Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – **there may be more space than you need**.

Information

- The total mark for this paper is 54.
- The marks for **each** question are shown in brackets – **use this as a guide as to how much time to spend on each question**.
- Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed.
- The marks available for spelling, punctuation and grammar are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.
Answer ALL questions.

SECTION A – GETTING TO KNOW UGANDA

1 Use Section A (Pages 3 to 7) in the Resource Booklet to answer this question.

(a) Study Figure 1.

Describe the location of Uganda. (3)

(b) Study Page 5 in the Resource Booklet.

Outline the evidence which suggests that Uganda is one of the world’s poorest countries. (3)
(c) Study Page 6 of the Resource Booklet.

(i) Study Figure 4.

Describe the changes in Uganda's population growth between 1960 and 2010. (2)

(ii) Study Figure 5.

Outline the ways in which Uganda's age-sex structure is typical of many developing countries. (4)
(d) Study Figure 6 on Page 7 of the Resource Booklet.

Compare the rates of HIV infection for men and women.

(Total for Question 1 = 16 marks)

TOTAL FOR SECTION A = 16 MARKS
BLANK PAGE

Section B starts on the next page.
SECTION B – UNDERSTANDING THE ISSUES IN RURAL UGANDA

2 (a) Define the term **subsistence farming**.  

(b) Study Figure 12 on Page 11 of the Resource Booklet.  
Outline the impact of rural isolation on the cycle of poverty for smallholders.  

(c) Explain **one** benefit for a rural family of having a large number of children.
*(d) Study Page 14 in the Resource Booklet.

Explain how the opportunities for women in rural Uganda are reduced as a result of gender inequalities.

(6)
(e) Explain the potential impacts on the population and economy of rural Uganda if all girls were to be educated to age 16 or older.

(Total for Question 2 = 19 marks)

TOTAL FOR SECTION B = 19 MARKS
SECTION C – LOOKING TO THE FUTURE

Spelling, punctuation and grammar will be assessed in *(b).*

3 Study Options 1 to 5 on page 21 of the Resource Booklet. These are about how Uganda could spend its future income from oil.

*(a)* Select the Option that you think would be best for the environment and people of Kabujogera.

Option: .............

Justify your choice.

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*(b) Now study all five Options on Page 21 of the Resource Booklet.

Explain why some of these Options will be better than others in helping Uganda to meet the UN Millennium Development Goals (Page 20).

(Total for spelling, punctuation and grammar = 4 marks)
(Total for Question 3 = 19 marks)

TOTAL FOR SECTION C = 19 MARKS
TOTAL FOR PAPER = 54 MARKS
Edexcel GCSE

Geography B
Unit 3: Making Geographical Decisions
Uganda

Paper 3F and 3H

Monday 17 June 2013 – Afternoon

Resource Booklet

Do not return the Resource Booklet with the question paper.

Instructions

- Use this Resource Booklet to prepare for the examination. You will be asked to use the resources in the examination.
- Your teacher will go through the Resource Booklet, over about 10–15 hours, in the lessons leading up to the examination.
- The Resource Booklet must be handed in to your teacher at the end of each lesson. You must not write on the booklet. No notes are to be taken into the examination.
Guidance and suggested preparation

General

This Resource Booklet is about the related issues of population, poverty and development in rural Uganda, and the choices to be made about the future. It focuses on Kabujogera, a village in south-west Uganda. You may not know much about Uganda or this village. Do not worry; it is not your previous knowledge of Uganda that is being tested, but more your ability to understand the geographical issues that it faces and its future options.

You can do all of that using only the information in this Resource Booklet.

You should:
- begin by reading this Resource Booklet so that you understand the issues
- make sure you understand the meaning of all geographical terms used
- focus on terms printed in italics which are central to the issue. Examination questions will use some of these terms and you will be expected to use some of them in your answers
- make links with other topics you may have studied (e.g. Population Dynamics, Unit 2 Topic 1).

Section A: Getting to know Uganda

- Study the key points about the country, e.g. its size and data about its people and the economy.

Section B: Understanding the issues in rural Uganda

- Explore the different aspects of living in rural Uganda – its people, the local economy and the challenges faced by people living there.
- Consider how well Uganda is coping with challenges such as farming, education and health.
- Assess how these challenges could be dealt with once oil is produced.
- From what you know about rural Uganda, consider whether Uganda is likely to meet the targets known as the Millennium Development Goals.

Section C: Looking to the future

- Consider the five options for the future, 1 to 5. Look at each option and analyse what benefits and problems it might create for the region’s people, wealth and environment.
- You will be asked to discuss these options in the examination. Do not just choose which one is best and ignore the rest. The examination could ask why you support or reject one or more.
- There are no ‘correct’ options. You could make a good case for any of them. People in rural Uganda are divided about this! You will not be marked on which one you select, but on the way you support your choice with evidence.

Background research

This Resource Booklet contains all the information that you need.

- If you would like to carry out further background research, you could use sources such as Google Maps or Google Earth to find this region, its settlements, landscapes and resources.
- Do not contact any people or organisations mentioned in this booklet.
Section A: Getting to know Uganda

Key
- town/city
- Kabujogera Village
- Reserves of oil and gas in Uganda
- Lake/river
- border

Figure 1 – Map of Uganda
Uganda – Landscape, people and change

Landscape

- Uganda is a landlocked country in East Africa (Figure 1). It lies across the Equator.
- Much of Uganda is a highland plateau, about 2000 metres above sea level. This makes its temperatures lower than might be expected on the Equator.
- Including Lake Victoria, Uganda is nearly the same size in area as the UK.
- Uganda has much fertile farmland largely made up of small farms (Figure 2a).
- Some areas of fertile farmland are owned by TNCs which produce cash crops for export (Figure 2b).

![Figure 2a – a typical rural landscape of small farms](image1)

![Figure 2b – a tea plantation](image2)

People

- Uganda’s population (33.5 million in 2010) is just over half the population of the UK.
- 87% of Uganda’s population live in rural areas.

Uganda’s changing wealth

- Uganda is one of Africa’s poorest countries (see Page 5).
- However, large reserves of oil have been discovered in western Uganda (Figure 1).
- Uganda has nowhere near as much oil as, for example, Saudi Arabia, but it could enable Uganda to earn an extra US$2 billion a year in oil exports within the next ten years.
How developed is Uganda?

A Uganda’s population (Figure 4 and 5)

- **HDI score** (2011): 0.45
- **Life expectancy at birth** (2010): 52.2 years for men, 54.3 for women
- **Birth rate** (2010): 47.5 per 1000
- **Death rate** (2010): 11.9 per 1000
- **Rate of natural increase** (2010): 35.6 per 1000
- **Fertility rate** (2010): 6.7
- **Infant mortality rate** (2009): 62.5 per 1000 live births

B Uganda’s economy

- **GDP per capita** (2010): US$1300 in $PPP (Purchasing Power Parity – an adjustment based on costs of living)
- **Source of GDP** (2010): agriculture 22.5%, industry 26.5%, services 51.0%
- **Uganda’s industries** include brewing, textiles, cement and steel production
- **Employment of people** (2010): agriculture 82%, industry 5%, services 13% (Figure 3)

Value of exports: US$2.2 billion
Goods exported: Coffee, fish, tea (Figure 2b), cotton, flowers, vegetables, gold

Value of imports: US$4.3 billion
Goods imported: Machinery, vehicles, petroleum, medical supplies, grain crops

Figure 3 – a series of mobile telephone shops in rural Uganda
Uganda’s Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Population in millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>6.8</td>
</tr>
<tr>
<td>1970</td>
<td>9.7</td>
</tr>
<tr>
<td>1980</td>
<td>12.4</td>
</tr>
<tr>
<td>1990</td>
<td>17.6</td>
</tr>
<tr>
<td>2000</td>
<td>23.5</td>
</tr>
<tr>
<td>2010</td>
<td>33.5</td>
</tr>
</tbody>
</table>

Figure 4 – Uganda’s population 1960–2010

Figure 5 – Uganda’s age-sex structure in 2010
HIV-AIDS in Uganda

- Since the early 1980s, AIDS-related illnesses in Uganda have killed over one million people.
- In 2010, about 7% of Uganda’s total population was HIV-positive. Figure 6 shows the age and sex distribution of 15 to 59 year olds infected with HIV.
- The number of cases of HIV-AIDS is rising each year, but survival rates are improving.
- Levels of HIV infection are higher than average in urban areas.

(Source: UNAIDS – data are only available for the 15 to 59 age groups)

Figure 6 – Levels of HIV infection in Uganda (2010)
Section B: Understanding the issues in rural Uganda

Kabujogera (Figures 7 and 8) is a sprawling rural settlement approximately 45 minutes’ drive from the nearest town, Ibanda, and over 200 km west of the capital, Kampala. About 5000 people live in the area, a 1000 of whom live in the village of Kabujogera itself (Figure 8).

The village faces five major issues.

Issue 1 Rural isolation

Many rural areas in Uganda are very isolated. The government has tarmacked a quarter of Uganda’s roads, especially those which link rural areas to urban markets. However, roads to and from Kabujogera remain dirt roads (Figure 9). Travel can be slow and difficult.

Ibanda is the nearest local market town to Kabujogera and also has the nearest internet connection as there is no 3G mobile network.

- To get to Ibanda, people may walk or travel by push bike which can take between two and six hours.
- Long journeys may bruise fruit or crops and cost the farmer time away from the farm.
- Other transport is available by bus or local motorcycle taxis but there are no local railways.
- It can take as long as eight hours to get to the capital, Kampala, by car or 12 hours by bus because the bus route goes via Mbarara.
Figure 8 – The centre of Kabujogera village

Figure 9 – Farmers taking a cash crop, pineapples, to the market at Ibanda
**Issue 2 Rural poverty**

The greatest poverty in Uganda is found in rural areas. Reasons include:
- rural areas offer much less full-time work compared to urban areas
- most families in rural areas are *subsistence farmers*
- most farms in Uganda are *smallholdings* (Figures 2a and 10), averaging one hectare in size
- limited *investment* and neglect by regional and national governments over many years.

**Farming in the Kabujogera area**

Subsistence farming dominates the Kabujogera area. Survival for most *households* depends on what they produce on the land.

- 85% of households in Kabujogera grow crops mostly for their own consumption.
- Labour comes from the *extended family*, particularly women but also including children as young as five years old.
- Some households manage to grow a cash crop to earn enough to pay for a few extras such as school fees or to pay off debts.
- For most households these crops earn only half of the income the household needs, because farms are so small.
- 38% of women and 28% of men have additional jobs to increase family incomes, e.g. running small market stalls (Figure 11), driving a motorcycle taxi, or working locally as a bar worker or builder.
- Some members of the household live and work in urban areas and send home some of their earnings.

*Figure 10 – A smallholding near Kabujogera*
Figure 11 – Market stalls selling produce from local smallholdings

Problem of food production

- Subsistence farmers are often trapped in a cycle of poverty (Figure 12) because of land ownership issues and low productivity.
- A survey in 2006 showed that 60% of rural households did not grow enough food to eat.
- Having to buy extra food can leave a family in debt for the following year.
- In 2006, less than 10% of land received any ‘additional inputs’, e.g. better seeds, artificial fertiliser, or pesticide. Many of these inputs are expensive.
- Most farmers do not receive any training on how to improve farming methods which could raise productivity. In 2006, only 7% of Ugandan farmers were visited by a farm expert.
- Farmers who did receive some training increased their crop production per hectare by 27% in one year. As a result of this their income increased by 41%.

Figure 12 – The cycle of poverty for farmers
**Issue 3 Education and the status of women in rural areas**

- Uganda’s average adult *literacy rate* is 77% for males, 58% for females.
- In rural areas literacy rates are lower, 60% for males, 42% for females.
- However, in 2010, 93% of children in rural areas attended school until the age of 11.
- Primary class sizes are often large although rapid progress has been made (Figure 13).

<table>
<thead>
<tr>
<th>Date</th>
<th>Average number of students per primary class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>146</td>
</tr>
<tr>
<td>2003</td>
<td>55</td>
</tr>
<tr>
<td>2010</td>
<td>40</td>
</tr>
</tbody>
</table>

**Figure 13 – The average number of students per primary class in Uganda**

**Secondary education**

Since 2010, secondary education has been free in Uganda to age 18. However, there are not yet enough state secondary schools to meet demand and many rural areas do not have a secondary school within reach. This can make it costly to send a child to school. In addition, most schools have few books or equipment so students must buy these themselves.

For ten years, Kabujogera has had a private secondary school, of about 800 students, to meet demand. It charges US$80 per child per year, the same as a family would pay to send a child to a state school further away. For some families, US$80 is their whole annual income from cash crops.

- Families can pay school fees in crops or money. Crop payments are useful as the school feeds every student with a main meal each day.
- Some pupils walk several kilometres to and from school.
- Students study for traditional exams at ages 16 and 18.
- There is a close link between level of education and poverty (Figure 14).

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Those living in poverty (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td>52</td>
</tr>
<tr>
<td>Just primary</td>
<td>44</td>
</tr>
<tr>
<td>Primary and secondary</td>
<td>29</td>
</tr>
<tr>
<td>Primary, secondary and college or university</td>
<td>18</td>
</tr>
</tbody>
</table>

**Figure 14 – Levels of education and poverty in rural Uganda**
Figure 15 – A class in Kabujogera’s secondary school

Dropping out of education

- The main reason students leave school is the cost of school fees.
- If they leave school, they are able to work and so help to increase household income.
- Many girls leave school in their early teens to get married, so that older classes are often male dominated (Figure 15).
- For those students who are able to stay on to ‘A’ levels, there are many government scholarships to help to pay school fees.
- University education is expensive, with few government grants. Those unable to gain scholarships have to raise the fees themselves.
Status of women

Uganda has many gender inequalities. From birth, life in Kabujogera is hard for most women.

- In primary schools the ratio of girls to boys is 1:1
- By age 12 it is 1:2 (i.e. one girl for every two boys), and by 16 it may become 1:10 (i.e. one girl for every ten boys).
- Married women and unmarried girls do most of the manual labour on the land, collect most firewood and do almost all domestic work, caring for children and preparing food.
- In traditional rural families, a dowry is paid to a girl’s parents when she marries. She then goes to live with her husband’s family.
- The average rural woman spends 20–30 years raising young children.
- By tradition, women rarely own land, as land is passed to a son on his father’s death.
- Having no land of their own, unmarried women or widows have little choice but to sell their labour.

The impact of education on girls

Educating girls to the age of 16 or older brings major changes to their life chances. They are more likely to:

- have a job outside agriculture
- earn more and increase their wealth
- marry later and have fewer children
- be able to afford medical help when their children are born (Figure 16).

Infant mortality rates for the children of degree-educated Ugandan women are almost as low as in many developed countries.

Maternal mortality

Uganda’s maternal mortality rate in 2009 was one of the world’s highest with 430 deaths per 100,000 live births. Maternal mortality rates are highest in rural areas. This is because:

- mothers in rural areas are more likely to be malnourished than those in urban areas
- 12% of rural mothers are classed as ‘very thin’, caused by malnutrition, workload, lack of access to healthcare and frequent pregnancy
- only 40% of births in rural areas are attended by qualified medical staff compared to 80% in urban areas
- rural mothers receive little help from health services during their pregnancy and when caring for young children.
Issue 4 Health in rural areas

Healthcare varies across rural Uganda and is costly. Most drugs and medical fees are paid for by the patient. Kabujogera has a health clinic with one part-time doctor and nurse, who divide their time with other clinics. The nearest hospital is in Ibanda.

HIV infection in Uganda

- In 2010, adult females accounted for more new HIV infections (57%) than adult males (43%).
- People’s knowledge about HIV and AIDS and how to prevent infection depends on their level of education (Figure 16).

![Graph showing % of people with detailed knowledge of HIV/AIDS and their level of education.]

Figure 16 – The percentage of those with detailed knowledge of HIV and AIDS, and their level of education

Testing and treatment for HIV

More people are being tested for HIV. In 2009, there were only about 1200 clinics and hospitals offering HIV tests for a population of 33.5 million. Many more are needed, especially in rural locations.

- Most rural healthcare clinics have too few staff and cannot cope with the demand for testing and treatment, which they sometimes have to refuse.
- Imported drugs to treat and slow down the progress of HIV are expensive. In 2011, only 40% of those with HIV in Uganda were receiving drug treatment.

The economic impacts of HIV and AIDS

- HIV gradually weakens a patient unless treatment is given. Usually, treatment must be paid for; the cost of one person’s treatment is greater than an average family’s yearly income.
- As the disease gains hold, the energy of sufferers is reduced. Most are unable to work.
- Most families have to borrow to afford treatment.
- Unless treatment is provided, HIV often progresses to AIDS and then death within five years.
- Traditional funerals are expensive and cost families as much as one year’s income.

Deaths from AIDS among parents have left over a million children as orphans.
Water supply, sanitation and health

Improved water supply (clean and drinkable) is not yet available to everyone in Uganda (Figure 17).

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved</td>
<td>91%</td>
<td>64%</td>
<td>67%</td>
</tr>
<tr>
<td>Unimproved</td>
<td>9%</td>
<td>36%</td>
<td>33%</td>
</tr>
</tbody>
</table>

*Figure 17 – Percentage of people obtaining drinking water from improved sources, 2008*

- In Kabujogera, water is available from communal taps, piped from a local river.
- Water must then be carried in containers from taps to each household (Figure 18).

*Figure 18 – Fetching water in Kabujogera*
There is no proper system of sewage disposal or treatment in Kabujogera. The vast majority of people there use traditional *pit latrines* (Figure 19).

![Figure 19 – A pit latrine. The waste falls into a pit.](image)

**The risk of disease**

As well as HIV, the following causes of disease are widespread, causing sickness and often death:

- infected water, which causes diarrhoea, hepatitis A and typhoid
- insects, causing malaria and sleeping sickness
- microscopic worms, which can cause bilharzia
- animal contact, which can lead to rabies.
Issue 5 Energy

Only 9% of households in Uganda have an electricity supply. This percentage varies between urban areas (44% of households) and rural areas (2.4%).

- There is no local electricity supply in Kabujogera.
- A few better-off households, local businesses and the local secondary school have their own electricity generator, powered by petrol or diesel. These are expensive to run because, currently, Uganda’s fuel oil is imported.
- Kabujogera has 20 motorcycle taxis but the nearest petrol station is in Ibanda.

Firewood

Many trees in Kabujogera are being cut down both for domestic cooking and to be sold for extra income (Figure 20).

- Several hours of family time each week is spent collecting wood. Most cooking is done on outdoor open fires (Figure 21).
- Deforestation is threatening the biodiversity of the area and the long-term future of the forest.
- The secondary school in Kabujogera is trying to raise awareness about the local environment (Figure 22).

Figure 20 – Firewood being taken to market for sale
Figure 21 – Cooking the daily meals at the secondary school in Kabujogera. The wood is for fires, and the cans and buckets for carrying water.

Figure 22 – A poster in Kabujogera’s secondary school about deforestation and new stoves which use less fuel
## Section C: Looking to the future

### C1 The Millennium Development Goals in Uganda

In 2000, the United Nations (UN) drew up a list of aims to improve life in the world’s developing countries, including Uganda, by 2015. These are known as the *Millennium Development Goals*. Figure 23 shows these goals and the UN’s view as to how likely it is that these goals will be achieved in Uganda.

<table>
<thead>
<tr>
<th>Millennium Development Goals</th>
<th>Likely to be achieved?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Get rid of extreme poverty and hunger</strong></td>
<td></td>
</tr>
<tr>
<td>a Reduce by half the percentage of people living on under US$1 a day</td>
<td>Already achieved</td>
</tr>
<tr>
<td>b Reduce by half the percentage of people suffering from hunger</td>
<td>Already achieved</td>
</tr>
<tr>
<td><strong>2 Provide primary schooling for everyone</strong> and make sure that all complete it</td>
<td>Very likely to be achieved</td>
</tr>
<tr>
<td><strong>3 Achieve gender equality</strong> and improve the power of women; close the gap between the percentage of boys and girls who complete primary and secondary school.</td>
<td>Some progress</td>
</tr>
<tr>
<td><strong>4 Reduce child mortality</strong> by two thirds</td>
<td>Little progress</td>
</tr>
<tr>
<td><strong>5 Improve the health of mothers</strong></td>
<td></td>
</tr>
<tr>
<td>a Reduce by three quarters the proportion of women dying in childbirth</td>
<td>Little progress</td>
</tr>
<tr>
<td>b Achieve access to healthcare for all pregnant women and mothers</td>
<td>Little progress</td>
</tr>
<tr>
<td><strong>6 Fight HIV and AIDS, malaria and other diseases</strong></td>
<td></td>
</tr>
<tr>
<td>a Stop and then reverse the spread of HIV/AIDS, malaria and other diseases</td>
<td>Getting worse</td>
</tr>
<tr>
<td>b Provide treatment for HIV/AIDS for everyone who needs it</td>
<td>Some progress</td>
</tr>
<tr>
<td><strong>7 Achieve environmental sustainability</strong></td>
<td></td>
</tr>
<tr>
<td>a Reduce the loss of biodiversity</td>
<td>Little progress</td>
</tr>
<tr>
<td>b Increase access to safe drinking water and sanitation</td>
<td>Already achieved</td>
</tr>
<tr>
<td><strong>8 Develop a global partnership for development</strong></td>
<td></td>
</tr>
<tr>
<td>a Make essential drugs available in developing countries</td>
<td>Little progress</td>
</tr>
<tr>
<td>b Spread the benefits of new technology</td>
<td>Some progress</td>
</tr>
</tbody>
</table>

*Figure 23 – A selection of the Millennium Development Goals and the UN’s view as to how likely it is that these goals will be achieved in Uganda*
C2 Options for the future

With a high proportion of its people living in poverty, a spokesperson for a Ugandan pressure group, interested in the country’s development, made a speech about what oil could mean for Uganda (Figure 24).

“In Uganda, we have a great opportunity to build infrastructure, to meet the Millennium Development Goals, and to bring electricity and social services to rural areas. We should make sure that oil is a blessing and not a curse, offering sustainable benefits to society, the economy and the environment for people now and for those that follow.”

Figure 24 – Statement about the opportunities offered by Uganda’s oil discovery

What should Uganda’s priorities be for its rural areas?

Difficult decisions have to be made about how to spend the income from oil in Uganda. Two billion dollars a year, although a large sum of money, will not solve all of Uganda’s problems.

You have been asked to attend a conference, where you can put forward your ideas about the priorities for Kabujogera specifically and rural areas in Uganda as a whole.

Study options 1 to 5 below to decide which offer the best ideas.

**Option 1  Develop an all-weather road network**

Improve rural roads by:
- tarmacking roads between every rural village and market town
- creating drainage channels to prevent road flooding.

**Option 2  Create a national farm advisory service**

Offer free advice and training sessions to smallholders, including:
- the use of fertilisers, new seed and chemicals such as pesticides
- improved farming technology, e.g. machinery and tools.

**Option 3  Build rural health clinics**

Build health clinics within a 30-minute walk of all villages. These would have a full-time doctor and nursing staff, offering free treatment and care for all, including:
- most diseases and infections, such as testing and drug treatment for HIV
- improvements to maternal and child healthcare.

**Option 4  Provide safe piped water for all**

Bring piped water from reservoirs or underground supplies to rural communities so that:
- every household has its own water tap and pit latrine
- all schools, clinics and workplaces have piped water and improved sewage disposal system.

**Option 5  Develop rural electricity sources**

Offer payments to rural communities so that every village:
- can build its own solar-power or hydro-electricity generation system
- will have low cost power in all households within ten years.