

THE ANALYSIS OF THE ENVIRONMENTAL IMPACTS OF THE PROPOSED THIRD
RUNWAY AT LONDON HEATHROW AIRPORT AND WHY IT WILL MAKE AVIATION
MANAGEMENT EASIER

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Table of Contents

Abstract	2
Background	2
Methods	2
Results and Discussion	2
Conclusion and Recommendation	3
Introduction	4
The Aim	5
Objectives	5
The Rationale	6

Abstract

Background

The proposed expansion of Heathrow Airport through constructing a third runway has been faced with significant challenges over the years. Environmentalists, among other opponents, believe that the project is not environmentally friendly. Arguably, Greenhouse gas emissions (GHE) would increase if the project were to be implemented. On the other hand, the government supported the project claiming that it would lead to economic and social benefits to the locals. Therefore, this study seeks to understand the conflict of interest associated with the proposed third runway at Heathrow Airport.

Methods

The research applies the qualitative method in meeting the set aims and objectives. The data collected is qualitative and is obtained from peer-reviewed articles, reputable news sites, and government websites. Such research method is adopted because it is easy to conduct and is time-efficient.

Results and Discussion

The research identified several economic benefits that are associated with the expansion project. The benefits are highlighted and discussed to give a clear picture of how the project may aid the people socially and economically. Similarly, the environmental costs that would have to be paid upon the completion of the project were also analyzed. The discussion revolved around the benefits and environmental costs, although the sustainability efforts the managers could adopt are also considered in the research. The discussion creates a vivid understanding of the results obtained and offers a better insight into the addressed research questions.

Conclusion and Recommendation

The research answers the study's aim and objectives by building on the results and appropriately discussing them. The aim of the research is met, and all four questions are specifically answered. Recommendations regarding further research are made based on the limitations that are encountered. The recommendations also include some of the potential ways of improving the understanding of the topic based on different approaches.

The Analysis of the Environmental Impacts of the Proposed Third Runway at London Heathrow Airport and Why It Will Make Aviation Management Easier

Introduction

There has been much debate on the proposed construction of the third runway at London Heathrow Airport. In November 2007, the British government started an extensive consultation and research process, asking for the public's opinion on constructing a third runway at the Heathrow Airport in London. London's Heathrow Airport is among the biggest and busiest airports in the United Kingdom. For instance, in the year 2015, the airport served up to 75 million passengers and handled approximately 470,000 flights (Martin, 2016). The proposed third runway was to be constructed for economic reasons, such as increasing business performance in the region (Griggs and Howarth, 2016). Therefore, the plan was to expand the Heathrow Airport by building a shorter runway of 6,569 ft or 2,000 meters long together with a proposed passenger terminal and mega car park for an estimated number of 50,000 cars (Cairns, 2016). The proposed runway is expected to boost the economy by £61 billion and provide employment opportunities to more than 70,000 people by 2030 (Smith, 2017). The economic benefits expected from the project are lucrative and have prompted the proponents to argue for its implementation strongly.

However, critics argue that the construction process will have adverse environmental impacts (Hughes-Gerber, 2021). Moreover, the project will divert rivers and reroute current roads (Sandberg *et al.*, 2020). Additionally, the expansion process will change the structural makeup of the horizontal plane under the flight path in the urban area and displace up to 700,000 people living in the anticipated flight path from their homes (McDonough, 2017). Also, the construction process will probably increase air pollution and adversely affect climate change (Griggs and Howarth,

2016). Therefore, the environmental concerns are significant and must be addressed before the project implementation.

Arguably, despite the potential negative impacts of the project, the expansion process will have significant social benefits for the locals and open up the United Kingdom to the rest of the world to a greater extent (Liebe, Preisendörfer and Enzler, 2020). The United Kingdom, like most of the developed countries around the world, is determined to achieve net-zero greenhouse emissions by 2050 (Pye *et al.*, 2017). Additionally, with the increase in ‘green technology,’ it is possible to conduct operations that are conducive for the environment. As a result, the proponents believe that the project can be implemented while observing the environmental factors to maximize its potential social and economic benefits (Chao, Lirn and Lin, 2017). Additionally, the project will potentially increase the ease of management of the Heathrow Airport, London, as the expansion will raise the devolution of the management of the Airport (Avanzi and Zerjav, 2020). Thus, it is necessary to research the different sides of the debate to understand the topic better.

The Aim

To examine the potential environmental impact of the third runway at London Heathrow airport and its possible impact on aviation management.

Objectives

1. To explore the economic and social benefits of the potential expansion of London Heathrow airport (arguments of proponents);
2. To understand the impact of the expansion of London Heathrow airport on air pollution.
3. To critically compare the benefits of the project to its expected environmental costs.
4. To assess the potential sustainability efforts that could be adopted by London Heathrow airport towards the expansion project.

The Rationale

Despite the debates on the topic, there is an important research gap as to whether the new runway can operate sustainably. Therefore, the study is necessary because it investigates the sustainability of the proposed new third runway at Heathrow Airport. The reduction of Airport Carbon and Greenhouse Gas Emissions (GHG) can be used as a primary basis for ensuring sustainability (Carlucci, Cirà and Coccorese, 2018). Additionally, the construction process of the new runway and terminals can be developed by using sustainable materials, which will reduce its environmental impact. Ascertaining the speculations is important, therefore, there is a need to conduct the study.

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