

Economics

Higher level and standard level

Paper 2

13 May 2025

Zone A afternoon | **Zone B** afternoon | **Zone C** afternoon

1 hour 45 minutes




Instructions to candidates

- Do not open this paper until instructed to do so.
- You are permitted access to a calculator for this paper.
- Unless otherwise stated in the question, all numerical answers must be given exactly or correct to two decimal places.
- You must show all your working.
- Answer one question.
- Use fully labelled diagrams and references to the text/data where appropriate.
- The maximum mark for this examination paper is **[40 marks]**.

Answer **one** question.

1. Read the extracts and answer the questions that follow.

Text A — Overview of the economy and government policies in Kenya

- 1** Kenya, in East Africa, is achieving high annual economic growth rates, averaging above 5%. Living standards are improving and employment is increasing in the manufacturing, tourism, construction and education sectors. Kenya's high growth is also changing the distribution of income and affecting the environment. However, climate change and high levels of inequality may reduce future growth rates. 
- 2** Floods and droughts are severe and frequent. In 2022–2023, droughts caused agricultural output to fall, affecting the employment of 40% of the population and doubling the number of people with insufficient food. The government took measures to increase food supplies, such as reducing the tariff on imports of rice.
- 3** The rising price of food is the main cause of **inflation** in Kenya. The central bank used a contractionary monetary policy in 2022 and 2023 to reduce inflation and to prevent the depreciation of the country's currency (Kenyan shilling, KES).
- 4** The budget deficit as a percentage of gross domestic product (GDP) became smaller in 2023 because government expenditure grew more slowly than GDP. Moreover, economic

Text A — Overview of the economy and government policies in Kenya

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- 3** The rising price of food is the main cause of **inflation** in Kenya. The central bank used a contractionary monetary policy in 2022 and 2023 to reduce inflation and to prevent the depreciation of the country's currency (Kenyan shilling, KES).
- 4** The budget deficit as a percentage of gross domestic product (GDP) became smaller in 2023 because government expenditure grew more slowly than GDP. Moreover, economic growth resulted in higher tax revenue from both income tax and a 16 % indirect tax on goods and services. The government is also receiving revenue from the sale of some state-owned enterprises (SOEs). A World Bank programme, aimed at an expansion of "green" energy in Kenya, provides financial and technological support to the Kenya Power and Lighting Company, an SOE that has been making losses.

- 5** The currency depreciation in 2022 boosted exports. Services, which are approximately 38 % of total exports and include tourism and financial services, are growing faster than exports of goods. Manufactured goods account for 37 % of total exports and agricultural goods account for 25 %. Revenue from exports of tea, flowers, vegetables, meat, and coffee are volatile and unpredictable. The droughts in 2022–2023 reduced output, which lowered export revenue from vegetables and flowers by almost 20 %.

Text B — Unequal distribution of the benefits of economic growth in Kenya

- 1** Although economic growth has reduced absolute poverty, inequality remains a problem, particularly between the formal and informal sectors and between the urban and rural areas. Rural poverty is caused by low agricultural productivity and farmers' limited access to markets, finance, and technology.
- 2** However, the level of education has improved significantly, with a literacy rate of over 90 %. Secondary school attendance rates have increased from 13 % in 2003 to 49 % in 2022, despite the costs of attending school. In 2022, the government introduced a fund (the Hustler Fund), partly financed by **foreign aid**. The fund provides low-interest loans to women, young people, and small firms, for education or investment.

(Question 1 continued)

Text C — Reducing and adapting to climate change in Kenya

- 1 Global warming is affecting the Kenyan economy. Consequently, agricultural output and tourism, which account for 70 % of employment and most exports, will probably decline. Therefore, GDP could fall by 2 % annually. However, Kenya has relatively low carbon emissions, particularly because renewable resources generate 90 % of electricity, a figure that is planned to rise to 100 % by 2030.
- 2 Measures taken by other economies to reduce carbon emissions provide opportunities for Kenya, because the markets for “green” goods are expanding. Kenya is able to sell tradable permits (carbon credits) to high-emitting countries due to its reforestation programmes. However, there are challenges for Kenya. The production of exports, such as coffee, needs to meet strict sustainability regulations imposed by the European Union (EU) on imports.
- 3 The International Monetary Fund (IMF) recommends that climate-related considerations should be part of macroeconomic and infrastructure policies. It also recommends that carbon taxes should be imposed to reduce the use of fossil fuels by firms. Rapid urbanization is increasing the need for electric vehicles and improved public transport. Energy efficiency measures, fuel substitution, and switching to rail transport will not only lower transportation costs but also reduce the trade deficit. This is because fossil fuels used for transportation and manufacturing are imported.

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- 4** Kenya is able to obtain finance and technology for investment in climate-related projects, such as renewable energy and forestry programmes, through foreign aid and partnerships with the private sector. Overall, these policies will reduce environmental disasters and increase economic growth and jobs in the formal sector.



(Question 1 continued)

Table 1: Tea production in Kenya

	2021	2022
Price per kg (KES)	324	340
Quantity produced in kg (million)	3700	4800

Table 2: Economic data for Kenya

	2015	2022
Real GDP (USA dollars (USD) billion)	70.12	94.80
Real GDP per capita (USD)	1497	1755
Exchange rate (KES per USD)	98	118

Table 3: Development data for Kenya

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Table 3: Development data for Kenya

	2015	2022
Population (million)	46.85	54.03
Gini coefficient	0.408	0.387*
Employment in the informal sector (% of total employment)	83	83
Human Development Index (HDI)	0.561	0.601

* estimate

- (a) (i) Define the term *inflation* indicated in bold in the text (**Text A**, paragraph **3**). [2]
- (ii) Define the term *foreign aid* indicated in bold in the text (**Text B**, paragraph **2**). [2]
- (b) (i) Using information from **Table 1**, calculate the price elasticity of supply for tea in Kenya when the price changes from 324 KES per kilogram (kg) in 2021 to 340 KES per kg in 2022. [2]
- (ii) Using information from **Table 1**, calculate the total revenue earned by Kenyan tea growers in 2022 in millions of KES. [1]
- (iii) Sketch a demand and supply diagram to indicate how droughts caused the price of food to rise in Kenya (**Text A**, paragraphs **2** and **3**). [2]
- (c) Using an international trade diagram, explain how the quantity demanded of rice in Kenya will change if the tariff on imports of rice is reduced (**Text A**, paragraph **2**). [4]
- (d) Using an exchange rate diagram, explain how a contractionary monetary policy could prevent the depreciation of the Kenyan currency (KES) (**Text A**, paragraph **3**). [4]
- (e) Using an AD/AS diagram, explain the likely effect of the improvement in the level of education on Kenya's full employment level of output (potential output) (**Text B**, paragraph **2**). [4]

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(e) Using an AD/AS diagram, explain the likely effect of the improvement in the level of education on Kenya's full employment level of output (potential output) (**Text B**, paragraph **2**).

[4]

(f) Using a Lorenz curve diagram, explain what happened to the distribution of income in Kenya between 2015 and 2022 (**Table 3**).

[4]

(g) Using information from the text/data and your knowledge of economics, discuss the likely impact of high economic growth on environmental sustainability in Kenya.

[15]

2. Read the extracts and answer the questions that follow.

Text D — Overview of Bhutan

- 1 Bhutan is a lower-middle income country in southern Asia. It is mountainous, water is plentiful, and 60 % of the territory is protected forest. Since 2008, Bhutan has measured its economic development by changes in its “Gross National Happiness” (GNH) index. The index considers factors such as income inequality, environmental conservation, sustainable development, and gender equality, in addition to the components of the Human Development Index (HDI).
- 2 The pursuit of GNH has involved using government programmes to spread the benefits of **economic growth** across all social groups. An example of this is the construction of large hydropower plants, not only for the export of electricity but also to ensure that remote communities can buy power at low prices. Hydropower is a renewable method of producing electricity using the natural flow of water. With these new plants, all rural and urban areas had access to electricity by 2019.
- 3 Government intervention in the market for electricity has been necessary due to the high cost of **resources**. Both the production and distribution of electricity are therefore controlled by state-owned enterprises. Bhutan’s government has relied on India for grants and loans to finance hydropower projects.
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- 4 Sales of surplus electricity to India, amounting to over 70 % of electricity generation in 2021, have increased the funds available to the government for investment in healthcare and education. These revenues have also helped to finance the expansion of essential infrastructure, particularly road networks. The government's aim has been to reduce poverty and to improve well-being, especially in rural areas.
- 5 Hydropower has proved to be an important source of economic development. However, the private sector faces a lack of investment for multiple reasons, including high transport costs and a small domestic market. This has limited the creation of new private sector jobs. Furthermore, a sustainability tax of 100 USA dollars (USD) per night for tourists helps with Bhutan's conservation efforts. The tax reduces Bhutan's competitiveness as a tourist destination.
- 6 Agriculture is vital to Bhutan's largely rural population. This sector employed 55 % of the workforce in 2021. However, most agricultural produce, such as rice, is consumed by farming households rather than sold in the market. By 2021, the country was importing about 50 % of its food. The growing food demands of urban areas could have negative consequences for the balance of payments.
- 7 Agricultural output is constrained by many factors, including a lack of machinery, irrigation and affordable credit. Bhutan's partnership with the United Nations International Fund for Agricultural Development has provided funds for investment in the agricultural sector, such as irrigation systems, roads connecting farms to markets, and storage facilities. However, the GNH emphasis on sustainability could restrict growth in this sector. For example, to preserve biodiversity there are restrictions on the use of chemical fertilizers.

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(Question 2 continued)

Text E — Youth unemployment in Bhutan*

- 1** The youth unemployment rate for Bhutan in 2021 was 20.9 %. However, youth unemployment in towns was much higher than in rural areas. Approximately 60 % of the total unemployed youth were female.
- 2** There is a mismatch between the needs of employers and the skills of young people. Apart from this problem, the private sector requires government assistance in creating job opportunities so that young people can find employment outside of the public sector. Moreover, a lack of finance discourages the youth from entrepreneurship, further reducing their work prospects and the growth of Bhutan's economy.

Text F — Bhutan's trade relations with India

Bhutan has a free trade agreement with India, removing all tariffs between the two countries. In 2021–2022, about 80 % of Bhutan's international trade was with India. India's top imports from Bhutan include electricity, metals, and cement. Bhutan relies on India for goods such as fuel, cars, and rice. Transactions between the two countries are straightforward, as the central bank of Bhutan ensures the ngultrum (Bhutan's currency, BTN) is fixed to the rupee (India's currency, INR) at the exchange rate of 1 BTN = 1 INR.

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* aged between 15 and 24



(Question 2 continued)

Table 4: Economic data for Bhutan

	2008	2021
Population (total)	689 737	782 455
Nominal gross domestic product (GDP) (USD million)	1227.81	2539.55
GDP deflator	143	279
GDP growth (annual %)	4.8	4.1
Net income from abroad (USD million)	−34.02	−155.64
Current account balance (USD million)	−112.48	−321.53

Table 5: Development data for Bhutan

	2007	2022
Life expectancy at birth (years)	67	72

Net income from abroad (USD million)	−34.02	−155.64
Current account balance (USD million)	−112.48	−321.53

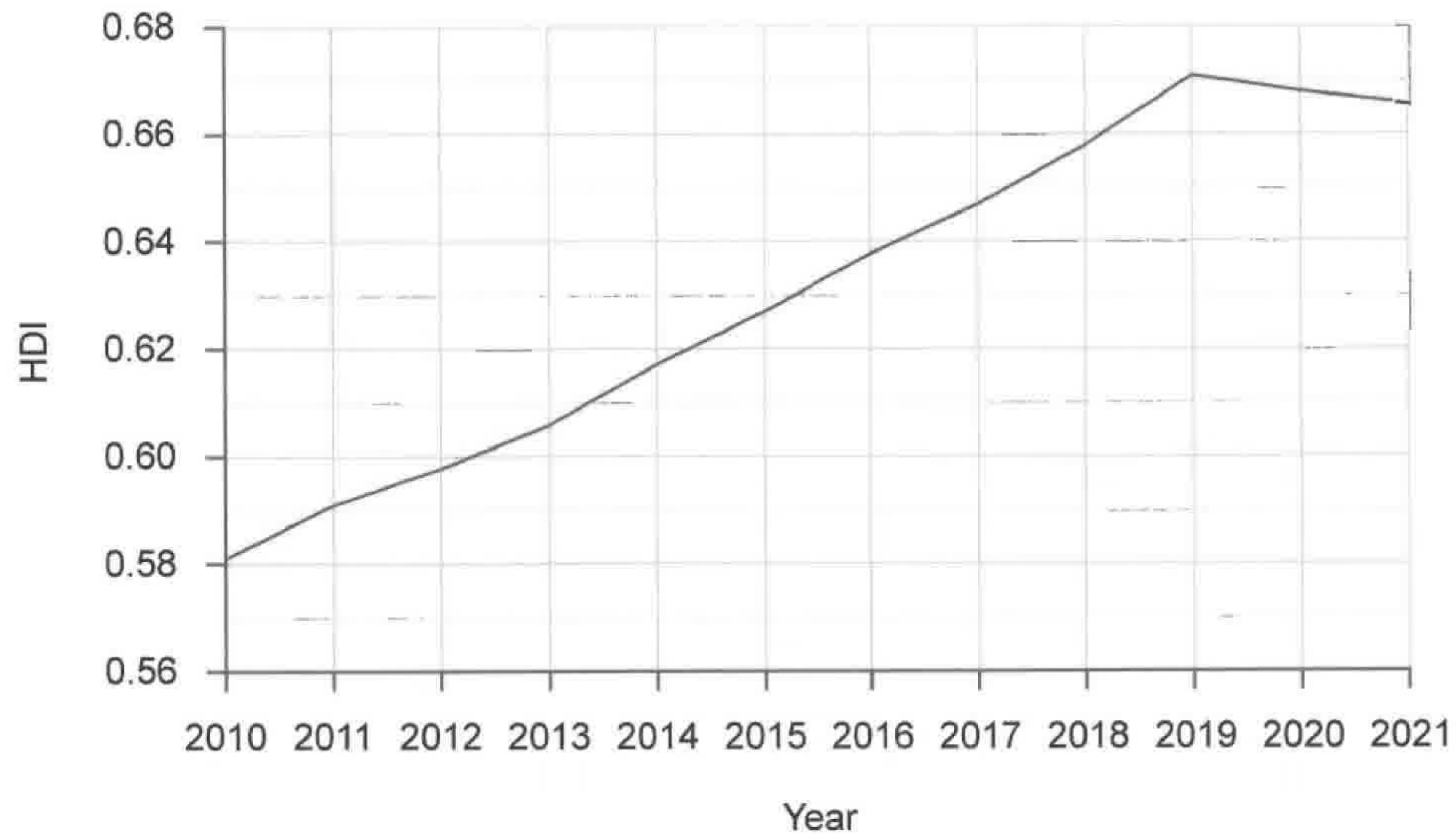
Table 5: Development data for Bhutan


	2007	2022
Life expectancy at birth (years)	67	72
Absolute poverty (% of population living on less than USD 2.15 (2017 PPP) per day)	5.9	0
Gini coefficient	0.381	0.285
People using safe sanitation services (% of population)	44	51

Figure 1: HDI for Bhutan from 2010 to 2021



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- (a) (i) Define the term *economic growth* indicated in bold in the text (**Text D**, paragraph **2**). [2]
- (ii) Define the term *resources* indicated in bold in the text (**Text D**, paragraph **3**). [2]
- (b) (i) Using information from **Table 4**, calculate Bhutan's real GDP in USD in 2021. [2]
- (ii) Using information from **Table 4**, calculate Bhutan's nominal GDP per capita in USD in 2021. [1]
- (iii) Using information from **Table 4**, calculate the change in Bhutan's nominal gross national income (GNI) in USD between 2008 and 2021. [2]
- (c) Using an AD/AS diagram, explain the likely effect on Bhutan's real GDP of a large increase in sales of electricity, produced in Bhutan, to India (**Text D**, paragraph **4**). [4] 
- (d) Using a demand and supply diagram, explain the likely effect of improved road networks on the price of rice that is sold in Bhutan's towns (**Text D**, paragraph **7**). [4]
- (e) Using an exchange rate diagram, explain how the central bank of Bhutan could maintain its fixed exchange rate during a period of falling demand from India for metals and cement produced in Bhutan (**Text F**). [4]
- (f) Using an externalities diagram, explain how increased government investment in education could achieve allocative efficiency in Bhutan's education market (**Text D**, paragraph **4**). [4]

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- (g) Using information from the text/data and your knowledge of economics, evaluate the strengths and limitations of Bhutan's economic development strategy. [15]
-