacity to hold 5,000 people	The hospital has been built in a low-lying area
Education	Residents are educated in how to protect themselves in the event of a tsunami	International tourists may not know what to do

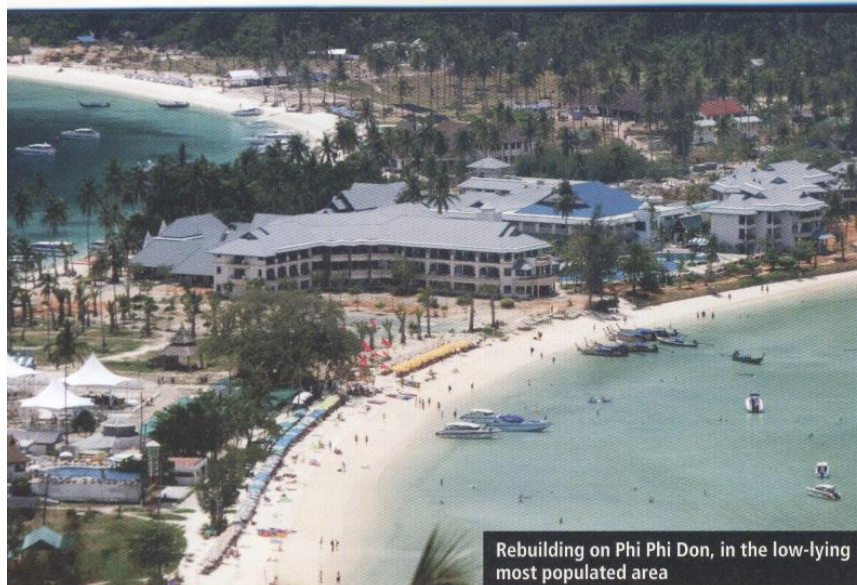
Further reading

The Pacific Tsunami Warning Center at <http://ptwc.weather.gov/> gives a lot of information including current warnings.

There are resources including animations of tsunamis from the USGS at <http://walrus.wr.usgs.gov/tsunami/>

GEOGRAPHY REVIEW Vol. 25, No 1 contained special coverage of the Japan earthquake and tsunami, including an article by Professor David Petley on the causes of the event.

Butti, L. (2007) *Tsunami in Paradise*. An account of the 2004 tsunami on Phi Phi island.



Rebuilding on Phi Phi Don, in the low-lying most populated area

GeographyReviewOnline



Go to GeographyReviewOnline for a quiz testing your knowledge of tsunamis.

always a large number of tourists on the island, and there is little infrastructure in place to make sure they know what to do.

Conclusion

Overall, the precautions available to help people survive a tsunami on Phi Phi Don are much improved since the event of 2004, although the low-lying topography in the most populated area adds to the risk level. It is this very physical geography that attracts tourists to the island. The frequency

of tsunami events is low but there have already been two catastrophic events this century. The startling death tolls of these events reflect the number of people living in vulnerable coastal areas.

Questions for further discussion

- 1 Should tourists receive compulsory tsunami evacuation education before they arrive on Phi Phi Don?
- 2 As increasing numbers of people live in coastal areas, can we expect to see the death toll related to tsunamis increase?

Stuart Turner is a geography teacher at Merchant Taylors' School, Northwood.

Key points



- Tsunamis have the potential to cause widespread destruction in coastal areas.
- There are a variety of means of protection from tsunamis.
- Much has been done to improve protection on Phi Phi Don but the island remains vulnerable.

Article 2: Dankalia: the shaping of a hostile environment.

Source: Geography Review April 2013. Author: Charlie Jenkinson

The shaping of a hostile environment

Dankalia is a hot desert region in the Rift Valley, shaped by tectonic processes. The combination of aridity and volcanic activity creates an environment that has been likened to 'hell on Earth'. This article looks at the physical processes at work in Dankalia, at how humans have adapted to this harsh environment and at its potential for economic development. It is relevant to topics on hot deserts, plate tectonics and development

Dankalia is a region that stretches from the Red Sea coast, through Eritrea and into eastern Ethiopia (see Figure 1). It is part of the Great Rift Valley system (also known as the East African Rift Valley). At its heart lies the Danakil Depression, a volcanic desert most of which is 120 m below sea level. The irony of this name is not lost on those who experience its bleak conditions.

The environment of Dankalia is tremendously hostile. Relentless searing heat burns the skin and lungs (the temperature has been known to exceed 60°C), lakes 'deceive' travellers by offering salt water not fresh, and vicious sandstorms abrade the skin. The famous explorer Wilfred Thesiger once remarked

‘If the devil wanted to create hell on earth, the infernal wastes of Dankalia would be his choice.’

Heat, both volcanic and climatic, has been essential in the creation of this austere landscape.

The volcanic desert

The formation and evolution of the Great Rift Valley is still not well understood but it is believed that around 35 million years ago a large **mantle plume** (known as the Afar mantle plume) formed somewhere near the Ethiopia-Sudan area. The rising plume created rifting as east Africa was moved in a northeasterly direction away from the main African plate, which was moving north. The result was a rift valley system that extends around 4,000 km from the Red Sea to Mozambique. Lava flows are a common feature throughout the region.

The process of rifting stretches and thins the Earth's crust, which results in the crust 'sinking'. This is why the Danakil Depression lies around 120 m below sea level, with some areas 160 m below sea level. The thin crust, combined with the rising mantle plume, enables lava to extrude, creating a new land surface and distinctive geomorphological features. **Shield volcanoes** such as Erta Ale erupt from the thinning crust, rifting creates fault systems tens of kilometres long and salt

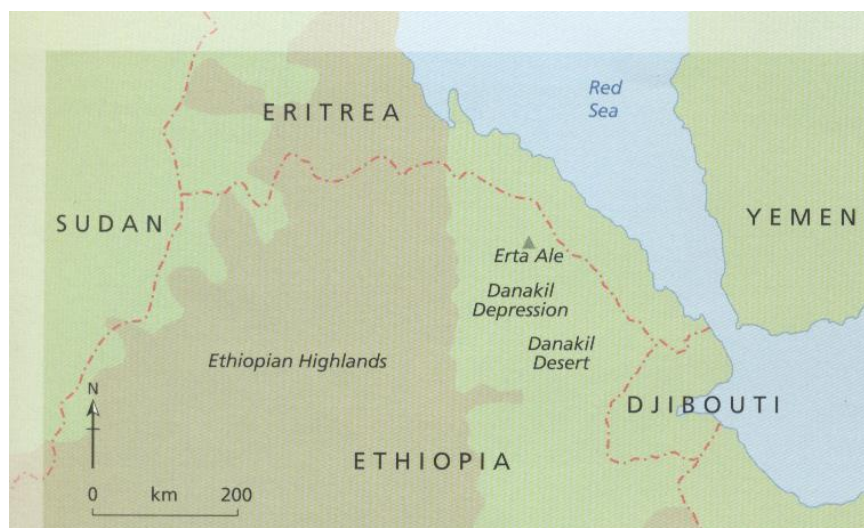


Figure 1 Map showing the location of Dankalia

lakes and salt flats ensure that it is difficult for vegetation to grow.

Erta Ale volcano

Erta Ale has had a permanent lava lake since at least 1906, making it the longest existing lava lake and one of only five in the world. Despite the fact it has erupted lava constantly for at least a century, it is only 613 m high. This is because the low silica content of the basaltic lava means that it flows over great distances.

Major eruptions are rare, although in 2005 over 250 livestock were killed, and thousands of nearby residents were forced to flee. This happened again in 2007, when at least two people died. Lava flows have little impact in industrialised countries but in a region like Dankalia, where no warning system or lava-flow management is in place, they can create major hazards. The volcano was recently mapped as part of the BBC series *The Hottest Place on Earth*. The searing temperatures of the lava meant that laser techniques were the only method able to produce a three-dimensional map.

Rift or mid-ocean ridge?

Where a rift occurs a continent will eventually split in two to create an ocean. Geoscientists need to understand when the transformation takes place from a rift to a mid-ocean ridge. The Danakil Depression has become crucial to this study. In recent years there has been significant rifting and scientists watched an 8-m rift develop along a 60-km long fissure in just 3 weeks. It will take millions of years before there is a full ocean basin in the region but the speed of the rifting helps us to understand the process. Satellites are

used to monitor ground deformation and the lack of vegetation in this region makes it easy for researchers to study changes.

The Danakil Depression was once covered by the sea. As sections of crust collapse due to rifting, the sea has occasionally been able to flood into the valley. Volcanic eruptions create dykes of basaltic rocks which trap the water and the intense temperatures in the region cause it to evaporate, leaving salt flats and salt lakes behind. This has happened many times, most recently around 10,000 years ago, and it leaves an unforgiving landscape.

Smaller landforms

Aside from the large-scale tectonic landforms in Dankalia, there are numerous small-scale examples of **extrusive** activity as well. A

common example is the fumarole. Rifting creates faults which allow water to seep down into the crust. Here the water is heated until it is ejected as steam, creating fumaroles. Where the water table reaches the surface, hot springs are common.

Arid processes

Heat and wind play the most important roles in the weathering of this landscape where:

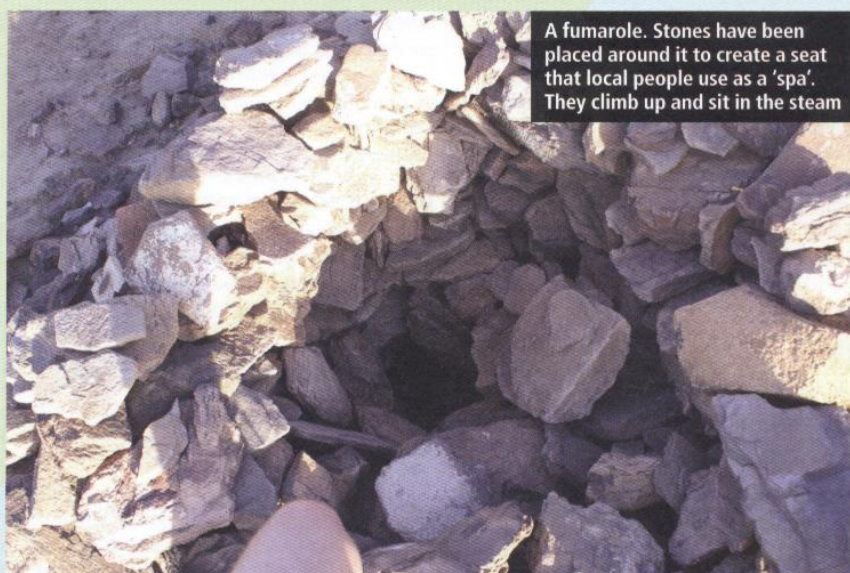
- annual average rainfall is well below 100 mm
- maximum daytime temperatures are regularly over 50°C
- the highest average minimum temperatures in Africa occur (27°C)

The geology is varied, with a mixture of igneous rocks from volcanic activity, sedimentary rocks from inundations from the sea, and metamorphic rocks formed under the immense heat and pressure of **intrusive** activity. The oldest rocks are from the Precambrian and are over 600 million years old. They have experienced several orogenic episodes and this, combined with rifting, has left them susceptible to fracturing and shattering.

Sandstone, mudstone and limestone are found where the sea once spread. Deflation has occurred where these rocks have experienced **exfoliation** or block separation to the extent where the wind can transport the resulting particles. Deflation has also left dark, rocky **gibber** plains across much of the region. The hot wind is relentless for much of the year.

Sandstorms

At Badda, a bustling village in a surprisingly fertile area of the Danakil Depression, daily



A fumarole. Stones have been placed around it to create a seat that local people use as a 'spa'. They climb up and sit in the steam

Glossary



Albedo The reflectivity of a surface, expressed as the proportion of solar radiation that is reflected back into the atmosphere.

Chemical weathering Form of weathering brought about by chemical attack on rocks, usually in the presence of water.

Exfoliation A process of physical weathering where the outer layers of the rock surface peel off due to the rapid expansion and contraction of the rock surface under extreme changes in temperature (often diurnal).

Extrusive Volcanic activity that either occurs on, or breaks through, the Earth's surface. It can include lava flows, pyroclastic flows and gaseous eruptions.

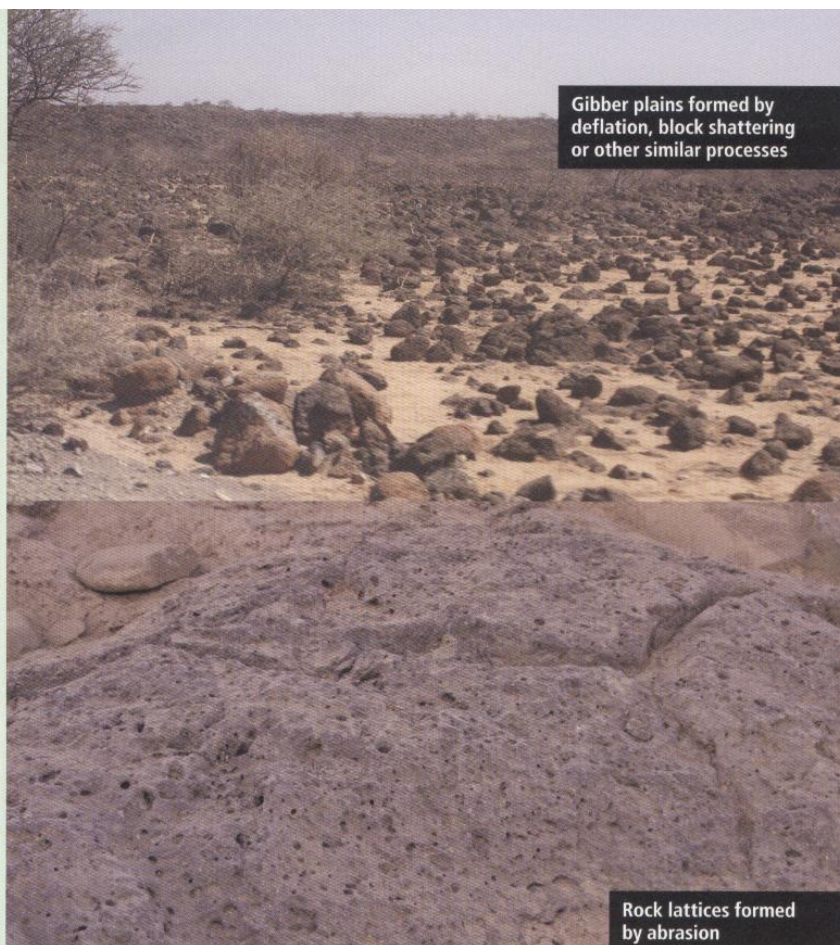
Gibber A desert plain mantled with a layer of pebbles or boulders.

Intrusive Volcanic activity that does not break through the Earth's surface. The magma cools before reaching the surface.

Mantle plume A convectional flow of hot rock that rises through the mantle leading to a hot spot on the Earth's surface.

Physical weathering The mechanical breakdown of rocks involving no chemical change.

Shield volcano A broad, flat volcano formed by basaltic lava at a constructive margin or hot spot.



Gibber plains formed by deflation, block shattering or other similar processes

Rock lattices formed by abrasion

sandstorms occur between 1 and 4 p.m. This creates rock lattices — wind-pitted surfaces in the rock formed through abrasion as sand and small particles transported by the wind are driven against rock surfaces.

For the 4 hours of daily sandstorms, the busy village of Badda becomes a desolate place. People, camels and donkeys sit bent double against the wind and the sand and visibility is reduced to less than 10 metres.

Heat shattering

The dark surfaces of igneous rocks make them susceptible to shattering, as the black basalt absorbs heat and expands rapidly. Some of the black volcanic rocks in Dankalia have been known to reach up to 80°C during the day before cooling rapidly at night as the temperature drops due to the cloudless skies. In areas of salt pans, the **albedo** effect leads to the surrounding volcanic rocks receiving even more solar radiation. The black mica and the white quartz crystals in the granite of the region heat up and cool down at very different rates. This leads to intense granular disintegration.

Chemical weathering

When water is present **chemical weathering** can be rapid. There is a small amount of rainfall, water from dew, and groundwater moving up through the rocks. Saline solutions are common, because of inundation by the sea as described above, and cause leaching of metallic minerals, such as copper and manganese, from the rocks. This increases disintegration.

Human adaptations

Social anthropologists have suggested that culture may be determined by environment and this is certainly true of the Afar people of Dankalia. Their reputation for ferocity and stoicism is legendary and even their name means 'the best'. Up to the time of the Second World War an Afar male had to kill another man in order to pass into adulthood.

Geographical isolation

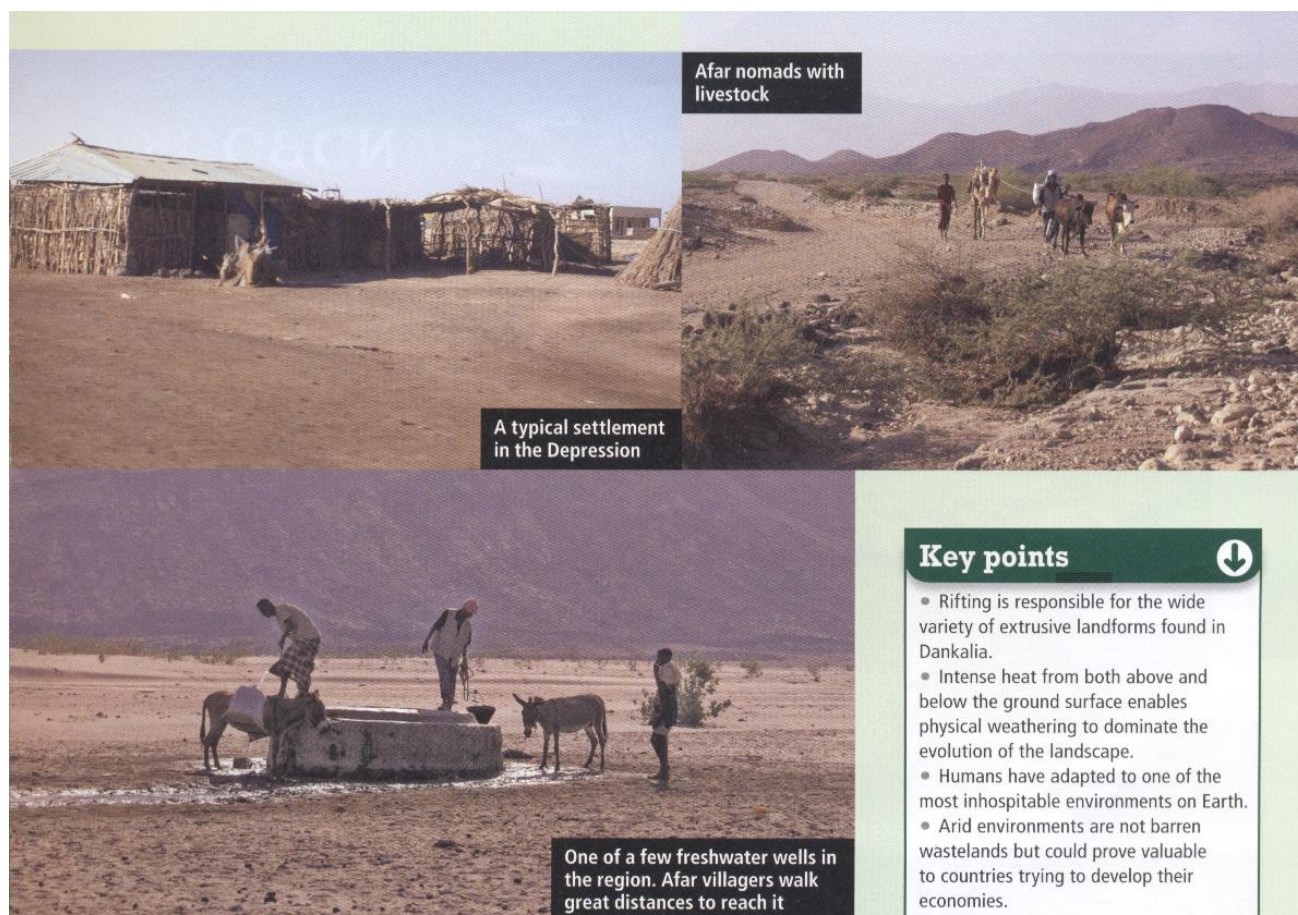
There are around 1.5 million Afari living in Eritrea, Ethiopia and Djibouti, and Dankalia is their region of origin. Dankalia, at around 200,000 km², is only slightly smaller than the

UK (270,000 km²). This shows how sparsely the population is distributed. The harsh climate makes it difficult to travel across the region and Afari clans live in relative isolation. They lay great stress on toughness, strength and bravery. Those that are not strong enough will not survive in the Danakil Desert.

Afar living near the coast are generally fisherman and those inland have often mined and traded rock salt with the highland interior of Eritrea. Both these groups remain nomadic, travelling over wide distances in search of scanty vegetation for grazing their goats and camels. Their hemispherical huts (aris) made of palm ribs covered in matting provide shade from the sun. They must be light enough to be transported by camel and are erected in semi-permanent locations on seasonal migration routes, generally near to fresh water wells.

Political isolation

As well as living in some of the most challenging conditions on Earth, the Afar must adapt to being one of the most marginalised ethnic groups in Ethiopia and Eritrea. The border of these two countries runs



Afar nomads with livestock

A typical settlement in the Depression

One of a few freshwater wells in the region. Afar villagers walk great distances to reach it

Key points

- Rifting is responsible for the wide variety of extrusive landforms found in Dankalia.
- Intense heat from both above and below the ground surface enables physical weathering to dominate the evolution of the landscape.
- Humans have adapted to one of the most inhospitable environments on Earth.
- Arid environments are not barren wastelands but could prove valuable to countries trying to develop their economies.

GeographyReviewOnline



For a presentation on management of another fragile environment, Socotra, go to this issue of GeographyReviewOnline

through Dankalia. There was fierce fighting here during Eritrea's struggle for independence from 1961 to 1993, and during the border war from 1998 to 2002. The area continues to be under threat of border conflict and so both governments, along with aid groups, are unwilling to provide much development assistance. Most men in the area carry AK47s, which, combined with the fierce reputation of the Afar, puts many people off visiting.

Future development?

The dispersed nature of the Afar population, alongside the threat of conflict, means that the government is struggling to provide health-care, education and access to clean water.

However, it is naïve to believe that arid environments provide no opportunities for economic development and are simply barren wastelands. Tectonic activity, combined with

the weathering processes that dominate in this region, has created an environment that is rich in mineral deposits. Surveys are currently underway for oil and gas, although they are low profile due to the border dispute and the potential conflict that might arise if valuable deposits are found. There are also deposits of potassium and magnesium salts. Gold, nickel, copper, zinc, silver and lead have all been found in significant quantities in the region and there are other industrial minerals such as cement limestones and glass sands. Perhaps the very processes that led to the physical creation of this dramatic landscape could be responsible for causing humans to change it even further.

Conclusion

The combination of processes that act upon the environment make Dankalia important for geographical research. Its mineral resources have the potential to allow the underdeveloped countries of Eritrea and Ethiopia to engage in the global economy, but given its importance for research on rifting and related tectonic processes, should the area

be protected? The opportunity it provides to study rifting processes on land is unusual but political stability in the region is necessary for research study to develop.

Those who travel to the region should remember Thesiger's opinion: Dankalia is as close to hell as we can experience. Incessant heat, both above and below the surface, has created one of the most formidable landscapes on Earth.

Questions for further discussion

- 1 Should regions such as Dankalia be protected so that they can be used for scientific research, or exploited for their resources?
- 2 How can tectonic activity impact upon the following: livelihoods, the creation of the physical landscape, the denudation of the landscape and the future use of the environment? Try and identify links between the four areas and the complexities within them.

Charlie Jenkinson is a geography teacher at Eton College.

Topic 2: Globalisation – sample articles

Article 3: Neoliberalism's 'trade not aid' approach to development ignored past lessons.

Source: The Guardian, 30th Oct 2012. Author: Simon Reid-Henry

Neoliberal development policy was radical and abstract, but its uncompromising approach proved dangerous in the real world. It is the age-old story of counter-revolution: not the restoration of the monarchy kind, but the intellectual kind, as the pendulum of ideas in development thinking swings back from the structuralism of the 1970s left towards the new right of the 1980s.

Before we take a look at the nature and substance of this counter-revolution, however, it's worth considering what became of the competing ideas of modernisation theory and dependency theory. Underdevelopment theorists blamed the advanced countries for exploiting and so creating the poverty of the poor. Modernisation theorists saw the presumed weaknesses of poor societies as the primary barrier to future prosperity. Nonetheless, both approaches focused principally on the interplay of states and markets. As a result, neither fully captured the complex challenges confronting poorer countries at the time.

Perhaps the principal upshot of this was what would become known as the "impasse" in development studies. This impasse led to considerable and often illuminating debates. But it was perceived by many at the time to symbolise a policy as much as an academic dead end. And, crucially, for a while it ceded the future to those prepared to come forth with bolder, brassier ideas. By the early 80s, that meant the new right.

The new right was a broad church. Its ideological home was provided by the governments of Margaret Thatcher in Britain and Ronald Reagan in the US. But its practical levers were the institutions of the Washington Consensus – the World Bank, the International Monetary Fund (IMF) and the General Agreement on Tariffs and Trade (GATT, which would later become the World Trade Organisation) – and its momentum was provided by a more general sense of excitement about what is today (far too pejoratively) referred to as globalisation.

At the heart of the new right project was a particular constellation of ideas and policies known as neoliberalism. Neoliberalism is often used today as shorthand for any idea that is pro-market and anti-government intervention, but it is actually more specific than this. Above all, it is the harnessing of such policies to support the interests of big business, transnational corporations and finance. It seeks not so much a free market, therefore, as a market free for powerful interests.

In terms of development policy, neoliberalism often boiled down to the belief that an intensified globalisation was itself development, the two being inseparable sides of the same virtuous coin. Hence, instead of seeing that poor countries would be best served through appropriate targeted policies (limiting domestic vulnerability to the global market through protectionist measures like tariffs, say, as South Korea was doing), neoliberals claimed that – since global free markets were both the means and the desired end of development – the only viable object of development policy

was to do whatever necessary to make local markets and societies "fit" with the new global imperatives that the rich world's drive to internationalisation was bringing into focus.

Accordingly, neoliberal development policy was both radical and abstract and, like all such prescriptions, was to be applied strictly according to the instructions. That usually called for several policies. The local state was to do no more (or rather, no less) than facilitate the conditions for "market society". At the same time, all barriers to foreign investment would ideally be pulled down, the domestic labour force would be "restructured", industry would be privatised, and the profit motive would become the organising value of social life. This, in short, was the "trade not aid" approach to development. Get the market conditions right, went the theory, get that too easily corrupted (if not corrupting) state out of the way, and social justice and human development would follow automatically.

Alas, such an uncompromising approach was always likely to come to blows – if not inflict a few of its own – in the real world. And for all that neoliberalist development policy may with reason claim to have overcome some of the problems of earlier development approaches – an overreliance on the state as the main agent of change, say – it soon became clear it had also ignored their most important lessons. Most neoliberals, for example, were convinced that the structuralism of earlier development economists betrayed an excessively political bent to which their own, more "scientific" theories were immune.

It was precisely this sort of dogmatism that made neoliberalism itself so much more dangerous than the previous generation of ideas. Too many nations were to witness this at first hand in the 1980s. First via the rather callous settlement to the 1980s debt crisis that neoliberals called for (there could be no mitigating factors for third world debt, they claimed: even debt accrued illegitimately by former leaders for personal gain was to be paid back, plus the interest), then at the hands of the IMF's so-called structural adjustment policies (which frequently used poor countries' existing debt as a lever for drawing yet more market-friendly reforms out of them).

Though heavily criticised, neoliberal development theories are still alive and well in the halls of economic and political power today

Article 4: The post-2015 development agenda explained

Source: The Guardian. 31st Oct 2012. Author: Mark Tran

Where are we on the post-2015 development agenda?

In May, Ban Ki-moon, the UN secretary general named UK prime minister David Cameron, Liberian president Ellen Johnson Sirleaf, and President Susilo Bambang Yudhoyono of Indonesia, as co-chairs of a high-level panel to advise him on the global development agenda after 2015, the expiry date for the millennium development goals (MDGs). That was followed by the naming of a 26-member panel that will work on a report, setting out a "bold yet practical vision", to be submitted to Ban in May. Homi Kharas, a former World Bank economist, now at the Brookings Institution think tank in

Washington, is the lead author of the report. The first draft is expected in March. The co-chairs and panelists are holding their first substantive meetings this week in London.

What is the theme of this week's meetings?

Household poverty is the focus this week – both defining it and looking at ways to get households out of poverty. Subsequent meetings in Liberia and Indonesia will focus on national development and global partnerships respectively, followed by a final meeting in New York in May. There will be three sessions in London. The first one takes place on Wednesday, and has been organised by No 10 and the UK's Department for International Development. It will feature several external speakers – include Hans Rosling, described as a data visionary – who will expose the panel to Britain's thinking and ideas.

What is Britain's thinking on development?

The prime minister has said he wants to shift the debate away from the quantity of aid given and towards what he calls the "golden thread" of development. This involves not only aid but also stable government, lack of corruption, human rights, the rule of law and transparent information. Cameron carries clout because the UK is on course to meet the long-standing UN target of spending 0.7% of gross national income on aid next year. The UK government has protected Britain's aid budget from cuts despite grumbling from within its ranks that aid should take a hit along with other sectors of government at a time of economic crisis.

What has been the reaction to the golden thread?

Development experts have welcomed the golden thread approach, but with caveats. Owen Barder, Europe director of the Centre for Global Development thinktank, says the golden thread stresses free markets, jobs and growth, but not other ways to encourage positive social and economic change, such as reducing inequality, tackling the power of elites, providing social protection, and ensuring a strong voice for civil society. Ivan Lewis, Labour's shadow secretary for international development, says the 0.7% target has to be accompanied by meaningful climate change targets, the removal of barriers to fair trade, fair and transparent taxes, universal human rights, social protection, free access to quality compulsory education, and health services. The panellists will meet on their own on the second day and Friday will involve "outreach" to NGOs and the private sector, and discussions on how to reach out to the most excluded, to get their views on the post-2015 development agenda.

How does the high-level panel's work fit in with Rio+20?

The Rio+20 summit on sustainable development, held in June, agreed a plan to set global sustainable development goals that address global environmental management, protect the oceans, improve food security, and promote a "green economy". Climate change and anti-poverty are inextricably linked. For example, repeated drought in the Sahel can only drive people deeper into poverty unless measures are taken to protect them from such repeated shocks. A working group is being set up following Rio+20 to work on sustainable development goals, so there are parallel tracks on a post-2015 development agenda; the trick for Ban is to combine them into one. The UN's special adviser on post-2015 development planning, Amina Mohammed, has told MPs on

the development committee that both the high-level panel and the working group on sustainability share one secretariat, saying the end result will be "one development agenda". But climate talks are making painfully slow progress, with the prospect of, at best, a weak deal in 2015 that will not come into force until 2020. "Getting rid of poverty is about making more stuff and giving it to more people," said Claire Melamed, head of growth and equity at the Overseas Development Institute thinktank. "It's a popular thing to do, but climate change is about sharing out limited resources. Politically it's of a totally different order of magnitude and so contentious."

What about the unmet MDG goals?

The MDGs, which were agreed in New York in September 2000, set out eight specific – and ambitious – goals for the international community, including eradicating extreme poverty and hunger, achieving universal primary school education, and reducing maternal and child mortality rates. Some of those goals in some countries are expected to be achieved by the 2015 deadline; others definitely will not. The World Bank says the goal of halving global poverty will be met, as the population share of extremely poor people in developing countries is projected to fall from 29% in 1990 to 12% in 2015. The world has also met the target of halving the proportion of people without access to improved sources of water, and it has achieved parity in primary education between girls and boys. But the child mortality MDG is not likely to be met. The high-level panel said after its first meeting at the UN general assembly in New York in September that it plans to bring this unfinished business into the new framework.

What should be in the next set of goals?

Melamed points to the differing set of circumstances confronting this panel. The MDGs, she says, were essentially cooked up by a group of rich countries deciding how they wanted to spend their aid to help poor countries. Now most poverty is in middle-income countries, many of which are themselves donors (India, for example). A 2010 report by Andy Sumner of the Institute of Development Studies found that 70% of the world's poorest people live in middle-income countries, so tackling inequality is one of the most effective ways to accelerate progress towards eradicating poverty. But countries such as India can be expected to resist being told what to do within their borders. The panel sees the importance of taking on new challenges in a changed world in any framework. They include the importance of inclusive growth (a fallout of the Arab spring), conflict and gender equality. For Melamed, a good agreement on a development agenda after 2015 will be one with few issues, some numbers, and with obligations and commitments for all countries.
