



Cambridge International AS & A Level

GLOBAL PERSPECTIVES & RESEARCH

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Paper 1 Written Examination

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INSERT

1 hour 30 minutes

INFORMATION

- This insert contains all the resources referred to in the questions.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.



This document has **4** pages. Any blank pages are indicated.

The following documents consider issues related to sustainable futures. Read them **both** in order to answer **all** the questions on the paper.

Document 1: adapted from *Prohibit or regulate palm oil production?* written by Tharumalee Silva in 2019. The article was published in The Sunday Morning, a Sri Lankan newspaper. The author is a journalist.

Cultivators and environmentalists disagree deeply about the palm oil industry.

Planters' Association of Ceylon (PA) Chairman, Sunil Poholiyadde, stated that palm oil has been Sri Lanka's single most profitable crop for over 50 years. PA Secretary General, Lalith Obeyesekere, claimed: "Oil palm cultivation generally results in lush undergrowth which helps to conserve soil moisture and nutrition." He also stated that new species of fish are being discovered in the Nakiyadeniya estate – the largest oil palm estate in Sri Lanka.

Obeyesekere states that, unlike rubber, palm oil production doesn't require chemicals such as fungicides and pesticides. He also says: "Factory solid waste is used as organic manure and also as fuel to generate renewable energy."

However, environmentalists claim that oil palm cultivation has a negative effect on biodiversity. Furthermore, oil palm cultivation provides a suitable breeding ground for invasive species such as snakes. Jagath Gunawardena, environmentalist, states that the dry environment created by oil palm farms is the ideal habitat for peacocks, which migrate there and have now become a problem.

Statistics from the International Union for Conservation of Nature (IUCN) support these claims. Globally, palm oil production affects at least 193 threatened species. Oil palm expansion could affect 54% of all threatened mammals and 64% of all threatened birds globally. It reduces biodiversity and has played a major role in the decline in species such as orangutans and tigers.

According to the World Wildlife Fund (WWF), a palm oil mill can generate 2.5 metric tonnes of effluent (liquid waste) for every metric tonne of palm oil it produces. "Direct release of this effluent can cause freshwater pollution, which affects downstream biodiversity and people. While oil palm plantations are not large users of pesticides and fertilisers overall, indiscriminate application of these materials can pollute surface and groundwater sources."

However, PA Chairman Poholiyadde stated that up to 95% of palm oil mill effluent is treated and the remaining 5% is also harmless. He also said oil palm cultivation does not cause deforestation in Sri Lanka, because it replaces old unproductive rubber lands. So, there is no negative environmental impact. He continued: "Oil palm cultivation is good for the economy since most local traditional crops such as coconut, rubber, and tea are not profitable crops."

The IUCN states that banning palm oil is not a solution as it may lead to further biodiversity loss. "Banning palm oil could result in an increase in land used for producing other oils (mostly soy, sunflower, and rapeseed) ... Oil palm produces up to nine times more oil per unit area than other major oil crops, and can help meet global demand for vegetable oils." Instead, IUCN suggests that oil palm should be cultivated sustainably, where forestry is not sacrificed for new crops.

Sri Lanka must find a middle ground between environmentalists and cultivators. Sri Lanka has a debt crisis and can clearly benefit economically from continuing oil palm production. However, as an island rich in natural resources, it is also very important to protect these resources for the next generation.

Document 2: adapted from *Palm oil: EU ban won't save Asian rainforests, but here's what might help*, written by Elizabeth Robinson and Herry Purnomo in 2019. The article was published in The Jakarta Post, Indonesia. Elizabeth Robinson is Professor of Environmental Economics, University of Reading, UK. Herry Purnomo is Professor of Forest Management and Governance, Centre for International Forestry Research, Indonesia.

Anyone lucky enough to visit Ghana could do worse than order a plate of boiled yam and red-red – a stew made with beans and tomato paste. A Sunday morning treat in Europe might be homemade crepes and hazelnut chocolate spread. Both of these meals – though part of very different cuisines and eaten in different places – contain palm oil, an edible vegetable oil extracted from the fruit of the oil palm. Few people realise how common palm oil is in items used every day, such as cleaning products and biodiesel.

Global production of palm oil has increased rapidly since the 1990s, with plantations in Indonesia and Malaysia supplying around 85% of the global trade. In Indonesia alone, palm oil is cultivated on more than 4 million small farms. More than 7 million labourers are employed throughout the supply chain. In 2017, exports contributed over USD 23 billion to the country's economy.

The link between palm oil production and deforestation in the tropical regions where it is grown is well known. Many palm oil plantations have replaced natural forests and also damaged peatlands. The European Union (EU) issued a resolution in 2017 to phase out and eventually ban biofuels made from palm oil. The EU ban could reduce demand for palm oil. However, many, including the International Union for the Conservation of Nature (IUCN), aren't sure the ban will be effective in reducing deforestation. Malaysian farmers meanwhile argue it will harm their livelihoods. The ban could even harm the environment by ending efforts to work with countries that are developing sustainable palm oil production.

Despite the importance of palm oil to Indonesia's economy, the impact of an EU ban is likely to be small. Indonesia exports less than 15% of its biodiesel to EU countries. However, the EU ban might impact Indonesia's efforts to manage its forests and palm oil trade. Indonesia may increase sales to large importers such as India and China. Unlike the EU, these countries aren't committed to buying palm oil from sustainable sources. This highlights why bans may not work.

Better approaches would target the interconnected problems of carbon emissions, deforestation and poverty. EU countries could support the sustainable cultivation of palm oil, breaking the link between oil palm expansion and deforestation in producer countries. One way to do this is planting on unproductive farmland rather than replacing tropical forest. This avoids the negative impact of a ban on the livelihoods of millions of farmers. Another option would be to reduce the demand for fossil fuels by making public transport more accessible, affordable and reliable. Incentives for people to buy electric cars, through subsidy and a higher density of charging points, could also help.

In an increasingly interconnected world, decisions made in one place can have unintended consequences elsewhere. An EU palm oil ban, designed to protect tropical forests, could instead harm the livelihoods of farmers. It could also increase forest loss, if countries such as Indonesia and Malaysia switch to markets with fewer environmental checks and balances. Given that most palm oil exports go to countries outside of the EU, a global approach is needed.

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