



Province of the
EASTERN CAPE
EDUCATION

NATIONAL SENIOR CERTIFICATE

GRADE 11

NOVEMBER 2011

GEOGRAPHY P1

MARKS: 300

TIME: 3 hours



This question paper consists of 14 pages and an
annexure of 12 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of TWO sections, namely SECTION A and SECTION B.
2. Answer THREE questions to be chosen as follows:

ONE question from SECTION A
ONE question from SECTION B
A THIRD question from SECTION A or SECTION B (which has NOT been answered already)
3. All diagrams are included in the annexure.
4. Leave a line between subsections answered.
5. Start EACH question on a NEW page.
6. Number the answers correctly according to the numbering system used in this question paper.
7. Do NOT write in the margins of the ANSWER BOOK.
8. Encircle the numbers of the questions that you have answered on the cover page of the ANSWER BOOK.
9. Where possible, illustrate your answer with labelled diagrams.
10. Write neatly and legible.
11. Mark allocation: If marks are given as follows – $3 \times 2 = 6$, it means that THREE facts should be given for TWO marks each.

If marks are given as follows – $3 \times 1 = 3$, it means that THREE facts should be given for ONE mark each.

Essay type questions must be answered in FULL SENTENCES. LISTING will result in marks being deducted.

SECTION A: PHYSICAL GEOGRAPHY: THE SIGNIFICANCE OF WATER AND ECOSYSTEMS

Answer at least ONE question from this section.

QUESTION 1 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

- 1.1 Refer to the map of Africa (FIGURE 1.1) to answer the following questions. Write the correct answer next to the number of the question (1.1.1 – 1.1.5) for example 1.1.6 South Africa.

Name ...

- 1.1.1 The longest river in the world that flows through eleven African countries. (2)
- 1.1.2 The river that have the Victoria Falls along its course. (2)
- 1.1.3 The largest human-made lake in Africa. (2)
- 1.1.4 The country where the Orange River forms the border with South Africa. (2)
- 1.1.5 The lake which is shared by Nigeria, Chad, Niger and Cameroon. (2)

- 1.2 Decide whether the following statements are True or False and write down your answer next to the question number (1.2.1 – 1.2.5) for example 1.2.6 True.

- 1.2.1 The biosphere is a large area with a particular climate and vegetation, inhabited by certain types of life. (2)
- 1.2.2 A group of individual organisms of the same species living in a particular area is called a population. (2)
- 1.2.3 Nutrient cycles are the transfer of energy from the sun through the food chains from one trophic level to another. (2)
- 1.2.4 The ability of an ecosystem to adapt to gradual changes is called self-regulation. (2)
- 1.2.5 Desertification causes the soil to become more fertile. (2)

- 1.3 Refer to the Case Study (FIGURE 1.3) to answer the following questions.
- 1.3.1 With reference to the Case Study, identify the weather phenomenon that caused the flood in Cape Town. (1x1) (1)
 - 1.3.2 Give evidence from the Case Study suggesting that Cape Town is still in the grip of a severe drought. (1x1) (1)
 - 1.3.3 Suggest how the flooding might have affected the traffic flow in the city. (1x2) (2)
 - 1.3.4 Explore the need for good stormwater drainage in urban areas like Cape Town. (1x2) (2)
 - 1.3.5 Examine the reasons why people living in informal settlements are generally more badly affected by floods. (2x2) (4)
 - 1.3.6 Justify the phrase made by Waheed Patel. (1x2) (2)
 - 1.3.7 Write a paragraph(not more than 12 lines) to explain how the following control measures might reduce the impact of the flood in Cape Town:
 - (a) Measures to control the flow of water in the rivers (2x2) (4)
 - (b) The building of dams (2x2) (4)
 - (c) Planting of trees and vegetation (2x2) (4)
- 1.4 Refer to the map of the west coast of South Africa (FIGURE 1.4) and answer the following questions.
- 1.4.1 Identify the ocean current depicted by the arrow A that flows along the west coast of South Africa. (1x2) (2)
 - 1.4.2 Describe how the ocean current mentioned in QUESTION 1.4.1 influence the rainfall in this area. (2x2) (4)
 - 1.4.3 Why is fishing a successful primary activity in this area? (1x2) (2)
 - 1.4.4 Describe the impact that the Mittal Steel South Africa plant could have on this coastal area. (2x2) (4)
 - 1.4.5 Suggest measures the Western Cape Provincial Government can implement to prevent over-fishing of this coast line. (2x2) (4)

- 1.5 Refer to FIGURE 1.5 depicting a soil profile of a Tropical Rainforest to answer the following questions.
- 1.5.1 What is soil leaching? (1x2) (2)
- 1.5.2 Explain why a high degree of leaching takes place in this soil profile. (2x2) (4)
- 1.5.3 Account for the soil depth of this tropical rainforest soil profile. (2x2) (4)
- 1.5.4 Name ONE active soil-forming process that can be seen in the FIGURE and explain its role in soil formation. (3x2) (6)
- 1.5.5 Explain why this soil profile has a coarse texture. (1x2) (2)
- 1.5.6 Refer to your answer in QUESTION 1.5.4 to describe the fertility of the soil of this soil profile. (1x2) (2)
- 1.6 Refer to FIGURE 1.6 depicting the requirements for ecotourism to answer the following questions.
- 1.6.1 What is meant by the term 'ecotourism'? (1x2) (2)
- 1.6.2 Refer to the FIGURE and give an example of how ecotourism can maintain a balance between development and the protection of the environment. (1x2) (2)
- 1.6.3 Supply evidence from the FIGURE that indicate the involvement of the local community in ecotourism. (2x2) (4)
- 1.6.4 Write an essay (not more than 12 lines) on the advantages and disadvantages of ecotourism to the local community as well as the environment. (6x2) (12)
- [100]**

QUESTION 2 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

- 2.1 Select the correct word from the list below that match the following statements. Write down the answer next to the question number (2.1.1 – 2.1.5) for example 2.1.6 ocean

Sublimation; swash; evaporation; backwash; lagoon; bay; silt;
condensation; sediment; El Nino; summer; La Nina

- 2.1.1 Water droplets that turns into water vapour. (2)
- 2.1.2 The rush of water that moves up a beach when a wave breaks. (2)
- 2.1.3 The mouth of a river that is partially or completely blocked off by sandbars. (2)
- 2.1.4 Highly fertile sand that is deposited by rivers. (2)
- 2.1.5 The weather phenomenon that leads to the warming of the western Pacific Ocean. (2)

- 2.2 Select from the list below the nutrient cycle depicted by each of the following statements. Write down the answer next to the question number (2.2.1 – 2.2.5) for example 2.2.6 nutrient cycle

Carbon cycle; Oxygen cycle; Nitrogen cycle; Water cycle;
Sulphur cycle; Phosphorus cycle

- 2.2.1 The circulation of water between water bodies and living organisms. (2)
- 2.2.2 Recycled when decomposers break down the waste matter of dead plants and animals. (2)
- 2.2.3 Converted by lightning and bacteria in root nodules for the production of proteins. (2)
- 2.2.4 Absorbed by plants as sulphates. (2)
- 2.2.5 It is withdrawn from the excreta of animals and in bones and teeth. (2)

- 2.3 Refer to the Case Study (FIGURE 2.3) to answer the following questions.
- 2.3.1 Name the main river that feeds the Okavango Delta. (1x2) (2)
 - 2.3.2 Why is the Okavango Delta referred to as an inland delta? (1x2) (2)
 - 2.3.3 What happened to the water in the Lake Ngami? (1x2) (2)
 - 2.3.4 The Okavango is a popular tourist attraction. Why do you think this is the case? (1x2) (2)
 - 2.3.5 Write a report (not more than 12 lines) on what could happen if the Botswana government starts to draw water from the Okavango Delta for irrigation. (6x2) (12)
- 2.4 Study FIGURE 2.4 that depicts a delta coast to answer the following questions.
- 2.4.1 Explain how a delta coast is formed. (2x2) (4)
 - 2.4.2 Discuss THREE coastal conditions that are suitable for the formation of a delta coast. (3x2) (6)
 - 2.4.3 Name the type of waves that would build up a delta coast. (1x2) (2)
 - 2.4.4 With reference to your answer in QUESTION 2.4.3 classify delta coast as prograded or retrograded. (1x2) (2)
 - 2.4.5 Describe the economic importance of delta coasts to the inhabitants of these coasts. (3x2) (6)
- 2.5 Study the aquatic ecosystem, FIGURE 2.5 and answer the following questions.
- 2.5.1 Name ONE secondary and ONE tertiary consumer in this ecosystem. (2x1) (2)
 - 2.5.2 Identify the organisms that form the lowest layer of the food pyramid in this ecosystem. (1x1) (1)
 - 2.5.3 How many links will a food chain in this ecosystem contain? (1x1) (1)
 - 2.5.4 Substantiate your answer in QUESTION 2.5.3. (2x2) (4)
 - 2.5.5 Name and explain the process whereby the producers make their own food from the non-living elements in this ecosystem. (3x2) (6)
 - 2.5.6 What would happen in this ecosystem if all the decomposers disappeared? (2x2) (4)

- 2.6 Study the map of the main biomes of Africa (FIGURE 2.6) to answer the following questions.
- 2.6.1 Refer to the map and explain what is meant by a biome. (1x2) (2)
- 2.6.2 Identify the biomes marked 1 and 2. (2x1) (2)
- 2.6.3 List TWO environmental factors that determine the characteristics and distribution of biomes in Africa. (2x1) (2)
- 2.6.4 Briefly explain how the environmental factors mentioned in QUESTION 2.6.3 interact to determine the distribution of biomes in Africa. (2x2) (4)
- 2.6.5 “The biomes of Africa have been greatly modified by human activities.”
- Write a short passage (not more than 12 lines) on why humans interact in such a way with their environment that they destroy it and suggest management strategies on how humans can use biomes in a sustainable way. (6x2) (12)
- [100]**

HUMAN GEOGRAPHY: PEOPLE AND THEIR NEEDS**SECTION B: DEVELOPMENT, SUSTAINABILITY, PEOPLE AND THEIR NEEDS**

Answer at least ONE question from this section.

QUESTION 3 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

3.1 Select the diagram from FIGURE 3.1 that fits the following statements. Write your answer next to the question number (3.1.1 – 3.1.5) for example 3.1.6 J.

- 3.1.1 Human resources (2)
- 3.1.2 Depletion of wood (2)
- 3.1.3 Protection of forests (2)
- 3.1.4 A low standard of living (2)
- 3.1.5 Manufacturing resources (2)

3.2 Match the description in COLUMN A with the concept in COLUMN B. Write only the letter of the concept in COLUMN B next to the question number (3.2.1 – 3.2.5) for example 3.2.6 X.

	COLUMN A		COLUMN B
3.2.1	The theory that looks at the ever-widening gap because of the reliance of developing nations on developed nations	A	Commercial farming
3.2.2	A farming system where a group of farmers work together to manage the farming and share in the profits and losses	B	Dependency theory
3.2.3	Plants that are grown without using fertilisers	C	Organic plants
3.2.4	A policy that supports sustainable industrial development in areas where poverty and unemployment are highest	D	Co-operative farming
3.2.5	The act of giving back land that has been taken by force	E	Urban Development Framework
		F	Independent Theory
		G	Genetically modified plants
		H	Land Restitution
		I	Spatial Development Initiatives
		J	Land Redistribution

(5x2) (10)

- 3.3 Refer to the table (FIGURE 3.3) showing Development Indicators of two countries to answer the following questions.
- 3.3.1 Identify TWO indicators that contribute to the economic growth of the two countries. (2x1) (2)
- 3.3.2 Give reasons for the contrasting percentage of labour in agriculture between the two countries. (2x2) (4)
- 3.3.3 Account for the vast difference in the value of exports between the two countries. (2x2) (4)
- 3.3.4 Why is both the literacy rate and the life expectancy rate low in Mozambique? (2x2) (4)
- 3.3.5 Describe the socio-economic and environmental impact of the high population growth in Mozambique. (3x2) (6)
- 3.4 Refer to the Case Study on Mauritius (FIGURE 3.4) to answer the following questions.
- 3.4.1 Explain why it is a threat to sustainable economic development when a country focuses on a one-crop industry. (1x2) (2)
- 3.4.2 What plan of action did Mauritius adopt to overcome its focus on a one-crop industry? (1x2) (2)
- 3.4.3 What strategies did Mauritius put in place to implement its plan of action? (2x2) (4)
- 3.4.4 Write an essay (not more than 12 lines) to explain how this plan of action improved economic development in Mauritius and the negative impact it had on the environment. (6x2) (12)

- 3.5 Refer to FIGURE 3.5 as well as the extract below that depicts human population pressure on the earth's resources to answer the following questions.

"The world's population is increasing constantly. The growing number of people means there is an increase in the usage of resources. Therefore it is important to understand and apply the principles of resource preservation and conservation..."

- 3.5.1 Which resource will be closest to and which will be furthest from matching the growth in human population? (2x1) (2)
- 3.5.2 Refer to the extract and predict the result of this population explosion on the earth's natural resources by 2014. (1x2) (2)
- 3.5.3 Refer to the table and mention examples of human behaviour that might have contributed to the change in crops, pastures and forests. (3x2) (6)
- 3.5.4 Distinguish between resource preservation and conservation. (2x2) (4)
- 3.5.5 List TWO methods of preservation and conservation to protect the earth's resources. (2x1) (2)
- 3.5.6 Explain why the conservation of the earth's resources is mostly in conflict with the local inhabitants of an area. (2x2) (4)
- 3.6 Study the map of the top ten carbon dioxide-producing nations (FIGURE 3.6) to answer the questions that follow.
- 3.6.1 Which of the top carbon dioxide producing countries are developed and which are developing? (2x1) (2)
- 3.6.2 Why do countries like the United States and Britain produce so much carbon dioxide? (1x2) (2)
- 3.6.3 Explain how the production of carbon dioxide contributes to climate change. (2x2) (4)
- 3.6.4 Write an essay (not more than 12 lines) on the human and environmental impact of carbon dioxide production and suggest ways to reduce the emission of carbon dioxide. (6x2) (12)

[100]

QUESTION 4 [LO 1.2 – LO 1.5] [LO 2.1 – LO 2.4] [LO 3.1 – LO 3.2]

4.1 Select the diagram from FIGURE 4.1 that represents the following statements. Write the answer next to the question number (4.1.1 – 4.1.5) for example 4.1.6 X.

4.1.1 Globalisation (2)

4.1.2 Millennium Development Goals (2)

4.1.3 Sustainable land-use in rural development (2)

4.1.4 Multinational corporations (2)

4.1.5 Composite Index of Development (2)

4.2 Choose the correct word(s) from those in brackets to complete the following statements. Write the word(s) next to the question number (4.2.1 – 4.2.5) for example 4.2.6 Resources

4.2.1 A natural resource that is removed from the environment and used in its original form to make products is called (raw material; natural resource) (2)

4.2.2 To grow crops or to rear animals for survival or to supply food for a household is (stock farming; subsistence farming) (2)

4.2.3 Species that may die out if they are not conserved is called (extinctive species; endangered species) (2)

4.2.4 Rain that contain acid formed in the atmosphere from industrial waste gases is called (acidic scale; acid rain) (2)

4.2.5 Energy produced by using the heat of underground rocks and water is called (thermal heat; geothermal heat) (2)

- 4.3 Refer to FIGURE 4.3 depicting the development gap, as well as the extract below to answer the following questions.

“W.W. Rostov formulated the so-called ‘stages of growth model’ which is made up of five linear stages. Rostov suggested that all industrialised countries had to pass through certain stages of development. He based his model on observations of how developed countries had moved from being agricultural economies to industrial economies...”

- 4.3.1 Refer to Brand’s Report to explain what the development gap is. (1x2) (2)
- 4.3.2 Why do you think are countries like Africa and Asia trying to close the gap? (2x2) (4)
- 4.3.3 Refer to the extract and name the FIVE stages of growth according to Rostov’s model. (5x1) (5)
- 4.3.4 In what stage of the Rostov model would you place Africa? (1x1) (1)
- 4.3.5 Explain your answer in QUESTION 4.3.4. (1x2) (2)
- 4.3.6 Give examples of foreign aid initiatives (not money) to improve the standard of living in Africa. (2x1) (2)
- 4.3.7 Why is foreign aid in the form of money not the right approach to follow to improve the standard of living in Africa? (1x2) (2)
- 4.4 Read the extracts depicting gender inequalities (FIGURE 4.4) to answer the following questions.
- 4.4.1 Name a development indicator to measure gender-related development issues. (1x2) (2)
- 4.4.2 Refer to the extract and give evidence that rural woman are oppressed and undervalued. (2x2) (4)
- 4.4.3 Explain why women are important in the sustainable development of a country. (2x2) (4)
- 4.4.4 Write an essay (not more than 12 lines) on the social problems rural women face and give realistic solutions to some of the problems you identified. (6x2) (12)

- 4.5 Study the diagram depicting various resources (FIGURE 4.5) and answer the following questions.
- 4.5.1 Identify ONE renewable and ONE non-renewable resource in the diagram. (2x1) (2)
- 4.5.2 Suggest TWO options to people when a non-renewable resource has been exhausted. (2x2) (4)
- 4.5.3 Describe the devastating effects of resource exhaustion on people and their environments. (2x2) (4)
- 4.5.4 Write an essay (not more than 12 lines) on the opportunities and conflicts the extraction of non-renewable sources could create. (6x2) (12)
- 4.6 Study the table (FIGURE 4.6) depicting energy use in some countries to answer the following questions.
- 4.6.1 Name the country that consumes almost double the value of energy than France. (1x2) (2)
- 4.6.2 Give TWO reasons why this country uses so much energy. (2x2) (4)
- 4.6.3 Which country uses the least amount of energy? (1x1) (1)
- 4.6.4 Name the THREE fossil fuels that are the major sources of energy worldwide. (3x1) (3)
- 4.6.5 Describe the relationship between development and energy use. (4x2) (8)
- [100]**
- GRAND TOTAL: 300**



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**GEOGRAPHY P1
ANNEXURE**

This annexure consists of 12 pages.

FIGURE 1.1

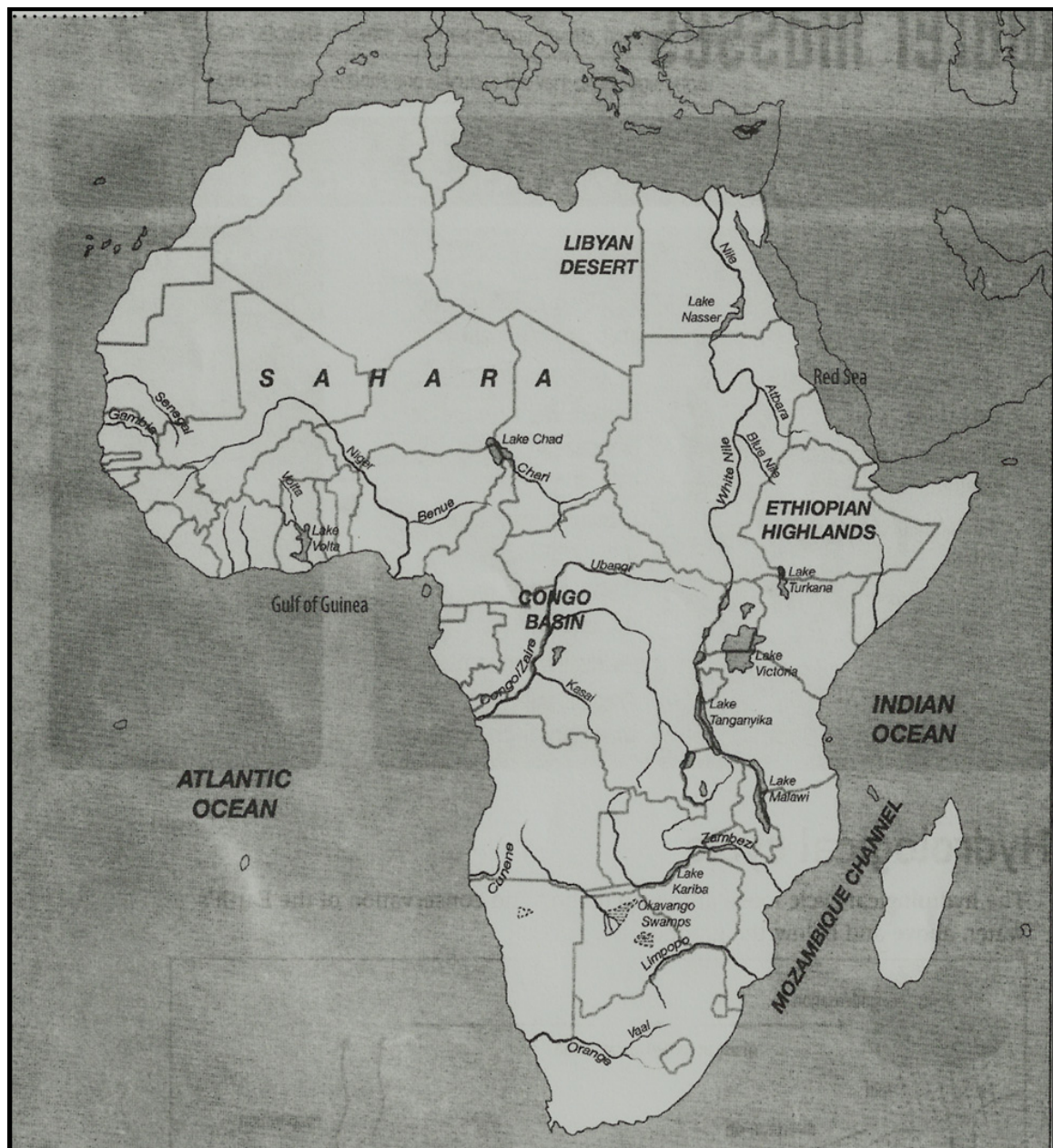


FIGURE 1.3**Case study: Cape Town facing major weekend mop-up**

Cape Town rescue workers are braced for more rain this weekend after thousands were homeless in torrential downpours across the Peninsula. In the middle of a one-in-ten year drought, just days after authorities announced severe water restriction, a cold front moved across the Peninsula and dumped more than half the average rainfall in just six hours.

Roads were swamped, houses were flooded, rivers burst their banks and thousands of commuters were stuck in their cars for up to two hours.

The city's director of disaster management said council workers would be mopping up, and they would focus on preventative measures of storm water drainage.

Relief agencies were assisting the province's Social Services Department to provide relief to flood victims, who were moved into community halls.

In Gugulethu, four informal settlements were flooded. The African Christian Democratic Party accused the ANC-led city council of letting down informal settlers living in low-lying areas. Meanwhile officials said yesterday's heavy rains did not mean the drought was over.

"What is needed is sustained rainfall throughout the remainder of the winter ..." said Waheed Patel, a spokesperson for the mayoral committee member of water consumption.

Sourced adapted from The Star: 26August 2004

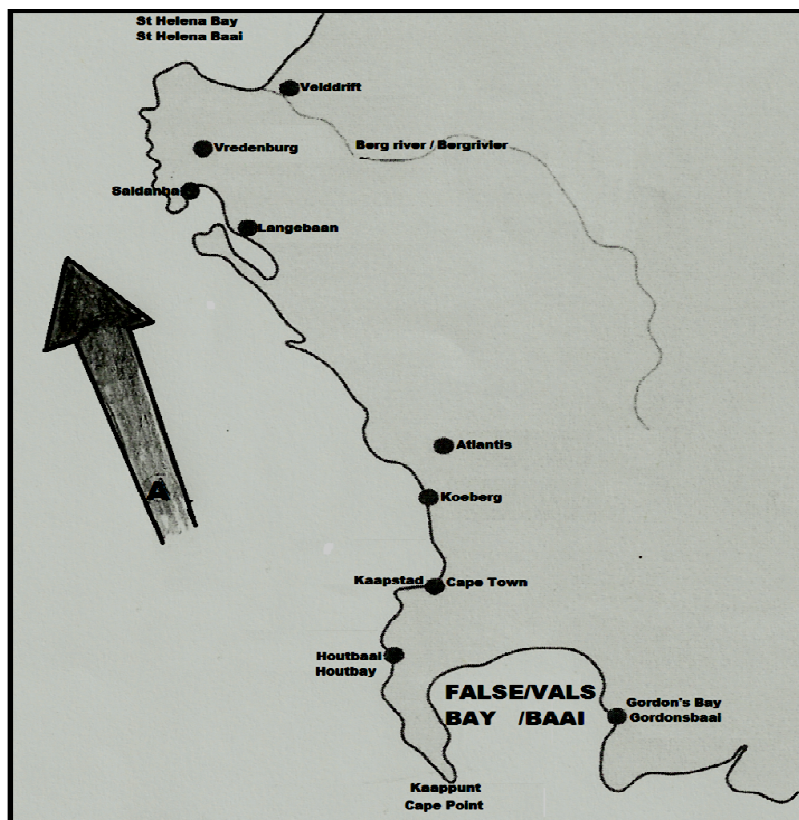
FIGURE 1.4

FIGURE 1.5

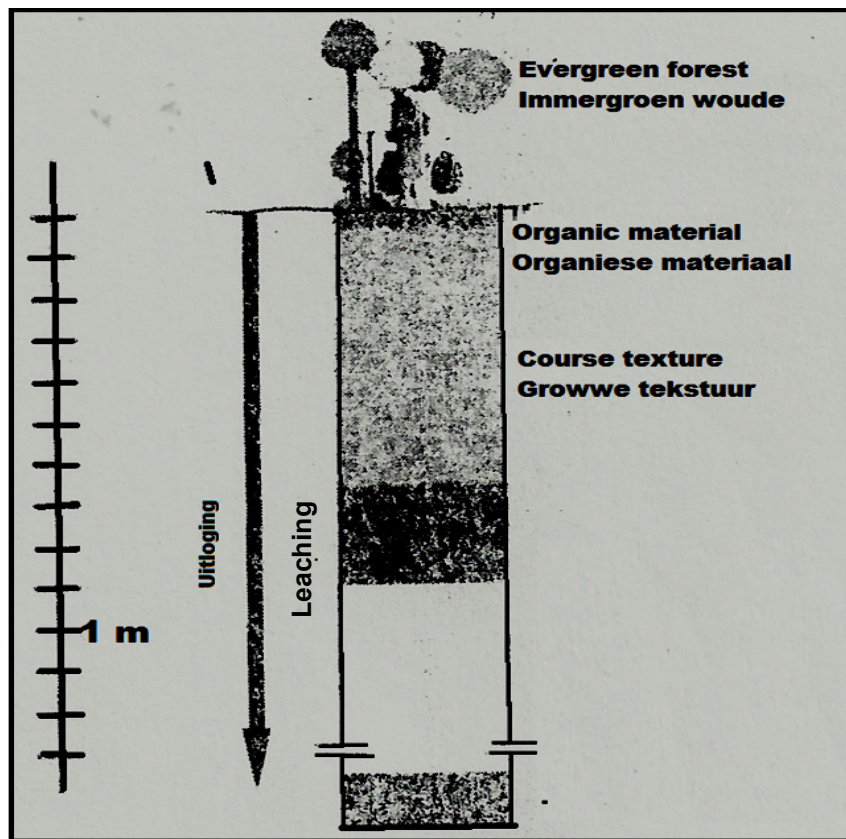


FIGURE 1.6

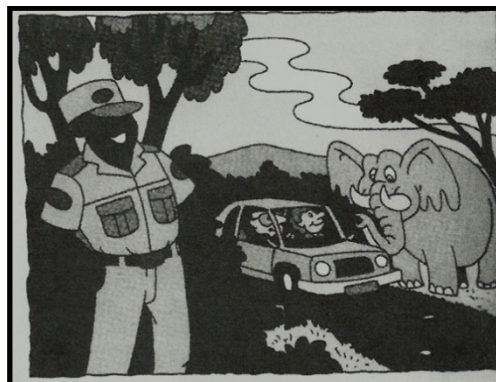
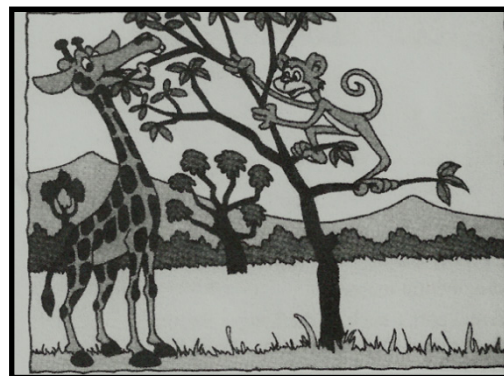


FIGURE 2.3

The Okavango, an inland delta

The best-known delta is the Okavango Delta. This is a vast region of swampland located mainly in Botswana at the northern margin of the Kalahari Desert. Like all wetlands, these swamplands play an important role in purifying water and support a great diversity of plants and animals.

The Okavango is part of the Zambezi River system, which rises in the western highlands of central Africa. In the southwest parts of its basin, the Zambezi system connects with the Taukhe River system, receiving water from it at times. In its middle reaches, the Taukhe is called the Okavango. This part of the river spreads out in a system of swamps, inlets lagoons and salt pans. Once this system included a huge lake, Lake Ngami, but long ago this dried up. During the rainy season, the floodwater from the highlands of Angola drain down the Okavango River, filling up the many inlets and lagoons that make up the delta and replenishing the water that soaks into the sand or evaporates.

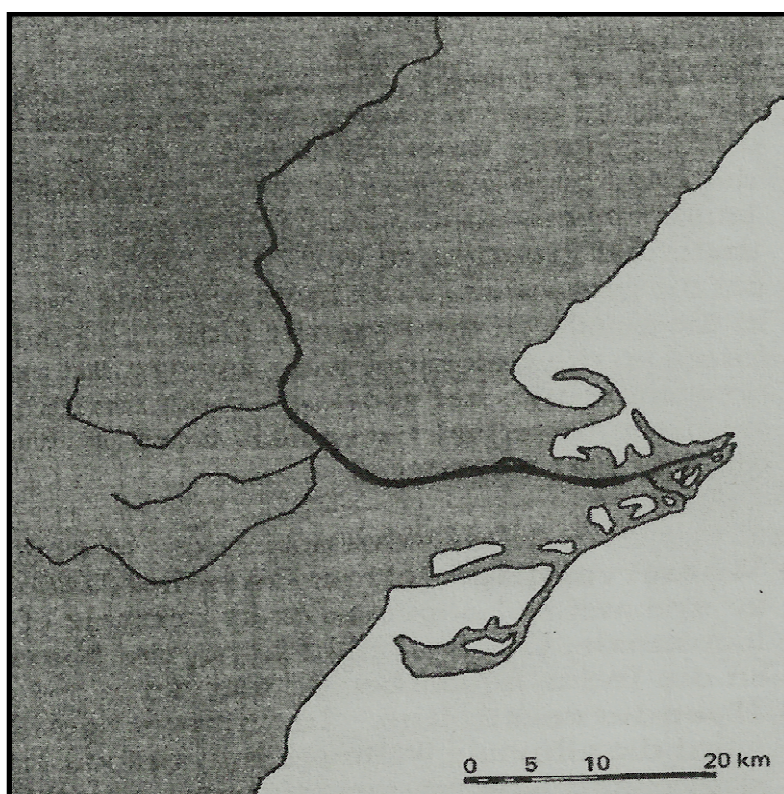
FIGURE 2.4

FIGURE 2.5

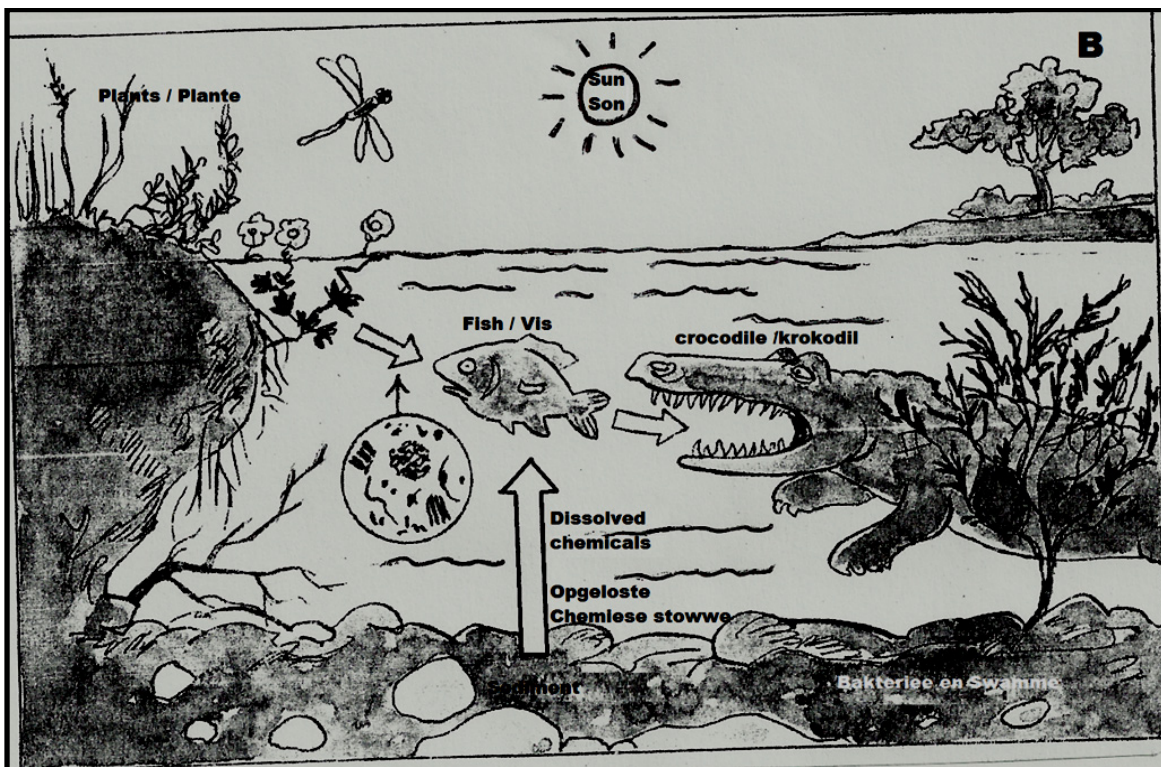


FIGURE 2.6

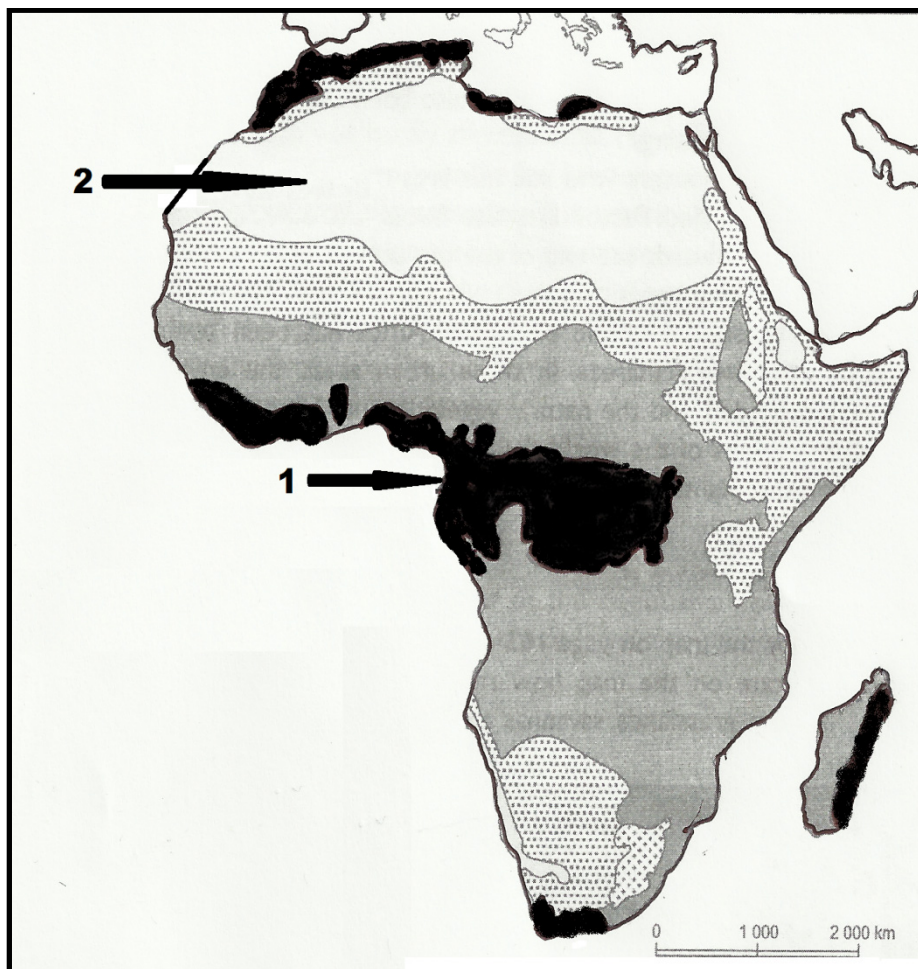


FIGURE 3.1

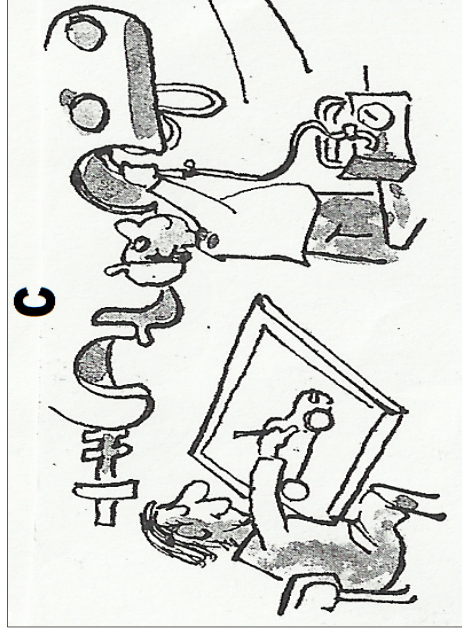
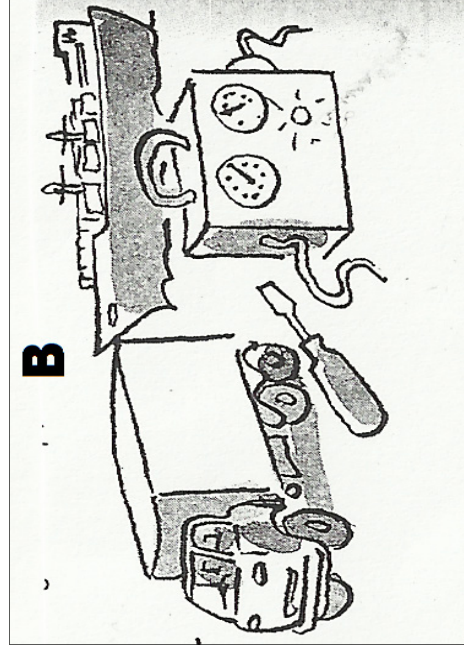


FIGURE 3.3

INDICATOR	THE NETHERLANDS	MOZAMBIQUE
% of labour in agriculture	2%	81%
GDP per capita	\$22 000	\$800
Value of exports	\$203 billion	\$226 million
Daily newspapers	46	3
Literacy rate	99%	40%
Life expectancy	78	43
Population growth rate	0,4%	2,2%

FIGURE 3.4

Case study: Mauritius

Like many African countries Mauritius was once dependent on the production of sugar cane. They realised that world markets for sugar cane were growing smaller. Mauritius then developed its tourist and manufacturing industries. The country promoted industrial growth by providing tax-free industrial areas and charging business less tax. Furthermore, they encouraged investment in service industries and finance and communication technologies. There were also increased spending on manpower and infrastructure development. Mauritius now has a GNI per US \$10 000. They made lots of rupees in their own money.

FIGURE 3.5

How growing numbers will reduce resources per person				
	1990	2010	Total change	Change per person
Population (millions)	5300	7050	33%	-
Fish catch (million tons)	85	102	20%	-10%
Crops (million hectares)	1444	1516	5%	-21%
Pastures (million hectares)	3402	3540	4%	-22%
Forests (million hectares)	3413	3165	-7%	-30%

FIGURE 3.6

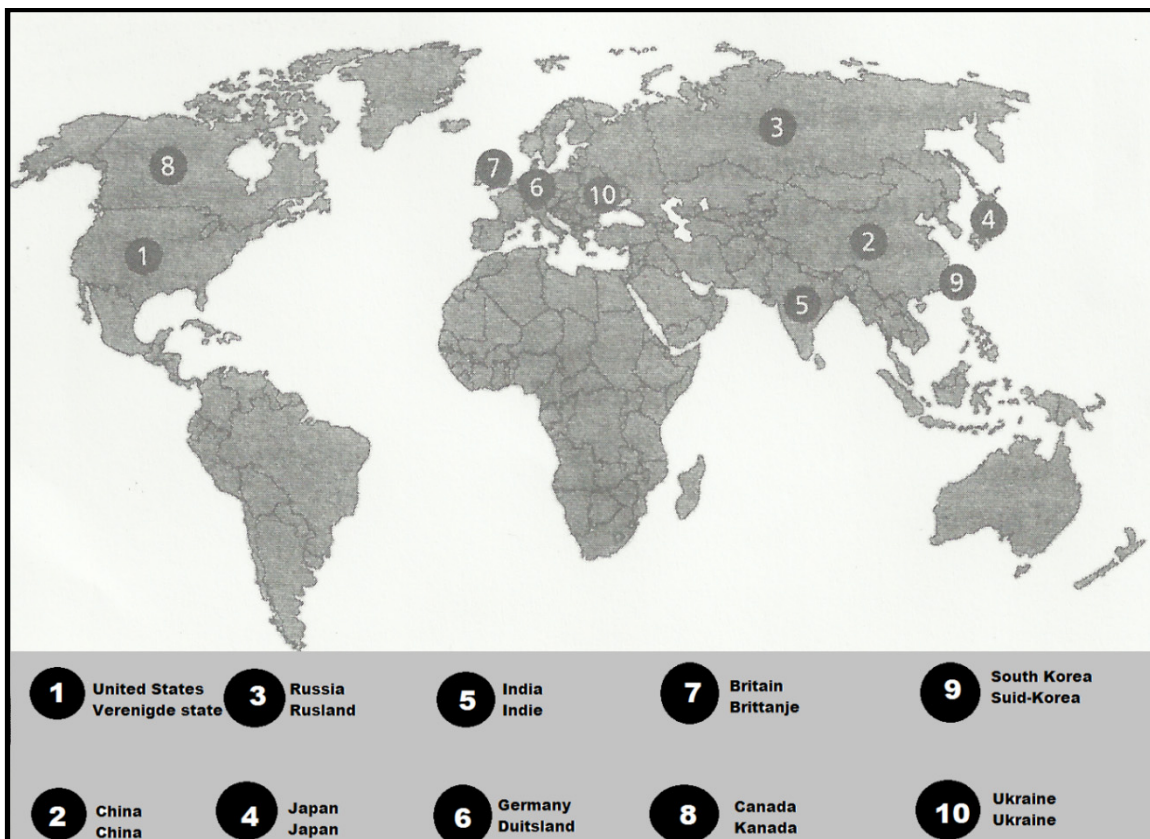


FIGURE 4.1

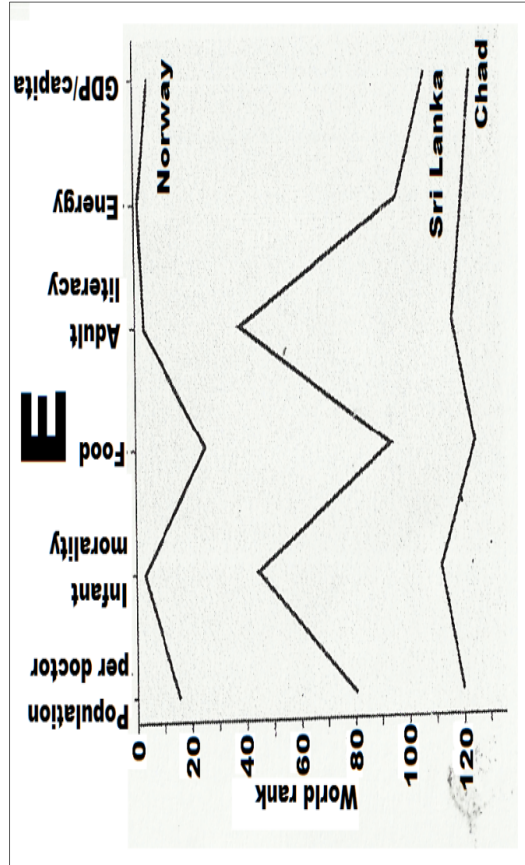
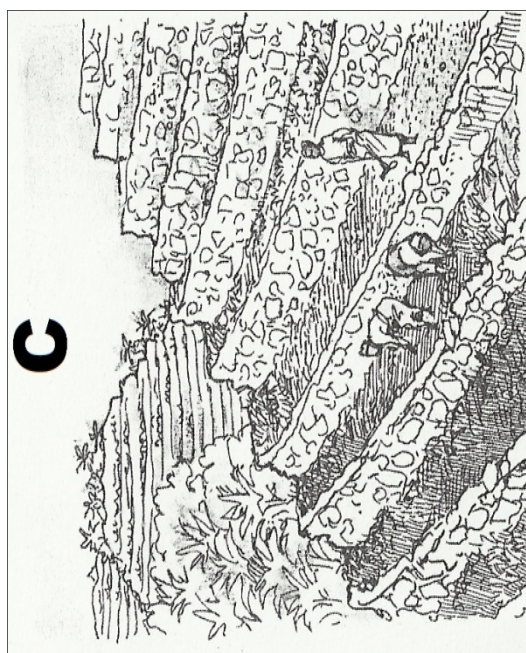
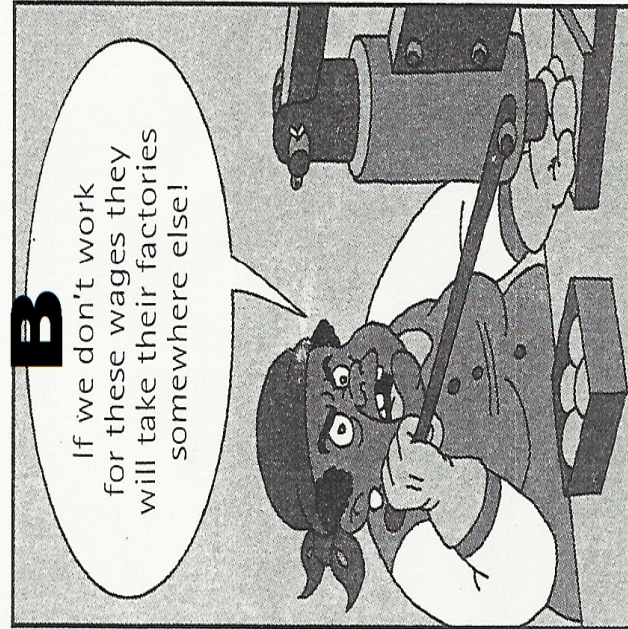
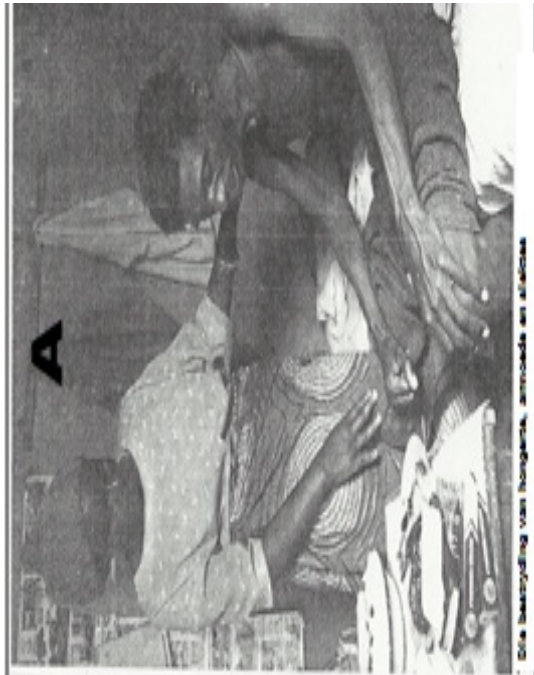


FIGURE 4.3

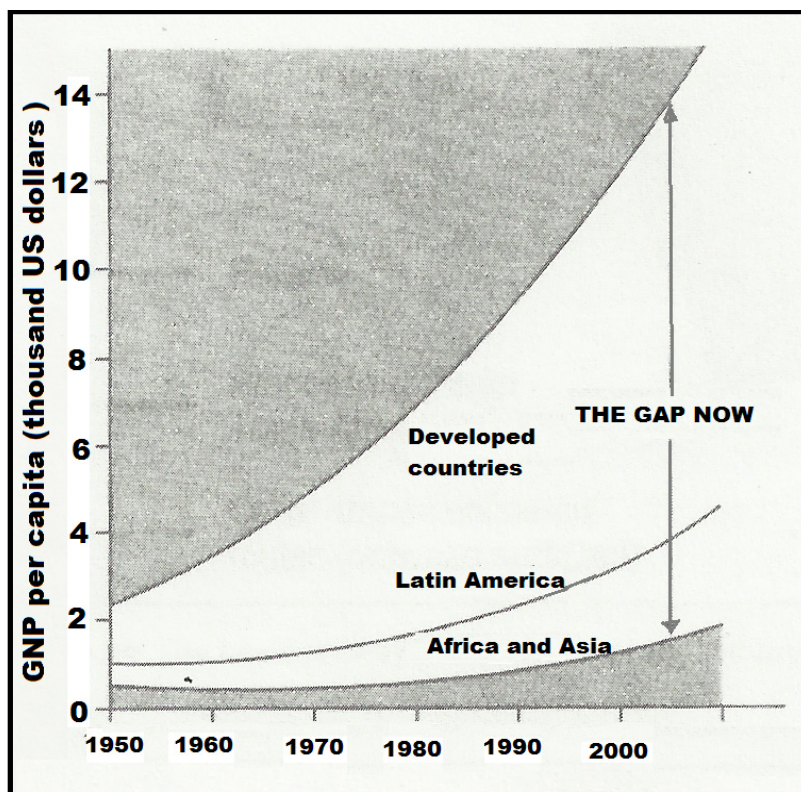


FIGURE 4.4

Extract from the South African Geographical Journal Vol.83 No.3.

'Rural women face oppression from many sides – because they are women, because they are poor and because they live in rural areas.'

'Rural women spend five hours each week collecting firewood.'

'A rural woman of sixty years will have spent fifteen years of her life fetching water.'

'67% of households in rural areas is headed by women because of selective outward migration.'

FIGURE 4.5

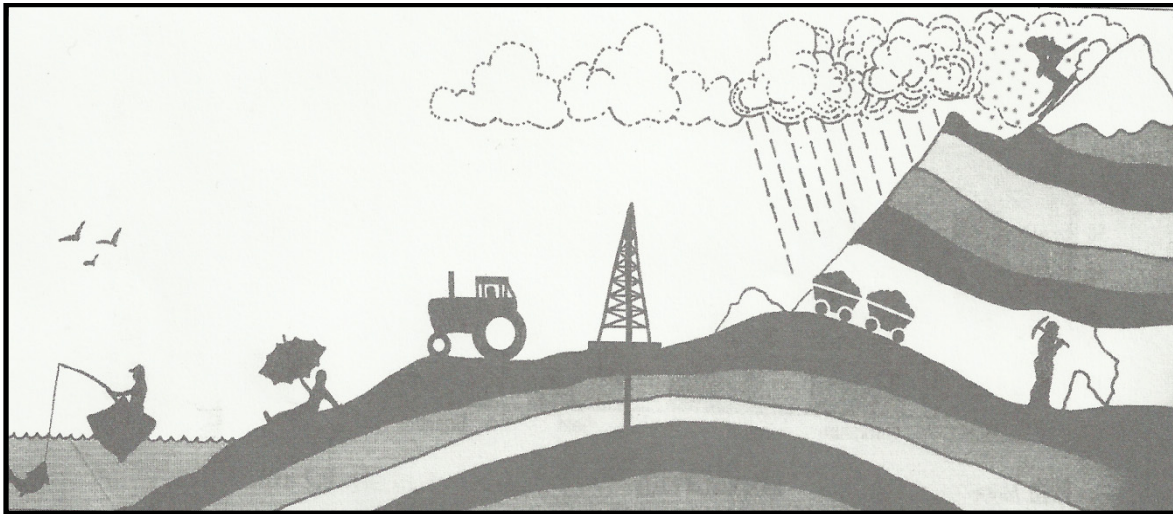


FIGURE 4.6

Energy use in some countries	
Region/Country	Energy use per person per year (equivalent to tons of oil)
Africa	0,32
Latin America	0,67
Japan	3,72
France	4,05
Germany	4,11
Canada	7,63
United States	7,86